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The Cataloging and Classification of Music on Phonorecords—Some Considerations

Librarians should take their cue from discographers in the cataloging and classification of music on phonorecords. The basis of the catalog entry cannot always now, as traditionally, be the work performed as opposed to the record itself. Today, such music as jazz and rock dictates an approach that recognizes the record as inseparable from what is on it. The argument is developed by criticizing some current writing in the field and by using some specific examples of music on records.

INASMUCH AS THE MOST THOROUGH and accurate descriptions of music on phonograph records have been made by discographers, it seems only sensible to follow their lead when possible in the cataloging and classification of phonorecords. The following systems have been used, or could be used, to organize discographies. These potential methods of organization comprise essentially a list of discographical elements. In setting them forth we can see that there is just a little more to a sound recording of music than the composer, title of the composition, and physical description of the recording. Here, then, are the possible methods of discographical organization:

(1) alphabetical based on composers' names; (2) alphabetical based on titles of works recorded (or, in the case of collections, titles of collections); (3) by country or place of origin (i.e., the physical location of the manufacturer of the recording); (4) by country of origin (i.e., in terms of content, such as French music, German music, etc.); (5) numerical based on matrix numbers; (6) numerical or alpha-numeric based on manufacturers' catalog numbers; (7) chronological by date of publication (i.e., date of actual issue); (8) chronological by date material was recorded (i.e., date of recording session); (9) chronological by date of composition of material recorded (e.g., classical music arranged by
performing, not the gramophone record.”

But there is now a new idea underlying the approach to nonprint media:

Nonprint media is no longer viewed solely as an enrichment of print, but rather as a basic aspect of communication among a world population confronted with numerous languages, customs . . . writing skills, and unprecedented demands for speed in the exchange of concepts, emotions, and expectations.

The quotation refers primarily, of course, to recorded verbal material. It goes without saying, however, that recorded music is in almost no sense an enrichment of print, but rather another form of expression in its own right, one which must be dealt with appropriately. To acknowledge this difference may result in the recognition of a principle quite the opposite of that enunciated by the joint committee, namely that we should consider the record as an entity rather than considering merely the work being performed on the record. Interpretation, performance, and personality loom ever larger in our culture, as attested by the popularity of Leonard Bernstein’s recordings. In the popular field, recognition of the total sound concept, including even the creative work of the recording engineer, is the only possible way to approach rock music; and in jazz, the “work performed,” that is, the original song on which improvisation is based, is the least important element of the record.

Jay Daily has identified the problem. He writes that the catalog cards produced by the Library of Congress for sound recordings, based on AACR, are deficient. “Phonorecording are to be treated like the printed score of the music, but a profound difference is omitted, the role of the performer in the process of identification.” AACR includes the basic requirements of description, but “for recorded sound generally, the rule stops far short of the needs of a library catering to users with any degree of sophistication. It seems to banish jazz and other music dependent on performance entirely from the collection.”

Similar limitations are encountered in other prescriptive codes, with respect not only to jazz but also to popular music generally. For example, in chapter three, “Phonorecords,” of the Music Library Association and

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American Library Association Code for Cataloging Music and Phonorecords, rule IIIA states:

In "popular" music the indication of the entry on the phonodisc or other phonorecord may appear as follows: “Smith-Jones-Black” or “Words and music by Smith, Jones, & Black”; in this event, make an arbitrary choice for main entry, choosing the final name listed as it is most frequently that of the composer.

This is paraphrased closely in AACR rule 250A.

The rule sounds adequate, but there are several objections to it. First, it is true that on record labels the composer’s name is customarily listed last, but there are many exceptions. Second, the rule does not acknowledge the kind of collaboration (not at all infrequent) in which all parties contribute to both the words and the music. Third, there is no justification for assuming that the composer of the music is more important than the author of the words. Both deserve a citation. Finally, it is seldom necessary to make an arbitrary choice for main entry. There are many source books in the field that tell who wrote what.

In jazz the problems are greater but not insurmountable. Daily writes:

In the case of music, jazz cannot be said properly to exist in any printed form. Most jazz musicians are constitutionally incapable of playing a work the same way twice. They are in the position of artist-craftsmen whose etchings may exist in numberless variations without ever constituting an edition.

To put it another way, jazz musicians strive not to play a work the same way twice. That's what jazz is—improvisation. Once again discography provides some guidelines; the elements that should be included in a description of a jazz recording have been succinctly identified by Walter Allen:

(1) names of performing artists; (2) date and location of the recording (i.e., actual place of recording process, not location of “publisher” as identified in imprint); (3) lists of complete personnel; (4) matrix number; (5) identification of takes, if more than one, and identification of those issued; (6) titles of compositions performed; (7) names of arrangers; (8) playing time; and (9) when dealing with reissues, comparisons should be made with the original recordings.

Admittedly, taken as a whole, this is a degree of completeness needed more in a discography than in a catalog. Nonetheless, these discographical elements should serve as guidelines, and many of them should appear on the catalog card. A few require comment. Item 1 (names of performing artists) is important because of the nature of jazz. Jazz is improvisation on a given melody and set of chord progressions. Each member of the jazz ensemble plays a solo, that is, creates his improvisation on the tune. This, more than his ensemble playing, is his creative contribution to the record. When this is understood, the importance of item 5 (identification of takes if there are more than one) and item 9 (comparison of reissues with the original recording) becomes immediately apparent.
Probably the most vexing problem in jazz—the one that has not really been engaged—is item 6 (titles of compositions performed). On the face of it, this appears to present no problem. If, for example, you examine the record “Capitol Jazz Classics—Volume 4” by the Gerry Mulligan Tentette, you find at band 5 on side 2 a song entitled “Who Sleeps?” by Red Norvo. What is wrong with that? What is wrong with it is that “Who Sleeps?” is really “Jeepers Creepers” with words by Johnny Mercer and music by Harry Warren. When you play the record, you never hear the melody of “Jeepers Creepers” stated, but if you listen closely and analytically, you discover that the adherence to the harmonic chord progression of that well-known song is undeviating. On the album “Capitol Jazz Classics—Volume 5” appears “Rifftide,” attributed to tenor saxophonist Coleman Hawkins. “Rifftide” is really “Oh, Lady be Good” by George and Ira Gershwin. The jazz classic “Lullaby of Birdland,” on which pianist George Shearing has made a fortune, is really “Love Me or Leave Me” by Gus Kahn and Walter Donaldson.

Endless other examples could be cited. With all due respect (and an immense amount is due) to jazz musicians as among the most creative people in popular music, we submit that their practice of appropriating the tunes they improvise on is a lamentable one. To speak plainly, it borders on piracy. When we characterize jazz musicians as among the most creative people in popular music it is only to leave room for their equally creative brothers and sisters, the songwriters. It is time for the record of authorship in jazz vis-à-vis popular music to be set straight. Does this task rest on the slender shoulders of the nation’s librarians? Probably so. Who else cares? Here is what is required: an encyclopedic knowledge of popular music and jazz, a love and respect for them, and a very good ear.

But librarians have been accused of abdicating their responsibility where nonprint media are concerned, and the resulting vacuum has been filled in part by people in the commercial field. That this is less than completely satisfactory can be seen from an examination of the position of Roger McFarland, media specialist at Bro-Dart Industries. He begins by discussing the recognition of resemblances and the grouping together of like factors. By doing this, Bro-Dart was able to perceive that operas, choral music, and vocal music are related to each other in that each is a type of vocal music. Operas are said to be the broadest category because they involve the most people; choral music is said to involve fewer people; and the category vocal music is reserved for vocal solos.

These distinctions are not only arbitrary but also wide of the mark. In the first place it is often true that choral music other than opera involves more participants than does opera. But more importantly, how does the number of participants involved relate to accuracy of classification or the needs of the user?

With increasingly questionable results McFarland continues:

Band and electronic music are not so much types of music as methods of pro-
ducing forms of music. A band can play a symphony or a concerto or a sonata or whatever and an electronic synthesizer may play an adagio or fugue.\textsuperscript{10}

This is not true. A band cannot play a symphony as written unless the string parts are given to the woodwinds; the same is true for its playing a concerto—an even less likely occurrence. And bands never play sonatas; they are written for solo instruments. Bands may play something in sonata form, like a symphony, but that is not McFarland's point.

This confusion of form and medium is not helpful in any way and his explanation of popular music is equally confused:

We also get into . . . the distinction between classical music and popular music. . . . In the popular music category we have such things as pop music, the Beatles, and . . . country western and jazz. . . . Holiday music will generally be composed of Christmas music, etc.\textsuperscript{11}

Truly a strange mixture. Pop music and the Beatles are not parallel structurally. The Beatles are an instance of a larger category, rock music. The accepted phrase in the industry is "country and western," not "country western." More important, all of these categories are quite different from each other musically and should be treated accordingly. In pop music (assuming that he uses this term for prerock popular music) the points of access should be the song title, the composer, the arranger, and the orchestra or singer. In rock music the important elements are the performing group, the record producer, and the engineer, all of whom are involved creatively in the total sound of the record. In jazz, each performer is equally important. In country and western the song and its writers as well as the performer are the important access points. One has the uneasy feeling that these important distinctions are not being observed.

It is evident, then, that these matters should be in the hands of librarians or, at any rate, media specialists. This brings us back to Daily, who believes that a new theory of description is needed, one which leads to the use of title main entry. He argues that a unit card includes the description of all the identifying features of an item no matter what the entry, and that in a catalog made up of such records it is easiest to enter all works by title, especially when cards for different kinds of material are filed together. He says the result is a catalog in which some titles have the force of subject headings, and that one advantage of this system is that it eliminates the distinction between title and uniform title.

But this is not necessarily an advantage. The Anglo-American Cataloging Rules for uniform titles are sensible and comprehensive, and they serve the needs of scholarship.

Daily emphasizes that the needs of users vary greatly.

A radio station would need entries for each of the compositions on a record containing more than one and would require playing time. Entries for the composer, with dates, for the performers and subject headings would make all the
music available under whatever rubric it was sought. A school library, to take the
opposite level of sophistication of use, would most likely require little more
than the title of the phonodisc and other information identifying the item.\textsuperscript{12}

This may be generally true, but is it necessary to sacrifice intellectual
exactitude? It is disturbing to read on the next page: “If no decision has
been made on the form of the composition, or if authorities differ, then
the unit entry can be by conventional or label title.”\textsuperscript{13}

However, there is not often that much question about the form of
a composition. In such cases there are many highly scholarly and authori-
tative source books to consult. And if it is found that authorities differ,
it is still better to use some authority than none at all.

Daily is right in stating that the cataloger of phonorecordings must
keep in mind that he is making a record of the contents, not simply pro-
viding a means of obtaining the phonorecording. He continues to press
for the use of title main entry, adducing several further advantages:

Uniform fields for searching are established with the most clearly identify-
ing feature, title, serving as the pivotal field for use with dependently search-
able fields. . . .

No specious preference for performer over composer or lyricist over com-
poser is necessary. Entries identifying all these have equal value.\textsuperscript{14}

It has been shown that the preference for performer over composer
is not specious, but rather appropriate in certain kinds of music. In rock
and jazz it is the only sensible approach. It has also been shown that an
attempt to apply title main entry in jazz would lead into a morass.

The preference for lyricist over composer is not of the same order:
by a convention in popular music, lyricists are usually listed first.

Daily’s last argument for title main entry may be the most attractive:
A curiosity of computerization of cataloging has been the expense of input in-
to the system, usually requiring complete cataloging by professional personnel
before the computer entry can be made. . . . If title entry is adopted, the com-
puter can serve both as an automated device for the production of discographies
as well as a searching tool.\textsuperscript{15}

Attractive, yes, but only if the convenience of the computer pro-
grammer is to be preferred to that of the user. Convenience of the user
implies serving him with intellectual exactitude. The fact remains, the
composer is still the most important identifying element in classical
music. There are thousands of symphonies but only one Beethoven.
Daily himself was closer to the truth in 1967 when he wrote:

There is no reason why the entry should not be just as straightforward as pos-
sible, preferring the composer of serious music for a unit entry, the performer
in the case of several works by different composers or for jazz and popular mu-
ic, and the title of the recording for works by several composers played by sev-
eral performers.\textsuperscript{16}

Decisions on choice of entry are ultimately based on one’s priorities.
In Organizing Nonprint Materials Daily writes:

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The librarian preparing to make a collection of phonorecordings must first determine how the collection will serve the community and how the community will search for the phonorecordings each individual wishes to hear.17

I would amend the statement to read: “The librarian preparing to make a collection of phonorecordings must first be mindful of musical considerations and organize his collection in a logical manner which takes account of those considerations. Then he should teach the user how to search or should simply serve him directly.”

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12. Daily, Organizing Nonprint Materials, p.44.
The Closing of the Classified Catalog
At Boston University

MARGARET HINDLE HAZEN
Boston University Libraries
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The classified catalog at Boston University libraries is being discontinued. Although it has been a useful research tool, the classified catalog has proven too expensive to keep current. The library has, therefore, converted to a traditional alphabetic subject catalog and will receive catalog cards from the Ohio College Library Center through the New England Library Network. This change has required significant modifications in cataloging procedures and should result in improved service. Although the books represented in the classified catalog may eventually be assigned subject headings, two subject catalogs are being maintained at present.

Since 1948 the Subject Catalog for Boston University (BU) libraries has been a classified catalog based on the Library of Congress (LC) classification system. On 1 July 1972, however, work on this catalog ceased in preparation for the conversion to an alphabetic subject catalog. Because the classified catalog is an unusual tool in American libraries, it seems appropriate to review the format and effectiveness of our catalog, as well as to comment upon the present discontinuance of this subject approach.

The decision to construct a classified catalog at Boston University was made by former library director Floyd E. Orton, who had observed the usefulness of such a tool at the John Crerar Library in Chicago. The classified catalog was begun in September 1948 and, until 1970, was primarily the responsibility of Mary D. Herrick. During its twenty-five year history, the classified catalog served the central library as well as four branch libraries. The index to the classified catalog has been published in three editions.

Construction and Maintenance of the Classified Catalog

Unlike European classified catalogs, the classified catalog at Boston
University is composed of two sections—the catalog itself and the index. Both sections appear in card format. Until the time of conversion, the index cards were interfiled in the author/title catalog. Each index card displays a typed subject heading, with or without subdivisions, and the corresponding classification number or number range under which books on the desired subject may be found. There are clear directions referring the reader to the classified catalog, which is located in a separate cabinet. In the classified catalog the cards are arranged by LC classification number and are then subarranged alphabetically by main entry. The classification number, which appears in the upper left corner of each card, may be the call number of the book or, if enclosed in parentheses, a number representing a secondary subject heading; that is, a subject heading for a concept other than that represented by the call number.

All subject work is done at the Subject Authority File after the book has been processed and sent to the shelves. The Subject Authority File duplicates the classified catalog index and also contains tracings for see and see also references and authority cards. The cataloger checks the LC subject headings provided, verifies the indexing for the classification used in the call number, and assigns additional numbers for each additional subject covered by the book. When necessary, the index is augmented by adding new index terms and their corresponding classification numbers. An attempt is made to use LC subject headings for major index terms, but the wording of the subdivisions may be taken from the LC schedules, the index to the schedules, or other appropriate sources.

Many local policies have developed over the years. An example is the handling of see references. Theoretically, these can be eliminated in a classified catalog simply by providing the appropriate number under each possible subject term. This is done in our catalog for each major subject heading. If a topic has many subdivisions, however, we provide direct reference only to the basic aspect of the subject and refer the reader to the “correct” cards for specific aspects. Another local development is the creation of a reverse index which lists various subject headings used for a single classification number.

Not all of the above procedures were planned at the outset; some were developed as the need arose. Fortunately, such policies were easily adopted and, in general, the catalog matured gracefully.

Discontinuance of the Classified Catalog

Despite the development of a workable system for the construction and maintenance of the classified catalog, our subject approach had a serious drawback—namely, the difficulty of keeping the subject records current. The great growth of the library in recent years may be seen in the fact that the 1970 book budget trebled that of 1969. For each new title, the subject cataloger must do careful subject authority work as
noted previously. Not surprisingly, it became increasingly difficult to keep up, and a backlog of subject work began to develop in 1968. As of September 1970 approximately 40,000 titles, representing at least one year's work, were waiting to be authorized. (It should be noted that one card for these books did appear in the classified catalog, but this was not necessarily indexed, and additional subject headings were not analyzed.)

In an effort to reduce the backlog, additional subject personnel were trained. By the summer of 1971 eight catalogers, as opposed to the previous one-and-a-half, were doing subject work regularly, and additional workers were trained that fall. In order to increase efficiency, each subject worker was given responsibility for a particular subject area. Sessions at the Subject Authority File were tightly scheduled, and weekend and evening work hours were instituted. In spite of these measures, however, subject work generally lagged by a period of one year.

In recognition of an obligation to make material available more quickly, alternative systems were considered, but until recently none was found sufficiently economical to outweigh the costs of a system changeover. The development of the Library of Congress MARC tapes and, more recently, the introduction of cooperative cataloging by member libraries in the Ohio College Library Center (OCLC) system provided a possible method for achieving speed and efficiency in subject—and general—cataloging. On 1 July 1972 Boston University became a full subscriber to the New England Library Network (NELINET), which is now connected with the OCLC system. The library is now on line and receiving cards from the OCLC computer center.

Although the numerical approach to subjects in a classified catalog seems more amenable to computer applications than the alphabetic approach of dictionary subject catalogs, systems developed to date have not provided the numerical approach and, in order to take advantage of the OCLC system, Boston University was faced with the task of conforming to the LC data on the MARC tapes. This involved not only closing our classified catalog and initiating an alphabetic subject catalog, but also revising other procedures in order to achieve conformity with OCLC standards. The preparations for joining NELINET were accomplished during the summer of 1972 and will be reviewed briefly here.

The first step involved the total acceptance of LC call numbers, including book numbers as provided by LC instead of the Biscoe time numbers previously used. Beginning in July 1972, LC policy was followed as closely as possible for all new material, and from that date Biscoe time numbers were regarded as Cutter numbers and filed as book numbers.

As anticipated, this procedure caused several minor problems. For instance, in those classification numbers for which there were more than nine books published in a single year, there was a filing problem. Normally, the time numbers are filed first by year of publication and then by individual book numbers: F71, F711, F712, . . . , F7113 (F7113 repre-
senting the fourteenth book published in 1971 for a particular classification). Cutter numbers, on the other hand, are filed decimally, a procedure which places a book with time number F7113 between books with time numbers F711 and F712. The shelflist and shelves were refilled decimally where necessary. A similar filing problem involved those classifications in which Cutter numbers were part of the classification numbers. For example, in the subject area of psychoanalysis, BU filed (by time number) all books with the general number for psychoanalysis—BF173—before all periodicals with classification BF173.A2. When, as a result of our catalog changeover, Biscoe time numbers were regarded as Cutter numbers, periodicals with A2 as the third element of the call number came to be filed before all books with time numbers as the third element. The rearrangement of the shelflist and shelves according to this principle resulted in a better representation of LC policy. Finally, the occasional conflicts of LC book numbers with Boston University time numbers had to be adjusted. As an example, LC assigned the number LB2342.F64 to a book by the Ford Foundation, but BU had used that number previously for a similar book published in 1964. Whenever such a conflict occurs, the LC number is accepted and the book with a Biscoe time number is changed.

At the same time that LC call numbers were accepted in toto, LC subject headings were accepted, and thus an alphabetic subject catalog was begun. All new materials and all backlog subject work (originally intended for the classified catalog) were given LC subject headings. The subject authority work was not done at this time but was reserved for a later date. It should be noted that after careful consideration, BU decided to file all "name subjects" in the author/title catalog. Thus, works about persons, government agencies, institutions, and societies are filed along with works by these bodies.

Meanwhile the classified catalog had to be maintained. An important project involved the transfer of the classified catalog index from the author/title catalog to a separate cabinet near the classified catalog itself. In addition, routine adjustments of the classified catalog and its index continued.

As a consequence of all these activities, the library currently maintains three catalogs with subject references. In an attempt to reduce confusion for readers, BU has designated a distinct area of the library for both the classified catalog with its index and the alphabetic subject catalog. Prominent signs, as well as brief information sheets, are provided to help the reader utilize the subject tools fully. During the initial stages of our changeover, additional assistance was offered at an information desk staffed by members of the Reference and Catalog departments.

Shortly, BU expects to remove the name subjects from the classified catalog index so that all name subjects can be filed in the author/title catalog. In a more ambitious endeavor, the library hopes to carry the

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conversion project to its logical conclusion by assigning alphabetic subject headings to the books represented in the classified catalog. This operation will be extremely costly, however, and as a result the total dismantling of the classified catalog is not anticipated in the near future.

Effectiveness of the Classified Catalog

It is not without regret that the classified catalog has been discontinued. It served the university well for many years, and the problems which were involved in the maintenance of the classified catalog were accompanied by very real benefits. A brief analysis of the advantages and disadvantages of the catalog follows.

A primary disadvantage of the classified catalog was that maintenance was time-consuming, and, as a result, the catalog was expensive. There was always a lengthy period of training for new subject catalogers before subject authority work could begin. The subject analysis itself required careful judgment, and not infrequently additional time was spent in recalling books to check subject aspects which were not clear from the subject headings provided by LC. During the final year of active subject work, approximately ten catalogers spent a total of fifty-two hours a week at the Subject Authority File doing subject work. On the average, twenty-five to thirty titles could be authorized in an hour.

Although it is difficult to compare this production level with that for authorizing alphabetic subject headings (especially because the alphabetic file has been started so recently), a few general comparisons can be made. Although it is time-consuming to establish alphabetic subject headings, with this approach the cards can be filed and in use while the subject authority file is being built. The procedure for the classified catalog had been to hold up card production until subject work was completed. In addition, subject authority work for alphabetic subject headings can be batched, an approach not possible with the classified catalog. BU anticipates that by maintaining an alphabetic subject catalog based on a computer system, it will be possible to avoid the backlog of subject work which developed with the classified catalog.

There were other minor problems as well. The lack of a general index to the LC classification resulted in basic difficulties in creating the numerical equivalents for subject headings assigned by LC. As the BU index grew, the problem was lessened somewhat, but the library nonetheless experienced some difficulty in establishing correspondence between the LC schedules and subject headings. The two-part nature of the classified catalog presented another potential problem. References in the index must, of course, lead to at least one card in the classified catalog, and the removal of such references may be overlooked when the last work in a given number is withdrawn. Careful work is required to keep the index correct.

Many advantages were associated with the classified catalog. The cataloger had a great degree of flexibility in terminology, and could ex-
press relationships and subject aspects normally not available in traditional subject work. For example, the use of the subdivision "General Works" under most major subject areas quickly directed the user to basic books in the field. Another benefit for catalogers was the ease with which terminology could be updated. In a classified catalog only the terms on the index card must be changed. In an alphabetic subject catalog, each card with the outdated heading needs correction for optimal clarity, although new guide cards or dropped headings could be substituted. There is, in addition, a saving of cards and, hence, of catalog space due to the frequent duplication in meaning of LC subject headings. That is, it is common to find a book with two LC subject headings covered by the same classification number. The reader will be led to this number by index terms representing both subject headings, but only one card need appear in the classified catalog.

The reaction of users to the classified catalog at Boston University has never been studied formally, but, in general, the catalog seems to have functioned well. Some people swear by it, some people swear at it, but mostly readers just use it. The Reference Department staff comments favorably upon the catalog and appreciates especially the ease with which the index can be used to demonstrate a specific aspect of a topic. The broad view of subject fields which is provided in the classified catalog has also been noted favorably. A potential problem for the users always exists, however, because of the two steps involved in the use of the classified catalog. It is possible to miss one of the steps and to lose important material as a consequence. (BU discovered, in fact, that some students purposefully consulted only the index before going to the stacks. Obviously they were missing books with secondary subject headings in the desired field.) To promote proper use, Catalog Department personnel have been stationed at an information desk in the public catalog area, and such service is generally appreciated. Generally, however, faculty and students can and do use the classified catalog efficiently without individual instruction.

The classified catalog is, in short, a useful research tool. The realities of subject cataloging were such, however, that the classified catalog became a luxury which Boston University could no longer afford. Boston University's efforts toward standardization have no doubt resulted in a loss of individuality, but the library believes that this loss will be compensated by an improvement in service to the university community.

REFERENCES


Volume 18, Number 3, Summer 1974
Enlarging LC Copy: A New System

ANN K. SYMONS*

The Xerox System 1.2.3., which makes contact size copy and enlarges copy, is described as utilized by the Oregon State University library.

Libraries, large and small, continue to search for methods of reproducing entries from the National Union Catalog (NUC) at a low cost by efficient methods. This has certainly been true at Oregon State University (OSU) library. The library houses over 600,000 volumes, and the catalog department processes approximately 1,500 new titles per month.

Preparing catalog cards has advanced beyond locating copy and ordering LC cards, or typing a master for card reproduction. In 1965 ALA’s Library Technology Project issued Catalog Card Reproduction, but many methods there described are now out of date and have been replaced by more sophisticated methods. In reviewing the literature one is surprised that so little has been written about reproducing NUC entries. Articles about the use of the Polaroid CU-5, appearing in 1967, were the first to describe post-1965 techniques; Library Technology Reports later published a comprehensive report on the Polaroid CU-5.2,3

In the mid-1960s when the Polaroid CU-5 camera was developed for use in libraries, Oregon State University library, like many other libraries, was eager to try the camera and purchased one. While the CU-5 was used at OSU, the cost was $.25 to $.28 per exposure. The copy from the Polaroid was not totally satisfactory in appearance: sometimes photos were either too light or too dark. Also, if the copy was brief it was found more effective and cheaper to type the entry rather than photograph it.

Other systems using a cataloger’s camera have been devised, some by large companies and others by libraries using the resources of local audiovisual departments. While the process, that of photographing entries, remained basically the same, the purpose of using new methods was to reduce costs. Libraries with cameras using regular film which had

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to be sent out for developing or taken to a campus darkroom found that card reproduction was delayed.

Other systems in operation in libraries today, e.g., the cataloger's camera, Library of Congress (LC) depository cards, and microfiche systems which can be searched by LC card number and copy enlarged, were investigated before OSU decided to change from the Polaroid camera to the system presently used.5

The Oregon State University library has found a method for reproducing entries from NUC at $.05 per title or less. The operation is performed in the catalog department with no extra processing or waiting, and can be performed by anyone because it requires no more skill than the ability to use a Xerox machine.

The system in operation at OSU library since mid-summer 1971 is the Xerox System 1.2.3. Xerox previously built a machine called the 3.2.1. for industrial and commercial applications to reduce correspondence to tab card size, and then produced a machine called the 1.2.3. with a 2x lens as a blow-back mechanism so that correspondence would be brought back to the original size and read. Libraries at Syracuse and Princeton universities became interested in the possibility of using a Xerox 1.2.3. for library copying. The 2x lens on the 1.2.3. enlarged the copy too much for use on a conventional catalog card (Exhibit 1). A model with a special 1.7x lens was developed to enlarge the copy to the appropriate size for library use (Exhibit 2).

The Xerox 1.2.3. used by OSU is basically a 720 Xerox copier with the controls modified to include a set for the enlarging mechanism. Instead of one print button as on the standard Xerox 720, there is a copy button, an enlarge button, and two print buttons (left and right). To make regular Xerox copies, the copy button is pressed and then the left print button. To enlarge, the enlarge button is pressed, changing the machine from copy to enlarge, and then the right print button. The twenty-by-twenty-four-inch enlarging apparatus has been added to the right side of the machine and stands about seven inches above and to the right of the regular copy platen. The regular receiving tray has been raised.

Using the Xerox 1.2.3. is no more complicated than using the standard 720 Xerox. To enlarge, the NUC copy is placed face down on a 4½-by-2¾-inch glass plate illuminated with a purple light to make it easier to see and to center the copy through the page. The enlargement returns on an 8½-by-11-inch sheet of paper, and, like the Polaroid photograph, is cut and pasted on catalog card stock before card reproduction. Card reproduction is performed on the same machine. This machine is also used for technical services department and library administration office Xeroxing. We therefore receive a full range of use from the machine, rather than having a single purpose piece of card production equipment which takes storage space and needs a special set-up and training of personnel to use.

The quality of the Xerox 1.2.3. final product—a catalog card—compares favorably to that of cards produced by other systems. The card
has not the fine clarity of a printed LC card, but is quite legible. Xerox 1.2.3. cards are of better visual quality than cards produced using the Polaroid CU-5 or those produced using microfiche systems.

The system requires an initial expenditure of $300 for the 1.7x lens. In addition, charges per impression are made according to the following schedule:

<table>
<thead>
<tr>
<th>Monthly minimum</th>
<th>Charges over minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>$225 per 4,500 impressions</td>
<td>4,500-12,000 impressions; $.045 per impression</td>
</tr>
<tr>
<td>or $.05 per impression</td>
<td>12,000-30,000 impressions; $.024 per impression</td>
</tr>
<tr>
<td></td>
<td>30,000+ impressions; $.015 per impression</td>
</tr>
</tbody>
</table>

OSU uses approximately 1,000 impressions per month for enlarging entries from NUC, and the remainder for card reproduction and other Xeroxing.

Clerical time devoted to Xeroxing from NUC totals approximately sixteen hours per month for 1,000 impressions. In addition, approximately ten to twelve hours per month are needed for student help to cut and paste the copy. Salaries for this time are about $130 per month, or an additional $.13 per copy, bringing the total cost per copy to about $.18, a substantial saving over the Polaroid CU-5 initial cost of $.25 to $.28 per photo.

In addition to the low cost and ease of operation, a major advantage for the catalog department is that anyone can enlarge at any time. Serials catalogers, particularly, have found this useful, because at OSU serials are not searched in the same routine as monographs. Some more complicated titles are searched by the catalogers themselves, and any catalog record found useful can be enlarged immediately. With the Polaroid CU-5, catalog records found in searching had to be typed or a note given to the clerk in charge of photographing requesting that a particular item be photographed when the camera was set up for use. Another advantage of the 1.2.3. copy is that changes in cataloging can be typed readily on the 1.2.3. print.

The main disadvantage found in using the Xerox 1.2.3. is that no way has been devised to frame the exact NUC entry wanted; it is necessary, therefore, to put a small check by the entry before it is photographed so that when the copy is cut by student assistants it will be cut properly.

Another system, Graphic/Minolta Enlarger Plus, seems to operate on the same principle as the Xerox System 1.2.3.6 The Minolta enlarges 1.3x, and the size of enlargement must be adjusted to 1.6x before use, making its cost slightly higher than the 1.2.3. system.

Oregon State University has found the 1.2.3. system adequate for present needs and expects to use it until, for an equivalent price, a more sophisticated system which produces better copy appears.

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Library Resources & Technical Services


Use of the Copy Cat Camera in Card Production at Princeton University Library

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Princeton conducted an experimental program involving use of the Copy Cat camera to extract National Union Catalog (NUC) copy to produce a master card when an actual Library of Congress card is not available. The device has proved satisfactory in terms of cost and quality of product, and has contributed significantly to a more efficient card production process.

Introduction

CARD PRODUCTION METHODS AT PRINCETON have varied widely over the last fifteen years. Each change represented an attempt to expedite card production by developing faster, more efficient processes; whenever possible, new methods have been combined with procedural changes designed to free professional cataloging staff from clerical activities.

In the late 1950s a cataloging worksheet, called the process form, was instituted. Designed to be used in conjunction with a copy of the typed order slip to transmit the necessary information to the typing unit, the process form freed the catalogers from the task of typing the master catalog card. Catalogers were still burdened, however, with considerable clerical work because extensive changes had to be filled in on the process form. Moreover, the edited order slip was frequently illegible and therefore conducive to typing errors.

A later and supplementary effort to assist the cataloger involved Xeroxing available National Union Catalog (NUC) entries for editing by the catalogers. Because of problems related to the original record—the limited space available for corrections and the small size of the print—copy produced on a Xerox 720 was considered unsatisfactory. Substitu-
tion of prints made on the Xerox 1.2.3. provided enlarged copy which was edited with less difficulty and which was much easier for the typists to read. However, the Xerox machines are located two floors away from our book catalogs, and must be shared with other users. Not only was time lost in transporting volumes back and forth, but the operation also was delayed frequently because the machines were not available for use.

Card production during this period, when based on process forms or Xerox copy, was done using MT/ST typewriters. The rental fee for these machines required a high production rate to offset their cost, and many local variations in cataloging practices were developed in order to reduce typing time. Such variations included frequent omission of contents notes, use of non-standard abbreviations in author and edition statements and in the imprint, and omission of all but the first place of publication. On the other hand, no such editing was performed when a Library of Congress (LC) card was available for use as a master for Xeroxing a card set; an LC card was modified only if it did not agree with the book in hand or with entries already established in the Princeton catalog. As a result of these practices, the catalog included cards with varying formats. In our search for a way to make direct use of entries from NUC, therefore, we were not concerned with the lack of uniformity in cards.

In the summer of 1968, a Xerox 3.2.1. was installed in the photographic services department. The principal feature and advantage of this device is that it reproduces directly and quickly onto card stock. Originally built to accept "Graphic Data Cards," the machine was adjusted to handle three-by-five-inch cards, an adjustment which allows reproduction of LC cards and unit cards prepared in-house. In terms of cost, speed, and quality of product, the Xerox 3.2.1. proved so superior to the MT/ST that use of the latter was discontinued in 1971.

We attempted to copy NUC entries with the Xerox 1.2.3. as input to the Xerox 3.2.1. These experiments, however, did not prove encouraging: in addition to having to transport volumes of the National Union Catalog to and from the photographic services department, it was necessary to cut and mount the NUC copy because the Xerox 3.2.1. functions most effectively when input matches the dimensions and weight of card stock.

What we wanted, then, was a print that could be used as a master card in the same way as an LC card. What we sought was a cataloger's camera that (1) would expand the NUC copy to standard card size and produce a good, clear print, (2) could be handled by junior clerical staff or student assistants, (3) could be located close to our bibliographical tools so the volumes would not be out of service for long periods, (4) could produce the copy quickly so that the books and copy could be matched and forwarded for cataloging without delay, and (5) would be economically feasible.

A number of devices were investigated, but only the Hazelrigg camera met all of our criteria, particularly those of cost and quality of
EXHIBIT I

Copy Cat

The darkroom is a red Plexiglas® box with a door at the left end. It
contains a metal paper safe for storage of the negative and positive pa-
paper, the exposure plate, the release button for the camera shutter, the
contact printer, and the timer and release button for the printer.

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The timer for the camera shutter is on the camera itself, which is suspended under the negative exposure plate in the darkroom. A small dental mirror must be used to adjust the camera setting; however, once the proper setting is made for the type of paper being used, further changes are seldom necessary. The camera is enclosed in four metal legs which terminate in the white plastic mask used to position the copy for photographing. The camera unit is raised and lowered by means of a handle to permit insertion of the book catalogs under the mask.

The mask is attached to the metal leg unit with two screws; once proper left-to-right alignment has been achieved, the screws are tightened to prevent the mask from shifting. The unit is constructed to allow a small amount of vertical play to facilitate spacing of the copy. A sliding shield which fits into grooves on the mask is used to block out unwanted material below the copy being photographed. However, because the mask has been designed to accommodate the longer-line copy in the 1956-1967 Rowman and Littlefield cumulation of the NUG, unwanted material from adjacent columns is copied when the older catalogs are used. Such material is blacked out on the negative with a black Magic Marker so it will not appear on the prints.

The fluid trays are positioned to the right of the darkroom and are shielded by a plastic cover. A piece of red Plexiglas is laid over the gap between the darkroom and the fluid trays and is taped to the darkroom wall. This shield protects the paper from light exposure as it passes from the darkroom into the developer tray.

The storage cabinet located at the right end of the unit provides sufficient space for a working stock of paper, fluid, and other supplies. Its top, which is level with the shelf on which the volumes are positioned, serves as an additional work area.

The print timer requires frequent adjustment, depending on the quality of the copy in the catalogs and the age of the fluids. Such adjustment can be made easily by shifting the lever on the timer, but the need to do so slows the printing process.

Access to the darkroom is provided by three black cloth sleeves which permit the operator to reach inside the box without exposing the paper to light.

All components are replaceable, and the machine is so designed that replacement can be accomplished fairly easily by in-house staff. A toll-free call to the company results in prompt shipment of the needed replacement part by prepaid air freight. No need exists, therefore, for costly servicing, and little time is lost waiting for the machine to be repaired.

Routine maintenance is largely a matter of cleaning and refilling the fluid trays. The process requires approximately twenty minutes and must be performed once or twice a week depending on the amount of use. The tray cover is removed and the old chemicals are siphoned off. The roller unit and plastic fluid tray unit can then be lifted off and washed with hot water and paper towels. Any chemical build-up on the roller
gears can be removed with a small brush. The units are then replaced, and the trays refilled with fresh fluid.

Between cleanings, the operator needs only to add fluid occasionally to keep the trays at the proper level and to refill the paper safe in the darkroom with negative and positive paper. The paper boxes must be opened within the darkroom chamber, and all paper must be in the safe before the door of the darkroom is opened.

The only other routine maintenance procedure is to check the mask alignment and tighten the screws if necessary.

Operational Considerations

Princeton's present operation is based on development of (1) standards for acceptable copy in terms of our card production processes, (2) efficient routines for requesting copy and matching the completed print with the publication to which it relates, and (3) methods for handling the print to achieve a satisfactory master for card reproduction. The experimental program which led to the development of these three steps was conducted under the supervision of the assistant catalog librarian and was staffed by student assistants.

Our original request procedure involved use of a request sheet which proved unsatisfactory for several reasons:

1. Requests were recorded as found, in a random sequence of catalogs and volumes, and there was no convenient way to batch them for copying. As a result, the operator wasted considerable time collecting and returning volumes.

2. If the copy proved to be unacceptable for any reason, the item had to be re-searched.

3. The requester's initials had to remain on the finished print in order to identify the copy for distribution.

4. No easy way was found for the requester to match completed copy with its volume, particularly when operating difficulties or staffing problems caused copying backlogs.

A separate request slip, which remains with the copy throughout the card production process, eliminated all of these problems.

Until a sufficient number of prints had been processed completely, we were not sure what standards to apply. We were not sure which problems derived from the copy itself and which were caused by the processing. As a result, in assessing quality, we varied between being overly permissive and overly strict.

Because of the requirements of the Xerox 3.2.1., the physical condition of the print is of great importance. After we established a package arrangement whereby the covering request slip protected the surface of the print and a backing card kept it flat and even, our reject rate dropped significantly. We were then able to concentrate on standards for the print. Basically, each print must meet the following requirements:

1. The copy must be parallel with the top of the print paper.
2. The copy must be positioned horizontally, so that there is space to
type in the call number with at least two typewriter spaces between the number and the left edge of the print, and vertically, so that there is space for the headings to be overtyped on the completed card set.

3. Contrast must be such that the finished card set will be neither too light nor too dark.

A quality control process is essential to ensure that the prints meet these standards. Originally, a review routine was applied immediately, before the copy was distributed to the requesters. We found, however, that time was spent redoing prints which the cataloger might modify extensively or discard as incorrect. We therefore shifted review to a later stage—now prints are reviewed after the cataloging process has been completed. A further advantage of this arrangement is that when reprints are necessary, some of the corrections requested by the cataloger can be facilitated by blacking out portions of the negative to remove unwanted information and provide space for typed insertions. This in turn saves typing time and frequently results in a neater looking card set.

Problems

Certain problems encountered with the Copy Cat as originally provided have now been adjusted or corrected:

1. The original enlargement ratio of 1.76 made copying items from the 1956–67 Rowman and Littlefield cumulation of the NUC impossible. A new camera setting was devised to provide a 1.6 enlargement ratio, and a new mask was provided to fit the longer line in these catalogs. (As a result of these changes, copy extracted from other NUC volumes is sometimes slightly smaller than desirable, and unwanted material from adjacent columns must be blacked out on the negative.)

2. The original fixed-position mask made impossible compensation for an entry which was not aligned in the catalog. An adjustable mask was provided to permit left-to-right alignment.

3. There was not sufficient clearance between the camera and the back wall of the machine to permit copying items on the bottom of a page of the larger volumes. This problem was solved by cutting an opening in the back wall.

4. If the copy in the volume is too close to the inner margin, as is frequently the case with the NUC monthly cumulations, it is sometimes impossible to focus the camera to obtain a clear print. In such cases the page can be Xeroxed on a machine where the book is laid flat, and then a photograph is made from the copy.

Although the basic design of the Copy Cat is intended to permit easy maintenance, access to two areas is difficult:

1. The camera is suspended under the darkroom, and adjustments of the camera setting require use of a dental mirror. This is a minor problem because the camera setting seldom needs readjustment.

2. The screws which permit adjustment of the mask are difficult to
tighten because of their position in relation to the metal legs of the camera unit. For this reason, we prefer not to change masks when working with the different catalogs, even though the size of the copy varies.

In terms of operating problems, we have found that:

1. Blacking of the negative with a Magic Marker is essential to remove lines around the copy and to delete unwanted text picked up from adjacent columns.
2. The prints are easily damaged while damp and tend to curl. For protection, therefore, we use a backing card and a cover slip.
3. Spacing of the print is very important, particularly because the Xerox 3.2.1. tends to expand the copy slightly. Most rejects now result from unsatisfactory spacing.
4. Because of the glossy surface of the print, it is necessary to "rough up" with an electric eraser any area where typing in is necessary. Moreover, neither pencil nor ordinary pens can be used successfully; any markings to be written on the copy must be made with a fine point black felt pen.

Cost

For copying purposes the best master is unquestionably an actual LC card. Because depository cards from the Library of Congress are free to Princeton as a participant in the National Program for Acquisitions and Cataloging, the card is also the cheapest master available. Therefore, a Copy Cat print is made only if the LC card is not in our depository catalog at the time the book is to be forwarded for cataloging. For titles which are outside the scope of the depository catalog, a Copy Cat print is made when LC is unable to supply a card set.

Costs during the experimental program were considerably higher than our present figures, which are shown in Table I. Note that the total cost of equipment and supplies is $.15 per print. We consider our present costs acceptable because of the quality of the finished product.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost per year1</th>
<th>Cost per hour</th>
<th>Cost per print2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental fee</td>
<td>$ 900.00</td>
<td>$ 0.60</td>
<td>$0.06</td>
</tr>
<tr>
<td>Supplies5</td>
<td>1,350.00</td>
<td>0.90</td>
<td>0.09</td>
</tr>
<tr>
<td>Salary &amp; overhead4</td>
<td>5,385.00</td>
<td>3.59</td>
<td>0.36</td>
</tr>
<tr>
<td>Quality control5</td>
<td>900.00</td>
<td>6.00</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$8,535.00</strong></td>
<td><strong>$11.09</strong></td>
<td><strong>$0.57</strong></td>
</tr>
</tbody>
</table>

1. One year includes 1,500 operating hours.
2. Based on a production of ten prints per hour.
3. Estimate for paper includes a 30 percent overage to allow for multiple prints, reprints, etc.
4. LA-A clerk, our lowest clerical classification.
5. Based on an estimated 150 hours of supervisory time.
EXHIBIT 2
Copy Cat Print

Evaluation

We have found the Copy Cat superior to most alternatives because the camera produces clear, sharp copy which can be fed to the Xerox 3.2.1. to obtain card sets that are for the most part neat and highly legible (Exhibit 2). Moreover, alterations in the bibliographic record can be accomplished on the Copy Cat print, thus avoiding costly retyping and revision.

The Copy Cat is compact and easy to maintain. In over a year and a half of operation, practically no time was lost because of mechanical failures. In those few instances where parts had to be replaced, they were shipped to us air freight; because the device consists of separable units which can be detached and replaced in toto, any major malfunction can be remedied in-house without waiting for a service representative.

Introducing the Copy Cat into our operations did not prove to be a problem-free task. Most of our difficulties, however, arose from the decision to use student staffing during the trial period. Now that procedures are well-developed and a full-time staff operator is present, training, supervision, and waste should be reduced greatly. Indeed, the only major problems which we have not been able to resolve are those inherent in the materials being copied—records in the NUC which are too light or which are positioned too close to an inner margin. Fortunately, instances where these circumstances impede copying are relatively few.

REFERENCE

Acquisitions in 1973

J. MICHAEL BRUER
University of Houston
Houston, Texas

Introduction

An accurate appreciation of the scope of 1973's work in acquisitions can best be obtained by reflecting on the consequences of the reorganization of the old Acquisitions Section of the Resources and Technical Services Division, which became the Resources Section at the end of the 1973 Annual Conference in Las Vegas. Although the detailed implications of these changes will no doubt be covered in the future annual reports of the chairmen of this section, it is important for this report to call attention to the possible ways in which this development may foreshadow the future thrust of acquisitions work in this decade. The reorganization included a change of name, from Acquisitions to Resources Section, and the incorporation of three former division-level units in the new section. The Subcommittee on Micropublishing Projects and the Subcommittee on the National Union Catalog (ad hoc) are now full committees of the Resources Section. The former RTSD Resources Committee has been reconstituted as the Collection Development Committee, with new focus, new membership, and a vigorous new program designed to meet the needs of acquisitions librarians who face the problems of a restricted fiscal environment beginning with the Nixon budget cut of 1969.

It is this latter change, an emphasis on collection development as a sign of the times, which seems to symbolize the response by acquisitions librarians to the strained budget conditions of recent years. As the review of acquisitions trends of 1972 makes clear, and as is further demonstrated in this summary of 1973's work, a number of issues related to acquisitions in terms of collection development, as distinct from acquisitions procedures and operations, are receiving renewed attention and careful analysis. These issues include research in gift and exchange practice, reevaluation of approval purchasing, analysis of book selection practice, and cooperative acquisitions. Each of these issues may be termed a subset of the larger problem of collection development in general. It is, therefore, encouraging to note a new structure within RTSD more in keeping with recent efforts to build the best possible collections in the face of declining sources of funding. It would not be an exaggeration to
label this development the most significant one in acquisitions work during 1973. And it is not too much to hope that it foreshadows new and expanded research into the principal issues of collection development which will be reflected in the literature of the next few years.

Coincidental with these developments was the publication in 1973 of the proceedings of the Department of Health, Education, and Welfare-sponsored Institute on the Acquisition of Foreign Materials held in 1971. The papers cover a wide spectrum of issues, many of which are noted in appropriate sections of this review. In addition to those papers specifically cited, a number of contributions are included on the organization and technical processing of foreign materials, cooperation in acquisition programs, reproduction of foreign materials, and methods of acquisition.

Also related to collection development is the monograph by Brodus on selection practice and a collection of essays assembled by Applebaum which includes studies on acquisitions methods and bibliographic control as well as papers on processing operations and technical applications of MARC.

**Federal Appropriations**

The downward trend in federal support for libraries which began in 1969 approached its nadir in 1973 with the announcement of President Nixon's budget for fiscal year 1974, which dismantled "the whole body of library aid laws by the simple expedient of recommending not a cent for libraries." Initial congressional reaction was sharply critical of the president's library policy which reflected his announced determination to achieve a $250 billion budget ceiling. This policy triggered a symbolic program sponsored by the American Library Association entitled "Dimming the Lights" on 8 May 1973. By means of this and other efforts on the part of many librarians, the library budget plight was called to the attention of lawmakers and the general public with the hope that the zero budget proposal might be reversed.

The education revenue-sharing plan proposed by the president was also received coolly. As a result of this program, public libraries, already hard-hit by general revenue sharing, were joined by school libraries which will have to compete for funds with teacher pay and classroom equipment.

And finally, the administration's impoundment policy was assailed by a flood of lawsuits—thirty at last count—charging that funds were being withheld illegally. In most cases the administration lost its argument in federal district courts, though it has appealed many of these decisions.

The net result of this negative approach to library programs was extended delay before authorization of budgeted funds was finally achieved. Several versions of the bill funding HEW programs during fiscal 1974 were vetoed by President Nixon, and Congress—unable to override the vetoes—enacted continuing legislation to fund library programs on a temporary basis. At last, after some compromise on the total appropriation, the president signed into law Public Law 93-192 appropriating...
$32.9 billion for fiscal year 1974, including library funding in the following categories: Elementary and Secondary Education Act (ESEA), $95 million for school library resources and instructional materials; Library Services and Construction Act (LSCA), $46.5 million for library services and $2.7 million for interlibrary cooperation; Higher Education Act (HEA), $10.5 million for college library resources, $3 million for library training, and $1.5 million for research. The law authorized appropriations which totaled $1 billion less than Congress had authorized, and contained a provision allowing the president to cut total appropriations by $400 million, though individual programs could not be cut by more than 5 percent, and programs which do not exceed the president's budget could not be cut at all.

Thus, although the president's threat to reduce federal library support to zero was overcome, it is evident that library and educational programs are a long way from having clear sailing. The downward trend in total appropriations has continued, and the general climate in Washington, particularly as reflected in the attitude of the administration vis-à-vis funding for educational programs, has worsened.

Copyright

On 27 March 1973 Senator McClellan introduced a new copyright revision bill (S. 1361) substantially the same in content as the previous one (S. 644) which did not meet with approval from librarians. The conflicts between cable television and the broadcasting industry appeared on the way to resolution, leaving disagreement between librarians and publishers as the main stumbling block to copyright revision. McClellan stated that his committee had received several requests to conduct additional hearings, and he gave assurance that they would be called at a later date. But the first session of the Ninety-third Congress did not complete action on the general copyright revision bill, which was therefore carried over into the second session scheduled to begin on 21 January 1974. The president had previously signed Public Law 92-566 on 25 October 1972, extending existing copyrights until 31 December 1974.

In the copyright infringement suit brought by Williams & Wilkins against the National Library of Medicine and the National Institutes of Health, the United States Court of Claims announced its decision in favor of the defendants on 27 November 1973. Although the court's commissioner Davis had recommended in February 1972 that the plaintiff was "entitled to recover reasonable and entire compensation for infringement of copyright," the full court ruled, in a four to three majority, that as a matter of law . . . plaintiff is not entitled to recover and its petition is dismissed." Specifically, the court held that under the circumstances of the case photocopying should be considered "fair use."

Postal Rates

At year's end it was announced that a new request for across-the-board postal rate increases had been submitted by the postmaster general to
the Postal Rate Commission. The proposed increases would be over and above the schedule of increases authorized in 1971. It is anticipated that hearings will be held during 1974, at which time the American Library Association (ALA) will attempt to forestall the newest proposed rates.

Automation

Previous articles in this series have emphasized the relative scarcity of studies dealing with mechanization of acquisition processes. The trend continues: the literature available for inclusion in this survey is virtually nonexistent. This lack of reported activity is especially evident in the case of on-line systems, and the number of papers of any sort is insignificant in comparison with those devoted to circulation and cataloging. Several possible explanations of this condition suggest themselves: no work is being done in this area, or at least none reported; the results are being published only in the technical report literature; or most new systems are “off the shelf,” lacking imaginative new features susceptible to generalized application. Whatever the case may be, there would appear to be considerable justification for a study of the nature and causes of this phenomenon.

Exchange and Gift

Draft statements on appraisal of gifts and on legal title prepared by the Committee on Manuscripts Collections of the Rare Books and Manuscripts Section, Association of College and Research Libraries (ACRL), first appeared in late 1972 and were given final approval by the ACRL Board of Directors at the 1973 Midwinter Meeting of ALA. Subsequently, officially approved statements appeared in a number of sources after comments and criticisms had been solicited by the committee.

The Tax Reform Act of 1969 came under fire from a number of sources in 1973. As presently written, the tax laws do not permit gifts of one’s personal papers and manuscripts to be appraised as charitable contributions for income tax purposes. It is this provision that has been cited as the principal reason for the decline in gift-in-kind programs of libraries and research institutions. The Rare Books and Manuscripts Section of ACRL, through chairman Howard Applegate, testified before the House Ways and Means Committee and presented a strong case for amending the Tax Reform Act. Evidence was offered that gifts of manuscript collections had dropped sharply in the years following the enactment of this legislation. Additional criticism appearing in the annual report of the Library of Congress (LC) noted that the consequences of the act were felt most severely by the Manuscript Division of LC, which failed to receive any significant new literary collections during the preceding year.

The Society of American Archivists (SAA) also released draft standards on gift appraisal prepared by the Standards Subcommittee of the SAA
Committee on Collecting Manuscripts. The society's council invited comments and criticisms of the draft before final approval was given. This draft is similar in content to the standards approved by the ACRL though somewhat differently structured.

The literature on exchange includes a full report by Gamboz on the second conference of European exchange experts organized by the International Federation of Library Associations' Committee on the Exchange of Publications. Several important aspects of exchange were emphasized at the conference: exchanges and other means of access to world literature; the need to increase exchanges with developing countries; current exchange problems, particularly with reference to establishing the exchange balance; and the present situation of standardization in exchange practices. The conference also noted that excellent progress is being made by B. P. Kanevsky (USSR) in preparing the International Bibliography of the Literature on Exchanges and discussed the desirability of bringing up to date the information in Unesco's Handbook on the International Exchange of Publications (3d ed.; 1964).

Various methods of dealing with the problem of obtaining single issues and complete volumes of medical periodicals were examined by Pathan, who emphasizes the Medical Library Association Exchange as a source. The relatively low incidence of use of this service is attributed to a lack of knowledge of its existence, particularly among non-U.S. libraries. Another helpful exchange program recommended by Pathan is the World Health Organization's International Exchange for Duplicate Medical Literature.

Government Publications

Bad news continued to plague the Government Printing Office (GPO) during 1973, relieved only by the appointment of a new public printer after a year of indecision by President Nixon. The administration's budget reductions have now hit GPO, for which the fiscal 1974 budget request is $26.8 million, down $1.2 million from the previous year. This cut-back is particularly vexatious in view of the mounting backlog of orders for public documents. There are reports of delays as long as nine months for order fulfillment, but GPO has announced a target of three-weeks' turnaround time which it hopes to meet in spite of the reduction in budget.

With regard to the acquisition of United Nations agencies publications, Gerard stresses the role of UNIPUB, Inc., in providing coverage of the publications of Unesco and some twenty other intergovernmental agencies which together comprise the United Nations system. He also reports on the publication of a new periodical, International Bibliography, Information and Documentation, which will "provide bibliographic information on all the current publications of all the organizations of the United Nations System." This important acquisitions tool provides coverage of documents and publications of the specialized agencies of the United Nations formerly included in United Nations Documents Index, which
in recent years has devoted itself only to those materials published by
the United Nations itself.

A number of useful papers dealing with the impact of government
libraries and federal library programs on the acquisition of foreign ma-
terials appear in the proceedings of the Institute on the Acquisition of
Foreign Materials, already mentioned.25

Microforms

The series of articles by Fair on the development of a microtext read-
ing room continued in 1973. Part III deals with further aspects of bibli-
ographic control of microforms, including indexes and catalogs, and
touches upon receiving and processing routines.26

In another important article, Sullivan covers microform developments
as they relate to acquisitions. Having called attention to the rapidly
expanding holdings of microforms in the collections of major American
research libraries, Sullivan reviews the various types of microform, the
micropublishing industry, selected cooperative projects, research efforts,
bibliographic control, and ordering procedures. He suggests that the
acquisitions librarian needs to be aware of changes in these areas and
"to try to interpret them to assist in the acquisition of microforms for
his particular library."27

O.P. Materials

The acquisition of out-of-print (o.p.) materials was the object of con-
siderable attention in the literature of the past year. Perez examines
various methods of obtaining o.p. materials for library collection-binding,
including reprints, microtexts, and exchange, as well as the o.p. book
market itself.28 Included in this paper are the results of a survey of o.p.
book dealers which gives an indication of current practice.

Another survey of dealers is reported by Mitchell, resulting from the
experience of the California State University at Northridge library which
showed that most titles supplied were received within nine months from
the date of the want list.29 The survey attempted to determine dealer
approaches to the problem of locating titles, the methods found to be
most useful, and the reasons for the lack of response by dealers to want
lists after nine months. Mitchell suggests that purchasing standards
should be established so that book dealers and librarians might operate
under the same set of assumptions.

Lynden and Meyerfeld advocate reliance on an in-house specialist to
prepare desiderata lists and evaluate offers received.30 Their results seem
to indicate that it is possible to achieve measurable cost savings by hav-
ing the library act as the searcher as opposed to granting exclusive rights
to a bookdealer.

Particularly thorough coverage of o.p. problems is provided by the
proceedings of the Institute on the Acquisition of Foreign Materials.
The viewpoint of dealers relating to acquisition of noncurrent materials

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is represented in papers delivered by Blackwell, Dorn, Hanrahan, and Slatkine. The librarian's viewpoint is represented by Loreck. Acquisition of o.p. materials from Latin America is covered by Hodgman, and from Western Europe by Szabo. The services of auction rooms and the acquisition of o.p. materials from institutions and collectors are the subjects of papers by Spowers and Torrington.

Cooperative Acquisitions

The papers of the first Caribbean Conference on University and Research Library Cooperation, including several dealing with acquisitions topics, were published in 1973. Jordan points out in an introduction that the acquisition of materials is the *sine qua non* of most library cooperative endeavors, "without which neither their listing nor availability for consultation and loan could follow." It is further noted that, in the absence of recognizable trade publishing and current national bibliographies, research libraries within and outside the area are unable to apply standard acquisition techniques. Alternative approaches to this and other problems are offered by the contributors.

An information clearinghouse for expensive library purchases has been established at the library of the University of California, Berkeley. All of the University of California campuses along with Stanford University have agreed to participate in the experiment which will be carefully evaluated over a six-month trial period. Each library will send a copy of each order slip for items priced over $100 to be filed in a common data bank at the Berkeley campus. It is anticipated that monthly lists of titles reported will be prepared and sent to participating libraries.

The acquisitions policies and cooperative acquisitions efforts of the National Library of Medicine and the National Agricultural Library are clarified by Finzi in the papers of the Institute on the Acquisition of Foreign Materials, which also contained a contribution by McNiff on the general question of cooperation in the acquisition of foreign materials.

In Summary

It should be clear from this resume of acquisitions work in 1973 that the period of adjustment and reevaluation signaled by the contributions of 1972 has continued and even broadened in scope. The number of shocking reports of huge budget cuts, which permeated the literature of 1971, declined substantially during 1972 and 1973. It would seem that smaller book budgets, as compared with those of the sixties, are accepted as a fact of life now. There is evidence to indicate that acquisitions librarians are turning their attention from the problem of "how little there is" to the question of "how to get the most out of what is available." Hard times have spurred research and analysis on a host of issues related to the acquisition of library materials, with emphasis on maximum return on investment of time and money. There remains now the problem of
bringing these issues into perspective and relating them to one another, with a view toward an integrated theory of resource allocation and collection development.

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The adoption of cost-plus pricing by a major book jobber may have profound effects on the discounts that libraries receive. The article explains the pricing system and presents a set of graphs for libraries to use to determine its effects. Under cost-plus pricing, libraries that order single copies of books with an average list price of $10.00 or less are likely to receive an average discount of about 5 percent. Ordering multiple copies increases the discount; however, very short discounts are likely to prevail for standing orders and books received on approval.

LONG USED BY MILITARY CONTRACTORS, cost-plus pricing is a system by which the supplier charges the customer the price it has to pay plus a certain additional amount to cover other costs and allow for a profit. With one major book jobber, Richard Abel & Co., switching to cost-plus pricing and the possibility that others may follow suit, it seems appropriate to examine the effect that the new pricing system may have on discounts to libraries.

In February 1973 Richard Abel & Co. adopted cost-plus pricing. Under its new system Abel passes along to its customers the discount that it receives minus 6 percent for United States and Canadian publications and minus 10 percent for publications from the United Kingdom. To this adjusted discount figure, a service charge is added. As of 1 May 1973 the service charge was $1.65 for single copies of books whose list price was $10.00 or less, and $2.15 for those over $10.00.

To illustrate how the system works, suppose that a library purchases a single copy of a book with a list price of $20.00 and that Abel receives a 30 percent discount from the publisher. The library would pay $20.00 less 24 percent plus $2.15, or a total of $17.35.

Clearly the discount that the library actually receives from Abel is not 24 percent, but about 18 percent. The difference is due to the effect of the service charge. The effect depends on the list price and the discount that Abel receives from the publisher. In other words, books with high prices and high discounts will result in higher library discounts than books with low prices and low discounts.
The overall pattern of fluctuating list prices and discounts for single copies is shown in Figure 1. The vertical axis shows the list price reported by Abel. The horizontal axis shows the discount that Abel gives to its customers, i.e., the discount that Abel receives less 6 percent for United States and Canadian books and 10 percent for books from the United Kingdom. The curves on the graph demonstrate several real or actual discounts that a library receives when the service charge is taken into account.

Libraries can use the curves to predict accurately how the discounts they receive will fare under Abel's cost-plus pricing. Suppose a library purchases a $20.00 book, and Abel gives a 5 percent discount. By using a straight-edge to find where on the graph the list price ($20.00) and the discount (5 percent) intersect, it is apparent that the library will pay more than list price, because of the effect of the service charge. On the other hand, if Abel gives a 21 percent discount on the same book, then the library will receive a discount of 10 percent after the service charge.

The curves can be used to best advantage when average prices and average discounts are known. It must be stressed that average prices and discounts over a period of time are much more meaningful in the business operations of a library than the price or discount of any particular item. During one test period, Boise State College library purchased books
from Abel that had an average list price of $10.75 and an average discount from Abel of 24.5 percent. From the graph it can be seen that our real discount was somewhat greater than 5 percent.

The important point is that when a library looks at average prices, average discounts, and average real discounts, it can determine where its overall book-buying operations lie in the world of possible situations. In the case of cost-plus pricing a library can increase its real discount only by either ordering books with a higher average price or changing the mix of its orders so that Abel receives a higher discount from publishers.

It is unlikely that libraries whose orders average $10.00 will be able to reach the curve of 10 percent real discount, since Abel would have to give an average discount of 28.5 percent. Abel, in turn, would have to receive 34.5 percent discount from the publisher. Libraries whose orders average $5.00 each will probably pay over list price on the average.

The situation changes somewhat when multiple copies or multi-volume sets are purchased from Abel (Figure 2). Abel passes along the same discount on each additional copy or volume, but adds only a $.25 service charge for each. This greatly reduces the effect of the service charge. A library that buys an average of two copies of every title can achieve easily the curve of 10 percent real discount—the average list price per volume needs to be only $9.50 with Abel giving a discount of 20 percent. In the real world, however, it is likely that only school or

![Figure 2](image)

**Figure 2**

Actual Discount on Orders for Two Copies from Richard Abel & Co.

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Actual Discount on Approval Books and Standing Orders from Richard Abel & Co.

public libraries buy an average of two copies and can therefore benefit significantly from this aspect of cost-plus pricing.

Discounts are much harder to attain in the case of standing orders and books received on Abel's approval plan (Figure 3). Abel makes a service charge of $2.25 for books with a list price of $10.00 or less and of $2.65 for those over $10.00. This has the effect of shifting the curves in Figure 1 upward and to the right, thereby making it increasingly difficult for libraries whose standing orders or approval books average $10.00 or less in price even to break even. On the average, Boise State College library is receiving about 2 percent discount on approval books and less on standing orders.

It is hoped that the graphs presented here will allow libraries to examine the effects of cost-plus pricing. I would like to stress that they in no way depend on the situation or experience of Boise State College, but rather they show the discounts that will prevail at any library under Abel's new cost-plus pricing system.

Whether or not a library will receive a competitive average discount will depend on the average list price of items that it orders and the rate of discount that Abel receives from the publisher. Libraries that order single copies of books in the $10-15 range probably can expect their average discount to be less than 10 percent. If such items are put on standing order or received on approval, the discount will probably drop.
below 5 percent. On the other hand, if a library orders, on the average, two copies of books in the $10–15 range, it should be able to attain an average discount of between 10 and 15 percent.

Each library will have to judge for itself the discount that it receives under cost-plus pricing. Undoubtedly, such a judgment will be made in the light of the importance of discounts in general, the degree of competitiveness between jobbers, and the quality of service that each jobber provides.
An Empirical Rationale for the Accumulation of Statistical Information

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A point of departure for the collection and use of statistical information about a library’s internal operation is presented. Several techniques for manipulating numerical data are suggested to achieve a better understanding of actual operations within the administrative unit being studied.

Libraries have never come to grips adequately with the problems which arise in gathering statistical information about themselves or their operations. As Herner, Randall, Maidment, Booz, Allen and Hamilton, and Goldhor point out, very little has been written to guide the administrator in developing a rationale for the collection of statistical information about his operation.1-5 Today there is a great need within the profession for quantified objectives and performance measures. These cannot be developed, however, until the profession can create an adequate data base which will support such goals. Yet the kind of data base envisioned here will not be forthcoming until a carefully reasoned statement of principles has been developed and tested against the everyday needs of the profession.

The compilation of statistical information concerning library operations is too frequently a routine operation based on tradition and with unclear purpose, resulting in poorly collected data utilized at a very unsophisticated level. The intent of this paper is to offer the reader a rationale of measurement as well as a technique for discovering the essential parameters necessary to answer the needs of library management for measurement and quantitative observation.

The computer, with its immense capacity for storing and manipulating numerical data, has both aided and accentuated this problem. It is typical of the change from manual to computer processing that the need for a more rigorous examination of current procedures is spotlighted.

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Meanwhile, because of inadequate understanding the immense potential of the computer for manipulating numerical data remains either untapped or poorly used.

Colorado State University (CSU) libraries was in just such a situation in early 1972 with the impending change from a manual to an automated circulation system. Our need for supporting documentation was further reinforced by the large number of management-type questions received by the CSU library administration when justifying and effecting this change. Quite soon after the decision to automate circulation had been made, it became apparent that our gathering of statistical information was both traditional and naive, and that existing information about the library's operations would answer neither the university's nor the library's need to interpret what was taking place at the loan desk.

This observation, together with the feeling that our problems were not unique to CSU, has prompted the development of the following rationale.

The library circulation desk is a reservoir of information about the library, its collections, and its users. Circulation activities, therefore, offer a rich mine of statistical data to be analyzed and manipulated. This is not meant to imply that statistical information is unique to the loan desk and its activities. Indeed, it is hoped that many of the guidelines developed here will aid in the collection of management information about other areas throughout a library. Thus, one can develop from the data and activities taking place at the loan desk a number of concepts and guiding principles which will aid other areas throughout the library in efforts to develop management information systems.

The term “statistical information” as it is used here refers to numbers taken as measures of the occurrence of certain events, be they books checked out/in, patrons coming through a turnstile, or hours of staffing time. By using the science of statistics, it is possible to study these numbers and their significance in more detail, to determine the measures of central tendency reflected by these events, to develop the capability to generalize about the population from a sample, and to forecast the likelihood of an event's occurring as well as the distribution of events over time. Before one begins to collect or manipulate this data, however, he needs a clear understanding of his goal or purpose in collecting such data (what conclusions are to be drawn from the data), a measure of the accuracy/validity of the data, an awareness of the data's currency, a well-planned methodology for the gathering of the data, and some awareness of, or sensitivity to, what questions the data can and cannot answer. In this last requirement lies the first clue to the creation of a rationale for the collection of statistical information.

The library administrator should begin his review of the organization's need for statistical information by compiling a detailed list of the questions which the proposed system will have to answer. In doing so it will be helpful for the manager to think in terms of size or number, frequency of occurrence, processing rates, rates of change, and costs (the
consumption of any resource) as they could be used to answer questions of how much?, how many?, how often?, or how long? Ideally, this exercise should occur well in advance of the implementation of a new system in order to take the necessary steps to collect and tally the requisite data. This will not always be possible, however, and adequate provision must be made for the insertion of needs discovered during the second, third, fourth, ..., nth iterations in the design of a system to collect statistical information.

It is possible to categorize these questions in a way that will aid in their formulation. Management-type questions which can be answered about a library's operation using numbers usually will fall into one of the following four categories:

1. Questions relating to the user or to a class of users, their habits, likes, dislikes, demographic characteristics, predispositions, and needs.
2. Questions about the collection itself, how it is used, when, what duplicates need to be purchased, and, relating to (1) above, by whom are what parts of the collection used.
3. Questions relating to the impact that library policies have upon the use being made of the collection. For example, how do loan policies governing circulation periods, fines, holds or reserves, and renewals affect the use of the collection and/or the user.
4. Questions about work loads, scheduling, operational limitations, staffing patterns, product flow, service demands, and traffic movement.

Each of the above will influence the decision making processes of the administrator to some degree, and each is vital to intelligent decision making by the library manager. Consider how sparse our present information is now and how totally unequipped a librarian is to answer most of the questions asked by management. Just how unsophisticated is seen clearly in the profession's diligent collection of statistical information about library materials checked out, whereas a record is seldom kept of items discharged. Yet the discharging process has tremendous impact upon the work load and staffing patterns at any loan desk and, as we have discovered at CSU, is never equal to the charges for any given day, week, or quarter. Yet checking an item in is just as important as checking it out and can be even more burdensome on the staff if due dates are not controlled carefully.

Typical examples of the questions which might be asked from each of the above categories are the following:

1. Questions about the user.
   How many and what type (as defined by the library) of borrowers are using the library? How many and what types of libraries borrow on interlibrary loan?
   What are the characteristics of these borrowers? For example: age,
sex, education, class, major, college, address, status (faculty, student, staff, adult, young adult, child), marital status, date of entering school or moving to town, and which library they used most often. From this data a demographic profile can be constructed and questions about user habits, collection development, etc., answered.

What techniques can be used to identify the chronic delinquent borrower?

What is the ratio of actual to potential users?
What is the average circulation per user per quarter?

2. Questions about the collection.
What percentage of materials is being used by type and/or class of user?
What portions of the collection are used most heavily?
What library materials (titles) receive heaviest use?
What is the circulation history of a given title?
What books have circulated so often that they are likely candidates for rebinding or replacement? How often and in what ways is the entire collection being used? Are there enough copies of a title to meet demand?
What languages, subjects, countries, publication dates, and dates of acquisition receive greatest use?

3. Questions relating to library policies.
How well do the present loan policies meet the needs of the library’s clientele in terms of insuring equitable treatment, length of the circulation interval, and involving the greatest number in library use?
What is the number of days a book is likely to be off the shelf and thus unavailable for loan?
What is the likelihood of a request being received for a given book while that book is off the shelf?
What is the average length of time we can expect an item to be off the shelf under each class of loan period?
What is the average number of items checked out in one set of concurrent transactions? (Used to answer the question, “How many books might a library user take at one time?”)

4. Questions related to management.
What are the daily, monthly, quarterly, and/or annual charge, discharge, and renewal rates?
What is the greatest/least number of books likely to be on loan at any given time?
What is the relationship, if any, between increased enrollment and increased charges from the library?
What percentage of the returns come in on time, one day overdue, two days overdue, three days overdue, . . . , n days overdue?
How many circulating books were reported lost or were requested by another reader in the period of a day, a month, a quarter, or a year?
Where are the peak load periods during the day, week, month, quarter, and year?
What is the ratio of loans to new additions to the collection?
What is the ratio of loans to the total book collection?
What percentage of one day's circulation was acquired in the past six months? Quarter? Year?
What is the ratio of items circulated to the number of actual users? Of potential users?
What percentage of the users coming into the building can be expected to withdraw a book?

These are just a few of the many questions which the library administrator can ask himself about his library. Yet they serve to illustrate the necessary beginning point for any compilation of statistical data about an operation, its purposes, and functions.

Once the goals have been decided upon, and the questions to be answered by the system have been articulated, the manager must decide how he wishes the numerical data to be captured and stored. Does he seek a frozen moment of action, a trend or direction, averages or a total, a rate of change, or simply the monitoring of a process? Does the manager need absolute numbers or will percentages (ratios) answer his needs? Is he seeking cumulative figures or does he wish to acquire information about a specific period, such as the activity within an hour, day, or week? Each requirement has its own limitations, and data is collected differently. For example, if the library manager is looking for totals then his results are valid only when the identity of the items (events) counted remains both constant and discrete. If he wishes to deal in averages, he must understand that the figure he derives very easily could be one which does not exist in the data set being studied. If he wishes more than one cumulation, then the data must be capable of being stored and summed several times without any loss of data; and if he wishes only to cumulate for a given period, he must define both beginning and ending times.

In conclusion, the user of numerical information must keep in mind and be alert to the following general considerations:

1. For what purpose(s) is the information to be acquired? What questions will be answered or decisions made on the basis of this data? Remember, too, that all data do not have equal value in use, and, therefore, both data and data collection should be cost sensitive.
2. How closely can the information derived from the accumulated data be expected to approximate the actual? In other words, how closely does a sample mean approximate the true mean?
3. Over what time span is the data to be acquired?
4. Are the data points discrete, or do they overlap other data points in such a way as to invalidate the data or the conclusions?
5. Is the definition of each unit to be measured precise, unambiguous, explicit, discrete, and capable of replication?
6. If the collection of statistical information is to be automated, it is important that all personnel working with the system understand clearly the demands of the system, including answers to the preceding considerations, and it is crucial that great care be devoted to insuring a consistent, thorough collection of data and proper handling of the data in the computer.
7. The manager must keep in mind always that the way in which data is captured will have a decided impact upon the data itself as well as upon the way in which that data can be used. Great care must be taken to avoid any possible bias in the collection of data.
8. Every effort should be made to standardize the collection of statistical information among libraries so that such information will have meaning both to the library where it was accumulated and to other libraries of a similar nature having similar problems.
9. Finally, there is a proprietary aspect to all management information, and its distribution must be monitored carefully lest the information itself be used for purposes other than those intended and/or improper conclusions be drawn from this information.

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8. Randall, "Special Library Standards."
The design, implementation, and operation of an integrated on-line automated system are discussed as applied in a scientific and technical library. The system handles book ordering and receiving, cataloging, circulation, language control, and bibliographic retrieval; serials ordering and renewal, receiving and routing, holding records and binding data; patron and statistical control. All subsystems function independently.

This locally designed and implemented system handles open literature and patron control while the systems of the Defense Documentation Center and the National Aeronautics and Space Administration are utilized for technical report literature through on-line cathode ray tube terminals for bibliographic citations and microfilm files of the reports themselves.

Introduction

There appears in the literature of library automation a great deal of information on system planning and analysis written in what one librarian has referred to as the "historical future," plus rather numerous accounts of how certain specific functional areas
such as circulation or serials control have been automated. There is still a dearth of operating experience—or at least the narration of such experience—relating to wide-scale systems which handle all the functional areas of a fairly large library in an integrated manner. Doubtless there are not too many situations where this approach is desirable, much less attainable, for reasons having nothing to do with the functions themselves, but because of the unavailability of manpower and equipment to do the job and the organizational structure basic to the design concept of large interacting data bases used throughout such a system.

This paper is an attempt to recount the implementation and operation of an integrated on-line automated system for handling ordering and receiving, circulation, bibliographic and language control, retrospective search, and patron and statistical data for a very specialized and very active scientific and technical collection of books, journals, and reports. The system was designed to provide the library with as much support as possible without great concern for hardware costs, which purportedly are diminishing while personnel costs continue to rise. Another consideration was the availability of a large, sophisticated computer center offering remote on-line time-shared processing. This account, written from the view of the librarian user and the computer specialist, attempts not to debate the “why?” but to communicate the “how” learned, it so often seems, the hard way.

The Redstone Scientific Information Center

Redstone Scientific Information Center (RSIC) is an element of the Army Missile Command at Redstone Arsenal, Alabama. A unique government organization in that its mission and support are shared by two agencies (the National Aeronautics and Space Administration Marshall Space Flight Center and the Department of Defense Army Missile Command), RSIC also serves the local contractors of these agencies and other local military organizations such as the Safeguard Systems Command, Corps of Engineers, and Army Missile and Munitions Center and School. The open literature collection is available for on-site use of college and university students. In addition to the traditional library services, translations, in-depth literature searching, state-of-the-art surveys, and development of advanced information handling techniques have been a part of RSIC’s activities.

The collection currently numbers approximately 185,000 book and journal volumes, 4,600 serial subscriptions, and over one million reports on research and development in missile and aerospace technology. There are about 7,500 registered patrons. The library staff of the center includes eighteen librarians, ten library technicians, and thirteen part-time students.

Description of the Automated System

Overall Design. Since its inception, as the result of a recommendation by a panel of library consultants in 1961, one of the functions of
RSIC has been to conduct a continuous program of research and development relating to the application to library purposes of microphotography, computation equipment, and automated processes in general. Design of computer library applications began in 1962 with project ALPHA-I (Automated Literature Processing, Handling and Analysis—First Generation). This system was designed and developed to automate the service, processing, and management aspects of the library operation, with primary emphasis on the processing activities because of their high manpower requirements. Programming and implementation were completed in 1965, and ALPHA-I operated more or less successfully until supplanted by the present on-line system begun in 1966.

The time spans—1962 to 1965 and 1966 to 1972—point up one of the basic characteristics of extensive automated systems. It takes a long time to design a system, to establish extensive data bases, and to implement and refine the operation. Meantime, changes occur, and the basic system must be flexible enough to accommodate these changes.

Perhaps the most significant change as far as system design and programming were concerned was the recent availability of remote on-line cathode ray tube (CRT) terminals and communications providing direct access to national networks for the research report area. As a node in the on-line networks of the vast information resources of the Defense Documentation Center (DDC) and the National Aeronautics and Space Administration (NASA), both centered in the Washington, D.C., area, RSIC was relieved of responsibility for the report literature and was able to concentrate on the book and journal resources unique to RSIC. Both national networks provide on-line CRT query, search, and print capabilities of their respective bibliographic files. Manual microfiche files of those collections are locally maintained, duplicated, and disseminated.

The resulting local system is one of on-line interactive design in which book acquisitions, cataloging, circulation, language control, current and retrospective search, statistics, serials, and patron control are treated as an integrated whole, with each subsystem or function interfacing with all the others to allow automatic and continuous flow of data from one to another. The librarians and library technicians are the direct users or operators of this system with functional controls assigned in the software to terminals according to their physical location. One terminal serves as a master providing backup and control. Programming is in COBOL for the Univac 1108 3x2 teleprocessing computer complex of Marshall Space Flight Center, and the system currently utilizes some eighty-two million characters of direct access drum storage. Five IBM 1050 remote terminals (consisting of typewriter, card reader, and cardpunch configurations) and associated communications gear located throughout RSIC connect the users with the computer complex located in a nearby building. In addition to keyboard entry, remote card input/output was designed into this system to provide for off-line data capture and transaction preparation, the use of recycle transactions, mailing no-
tics and address labels, and continued use of book circulation cards which were a carryover from the previous system. Most important, secondary operating software was developed so business can continue in a batch mode when hardware failures occur and when higher priority NASA missions force RSIC off-line. Needless to say, additional CRT terminals are desired for easier access, interaction, and upgrading of the system.

The present overall system is shown in Figure 1, which illustrates the interrelationships among the master files themselves and between the files and the terminals. The functions performed through the individual terminals are indicated, along with the files they act upon.

**Functional Areas.** During the design phase it was considered both philosophically and practically that the patron is the focal point of the system; therefore, the patron subsystem will be described first. The subsystem contains in machine-readable form all the patron information required by the librarian-user or by the other automated subsystems. The name, social security number, office address, phone number, security status, and routing requirements of each of the 7,500 patrons are included and provision is made for comments. Also included in this sub-

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system, as in all the others, are software maintained machine addresses of related records. These program links provide for the automatic flow of information from one subsystem to another.

The comment field, incidentally, is one common to most of the data files and provides a means for the notations so dear to the heart of most practicing librarians and indeed so helpful to the smooth operation of libraries. Here can be stored vital free-form information such as messages from publishers, unusual disposition instructions, or special handling notes.

In addition to the remote terminal queries initially envisioned for the system, there are numerous daily operations for which printouts are more suited for ready reference. In the case of the patron subsystem, these include alphabetical patron listings by name with a cross reference from a patron social security number sequence. Specified changes to critical control data in the files result in preprogrammed messages which are printed on cards ready for mailing to apprise the individuals concerned of the change. Unitized printed records are also produced for each deleted patron so required historical files can be maintained.

The book ordering and receiving function provides for items to be ordered or received throughout the day on any purchasing accounts that are authorized and stored in the system. Printed copies of orders are produced on demand, as are claims, cancellations, status reports, and financial compilations regarding current expenditures with each vendor. The skeletal bibliographic master record was to have been created at order time, verified, and added to in subsequent processing and handling, but this is not currently operational. Use of Library of Congress MARC data to create these records was investigated, but since such a small proportion of the materials ordered have cataloging records in this medium, the idea was abandoned for the time being. It was initially planned and programs were written to enable the cataloger to initiate the cataloging process at a remote CRT terminal by verifying and expanding data entered as part of the ordering and receiving process. Any additional bibliographic data was to be entered with the subject headings selected by the catalogers and automatically processed against the language control subsystem. The typewriter terminals provided by the computer center in lieu of the requested CRTs proved totally inadequate-too slow and awkward—for use by the catalogers. Temporary modifications were made to the programs to allow keypunch input of the cataloging record by a keypunch operator (the only one in the system) pending installation of CRT devices. The CRTs are expected to provide a suitable tool for direct input by the catalogers, who incidentally are no longer intimidated in the least by either the tools or the language of the computer professionals.

Once created, this large and vital bibliographic file is the backbone of the circulation system in addition to its more obvious use for printed catalogs, announcement lists, and retrospective search.

The book circulation subsystem provides control and maintenance
data regarding location and status of each copy of all the items included in the book master file. Circulation, renewals, recalls, records of lost and found items, and overdues are processed from the remote terminal located at the main circulation desk. In addition to on-line displays of the current status of copies of books, weekly printouts are available in several locations throughout RSIC and its five branches, arranged by patron name and by the call number of the book.

The language control unit or thesaurus is a file consisting of some 15,000 terms and 6,500 cross references, but in an automated system it is much more than a tool for catalogers. It is based on Library of Congress (LC) subject headings and not only records the subject terms used in describing materials in the collection but also is the key to updating and revising these terms throughout the book master file. The computer, which can readily store, change, and retrieve information if it has been properly instructed to do so, provides a veritable clerical army to do the cataloger's bidding once it has been determined that a subject heading is to be changed. One transaction or command to the system changes the heading not only in the thesaurus but also in the master record for every item previously entered under the old term.

Printing multiple copies of the thesaurus provides access for reference librarians and patrons, but even more useful for retrieval is the program ability to extract all cross references from the language file and incorporate them in the subject and author catalogs. Again, once a record is put into the system it can be used wherever and whenever it is useful.

The search subsystem is designed for bibliographic retrieval. Since LC subject headings are quite general, the products here amount to bibliographic listings, but ability to select various combinations of subject headings, authors, LC classes, and time periods, and to print in a predetermined but variable format results in a more useful product for the user and reduces the time devoted to interpretation by the reference staff.

The serials function was the last to be converted from batch off-line to on-line operation, partially in anticipation of development and implementation of the National Serials Data Program. The purpose of this subsystem is to maintain and control by title the ordering and renewal, receiving and routing, holdings records and binding data on each of RSIC's 4,600 subscriptions. This one file contains all machine records maintained on a particular title and produces review lists for consideration for renewal and binding, orders, receipt data, circulation routing slips (in conjunction with the patron file), statistical data, and masters of holding records which are published as a periodicals catalog and distributed to patrons.

One of the advantages of an automated system is the flexibility and ease of compiling financial and statistical summaries of the whole system. One can look at any of these summaries at any time by a simple on-line query to the system. Subtotals and accumulations over a period of
time provide any combination of data that might be beneficial or required for better management decisions and control.

Implementation

Conversion and Establishment of Data Bases. Of great assistance in implementing the current system was the fact that the large data bases required were already established, although in a different format. In most cases they had been used for years by librarians who knew them well and had already worked out many data requirements and reliability problems. It seems, however, that there is absolutely no way to anticipate and compensate for all the problems encountered in transferring large masses of data from one system to another. For one thing, the former systems were truly experimental when they were implemented in the early and mid-1960s, and as problems encountered were followed by solutions and reprogramming, the details of the "before" and "after" were not documented. The inventive resourcefulness of the operating librarians themselves was another unexpected hazard. Whatever information was considered necessary in their files, they managed somehow to include, disregarding the fact the computer programs were not designed to process this information. The machine can accurately store and retrieve, but it cannot discriminate unless it is also instructed precisely how to do so. Using computer records as "scratch pads" can serve an immediate purpose but must be done within a defined pattern. In this case the librarians turned out to be their own worst enemy.

Operation. The computer assumed its "rightful" role as villain, however, as soon as operations began on converted files under the new programs. While the previous system had been designed for maximum interface between subsystems, it did not function as a truly integrated system. The on-line system does, however, and there have been some disconcerting inconsistencies and gaps in the files, but the system is now fully operational.

The librarians made a tremendous contribution because of their interest and previous experience with the batch system. Their enthusiasm increased once they began to realize the advantages and potential of the new; they are now seasoned veterans who have learned to benefit from the use of the computer.

The most frustrating problem now is the unavailability of the computer during regularly scheduled working hours. This was considered and accepted during design stages, but can be quite a problem under actual operating conditions. In addition to scheduled nonavailability, there seem to be many more operational problems than anticipated with the hardware, and of course a direct access system with multioperator remote terminals will probably never be entirely free of program errors. The complexity of the system and its myriad components combine to produce a variety of problems, any or all of which deny the user the full benefits of the system. This same complexity and sophistication, however, greatly enhances the capabilities and benefits derived, thus pro-

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viding what is considered an acceptable balance.

One rather unexpected benefit was the greatly increased control of operations provided through control of the master files. Input plus programs govern output (products), and, for example, the librarian who controls the maintenance of the periodicals master file can, in effect, control the form of entry, the receipt, routing, and binding, and through the comments included as part of the record pass along any special instructions or information concerning that particular title. This same principle applies to patron and bibliographic files and, to an even greater extent, to the language file. Program controls now prevent circulation of a book whose call number does not match the bibliographic master file, leading to comparison and elimination of errors throughout the system.

Local availability of COM (computer output microfilm) devices greatly reduced the cost of producing a microfilm master suitable for use in a reader or for printing such products as books and periodicals catalogs. This allows updating the catalogs more frequently and results in more utility from the data bases.

Future

Change in computer technology is certain, and since the library is a satellite rather than central or controlling body, the system will have to accommodate changes to the computer complex brought about in the name of progress. This change condition requires continuous modifications and maintenance of the library's computer programs and makes it difficult to concentrate on improving library tasks and gaining maximum utility from the current programs. Certainly there is hope for both. Already recognized is the urgent need for additional CRT terminals—particularly for the use of the reference librarians in the main library and the branches for bibliographic retrieval, and for use by the catalogers for input. Lastly, because of daily operational demands, there never seems time for constructive critical evaluation and documentation of what has been developed so that future planning and development may be enhanced.

An area already under preliminary investigation is a method for retrieving, transmitting, and printing automatically from the data carriers themselves, since most of the patrons are located in the laboratories, and all the efforts so far result only in bibliographic citations at the library. More urgently required is a retrospective data base providing indexes to scientific and technical journal articles in the same manner that DDC and NASA provide access to their report literature. It is entirely too big a job for an operating library such as RSIC, but with local programs and those of national information networks the user could be provided the full spectrum of bibliographic citation retrieval. The library must continue, therefore, to strive for maximum compatibility with all other useful systems, formats, and equipment.

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Conclusion

Newton's Third Law, which demands a reaction for every action, certainly applies in the world of computer operations, and synergism prevails. The whole idea, of course, is to make the principles work for you rather than the reverse, but anybody who has worked in this field knows it is a tricky business. The strongest asset in this development has been people—determined people and people with a lot of work to do and limited staff with which to do it. Fortunately, the basic system design has proved quite sound. The problems encountered were related to individual programs, implementation and equipment, and coordination of the various components rather than to fallacies in the overall plans. Enormous resources have become available from other systems, and communications technology has made information transfer not only possible but practical. Despite steadily diminishing personnel resources, computer facilities continue to be available, and of course technological progress continues.

The data bases are becoming more and more refined and consequently more useful. Here synergism works for us. The book master file provides bibliographic and inventory control and data for production of book catalogs which can be placed in branch libraries and other strategic locations throughout the user community. It also provides printed bibliographies on demand and tailored to the user's requirements. The master files essentially give managerial control to the librarians who operate them because what is put into the system controls the products generated, and hence assists those who use these products to provide service to the patrons.

Now that the direct access data bases are established and programs are operational, it is comparatively simple, and sometimes surprising, to extract and manipulate data to gain information and products not previously envisioned. Information from these data bases can be made available whenever it is required. The journey from development to operation is a long and treacherous one, but never dull, and realizing the benefits of a truly integrated system can be a great compensation.
The Acquisitions Department of the University of Nebraska at Omaha library completed on 27 October 1972 a quantitative evaluation of the library's book collection in relation to the course offerings of the university. The methodology used is explained and analyzed, and the benefits of the methodology for collection evaluation and building are discussed. The author concludes that quantitative research, while providing valuable information for collection evaluation, must be supplemented with qualitative evaluation.

The acquisitions function, as performed by the four professional librarians in the department, encompasses materials selection, faculty liaison, and collection evaluation. Collection evaluation has been of prime importance from the inception of the department; shortly after the formation of the department, library director John M. Christ emphasized the importance of collection development in a memorandum which charged the department “to thoroughly evaluate the library collection and prepare a comprehensive review of our holdings as they compare with the curriculum structure to determine our ability to support the academic programs of this university.” What follows is an account of the first steps in carrying out this directive and an analysis of the results.*

How is an academic library collection evaluated? A literature search revealed that the standard qualitative procedure followed by libraries is to check their holdings against subject bibliographies or major library

* The author acknowledges with appreciation the contributions of Jon A. Boone, Christopher P. Eichhorn, Karen Powell, and John M. Christ, who offered constructive criticisms and encouragement during the writing of this paper.

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catalogs of a specialized nature, e.g., the catalog of the Baker Library for business and economics. Often a library uses the *Choice* opening day collection or *Books for College Libraries* as a tool for evaluation. One value of the qualitative method for acquisitions is that it combines evaluation with selection.

The question may be raised, however, are the bibliographies checked relevant to the library collection being evaluated? For instance, must every library that serves students of business and economics emulate the Baker Library at Harvard? Doubtless, inadequate budgets will refute the possibility of such emulation; but, if there are no budgetary restrictions, allowances must be made for differences in university programs. The undergraduate program in economics probably will need fewer research materials than a graduate program; concentration on the various aspects of business will differ from college to college; and, within a geographic area, other resources available to the library user may reduce the immediate need for the library to purchase many materials. It must be decided, therefore, what percentage of the Baker Library’s catalog and/or acquisitions lists the library should have. In effect, we must evaluate our evaluative tool. To accomplish this, one requires thorough knowledge of the university’s curriculum, a necessity which often leads librarians to consult faculty or other specialists in the fields being evaluated for assistance in determining the adequacy of the measuring tool.

To summarize, the merits of bibliographic checking include faculty interaction, the creation of lists of titles for future collection building, and the gathering of statistics to be used for collection evaluation. Such a qualitative evaluation, however, does not assess fully the current collection’s actual support of the existing university program. We concluded that we could obtain this assessment only through a two-part study covering both qualitative and quantitative collection evaluation. Believing that knowledge of what was in the collection was necessary before we could begin to evaluate the collection qualitatively, we decided to conduct the quantitative study first.

Our first step in the collection of quantitative information was to divide the collection into segments by format, i.e., books (monographs), serials, audiovisual materials, microforms, and government documents. We reasoned that the format of the material would affect the method of evaluation; therefore, each format was to be studied individually. The initial study was limited to books, primarily because the core of the collection is in this format.

If the purpose of a quantitative study is to assess the actual support provided by the current book collection for the courses offered by the university, then the key to the evaluation is knowledge of the university’s programs. To collect information about programs, we used the university catalog which contains concise descriptions of the courses in each department. Each course description was read carefully, and, when available, faculty and class outlines were consulted. To index the subject coverage of a course, we assigned Library of Congress (LC) classification.
numbers to the description. A background subject or a topic of interest to, but not specifically included in, the course content was considered peripheral, and no LC number was assigned for it. The basic rule for assigning entries was termed the "principle of primary support."

After LC numbers were assigned to the course descriptions, student assistants used the shelflist to count the number of books giving support to each course. And, to gain an idea of the demand for that support, course enrollment statistics for the year just ended were included. With this information we thought that a satisfactory quantitative evaluation of the book collection in relation to the university's programs could be made. Table I illustrates an example of the data collected.

TABLE I
EXAMPLE OF QUANTITATIVE DATA COLLECTED FOR COURSES RELIGION

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>LC Class Numbers</th>
<th>Total Number of UNO Books</th>
<th>Course Credit Hours</th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>211</td>
<td>African and American Indian Religion</td>
<td>BL2400-2499, E59.R38, E98.R3</td>
<td>38</td>
<td>3</td>
<td>37 0</td>
<td>32 0</td>
</tr>
<tr>
<td>215</td>
<td>Old Testament</td>
<td>BS1-1830</td>
<td>676</td>
<td>3</td>
<td>111 0</td>
<td>— —</td>
</tr>
<tr>
<td>216</td>
<td>New Testament</td>
<td>BS1-680, 1901-2970</td>
<td>817</td>
<td>3</td>
<td>— —</td>
<td>124 0</td>
</tr>
</tbody>
</table>

The methodology used at UNO is similar to that of William E. McGrath, who has classified college catalog information for many uses, including collection assessment. We believe that, although UNO's methodology for collection evaluation is similar to McGrath's, sufficient dissimilarities in philosophy and procedure exist between UNO's work and McGrath's work to warrant comment.

McGrath did not allow an LC classification number to be assigned to more than one department, and, at most, three numbers were assigned to a course. To produce unique ranges of LC classification numbers representing the support profile for a department, McGrath integrated the numbers assigned to courses. Therefore, although LC classifies mathematics in QA, McGrath's study found that at the University of Southwestern Louisiana mathematics is supported by materials classified in HF5691-5761; QA11, 39, 135-263, 266, 269-699; QC851-999; and TA329-

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In this manner McGrath is provided with unique statistics, that is, a classification number or range supports one, and only one, department. We believed, however, that to show the actual collection support for a field, overlap must be allowed. We assigned, therefore, all pertinent LC classification numbers to a course, without regard to previous assignments of the classification number to another course. UNO set no limit to the number of LC classification numbers that could be assigned to a course—following the principle of primary support, we assigned as many classification numbers as necessary. Furthermore, because we desired to prepare a detailed analysis of program support, we presented our figures without editing. We included enrollment figures at the course level while McGrath took the departmental approach.

Basically, the procedural differences result from the reasons for collection assessment. McGrath's primary purpose was to provide data to aid in budget allocation; he also desired to collect other data (e.g., statistics on collection use, for directions in weeding, as a shelving and storage aid, as a guide to the collection). For McGrath, collection evaluation was an added benefit. Our procedure was directed toward a single purpose: collection evaluation in regard to the university's programs with its implications for collection development. Thus, our method was more detailed and included more analysis of actual collection support of the curriculum.

The data collected at UNO appears in *Quantitative Evaluation of the Gene Eppley Library Book Collections in Relation to the Courses Offered at the University of Nebraska at Omaha*. The report is arranged by department and grouped by college, and for each department three major sections appear:

1. *Introduction*, in which the department is discussed and analyzed in terms of number of faculty, undergraduate and graduate programs, subfields in the department, new programs, orientations or emphases, interdisciplinary influences, and departmental demands on the library;
2. *Statistics*, in which data are presented in the format illustrated in Table 1; and
3. *Data Interpretation*, in which data are analyzed in light of the information gathered about the department, and judgments are made about the strengths and weaknesses of the collection in each area.

Throughout the course of the study, problems in the methodology were discovered. These problems arose from two sources: the LC classification and the university catalog. In many cases, the LC schedules did not contain specific classification numbers for the subject treated in UNO courses. In such cases, broader classification assignments than preferred were allowed, and sometimes no distinction in collection support between two very different courses could be discerned because both courses drew support from the materials classified in the same LC classi-
fication range. Thus, it was almost impossible to state the actual amount of collection support for these courses or make comparative judgments. Inadequate (or, we sometimes believed, inaccurate) course description was the major problem presented by the university catalog. Nevertheless, the catalog descriptions were taken as authority in all cases.

The UNO study does not include all courses listed in the current university catalog, but uses 1971/72 as the base year because the most recent enrollment statistics available were from this year. Courses not included in the 1971/72 catalog were ignored unless enrollment statistics were available (this occurred when courses that for one reason or another were not included in the catalog were offered during 1971/72). Courses excluded from the 1972/73 catalog were marked “discontinued” in the study and not analyzed because we reasoned that they were considered obsolete for the current university program and, as such, did not need their collection support evaluated.

Knowledge of the university’s programs and their correlation with the LC classification is an important result of the study. Librarians found that their ability to understand and assist faculty members in locating resources increased as the study progressed. Prior to the study, librarians were acquainted only with those needs expressed by the library-oriented faculty. Librarians found that, as the study progressed, they gained a more detailed and comprehensive picture of the university's programs and needs and were better able to understand and assist faculty members in locating resources. Faculty liaison greatly increased during the study, and with completion of the report even more faculty became involved in meetings established to discuss the study. At these meetings, faculty assessed the report, added their insights on collection evaluation and improvement, and indicated changes in program emphases, the importance of other types of resources besides books (in some fields), and the lack of publishing in some areas. Information obtained in these meetings has been recorded for possible use in future evaluations.

Better understanding of the relationship of the collection to the university's programs and increased faculty liaison are important and beneficial to the acquisitions program, but did the study evaluate collection support of the university's programs successfully? In the estimation of the UNO Acquisitions Department, the answer is a qualified “yes.” The limitations of the study are apparent. It is a quantitative evaluation and, as expected, additional research, both quantitative and qualitative, is necessary. This was merely the first step. We have gathered data about the number of books available to the student on a certain subject, but this study does not, nor was it designed to, estimate the exact pertinence of these books to a course. Such factors as collection age, condition, variety, and duplication are not measured. For example, we have no figures on the number of titles, as distinct from the number of volumes, and we have no information concerning date of publication. The study does not measure whether library use is stressed in a course. Circulation statistics and patterns could be studied profitably to ascertain if they sup-
port our findings. In interpreting the data, we made some generalizations (which may not hold in all cases) about library use, e.g., freshman-sophomore science courses usually concentrate on textbook study instead of library research. In other words, the statistics may be misleading if not interpreted in light of the subject and situation. (This was the major reason for adding the sections on data interpretation to the report.)

Although we could not evaluate fully the collection support of the university's programs with only a quantitative study, we are confident that we determined collection weaknesses and strengths. For example, less than ten books (assuming more than ten books have been published) on a subject about which a course is taught is probably weak support. On the other hand, a collection of 10,000 books probably may be considered strong support. It was, however, virtually impossible to assess areas of average support. What is an adequate level of support? Ten books per student? Twenty books per student? Knowledge of quantity alone is not sufficient to determine whether an area is well supported, even with the added information on enrollment. A qualitative study is needed.

The LC schedules also made evaluation difficult. If a subject area was well developed by LC, evaluation was aided greatly. But when the classification is relatively undeveloped, as in the case of computer science, evaluation of collection support becomes virtually impossible. Other methods of evaluation will have to be devised for such fields. Assigning an LC number to more than one course assesses properly the collection support for each course, but the immediate demand on the books is not the enrollment for one course but the enrollment for all courses covered by that classification number. Within one department common subject coverage is readily apparent, but it is difficult to know which other departments may also be drawing on the same resources. This is particularly a problem with strongly interdisciplinary departments such as the Speech-Communication Department.

Finally, the study needs continuous updating. Enrollment statistics change each semester, materials are constantly being added to and withdrawn from the collection, and course offerings are continually changing, frequently at a rate not reflected in the university catalog.

The limitations mentioned were, in most cases, known to the department and carefully considered before the study was conducted. The methodology was developed for the specific purpose of assessing the current collection's support of the current university program, and we believe the results to be significant. A more comprehensive understanding of the collection related specifically to the curriculum and course enrollments was gained. Problem areas and areas supported well by the collection were identified. University program emphases and de-emphases were discovered. An important incidental benefit was the gathering of information useful for analysis of budget allocations, that is, given university programs and related collection statistics, is the acquisitions budget properly allocated? Most importantly, the study encouraged librarians to
meet the faculty on an equal informational level and effective working relationships developed in many cases.

Currently, the UNO Acquisitions Department is conducting the next phase of collection evaluation, i.e., a qualitative evaluation of the book collection. Using the quantitative evaluation as a starting point, major bibliographies in the fields designated particularly weak or strong, or those fields emphasized by the departments, are being checked against the catalog. In addition, a study of the bibliographic structure of each field is in progress in order to discern which format of resources material best serves the field. For example, the importance of serials in the sciences may reduce the need for much further study of the book collection in these areas. Finally, some specific studies will be conducted for each field deemed appropriate by the previous study and the discussion of the study with the academic departments. These studies include a study of the age of the books in the business collection and a study of the amount of publishing available for certain subjects such as kinesiology.

Each new study will bring added knowledge and raise further questions that must be explored, as all studies have limitations. The UNO staff is convinced, however, that quantitative research can provide the library with a sound basis for communication with the administration and faculty concerning collection evaluation and development.

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Interlibrary Loan Analysis
As a Collection Development Tool

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A study of the 1,434 interlibrary loan requests of the California State University, Fullerton (CSUF) library covering the period 1 July 1971 to 30 June 1972 is described. An analysis of periodical article requests by departments and the frequency of titles requested was made. An analysis of books requested by departments and by broad Library of Congress classification was made. The findings reveal a wide range in departmental interlibrary loan requests and in frequency of periodical titles requested, and significant variation in classifications of books requested.

IN ANY LIBRARY, one of the concerns is to build a collection adequate to its community of users. In a community the size of a state university, however, details of the needs of the users, and changes in those needs, are often slow to reach the persons responsible for meeting them. Indeed they may never reach them. Therefore any method of automatically getting such information without relying on the users themselves (who are usually too busy with other concerns) is greatly needed. It is our contention that the interlibrary loan records of a large university library can fill just this function.

A search of the literature uncovered similar, but not identical, analyses of interlibrary loans in university and special libraries. Except for a study of incoming and outgoing interlibrary loan requests at Catholic University of America, they were concerned primarily with periodical requests in the sciences. At Southern Illinois University, described as a

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rapidly exploding university, Graziano studied interlibrary loans in the Science Library Division over a three-year period. Five hundred and three interlibrary loans were involved. Tabulations were made by department, degree program, numbers of faculty and students, requests for books, theses, serials, frequencies of serial titles requested, and dates of serials requested. Among his conclusions: "There seems to be little correlation between the number of persons with a department and the percentage of the total number of loans for which the department is responsible."

Graziano suggests that his data regarding frequency of serial titles requested indicate that "the chance that any particular title be requested more than once is largely accidental and that this type of analysis is of limited value as a selection aid for specific titles." His findings show that since "only four titles were called for five times or more in a three-year period, it must be concluded that interlibrary loan records are of limited value in pointing up the specific serial titles for backfile purchase." (Our study, however, showed that in a one-year period nineteen periodical titles were called for five times or more.)

Responding to Graziano, T. D. Wilson, librarian at Nuclear Reactor Centre, C. A. Parsons & Co., Ltd., Newcastle upon Tyne, reported on his one-year analysis of approximately 130 interlibrary loan requests for periodicals, which produced a frequency curve very similar to Graziano's. It should be pointed out that the two were dealing only with science serials requested on interlibrary loan, and they were concerned as well with backfiles, which we were not.

Ruth W. Wender, librarian at the University of Oklahoma Medical Center, Oklahoma City, studied the interlibrary loan requests for serials in the behavioral sciences. She describes the special circumstances existing: a new advanced degree program had been created and an increased number of faculty had been hired. In her study of 345 serials requested on interlibrary loan, 46.3 percent were requested more than one time, 26.9 percent more than two times. Using a bar graph instead of a curve, as Graziano and Wilson did, she gives a graphic representation of the frequency of requests for serial titles. Wender, however, differs with Graziano in her conclusions.

Thus, analysis of interlibrary loan borrowing records has proved to be a useful tool for us. The analysis has aided in determining the library's needs in the behavioral sciences at the University of Oklahoma Medical Center under a particular situation of expansion: both as an aid in determining serial titles for purchase and for backfiles acquisition.

In a study by Susan C. Uebelacker at Catholic University of America, the incoming and outgoing interlibrary loan requests were analyzed. In a one-year period 717 requests were initiated, categorized as follows: 281 monographs, 106 doctoral dissertations, 122 master's theses, and 208 periodicals. A table presents total numbers of requests by departments. No analysis as to subject classification was made of outgoing requests,
though such a tabulation was given for incoming requests. For these, her method was to use broad Library of Congress subject classifications. No attempt was made, however, to use the statistics collected in this study to evaluate the library's collection.

With this background, an investigation of interlibrary loans at the California State University, Fullerton (CSUF) library was instituted to see whether an analysis of interlibrary loan borrowing was a useful way of evaluating how well the library collection serves the needs of its faculty and graduate students. If so, the corollary of this would be that a review of interlibrary loans is one way of indicating weaknesses in the collection and will suggest specific remedial measures, such as purchases of specific titles or a vigorous acquisitions program in certain subject areas. The method described in this study can be used by any academic library and with some modifications could be useful to other types of libraries as well.

**Hypothesis**

The hypothesis for this study is quite simple—stated roughly, the differences in number of book requests in the various classification areas are statistically significant, and reveal weaknesses in the collection. Our null hypothesis is:

\[ H_0: CA_1 = CA_2 = CA_3 \text{ etc.,} \]

where CA stands for the various classification areas in the collection. The hypothesis is based on the premise that if the library is fulfilling its purpose, i.e., providing materials for the scholarly research of its faculty and graduate students, interlibrary loan requests will be fairly uniform throughout all areas.

Our second hypothesis concerns periodical requests. If the periodical collection is adequate, the bulk of articles needed by the users will be from journals held by the library. An occasional piece may appear in journals not held, but the majority of title requests (journal titles per year) should be one. Various empirical studies have suggested that the title requests are a Poisson process with these parameters. Any title requests which fall outside an agreed on probability limit, such as 98 percent, should be considered for purchase. Our second hypothesis, then, is that periodical title requests do follow a Poisson Distribution with a \( \mu \) (theoretical mean) of one.

**Limitations**

By way of introduction, the boundaries of the investigation should be made clear. It does not attempt to evaluate the university library's collection in support of the undergraduate curriculum. It does not take into consideration those users who find the library collection lacking and go elsewhere. It makes no judgments of how much research should be going on in the various departments of a university, though it reveals some interesting indications of the wide variation in these activities. It

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does attempt to measure quantitatively how well the library collection serves the needs of its faculty and graduate students who find it necessary to search for material through the use of interlibrary loans. This can be done despite imbalances due to demands of an active research-oriented department, and regardless of numbers of faculty and graduate students in each department.

Definition of Terms

To define the terms used in this study, faculty are those persons employed to teach in the university, whether on a full-time or part-time basis. Graduate students are those students working on an approved program of graduate studies. As users of interlibrary loans, these two groups form the population of the study. Departments are those curricular or administrative departments and divisions listed in the university catalog, which used interlibrary loan services in the period covered. Interlibrary loans are those requests made to another library on the standard interlibrary loan request form prescribed by the American Library Association. All requests were included, whether they were successfully filled or not.

The raw data consisted of the carbon copies of interlibrary loan request forms processed during the period covered. The study covered one calendar year—from 1 July 1971 to 30 June 1972—which included a full academic year plus summer sessions.

Methodology and Results

The interlibrary loan files under analysis were received in numerical order, the number having been assigned at the time the request was initiated. They were separated by departments. The 1,434 loan records were first coded by department so that they could be returned to the library staff in the order in which they were received.

The next step was to separate them into meaningful categories. The categories chosen, and number of requests in each, were: books, 527; periodical articles, 697; dissertations and theses, 146; documents, 27; ephemera, 27; and unidentified, 10. Books were defined as monographs. Because this library catalogs separately those serial publications not regarded as periodicals, these, too, were treated as books in this analysis. Periodicals were defined as publications issued regularly more than once a year, with the prospect of indefinite continuation. Theses and dissertations were easily identified as such. Documents were publications issued by a local, state, federal, or international government body. Ephemera were reports, pamphlets, films, or papers not part of a larger work. Unidentified were those items requested which could not be verified, either by the requesting or lending library.

Books

Of the various methods for separating requests for books, it was decided to tabulate them first by department, then into the broad subject
fields of the Library of Congress (LC) classification. For this purpose, *Outline of the Library of Congress Classification* was followed using only the major classes. This coincides well with the major areas of study in the university. In most instances, LC call numbers appeared on the interlibrary loan request forms, and they were accepted without question. Those few requests involving special classification systems or those lacking a class number were assigned LC class numbers by the investigators.

Of a total of 527 books requested, requests by department ranged from 1 to 135. The Anthropology Department requested 135 books (26 percent of all books requested); the History Department, 117 books (22 percent); the Linguistics Department, 88 books (17 percent); and the English Department, 74 books (14 percent). These four departments represented 79 percent of the requests for books. There was then a major drop to 21 or less books per department.

The number of books requested in each class ranged from a low of one (agriculture, and Slavic and other languages and literatures) to a high of eighty-six (American history). Table 1 is a list of books requested, arranged by LC classification in order of descending frequency.

<table>
<thead>
<tr>
<th>LC Class</th>
<th>Number of Requests</th>
<th>LC Class</th>
<th>Number of Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>E &amp; F</td>
<td>86</td>
<td>T</td>
<td>9</td>
</tr>
<tr>
<td>BL-BX</td>
<td>62</td>
<td>C</td>
<td>8</td>
</tr>
<tr>
<td>G</td>
<td>62</td>
<td>Z</td>
<td>7</td>
</tr>
<tr>
<td>Q</td>
<td>49</td>
<td>V</td>
<td>6</td>
</tr>
<tr>
<td>H</td>
<td>35</td>
<td>N</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td>31</td>
<td>PT</td>
<td>4</td>
</tr>
<tr>
<td>PJ-PM</td>
<td>30</td>
<td>K</td>
<td>3</td>
</tr>
<tr>
<td>B-BJ</td>
<td>21</td>
<td>PB-PF &amp; PH</td>
<td>2</td>
</tr>
<tr>
<td>R</td>
<td>21</td>
<td>M</td>
<td>2</td>
</tr>
<tr>
<td>PN, PR, PS, PZ</td>
<td>20</td>
<td>U</td>
<td>2</td>
</tr>
<tr>
<td>L</td>
<td>16</td>
<td>PG</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>14</td>
<td>S</td>
<td>1</td>
</tr>
<tr>
<td>PQ</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>10</td>
<td>Total</td>
<td>527</td>
</tr>
<tr>
<td>P &amp; PA</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Periodical Titles Requested*

An analysis of the individual periodical titles requested reveals that a total of 697 articles, from 438 titles, was requested. Table 2 presents details on the number of titles and articles requested.

An analysis of requests by department for periodical articles revealed a range of requests from a low of 1 (three departments) to a

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high of 286 (Biology Department). Six of the twenty-one departments requesting periodical articles accounted for 88 percent of the requests. Four of the twenty-one departments accounted for 79 percent of the requests.

Analysis of Results

Of the categories requested through interlibrary loan, only the books and periodicals were considered worthy of analysis. CSUF does not acquire and catalog dissertations and theses of other institutions on a comprehensive basis; so those requests are properly filled through interlibrary loan. The library is a selective depository for government documents, but since only twenty-seven of the requests fell in this category, it was concluded that they were legitimate loan requests. Similarly with ephemera, numbering only twenty-seven, it was concluded that they could not have been anticipated in building the collection.

Books. As noted, all of the book requests were classified according to LC classification. A Chi-square ($\chi^2$) test of statistical significance was then performed to see which areas had significantly more requests than might be expected by chance. We assumed that if the collection were perfect for its users, there would be no requests—all areas would equal zero, and thus be equal. Even assuming less than perfection, if the collection were balanced for its users, each area would be getting approximately equal amounts of requests. Thus, our theoretical frequency for $\chi^2$ was found by dividing the total number of book requests, 527, by 27, the number of class areas, resulting in a theoretical frequency for each class of 12.1. The distributions by class are shown in Table 1.

<table>
<thead>
<tr>
<th>Times Requested</th>
<th>Number of Titles</th>
<th>Number of Article Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>320</td>
<td>320</td>
</tr>
<tr>
<td>2</td>
<td>61</td>
<td>122</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>81</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>44</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>438</td>
<td>697</td>
</tr>
</tbody>
</table>
An analysis of these figures bears out our hypothesis. Five areas had significantly greater requests than the other areas (significant $\chi^2 = 38.85$, $v = 26$, .05 confidence level). These areas were:

- E-F, American History, $\chi^2 = 449.0$
- BL-BX, Religion, $\chi^2 = 205.6$
- G, Geography, Anthropology, $\chi^2 = 204.0$
- Q, Science, $\chi^2 = 112.7$
- H, Social Sciences, $\chi^2 = 43.35$

Thus a case could well be made for emphasizing the areas of greatest weakness, e.g., American history and religion, as shown by these statistics. The usefulness of this technique is especially notable in the lower reaches, as it gives a hard cutoff point. (How many requests are significant—35, 31, 30, 29?) Although we had selected the .05 confidence level, our results were actually significant at the .02 level (significant $\chi^2 = 42.856$).

Periodicals. Table 3 summarizes the results of comparing the distribution of our empirical data with the Poisson Distribution. This data bears out the experience of others, and suggests that interlibrary loan periodical requests do follow a Poisson Distribution, with a $\mu$ of between 1 and 1.4. This indicates that titles requested more than four times should be considered for purchase [$P(c_4) = 98.6\%$ for $\mu = 1.4$].

<table>
<thead>
<tr>
<th>Times Requested</th>
<th>Percentage of Requests</th>
<th>Cumulative Distribution</th>
<th>Poisson Distribution $\mu = 1$</th>
<th>Poisson Distribution $\mu = 1.4$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>73</td>
<td>.73</td>
<td>.736</td>
<td>.592</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>.87</td>
<td>.920</td>
<td>.833</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>.93</td>
<td>.981</td>
<td>.946</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>.96</td>
<td>.996</td>
<td>.986</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>.98</td>
<td>.999</td>
<td>.997</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>.99</td>
<td>1.000</td>
<td>.999</td>
</tr>
<tr>
<td>7 or more</td>
<td></td>
<td>1.00</td>
<td>—</td>
<td>1.000</td>
</tr>
</tbody>
</table>

CSUF differs from Southern Illinois in having more titles requested more than twice (13 percent versus 8 percent), and even had 4 percent requested five or more times, as opposed to the 1.4 percent which would be predicted by the Poisson Distribution. This suggests a weakness, and an analysis of dates requested would be necessary to see if the library perhaps needs additional backfile purchases, or if the current serials budget needs to be increased. The number of titles requested more than twice was less than the Oklahoma Medical Center study (13 percent versus 26.9 percent).

The departments least well served by the library's collection seem to be: anthropology, history, linguistics, English, biology, and sociology.

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Further analysis is required to show if a significant weakness exists.

Despite information indicating which departments are most active in requesting books and the ability to indicate by LC classification where the majority of these books were classed, it seems impossible to anticipate the need for a specific title. One method might be to engage in a more vigorous selection and acquisition effort in those classes most heavily requested. Another method might be to consider, at the time the request is initiated, the possibility of purchasing and receiving the book in a time span no longer than it takes to acquire it on loan. It seems the best this study can do is to indicate the collection is weak in certain subject areas.

In the case of periodical titles, the probability that there will be very few requests for any given title in any one year has been shown to be quite high. From our findings it is suggested that any title requested five or more times should be considered for subscription or backfiles acquisition. In 1971–1972, twenty titles occurred in this range. Unfortunately, our study did not analyze dates of periodicals requested, and no recommendations for how far back such additions should go can be made. In future studies this could easily be added to the data accumulated.

It should be noted that while Graziano stated that interlibrary loan analysis was not useful for this purpose, his study really showed that an analysis of his library indicated that no periodical acquisitions were necessary. This technique can demonstrate strength as well as weakness.

Suggestions for Further Research

Other topics for further study of use of interlibrary loan records for collection development might include the following: an analysis of individual periodical titles and dates requested to determine if new purchases are in order; an analysis of duplication of titles in book requests, to see if specific titles could be recommended for purchase; an analysis of requests by departments, to determine if the formula for departmental book purchases should be revised; an analysis of the correlation, if any, between departmental size and interlibrary loan requests (Graziano found none); an annual analysis of interlibrary loan figures to provide a continuing evaluation of the library collection. A distribution such as Graziano provides would indicate that the library is doing a good job over time, and any variations should reveal themselves rather quickly.

The use of interlibrary loan will always be a legitimate method of securing materials in any library where research and graduate studies are pursued. No one library can be all things to all of its patrons. Selection remains a necessary function in developing library collections. The literature on collection development often suggests specialization so that certain areas will be comprehensively covered by at least one library in a system or region. Library cooperation is emphasized in order to keep
abreast of the growing body of literature. However, there is growing concern that ever increasing demands for loans are being placed on a few large libraries, with high costs to those libraries which do the lending. Thus interlibrary loan may be an uneconomic way to meet user needs.

Another reason for using interlibrary loan analysis as a collection development tool is that it can provide information not available elsewhere. In a large institution such as CSUF, information is not always available to units that need it; for example, the fact that a department has acquired a specialist in a new area and that there is going to be high demand for works in that area may not be known to the library. Interlibrary loan provides one automatic kind of communication of such information. Through the use of automated record keeping it is always readily available.

Therefore, for reasons of economics and ease of use, as well as service to the academic library's patrons, analysis of interlibrary loans is a worthwhile undertaking. Too often they are overlooked by selection and acquisitions librarians as a guide for titles to be purchased.

REFERENCES

5. Graziano, "Interlibrary Loan Analysis," p.256. (Our emphasis.)
10. Graziano, "Interlibrary Loan Analysis."
12. David Kaser, "Whither Interlibrary Loan?" *College & Research Libraries* 33:399 (Sept. 1972), states "some have estimated the total cost of a single interlibrary loan to be as high as $8 within the lending institution alone. . . . Indeed some large libraries have estimated that they are spending in excess of $100,000 per year on interlibrary lending more than they are benefitting from it."


*Volume 18, Number 3, Summer 1974*
Draft Standard for
The Advertising of Micropublications

Subcommittee 35—Advertising Microform Publications
Standards Committee Z39—Standardization in the Field of Library Work, Documentation, and Related Publishing Practices
American National Standards Institute

Foreword*

SOME OF THE PROBLEMS associated with advertising are shared by all publishers; but certain characteristics of microform media, coupled with certain common practices in micropublishing, introduce a set of problems specific to the advertising of micropublications:

The complex, highly technical processes by which microforms are produced from original documents of widely differing physical and photogenic characteristics are characterized by many variables which affect the readability and useful life of the final product.

Micropublished material requires enlarging devices to make it readable and often it is published only on demand. These circumstances make it difficult in many instances for the potential customer to examine micropublications before purchase.

For reasons of economy and practicality, micropublishers may publish or republish many titles in one project. Thus publication may extend over a long period of time. In fact, the corpus of a project may be so large that the publisher will announce and even deliver portions of it before photographing it in its entirety. Because of these factors of project size and extended period of publication, micropublishers frequently encounter difficulties in adequately describing their product, difficulties not faced by publishers of printed books. These factors also pose problems for reviewers.

For all of the above reasons it is especially important that the information outlined in this standard be provided in advertisements for micropublications.

This Standard was prepared by Subcommittee 35 of American National Standards Committee Z39 on Standardization in the Field of Library

* This foreword is not a part of the proposed American National Standard for the Advertising of Micropublications, Z39.35-1973.

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Library Resources & Technical Services
American National Standard for the Advertising of Micropublications (Draft)*

1. SCOPE

This Standard is limited to those promotional materials which describe micropublications intended to be retained and used over a long period of time and are usually available directly from the micropublishers, as contrasted with proprietary information meant to be periodically updated or changed and distributed to a controlled readership.

This Standard applies to printed advertisements, catalogs, circulars, brochures and other promotional vehicles through which micropublishers communicate with customers and potential customers.

This Standard details for micropublishers the elements which will provide in their advertising the basis for a critical evaluation of their published products by prospective purchasers. The minimum information needed is outlined in the basic checklist. Advertising which includes the items on this checklist may include the statement, “Conforms to minimum requirements of ANSI Advertising of Micropublications Standard.” A complete list of elements needed to fully define micropublications is also provided for micropublishers who wish to give a total description in advertising their products.

2. DATA ELEMENTS FOR ADVERTISEMENTS

The following is a list of micropublication and bibliographic data elements recommended for use in advertisements and other promotional materials by micropublishers who wish to provide a full description of the materials advertised. Those elements marked with an asterisk (*) make up the basic checklist. Advertisements and other promotional material incorporating all elements in the basic checklist may include the statement, “Conforms to minimum requirements of ANSI Advertising of Micropublications Standard.”

2.1 Micropublication Data.

*2.1.1 Title, including subtitle or series title if any.
2.1.2 Editor.
*2.1.3 Name and address of micropublisher.
*2.1.4 Place of publication.

* The following is a draft of a standard for advertising micropublications. The draft has been circulated to interested parties for comment, and most of them have commented. It is published here primarily for information purposes. Anyone having important comments, however, should feel free to provide them in writing to Carl M. Spaulding, Program Officer, Council on Library Resources, One Dupont Circle NW, Suite 620, Washington, DC 20036.

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2.1.5 List price of collection.
   *2.1.5.1 Discount price (s) for prepublication purchase including
   prepublication cut-off date (s).
   *2.1.5.2 Price of individual titles or pricing policy.
2.1.5.3 Discount prices for purchases of all or major parts of a col-
   lection, offered in segments.
   2.1.5.4 Description of time payment plans offered.
   2.1.5.5 Price of partial orders or pricing policy.

2.1.6 Availability.
   2.1.6.1 Anticipated publication date.
   2.1.6.2 Date of final availability (if any).
   2.1.6.3 Schedule of segment by segment availability dates for col-
   lections offered in segments.
   2.1.6.4 Availability of individual units or parts of collections.

2.1.7 Microform specifications.
   *2.1.7.1 Film type(s) and size (microfiche, microprint, 35 mm reel
   microfilm, etc.).
   *2.1.7.2 Range of reduction ratios used.
   *2.1.7.3 Polarity (positive or negative).
   *2.1.7.4 Film type (silver halide, diazo, vesicular, etc.).
   *2.1.7.5 Microform standards adhered to.
   2.1.7.6 Order of filming (number, alphabetical, chronological, etc.).

2.1.8 Availability of eye-legible paper copies.

2.1.9 Scope and potential usefulness of collection.

2.1.10 Size of collection.
   2.1.10.1 Number of pages.
   2.1.10.2 Number of volumes.
   2.1.10.3 Number of titles.
   2.1.10.4 Number of microform units (reels, microfiche, etc.).

2.1.11 Pertinent data about writers of signed introduction.

2.1.12 External and internal retrieval aids provided.
   2.1.12.1 Cataloguing rules used if cards are provided.
   2.1.12.2 Bibliography (s).
   2.1.12.3 Indexes (printed, cards, computer, etc.).
   2.1.12.4 Cross reference guides.
   2.1.12.5 Reel guides.

2.2 Bibliographic Data.

2.2.1 Individual title.
   *2.2.1.1 Author(s) (or editor, or compiler, etc., or a combination
   thereof).
   *2.2.1.2 Title, including subtitle, if any.
   *2.2.1.3 Place of original publication.
   2.2.1.4 Original publisher.
   *2.2.1.5 Date of original publication or copyright date.
   2.2.1.6 If publication is a revised edition, indication of edition.
   *2.2.1.7 Pagination or number of volumes if more than one.
   2.2.1.8 Series name and number assigned to title in series.
   2.2.1.9 Translation information (original title, language, and
   translator).

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2.2.1.10 Conference information (place and date of meeting, sponsors, etc.).

2.2.2 Collection of titles.

  *2.2.2.1 If collection is based on a published bibliography, the title of bibliography.

  *2.2.2.2 Enumeration and description of individual titles or indication that a catalogue is available.

  2.2.2.3 If collection is incomplete, indication of missing titles or volumes and whether they will be available at a later time.

  2.2.2.4 Location of original material.

  2.2.2.5 Identification of source where information can be verified if bibliographical data in 2.2.2.2 is brief.

2.3 Post purchase policy of micropublisher concerning guarantees and related matters.
UCLA Library Task Force

ROBERTA NIXON
University of California Library
Los Angeles

The University of California at Los Angeles library is using part of its staff in a special mobile Task Force group to work on system-wide projects directed toward the elimination of backlogs and toward development of improved manual and automated systems.

IN THE HALCYON DAYS OF 1968 when the University of California libraries were still able to expect at least limited staff increases at the beginning of each fiscal year, the assistant university librarian for systems and technical services, taking a cue from business and industry, began to use these newly allocated technical services positions in an innovative way which resulted in the formation of a Task Force group.

Each year the various units in the University of California at Los Angeles (UCLA) library system, some eighteen, request new staff to support their needs. For years the number of requests for processing staff far exceeded the new positions available, so the administrative decisions for apportioning new positions were tough ones and by necessity discriminatory ones. Processing backlogs grew and the means for handling them did not. Means of developing automated or even improved manual processing methods were limited by lack of staff.

In fiscal year 1968/69 new technical processing positions were assigned not to units but were kept instead in one technical processing Task Force group responsible to the assistant university librarian for systems and technical services.

This group did not follow entirely the patterns of either the aerospace industry project-oriented groups, or the business appraisal or venture-directed groups, but rather was formed and developed along its own unique lines, suggesting in some ways the coming ad-hocracy of Toffler's Future Shock.

The new technical processing positions—seven the first year, 1968/69, and seven the second year, 1969/70—were at the library assistant level. The library has received no new positions since July 1969, but the level and the number of Task Force group positions have been shifted and changed to accommodate library contingencies. At one point the Task

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Force group numbered eighteen, including three librarians, an assistant administrative analyst, and a computer operator. The size of the group may not yet have stabilized, but at this time it has leveled off at eleven positions: two librarians, one computer operator, and eight library assistants.

The management of the group began as a joint assignment for the assistant head of the Acquisition Department and the assistant head of the Catalog Department, each on a half-time basis. Management of the group was planned originally as part of a program for rotating supervisory personnel from the technical processing departments, but subsequent reorganization of the processing departments resulted in the appointment of a permanent, full-time Task Force manager.

The Task Force group's original intent was to improve the flow of materials through units, working on backlogs, preparing for automation of processing procedures, processing bulk collections, and serving as a productivity "yardstick" or procedure evaluation agency and change catalyst to improve methods of handling materials. In July 1972 the Task Force's responsibilities formally were extended to include collection development and public service assignments since, in fact, projects in these areas were being specially approved and done by the Task Force group on a more or less regular basis. However, for a variety of reasons, the Task Force group's intended role as a procedure evaluation team did not develop.

The group is task oriented. Projects must have a definite end. Requests for projects originate with the unit for whom the project is to be done. The decision that the Task Force staff undertake a project and the priority assigned to the project depends, of course, upon the capabilities of the Task Force staff, the demands of ongoing projects, and the advice of the appropriate staff resource group. The staff resource groups are a regular part of the library administrative network. The nature of the project determines to which of the functional resource groups (the Technical Services Committee, the Public Services Committee, or the Collection Development Committee) the project is referred for advice. Membership for these committees is drawn from the campus-wide library staff, and, with this broad base for background information, the project is discussed in some depth, those involved are consulted, and the Task Force manager is advised of the committees' recommendation. Before making a recommendation, the committee discusses the requests in light of current good practice, looks for possible duplication of effort, ascertains that no unit or library function will be adversely affected, and determines the request's suitability as a Task Force closed end project. The committee also solicits suggestions for improving goals and procedures in terms of quality or efficiency. Recently the procedure has been modified to allow requests of fifty hours or less to be acted upon at the discretion of the Task Force manager without formal consultation.

The Task Force as a rule has about twenty projects going at any one time with each staff member working on several. In 1971/72 thirty proj...
ects were completed; work on eight of these was begun in the previous year. Twelve different units made thirty project requests for Task Force help during the year 1971/72; four of these requests were unsuitable and were referred elsewhere for action. Technical Services Department requests represented one-third of the project requests.

The projects range widely in time required and level of competence needed. For example, one project required twenty hours of clerical help to process a backlog of serial invoices; another project required five hundred hours of complex bibliographic searching, as well as some familiarity with Italian, Latin, and Medieval and Renaissance history. One project (transferring from one branch library to another and completion of cataloging of a specialized collection) within itself encompassed a considerable range of tasks, including some for which the Task Force had no capability, but the Task Force was able to support the project in a variety of ways in the amount of 1,300 hours with existing personnel. One-sixth of the requests are for filing help. Of the twenty projects completed in 1972/73 the time required for completion ranged from less than one month to twenty-four months with the average time for a project amounting to four months; however, two developmental automation projects have continued for more than two years with an end in the current year not yet expected.

The Task Force from its inception has supported the development of automated projects and continues to support them until such time as they become operational. The weekly production of a computer listing of new books, the production of an automated serials listing, and various statewide automation projects for which local participation is required are among ongoing Task Force responsibilities.

Not recorded as formal project requests are quick responses with short-term help made upon request of a unit head or administrative officer. These projects are sometimes of a trouble-shooting nature, and recently they reflect emergency responses to the state of California’s interest in library problems.

In the beginning the group was considered to be an arm of the assistant university librarian for systems and technical services. In December 1970, after serious re-evaluation, the Task Force became a separate unit. Dissolution, merger with the Systems Department, or reorganization as part of the Technical Services Department were considered. Departmental status as a unit of the regular library administrative network was selected as the best means of clarifying and regularizing the Task Force relations with the administration and with other units, the best way to insure all library units an equal opportunity to profit from Task Force help, and, given the state of the budget, to ensure flexibility and maneuverability to library positions in the interest of developmental and innovative programs for the total system. In a large and energetic organization in which there is no lack of dynamic ideas, but in which it is sometimes difficult to realize these ideas, the Task Force provides the means to move quickly and effectively.
While the Task Force's purpose and staff seem well established, given the promises of automation, the yeastiness of the library world, indeed given the yeastiness of the world, it is difficult to predict whether the Task Force will continue in its present state or even continue as a group. At least for now, in the Task Force the UCLA library has additional help in meeting and perhaps even shaping that future.
REVIEWS


The Classified List of Periodicals is a handy addition to the basic periodical reference tools. Consistently the general arrangement, number of issues per year, place of publication, starting date, and price are indicated. The annotations are written very well, encouraging the reader to read, and are as varied as a long list of annotations could be. The first paragraph of each annotation usually describes the scope or intent of the journal and the special emphasis, if any. The last sentence or two reflects the opinion of the annotator, i.e., who would most benefit from reading this periodical, qualifying strong and weak points, etc. Also included are a number of scholarly articles and reviews.

The fifth edition is by far the most satisfactory of all the editions. However, there could definitely be some dispute with regard to Farber’s choice of subject categories. Though the author explains why he grouped some titles together with others in a class (the subject divisions differ somewhat from the previous editions), one still might miss some titles because they were included in one subject and not in another. This most often arises because of interdisciplinary studies—the periodical is assigned to the subject which the author thought most important. Others might find another subject more relevant. In all fairness to the author, Farber explains the problem, advising that see references are used. In this reviewer’s opinion, nonetheless, there are not enough see references. For example, Art Education is under the subject “Education,” but Music Educator’s Journal appears under the broad subject “Music-Drama-Film-Dance.” Although Music Educator’s Journal probably is found more importantly under that subject, it is not too far-fetched to assume that one might just as easily search under “Education” and should at least find a cross reference.

An asterisk before a title indicates that the title is recommended for “first purchase,” that is, one should think of buying the title over one with no asterisk. This recommendation is helpful in a limited budget situation, and, similarly, that the Classified List suggests the importance of future purchase of back runs may be useful. Yet, unless a librarian is very new or the collection very young, priority in purchasing is established usually on the basis of patron need or request and not on recommendations from books. This is not an essential list for a large research library because the faculty and/or subject bibliographers know the material in their respective fields and thus would find little need to consult such a book.

The list is a bit out-dated. In his introduction the author says “Only titles that began publication before 1969 are included in this list.” He admits that it was difficult to evaluate titles that had begun only recently. Farber’s honesty in describing the scope of the book is admirable, but the librarian who requires selection assistance for titles commencing before the last four years receives no assistance. Source (no. 1, 1967–) missed the List and is perhaps the most important publication of new music.

Probably the subject most completely covered is area studies. There
is very little engineering, applied science, or technology. These are merely touched upon under the subjects "Chemistry," "Physics," and "Science."

If the author updates the Classified List periodically it may be a more crucial tool in the everyday life of the practicing librarian. Titles which are highly critical in the advanced research areas are mentioned, but, all in all, the book describes the bare essentials. As it stands, the List would be a good starting place for the developer of an undergraduate or junior college library collection, the library school student, or beginning professional.—Susanne Margulis Kahle, State University of New York at Buffalo, Buffalo.


As a member of the British group working with the American Library Association and Canadian Library Association groups on the Anglo-American Cataloging Rules (AACR), Escreet is familiar with the negotiations which lie behind the present wordings of the British and American texts of AACR, and the reasons for the differences between the two texts. In the present work he has not written an introduction to AACR for the neophyte but has created a collection of glosses on the rules based on his experience in their creation. Only an experienced cataloger with both the British and American texts at hand can read this work with comprehension. Such an exercise will reward the reader not only with a better understanding of the rules but also with some delightful insights, e.g., "... the longer it takes the cataloguer to dig up some recondite piece of information, the less likely is it to be of any assistance to the catalogue-user" (p.39). This comparative reading is not an operation likely to appeal to many, however.

After a preface and introductory chapter, comments are given on most AACR rules from 1 to 126 in Escreet's chapters two to seven. Chapter eight deals with the major differences between the British and American texts concerning rules for entry. Chapters nine and ten resume with comments on rules 130 to 191, including differences between the two texts—and all the dust has not yet settled on the battlefield. The current revision of AACR to accommodate the International Standard Bibliographic Description not only will make these last two chapters outdated but also should introduce greater harmony between British and North American practice. Escreet omits comment on AACR Part III, Non-Book Materials. A short appendix relates present British National Bibliography practice to the AACR.

There are many bibliographic references in the text, extensive and fair use of quotations from other writers on the rules including enlightening correspondence with C. Sumner Spalding, the general editor of the AACR, and an excellent bibliography and index.

Escreet gives as the purpose of his comments on the rules "... to assist the newcomer to the rules to appreciate their content more readily, sometimes by averting possible misconceptions, sometimes by relating one rule to another, and occasionally by singling out the most important passages in a lengthy rule, or the key rule or rules in a group of related rules." Only an experienced cataloger will be able to appreciate Escreet's work. Over five years after its publication, it is difficult to picture an experienced cataloger who would be a newcomer to AACR. This is not the "expository
work of the highest quality" which Noel F. Sharp in the foreword regards as "a primary requirement for the full understanding and proper application of the Anglo-American Cataloguing Rules." Nor is it an introduction to the AACR for the library school student or new cataloger. Its greatest use in North America would seem to be by the supervisors in large catalog divisions who must arbitrate between conflicting interpretations of a rule by staff members. Consultation of Escreet's comments frequently will shed light on the original intent of the framers of the rule. It will also be valuable for the teacher of cataloging faced with divergent understandings of a rule by students.

Introduction to the Anglo-American Cataloguing Rules should be purchased by major academic libraries for their catalog divisions and by library schools. AACR still awaits its Margaret Mann.—J. McRae Elrod, University of British Columbia Library, Vancouver.


It is an interesting task to review the second edition of a work, having previously reviewed the first edition (Library Resources & Technical Services 13:579-81). Although perhaps presumptuous to assume that deficiencies have been corrected as the result of one's review, it is a pleasure to report that the second edition of this book is a better effort than the first, at least in the variety and number of sources which are covered. Of particular importance is the inclusion of material on hardware and software information sources.

The coverage of materials is good and has an international scope. The value of this work is to this reviewer, however, somewhat questionable. The sections on "Computer Literature" and "The Cost of Information in Computing" are of limited value and could well be replaced by a discussion of the field of computer science. If the guide has been prepared for librarians, such an overview is essential to understand the remainder of the book and the value of various forms of computer literature. On the other hand, a computer scientist would find the lack of complete bibliographic citations frustrating and the digressions into bibliometric characteristics a waste of time.

The second edition is certainly better than the first, but it should be considered for purchase only by those libraries building major collections in computer science.—Donald R. King, Graduate School of Library Service, Rutgers University, New Brunswick, New Jersey.


Cataloging in Publication received a body blow with the appearance of this book. Just when a cataloger is again becoming accustomed to looking at the verso of the title page for catalog copy, a book appears with a facsimile on the back of the following page. Ignoring the noncanonical placement, the cataloger dutifully settles down to the work of transferring the data to a p-slip for typing, revision, and ultimate filing. The first subject heading gives him a little pause: "Librarians—Campaigns and Battles." Unusual, but it can be verified as a Library of Congress subject heading. The second tracing is "Libraries—Diseases and Pests." Undaunted, the cataloger looks at the
Meatballs—Creeping." If he has not already, clearly he should look at this book carefully. And what will he find?

The book is a collection of forty essays, poems, library science fiction stories, tracts, fables, and pieces of unidentifiable genre by librarians in revolt against the status quo. Together they constitute a statement of discontent with almost every aspect of the American library establishment. With one or two exceptions, the contributions are emotional, impressionistic, and anecdotal; consequently, they offer little guidance to those their authors would like to see change. This is unfortunate because the contributors have obviously experienced and observed injustices and absurdities but they neither have found nor shared possible ways of rectifying them. If the authors think the methods are implicit, they err—primarily because those whom they would change have regularly overlooked, ignored, or vetoed possible solutions to problems that have been recognized for a long time. It is unreasonable to expect a manifesto from such a diverse group, but more concrete suggestions for change are certainly in order.

Two essays should be of particular interest to technical service librarians: Steve Wolf's "Sex and the Single Cataloger: New Thoughts on Some Unthinkable Subjects" and Joan Marshall's "LC Labeling: An Indictment." These point out again the insensitivity and inertia of the relatively static subject headings and the classification systems which are badly in need of revision if they are to reflect changing attitudes in our society.

Other articles deal with current topics of interest to Social Responsibilities Round Table members and their fellow-travelers. Expressions of concern about assaults on intellectual freedom, something that all librarians should be in perpetual revolt against, are surprisingly few. In contrast, much attention is given to the shortcomings of library education, the democratizing of decision-making in libraries, the perfidy of recruiters, the rituals of the profession, and the necessity for library unions. A very brief, very eclectic bibliography is appended.

The editors are to be congratulated on their effort and they should be encouraged to continue. The book deserves at least selective reading by all librarians and particularly by administrators and library educators, the groups with whom the revolting librarians have the most difficulty in communicating.—Charles Wm. Conaway, School of Information and Library Studies, State University of New York at Buffalo, Buffalo.


As pointed out in this symposium's proceedings, retrieval methods for locating information through the author and/or title approach are very well developed and extremely effective. Principles have been established, international agreements reached, and exceptions to the application of these principles are reduced to a minimum, regrettable as these instances are. Because these problems of access to information have been solved, the profession has turned its attention increasingly to the complex problems involved in subject retrieval of information. Special libraries long ago realized "... that traditional methods

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of subject retrieval were inadequate for the highly specific topics dealt with in modern documents and for the needs of their sophisticated users. They have experimented considerably with newer techniques and conceptual frameworks, albeit not always successfully. Nevertheless, these experiments have provided insights into the underlying principles upon which improved subject retrieval methods must be built. So it is with keen interest that librarians (particularly those involved with national, academic, and public libraries, with their concomitant heterogeneous collections and clients) greet any publication which promises to deal with the substantive issues of subject retrieval.

Subject Retrieval in the Seventies will only disappoint its readers, despite the list of distinguished speakers and their equally intriguing topics. As can be expected the papers vary widely in their coverage of their respective areas. For the most part librarians could spend their time more profitably adjusting the correctable deficiencies of the subject headings in their own catalogs than reading these proceedings. Some notable exceptions to this blanket condemnation, however, should be emphasized. Hans Wellisch’s opening paper, “Subject Retrieval in the Seventies—Methods, Problems, Prospects,” presents the problem of subject retrieval in historical perspective. He critically examines the deficiencies of Library of Congress (LC) subject headings, finding the system ineffective: “... no more than about 30% of all subject searches in catalogs are successful.” He believes that the root cause of this inefficiency of LC subject headings is due to the lack of “... firm principles to guide their formation or application.” Wellisch bases his specific and detailed proposals for improving the effectiveness of subject retrieval of information upon... strict rules, derived from General Systems Theory and the principles of subject analysis developed during the last 50 years. LC subject headings should be augmented by terms taken from specialized thesauri, when terms on a certain level of specificity could be linked to those at other levels... by means of common classification codes (possibly UDC). Subject headings should be applied so as to generate a co-extensive string of descriptors... leaving the degree of specificity of indexing terms to individual libraries.

His conclusions are based on the assumption that there are no firm principles by which the Library of Congress formulates subject headings.

The final paper, “Library of Congress Subject Headings—Review and Forecast” presented by Richard S. Angell, should have preceded Wellisch’s paper in the symposium program, as C. Sumner Spalding of the Library of Congress noted during the first discussion period. Even more value would have accrued to the library world had Angell’s paper been made available to the speakers before the symposium convened. This paper begins with a description of Subject Headings Used in the Dictionary Catalogs of the Library of Congress (LCSH) and of the bibliographic records and services in which it is used. Specifically the author details the auxiliary lists available to the subject cataloger at the Library of Congress. These include lists of all of the geographic names, topical subdivisions, and form headings used as subdivisions and the headings under which they are used. In addition priorities are given for the choice of the form of a new heading. Clearly there are firm principles on the basis of which terminology is selected and applied. To my knowledge this is the first time this information has been generally available. It is apparent that Wellisch lacked this information, and it will be very interesting to see what direction his proposals take now that he has this knowledge. Every librarian
who operates in a system based on the use of LCSH will want to read Angel’s paper, not only for the description of LC practices, but also for (1) the “. . . recommendations for review and improvement of the [LC] lists,” (2) a suggested “. . . technique for adopting revised headings within the constraints of the present card catalogs,” and (3) “. . . suggestions offered for fuller publication of the total LC subject heading systems in future editions.”

The chapter titled “Recent Research Trends in the Field of Information Retrieval Languages,” by Eric de Grolier, is notable for its brevity and generalizations, perhaps an accurate reflection of this particular field of study. The bibliography (prepared by one of the editors) will provide the reader with more information than de Grolier’s remarks.

Potential readers are advised to read the last paper first, turn back to the opening paper, and then await the publication of the eighth edition of LCSH with the hoped-for supplemental lists.—Janice H. Shawl, Chapman College Library, Orange, California.


Major frustrations must plague an author whose text needs regular updating, for he rarely brings out a revised edition before another new aspect, publication, or advancement is drawn to his attention. Because so many have found the rules in Anglo-American Cataloging Rules (AARC) regarding nonbook cataloging incomplete and unsatisfactory, chapter nine will have to be rewritten next time in line with Nonbook Materials (by Jean Riddle Weih, Shirley Lewis, and Janet Macdonald, 1st ed., Ottawa: Canadian Library Association, 1973). Because the tenth edition of Abridged Dewey Decimal Classification was not available at press time, Wynar will have to change the explanation of the broad and close classification (p.234) in accord with the new policy: no longer an abridgement, but a close adaptation.

One must recognize the distinct improvement by enlarging the classification chapters with sections on Expansive, Subject, Colon, and Universal Decimal classifications, treating the Library of Congress classification more fully, rewriting the account of the Dewey classification in accord with the eighteenth edition, comments on the future of classification with automation, etc.

For anyone tempted to teach an introductory course from AACR only to find its complexity inducing student frustration, this text solves the problem. It presents the basic rules simply and understandably. Thereafter, the code can be referred to for finer details. Rarely is a professor satisfied with someone else’s textbook. Bearing this in mind, the book could be used effectively by one too harried to write his own. Sufficient references are given to other books which would be used in conjunction with this text to allow one to assign specific assignments for material not amplified enough for his manner of teaching the course. Some instructors might be grateful for lesson plans or explanations of how to teach problems related to classifying. As samples have been given in cataloging, so could sections of the tables or schedules be cited to exemplify some of the more difficult aspects of classification, e.g., number building.

To the neophyte xx and so in chapter fourteen would be unclear until he found the more complete explanation in chapter fifteen, where the distinction is clarified.

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For the student who gives Bible credence to a textbook, a greater stress might be laid on the statement that the form of the catalog card presented is one of several simple and generally efficient methods. One should adapt to the library in which one works. For example, those who Xerox cards will find that leaving only one space at the left of the card frequently causes the left edge of the call number to be invisible on the copies. Also, why not type the tracing as low as possible on the back of the card, so that it can be seen even more easily in the card catalog?

Comparing catalog records prepared under the old and new rules is helpful, because most catalogs contain records of both types.

The example at the end of the last paragraph of #3 on page 281 contradicts the explanation given in the first paragraph of #3.

To be picayune the printing could be improved, e.g., on page 235 a quote is made with no quotation marks, indentation, different print, or blank space left after it. Obvious unimportant typographic errors occur on pages 183 and 232.

This standard work, greatly improved, will continue to satisfy many users and is reasonably priced.—(Rev.) Jonian P. Lang, O.F.M., Department of Library Science-AV, University of South Florida, Tampa.


The experienced rare book librarian can penetrate these mysteries by virtue of long association with the antiquarian trade, and, if length of service fails him, can turn to dozens of specialized guides, such as the International League of Antiquarian Booksellers and Sheppard Press directories. The general acquisitions librarian, however, is often at a disadvantage. Since he does the bulk of his purchasing from the in-print market, he has little opportunity to gain familiarity with antiquarian dealers; and the very abundance of rare book reference tools may prove more confusing than helpful. It is this sort of librarian, rather than the rare book specialist, who possibly might profit from having basic o.p. trade information drawn together in simplified form into one up-to-date volume.

As its subtitle indicates, The Antiquarian Booktrade is primarily devoted to listing antiquarian dealers according to their subject specialties. Subject heading scopes range from general (i.e., "Bibliography") to specific (i.e., "James, Henry"). The syndetic apparatus seems fairly adequate, although there are a number of inconsistencies, such as "Medical—Obstetrics & Gynecology" but "Medical—Psychiatry: see Psychiatry." Some subject assignments are questionable. H. P. Kraus, e.g., is rightly listed under "Incunabula," but not under "Manuscripts." He is also listed under "Art" with a see also from "Illumination," but could a neophyte securely infer that Kraus is a leading supplier of illuminated manuscripts? While Grose does give a subject heading list separate from the dealer-by-subject section, it would have been
more helpful had he also provided
an explanation of his method of
formulating and assigning subjects
(i.e., are the headings his own, culled
from dealers' advertisements, from
other directories, or what?). Such un-
certainties unfortunately detract from
the usefulness of Grose's book.

On the positive side, however, are
a few prefatory hints on searching
titles and on doing business with o.p.
dealers. Dealer coverage, while not all-
inclusive, is genuinely international.
He provides current addresses for the
dealers in a separate alphabetical-by-
name section as well as listing (with
addresses) the major antiquarian
booksellers associations here and
abroad. Included also are selected ab-
reviations and definitions of terms
frequently encountered in o.p. cata-
logs and a short bibliography of stan-
dard antiquarian reference tools.—
Patricia Ohl Rice, George Arents Re-
search Library, Syracuse University,
Syracuse, New York.

Brault, Nancy. The Great Debate on
Panizzi's Rules in 1847-1849: The
Issues Discussed. Los Angeles: The
School of Library Service and the
University Library, University of
California, 1972. 89p. $3.00.

The preface of Brault's analysis
of the records of the parliamentary
investigation of the British Museum
of 1847-1849, a study undertaken
while the author was a research asist-
ant at the UCLA branch of the In-
stitute of Library Research, states
that the study is intended "as a use-
ful source for the student of catalog-
ing and the library professional."
This appears to be an understate-
ment. Many of the arguments ad-
vanced over 135 years ago by Panizzi's
opponents remain in active circula-
tion today, and the majority of his re-
sponses are as cogent and correct now
as they were then. Indeed, with few
exceptions Panizzi appears, to quote
R. K. Olding, as "a man with the an-
noying habit of not only being right,
but of being able to prove it" (quot-
ed on p.9). Thus, a publication bring-
ing information about the Panizzi
hearings within easier reach of to-
day's librarians has value far beyond
that of historical source material.
The issues raised in those hearings are
still current and compelling. The
light Brault's study sheds on them is
a contribution to cataloging theory,
and the UCLA School of Library Ser-
vice and the university library deserve
commendation for making it avail-
able.

The study consists of a number
of chapters presenting Brault's inter-
pretation of the issues found in the
hearings portion of the 1850 Report
of the Commissioners Appointed to
Inquire into the Constitution and
Government of the British Museum
with Minutes of Evidence, together
with substantial excerpts from those
hearings at the end of each chapter.
Though no two persons undertaking
a study like Brault's would make the
same choices, for the level at which
her study was conducted her selections
appear well made. The historically
important ninety-one rules, often re-
ferred to in the testimony, are re-
produced at the end of the book; this
in itself should be a boon to students
and teachers of cataloging.

Particularly interesting among
Brault's chapters is that entitled "Per-
ception of the Work" (p.48-50).
Brault claims that hidden in the test-
imony on more popular issues is the
recognition that while a work may
appear in various languages with
widely varying titles these editions
should be brought together in the cat-
alogue. This is a matter causing much
debate among present-day catalogers.
Bringing together the various editions
of a work was put forward as an ob-
jective in the revision of the 1949
"red book" rules into what evolved
as the Anglo-American Cataloging

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Rules, but in the deliberations on that revision, it was lost sight of often, or at least relegated to a less important position than the other objective of identifying individual bibliographic entities. On-going controversies, such as whether uniform titles should be printed on Library of Congress cards for translated editions of works, or whether movies made from a play should be regarded as editions of that play, are clearly related to the old problem of the "perception of the work." In spite of how little explicit attention the problem received in the hearings, it would still be helpful to those struggling with questions based on it to read what mid-nineteenth-century scholars had to say.

Brault's monograph is short; of its eighty-nine pages, only twenty-six present her own comments, with the rest given to excerpts from the hearings and the reproduction of the ninety-one rules. It does not offer any explanation of why problems like the recognition of works, the fullness of titles, and the use of form headings appear to have eternal life, but it does remind us that this is the case. We discover once again that supposedly new solutions to cataloging problems, such as mechanical transcription of title pages accepting authors' names as presented thereon, are not new at all. It is refreshing to find it maintained, in hearings held in 1847, that such solutions may change the very objectives and functions of a catalog. Furthermore, Brault's presentation of the testimony brings to our attention that many demands placed on an author catalog may not be compatible with one another.

Because the Panizzi debate illuminates problems of current interest, I recommend that Brault's book be read by all beginning students of bibliographic cataloging. At the very least, it provides an excellent introduction to the full Report. (Librarians of library schools not possessing a copy of the original document may be interested to know that it has been reprinted recently by the Irish University Press as volume three of the set Irish University Press Series of British Parliamentary Papers. Education. British Museum [Library of Congress card 70-105155].) For more advanced students, however, and for those with a professional interest in cataloging problems, Brault's study serves only to whet the appetite. Issues raised in the 1847 inquiry into the affairs of the British Museum are unsettled still; the minutes of that investigation could serve well as the point of departure for a much deeper analysis of those issues than appears in this work.—Michael Carpenter, University of California, Berkeley.


The authors describe their book as "... an introduction specifically written for librarians or library students." Such a textbook must "outline what a computer does, especially in the library context and explain in general terms what systems work is about." The authors believe that other works on the subject are too technical for the intended audience or are focused on non-library applications. Implicit in this statement is the assumption that the problems of bibliographic files and information retrieval are different from those encountered in commercial and scientific applications. While works on computers in libraries are available, the authors dismiss them: "... all of these seem either to assume a knowledge of computer workings or are intended to interest the reader on methodology." Periodical articles are
judged to be limited in the sense that they tend to give individualized views of systems. Intended is a simple but informative book which would acquaint the novice with the potentials and limitations of computers in libraries.

The book satisfies the first two descriptions: it is simple, and, to a certain degree, it is informative. The first four chapters describe the computer and its components. The next four chapters deal with systems analysis and design; to cover such a topic in four chapters is an admirable feat. That those chapters take twenty pages says something about the depth of coverage. The remainder of the book is devoted to input procedures, computer processing, and various forms of output.

Illustrations appear together—a feature which some will find convenient—at the end of the text. The bibliography is weighted heavily toward British publications and is better described as selective rather than comprehensive. The index, more than adequate for the size of the book, not only is faceted (i.e., compiled after the style of the Preserved Context Indexing System) with main and added entries, but index references also are to the top, middle, and lower parts of the page. A note of warning: flowchart symbols used in the book do not conform to the American National Standards Institute standard (ANSI X3.5—1970). The lack of a glossary, particularly in an introductory work such as this, is an unfortunate omission. On the other hand, the entire book may be viewed as an extended glossary organized by subject rather than the traditional format of terms in alphabetic arrangement.

Neither a "how to do it" nor "how it was done in my library" book, Computers & Systems acquaints the reader with the basic terminology but hardly with the potentials and limitations of computers in libraries.—Elizabeth Pan, Graduate School of Library Service, Rutgers University, New Brunswick, New Jersey.


Carol Nemeyer's work is a welcome contribution on a significant development in modern publishing. It is the only published investigation that has come to grips with any aspect of this international phenomenon. The study is limited to the United States with its "main focus on hard copy, small edition facsimile reprinting." Information was obtained, for what was originally a Columbia University dissertation, through interviews (about 95) and questionnaires (159) completed by reprint publishers.

The ensuing machine manipulation of the data produced one very good thing: an informative thirty-nine page directory of publishers. Less satisfactory was the utilization of apparently all data gathered from the questionnaires in nineteen tables of unequal worth (there is no list of these tables), and in statistical shards scattered throughout the text. We learn: "At least 10 firms [of 116] do not sell reprints to college and university libraries. . . . Bookstores, ranked as primary market by 22 firms, are not considered an important market by 26 firms" (p.113). The lack of structural amenities frequently encountered in survey research is softened somewhat by the author's jaunty style, though there is one semantic confusion that disturbs. We find that "A scholarly reprint publisher is one who assumes the responsibility for the selection, production and sale of new copies of scholarly works . . . " (p.3), a seemingly tautological definition of scholarly reprint publishers as reprinters of scholarly works (also inferred from
numbered statement two on page 10). This is clarified only later when the author explains her very broad definition of scholarly books: "'Scholarly' is a devilish word to define in this context, for 'The Rover Boys' could be 'scholarly' work for one studying children's books. 'Scholarly' is meant to imply works of interest to scholars and other serious readers" (p.15).

The two historical chapters vary in merit. Chapter three is a short reprise of several thousand years of book trade history. More to the point is the chapter on "Republication Programs in World War II." The war was the womb of the modern reprint industry, and the author pays justifiable attention to the U.S. Alien Property Custodian with due credit to men like J. W. Edward and Eugene B. Power. The characteristically cautious posture of the American Library Association is also recorded. The author does not discuss ALA's Reprint Expediting Service and its attempt to create a channel of communication between librarians and publishers. The survey of current reprint publishing in chapter five is sound; the segment on how reprinters select their titles is particularly intriguing.

It was Nemeyer's decision not to touch on the international aspects of reprint publishing so that there is no mention of such topics as business relations between American and European reprinters, or the market for American reprints aboard. The section on "public domain, copyright and the payment of royalties" (p.101ff) is a straightforward summary of questionnaire replies. An untapped source of color at any rate, would have been the Times Literary Supplement, where (shades of Dickens) irate letters attacking American reprinters and a few rebuttals have been appearing for years.

Attitudes of publishers were very mixed on the advisability of adding new matter, such as introductions or updated bibliographies, to planned reprints. Underlying this attitude is a question raised in the past: will reprints of dated works of scholarship, or older editions of primary sources, hurt the publication chances of new works or editions? The following is drawn from the reviewer's own experience. In 1963, Argosy Antiquarian issued a reprint of Emil Teichmann's A Journey to Alaska, well publicized and welcomed as an invaluable narrative. The public remained unaware that several manuscripts in Teichmann's hand, more extensive than the published version, plus additional notes, sketches, and artifacts were preserved (all too well perhaps) at the University of Chicago library. Need the reprinters have mentioned this, supposing they possessed the information, and would it have encouraged a new edition thus undercutting the reprint? Does the reprint diminish the market for a new edition? The penultimate chapter, titled "Reprinters and Librarians," is enlivened by comments on the antiquarian trade.

Nemeyer's book deserves to be widely read and will undoubtedly be reprinted, at which time one minor error may be corrected: Anglia instead of Anglie on page 48.—Robert E. Cazden, College of Library Science, University of Kentucky, Lexington.


Aiming to aid both the cataloger and library user, this work correlates the Library of Congress (LC) classification schedules with the Library of
Congress subject heading list. Volume 1 is arranged by LC classification number, with indication of the subject headings that appear bearing those numbers in the subject heading list. Volume 2 is an alphabetical listing of the classified subject headings contained in Volume 1, with the class numbers noted.

The work is based on the computer tape for the seventh edition (1966) of Subject Headings Used in the Dictionary Catalogs of the Library of Congress (LCSH) and on the supplements of the next eighteen months. The editors do not specify, however, the exact date of the latest supplement that is included. The work is approximately five years out of date, and the closely spaced typography does not easily permit writing in corrections.

Volume 1 arranges the subject headings by class number as given in LCSH. If there is more than one suggested classification for a particular subject heading, it appears under each appropriate class. It must be remembered, however, that only subject headings that appear in LCSH bearing LC classification numbers are included. Since several subject headings are often assigned to a given book, and the book can be physically shelved in one location only, the present work is no substitute for the cataloger’s ingenuity and understanding of both the LC classification schedules and subject heading lists, however inconsistent and ambiguous they may be.

Volume 2, the alphabetical listing, proposes to help the library user by directing him to the classification number assigned to the specific subject heading in which he is interested. The volume is, at best, a partial index to the Library of Congress classification schedules. In addition to the main headings that are used in LCSH, the see references to these headings are included. However, unless the library user carefully reads the introductory essays in both volumes he will be misled into believing that all the books assigned a specific subject heading may be found in one place on the shelves.

The introductory essays will be of great interest to catalogers. Daily and Manheimer analyze the structure of the LC subject heading list in its relation to the classification schedules, and Williams describes the programming that produced the classified and alphabetical lists from MARC tapes. Large catalog departments and library school collections will wish to acquire this work.—Judith B. Barnett, Pell Marine Science Library, Narragansett Bay Campus, University of Rhode Island, Narragansett.


Daily presents a discussion of the theories of organizing nonprint materials, reinforced with cataloging examples. The first part of the book is devoted to an examination of principles of nonprint organization; the second part presents examples for implementing them. A principle, constantly emphasized, is that the collection be based on the needs of the library community. A serious study of the community should be done before any attempt is made to organize the material. Daily also believes that the library community is not always best served by treating nonprint materials “as books,” both in their cataloging and their storage.

In one chapter, Daily offers a method for cataloging material which has no self-description. The method draws heavily on the subject approach. A brief discussion of the grammar of subject headings is in-
cluded, to be used as a guide to building one’s own subject lists as an alternative to the Sears and Library of Congress lists, which Daily contends are not based on the natural order of the language.

The suggested method of cataloging phonorecordings is quite a drastic departure from the Anglo-American Cataloging Rules. For example, Daily prefers title entry for all phonorecordings, including classical music. He feels that the repetition of titles in the card catalog would cause no more confusion than books beginning with the titles “Introduction to . . .” and “How to . . .” Certainly many librarians will take issue with this approach.

Daily considers a procedural manual an important, but often neglected, step in organizing a collection. The manual can be used as a basis for writing a guide for library patrons and as an aid in training library employees. Such a manual is a necessity for establishing computerized operations. The author outlines what details should be included, particularly those pertinent for computerized operations.

The second part of the book contains a sample community survey, performed by a graduate library science student. Also included is a sample procedural manual. Alphabetical and classified lists of subject headings are provided. A listing of audiovisual sources is given, as well as an extensive bibliography.

Throughout the book, Daily maintains that much of the cataloging can be done by a well-trained technical assistant. This is another point with which many librarians will take issue (including this reviewer).

This volume has potential usefulness for a wide range of libraries, from school to research libraries. Of particular value is the discussion of relating cataloging procedure to computerized operations. However, the book does not cover the handling of all types of materials so completely and clearly as does Weihs’s Nonbook Materials: The Organization of Integrated Collections.—Sara Koons, National College of Education, Evanston, Illinois.


A greatly expanded second edition of the bibliography which formed part of George Cunha’s one-volume first edition, this bibliography contains 4,882 numbered entries, more than twice as many as the 2,200 (unnumbered) entries in the first edition. If we subtract the entries which list the titles of journals and other publications devoted to conservation and the entries designated “No entry,” however, we are left with 4,734 entries, of which approximately 950 are duplicates, leaving about 3,800 unique citations.

In this extensive and sorely needed bibliography, we have a publication that affords the serious student of conservation a wealth of material, which, regrettably, appears to have been put together hastily and with little attention to the niceties of bibliographical consistency and accuracy.

The duplication of entries is a serious bibliographical weakness. For instance, J. H. Ainsworth’s Paper the Fifth Wonder is in Section I: Historical Background, under the general heading “Paper and Papermaking” and under the subheading “Paper (The Substance),” as item number 867, with a brief and uninformative annotation. It is encountered next as number 1189 in Section II: The Nature

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of Library Materials: General, this time with a longer and generally informative annotation. Found a third time as item number 1361 in Section II, under “Paper,” it has this time an annotation which is better than the first but not as good as the second. Furthermore, number 867 makes no mention of any edition, although the date for the third edition (1967) is given. In the second listing, only the annotation informs that it is the third edition, while the last citation includes the edition statement. Inconsistencies of this nature, of which there are a disappointing number, detract from the usefulness of the bibliography.

The arrangement of the bibliography is another weakness. The authors’ introduction states that the bibliography is organized by subjects to correspond with the arrangement of the text in volume one, and that this enhances its usefulness. Actually, it does just the opposite. For example, sources on paper are located in five different places throughout the bibliography, ink in three places, insects in three places, and so on. A much more logical and useful arrangement would have been to organize the bibliography according to the book, i.e., the history of the book, the materials that make up the book, the binding of books, the care and restoration of materials, the enemies of books, environmental control, etc., rather than according to the table of contents of volume one. The authors seemingly imply that the reader should have both volumes in hand while using the bibliography.

About 28 percent (1,374) of the total number of entries are annotated, but the majority of the annotations are either so brief or so obscure as to be of little value to the user. Annotations such as “A short, scholarly, and interesting commentary,” or “A useful leaflet for curators” tell the user very little. Either all (or at least most) of the unique entries should have been carefully annotated, or none. One suspects that the annotations included were obtained from the same sources as the entries themselves and were not edited or verified.

This is, however, a very commendable effort. It is something that needed doing and the Cunhas did it. The wealth of material in this bibliography makes it a welcome addition to every library interested in the conservation of archival materials.—Matt T. Roberts, Preservation Office, Library of Congress.


This is the report on a survey of the bibliographic control of microform materials, including microfilm, Microcard, Microprint, and microfiche. The importance of such control is indicated by the study’s findings that microform production is increasing at a rate of 20 percent annually, and that “the number of microforms issued is expected to reach parity with printed books in the very near future.”

The report itself is quite brief, only thirty-three pages; the remainder of the book is filled with appendices. But its length is by no means an index of the labor involved in the study, of the volume of data gathered and analyzed, or of its value to librarians.

For the survey, data were gathered from 190 American libraries, and at least some information was obtained on the bibliographic control of microforms in each of seventy-three other countries.

The authors recognize three rules
as governing bibliographic control systems: (1) every item acquired has its appropriate bibliographic control, either homemade (catalogs) or store-bought (indexes); (2) bibliographic control costs money; and (3) incorrect bibliographic control is worthless.

The survey found that American libraries, having no alternative, rely on homemade systems of control. More than 95 percent of its subject libraries do some cataloging of their microform holdings, although many catalog selectively or do not provide complete cataloging. Reichmann and Tharpe also report that “the overwhelming majority of the 190 libraries that responded to the questionnaire on local bibliographic control are not satisfied with the present situation and deplore the lack of adequate control.”

The authors’ solution to this problem is “a national tool ... that can supplement but never completely replace the library’s own catalogs and lists.” Specifically, they propose “a national, machine-readable index of microform publications that can be broken down into a multiplicity and variety of indexes tailored to the particular needs of a given library.” However, the authors note that the inadequacy in local bibliographic control is rooted in the “widespread belief that microforms are ‘second-class citizens.’” They find evidence that printed books are given priority over microforms: for example, “generally, the processing of microforms is postponed in order to make printed books available to the patrons as quickly as possible.” Perhaps all that is necessary to insure adequate bibliographic control at the local level is not machine-generated national bibliography of microforms would be very valuable to libraries, much of its utility would be lost without such an attitude change.

The authors find that the bibliographic control of archival materials is superior to that achieved by libraries, and so recommend that “cooperation should be established between the ARL [Association of Research Libraries] (and later, the International Federation of Library Associations) and the Microfilming Committee of the International Council on Archives.” They also have succumbed to the temptation to recommend in areas outside the scope of the study; they recommend that libraries be protected against inferior reproduction methods and offer specific proposals for establishing and enforcing standards for the production of microforms.

A machine-readable index of the type recommended, its requirements, and the details of its production are described by Henriette Avram and Harry Gochman in an appendix. Regrettably, these authors limit their discussion to the production of standard author, title, and subject lists, and do not consider the production of special “indexes tailored to the particular needs of a given library.” The ability to produce such special indexes is, perhaps, the major justification for the development of a machine-readable data base like that which is proposed, and certainly the generation of special indexes would help to reduce its unit costs.

Finally, this book contains a 176-page annotated microform bibliography. The entries are divided into four classes: I. Catalogs and Lists, 169 entries; II. Collections and Series, 144 entries; III. Manuscripts and Archival Collections, 169 entries; IV. Reference Books, 11 entries. All works listed in the fourth class are bibliogra-
phies, e.g., Guide to Microforms in Print and National Register of Microform Masters. The authors warn that this bibliography has shortcomings. (Was there ever one that did not?) Even so, it is a much valued supplement to the remainder of the work.

This is an important contribution to the literature on microforms, with findings and recommendations that merit serious consideration. It should be available and read in every library that is sincerely committed to the use of materials that are recorded in microform.—Charles Evans, University of Mississippi, University.


This relatively expensive little publication has a misleading title. It is not really a library binding manual—it does not deal with collating, guarding, stubbing, sewing, case making, binding specifications, and the other fundamental aspects of library binding. Therefore, it should have been called “Instructions for Preparing Materials for Binding in the Murray Memorial Library,” as it was written to be an in-house guide for the staff of the library. This is not to say that many of the routines described could not be used by other libraries, at least those with modest binding budgets as is the case with the library in question. But other libraries of comparable size probably follow equally good routines; it is, therefore, fair to say that this pamphlet either does not go far enough, i.e., actually discuss library binding, or it goes too far, i.e., simply reiterates things that have been said before.

The author gives a detailed and quite good description of the procedures to be followed in preparing materials for binding, including a description of his master bindery file, which, while somewhat old-fashioned, should make it virtually impossible to receive a serial from the bindery that has been incorrectly stamped or bound in the wrong color buckram. Aside from this, however, the author says little that was not said by Feipel in his now out-of-date Library Binding Manual (1951), which, like Tauber’s Library Binding Manual (1972), is what its title says it is. The author does not mention many fundamental matters that are to be found in Feipel’s book, outdated though it may be.

Four pages of the pamphlet are devoted to the mending of worn books and pamphlet binding, and all four should have been deleted. The author describes mending a book with mystic tape; this type of tape, unless carefully selected and even more carefully applied, does more harm than good and may make rebinding virtually impossible when it becomes necessary. His recommendation of “stiff cardboard” pamphlet binders, which become embrittled and disintegrate sooner or later (and usually sooner), and may transfer their acidity to the text block, is to be deplored.

The last page of the manual consists of seventeen swatches of low-grade buckram. These add little to the value of the publication but probably added considerably to its cost.—Matt T. Roberts, Preservation Office, Library of Congress.


This University of Lancaster report departs from the operations re-
search analyses of library services contained in earlier papers. It covers a relatively simple implementation for generating four types of computer printouts used in controlling and accessing Lancaster's reserve collection. The implementation is not integrated with any acquisition, catalog, or circulation system. The authors candidly explain a number of modifications to their initial plans.

A single punched card per copy contains all data for list production: author, brief title, copy number, classmark, time period held on reserve, and course department and number. A master list ordered by author and another list ordered by course are cumulated weekly; supplements cumulating daily through the week are generated in a more compact format. A list in classmark order of copies to be taken off reserve is produced at the end of academic periods. Each copy of a title for each course is separately itemized on all lists to emphasize the number available and to control their selective removal. Examples of each type of list, and flow diagrams and COBOL programs for their production are given.

Cost estimates show that labor plus machine costs make the new system more than twice as expensive (at £776 per year) as the labor-only processing costs of the previous single visible index system. Lack of optimized procedures in both systems limit the usefulness of the comparisons. For the new system, the proofreading labor, the frequency of some lists, and some sort procedures are subject to question. But total cost is not the same as cost-effective, and clearly there is improved service with multiple copies and with better collection control.

Some attention is given to duplicate copy purchase decisions including that of single titles serving more than one course. Feedback to instructors is provided in manual mode by ultimately returning their original reserve request forms with tallies of circulations per academic period. The authors report that, in turn, improved cooperation is received from the faculty in submitting their next reserve requests.

The report is of interest to systems personnel and to managers of reserve or similar dynamic, temporary collections. It is a partial response to reducing the severity of the cyclic problems associated with reserves.—Alan R. Benenfeld, Electronic Systems Laboratory, Massachusetts Institute of Technology, Cambridge, Massachusetts.


The British Library and AACR, a study directed by A. H. Chaplin, formerly Principal Keeper of Printed Books at the British Museum and executive secretary of the International Conference on Cataloguing Principles that prepared the Paris Principles, pinpoints in a concise and direct manner many of the differences between the Anglo-American Cataloguing Rules (British text) and the British Museum Library (BML) cataloging rules. The initial assignment was to determine how the AACR, already adopted by the British National Bibliography (BNB), could be adapted to meet the requirements of the BML and the other copyright libraries in order to eliminate duplication in cataloging the copyright deposit books. The government’s decision, while the study was in process, to create a new national library changed the focus of the study to planning an integrated system of cataloging and bibliographical recording for a new
national service. The work being reviewed is a supporting paper for the study under the leadership of Maurice Line reported in *The Scope for Automatic Data Processing in the British Library* (London: H.M.S.O., 1972. 2vol.).

For the BML the AACR is not a sacred cow. In relevant instances its correctness, practicability, and clarity are closely scrutinized in the Chaplin study through cogent reasoning, comparative lists, extensive tables, and explanatory comments as Chaplin fights for such features as both round and square brackets, and epithets, while at the same time showing that the BML requirements might be accommodated within the MARC system. A focal point of the study is the variance between the BNB concerns “to record as simply as possible the information needed by someone wishing to know what new works have been published, to order a work from a bookseller or publisher, or to find a copy of a work in a library” and the BML tradition to represent “the physical features of the books with sufficient accuracy to identify the particular edition or issue of which it is copy and to distinguish it from others, including those not held by the library.”

BML, however, welcomes changes that raise standards instead of lowering them. The AACR, for example, provides for writing names beginning with Mac, Mc, or M’ exactly as found in the book, whereas the BML has preferred the use of Mac in every case. As long as the filing order of Mac is retained the BML is willing to accept the AACR. For £684,000 BML could foresee embarking on the total conversion of the General Catalogue to machine-readable form. If total conversion is not feasible the BML may have to accept a catalog divided by date, a situation they have ways resisted “regarding its unity as a substantial factor in its usefulness as a bibliographical tool.” It is not, however, as if the General Catalogue has always been kept up-to-date, for there is, as those who have used the library in recent years are aware, a substantial card index of recent accessions not yet included in the bound volumes of the General Catalogue.

Chaplin's study either singly or in conjunction with the study under Line (cited above) should provide the stimuli for many a suggestive hour of discussion by professors, students, and theoreticians in the areas of technical services and automatic data processing. The Chaplin study deals, in the words of *Command Paper Cmnd. 4572* (London: H.M.S.O., 1971), which established the broad framework for the British Library, with “the most significant complex of museums and library resources in Europe.” That is quite a laboratory and quite a responsibility.—Elizabeth Snapp, Texas Woman's University Library, Denton.


Elspeth Pope's doctoral study looks at almost one hundred years of effort to reduce duplicative work in cataloging done by American libraries. Of principal concern are the bibliographic operations and products of the Library of Congress (LC), especially in the past fifteen years. Pope concludes, on the basis of comparable studies of availability of LC cataloging data in 1961 (conducted by Roger C. Greer for a Rutgers University Ph.D. thesis, 1964) and in 1970 (conducted by Pope), that the time span from publication to availability of LC cataloging data for current United States trade imprints has increased. The increase during this decade is on the order of one to two months.

The author views past LC at-
tempts to speed up cataloging information delivery as a succession of "enthusiastic promises" and "subsequent disappointment," and regards the newly established Cataloging in Publication (CIP) program, in its present form, as an unlikely mechanism for substantive improvement. She proposes instead an intensification of cooperative activity and compatible cataloging practice between publishers and LC leading to the provisioning of acceptable descriptive data. These data would be a by-product of the listings prepared for publishers' catalogs. Such information, plus a copy of the typescript on which LC could base subject analysis, should lengthen the lead time for providing definitive CIP information and therefore enable LC to solve "the time-lag in cataloging."

Pope has tackled a problem of considerable interest and concern, especially to technical services librarians. In the introduction, her adviser, Jay E. Daily, characterizes the study as "a major and enduring milepost in the literature of librarianship," one which "meets every requirement of objectivity, of methodology readily followed, of bibliographic accuracy."

The work can be criticized on two general levels. The first, which is of lesser importance, covers matters such as style, cohesion, intelligibility, and editorial acceptability. In these areas The Time-Lag in Cataloging is sadly deficient. The writing is graceless. There are abrupt jumps in both subject content and logic. Insufficient identification is provided for people ("Mr. Spalding" and "Mrs. Dunlap, of the University of Michigan Libraries," p.74), organizations ("catalog department" apparently stands for the Processing Department of LC, p.8), and concepts (LC's practice of superimposition is misleadingly and inadequately defined in a footnote, p.57–58). The book bears all too many earmarks of the typical dissertation: over-extended use of lengthy and not always appropriate quotations in place of paraphrase, summarization, and abstraction of other authors; conclusions based on literal interpretations of carefully selected sources which favor the thesis arguments; and an imperfect understanding of processing operations, bibliographic standards, and goals of both LC and other libraries.

More significantly, this study does not do justice to the topic. The problem is complex, even more than the author has portrayed. She pays too little attention to LC's dramatic increase of cataloging output since 1966 under the National Program for Acquisitions and Cataloging (NPAC). If cataloging data appear slowly for U.S. trade imprints, some responsibility must lie with the Association of Research Libraries (and its members) who were strongly influential in instituting NPAC and its attendant strains on LC's Processing Department.

Furthermore, Pope's conclusions (chapter seven) rest on extremely shaky ground. They are based on (1) a decidedly pessimistic view of LC's Cataloging in Publication program, contrasted with (2) an over-enthusiastic appraisal of publishers' ability to perform acceptable descriptive cataloging, especially insofar as such cataloging could be integrated successfully and consistently into the existing sizeable and complex bibliographic data stores of large public and research libraries. For example, Pope glosses over the problems of name and series authority establishment and reconciliation.

Improvement in centralized cataloging and the distribution of bibliographic data is possible and should receive high priority. Pope's critique and proposed solution, unfortunately, will not lead the way.—Joseph A. Rosenthal, University of California, Berkeley.

Some years ago it was quite fashionable to poll graduate library school students in order to identify the "most popular author" of library literature. The results were almost always the same: Jesse Shera received by far the most votes. Students liked his lively writing style, were intrigued by his ability to interweave ideas and facts gleaned from wide reading in a variety of disciplines, and applauded his aggressive and independent stance in a profession characterized by complacency and conformity. But perhaps what they admired most was his incisive and often brilliant handling of abstract ideas in an attempt to find order in our chaotic world.

Thus Conrad Rawski's title for this volume of essays is well chosen, for Jesse Shera has contributed more to a "theory of librarianship" than any other modern librarian. But Shera's contribution to the theoretical foundations of library science has yet another aspect. For while his own writings have been important, his consistently critical and theoretical approach to a profession once characterized by Butler for the "simplicity of its pragmatism" may well prove his most lasting contribution. Shera, for some thirty years, has been the intellectual center of our universe—a center of gravity around which younger intellectuals could circle. This collection of essays nicely reflects the extent and significance of Shera's influence in the latter role. For one finds here essays by some of the most brilliant and productive men and women to have worked in this profession both here and abroad. And each essay is characterized by one thing—a theoretical approach. Taken together, these diverse and often difficult papers must be considered a sincere compliment to Jesse Shera and a considerable contribution to our literature.

That this book was published by the press founded by Ralph Shaw, one of the few men considered Shera's intellectual equal, is fitting indeed. And while the two men rarely agreed, it is well known that each held an honest respect for the other. Perhaps the best way to recommend this book dedicated to the thinking man's librarian is to say that it is essential reading for those who think critically and theoretically about library science.—Michael H. Harris, College of Library Science, University of Kentucky, Lexington.


Prepared under the auspices of the Library Association Cataloguing and Indexing Group for the purpose of illustrating the Anglo-American Cataloguing Rules, British Text, this cataloging sampler offers more than similar published manuals by providing accompanying notes for each example, citing the essence of the rule used, and explaining the rationale of the choice of entry and the form of the heading, as well as the descriptive items.

For American librarians, it can serve two purposes: to exemplify the rules and to show, to a limited extent, the differences between the British and the North American texts. For the first purpose, the manual provides ample carefully selected examples, presented in the form of the main entry record. The examples display insight into the essence of the rules. Two indexes facilitate approaches through problems, e.g., adaptations, des-
ignations in headings, Festschriften, librettos, etc., and through rule numbers. Examples of added entries and cross references are included in the appendices.

Since the examples included in the sampler follow the rules exclusively, it is particularly useful to American librarians, because Library of Congress printed cards, prepared under the policy of superimposition, are not always easy to interpret, particularly with respect to form of the heading.

In scope, this sampler covers most of the major rules in the code. With few exceptions, the rules in Chapters 1 through 7 are illustrated. Chapter 8 (rules for incunabula) is excluded. Chapters 9 through 15 are illustrated only partially.

One drawback of this sampler is that its descriptive cataloging will be out-of-date soon because Chapters 6 and 7 of the rules are being revised according to the International Standard Bibliographic Description. The body of the entries in this sampler will need to be revised as soon as the new rules for descriptive cataloging are published.—Lois M. Chan, College of Library Science, University of Kentucky, Lexington.
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Quoted from the manufacturer’s literature.

From an evaluation of the same machine in the July, 1972 LIBRARY TECHNOLOGY REPORTS.

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