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The Library of Congress Cataloging Distribution Service (CDS), formerly known as the Card Division, has been the primary distributor of cataloging products produced by the library since 1901. Products sold include cards, proofslips, book catalogs, and MARC tapes and programs. The development and implementation of automation activities in the division have enabled CDS to provide traditional services in a more efficient and timely manner and at the same time to expand these traditional services and to develop new services.

The LIBRARY OF CONGRESS Cataloging Distribution Service (CDS), formerly known as the Card Division, is the principal distribution agency for catalog products created by the Library of Congress (LC), including cards, proofsheets, book catalogs, and magnetic tapes.

Cards

The oldest product is the card. Since 1901, the cataloging distribution service, which was then known as the Card Section of the Catalogue Division, has been supplying cards to libraries ordering titles by LC number or by author/title. Later, standing orders based on series, languages, subjects, and/or all new cards also were accepted from individuals and depository libraries. These same services are still available today, although the methods for handling orders and printing cards have changed.

In 1968, the optically readable order slip for handling card orders was introduced. Subscriber numbers for more than 30,000 libraries were expanded to incorporate a check digit; and optical reading equipment that could read numeric characters in twenty-seven different typewriter fonts, the 1408 line printer font and the E13B bank encoding font, was acquired. The equipment also reads handprint; indeed it was the prototype model with this particular feature. Revised ordering instructions...
and order slips preprinted with a customer’s subscriber number were distributed to all current customers. Within a short period of time, the new slip gained wide usage and order handling improved markedly.

Although automation was introduced in CDS primarily to expedite the handling of individual orders, it also has been useful in the development of controls over the card titles maintained in inventory. Frequency statistics on card titles ordered are used to reduce and realign the card inventory on a regular basis by removing titles not frequently ordered. In addition, other titles may be reinstated on the evidence of current demand. Through these techniques, the CDS card inventory is maintained at 500,000–600,000 titles. Automation also has made it possible to handle more efficiently orders for titles not immediately available from the card inventory. This is accomplished through the accumulation and daily maintenance of disposition information. This disposition information identifies the method of reproduction to be used (copyflo, photo-offset or photocomposition, and offset printing) for titles not in the inventory; it notes titles with preassigned cards numbers for which cards have not yet been printed (these titles are placed in a maximum three-month holding cycle); and it identifies titles that have been involved in any card number conflict (these titles are routed to the Card Control Unit within CDS for special manual handling).

In 1971 another aspect of the card distribution system began to evolve with the development of catalog card photocomposition programs. Programs were designed to extract the data required on the traditional catalog card from MARC machine-readable records; to insert proper spacing, font style, point size, and other typesetting information; to perform line-casting, including hyphenation; and to generate the appropriate number of continuation cards required to accommodate a title without creating unnecessary extra cards. In addition, these programs have the unique capability to float diacritic marks, i.e., to provide for the juxtaposition of an individual digitized character. For example, the umlaut diacritic is currently used with a lowercase a and a lowercase e. If it were determined that an umlaut might also be used with another letter, positioning values for this diacritic in relation to the letter would simply be added to the appropriate program tables.

Once the image of a card is formatted through these photocomposition programs, a paging program is used to arrange ten cards on a page approximately ten by fifteen inches in size. This digitized paging data is fed into a photocomposition device called the VideoComp, which then performs the actual photocomposition function by taking the data it receives and, through the use of a light beam emanating from a cathode ray tube, transferring the cataloging data onto a film material. Once developed, this film material is an offset plate that is used directly on an offset press to produce multiple copies of printed cards.

At the present time, photocomposed printed cards are used in filling the needs of both LC and other libraries. The unit card is the main type of card produced. It is used (1) to fill depository set requirements (depository sets consist of one copy of every newly printed card); (2) to fill

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new set requirements (new sets consist of one copy of every newly printed card in any of five categories: MARC titles, non-MARC titles, English-language titles, non-English-language titles other than Chinese, Japanese, Korean, Hebrew, Near East and South Asian languages, or any of the special language groups just noted); (3) to fill standing orders for specific subjects, languages, and series; (4) to supply inventory with newly printed card titles that may be used to fill individual customer orders; (5) to augment inventory with reprints of card titles that are frequently ordered by customers; and (6) for control purposes within CDS (one copy of each newly printed card is added to CDS's “Record set,” a numerically arranged card file of all titles ever printed by the Library of Congress, and single copies of the unit card are also sent to various other search files used within CDS).

A second major type of card is the overprinted unit card. This format replicates the unit card with the addition of a heading printed at the top of the card. These cards are produced only for internal LC needs. Both unit and overprint cards are photocomposed and printed on a daily basis.

A third major format consists of five card formats that are produced for use in the manually assembled book catalogs prepared by the Catalog Publication Division of the Library of Congress. These formats include: (1) author main entry card (i.e., a unit card, except all leading between paragraphs is removed and all cataloging data that is to appear in the printed book catalog is set in the upper-left-hand corner of the card); (2) added entry cross-reference card (one card is generated for each added entry in the machine-readable record, excluding subject, series, and title added entries); (3) multiple surname cross-reference card (one card is generated for each portion of each multiple surname in the machine-readable record that is used as a main entry or added entry, excluding subject and series name added entries); (4) subject heading card (one heading card is generated for each Library of Congress subject heading in the machine-readable record); and (5) monographic series heading card (one heading card is generated for each monographic series, excluding personal name series, in the machine-readable record). The author main entry, added entry cross-reference, and multiple surname cross-reference card formats are photocomposed and printed once every two weeks for inclusion in the National Union Catalog. The main entry card format is also used in the Subject Catalog and Monographic Series catalogs. The subject heading card format is photocomposed and printed twice every quarter for use in the Subject Catalog, and the monographic series card format is photocomposed and printed once each quarter for use in the Monographic Series catalog.

Of all of the cards photocomposed by CDS, the book catalog cards result in some of the most significant savings for the Library of Congress. In the case of all five book catalog formats, the cards are presorted in an arrangement that can be filed directly into the manual card files cumulated by the Catalog Publication Division in preparation for publishing a catalog. In the case of four cross-reference and heading for-
mats, their very production is of immense help in that all of these cards were previously prepared manually by Catalog Publication Division personnel using IBM typewriters.

The fourth, and most recently designed, group of card formats is the subject note and subject reference card formats generated from subject heading authority data keyed by the Subject Cataloging Division. These cards are photocomposed and printed weekly.

The offset plate material on which all of these card images are photocomposed has one advantage: the material used may be run on offset presses located within the Card Production Unit of CDS or on offset presses located within the Library Branch of the Government Printing Office at the CDS site. The only difference between the plates created for the two presses is the amount of leader required before data set on a page. The amount of leader is controlled by a parameter card used in the paging program, a program that easily can be rerun if it is determined that a different group of presses than the ones originally selected are to be used for a specific batch of cards.

There are several advantages to using the presses located within CDS:

1. Computer filing arrangements can be maintained on the CDS presses throughout the entire cycle of printing, cutting of the pages into three-by-five cards, and collating multiple copies of three-by-five cards. This is possible because a unique cutting and collating device developed by Tappan Automation is attached to each of the offset presses used in CDS. This device cuts a page of cards in half lengthwise, utilizes two series of belts and rollers, the first of which moves the two halves of the page until they are end to end and the second of which moves the two halves at a ninety-degree angle through cutters that separate the halves of the page into ten individual cards, and accumulates these cards in hold pockets. After the appropriate number of copies of each page of cards has been printed, the cards are picked up from the pockets manually and placed in boxes for distribution. A similar filing arrangement cannot be maintained on GPO presses because all pages printed are stacked in large groups and cut manually using a guillotine cutter.

2. Small quantities of cards can be printed on the CDS presses economically because the CDS presses have a special pre-wetting cycle that insures good first copy and thus the minimum of wastage. The GPO presses do not have such a pre-wet cycle.

3. Administrative control of the printing operation within CDS permits a more immediate response to specific requests, such as processing one type of card before another and handling reruns and other special printing tasks.

At present, all new and newly revised MARC records for book, film, map, and special materials cataloged by the Division for the Blind and Physically Handicapped are photocomposed into card formats. Overprint, book catalog, and authority cards for these materials are printed on the CDS presses. The group of unit cards required for depository sets, which are sorted according to title, also is printed on the CDS

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presses. All other unit cards, including reprints, are photocomposed and printed on the GPO presses. However, as new equipment is purchased, or if one group of presses is not operational, these groupings can be changed as needed.

There are several advantages to printing cards from MARC records as opposed to setting cards by hand in linotype:

1. The traditional printing error cannot occur. Any apparent printing error is either a keying error, which can be corrected readily, or a computer composition error, which usually can also be corrected easily and the record reformatted successfully.
2. It is cheaper to photocompose and print a new card on an offset press from a machine-readable record than to set a card in hot type.
3. In the case of cataloging changes that are to be applied to all previously printed cards, it is a relatively simple procedure to select all records requiring a format change, to update the computer photocomposition programs with the new format requirements, and to recompose these records. To reset all of these cards manually is often a practical impossibility, primarily due to the time and costs that would be involved.

As for reprinting cards that have already been set once, it is also easier and more economical to recompose a card, or to select it from a data base of previously composed card images and print it on an offset press, than it is to manually select a card from a large card file, photograph it, and print it either through copyflo or photo-offset.

Within the next year it is anticipated that name authority, cross-reference, and information card formats will be developed and printed and that specifications for unit, overprint, and book catalog formats for serial records will be developed.

Proofsheets

Another old service still provided by CDS is the proofsheet service. In the early years, this service took the form of a circulating library of card titles in proof form used by libraries subscribing to Library of Congress card services to become aware of new titles that could be ordered from the Card Division.

Today, both the form and purpose of the service are somewhat different. First, in regard to the form of the service, the cataloging data contained in the proofsheet copy is no longer proof or galley copy but is an exact replica of the cataloging data contained on the card—indeed, it is a photo-offset reproduction of the printed catalog card on paper stock rather than on card stock. Second, the uses made of the service, which is now purchased by a customer rather than merely circulating through his hands, may be quite varied. While proofsheets may be used as a card ordering tool, they are used more frequently by reference and acquisitions librarians as a current awareness service or by catalogers as an aid in preparing local catalog copy. In the latter instance, it is not uncommon for the proofsheet itself, or a photocopy of the proofsheet, to become the basic local cataloging copy.
With the advent of the machine-readable record and photocomposition, the proofsheet service has changed slightly, but significantly. The proofsheet customer no longer is required to purchase the entire output but may now purchase only proofsheets for all MARC English-language titles, for all MARC non-English-language titles, or for all non-MARC titles. Standing order proofsheet services, previously called partial proofsheet services, now are available in the traditional eighteen subject classes within the same new MARC English, MARC non-English, and non-MARC categories. All proofsheet services are available in a flat form, i.e., sheets of paper measuring five by fifteen inches containing five titles within one of the eighteen classes, or in a cut and punched form, i.e., a sheet of paper cut to the traditional three-by-five size and punched with a hole to accommodate the rod commonly used in catalog drawers.

Book Catalogs

The first book catalog prepared by assembling cards at LC was A Catalog of Books Represented by Library of Congress Printed Cards Issued to July 31, 1942. This predecessor of the National Union Catalog was assembled manually by shingling catalog cards into pages that were then photographed for offset printing. Although the final process remains essentially the same today, much of the effort involved in preparing and sorting the main entry, cross-reference, and heading cards has been eased by the advent of machine-readable records, photocomposition, and computer filing.

Since 1973, Films and Other Materials for Projection has been produced entirely by automatic means, utilizing the following procedures: (1) all of the titles to be included in the catalog are keyed into machine-readable form on a current basis; (2) all of the cross-references which cannot be derived from the bibliographic record itself are keyed into machine-readable form as the need for such a reference becomes apparent; (3) computer filing programs are used to select and manipulate bibliographic and cross-reference records in a manner that conforms to library filing rules; and (4) photocomposition technology developed during the writing of catalog card photocomposition programs has been applied to the requirements imposed by a book catalog.

When a typical quarterly issue of the Films catalog is received in CDS for photocomposition, four major steps occur:

1. All records on the file are processed through an edit program that (1) identifies each type of record to be handled, such as main entry, added entry see reference, or name cross-reference; (2) rejects records that cannot be identified as to handling type; (3) inserts various header and title records that are required, such as running titles and section headers; and (4) generates output records containing only that data actually required in the final catalog.

2. All records are photocomposed in a manner similar to that employed for catalog cards: proper spacing is inserted; font style, point size, and other typesetting information is added; and line-
casting, hyphenation, and floating of diacritics are performed. The result is that each record output is a unique entry, carrying information as to type of entry, whether or not the entry may be set at the bottom of a column, whether or not the entry should be preceded by a continuation heading if the entry is formatted as the first entry on a page, and which pieces of data should be used in the construction of a continuation heading if one is required.

3. A parameter-driven pagination program is used to assemble the composed records into book catalog pages. In all, twenty-five parameters may be varied as needed to control the width and depth of columns and pages; the number and positioning of columns set on a page; the minimum amount of leading to be inserted between entries; the style in which the continuation heading is to be set, if it is required; identification and setting information for record types to be handled as half titles, running titles, or guide words; point size and positioning of the folio set on the page; and what the first folio number set on the first formatted page should be.

4. The paging data, which is in a digitized form, is then fed into the VideoComp. In this instance, the VideoComp is used to transfer the cataloging data onto a reversal film material rather than onto offset master plate material. When this reversal film material is developed, a negative is created that can then be used to create signatures of the printed book. All printing and binding of this book catalog, and of all book catalogs published by the Library of Congress, is undertaken by the Government Printing Office or by a printing firm awarded a contract by GPO.

In late 1974, a second publication, the eighth edition of the Library of Congress Subject Headings, also was produced entirely by automated means. Using data keyed by Subject Cataloging Division personnel and machine-edited and manipulated by the MARC Development Office, CDS performed the computer composition work in a manner similar to that undertaken for the Films catalog. Reversal film was then developed and used to print the two-volume list. Since then, all current supplements have been processed through the same photocomposition programs, enabling these lists to be printed and distributed to standing order subscribers in a timely manner. It was possible to use the pagination program originally developed for the Films catalog for the Subject Headings lists merely by introducing a new set of parameter cards.

Photocomposition programs for producing a new edition of the Symbols of American Libraries were completed in March 1976 and were used to format the eleventh edition of this list; specifications and programs for the Antarctic Bibliography also were developed in 1976, and volume eight of the catalog was photocomposed in October 1976; formats for an ISSN-Key Title Register have been developed and will be used in early 1977; and printing changes brought about by the revision of chapter 12 of AACR for special materials will be incorporated into the 1976 annual Films catalog. When all current LC cataloging is in ma-
chine-readable form, it is likely that the National Union Catalog will be photocomposed in its entirety.

Magnetic Tape Services

The newest group of services supplied by the Cataloging Distribution Service is the MARC tape distribution services for books, films, maps, and serials. Book records received in CDS daily are accumulated daily and distributed weekly. These records are distributed in two services: a "Books (English)" service, which covers all newly verified English-language book records, and a "Books (All)" service, which covers all newly verified book records in the English, French, German, Portuguese, Spanish, Italian, Romanian, Afrikaans, Danish, Dutch, Estonian, Finnish, Frisian, Icelandic, Norwegian, and Swedish languages. English-language book records have been distributed since April 1969.

Film records, received in CDS three times a week, serial records, received twice a week, and map records, received once a week, are accumulated weekly and distributed once every four weeks. The film service is now in its fifth distribution year, and the map and serial services are now in their fourth distribution years. All tapes included in all services are available in 9-track 800 or 1,600 bpi (bits per inch) or 7-track 556 bpi.

The distribution cycle itself involves four steps: (1) the selection of all records requiring distribution for a specific service (this selection uses a control file, which insures that the proper identifying codes that should be associated with the record are used); (2) the conversion of the selected records from the Library of Congress internal processing format to the U.S. MARC II Communications format; (3) the printing of an index and accompanying statistics of all records converted for distribution; and (4) the production of multiple copies of communications format tapes for distribution to subscribers.

This group of services has had a greater impact on library work than any other service supplied by CDS, as approximately 60 direct users and more than 200 secondary users access MARC tape cataloging data for acquisitions, reference, and cataloging needs.

As of April 1976, two new services were added:

1. MARC Distribution Service—Books (COMARC).

Records in this service are entered into machine-readable form from LC source cataloging by agencies other than the Library of Congress. These records are sent to the Library of Congress, where access points in each record are compared with those on the counterpart record in LC's Official Catalog and updated if necessary. Once every four weeks, records that have been verified against the Official Catalog and that have not been distributed previously are sent to CDS to be converted into the U.S. MARC II Communications format and sent to subscribers.

2. MARC Distribution Service—Books (Canada).

Records in this service consist of bibliographic entries for mono-
graphs distributed weekly by the National Library of Canada. These records are received by CDS, accumulated and converted into the U.S. MARC II Communications format, and distributed to subscribers once every four weeks. In addition, one file of all Canadian records distributed between January 1975 and March 1976 has been created. The records in these services have not been integrated into the Library of Congress MARC data bases but are maintained as separate files. Both services are available in 9-track 800 or 1,600 bpi or 7-track 556 bpi.

The first CONSER records, representing descriptions of serials not previously distributed by the Library of Congress and recently converted to machine-readable form by agencies other than LC, were distributed in July 1976. Subject authority data in the form of the eighth edition of Library of Congress Subject Headings in machine-readable form were distributed in October 1976, and name authority data records are scheduled for distribution in April 1977. A service involving the distribution of records appearing in the GPO Monthly Catalog is also scheduled to begin in April 1977. In addition, shared distribution services similar to Books (Canada) are scheduled for development when shared cataloging exchange agreements are reached between the Library of Congress and other national libraries, creating national machine-readable data bases.

Computer Programs on Magnetic Tape

CDS also offers for sale two computer programs developed by LC to expedite the manipulation of machine-readable bibliographic records:

1. Format recognition.
   Written for OS, the program (consisting of forty-three modules) accepts monographic, bibliographic data keyed in a prescribed format and transforms it into an LC Internal Processing Format record that is tagged and formatted automatically. Once formatted, records are reviewed by editors, verified for correctness and updated if necessary, and then added to the MARC data bases at the Library of Congress.

2. Library Sort Key (LIBSKED).
   Written for OS, the program creates sort keys (256 character maximum) for each LC Internal Processing Format record meeting the selection requirement(s) indicated on control cards. More than one sort key may be created for one record if more than one selection condition exists in the record. Sorting of these records, based on these sort keys, results in a file conforming to LC filing practices.

Summary

Services of the Cataloging Distribution Service have expanded greatly since cards were first distributed in 1901. Proofsheets, book catalogs, and magnetic tapes are other vehicles of distribution currently in use. Microforms and on-line services are expected in the future.

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IN MEMORIAM: WILLIAM H. KURTH

The members and consultants of the ALA RTSD Resources Section Library Materials Price Index Committee wish to pay special tribute to the late William H. Kurth for his unique contributions to the development of price indexes for library materials.


After serving as chief of the Circulation Division at the National Library of Medicine in 1962 and as Latin American bibliographer at the University of California at Los Angeles in 1968, he moved to Washington University Library, St. Louis, where he advanced from acquisition chief to university librarian. From 1969 to 1971, he compiled a table of Mexican book prices for the Library Materials Price Index Committee. In 1972 he addressed the IFLA Committee on Statistics and Standards in Budapest on the need for international price indexes.

Mr. Kurth served as chairman of the American National Standards Institute Z-39 Subcommittee, which drafted the American National Standard Criteria for Price Indexes for Library Materials. Published in 1974, this standard has been officially adopted by the Library Materials Price Index Committee. In 1974, Mr. Kurth recommended this standard as an international model to the IFLA Committee on Statistics and Standards.

His work on price indexes was only one facet of William Kurth's many contributions to librarianship. The library world is greatly indebted to the vision and work of William H. Kurth for the development of these indispensable tools of library management.

Preparation of the microfilm indexes is sponsored by the Library Materials Price Index Committee, Resources Section, Resources and Technical Services Division, American Library Association. Publication of these indexes is designed to assist librarians in planning and justifying budgets for library materials in microform.

Table 1 lists fifty-seven selected libraries in the United States and presents data on the rates charged for negative microfilm in 1975 by forty-six of them. The 1975 rates for twenty-six of these libraries were obtained by telephone since they did not quote rates for inclusion in the 1976 Directory. Three libraries ceased their filming operations and contract all their filming on a jobber basis. The rates quoted are for 35mm negative microfilm per exposure.

Table 2 lists twenty-two selected libraries in the United States and presents data on the rates charged for positive microfilm in 1975 by nineteen of them. The 1975 rates for thirteen of these libraries were obtained by telephone since they did not quote rates for tabulation in the 1976 Directory. The rates quoted are for 35mm positive microfilm per foot.

Table 3 compares the 1975 negative and positive microfilm rate indexes for selected U.S. libraries with the 1969 and 1972 microfilm rate indexes. Earlier editions of the Directory distinguished between rates for bound and unbound materials and newspapers. The 1976 Directory lists only a single rate for each institution. Also, as with the indexes for other forms of library materials, the base period of 1957-59 has been
**TABLE 1**

**1975 Rates for Negative Microfilm in Selected U.S. Libraries**

(35mm per Exposure)

<table>
<thead>
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<th>Symbol</th>
<th>Institution</th>
<th>1975 Rates</th>
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<td>CPT</td>
<td>California Institute of Technology</td>
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<td>.105A</td>
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<td>University of California, Berkeley</td>
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<td>CoU</td>
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</tr>
<tr>
<td>WHi</td>
<td>Wisconsin State Historical Society</td>
<td>BC</td>
</tr>
</tbody>
</table>

**TOTAL:** 3.2510

**AVERAGE RATE:** .0706

**INDEX VALUE:** 143.2048

Legend:  
A Averaged  
B Responded to letter or telephone  
C No filming facilities; filming discontinued; or filming only for in-house use  
D Filming arranged with commercial firm

abandoned in favor of the new base period of 1967-69. For microfilm rate index purposes, the rates quoted in the 1969 edition of the *Directory* have been utilized as the new base period for computing index values.

The prices are definitely minimum rates and should be considered typical for small orders without complications. Many libraries add charges for spools and boxes; establish minimum charges per volume, item, or order; and/or set additional charges for manuscript, pictorial, rare book, and other material requiring special handling, or for nonconsecutive runs, filming double-page material in single-page format, for customer specifications, for scrapbook, map, and similar material, for camera changes required by fold-out charts or variations in material format, etc.

Figure 1 presents the 1969, 1972, and 1975 index values in graphic form. From the available data, a projection of future index values is made using median values of the negative and positive rates. The graph projects a median rate increase for positive microfilm of 13.3 and 15.9 percent for the 1978 and 1981 periods, respectively. Also shown is a median rate increase for negative microfilm of 11.3 and 12.7 percent for the 1978 and 1981 periods, respectively. The reader is cautioned that these projections are conjectural, based on past and present market conditions. It is fair to assume, however, that inflationary pressures will continue to be a factor in the future.

The index value for negative microfilm rates increased 17.3 percent.
TABLE 2
1975 Rates for Positive Microfilm in Selected U.S. Libraries
(35mm per Foot)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Institution</th>
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| TOTAL:  | 2.2805  |
| AVERAGE RATE: | .1189   |
| INDEX VALUE: | 123.8541 |

Legend:
A Averaged
B Responded to letter or telephone
C No filming facilities; filming discontinued; or filming only for in-house use
D Filming arranged with commercial firm

for the four-year period between 1972 and 1975, which is more moderate than the 25.9 percent increase for the 1969-72 period. It is less than the 22.3 percent increase for the 1959-69 period. It shows that the general inflationary increases in salaries and the cost of supplies and equipment is less severe than in previous periods, but it is still at least partially transmitted by library photoduplication services to their customers. The increase in cost generally parallels the annual increases in the cost of living index.

After a surprising dip in the index value of positive microfilm rates for the 1969-72 period of minus 12.6 percent, the 1972-75 period shows a whopping 36.5 percent increase, compared to an 18.6 percent increase for the 1959-69 period. Although the production of positive microfilm...
TABLE 3
INDEX OF U.S. LIBRARY MICROFILM RATES

<table>
<thead>
<tr>
<th>Negative microfilm (35mm per exposure)</th>
<th>1969</th>
<th>1972</th>
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<tr>
<td>Average rate</td>
<td>$ .0493</td>
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<td>$ .0706</td>
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<td>+17.3</td>
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</table>

<table>
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<th>Positive Microfilm (35mm per foot)</th>
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<th>1975</th>
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<td>Average rate</td>
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<td>$ .0839</td>
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<tr>
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<tr>
<td>Percent + or -</td>
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<td>-12.6</td>
<td>+36.5</td>
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</table>

GRAPHIC DISPLAY OF U.S. LIBRARY MICROFILM RATES

Figure 1
Graphic Display of U.S. Library Microfilm Rates

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is a more mechanized process than the production of negative microfilm, the increase in positive microfilm prices indicates that libraries are less willing to absorb the cost of materials, equipment, and production and are passing on to their customers more of these costs. The increased prices of U.S. library-produced microfilm also reflect the severe budgetary restrictions experienced by libraries in the past few years.

Increasing costs notwithstanding, U.S. library-produced 35mm microfilm continues to be a "good buy," especially when compared with the average price increases for the 1972-75 period of 77.5 percent for U.S. periodicals, 31.3 percent for U.S. serial services, and 36.5 percent for U.S. hardcover trade-technical books.

LIBRARY ORDERS FOR MICROFORMS

The American Library Association has recently published:

The guidelines answer the basic questions of librarians who are giving consideration to increasing their collections of commercially available microforms by citing the basic guides to the titles obtainable from more than 300 publishers of microforms and by informing librarians of what they may expect of publishers. The aim of the Guidelines is to provide basic information on the various steps to be considered in microforms acquisition. It suggests criteria for selecting the works, outlines proper ordering procedures, and presents a brief technical background in the form of a glossary of terminology. It does not attempt to evaluate production processes or compare formats.

The publication may be ordered from Order Department, American Library Association, 50 E. Huron St., Chicago, IL 60611.
Linear Programming and Library Delivery Systems

CHARLES R. MCCLURE
Assistant Professor
School of Library Science
University of Oklahoma
Norman, Oklahoma

Basic linear programming techniques can provide library decision makers with a powerful tool to increase the efficiency of many traditional library operations. However, librarians must first accept responsibility for developing some competency with basic mathematical procedures in order to utilize such techniques and to insure that such decision-making tools are properly applied for a specific situation. An example of how one basic linear programming technique can be utilized to improve the efficiency for delivery of material in a library system is provided.

In recent years libraries have started to take advantage of linear programming techniques in analyzing a wide range of library problems. For a number of managerial decisions, mathematical programming can provide a firm basis for determining the relationship between certain variables and costs. Generally, linear programming analyzes a problem within the following framework: (1) there is some objective to be attained, such as maximum profit, minimum cost, or minimum time for the system being studied; (2) there is a large number of variables to be handled simultaneously; and (3) there is a large number of possible interactions between variables. With librarians becoming more oriented to systems and operations research, the linear programming and mathematical modeling approach has become more common as a tool for decision makers in the larger academic, public, and federal libraries.

Linear programming techniques were largely introduced by the government in the 1950s, and industrial engineers were quick to pick up the procedures for use in the private sector. Only in the last five to ten years have librarians turned to mathematical programming. However, with the

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current economic slow-down and resulting competition for scarce financial resources, librarians have found linear programming and other types of mathematical programming to be valuable devices for justifying budgetary changes. A number of recent articles have discussed library applications for linear programming in such areas as interlibrary loans and networks,2 centralized delivery systems,3 journal selection,4 and compact book storage.5 Additional applications are summarized and discussed in Library Planning and Decision-Making Systems.6

At the outset, it should be stressed that such programming techniques are designed to be used as tools for the decision maker. The use of linear, goal, and other forms of mathematical programming does not absolve the decision maker from making a decision; rather, they are intended to aid him in making that decision from an objective basis. However, in the recent rush to apply mathematical models and mathematical thinking to library decision making, “simplified” techniques have been developed and published for librarians who are generally uninitiated to the linear programming jargon and who do not have a mathematical background. One such example of a “simplified” procedure has been reported by Heinritz and Hsiao.7 Other examples of applications in which operations research specialists apply mathematical techniques to library operations in an oversimplified framework also can be found in the literature.8

Although such presentations serve a useful purpose by initiating librarians into mathematical thinking as a basis for decision making, it is important that simplifications not be achieved at the cost of inaccurate or inappropriate descriptions of the techniques being suggested. It is simply not possible to present mathematical techniques that do not call for the use of any mathematics on the part of the decision maker. Librarians must face reality and spend some time learning basics of mathematics and model building. This is not to say that librarians must all become advanced mathematicians in order to operate the library; basic competencies with statistical procedures and at least algebra are required for decision makers to utilize basic approaches of linear programming. Otherwise, categorical acceptance of some of the procedures outlined in recent library literature concerning mathematical techniques for decision makers can cause more harm than good.

The problem to which Heinritz and Hsiao address themselves is frequently referred to as the “traveling salesman” problem.9 A salesman, starting at any given city, wants to visit each of a specific set of predetermined cities (or nodes) once and only once and then return to the original starting point upon termination of the tour. Simply stated, the problem is in what order should he visit the various nodes to minimize the total distance or cost of the tour? Complex programming techniques have been applied to this problem, and a simple algorithm to determine the optimum routing has not been developed. The applicability of this type of problem to library systems, which must deliver such things as books, equipment, processing, or even mail among the individual li-

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Library Resources & Technical Services
must be delivered to libraries B through I. The problem is to determine
the optimum (in this case, the least total distance) solution, that is, the
specific route the delivery vehicle should follow to go to each branch
once and return to its starting point. Figure 1 represents the cost matrix
between the various nodes as described by Heinritz and Hsiao. It should
be noted that the numbers in the matrix can be interpreted as either the
distance or the cost for this example. Furthermore, the costs between li-
brary A and library A, etc., are placed to be infinitely large, since it is
nonsensical to travel from a node to itself; thus, these squares will not
be considered when determining the optimum route to follow.

Heinritz and Hsiao describe their procedure for determining the
route as follows:

Pick the row [from the matrix] representing your starting point. On this row
locate and circle the lowest cost. In the example the starting point would be
row A, representing the main library, and the circled lowest cost would be 0.8,
in column I. 11

They continue by noting that after determining that branch I was the
first stop, the second leg clearly would begin at branch I. A similar iteration
for row I is then done, as was accomplished with row A, except for
making certain not to circle a square for either column A or I, since a
node that has already been visited must be bypassed. By completing this

<table>
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<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</table>

Figure 1
Cost Coefficients Between Libraries A-I.
procedure throughout the matrix, it can be found that their “near optimum” tour is A - I - D - C - F - B - H - E - G - A. The distance for this tour is 24.8 (see Figure 2).

Although Heinritz and Hsiao note that solutions from such a procedure should be considered as near optimum, there is a wide range of near optimum solutions for this problem, depending upon which starting node is used. Listed below are the resultant routes (any of which could be started and stopped at A) and their corresponding distances, depending upon which node is used as the starting point.

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<thead>
<tr>
<th>ROUTES</th>
<th>COST COEFFICIENTS</th>
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<td>1. A - I - D - C - F - B - H - E - G - A</td>
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<tr>
<td>2. B - F - C - A - I - D - H - E - G - B</td>
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<td>3. C - A - I - D - H - F - B - E - G - C</td>
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<td>10. I - A - D - C - F - B - H - E - G - I</td>
<td>23.8</td>
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</table>
It will be noticed that the range of possible solutions varies from a low of 23.8 to a high of 30.1—a considerable difference. The assumption that the decision maker must begin this procedure at node A to determine a near-optimum solution is incorrect. Once any closed-path route is identified (regardless of the node one uses as a starting point to identify it), actual starting-stopping places can be chosen by the decision maker depending on other circumstances (such as facilities to house the delivery vehicle, etc.).

The major problem with this simplistic procedure is conceptual in nature. In actual practice, it makes no difference what node is used as a starting point to identify the near-optimum route. Once a route has been determined, that is, a completed route satisfying the constraints of (1) visiting each node once and only once and (2) returning to the original starting point, any node joined by the path can be considered as a possible point of origin.

To make the Heinritz-Hsiao procedure more useful, the library decision maker should solve the problem using various nodes as points of origin to determine a set of possible routes from which the best can be chosen. Figure 3 represents an illogical route that the administrator would have determined as near optimum by using node B as the starting point. Figure 4 shows the actual optimum route for the problem, which can be determined if either node G or node I is used as a starting point. Both of these figures graphically represent the conceptual error with the Heinritz-Hsiao procedure. With single delivery systems, it makes no difference where the starting point is to determine the optimum route. Once the optimum route is determined, any node can be considered to be a starting point.

By now it is evident that the complexity of traveling-salesmen-type problems is due to the great number of possible routes that can be identified. One must also realize that the example being discussed in this paper (which is an imaginary library system presented from the Heinritz-Hsiao discussion) is simplistic and includes only a limited number of nodes. In one recent linear programming application to determine the optimum routing and scheduling pattern, more than 700 nodes were included. Obviously, a cost matrix $700 \times 700$ is not suitable to manual solution by procedures as described for the library system represented in Figure 1; but if the number of nodes is small, a cost matrix can be computed as was done in the example given by Heinritz and Hsiao.

To make the solution more optimum, the decision maker should first draw or trace a map to scale, indicating the location of the various nodes in the system, and employ the procedure described in this paper to determine various possible routes. By starting the solution using the farthest removed nodes as points of origin (regardless of the actual starting-stopping point), the optimum routes are more likely to be determined first. Ideally, the decision maker should compute the routes and their resulting cost for each of the nodes as points of origin. This does not take as much time as one might imagine, and the resulting minimi-
zation of costs by locating the optimum route would make the extra thirty minutes spent a most profitable investment—especially since such routes would be fixed for long periods of time as members of the system do not change frequently.

One other misleading notion described by Heinritz and Hsiao is their method to make certain that the resultant route from circling cost cells in the matrix is a viable one. They write, “notice as a check that no two circles [route segments] lie in the same row or column.” As Figure 5 indicates, this check is meaningless. This solution meets the stated criteria of having no column or row with two or more circles in it, but the result is three unconnected routes of (1) A - I - E - G - A, (2) F - C - F, and (3) B - H - D - B. This solution is short-circuited and is graphically displayed in Figure 6. Decision makers attempting to determine an optimum route by the Heinritz-Hsiao method should take care to list the
## Figure 5

Example of "Short-Circuited" Solution

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<tr>
<th></th>
<th>A</th>
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<th>D</th>
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</tbody>
</table>

## Figure 6

Graphic Representation of "Short-Circuited" Solution

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actual route before tabulating its cost coefficient to make certain that it fulfills the two constraints of (1) visiting each node once and only once and (2) returning to the original starting point.

Although the application of cost matrices and the computing of optimum delivery routes may be useful and perhaps even provide amusement for those who feel a need to demonstrate their mathematical prowess, a new era in library planning where decision makers will depend on techniques such as linear programming (among a number of mathematical models) as a decision-making tool is fast influencing the library field. It is apparent that the traveling-salesman-type delivery problem does not readily lend itself to linear programming techniques because of the complexities involved. However, a number of typical library operations are suitable to linear programming applications.

Within the context of delivery systems for libraries in a larger system, linear programming is most useful in those situations involving a number of variables to determine optimum benefits. Constraints reflecting (1) how much material is to be delivered, (2) how many delivery vehicles are available, (3) how much capacity each delivery vehicle has, and even (4) how frequently deliveries can be made are easily handled in a linear programming delivery problem. Such problems are referred to as "transportation" or "distribution" problems by linear programmers. An uncomplicated example is given here to demonstrate the power of linear programming to solve planning situations with a number of variables.

Let us assume that we are again dealing with a system of nine libraries, referred to as libraries A through I. Let us also envision this library system as one that is trying to make the most efficient use of its resources. In this system libraries B, F, and H have audiovisual laboratories with the traditional complement of equipment. The other libraries in the system do not maintain stores of such equipment but do have a considerable demand to provide projectors and other related equipment to their patrons. The expense of purchasing additional projectors and providing suitably trained staff makes it impossible for the system to buy more equipment and hire more staff. Thus, in order to obtain the optimum system benefit from the audiovisual equipment, the director of the system has determined that all libraries will have access to the equipment at the three laboratories and that these three audiovisual laboratories will deliver the desired equipment (in this instance, projectors) to other libraries on request.

Specifically, let us assume that audiovisual laboratory B has six projectors; audiovisual laboratory F has eleven projectors; audiovisual laboratory H has ten projectors; and thus, there are a total of twenty-seven projectors available (supply) for system use. On one particular day, the requests (demand) from each individual library are as follows: A needs two projectors, B needs one projector, C needs eight projectors, D needs four projectors, E needs two projectors, F needs one projector, G needs one projector, H needs six projectors, and I needs one projector.
Thus, a total of twenty-six projectors will be requested from audiovisual laboratories at libraries B, F, and H. These requests are listed in the DEMAND row of Figure 7. The number of available projectors are listed in the SUPPLY column in Figure 7. The numbers in the cells of the matrix of Figure 7 are the cost coefficients—for instance, the number 15 in the top left cell indicates that the cost coefficient to deliver material between the AV laboratory at library B and library A is fifteen.

It should be noted that “slack” variables have been introduced into the problem to compensate for unequal supply and demand. Since only twenty-six projectors from a possible total supply of twenty-seven are needed in this instance, a 1 is placed in the slack column to compensate for the difference. If more projectors (instead of less) had been requested, a 1 would have been placed in a slack row (instead of column) to determine which library would not receive its request. Because the use of slack variables is simply a method to balance supply and demand and are in fact nonexistent, their corresponding cost coefficient is zero. There is no cost associated with not delivering a projector. The use of slack variables allows the problem format to be easily changed to meet the supply and demand from specific libraries or even the contingencies of broken projectors!

Simply stated, the problem is: which audiovisual laboratories should provide how many projectors to which libraries at the least possible delivery cost? It is to such problems as this, with many variables, constraints, and capacity requirements that linear programming works to its true strength. Those who work in large library systems will recognize the similarity of this type of “distribution” problem to many other related
problems that daily confront the library decision maker. The solution to this problem is presented in Figure 8. A circled number in a cell indicates the number of projectors that will be taken to a given library from a specific AV laboratory. For instance, the 2 in the second cell down of the first column on the left indicates that the AV laboratory at F will take two projectors to library A. To determine the total cost for the problem, one simply multiplies the number of items actually delivered to a library (the circled number) by the cost coefficient for that particular cell. Thus, the total cost for delivery of these projectors is 145.

The method for determining which projectors will go to a given library is done by satisfying three constraints: (1) the allocation of projectors from an AV laboratory must equal the supply for that row, (2) the number of projectors to be delivered to a library must equal the column demand, and (3) the lowest combination of cost coefficients for delivery of material should be selected. Basically, the process of fulfilling these three constraints can be done through an inspection and iteration procedure.

As an example, we notice that library A needs two projectors (see Figure 8). Given a choice between the cost coefficients of 15, 9, or 16, one would choose 9 because it is less. Checking the total supply of AV laboratory F, we find that it has eleven projectors available so we can put a 2 in that cell indicating that both projectors will be delivered to library A from AV laboratory F. By simply using this inspection process for each library (iteration) and fulfilling the column and row constraints, we can obtain a near-optimum solution.

<table>
<thead>
<tr>
<th>FROM</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>SLACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-V Laboratory 1 at Library B</td>
<td>15</td>
<td>1</td>
<td>8</td>
<td>14</td>
<td>12</td>
<td>7</td>
<td>4</td>
<td>9</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>A-V Laboratory 2 at Library F</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>19</td>
<td>1</td>
<td>9</td>
<td>5</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>A-V Laboratory 3 at Library H</td>
<td>16</td>
<td>9</td>
<td>7</td>
<td>14</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>15</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>(SLACK)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>127</td>
</tr>
<tr>
<td>DEMAND</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 8
Solution to Example Problem
To obtain the optimum solution for this problem or any other delivery problem that can be described in the format presented in Figure 7, a basic linear programming technique called the steppingstone method can be utilized. This method simply formalizes the process described in the above paragraph by using an algorithm (repetitive set of formal instructions) that identifies which cells in the matrix can be improved by systematically comparing the costs for delivery from different sources. An understanding of high school algebra is required to utilize this method that has been described excellently in a straightforward and clear exposition elsewhere.16

Once the problem has been solved and the specific libraries have been identified to receive deliveries, the actual route of the delivery can be determined by a procedure discussed in the first part of this paper. It should be stressed that linear programming goes one step further than the routing problem by determining which libraries will deliver how many items to other libraries at the least cost.

The example given in this paper is used only to provide a simple representation of the problem-solving capabilities of linear programming. The size of the matrix easily could be expanded to include more libraries and more distribution points or to allow for contingencies or capacity for the delivery mechanism. The strength of the linear programming technique is its ability to handle large numbers of variables and constraints at the same time and to provide one optimum solution. In addition, computer programs exist at many universities or large municipalities where the problem can be solved simply by inputting the necessary data.

Because linear programming provides mathematical solutions to many common library problems, it provides a strong basis to justify or modify existing programs and to predict the minimum costs associated with the operation. Although librarians frequently assert that many library services and operations cannot be quantified, linear programming can aid the decision maker to determine optimum benefit or minimum cost. Intelligent use of this powerful tool will permit librarians to quantify costs and benefits of existing operations as well as to plan for future operations.

References


11. Ibid.

12. Two routes for node C have been computed because two different routes at the second leg of the tour are immediately possible due to similar distances.


**CHECKLIST FOR COMMERCIAL PROCESSING SERVICES**

The Checklist for Commercial Processing Services, prepared by the RTSD Commercial Processing Services Committee for the 1977 Detroit Conference program, was distributed at that time. As a result of the program, the committee will make additions to it. Since the program workshop, others have requested copies of the Checklist, and comments regarding it are welcome and solicited from the profession. Copies may be obtained from Dallas R. Shawkey, Brooklyn Public Library, 109 Montgomery St., Brooklyn, NY 11225.

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Serials files, even large ones, can be maintained efficiently by manual methods. Loss of control is due to lack of good management, not lack of computers. Eight problem areas are discussed: (1) decentralization of records, (2) duplication of processing, (3) personnel policies, (4) claiming, (5) payments and renewals, (6) replacements and duplicates, (7) unidentified pieces, (8) recording of receipt. The breakdown of manual procedures is not in itself sufficient reason for introducing automation.

TIME AND TIME AGAIN in reading about automation of serials, we find the implication that automation was necessary because of problems with manual control. It is generally believed that the larger a serials file becomes the more unmanageable it gets to be. Libraries have been known to decide to computerize serials because manual control was felt to be rapidly deteriorating. It is high time to set the record straight. The truth is that serials can be controlled very efficiently in a manual operation. Automation of serials may produce additional service to patrons and this may be a valid reason for computerization. But to say that automation of serials procedures is necessary because of lack of control in a manual system is completely wrong.

This persistent fallacy has come about, not only because of a naïve faith in the computer, but also—and mainly—because of misconceptions about serials that have caused grossly inefficient handling. The experienced handler of periodicals, serials, and continuations eventually becomes aware of the following causes for inefficiency in processing.

Decentralization of Records

There is a great temptation for departments of an academic library, and especially for branch libraries, to set up their own shop. The idea is to be self-sufficient and independent. Issues of titles under the wings

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of the particular department or branch should go straight from the publisher to the little empire, with no detour and no delay. A hold-up of even one day at a centralized serials file is intolerable. And what is more, the branch should of course have its own complete records of receipt, binding, etc. Patrons are constantly asking for these details, and there is nothing quite as heavenly as that all-round, self-sufficient, know-it-all branch library.

The truth is rather that there is nothing quite as inefficient. Decentralization may very well lead to a greater delay than there ever is in centralized processing. Management often does not realize that in departments and branches there is a great conflict between public service and technical processing if the decision is made that the branch should process its own serials. In such areas public service must come first, so, not infrequently, unprocessed serials stack up. If time is found at all, such “simple things” as recording of receipt and routing is entrusted to high-turnover student assistants who are then left to fend for themselves. The result, of course, is a hodgepodge of inconsistencies in the serials records, with all those evil consequences that give librarians a bad name. No man can serve two masters. Public service and technical processing must remain separated.

There are other dangers in decentralization. The separation of financial records and records of receipt of issues makes intelligent claiming impossible. Payment records still being maintained by technical processing in the main library, the branch lustily claims while blissfully unaware of the fact that the issues were, for one reason or another, never paid for. Or technical processing routinely pays, while the branch has received nothing for the past three years or so. It’s things like these that make publishers and subscription agents wonder about librarians.

Much more could be said about the evils of decentralization of serials records, but it would go beyond the scope of this article. One other matter is worth mentioning: waste of time, frequently the result of the best of intentions. What was supposed to be a student assistant or perhaps a part-time clerical job, easily grows into a full-time paraprofessional job. This happens when the branch starts claiming, when confused publishers send issues to technical processing and to the branch, when the branch becomes entangled in correspondence about subscription problems, etc. As an example, the Science Division of the University of Oregon Library, having moved out of the main library, thought it should have its own serials file. For a number of years the library lived with this confusion, until a shortage of staff made the division repent. Now the science titles are back again in the central serials file, where they were absorbed without any additional time required.

**Duplication of Processing**

Another very inefficient and even more wasteful situation exists when there is indeed centralized processing of serials, but divisions and branches record receipt once more. In other words, they duplicate por-
tions of the central serials record. This sin, too, is committed in the name of independence and self-sufficiency. There is no need for branch librarians to duplicate the central serials record. All that is needed is a small file listing titles and call numbers of serials in the branch, location within the branch, and perhaps indication of volumes at the bindery. Duplicate recording of receipt of issues or “check-in” is not necessary; the truth is that if a patron is looking for a current issue and it is not on the shelves and not on a record of items checked out, then the item probably has not yet been received by the centralized processing unit. So let’s not call a manual system inadequate because it does not produce a list of current receipts.

**Personnel Policies**

Manual systems easily can turn sour because of faulty personnel policies. Very often the check-in process is entrusted to student assistants or clerks of the lowest rank. Couple this with a minimum of training and supervision, add a high rate of turnover, and the result is man-made chaos. The check-in process is important and more complicated than the layperson realizes. This is so because of three important factors: (1) the woeful lack of consistency and discipline on the part of publishers (confusing numbering, dating, title changes, nondistinctive titles, etc.); (2) the complicated marking and routing, brought about by the attempts—sometimes overzealous—of librarians to make serials accessible in what is perceived as the most logical way, taking into account the widely varying nature of the material; and (3) the numerous problems and irregularities brought about by the nature of serials. The situation being what it is, we had better steer clear of student assistants and low-level clerks for the check-in function. If we don’t and things get messy, we must blame ourselves, not the manual system.

Supervisors also err when they have checkers (the people who record receipt, mark, and route issues of periodicals and serials) try to become familiar with the entire file in an attempt to create the “all-round” employee. This is a waste of time. The checkers should be in charge only of certain letters of the alphabet, so that they become thoroughly familiar with their own portion of the file. On the other hand, extreme specialization can lead to lower productivity and quality. Checkers should have some diversion, such as opening mail, searching other files in case of unidentified pieces, etc. Here again, manual systems have been blamed for creating drudgery, while in reality uncreative and inflexible librarians and paraprofessionals are at fault.

**Claiming**

The claiming of issues paid for but not received is an important part of serials work requiring many hours each week. Checkers spot issues not received as they record receipt of other issues of the same publication. Such cases present no problem to alert checkers. Problems arise when issues of a title stop coming in altogether. When no issues

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come in, checkers have no occasion to look at the records of such titles. In order to detect such cases, it is necessary to perform systematic claiming by reading through the entire serials file.

Claiming too soon is wasteful of the time of library personnel, subscription agents, and publishers, but claiming too late or never results in serious gaps in holdings. It is necessary, therefore, to search the entire serials file several times per year. At the University of Oregon Library, we comb our 16,000-title serials file five times per year. Four times each year, we look for periodicals that are not being received. Once each year, we search for the much less frequent serials that may have ceased arriving for one reason or another. (Our definition of a "periodical" is a publication issued at least twice a year. A "serial" is published less frequently and may be irregular as well. That's the narrow sense of the term "serials." The broad term includes periodicals, as when we speak of a "serials file.")

To keep up with this tight schedule of systematic claiming, we use plastic signals that move from left to right along the bottom of each card. When the checker records receipt of a quarterly, the signal for that title is moved up three months. For example, when an issue is received in October, the plastic tab is moved to the January position at the left side of the card. A bimonthly publication requires moving the tab two months ahead, a monthly, one month, etc. Near the end of a calendar year, all signals for periodicals should be near the right-hand margin of the card or at or near the left-hand margin. Any signal not in either one of these positions, that is, still in or around the middle of the card, is suspect. Around August the tabs should be on the right-hand side of the card, never on the left.

When it's time to search for nonreceipt of periodicals, the searcher pulls out a Kardex drawer holding about fifty-five titles and sees in a matter of seconds which cards need examination. Semiannuals, which by our definition are periodicals, do not lend themselves to moving signals, and their tabs are kept at the far right-hand side of the card, farther to the right than the December position. These tabs, and the ones for genuine serials (i.e., items published less than twice a year) do not move at all. Once a year, when we check for nonreceipt of serials and semiannual periodicals, we pull out a drawer and immediately see which titles are serials by looking at the position of the tabs. This system facilitates fast systematic claiming, avoids laborious checking of each card, and ensures catching titles not being received. Incidentally, the moving signal system works only with the so-called visible Kardex file, not with the blind or invisible "ferris wheel" file.

Detecting nonreceipt is one thing; getting the claims out is quite another. Here again a manual system of serials processing may needlessly come under attack. Our former procedure involved writing a three-by-five slip for each claim, to be prepared by a typist. Pressure of other duties, however, frequently delayed the preparation of claims, with the result that the claim slips had to be checked again to be sure that the is-
sues had not been received in the meantime. Further, the three-by-five slips had to be refilled in the serials file to indicate pieces being claimed. A copy of the actual claim form was filed in a separate claims tub. When a claimed issue arrived, the checker would draw a line across the claim slip and give it to the typist who would then search for the corresponding copy of the actual claim form and discard it.

It was an elaborate procedure causing a lot of delay and a lot of filing. So we decided to eliminate the three-by-five claim slip and have each checker type claims each day. We no longer keep copies of claims. A small red “c” in the space for the missing issue on the serials record is the only sign that a claim is outstanding. The follow-up on outstanding claims is the regular systematic claiming procedure. Agents’ lists of outstanding claims can also be helpful. When a claimed issue comes in, we draw a slash through the red “c,” indicating the claimed piece has arrived. So—no more filing of three-by-five slips, no more filing of copies of claims, no more pulling or weeding copies in the “outstanding claims file.” This whole file has been eliminated, and claims go out the same day nonreceipt has been discovered. Even if we do miss a few pieces with our new and much less complicated claiming system, there’s always the possibility of depending on second-hand dealers to provide the missing items or relying on interlibrary loan. We must carefully weigh the cost of overcautiousness, as in the case of our former elaborate claiming procedures, against the cost of a few more replacement issues that may possibly be the result of streamlined procedures.

**Payments and Renewals**

Another area in which manual processing is consistently under attack is the matter of subscription renewals and payments. Here the subscription agent, the person who stands between librarian and publisher and who renders a valuable service to both, enters the picture. It is regrettable that a number of publishers refuse to deal with subscription agencies. Their policy produces problems for serials librarians, for the more subscriptions placed with agents the better, in both manual and automated systems. The so-called “direct” subscriptions (direct between library and publisher) require separate payments, and each subscription needs to be flagged. Even with nonautomated processing, the subscriptions involved can be pinpointed fairly easily via manual punched card systems, but it is needless extra work.

The choice of agents also presents problems in medium-sized and large academic libraries. If a single agent is chosen, the library runs the risk of becoming a captive consumer and facing a complicated changeover to other agents in the event of neglect by the agent and resulting deteriorating relations. On the other hand, if the library employs too many subscription agents, there is the chance that no agency will have enough business to make their account worthwhile. The library may save some money on subscription service or handling charges but lose the goodwill and care of the agents. When a subscription agent no longer
cares about a particular library account but continues to handle it, an enormous amount of work will be in store for serials personnel in the form of unanswered correspondence and claims, subscription and payment problems that somehow never get straightened out, etc. Don't blame nonautomated serials processing for it. Such problems would persist no matter how sophisticated a computerized system were in use.

Another thorn in the flesh is the so-called "agent's annual renewal list," including perhaps thousands of titles. This list must be checked against payment records title by title and then sent back to the agent with deletions and other changes as necessary. Then the library receives the invoice, listing almost all of the same titles. So back to the serials file for the entering of payments. Thus, each of the thousands of titles must be handled twice. Surely there can be no reason for this wasteful double handling. The agent should eliminate the renewal list and send only the annual invoice list, perhaps in August. The library should process it promptly, delete items for which payment is premature or for other appropriate reasons, and return the invoice with the amended total amount to be paid. There is no reason why libraries cannot process the big annual invoices by the beginning of October, in time for the agent's payments to publishers. For the library it would mean handling each payment once rather than twice. Agents could speed up processing by listing titles clearly, such as "Zeitschrift für Psychologie" rather than "Z. Psychologie." The blame for double handling of payments lies partly with publishers and subscription agents and partly with librarians who in the past have dragged their feet in the handling of big invoices. It has little to do with manual processing as such.

**Replacements and Duplicates**

The subject of replacements and the others following are not necessarily stumbling blocks for nonautomated processing, but they can needlessly add a great deal to the work load. Librarians often go to great lengths trying to find replacements for issues never received or lost. This, of course, goes back to the days when collections were much smaller and libraries more independent. Everybody did original cataloging for much of the material, and everybody wanted periodicals and serials collections as complete as possible. Libraries are no longer so independent, and interlibrary loan operations have grown. If we really mean business with interlibrary loan (ILL), we should start binding incomplete volumes and forget about missing issues. If someone wants an issue we don't have, ILL can take care of it. True, there are a number of important journals we must bind complete, but at present there is still the wasteful tendency to try to bind just about everything complete.

Streamlining also is needed in the handling of duplicates. There are still serials departments around the country that make up lists of their duplicates and exchange these with other libraries. These are then meticulously combed for items needed for binding certain volumes complete. It is a way to find an issue wanted—the publisher did not have it...
anymore, several second-hand dealers could not produce it, but now, hurrah, it's on library X's duplicate exchange list. Things can be done this way, but is it worth the time and effort?

Unidentified Pieces or "Snags"

Several years ago I suggested what publishers can do to spare serials personnel the grief caused by receipt of unidentified pieces, resulting in "snags." Only by eliminating at the source sudden title changes, membership and package deals, etc., can we hope to avoid much unidentifiable material. It would require cooperation of the U.S. mail and the U.S. government. Alas, like Don Quixote I have been tilting at windmills. Our country holds freedom so dear that we put up with the chaos it can create. Automation or no automation, snags will always be with us. Librarians can help avoid some of them by interfiling outstanding subscription orders in the serials file, by having the most essential cross-references in the serials file, and by putting clearly written, dated, and initialed notes in the serials records wherever potential trouble may be expected. Yet it is surprising to see how often notes are lacking altogether or are written so poorly that different interpretations are possible. The computer forces us to be consistent, uniform, and disciplined; there is no reason to be sloppy in a manual system either.

Here, too, faulty use of personnel can hamper the process. Limiting clerks rigidly to check-in assignments can be quite harmful. There are benefits in mass production and division of labor, but when we adhere to these concepts without regard to human endurance, we end up with lower rather than higher productivity. Serials processing, like any assembly line operation, can easily result in mental fatigue. We must be flexible. Take the checkers off the assembly line for scheduled periods or an hour or more each day. Have them do some work below their level, such as opening of mail; some at their level, such as the typing of claims; and some above their level, such as snag searching. There are some who enjoy the challenge of problem solving and, if so, let them do it. There are others who don't like it, so don't insist on it. For higher level snag searching, there's nothing like experienced paraprofessionals or serials librarians who are thoroughly familiar with their files and with serials in general. Consequently, whereas reasonable personnel turnover at the lower levels is desirable, the opposite is true at the higher echelons. Here, too, sensible personnel policies can make manual processing more effective than it usually is.

Recording of Receipt

Recording of receipt or "check-in" is the most important and most time-consuming part of the entire serials process. The 16,000 titles at the University of Oregon Library produce about 72,000 pieces per year. The great majority of them are checked in without any problems, but there is a small minority that are potential time wasters. A good note worded simply and clearly can do wonders; without it, the same problems and
confusion about the title may come up year after year. Any type of special handling can be done smoothly as long as instructions are clear. Not only the "how" but a short explanation as to the "why" can save a lot of frustration. One may have such apparently odd cases as two subscriptions to the same periodical, to be explained by a note that one copy is for library use and one copy is to be used for exchange purposes with the Soviet Union. The potential mix-ups are easy to visualize, but manual processing need not be cumbersome if the "how" and "why" are presented in words that do not allow for different interpretations.

The use of all kinds of stamps, stars, and gold dots for marking and routing results in more wasted time. At the University of Oregon Library, we used to laboriously peel a dot off a roll and adorn call numbers with them to indicate pieces for restricted areas. Now the checkers simply add a little circle with the call number that has to be written out anyway—all in one motion. We used to stamp "bd" on the record for volumes as they were returned from the bindery, but it finally occurred to us that a quick slash through the volume number on the serial record saves time and space as well. In this connection one remembers Vesenyi's suggestion of many years ago that publishers leave a blank square inch at the upper-left-hand corner of issues of journals for the addition of call numbers. A good idea, but alas, "standardization" and "efficiency" are words seldom found in publishers' dictionaries. And, sorry to say, sources of library literature are no exception to this general rule.

Finally, in check-in activities, attempts to be independent, to "find out for yourself," may result in needless expense. It is much cheaper to have a cataloger/bibliographer with language expertise handle Japanese, Chinese, Russian, and other nonroman alphabet materials than to have clerks, paraprofessionals, or librarians without such expertise struggle with the materials.

Why Automate?

This article has identified eight areas related to serials processing in which problems persist, whether manual or computerized systems are employed. Waste of time and confusion result from inefficiency, lack of planning, lack of supervision, and lack of mental discipline. There is no reason why manual systems cannot be efficient. Manual serials processing need not be unwieldy or unmanageable, even with very large files. It follows, then, that size of a serials file is not a sufficient single requirement for automation. Indeed, it is hard to identify a library in the United States with an active serials file so large as to demand automation. Too often automation is seen as a simple means of correcting the mistakes of the past. Automation of serials processing can produce extra benefits, including statistics for management and information retrieval for patrons, provided that appropriate information is input in the first place. Provision of these extra services or the benefits to be obtained from creating a total system or joining a network may be valid reasons for automating serials processing. Good control over normal serials pro-
cessing in itself is not a sufficient reason for computerizing, because such control can be achieved just as well in a manual system.

References


MANUALLY MAINTAINED SERIALS RECORDS

Manually Maintained Serials Records, a state-of-the-art report on the basic functions of receiving, checking in, and claiming of serials, has been produced by the RTSD Serials Section Ad Hoc Committee to Study Manually Maintained Serials Records. Responses and working forms were received from ninety-one academic, public, and special libraries in the United States and Canada. The report is now available as ERIC document ED 125549.
A Proposal for the Revision of the Library of Congress Classification Schedule in History for Eastern Europe

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In order to assist and to expedite a revision of the Library of Congress schedules for history of Eastern Europe, the Slavic and East European Subject Headings and Classification Committee (SEESHAC) of the Slavic and East European Section of the Association of College and Research Libraries, after consultation with the representatives of the Subject Cataloging Division of the Library of Congress, prepared “A Proposal for the Revision and Up-dating of the LC Classification Schedules . . .” and submitted it to the proper authorities of the library for consideration. The proposal essentially covers three subclasses in history (DB—Austria, Hungary; DK—Russia; and DR—Eastern Europe, Balkan Peninsula) and proposes their rearrangement along the regional and ethnic principle applied to Western Europe. At the same time, the suggested revisions, additions, and changes are elaborated in such a way that they would require a minimum of reclassification and yet would introduce the principle of proceeding from larger to smaller units, which is the basis of LC practice in other parts of the world.

This article attempts to present an interpretation of the proposal for all interested parties, especially for those who were unable to acquaint themselves with the original SEESHAC proposal.

THE INADEQUACY of the Library of Congress (LC) classification schedules, as well as subject headings for Eastern Europe, has been discussed many times, but the introduction of additions and changes has been slow in coming. Response from LC to suggestions has been made with “due, deliberate speed.”

In June 1966, a paper on the topic of revised Eastern European Manuscript received April 1976; accepted for publication December 1976.

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schedules was presented at the Canadian Association of Slavists conference held in Sherbrooke, Quebec. Publication of the paper brought the problem to the attention of a wider circle of librarians and specialists on Eastern Europe and Slavists in general.\(^1\) In June 1969, the question of inadequacy of the LC classification schedules and subject headings for Eastern Europe was brought up again during the discussion of LC subject headings at the American Library Association (ALA) preconference in Atlantic City, New Jersey. In March 1972, it was discussed at the conference of the American Association for the Advancement of Slavic Studies in Denver, Colorado, where a second paper on the inconsistent use of subject headings and classification numbers was read.\(^2\)

As a result of increasing interest in the problem, the Slavic and East European Section of the Association of College and Research Libraries (ACRL) at its annual meeting in Dallas, Texas, in 1972 established the ad hoc Slavic and East European Subject Headings and Classification Committee (SEESHAC). The five subject specialists were asked to study the problem of the LC classification and subject headings used in relation to Eastern Europe. The committee met with representatives of the Library of Congress on 30 January 1973 in Washington, D.C. It was agreed that the classification schedule for Eastern Europe was the more urgent problem since LC plans to publish a revised edition of the D-Class (History).

The committee set itself the goal of producing a proposal for changes and revisions to be submitted to the Library of Congress for consideration. This task was entrusted to Wasyl Veryha who, after four months, presented a first draft for discussion at a special meeting of the committee.

The task was not an easy one because it was necessary to follow the pattern of the LC schedules in all other areas. Moreover, the many changes of political boundaries in Eastern Europe also presented a problem. Thus a criterion had to be found that would not be dependent on political changes and that would not conflict with principles and practice used in the existing LC classification scheme. Therefore, SEESHAC agreed upon the well-established Library of Congress regional approach, with a subsequent subdivision by the nationalities of that region. This decision was motivated by the fact that—taking the Baltic region as an example—the Baltic area has always remained constant in two aspects: its geographical location and its ethnic composition. It was decided, therefore, that these two factors should form the basis for the construction of the classification schedules, because such a scheme is more likely to be permanent. For example, should a foreign power dominate the region or should it be divided into independent national countries, its geography would remain unaffected and its history could be classed with it. Thus the regional approach served as a basis for the proposal submitted by the ad hoc committee.

What regions were taken into consideration? First of all, those regions that have not been adequately elaborated in the Library of Con-
gress classification schedules, namely the Baltic region (Estonia, Latvia, and Lithuania, which have been accorded only cutter numbers in the DK subclass) and Finland (DK445–465), both of which should be transferred into the DL subclass where the Scandinavian countries are classed. If this were done, then Finland, Estonia, Latvia, and Lithuania would form one group with the Scandinavian countries in the DL subclass. Such a move also would be justified by the fact that these Baltic nations have much more in common with the Scandinavian countries (with the exception of Lithuania, perhaps) than with the Eastern Slavs. Besides, there is not enough space for expansion in the DK subclass unless a third letter were used. To anticipate the argument that it would not be practical to transfer any of the Soviet Union republics out of the subclass assigned for Russia (USSR), it should be noted that LC already has made such a move when it transferred Armenia to the DS subclass together with other countries of Asia.

The Caucasian (or Transcaucasian) region, with the exception of the above-mentioned Armenia, would form another group. These countries are presently treated in the same way as the Baltic countries and have only cutter numbers under the numbers for Russian local history—DK 511:C1–35 for Caucasus, D2 for Dagestan, G3–47 for Georgia (Transcaucasia), and A9 for Azerbaijan. The LC classification principle that the division should proceed from larger to smaller areas is here completely disregarded as is the case with all other parts of Eastern Europe. Placing classification schedules for Transcaucasia together as a region would improve the classification for the benefit of the cataloguer as well as for the library user.

The next area to be considered is the extensive area between the Carpathian Mountains, Black Sea, Caucasus, and the White Sea in the north, comprising European Russia, White Russia, and the Ukraine, thus keeping all the Eastern Slavs (Russians, Ukrainians, and White Russians) in one group as well as Poland, which is not Eastern Slavic but until recently has been classified under the heading Russia in subclass DK. This irregularity can be explained in terms of the many mutual ties between Poland and all three Eastern Slavic nations, especially the Ukraine and White Russia. Besides, there is no special block of classification numbers provided by the Library of Congress for the Western Slavs (Poles, Czechs, Slovaks, and Sorbs or Polabian Slavs, also called Wends and Lusatians), because its classification is also in principle based on a regional approach.

The Republic of Czechoslovakia with its two nationalities should remain in the DB subclass together with Austria and Hungary, thus forming a block of Central Danubian nations. At the same time, the Southern Slavs should form another subclass, DR, which covers all the Balkan Peninsula. Those Slavic areas, which before the First World War belonged to the Austro-Hungarian empire and still are classed with Austria, should be transferred to the DR subclass with classification numbers of their own.
In dealing with the Balkan Peninsula, we have also suggested a separate block of numbers for the classification of Albanian history, which until very recently has been treated as a part of Turkey. A number of other parts of the Balkan Peninsula, such as Macedonia, Saloniki (Thessaloniki), Kosovo, Janina, etc., also have been classed with Turkish local history. We believe that the time has come when all these obsolete antiquities should be corrected to correspond with the actual ethnic and regional situation of Eastern and Southeastern Europe.

The reasons for the changes in the subclasses DB, DK, and DR of the LC classification schedules suggested by the SEESHAC Proposal can be best illustrated by the classification of local histories of Eastern, East-Central, and Southeastern Europe. Let us start from the subclass DB, which is entitled “Austria (Austro-Hungarian Empire).”

In subclass DB the section for “Local history and description” of the various provinces, regions, etc., occupies the numbers 101-785 and presents the areas in alphabetical order as follows:

101-110 Alps, Austrian
111-130 Austria, Lower
151-170 Austria, Upper
191-217 Czechoslovakia (now ČSSR)
231-250 Bosnia. Bosnia-Herzegovina (now constituent republic of Yugoslavia)
281-300 Carinthia, Austria
261-280 Bukowina (recently moved to DK 511 and DR 281)
301-320 Carniola (now part of Slovenia, constituent republic of Yugoslavia)
341-360 Carpathian Mountains (at no point contiguous to the Austrian border and now in DJK)
361-380 Croatia and Slavonia (now Croatia, constituent republic of Yugoslavia)
401-420 Dalmatia (part of Croatia)
441-450 Danube River
461-470 Dolomite Alps, Italy
481-500 Galicia (partly now within the Ukrainian SSR and partly within Poland; recently moved to DK 4600)
521-540 Herzegovina (region of Bosnia-Herzegovina, Yugoslavia)
541-560 Moravia (part of Czechoslovakia)
581-600 Novi Bazar (part of Serbia, province of Yugoslavia)
601-620 Salzburg (Bundesland, Austria)
621-640 Salzkammergut (Austria)
641-660 Silesia (now almost entirely in Poland with a small section in Moravia, ČSSR; recently moved to DB 2250)
661-680 Slovakia (the federal state of Czechoslovak Socialist Republic)
681-700 Styria
721-740 Transylvania (now part of the Rumanian People’s Republic; recently moved to DR 279)
761-780 Tyrol and Vorarlberg (Austrian provinces)

This treatment of "Austria" actually is based on the local history of the former Austrian Empire. The classification of "Other cities, towns, etc.,” of this Danubian region fares the same. All of them are classed in the Austrian class number DB 879, with a cutter for each individual place name. A partial list of the cities placed here includes the following: Bolzano, Italy (recently moved to DG 975); Bratislava, Slovakia; Bregenz, Austria; Brunn, Czechoslovakia (Brno in Czech); Debrecen, Hungary; Eger, Czechoslovakia (Cheb in Czech); Fiume, Croatia (Rijeka in Croatian); Gorizia, Italy; Karlsbad, Czechoslovakia (Karlovy Vary in Czech); Krakow, Poland (recently moved to DK 4700); Linz, Austria; Plzen, Czechoslovakia; Prague, Czechoslovakia (Praha in Czech); Ragusa (i.e., Dubrovnik), Croatia; Salzburg, Austria; Teplice, Czechoslovakia; Trento, Italy (recently moved to DG 975); Zagreb, Croatia.

In the meantime, the Library of Congress has issued new schedules for Poland and has announced to the committee the preparation of new schedules for Czechoslovakia. It must be admitted that they are much more extensive and therefore better than those suggested by SEESHAC. In view of this move, which must be welcomed by all concerned, discussion of the SEESHAC Proposal will ignore these particular countries.

Since the Library of Congress has already inaugurated changes indicating that the present Austrian schedules will be reorganized, Hungary will most likely remain within the DB subclass, like the Czechoslovak Republic. A number of pre-World War I Austrian crownlands should be transferred to their appropriate classification schedules. However, such former crownlands as Bukowina (DB 261-280, recently moved to DK 511) or Galicia (DB 481-500, recently moved to DK 4600), although no longer parts of Austria, perhaps should be left where they are for the period of Austrian domination (1772-1918), even though they do not exist in the same boundaries any more. Bukowina has been divided into northern Ukrainian and southern Rumanian parts; while Galicia, known during Austrian times as Eastern Galicia, inhabited by Ukrainians, is now part of the Ukrainian Soviet Socialist Republic and the western Polish part with the city of Cracow is now part of Poland. All the new works pertaining to the old Bukowina and to Galicia as one unit could therefore still be classed in the Austrian DB numbers, but works dealing with their present parts should be classed with their respective local numbers for Poland, Rumania, or the Ukraine.

Our proposal suggests the following changes for this particular region. First, the present title of subclass DB—"Austria"—should be changed to "Central Danubian countries" (or "East Central Europe" or any other similar heading appropriate for all three countries, Austria, Czechoslovakia, and Hungary, which we propose to leave in the DB subclass). However, all other regions should be removed to their proper regional or national location. (It is unfortunate that the Western Slavs cannot be brought into one group like the Eastern or Southern Slavs, be-
cause the Lusatians do not form any political unit by themselves and are classed in German local history.)

In the present subclass DB, we find the classification schedules for Hungary occupying the range of numbers 901 to 975. DB 975 is for "Local history and description," namely for "Counties, regions, etc." By some curious coincidence (one can hardly call it a planned policy), Hungarian "Cities, towns, etc.," are not classed with Hungary (with the exception of the Hungarian capital, Budapest). The cataloguer is referred to the number for Austrian cities and towns by a reference: "see DB 861-879."

The SEESHAC Proposal suggests the following classification for Hungary: DB 901-957 as in the present schedule, followed by 975 or, preferably, 1075 for counties, regions, etc., and 985 or, preferably, 1091 for cities and towns (the four-digit numbers are suggested to provide more room for expansion of the general history numbers).

But the schedules most in need of revision are those originally assigned for the Russian and the Ottoman empires, that is, subclasses DK and DR. The DB subclass recognized the components of the Habsburg monarchy, as has already been stated, and has a block of numbers for each of them. The Russian and Turkish empires were treated as ethnically homogeneous countries, and no provision was made for their multinational composition. In the last two or three decades, the Library of Congress has introduced a few changes to accommodate the new material for which no numbers were provided in the classification schedules. For instance, at the beginning of the classification schedules for "Local history and description," there had been only five major subdivisions: Northern Russia (DK 501), Eastern Russia (DK 503, recently cancelled), Western Russia (DK 507), Ukraine (Little Russia, Ruthenia, DK 508), and Southern Russia (DK 509), with one classification number each. Compare this with the twenty numbers for each of the Austrian crownlands in DB 191-772. Thus a small crownland of Austria, such as Bukowina or Carinthia, with barely half a million people was assigned a twenty-number classification block, while forty million Ukrainians had one number, and the Estonians, Latvians, or Lithuanians had just a few cutter numbers.

Unfortunately, the disproportionate assignment of classification numbers to various geographical or political connotations has not been rectified. In short, Russia, with all of imperial Russia included and the vast Asiatic territories and Transcaucasia, has been limited to the single subclass DK, the heading for which now reads "USSR Russia," as the result of a change in late 1974.

Examples of the inaccuracies in the schedules for Russia include the inclusion of Finland at DK 445-465, the inclusion until 1975 of Poland at DK 401-441, and several areas included under DK 511, the number for provinces, republics, governments, regions, etc. A few examples listed under this number for the "local" history and description of Russia indicate its contents: Azerbaijan; Baltic Provinces; Bessarabia; Caucasus;
Curland; Elbrus (mountain peak); Estonia; Georgia (Transcaucasia); Huculszczyzna (Ukraine); Karelian A.S.S.R.; Kalmuck A.S.S.R.; Kovno, Lithuania; Kuban; Latvia; Lithuania; Livonia; Moldavia (same territory as Bessarabia, above); Podhale, Poland (recently moved to DK 4600); Tatra Mountains, Poland (recently moved to DK 4600); Transcaucasia; Volhynia (Ukraine); White Russia (recently moved to DK 507); and Yaroslavl’ (Russia).

Following this number, a classifier finds two blocks of numbers for the two Russian cities, Leningrad (thirty-nine numbers, DK 541-579) and Moscow (twenty numbers, DK 591-609), and a general number, DK 651, for “Other cities, towns, etc. (European Russia and Poland), A-Z,” including Baku, Azerbaijan; Kaunas, Lithuania; Kiev, Ukraine; Kishinev, Moldavia; Minsk, White Russia; Riga, Latvia; Tallin, Estonia; Tiflis, Georgia; Voronezh, Russia; Warsaw, Poland (recently moved to DK 4610).

Thus it is obvious that there is confusion similar to that in the Austrian number for local history. As yet, nothing has been done with nationalities and regions of the USSR comparable to the changes for Poland in DK 4010-4800.

In order to improve and facilitate the classification of Slavic and Eastern European material, the SEESHAC Proposal suggests the following changes: the present heading of subclass DK, “Russia,” should be changed to read “Eastern Europe and the Slavs,” and the heading “Russia” should be placed above that part of the classification schedules actually assigned for Russia. First, it is suggested that, between the subclasses DJ—Netherlands and DK—Russia and Eastern Slavs, a new subclass (DJK) should be created, where all the material pertaining to Eastern Europe, Eastern Slavs, and Kiev Rus’ be classed instead of where it is now, in the DR and DK subclasses. (The recent creation of DJK has satisfied most of the needs addressed by SEESHAC, except that Kiev Rus’ has been left in DK as an integral part of Russian history.) The removal of schedules for medieval Rus’ prior to the Tartar invasion is justified on the basis that this political entity was in no way the direct predecessor of present-day Russia, but, as Soviet Russian historiography claims, it was the cradle of all three branches of the Eastern Slavs: Russians, Ukrainians, and White Russians. Ukrainians, on the other hand, claim that it was a medieval Ukrainian state in which all Ukrainians called themselves Rusyny, Rusychi (Ruthenians or Rus’ians in Latin). Since the Ukrainians had lived in that territory for many centuries prior to the formation of the Kievan state, it is illogical that the history of Kiev should be the history of modern Russia and not of modern Ukraine. Since the problem remains open for discussion and numbers of scholars adhere to different schools of historiography (the Russian school of Soloviev-Kliuchevskii, the Ukrainian school of M. Hrushevsky, and the latest Soviet school), it would be advisable to assign to this political entity a block of classification numbers in DJK—following the Soviet theory—and treat it as a separate entity altogether.
In view of the above-stated reasons as well as in view of the lack of numbers for expansion, the SEESHAC *Proposal* suggests the following changes, to be inserted either in DJ 500-1000 or in a new special subclass DJK.

The heading: *Eastern Europe and the Slavs*
All material relating to Eastern Europe, as well as antiquities not limited to one country, are to be classed here.

<table>
<thead>
<tr>
<th>DJ or DJK</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>501-599 or 1-150</td>
<td>Eastern Europe and the Slavs</td>
</tr>
<tr>
<td>651-720 or 151-250</td>
<td>Ancient Rus’—Kievan Rus’</td>
</tr>
</tbody>
</table>

In these numbers would be classed all works on the Slavs as a group, on Eastern Europe as a geographical unit, and historical works specifically on Kievan Rus’, e.g., G. Vernadsky’s *Ancient Russia*, B. Grekov’s *Kiev Rus’*, etc. Kievan Rus’, treated as a part of any national history—Russian, Ukrainian, or White Russian—would be classed in the classification schedules of that particular country but with the appropriate subject heading.

In this subclass could also be classed the Eastern Baltic region, if this is preferred to the DL subclass for Scandinavian countries, e.g.:

<table>
<thead>
<tr>
<th>DJ or DJK</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>721-771 or 801-889</td>
<td>Eastern Baltic countries (as a region)</td>
</tr>
<tr>
<td>901-996 or 1001-1096</td>
<td>Estonia, Latvia, Lithuania</td>
</tr>
</tbody>
</table>

This would also leave enough numbers for future expansion, which at the moment is not possible at the three-digit level in the DK subclass. However, taking into consideration the geographical situation of the Baltic countries, their classification schedules could be tied with the Scandinavian countries.

The changes suggested in the SEESHAC *Proposal* for subclass DK are as follows. Following their presentation in narrative form, they are summarized on p.363. In the range DK 1-275, no essential changes are suggested, with the exception of weeding out some of the material that belongs rather to the suggested DJ 500-DJ 1099 (or DJK subclass). Leaving numbers 275 to 370 for future expansion, it is suggested that numbers DK 371-385 be assigned for local history, limited strictly to the eight so-called autonomous republics within the Russian Soviet Federative Socialist Republics (RSFSR), one number for each, DK 371, Bashkirskaya Autonomous Soviet Socialist Republic, and DK 373, Chuvashskaya ASSR. These numbers should be assigned to Table I for decimal subdivision in order to satisfy their individual needs. Their ethnic composition, as well as their different religious, cultural, and intellectual development in general, fully justifies such a distinction. For the autonomous oblasts, regions, etc., another number is suggested, DK 389. Such a division would keep all the autonomous units within the RSFSR in a separate group from the ethnically homogeneous Russian provinces.

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For Russian local units with no autonomous status, DK 391 is suggested for provinces, oblasts, regions, and governments within the RSFSR and DK 396 for cities and towns, other than Leningrad and Moscow, which have their own generous classification schedules.

Numbers DK 401-500 were originally suggested by SEESHAC for Poland, but since the Library of Congress has already approved new, much more extensive, and therefore better classification schedules for the history of Poland, this block of numbers could be used for future expansion of Russian history.

Numbers DK 501-511 are at present taken for the so-called “Local history and description” (see above), which should be cancelled and the numbers left unassigned for a while, since it may take time before they are cleared from present material through reclassification. Numbers DK 512 to DK 540 are free for expansion, and those numbers should be assigned to White Russia. Following the Leningrad and Moscow classification schedules, the numbers DK 652-DK 749 are also free, and they should be used for the Ukraine. Both White Russia and the Ukraine should have their own special numbers for local histories and description.

Numbers DK 750-DK 973 are presently assigned to Russia in Asia, including DK 751 to DK 781 for Siberia, which has its own local history and description numbers, although it is part of the RSFSR. Considering the size of Siberia and its multinational (or ethnic) composition, this can easily be justified. Numbers DK 782-844 are free for expansion, while at DK 845 the classification schedules for Soviet Central Asia and its Union Republic begin. Here the Library of Congress was more generous and not only assigned special blocks of numbers to the ancient states like Bokhara and Khiva (nine numbers each) but also assigned ten numbers to each of the Union republics. (In the European part of the USSR, Ukraine and White Russia have only one number each, and the Baltic countries have only cutter numbers.)

Unfortunately, the Caucasus, with its three Union Republics, has been treated differently again. Two of them, Georgia and Azerbaijan, do not have classification schedules of their own but are listed under the number for Russian local history in DK 511. The exception is Armenia, which is taken away from the DK classification schedules altogether (i.e., from Russia or USSR) and classed in DS 161-199 (DS is a subclass for Asia). The reason for this distinction in treatment of the Caucasian nations is not clear. Having free numbers in the section DK 782 to DK 844, SEESHAC suggested assigning these numbers to the Caucasus as a region, subdivided in turn between the remaining two republics, Azerbaijan and Georgia. SEESHAC elaborated classification schedules for each component part of the Soviet Union within existing schedules (with the exception of the Baltic region) in order not to increase costs. However, if the Library of Congress decided to employ four digits in DK, then many more numbers could be assigned to each of the Soviet republics, which would also provide more space for future expansion. The outlines of the SEESHAC Proposal are presented opposite.
DJK EASTERN EUROPE AND THE SLAVS

1-150 Eastern Europe as a region
Slavs and their early history and civilization

151-250 Ancient Rus'. Kievan Rus'

DK SOVIET UNION (USSR)
Russia (Moscow)

1-370 General subdivision and by period
Local history:

371-385 Eight autonomous republics within the RSFSR each with its own number subdivided by Table I.

389 A number for autonomous oblasts, national regions, etc., within the European part of the RSFSR, A-Z.

391 Russian provinces, governments, oblasts, regions, etc., A-Z.
Cities and towns:
Moscow see DK 591-609
Leningrad see DK 541-579

396 Other cities and towns, A-Z

750 Russia in Asia

751-781 Siberia

Caucasia

785-800 Caucasus treated as a region with respective topics. Under the Caucasus as a region, there should also be a section for local history, which would be applied to such political entities as existed in the past but now cannot be located within any of the existing administrative or national units, e.g., the ancient region of Caucasus named Albania. Here also should be assigned the four autonomous republics of the region, which are not located within any of the Caucasian Union Republics, e.g., DK 796 Dagestanskaya ASSR.

805-820 Azerbaijan, with its own numbers for local history. One of these (DK 817) is for Nakhichevanskaya ASSR, subdivided by Table I.

825-841 Georgia, with its own numbers for local history, among them two numbers (DK 837 and DK 838) for Abkhazskaya and Adzharskaya ASSR.

Armenia see DS 161-199

845-973 Soviet Central Asia

In this section two ancient khanates of Khiva and Bokhara, as well as each of the present-day Soviet republics, each provided with its own classification schedules amounting to 10 numbers.

DL NORTHERN EUROPE. SCANDINAVIA AND BALTIC COUNTRIES

1-991 Scandinavia (Denmark, Iceland, Norway, and Sweden) as already established should be supplemented by Finland and the Baltic countries (one of the three proposed alternatives).

1001-1099 Finland

1111-1161 Baltic countries as a region

1201-1289 Estonia

1301-1396 Latvia

1401-1496 Lithuania

All of these countries have been assigned special numbers for their own local histories.

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In the DR subclass (Balkan Peninsula), the Turkish empire is still intact, and as a result, under the Turkish number for “Local history and description”—DR 701—we find Albania (cuttered from its Albanian name, Scutari, and recently moved to DR 901-998) side by side with Turkish Dardanelles and the Peninsula of Gallipoli, the Yugoslav state of Kosovo, Macedonia (recently provided for in DF and DR 381 also), as well as Monastir, the Greek province of Janina (recently moved to DF 951), and the region of Saloniki (recently moved to DF 951). The SEESHAC Proposal suggests that all this should be changed to correspond to the actual present state of the national and ethnic composition of the region. The whole DR subclass is entitled “Eastern Europe. Balkan Peninsula” and begins with classification schedules covering the whole region, which is quite consistent with a general classification outline for other areas. Then follows the classification for Bulgaria (DR 51-98), Montenegro (now a federal state of Yugoslavia, DR 101-196), Rumania (DR 201-296), Serbia (which is erroneously identified with Yugoslavia, DR 301-396), and of course Turkey (DR 401-741). Starting in 1968, the Library of Congress began to introduce some changes by transferring some of the Yugoslav federal states into the fold of Serbia, assigning to them cutter numbers under local history and description for Serbia. But these changes seem to create even more confusion. Some of the Yugoslav states, like Croatia and Slovenia, are still referred to their schedules within the Austrian classification in DB subclass, while some of their cities and towns are being transferred to the Serbian local number DR 396, e.g., Ljubljana and Pula (Pola), although disputed Rijeka (formerly Fiume) is referred to DB 879.F5. Bačka and Banat have been left in DB 975, and Bosnia-Herzegovina remains in DB 231-250. Moreover, instead of assigning to Yugoslavia, as a new national entity, a separate block of classification numbers, the Library of Congress treats the Serbian block of numbers as Yugoslav, and post-World War I Serbia has been assigned a cutter number in DR 381. Slovenja was treated in the same fashion, but the maritime province of Slovenija, “Slovensko Primorje,” is referred to the Austrian number for local history, DB 301. As a result, the process of modernizing classification schedules has created even more confusion because of inconsistencies. It simply lacks logic.

The SEESHAC proposal for the revision of the Balkan classification schedules does not touch Greece, which has its separate, quite extensive, schedules comprising the DF subclass; it does not touch upon the Bulgarian, Rumanian, and Montenegro classification schedules, although considering them unsatisfactory because of limited numbers for expansion but at least within the realm of possibility as is. The proposal suggests a change in the heading of this subclass to read “The Balkan Peninsula,” dropping out “Eastern Europe,” which should be classed in DJ 500 (or in DJK). Since the numbers in this subclass are very tightly redistributed from DR 1 to 741, SEESHAC proposes the following changes:
The original section for Serbia (DR 301-396) should be left with its original designation, and for the new political entity of Yugoslavia a new block of numbers should be assigned: DR 801-850. Number DR 846 should be assigned for local history and description, and here should be classed all those historical or geographical regions that are within Yugoslavia but not limited to any of its federal republics, e.g., DR 846.D5 for Dinaric Alps or 17 for Istria. Any other region that is within any federal republic should be classed with its local history, e.g., Banat should be classed with Serbia in DR 381.B3, etc. SEESHAC proposes assigning the next twenty-nine numbers to Bosnia and Herzegovina (DR 851-879), then forty numbers (DR 881-920) to Croatia, and twenty-six numbers (DR 921-946) to Slovenia. In this way, these three federal republics of Yugoslavia would be classed together with the other Balkan Slavs, which is their proper place for classification.

In a similar manner, Macedonia should be transferred from the Turkish local history class and assigned its own block of numbers in the Balkan region.

Macedonia, now one of the federal republics of Yugoslavia, could be assigned forty numbers at the end of the DR subclass (DR 961-999). In general, the DR subclass would then be organized as follows:

**BALKAN PENINSULA**

<table>
<thead>
<tr>
<th>DR</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-48.5</td>
<td>All material relating to the Balkan Peninsula as a unit (including Greece)</td>
</tr>
<tr>
<td>51-98</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>101-196</td>
<td>Montenegro</td>
</tr>
<tr>
<td>201-296</td>
<td>Rumania</td>
</tr>
<tr>
<td>301-396</td>
<td>Serbia (not Yugoslavia)</td>
</tr>
<tr>
<td>401-741</td>
<td>Turkey</td>
</tr>
<tr>
<td>751-799</td>
<td>Albania</td>
</tr>
<tr>
<td>801-850</td>
<td>Yugoslavia (not Serbia; here material relating to Yugoslavia as one political unit would be classed)</td>
</tr>
<tr>
<td>851-879</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>881-920</td>
<td>Croatia</td>
</tr>
<tr>
<td>921-946</td>
<td>Slovenia</td>
</tr>
<tr>
<td>961-999</td>
<td>Macedonia</td>
</tr>
</tbody>
</table>

In the LC schedules, Turkey is treated as a Balkan state and consequently classed in the subclass DR 401-741, with a few numbers assigned also in a subclass of Asia (DS 47-53). This upsets the proposed regional arrangement, because Turkey, with small exception, is situated in Asia Minor. Therefore, it would be advisable to remove Turkish classification numbers (DR 401-592) from the DR subclass, combine them with the DS numbers, and form a special transitional three-letter subclass DRS that would fall between the DR and DS subclasses. Numbers DR 701-741 could be left where they are for “Local history and description” of Turkish possessions in Europe with a designation “Tur-
key in Europe." This would require minimum reclassification of the material in the DS numbers and an addition of the capital letter “S” to the present Turkish numbers DR 401-592, which would then become DRS 401-592.

Albania recently has been assigned its own block of numbers, DR 901-998. This upsets SEESHAC’s suggestion of classification for Slovenia and Macedonia. However, we are not concerned with which numbers are assigned but wish to see that each of these Balkan peoples gets fair treatment in the schedules within their region.

Other regions or provinces could be classed either in the local history and description of Yugoslavia (DR 846) or within any of the Yugoslav republics, for instance, Voivodina, which recently has been transferred from the Austrian number to its more logical place in DR 381.V6., a number for local history of Serbia.

Conclusion

The Library of Congress classification schedules and subject headings for Eastern Europe include anachronisms, inaccuracies, and inconsistencies. This does a great disservice to the users of the many academic and research libraries who rely on it. The changes and revisions proposed by the subject specialists on Eastern Europe who make up SEESHAC correspond to past as well as to present-day reality. The Austrian, German, Russian, and Turkish empires have been "dissolved" and new schedules introduced. Since these new schedules are based on regional and national considerations, they should survive the rise and fall of future empires, if such should occur. The Proposal, if accepted, would eliminate most of the major and serious flaws of the present system, and the expense involved in reclassification would be more than compensated for by the labour saved by users and cataloguers. Moreover, once these changes and revisions are adopted, the Library of Congress is less likely to be accused of either bias or ignorance with respect to the classification schedules in history relating to Eastern Europe.

To conclude, the SEESHAC Proposal has gone through a ten-year period of study, discussions, drafts, and revisions by experts both on the committee and from outside in the areas concerned. Consultation with the Library of Congress authorities was undertaken in the belief that updating of the LC classification schedules should not be just a stopgap measure or half measure. Obviously, neither the Library of Congress nor any other library relying on the LC cataloguing and classification services can afford to change its classification schedules every few years. The SEESHAC Committee has followed carefully the general principles and original philosophy of the LC classification. In fact, the revision made for the Soviet Union and Yugoslavia followed these principles as they were applied to Great Britain, where all the components of the United Kingdom have been recognized for general as well as for local histories. In short, in the SEESHAC Proposal, no novelties have been introduced that would be contrary to the accepted Library of Congress
practice in other regions of Europe. The primary objective of SEESHAC has been to revise the LC classification schedules and subject headings in the same manner and style as has been done for other areas of Europe.

References


**CATALOGING SERVICE INDEX**

An index covering bulletins 1–120, June 1945–Winter 1977, of the Library of Congress Cataloging Service has been compiled at Mankato State University. The index includes references to all the changes in the *Anglo-American Cataloging Rules* and may be ordered direct ($7.50, postpaid) from Nancy B. Olson, Box 868, Lake Crystal, MN 56055.
Considerable attention has been given to the matter of subject specialists in academic libraries; however, it has often been devoted to the circumstances of large and very large, long-established libraries. This paper attempts to examine the situation in the smaller or middle-sized institutions and to contrast it with that of the larger ones. The role and latitude of such librarians is treated along with the utility of approval plans and traditional faculty book selection.

In recent years there has been increasing interest in the use of subject specialists and bibliographers in university libraries. Most articles on the topic have dealt with their utilization in large, established academic libraries. Subject specialists are also being used, however, in more moderately sized libraries. It is the special circumstances and problems encountered in the latter situation to which this paper is addressed.

Before proceeding it is, perhaps, advisable to make a comment on terminology. It seems that no matter which title or descriptive term one chooses to use, there will be objections from some quarters. If the types of library work involved are not unique, their combination in a single position may be. Thus, in using an extant term such as “bibliographer” or “subject specialist,” one may invite some misunderstanding. Nevertheless, in this paper the term “subject specialist” and, in shortened form, “specialist,” will be used henceforth to denote those who have a subject specialty and who devote the major part of their time to collection development. Weber’s article on the “professional-specialist” provides what seems to be an additional useful delimitation in saying that “. . . the term is further limited to persons whose specialist talents may be said to dominate his talents as a librarian.”

It is probably best that the subject specialist be administratively independent of both the public service and technical service sections of the library, so that the individual’s primary work not be diluted by de-
mands for other duties in those areas. In larger institutions the specialist normally would report to the assistant director who has responsibility for collection development; however, in medium-sized and smaller universities this probably means that subject specialists report to the director of the library.  

In large academic libraries the specialist usually has responsibility for, and works with, one, two, or possibly three related subjects. In the smaller academic library, however, the specialist has the problem of being much overextended and may even be charged with all the humanities, sciences, or social sciences. One may inquire, how can one be called a “subject specialist” if the title is that broad? And, indeed, the question is valid. In practice, though, such a person normally will have a distinct specialty within the broad sweep of his/her charge. The specialist’s preparation is probably the same as that of colleagues in the large libraries: undergraduate and graduate subject degrees and a graduate library degree plus some facility with foreign languages. In practice, it would be unwise to attempt evenhanded treatment of all the subjects suggested by the title. The specialist must, rather, weigh the various factors, such as the relative dependence on library materials of the several respective teaching departments and the size and strength of each. What this amounts to is choosing the optimum strategy in a difficult situation. Also bearing on this, of course, is the subject background of the subject specialist. It would be inappropriate to have this subject competence in a field represented in the university by a small and/or weak department.

Studies indicate that most subject specialists in large academic libraries devote the larger part of their time to a program of book selection. The same is probably true in smaller libraries. But while a high proportion of books ordered by large libraries is selected by the library, the same may not be true of smaller institutions. In small colleges, faculty ordering may be the primary means by which new titles are selected. In middle-size libraries, however, the trend appears to be away from ordering by teachers. When subject specialists are appointed, the shift may be expected to accelerate. There is apparently a point in library growth where faculty book ordering takes a proportional drop as compared to orders from other sources. Danton cites the million-volume level as a rough figure at which teacher interest in ordering drops off noticeably. This writer has the impression that a decline in such teacher ordering may actually be detected at an earlier date in the growth of a library. It is directly related to the increased ordering within the library. The more frequently a teacher’s order recommendations are returned marked “already on order” or “already in the library,” the more willing the teacher will be to let the library have the major book selection responsibility.

In the smaller academic library, the subject specialist’s difficult task may be eased somewhat if approval or blanket-order plans are utilized to advantage. An approval plan can be very useful. Checking a large number of incoming books on a regular basis, however, sometimes becomes burdensome. If the system is also dependent on faculty members
from outside the library sharing in the inspection of new books, it runs the risk of breaking down altogether. A blanket-order plan need not be subject to the same risk, since inspection of each new book for its suitability may not be part of it. Under such a plan, libraries can set up a profile of the subjects and types of materials they wish to receive automatically. The agent gathers the books to be sent accordingly. An alternative to this plan is one based on publishers rather than subjects. If the library would normally select the vast majority of a certain publisher's output for purchase, that publisher may be chosen for inclusion in a blanket-order plan. The savings in time will more than pay for the cost of absorbing that small part—say 2 percent—which the library might not have bought individually. Such a scheme, based mainly on a limited number of publishers, offers a certain simplicity with the result that anyone, inside the library or out, can predict with good success whether or not a particular new title will be automatically received.7 A description of the plan can be duplicated and copies circulated to all on the campus who are concerned. The covering message explains that books included in the plan need not be individually ordered.

Critics of approval and blanket-order plans argue that the librarians who use them give up one of their professional responsibilities by not individually selecting these titles to be added to the library's collection. Worse yet, in many cases they are turning this duty over to a remotely located agent who is not a librarian and who has little familiarity with the needs of the particular library.8 Another criticism is that some titles, which would not have been individually selected, automatically will be received and kept, since it is easier to retain than return them. This is irrelevant in a blanket-order plan; it is in the design that they be kept. Proponents of the blanket-order plan argue that a few such books making their way into the collection will not compromise the librarian's integrity. Those few unwanted books, after all, need not be added to the collection. Book selection under the best conditions is part art, part science. In addition, there are certainly many other books in the holdings that would not have been purchased were it not for the prerogatives of a few individual faculty members who at some time "went overboard" on pet subjects (and then probably departed for other schools in a year or two). Blanket-order plans must, of course, be thoughtfully begun and carefully monitored, but if handled well, they can, in effect, result in stretching the book budget.

In the middle-sized library, a blanket-order plan is designed by consulting all librarians concerned with collection building, but it is administered by the acquisitions department. Even when a blanket-order plan is adopted, the subject specialist will normally devote the larger part of his/her time to individual book selection. In practice, the plan actually may be thought of as freeing the book selector to do more retrospective buying or whatever else requires special attention.

One writer asserts that the use of subject specialists even in large research libraries is based on some fallacy, since "it is clear that the subject
spread for any one of these librarians could not be covered in an informed manner by five super-Ph.D.s." What he would say concerning their place in a smaller institution is not difficult to guess. Intelligent book selection, however, does not require even one such degree. The librarian does not operate exclusively on the fuel of personal subject knowledge but is, instead, concerned with the judicious use of someone else's resources as manifested in bibliographies and other available tools and by consulting regularly the best available "experts" on the campus.

Book selectors sometimes tend to consider titles for prospective purchase in isolation from one another. Each becomes an item to be selected or rejected on its own. In many cases, however, one needs to think about how a particular title may be used by the student in relation to other individual works and collections. In the study of history, for example, undergraduates are often expected to utilize some primary sources (personal journals, diaries, contemporary newspapers—the raw material of history) in their papers and reports. Graduate students usually must use them. Scholars cannot work without them. It is not enough to provide the student with a number of good monographs on, say, the subject of the western frontier. For a course or seminar on that topic, some accounts written by participants and/or firsthand observers and, perhaps, a contemporary newspaper from the period and region under study also will be needed. (Both of these types of primary materials are available today, the former in modern printed editions, the latter in microform.) Choosing "good books" without considering the dynamics of use is to overlook a critical factor.

The multifaceted nature of a subject specialist's activities calls for a variety of talents and a willingness to apply them as needed. That is to say, knowledge of such things as bibliographic tools, the book trade, and acquisitions operations, as well as sensitivity and reasonable effectiveness in representing the library to the rest of the academic community are needed. The somewhat unstructured nature of the job and the freedom to move about the library and campus as called for inevitably give rise to suspicions and misunderstandings from some fellow librarians. In the smaller academic library, the specialist's independent course is certain to be more visible. Probably those colleagues with the more highly structured positions are most likely to resent the freedom and mobility of the subject specialist. Smith quotes an unnamed technical services head:

The fact that... they [the subject specialists] are not being subjected here to any of the customary hours and norms of behavior which govern, for example, professional catalogers, is creating a serious morale problem all through the processing area. These people keep their own hours, they have no visible responsibilities, they have no measurable norms whereby we can evaluate their performance.10

In both the middle-sized academic library and the larger one, intelligent book selection can be assisted by the practice of having faculty book requests routed through the office of the subject specialist to pro-
vide information on the orders initiated by the teachers concerned. Regular perusal of these orders, before forwarding them to the acquisitions department, can provide a better feel for individual professors' interests as well as a composite of the department. The only danger in this practice is that people in the technical processing areas may mistakenly assume that the specialist is somehow processing the orders, or is supposed to process them. Examining these book orders may provide an opportunity to pull out and return those items known to be already on order or already in the collection. The only other instance in which individual faculty orders may be questioned is that of the expensive title about which the specialist has definite reservations. It may seem too esoteric (it helps here to have a good, written book selection policy) or perhaps the specialist knows of a related title or edition that may be preferable. On the other hand, it may be inadvisable to question an esoteric title of nominal cost.

Liaison between the library and the classroom faculty is a significant function of the subject specialist. Achieving and maintaining good rapport with this group is a desirable goal for all librarians but a necessity for subject specialists. Certainly in the specialist's maintaining relations with the classroom faculty there is opportunity for casual observers both within and outside the library to conclude that the specialist is socializing a great deal or is simply slacking off. Eldred Smith's study indicates a certain measure of misunderstanding does exist among the rank and file of librarians concerning the activities of the specialist. It would be useful to examine briefly the rationale for liaison work, since it does not seem to be well understood by a good many librarians in the academic field.

Let us consider some of the various functions of liaison work. In practice, of course, a single contact between the subject specialist and a member of the classroom faculty may involve a number of these activities, but it may be helpful to individually identify them:

- Consult on collection development and book selection.
- Learn of impending changes in curricula, policies, new instructors, etc.
- Communicate library policies and practices to the departments in one's subject area.
- Consult on proposed changes in the library.
- Act as ombudsman or trouble-shooter for library problems of the classroom faculty.
- Educate students taking specific classes in one's subject area on respective library resources and utilization.
- Improve the image of the library faculty and the library as an institution.

No doubt readers can think of additions and variations. All constitute what one may call liaison activities. What is more difficult than enumerating goals, of course, is putting the subject specialist to work on them.

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Many of the classroom faculty expect the library staff to be passive participants in the education process. Indeed, too many of the librarians also identify with that sort of role. To be effective the subject specialist must be dedicated to an active program and not be like a reference book incarnate—to be consulted in the library on request but never to leave the building. Subject specialists find their most receptive audiences when they seek them out in other places on the campus—in faculty offices, in the cafeteria, the coffee shop, etc. In a relatively short time the old stereotypes are exploded, and there is a real opportunity to establish a spirit of cooperation. There are many ways in which the specialist can implement a liaison program, and, indeed, there is considerable latitude for variation, depending on different institutional circumstances and personalities.

In the middle-sized academic library, the larger subject spread for which the specialist is responsible may make the liaison task appear formidable. Several departments on campus with their combined faculties numbering a hundred or more members make any more or less uniform coverage difficult at the least. As in book selection and collection building, however, the specialist will be most effective working with the more library-oriented disciplines and stronger departments. They, in turn, will be most receptive to an active library program.

In major libraries subject specialists are usually responsible for a single subject or, at the most, two or three related ones. A principal difference one finds in middle-sized academic libraries is that the smaller number of subject specialists means that each of them probably will be responsible for a greater number of subjects and their related departments on the campus. Since no one specialist can be expected to have substantive background in a number of different subjects, this must result in something less than effective coverage of each subject and the related faculty. One really has little choice but to use the optimum strategy of stressing the stronger and more library-oriented departments and subjects. If the value of an active subject specialist program demonstrates itself in stronger and more coherent collections and in better relations with the classroom faculty, the case will be made for a more comprehensive staff of subject specialists in the middle-sized library.

References


5. *ibid.*, p.50.


7. Both blanket-order plans are versions of the "efficiency" type mentioned by Chapin. If a plan is well designed, only a cursory examination of newly arrived books is needed. The inspection costs are minimal, no greater than those of individually ordered titles. See Richard E. Chapin, "Summary Statement," in *Economics of Approval Plans*, ed. by Peter Spyers-Duran and Daniel Gore (Westport, Conn.: Greenwood, 1972), p.119–20.


11. *ibid.*
Notes on the Author Notations and Tables Used in Library of Congress Schedule for Icelandic Literature—Some Further Considerations

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An investigation of the Library of Congress classification for Old Icelandic and Old Norwegian literature prompted by Helen Kovar's discussion of the problems facing catalogers in this area reveals serious inadequacies in the schedule's organization of prose works. The investigation also discloses that, despite the 1974 change in the practice of citing Icelandic names, considerable confusion still exists, perhaps resulting in the omission of some Icelandic entries from the National Union Catalog: Pre-1956 Imprints.

Helen Kovar has provided a useful introduction to the problems that a cataloger faces in dealing with Icelandic literature both ancient and modern. Although her presentation regarding modern Icelandic writers is helpful, the same cannot be said for her handling of the medieval material. Further investigation has indicated that the problem is not so much a misunderstanding on her part, but rather the result of some serious inadequacies on the part of the Library of Congress (LC) classification schedule for Old Icelandic and Old Norse literature. But beyond this, some of her opening statements require qualification.

Iceland was discovered by the Scandinavians in 874 and, by the time of the country's conversion to Christianity in 999 or 1000, was to all intents and purposes fully settled. Not only did these settlers come from various parts of Norway, but a considerable proportion of the original

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population (especially the slaves and half-free servants) came from Ireland and the Scottish Islands. The literature the settlers brought with them often shares points of common origin with that surviving in Old High German and Old English, but in no way did it originate in either of these two dialect areas, for it represents a fully independent tradition of its own.

As Kovar points out, Icelandic literature, especially the prose literature of the Middle Ages, presents a confusing picture to the nonexpert and, consequently, formidable problems for the library cataloger who usually falls into this category. Some of these problems can be traced to the basic LC schedule for Old Icelandic and Old Norwegian literature. This section (PT7101–PT7338) has remained virtually unchanged since it was prepared by Jules Dieserud, then of the LC Catalogue Division, in 1915–16. His work remains a satisfactory framework for all sections except those concerned with the prose literature (PT7177–PT7338). While the books Kovar mentions as being useful in helping identify various sagas are of some help, no cataloger of medieval Icelandic literature should be without access to Schier’s Sagaliteratur. In this work all the surviving historical and literary prose texts are classified in tables according to their now-accepted genres. Also useful in unraveling difficulties of classification is Halldór Hermannsson’s Catalogue of the Icelandic Collection Bequeathed by Willard Fiske and its two supplements (to 1942), but since his cataloging system is unique to the collection, its usefulness in untangling contemporary cataloging conundrums is much limited by that. But even these aids will prove of small avail because of the unsatisfactory arrangement of the schedule, which has not yet been brought up to date to reflect the substantive changes made in the classification of Old Icelandic prose literature in the last half century. The principal difficulties are encountered in the sections PT7177–PT7193 (Special forms of literature. / Prose . . . Sagas.) and PT7263–PT7309 (Individual sagas and historical works). Since PT7177–PT7193 deals with secondary works, it will require little readjustment to bring it in line with such a revised schedule as is proposed below. The principal change would be the elimination of PT7185 (Sagas relating to the Norwegian colonies. [Greenland, America, etc.]), since such sagas are now considered to be family sagas, PT 7183, although they may warrant special consideration under this classification.

In the period since the schedule was put together, it has been conclusively proven that no distinction can be made between “historical” and “unhistorical” sagas, for all the surviving sagas are fictitious, using history to their own ends in much the same way as did E. L. Doctorow in his recent novel, Ragtime. Even those works that make a particular claim to be historical, such as the Konungasögur or the Samtíðarsögur, are often only a historical kernel surrounded by a considerable fictional overlay. A reclassification of section PT7263–PT7309 more in line with contemporary scholarship, following the general principles set down by Schier, might be outlined as follows:
A. Historical Works.

(1) Sagas on Norwegian History. (Konungasögur.) Includes PT-7276–PT7279. There seems little point in singling out Snorri Sturluson’s Heimskringla (PT7276–78) for special attention, and it would be more consistent to classify it in the appropriate place among the other works in this section.

(2) Sagas on Danish History. Includes PT7282 (except .Y6–8). There are no “sagas relating to Sweden” worthy of a separate category.

(3) Sagas on the History of Other Regions. This would include PT7281 (except for .E4–6 and .G6–8, which are now classified as members of the family sagas).

(4) Works on Icelandic History. Includes PT7263–68 and PT7274.

B. Family Sagas (Ísleiningasögur.) Includes PT7269, PT7281.E4–6 and .G6–8, PT7288, and PT7291. In this latter classification, the þættir (sg. þáttur) or “short stories” would have to be allocated to whichever division of this classification was most appropriate according to their contents.

C. Sagas of Contemporary Events. (Samtíðarsögur). Includes PT7270.

D. Bishop’s Sagas. (Biskupsáður). Includes PT7271–72.

E. Sagas of Northern Antiquity. (Fornaldarsögur Norðurlanda.) Includes PT7282.Y6–8 (Yngvars saga viðförla), PT7285, PT7287, and PT7296.T4–42 (Þjóveks saga af Bern).

F. Sagas of Southern Antiquity (Fornsögur Suðurlanda or Riddarasögur) (Sagas of Knights). These are divided into two classes:

(a) Those sagas that have been clearly translated or adapted from a continental original.

(b) Those sagas that, while they have their setting in Europe, Asia Minor, etc., are clearly of native Icelandic origin. These sagas are sometimes called lygisögur (Ly- ing sagas).

Includes PT7294 and PT7296 (except .T4–42 as noted under E). It may prove wise to divide this section into separate classifications for the two subtypes noted.

G. Religious Sagas. (Heilagramanns sögur, Postola sögur, etc.). Includes PT7298–PT7309.

If the schedule were to be reorganized under the lines of the scheme given above, it would make the task of classification in this difficult area much more straightforward.

The remainder of the schedule, including Modern Icelandic Literature (PT7351–PT7550), presents no particular problems. It has remained substantially unchanged, except for the revision in 1974 of PT7501 and PT7511 in which the names of the individual authors were inverted and new cutter numbers assigned accordingly.

One difficulty that these new guidelines do not seem to have dealt with satisfactorily is those cases in which an author writes in both Ice-
Icelandic and English. Thus the Icelander, Hermann Pálsson from the University of Edinburgh, is still listed as Pálsson, Hermann, *Hrafnkels saga og Freysgyðlingar* (Reykjavik: Pjöösaga, 1962) without a reference from Hermann; while Einar Pálsson, *Baksvöö Ñjálu* (Reykjavik: Mimir, 1969), is listed as Einar Pálsson with a cross-reference from Pálsson, Einar. The classification of Icelandic works is, therefore, an area still full of pitfalls for the cataloger, and these continuing difficulties point to the need for a further set of explicit guidelines to help prevent this continuing confusion. It appears that only by following modern Icelandic bibliographical practice can this be achieved. The consequences of mixing Icelandic and non-Icelandic systems can be seen all too clearly in Allen's recent *Manual of European Languages for Librarians*. In the section BIBLIOLINGUISTICS, 1.1.5, he suggests, contrary to Icelandic and LC practice, that all Icelandic authors should be cataloged under their patronyms. But not all Icelandic authors use their patronyms, and it is in the attempt to deal with this problem that this system demonstrates why such an approach is unworkable and has been wisely abandoned by LC. If an Icelandic writer has a recognizable surname, Miller recommends entering the author under it: Einar Gisli Hjörleifsson KVARAN (who published under the name Einar H. Kvaran). This system comes to grief when attempting to deal with examples such as the historian Jón Jónsson Aðils (1869-1920), who published under both Jón Jónsson and Jón J. Aðils, or the writer Helgi Briem Magnússon, who recently published a book on karate. In this latter example, Briem, which is listed in 1.1.7 as a “true surname,” is here being used as a second Christian name, although this would not be obvious to the inexperienced cataloger. Similarly, in situations where a name is compounded with the preposition frá or ír, the advice to the cataloger is to enter the author according to whatever appears before the preposition. This, too, is unsatisfactory, for GUÐRUN frá Lundi is frequently found referred to as Guðrún ÁRNADÓTTIR frá Lundi. Under this system, the first volume (1971) of the collected writings of Helgi Haraldsson á Hrafnkelsstöðum would be entered under HARALDSSON and the second (1974) under HELGI. Further, nothing is said about writers who publish under nicknames. What is the cataloger to do with volumes of the poems of Þura í Garði (Þuríður Árnadóttir, 1891- ) or those of the well-known Bólu-Hjálmar (Hjálmar Jónsson frá Bólu, 1796-1875)? These are just random examples of the problems that a cataloger using such a system commonly will encounter. Only by entering authors under their Christian names will such difficulties disappear, and only in this way will it be possible to prevent the kind of problem that appears to have led to the omission of existing LC printed cards from the *National Union Catalog: Pre-1956 Imprints (Pre-56 NUC)*.

In the “LC Catalog of Printed Cards” are found the compilation by Jón Árnason (1819-1888), *Islandische Märchen* (Vienna, 1884), and a selection from the main work, *Tröllasögur* (Reykjavik, 1905), both listed.
under Árnason. Neither of these books is found in Pre-56 NUC, either in volume 21 under Árnason or in volume 283 under Jón, where some other Icelanders are listed under their first names or are cross-referenced, e.g., Jón Bjarnason (1845-1914) and Jón Helgason (1899— ). It is at this point that these books should be found if the entries had been revised in connection with the cataloging revision of 1974. Not only has the folklorist Jón Arnason been lost from the catalog, but so have books by Jón Árnason (1665-1743), Jón Árnason (1727-1777), Jón Árnason (1830-1876), Jón Árnason (1875— ), and Jón Árnason (1921— ).

It is to be hoped that further investigation will not turn up similar additional deficiencies, but, given the confusion that appears to exist with respect to Icelandic materials, both ancient and modern, the prospect of finding further Icelandic omissions in Pre-56 NUC must be regarded as a very real possibility. There is, however, one ray of hope in all this gloom. For books published in Iceland from 1974 on, catalogers will benefit greatly from the appearance of the Íslenzh bókaskrá, The Icelandic National Bibliography, which is now being prepared on a regular basis by the National Library of Iceland.

References

10. Ibid., part 4, p.2.
11. Charles G. Allen, Manual of European Languages for Librarians (Epping, Essex: Bowker, 1975). The section on Icelandic (p.98-101) is, in general, useful except for 1.1.5 on how to enter Icelandic authors.
6:257. Not listed is the *Editio Princeps* of this work, *Íslenskar þjóðsögur og øfntýri* (Leipzig, 1862–64).

13. For full bibliographical details see Halldor Hermannsson, *Catalogue and supplements*, in which by 1942 more than forty works by Jón Árnason (1819–88) alone are noted, and Stefán Einarsson *Íslensk bókmenntasaga*. However, since only a portion of the Fiske collection is represented in the main card catalog of the Cornell University Library, and since only within recent years have cards from the Fiske collection been sent to NUC, only a small portion of the collection’s holdings are recorded in *National Union Catalog: Pre-1956 Imprints*. Of the Jón Árnason mentioned, only Jón (1665–1743) (U.S. Library of Congress, *A Catalog of Books*, V.6) is found in addition to Jón (1819–1888). This does not, however, preclude works by all the Jón Árnasons held in other libraries being entered in the *National Union Catalog*.

14. *Íslensk bókaskrá, The Icelandic National Bibliography 1974* —; útgáfu annast Landsbókasafn Islands þjóðdeild (Reykjavik: Landsbókasafn Islands, 1975—), Each entry is accompanied by the appropriate Dewey Decimal Classification number.
Margaret Mann Citation, 1977:
Phyllis Allen Richmond

The Margaret Mann Citation in Cataloging and Classification for 1977 is awarded to Phyllis Allen Richmond in recognition of her outstanding teaching of cataloging and classification, her scholarly publications and major contributions to professional associations, and her continuing major contributions to the understanding and application of information science, of the theory and practice of subject analysis, and of the formulation of cataloging rules.

Phyllis Allen Richmond

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The contributions of Phyllis Allen Richmond to library and information science and especially to cataloging and classification have been, and continue to be, many and outstanding. The award of the Margaret Mann Citation to her in 1977 brings official recognition of her notable professional achievements.

Born in Boston and raised in Rochester, Dr. Richmond received the A.B. degree in history in 1942 from Western Reserve University, where she was elected to Phi Beta Kappa. Following a semester as graduate scholar at Bryn Mawr College, she served as curator of history, Rochester Museum of Arts & Sciences, from 1943 to 1945 and again in 1946-47. She received the A.M. degree in history from the University of Pennsylvania in 1946, again with the honor of graduate scholar. In 1947-48...
she was an American Council of Learned Societies fellow at Cornell University; and in 1948-49, she was a Bennett fellow at the University of Pennsylvania, receiving the Ph.D. degree from that institution in the history of science in 1949. Dr. Richmond was research assistant to the director of the Institute of the History of Medicine, Johns Hopkins University, in 1952 and then entered the School of Library Science at Western Reserve University, receiving the M.S.L.S. degree and election to Beta Phi Mu in 1956.

Her career as a librarian began with the position of serials cataloger at the University of Rochester Library (1955-60), followed by that of supervisor of River Campus Science Libraries (1961-66) and information systems specialist (1966-68), also at the University of Rochester. While there she was responsible for six computer-produced, title-a-line book catalogs (1960-68) for the science and engineering libraries and for two computer-produced serials lists (1966-68), innovative projects at that time. After serving as a visiting professor at the School of Library Science of Western Reserve University during the spring term of 1966, she turned from libraries to library education as professor of library science, first at Syracuse University in 1969 and, since February 1970, at Case Western Reserve University. The award citation justly notes her outstanding teaching of cataloging and classification. Equally successful with the beginning master's program student in the classroom and in conference with the doctoral candidate in the final throes of the dissertation, Dr. Richmond is that rare instructor who brings to her students not only a theoretical knowledge of cataloging and classification but also knowledge derived from her practical experience and scholarly background. She brings to her teaching the ability to present complex topics with clarity and wit and to gently and subtly prod her students into doing more than they ever thought they could with comments on their work that are always perceptive, pertinent, and constructive.

Dr. Richmond has published sixty-nine articles on topics varying from the history of science and medicine to technical articles in library and information science, as well as numerous reviews. The topic of her dissertation was *Americans and the Germ Theory of Disease* (Ann Arbor, University Microfilms, 1949), and she is currently working on an introductory text on PRECIS (PREserved Context Index System) indexing for North American users, having been among the first in this country to be aware of the value of this new system and to work with it. Perhaps Fluffy and Brownie assisted her with "Cats: An Example of Concealed Classification in Subject Headings" (*Library Resources & Technical Services* 3:102-12 [Spring 1959]), but no article was found about concealed classification in the operations of her ham radio. A recent paper, "Mr. Dewey's Classification, Mr. Cutter's Catalog, and Dr. Hitchcock's Chickens" (*Library Resources & Technical Services* 21:107-19 [Spring 1977]), was presented as the keynote address at the RTSD program of the ALA Centennial Conference in 1976. In addition to her own publications, she has served as assistant editor for cataloging and

Active in several professional organizations, she organized and was first chairman of the Classification Research Special Interest Group of ASIS. She has served ALA as chairman of the RTSD/CCS Classification Committee, member of the CCS Policy and Research Committee, member of the CCS Executive Committee, secretary of the Serials Section, and chairperson of the Esther J. Piercy Award Committee. She is a corresponding member of the Classification Research Group (London) and was a member of two subcommittees of Committee Z39 of the American National Standards Institute. She served as consultant on various information science projects at the American Institute of Physics and on the Bibliographic Control of Microforms Project of the Association of Research Libraries.

The American Library Association is not the first to honor Dr. Richmond. The American Documentation Institute presented its Technical Referee Award to her in 1968, and she was named a fellow of the Council on Library Resources for 1977-78. In 1972 she received the Award of Merit of the American Society for Information Science "for her contribution to the understanding of the theory and practice of subject analysis, in general, and classification, in particular."

The award of the Margaret Mann Citation to Phyllis Allen Richmond honors an individual outstanding in the fields of cataloging and classification as a writer, scholar, practitioner, teacher, and contributor of common sense and wisdom. It is fully earned and richly deserved.

**NOMINATIONS FOR 1978 MARGARET MANN CITATION**

Nominations for the 1978 Margaret Mann Citation are invited and should be submitted by 15 December 1977 to: Jane R. Moore, Library, Graduate School and University Center, City University of New York, 33 W. 42d St., New York, NY 10036.

The Margaret Mann Citation is awarded annually for outstanding achievement in cataloging or classification through (1) publication of significant professional literature, (2) contributions to activities of professional cataloging organizations, (3) technical improvements and/or introduction of new techniques of recognized importance, or (4) distinguished work in the area of teaching.

Names of persons previously nominated but not chosen may be resubmitted, and letters of nomination should include a résumé of the nominee's achievement.

The citation has been awarded annually since 1951 by the Cataloging and Classification Section, Resources and Technical Services Division,
American Library Association, and its predecessors, in honor of Margaret Mann. Mann served as head of the catalog departments of the Carnegie Library in Pittsburgh, the Engineering Societies Library in New York, and the University of Illinois and from 1926 to 1938 in the University of Michigan School of Library Science. Her *Introduction to Cataloging and the Classification of Books* is a classic in the field.

**NOMINATIONS FOR 1978 ESTHER J. PIERCY AWARD**

Nominations for the 1978 Esther J. Piercy Award are now being accepted. They should be submitted by 15 December to: Linda Crismond, Doheny Library, University of Southern California, University Park, Los Angeles, CA 90007.

Since 1969, the American Library Association's Resources and Technical Services Division has given the Piercy Award.

Its purpose is to recognize contributions to librarianship in the field of technical services by a younger librarian—one who has no more than ten years of professional experience and who has shown outstanding promise for continuing contributions and leadership.

The award may be granted for:
- leadership in professional associations at the local, state, regional, or national levels;
- contributions to the development, application, or utilization of new or improved methods, techniques, and routines;
- a significant contribution to professional literature;
- conduct of studies or research in technical services.

Names of persons previously nominated but not chosen may be resubmitted. Letters of nomination should include a résumé of the nominee's achievements.

The recipients of the Piercy Award to date are:
1969—Richard M. Dougherty
1970—John B. Corbin
1971—John Phillip Immroth
1972—Carol A. Nemeyer
1973—Glen A. Zimmerman
1974—no award presented
1975—John Byrum
1976—Ruth Tighe
1977—no award presented

Esther J. Piercy was active in ALA and several of its divisions. The author of *Commonsense Cataloging* and numerous articles in the field of librarianship, Piercy was also, from 1950 until her death, editor of the divisional journal, *Journal of Cataloging and Classification*, and its successor, *Library Resources & Technical Services*.
The Resources Scholarship Award has been established to honor the author or authors of a monograph, published article, or original paper on college and university library acquisitions. The award is given by the Resources Section of ALA's Resources and Technical Services Division.

The National Library Services, Inc., of Norwalk, Connecticut, is donating a $1,000 scholarship to the U.S. or Canadian library school of the winning author's choice. That school will select a library student who is concentrating in the acquisitions or collection development areas to receive the scholarship money.

A Resources Section Scholarship Jury has been charged with identifying the most significant 1977 article or book. Nominations should be submitted before 15 December to: Joe Hewitt, Associate University Librarian for Technical Services, University of North Carolina, Chapel Hill, NC 27514.

The winning author(s) will be announced on 1 April 1978, and the award will be presented at the RTSD Resources Section membership meeting during the 1978 ALA Annual Conference in Chicago.

Herbert S. White was the author of the article winning the 1977 award. It was "Publishers, Libraries, and Costs of Journal Subscriptions in Times of Funding Retrenchment" in The Library Quarterly, v.46, no.4, 359-77, October 1976. He chose Indiana University Graduate Library School to administer the scholarship.
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   b. subjects of articles and of books reviewed (the latter identified by "(r)");
      subject entries for individuals and corporate agencies are provided sparingly
      and are identified by "(about)"
   c. titles of articles and of books reviewed (the latter identified by "(r)"

(2) Corporate names have been indexed under the common form of the name as it
    normally appears in print (not in inverted form). Acronyms and initialisms are
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