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May/June 1972, vol. 63, nos. 5/6

- ☐ On-Line Reference
- ☐ Cassettes—The Future Medium
- ☐ American Doctoral Dissertations
- ☐ Educational Problem-Solving
- ☐ Cataloging Woe
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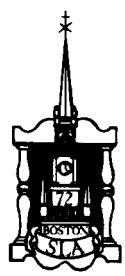

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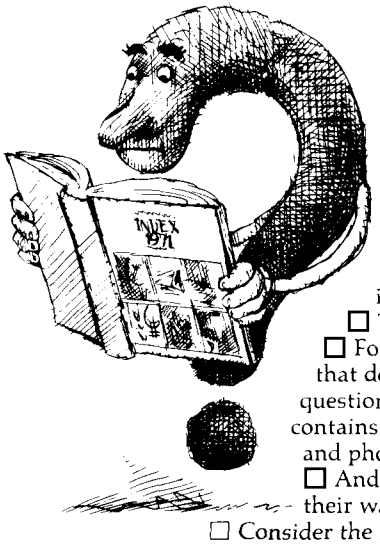

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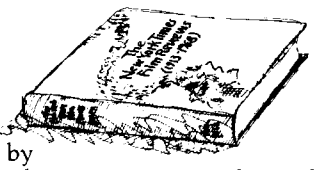

☐ Ideally, an index should be a comprehensive reference tool by itself. A resource that makes one-stop research possible.

☐ That's what any index from The New York Times is.

☐ For instance, your library may be among the 5,500 institutions that depend on *The New York Times Index* for detailed answers to questions about current affairs. This unique resource not only contains abstracts—but maps, charts and photographs as well.

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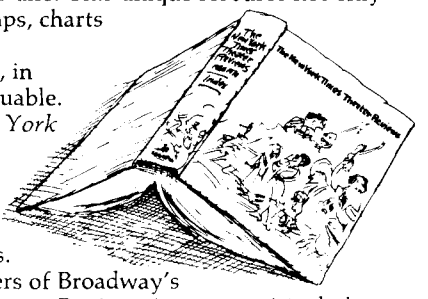
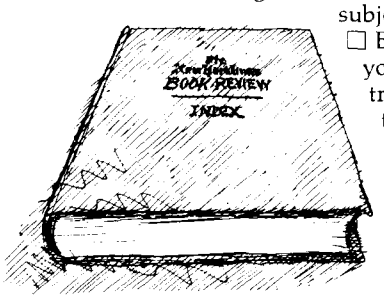


☐ Consider the index to *The New York Times Film Reviews*. By using the list of personal names, your patrons can trace the career of any film figure—author, screenwriter, producer or director—since 1913. Or, by consulting the "portrait gallery," quickly identify some 2,000 actors.

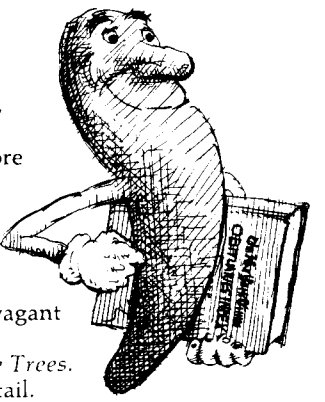
☐ Suppose, instead, a patron wants to trace the careers of Broadway's Royal Family. The index to *The New York Times Theater Reviews* (1920-1970) includes not only John, Ethel and Lionel Barrymore, but Doris Rankin, Michael Strange, Diana Barrymore, Bramwell Fletcher and Elaine Barrie. All twigs on that illustrious tree.

☐ How about the field of literature? The long-awaited *Book Review Index* is perhaps the most ambitious work of its kind ever undertaken.

☐ This massive, five-volume index covers every issue of the Book Review—nearly 4,000—published from 1896 to 1968. Some one million entries are arranged in five sections: author, title, byline, subject and literary category.



☐ By referring to this index alone, your patrons can trace literary trends and reading tastes for more than seven decades. Find a bibliography on thousands of subjects. Or discover a literary storm in a teacup, viz., the letters to the editor scoring John O'Hara's extravagant praise of Hemingway's *Across the River and into the Trees.*



☐ Of course, a Times index can quickly locate the most esoteric detail. Question: "When did Queen Salote of Tonga die?" Answer: see page 890 of the *Obituaries Index*—a listing of over 350,000 death notices since 1858.

☐ Indexes from The New York Times. Where a search begins and research often ends.

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MAY/JUNE 1972
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SPLBA

Letters	9A	
Reference Function with an On-Line Catalog	217	Ruth Winik
Audio and Video Cassettes	222	Arthur Poulos
Bibliographic Control of American Doctoral Dissertations	227	Julie L. Moore
An Educational Model for Library Problem-Solving	231	Edwin E. Olson James W. Liesener Donald H. Kraft
The Cataloger's White Knight?	235	Hillis L. Griffin
Use of the MT/ST at a Remote Facility to Produce Catalog Cards	240	Ann T. Brown
Many Benefits from Centralized Library Services	245	Thomas Morey
Current Literature in Technical Processes	248	George V. Hodowanec

SLA News

SLA Election Returns	265	SLA Student Groups	272
Chapters & Divisions	269	Call for Papers 1973	274

Vistas

Copyright Infringement	275	Reviews	279
LTP Reports to SLA	278	Coming Events	280
Placement	15A	Index to Advertisers	16A

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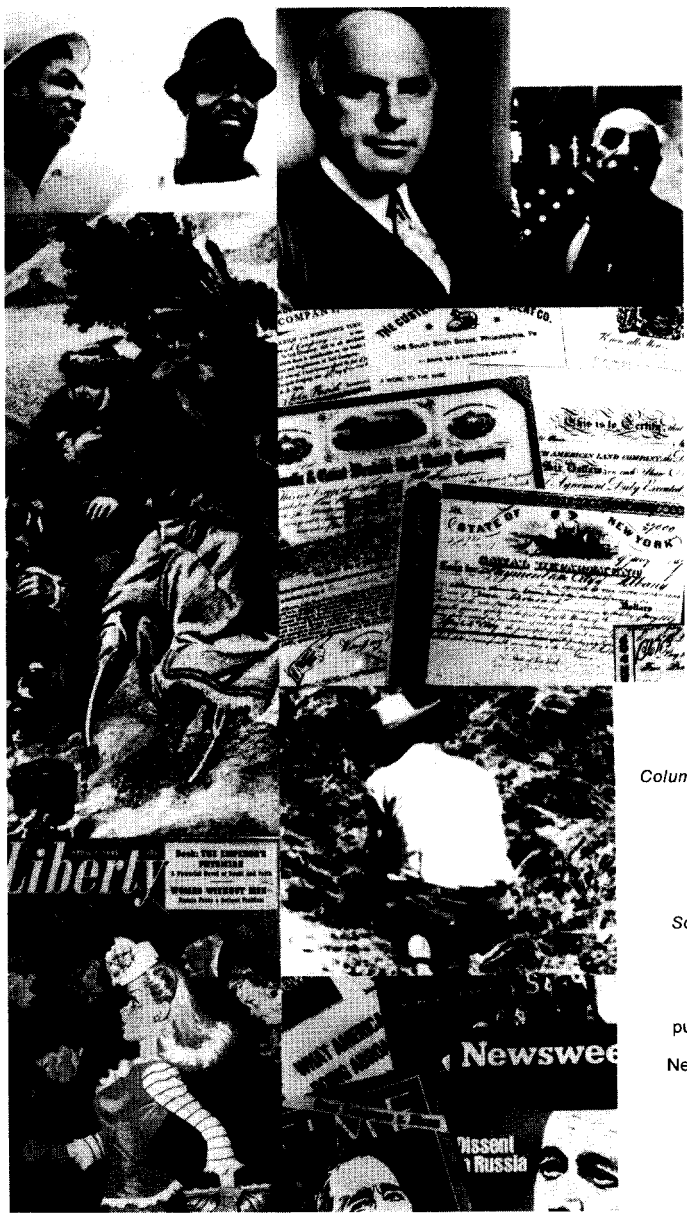

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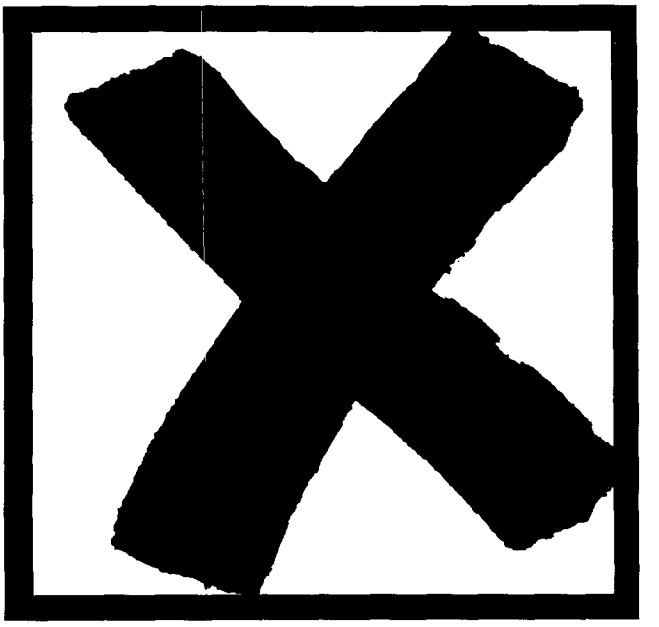

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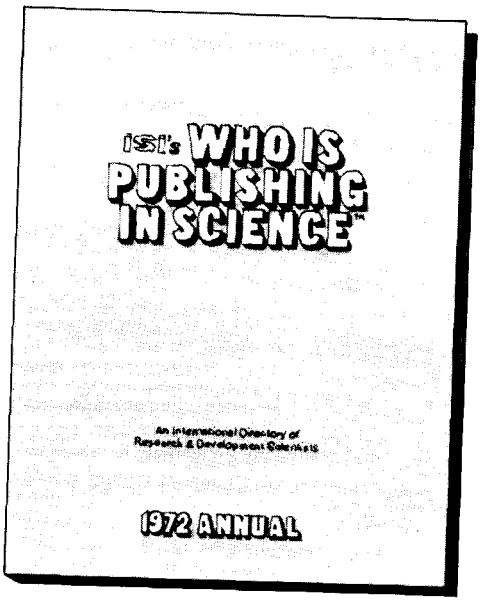

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In Defense of Statistics

Please print this reply to Mark Baer's Letter to the Editor *Special Libraries,* Feb 1972, p.9A.

As the author of "How to Survive in Industry," *Special Libraries,* Nov 1971, I would like to reaffirm the usefulness of statistical surveys to justify a company library. First of all, although Boeing laid off enormous numbers of employees, many with 15, 20, or 25 years of service, I was not laid off—I quit! Let me further point out that I had only 3 years longevity with Boeing. Second, a recent issue of *Special Libraries* (Jan 1972) carried a one-half page invitation for librarians to apply for Boeing employment while employment is still trending downward there I believe.

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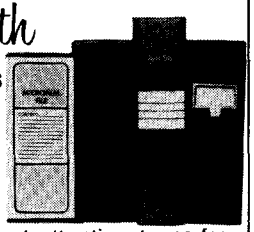

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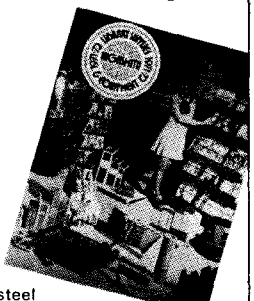

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First of all you have no "subscription order" . . . this is a gift.

Secondly your "please" has a very demanding tone to it.

It is addressed to "Gentlemen" and if this letter makes me no "gentleman" then you're wrong on three counts.

Seriously, though, may I strongly recommend you take up with your fellow librarians a change in your wording. The thing that sticks in my craw is that coming as they do some years after delivery date I am "convinced" that the copies were in fact delivered and you are just trying to get replacements free for copies someone lost or had stolen.

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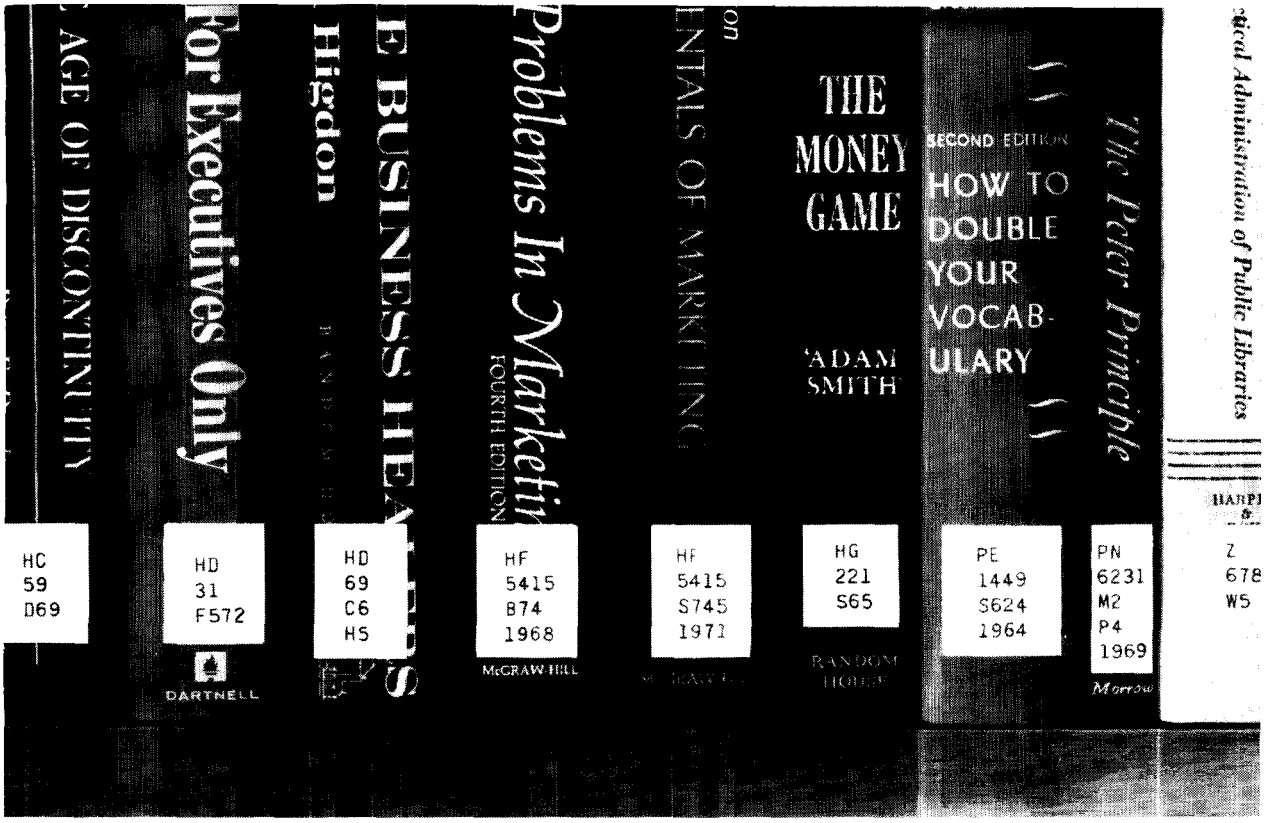

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Reference Function with an On-Line Catalog

Ruth Winik

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AUTOMATION of library processes had emphasized that the reference function *is* the library. All library processes have as their ultimate goal the referring of the user to information *(1, 2)*.

In 1966, when the Conference on the Present Status and Future Prospects of Reference/Information Service *(3)* was held, there was some concern that the reference function required clarification as such, but interest was focused on how to improve the accessibility and comprehensiveness of the information store itself, by means of computerized indexes, catalogs, and networks.

In a special library, with its often small staff, many functions which are normally separate in a large library must be performed by a single individual. This concentration of functions tends to emphasize the unity of purpose of a library: providing information to the user.

What Is an On-Line Catalog?

A catalog may be defined as follows *(4)*:

"A register or compilation of items arranged methodically, usually with sufficient description to afford access. . . . A work of reference showing the location and availability of publications as complete units. . . . Distinct from index, which is more generally concerned with content analysis."

On-Line is defined as *(5)*:

"Pertaining to equipment or devices under direct control of the central processing unit. . . . Pertaining to a user's ability to interact with a computer."

This paper is therefore concerned with records of books and reports (but not articles in periodicals) contained in a par-

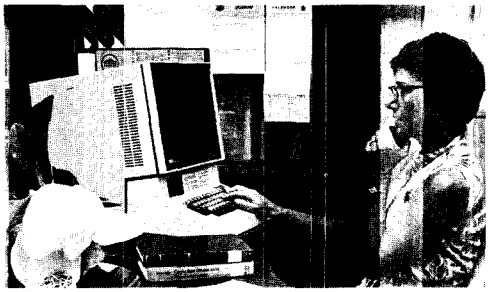

Figure 1. The ELMS Display Terminal (IBM 2260)

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ticular facility, such records being stored on a direct access storage device, a disk file, which the user consults via a computer by means of a terminal.

The ELMS On-Line Catalog

Today, there are many computerized catalogs and many on-line systems in libraries *(6, 7, 8)*. The Experimental Library Management System (ELMS) on-line catalog *(9)* at the IBM ASDD Library in Los Gatos, California, has several distinctive features:

- The definition of *catalog* has been expanded to include all records concerned with the books and reports in the library, from the initiation of an order, through receipt and processing, and continuing into circulation. The catalog is the single central file of a total integrated system.
- The on-line catalog is in everyday use in a working library and is the only bibliographic record that needs to be consulted.
- The terminal used is a display terminal with keyboard (IBM 2260), *not* a typewriter terminal; therefore, response time is very fast, all transactions taking place in "real-time."

ELMS has now been fully operational for over a year, and we have had an opportunity to evalute its impact on the various aspects of library management, including the quality of service received by the patron. The conclusion is that such service has improved in two ways: 1) The patron normally consults the file directly and is usually able to find what he needs rapidly, by himself; and 2) Much of the librarian's time is freed, allowing concentration on the exceptional problems encountered by patrons.

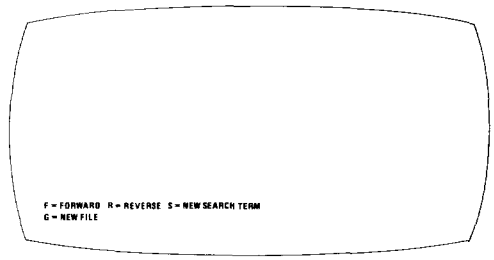

Figure 2. One-Letter Codes

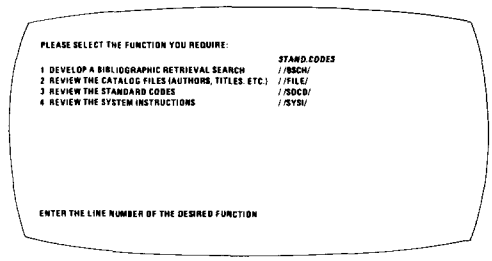

Figure 3. Simple Instructions

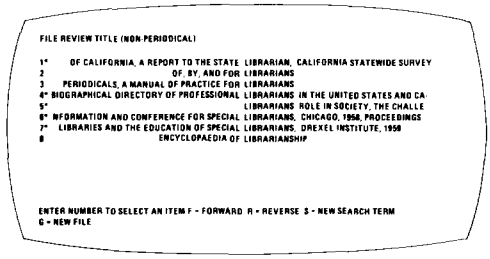

Figure 4. KWIC Indexing of Titles

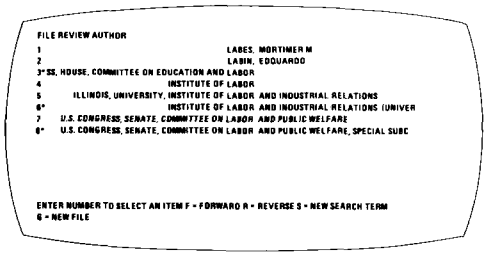

Figure 5. KWIC Indexing of Corporate Authors

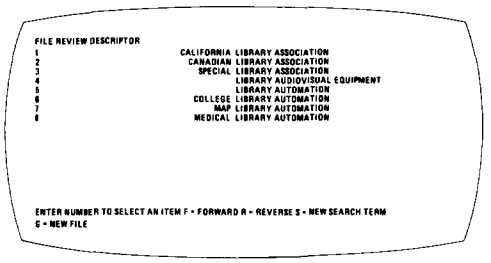

Figure 6. KWIC Indexing of Descriptors

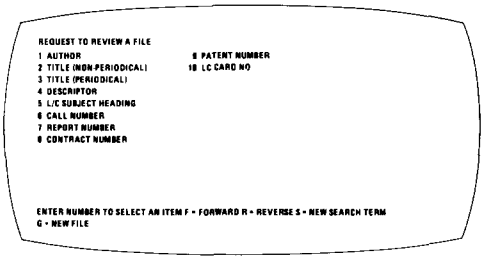

Figure 7. Access Points

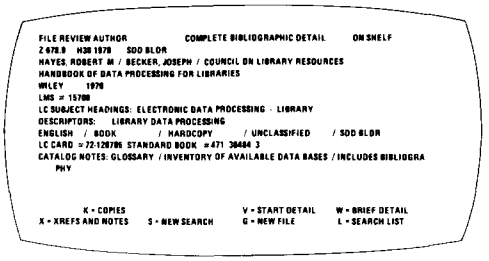

Figure 8. Complete Bibliographic Detail

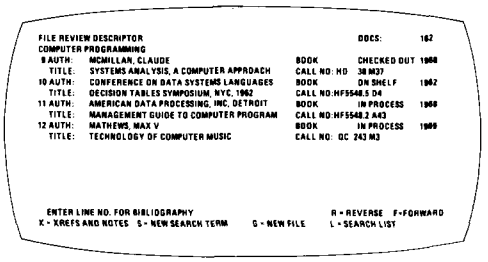

Figure 9. Status Designation

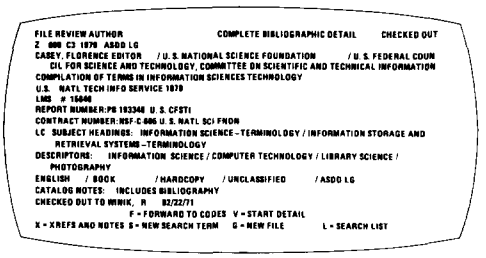

Figure 10. Circulation Status

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How an On-Line Catalog Helps the Patron

There are four display terminals in the library, two in the processing area, one at the reference desk, and one in a carrel (Figure 1). The majority of the library users enter the library, sign in at a terminal, search the files, retrieve books from the shelves, check them out and leave, without any intervention by the librarian. This is made possible because the needs of the users were considered carefully when the system was designed *(10)*.

In this system, keying is kept to a minimum: commands are one-letter codes (Figure 2); search terms can be truncated, or even misspelled, since their input leads to the display of a section of the file from which choice may be made. Instructions are simple (Figure 3). Review of the file is in conversational mode, i.e., each display asks one question and waits for one answer. KWIC indexing is used for titles, corporate authors and descriptors (Figures 4, 5, 6).

Furthermore, many more access points to a document are provided than in a conventional catalog (Figure 7). Because the complete bibliographic detail is available through any known access point, the often tedious problem of guessing the main entry is eliminated *(11)*.

Finally, because the ELMS catalog is part of a total integrated system, on-order and circulation records appear in the display of bibliographic detail. The user thus knows at once whether a book is on the shelf, checked out, on order or in process. In fact, if the book is checked out, the display indicates to whom and when (Figures 8, 9, 10).

How an On-Line Catalog Helps the Librarian

The entire ELMS library catalog is literally at the librarian's fingertips, since one of the terminals is located on the reference desk. This means that the reference librarian can be on duty at the desk a much greater part of the time than would be possible with other types of catalogs.

For example, without moving away from the reference desk, the librarian can:

1. Introduce a new patron to the system.
2. Answer a telephone query from a patron or another library concerning the possibility of borrowing a book. She can give these answers immediately:
   a. Yes, it is on the shelf; we will send it right out.
   b. No, we do not have it.
   c. Yes, but there will be a delay while we recall it, because it is checked out.
   d. Yes, but there will be a delay because it is: on order, or in process.
3. Show a patron the record of books he has checked out. This is particularly helpful for patrons changing jobs or transferring to a different location.
4. Choose the most appropriate reference book for answering "fact" questions. In addition to the distinctive features mentioned above, the system also permits file search with the use of a date delimiter, thus simplifying the identification of reference books which cover a given period.
5. Select books for purchase. With publishers' ads, *Books in Print, Publishers' Weekly* and similar tools at hand, the librarian can make sound choices based on thorough review of the existing collection, including items which have been ordered.
6. Participate in the cataloging process. This can cover a wide range of activities, from simple corrections to the file and the addition of cross references, to the entering of the complete bibliographic information for books.

Conclusion

There are many ways in which the use of an on-line catalog affects the reference function. The user tends to become more self-sufficient, undertaking and accomplishing his own searches with ease. The librarian is able to concentrate many activities at one station, and give better and faster service.

In the future, more advances are possible:

- The patron may enter his own circulation transactions, including check-out, return and reserve.
- The patron's dialog may be saved to provide the basis for enriching the files with new interrelationships of terms.
- The system may be expanded to include a network of libraries, all using a common file.
- Terminals may be located on the patron's desk in his own office, as well as in the library.

The on-line catalog gives a new dimension to the reference function and, thus, has an important role to play in the development of dynamic libraries.

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Ruth Winik is reference librarian, IBM Advanced Systems Development Division, Los Gatos, Calif.

Audio and Video Cassettes

Friend or Foe of the Librarian?

Arthur Poulos

American Chemical Society, 1155 16th Street N.W., Washington, D.C. 20036

■ The fast-growing list of titles and users of audio tape cassettes indicates acceptance of the format as a communications tool. Video tape cassettes, too, now are appearing in commerce and promise a revolution in audio-visual communications. For the librarian these products pose some special problems. A better understanding of what they can—and cannot—do will help the library professional make optimum use of the new formats.

THE STORY of magnetic tape packaged in cartridges and cassettes sounds at times like a Cinderella story. The words "cartridge" and "cassette" are used frequently and loosely these days. They are not interchangeable, at least not in the audio format.

An audio tape cartridge measures almost 6″ long, is about 4″ wide, and nearly 1″ thick. It uses magnetic tape in an endless loop configuration. The tape is ¼″ wide and it runs at 3¾″ per second. There are eight tracks or channels available, four in each direction, thus the terminology "8-track cartridge." Most 8-track cartridge machines are playback-only units. That is, they are not capable of recording, although recorders are now becoming increasingly available. Most of the 8-track cartridge players, perhaps two-thirds, are in use in pre-1971 model automobiles. For the most part, this format does not lend itself to easy search of the tape for your favorite selection because provision for rewinding the tape is rarely available.

A cassette is a much smaller piece of equipment. It measures 4″ long, 2½″ wide, and is only 5/16″ thick. Basically, it consists of a feed reel and a take-up reel encased in plastic, and it can be thought of as a miniature open reel device enclosed in a plastic box. Cassettes use magnetic tape which is only about ⅛″ wide, and the tape runs at only 1⅞″ per second. There are four tracks available, two in each direction. Most cassette machines can record as well as play back, and search of the tape is easier than with 8-track cartridges because practically all cassette machines provide for fast rewind as well as fast forward.

The two systems are obviously incompatible. Libraries are much more likely to be involved with cassettes because of their convenience features.

The Early History

The idea of magnetic tape packaged in some type of container intrigued many manufacturers and users for a long time. About 18 years ago a patent was granted on a plastic package containing magnetic tape in an endless loop configuration. About five years later, RCA Victor introduced a twin-hub cartridge using ¼″

tape running at 3¾" per second. This device contained four channels of sound —double the usual number contained on ¼" tape up to that time. Not long after the RCA product there appeared a product developed jointly by CBS and 3M which used a single spool of tape packaged in plastic, with the take-up reel housed in the playback equipment. This product used tape only ⅛" wide and it ran at only 1⅞" per second.

None of these products met with much success in the market place, but they set the stage for what we have today.

The Philips organization in Holland was among those who picked up the thread. Their work led to a product marketed in 1965 which, in effect, combined the twin-hub configuration of the RCA product with the ⅛" tape running at 1⅞" per second used by the CBS–3M product. And so was born the cassette of today.

The Growing Medium

It offered many advantages. While it lacked the frequency response and signal-to-noise ratio of medium priced reel-to-reel recorders, the cassette was much less bother than having to thread open reel tape. And while its hissy sound was inferior to that of phonograph records, a cassette was much easier to carry around and to store than records (or open reel tape for that matter), and it could be listened to through a handy and modestly priced and portable player. Today all cassettes are made under a Philips license and they must conform to Philips specifications. This is important because it assures compatibility of all cassette products with one another around the world.

According to Ampex Corporation, about 200,000 cassette recorders were sold in 1966. This figure tripled to 600,000 in 1967 and cassette recorders were suddenly accounting for about 10% of all tape recorders sold. In 1968 cassette recorder sales tripled again and in 1969 they doubled their 1968 totals. By 1970 cassette recorder sales were accounting for more than half of all types of tape recorders sold in the U.S. In 1971, unit sales of cassette recorders were higher than were sales of all types of tape recorders as recently as 1967. And Ampex estimates that in 1972 cassette recorders will account for almost 65% of the total tape recorder market.

Does this rather heady growth mean that Americans are hooked on hissy rock music? Not at all. Listen to a current issue pre-recorded cassette containing classical music. Note the low level of hiss and other noise. Practically every major producer of cassette tape today offers a low noise, high output tape which can give truly "high fidelity" sound when played back on high quality equipment. The availability of high quality cassette tape (and reliable cassettes) has helped broaden the market for the format. In 1969 there were about 3,600 releases or titles available on cassettes. Today, Ampex alone has more than 5,000 and there are many other producers. Music accounts for most of the titles.

Cassettes in Libraries

But music on cassettes is not the whole story. By 1970 many doctors around the country were getting medical news on cassettes. Alert chemical industry executives started their work week by listening to industry news via the American Chemical Society's (ACS) *Chemical Executives Audionews*. By the end of 1970, *Fortune* had started to offer its *Executive Voice* cassette program. The year 1971 brought interviews with famous scientists in the form of the ACS's *Men and Molecules* cassettes and cassette tapes from ACS meetings.

It is with products such as these that librarians are most likely to become involved with cassettes. There is likely to be great growth in demand for recorded interviews, seminars, symposiums, and lectures similar to those already offered.

Obviously, there is plenty of action on the commercial front. But there is quite a bit of ferment in the non-commercial arena, too. A fast-growing number of companies send product news and pep

talks on cassettes to their salesmen. A major brokerage house sends instructions and situation reports on cassettes every two weeks to all its office managers. Olin Corporation's research management circulates research notes on cassettes to key research people. Growth of this kind of activity is so rapid that it is all but impossible to list accurately everyone using cassette techniques.

All this activity indicates that apparently people, at least busy people, are more likely to listen to a message they might tend to ignore in memo form. Additionally, lectures and interviews can be quite interesting and even exciting, certainly more exciting than cold type. Imagine—famous scientists can be heard discussing how they performed the work that made them famous and how they feel about the world of science. And they can be heard with all the warmth and enthusiasm, all the subtle inflections and nuances that add so much to the understanding of a discussion. Even better, this hearing can be done at one's own convenience, while driving to or from work, riding the train or bus, preparing breakfast, or taking a walk.

Such activity with cassettes is bound to affect the science librarian at work. Certainly science libraries will have to stock audio cassettes and list cassette programming on index cards. And librarians will have to remember to store cassettes at moderate temperatures and to keep them away from magnetic sources which will erase them. The librarian, too, should become familiar with the operation of a cassette recorder since there may be a need to record meetings, etc. Basically, however, it would seem that the audio cassette poses no difficult or unusual problems for the librarian.

The Video Cassette Is Coming

But such may not be the case with *video* cassettes. Video tape in cassette format is now beginning to appear and some predict a veritable deluge to come.

A few years ago some enterprising makers of videotape recording equipment marketed compact video recorders priced at about $1,000. This move heightened speculation that the day we could make our own home video shows was nearly upon us. Those few years have now passed and that day seems only slightly closer. Nevertheless, progress has been made, the most significant being the coming availability of video cassettes on a fairly large scale, if manufacturers' announcements are to be believed.

Video cassettes promise to become revolutionary audio-visual and home entertainment products. The average American is said to watch television for approximately 2,000 hours per year. Some forecasts indicate that video cassette penetration of the home market will reach 5% of all U.S. television households by as early as 1975. The crystal ball gazers say that sales of video cassette players to consumer markets could exceed $50 million in 1973 and spurt to $320 million only four years later. Sales of program materials (movies, sports events, travelogs, etc.) could be $15 million in 1973 and climb to $115 million by late 1974, and there will probably be an equal amount of program rental business.

Moving even faster, at least in the earlier years, will be sales to institutional markets. Sales of video cassette players here could well be close to $100 million in 1973, according to one survey, and they could exceed $150 million by 1974. Even bigger money is likely to be involved in program materials for institutions. A program market in excess of a half billion dollars is visualized by some.

But before such juicy sales figures can be realized, some important things must happen: The products of the various manufacturers will have to become mutually compatible, and prices will have to decrease. Today, none of the systems talked about is able to play cassettes designed for another maker's machines.

The Systems

The systems that have surfaced thus far can be classified into two groups: those based on magnetic tape and capa-

ble of recording, and those not based on magnetic tape and so restricted to playback only. This difference is substantial and may be crucial to the success or failure of a format.

Companies backing the magnetic tape-based systems disagree on details of the format, but they agree that the ability to record will tip the consumer toward a magnetic tape system. Avco's "Cartrivision" apparently is the first magnetic tape-based system to become available for home use. Sears Roebuck has announced that it will offer this system built into some of its color TV sets. Record and playback units for attaching to existing TV sets will become available later. Avco's product uses ½" magnetic tape. Programs in a variety of lengths are to be sold or rented, with prices ranging perhaps up to $35 per program. Avco has many movies and sports events lined up for its system.

Norelco's VCR system, now about ready to be introduced in Europe, also uses ½" magnetic tape. The Norelco system is worthy of close attention because several European equipment makers apparently have agreed to use the Norelco type of cassette, thus assuring compatibility.

The Japanese, too, have high hopes of capturing a large piece of the market. The Sony "U-Matic" system, now becoming available to institutional users, is also based on magnetic tape—but it is ¾" tape, not the ½" tape on which the Europeans and Avco seem to have agreed. Japan Victor Corp. and Panasonic have apparently agreed to use the Sony format, although Panasonic hints that it will also produce a unit based on ½" tape. To muddy the waters a bit more, 3M has been licensed by Sony to produce equipment in the Sony format. Thus the stage is set for a showdown between the ¾" and ½" formats, with the consumer waiting in the wings.

Companies espousing non-magnetic tape systems firmly believe that their systems are superior to those of the tape makers. Possible contenders here include such illustrious names as CBS, RCA, and Telefunken. All the playback-only systems visible today are quite novel technically. However, the actual appearance in commercial channels of these systems is somewhat doubtful. So far only CBS's Electronic Video Recording (EVR) system has actually popped up for sale and its future in the U.S. is questionable.

RCA's "SelectaVision" is perhaps the most exotic of the proposed playback-only systems. It makes use of a tiny laser, and the images are actually holograms embossed on ordinary, low-cost vinyl film. RCA has demonstrated only a feasibility model, but it insists that it will be ready to market SelectaVision playback units for around $400 early in 1973 and that pre-recorded cassettes will be available for around $10. The nature of holograms is such that the "SelectaVision" film can be scratched or even torn without damaging the picture—a real boon to libraries.

Nearly as esoteric as the RCA system is the Telefunken-English Decca "Teldec" system. This is a disc system. Teldec discs look much like thin, flexible phonograph records. The Teldec player looks much like an ordinary record player. But the Teldec disc revolves at 1,800 revolutions per minute compared with 33⅓ rpm for standard records. And the Teldec turntable stands still! A 12" Teldec disc today permits only about 15 minutes of playback in black-and-white. The developers say longer playing discs with color capability are coming. A disc player priced at $150 is mentioned, with disc changers priced at about $300 under development. The discs could be as inexpensive as today's LP records because they can be made out of the same low-cost vinyl materials, and efficient high speed duplicators can be used.

CBS's EVR system is perhaps the best known of the playback-only video cassette systems, mostly because of its early arrival on the scene and actual sale of a scattering of units. The EVR system uses a special narrow film which is contained in a disc shaped plastic housing. Program material in both black-and-white and color is available. Playback is through a special player attached to a TV set. Because it is a non-recording

system, program material must be sent to CBS for putting on EVR cassettes. Perhaps because of this lack of flexibility, EVR has been slow in gaining wide acceptance in the U.S. CBS has decided to suspend production of EVR in the U.S. and is transferring this operation to England. This move leaves the future of EVR in this country very much in doubt.

Impact on Librarians

Whatever format—or formats—win out, the arrival of video cassettes will probably make the life of the science librarian a bit more complicated. As with products in other media it will be necessary, of course, to stock video cassettes and index their contents. Storage conditions must be watched carefully, especially with magnetic tape systems. These are also susceptible to damage from magnetic sources. People will need to be instructed in the use of the playback machines, and extra care must be taken here to be sure that magnetic tape cassettes are not accidentally erased by the user—a fairly easy mistake to make. And, since it seems that video cassettes and players will be relatively expensive items, their impact on budgets is likely to be relatively strong. In the same vein, these systems will also be expensive in terms of space required because viewing rooms and viewing monitors will probably be needed. And, as with audio cassettes, the librarian might be called upon to videotape meetings or company seminars. That makes the librarian something akin to a movie director!

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Arthur Poulos is director of promotion, Public Affairs and Communication Division, American Chemical Society, Washington, D.C.

Bibliographic Control of American Doctoral Dissertations

A History

Julie L. Moore

University of Southern California, Los Angeles, California 90007

■ The primary sources of bibliographic control of American doctoral dissertations have been three series: *A List of American Doctoral Dissertations Printed in 1912–1938, American Doctoral Dissertations* and its predecessors (1934–1969), and *Dissertation Abstracts* and its predecessor (1938–1969). A brief bibliographic history of publication, purpose and coverage is presented in order to clarify the differences between these series, two of which are concurrently issued.

THE CURRENT EMPHASIS on research in academic libraries and information centers has led to an increasing utilization of all information sources, both published and unpublished. One of the primary sources of unpublished literature has been doctoral dissertations, representing formalized investigations of special complex problems. The format of a dissertation contains the experimental details, statistics and minutiae which are necessary for beginning research or for checking the validity of an experiment. As such, dissertations have long been utilized by scholars and researchers as a source of basic information.

The Problem

Prior to 1900, most European universities required studies for higher degrees to be printed, thus insuring that a listing would appear in national bibliographies. However, neither the United States nor Canada established national bibliographies until some years later. American universities awarding higher degrees have never rigidly enforced the printing of dissertations. Unless a dissertation found its way into print as a book or scholarly article, the research performed remained relatively unknown. The scholarly community, recognizing the problem, proposed several solutions, including the printing of catalogs of each university's research, the collection of specialized subject lists, especially in literature, history, and science, and the compilation of a separate "national bibliography of dissertations."

The Purpose

It is the purpose of this paper to state briefly a historical summary of these national listings of dissertations which are a unique alternative to the bibliographic

This is the first in a two-part series on bibliographic control of American doctoral dissertations. The second part, an analysis, will appear in the Jul/Aug 1972 issue of *Special Libraries*.

control of published and unpublished doctoral dissertations in the United States and Canada.

Bibliographic History—1912–1938

The earliest national bibliographic source for dissertation titles was issued by the U.S. Library of Congress for 1912. This list, originally compiled by Charles A. Flagg, was intended to be an annual publication. Titles were collected from letters sent to "the libraries of all universities listed in the 1911 Report of the Commissioner of Education as maintaining graduate departments" *(1)*. Presumably the method of collection did not change through the years. This series listed only those doctoral dissertations which had been printed for circulation. No listing of unpublished titles was thought to be necessary, since there was an assumption that most of the dissertations eventually would be printed.

Early publication of dissertations took the form of monographs or entire issues of scholarly journals. Texts were frequently printed *verbatim* from the dissertation manuscript. Even so, a substantial portion of early dissertation research was not reported in any printed sources.

There was still no single national bibliography of all printed works for either the United States or Canada. Any printed material would have had to have been listed in the regular publishing trade channels available, principally the *American Catalogue of Books* (1876–1910), the *United States Catalog* (1899, 1902, 1912, 1928), *Cumulative Book Index* (1898–1970) and *Canadian Catalogue of Books* (1791–1897) or in the individual university lists of faculty and student research.

In the Library of Congress series the coverage and arrangement were quite consistent. The earliest date of imprint was 1911; the latest was 1938. Each volume arranged alphabetically by author contained the supplement of earlier titles missed in the preceding volumes. However, there was no subject arrangement until 1915 when Alida M. Stephens, Flagg's successor, established a classified list using broad subject divisions based on the Library of Congress Classification schedules. This arrangement was continued until the series's demise in the 1938 issue (printed in 1940).

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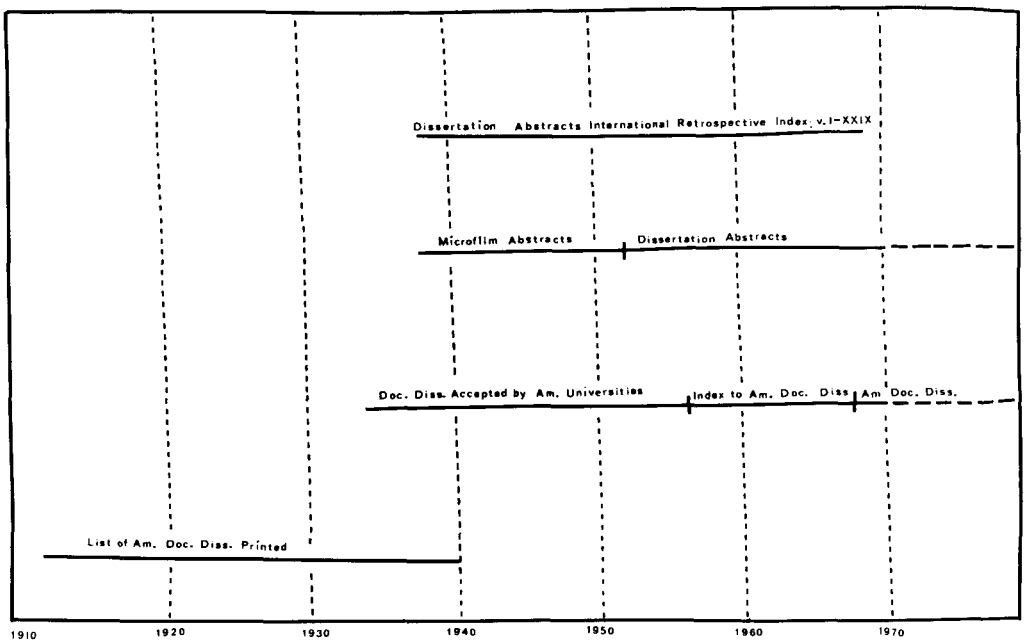
Figure 1. Bibliographic Control of American Doctoral Dissertations (1912–1970)



Bibliographic History—1934–1970

A second major series was established in 1934 under the auspices of the Association of Research Libraries. Its purpose was to provide a source of unpublished as well as published titles of American dissertations. This series has been issued under three title changes from 1934 to 1969: *Doctoral Dissertations Accepted by American Universities* (1933/34–1955/56), *Index to American Doctoral Dissertations* (1955/56–1966/67), and *American Doctoral Dissertations* (1967/68–1968/69).

In the first issue, the editor, Donald B. Gilchrist, approached the problem of bibliographic control of unpublished literature by stating *(2):* "The fact [is] that a large percentage of American dissertations are not printed in full, and only part of these are even published in abstract. . . ." The collection of dissertation titles was compiled from lists submitted by "Deans and registrars and libraries of the Universities" *(3)* by the Association of Research Libraries under the auspices of the American Council of Learned Societies and the National Research Council. This series also continues as an annual, issued usually one year after the dates of coverage. In recent years the time lag has been 14–20 months. Arrangement of titles has been under broad academic disciplines, i.e. Biology, Agriculture, Psychology. There have been no other subject indexes to this series. The series has had two publishers, but has remained under the direction of the Association of Research Libraries.

A third series, issued from 1938 to 1970, is commonly referred to as *Dissertation Abstracts.* Its first name, *Microfilm Abstracts 1938–1951,* was more descriptive of its original purpose, that is to act as a publisher's catalog of dissertation and scholarly books available on microfilm. Eugene B. Power wrote in 1941 *(4),* "If upon examination of the abstract, it appears a copy of the complete manuscript would be of use, a microfilm copy can be prepared from the negative on file at a very reasonable rate." As a manuscript data base, five universities—Princeton University, University of Toronto, University of Michigan, University of Nebraska, and Stanford University *(5)*—contributed unpublished dissertations for 1934 to 1938.

A major policy change was enacted in 1952 when the series title became *Dissertation Abstracts.* The preface of the first issue of that year states *(6):* ". . . it is hoped that the goal of a complete bibliography of doctoral dissertations may be realized within the next few years." With such a change, *Dissertation Abstracts* has announced itself as the authoritative source for dissertation literature and has become known as such. In 1968, the series added a few European titles to its data base and was renamed *Dissertation Abstracts International.* A computerized data base of bibliographic information was established for *Microfilm Abstracts* and *Dissertation Abstracts* (1934–1969) to be searched on individual request by any researcher, scholar, or student. This data base, known as DATRIX, was one of the first successful commercial information retrieval systems. It has since been published as *Dissertation Abstracts International Retrospective Index v.I-XXIV* providing a cumulative source, by keyword-in-title-index, for all dissertations listed in *Microfilm Abstracts,* v.1–11 and *Dissertation Abstracts,* v.12–29, covering in combination a total of thirty-four years. Each volume is arranged as a broad subject, such as Physics, Mathematics, Life Sciences, Psychology, etc. Within the volume, the disciplines are arranged alphabetically, with a final breakdown by keywords of the titles acting as a subject index. A single index to authors is provided in volume nine. Abstract numbers are listed after the author, together with the order number *(7).* Because this series has had a total of 258 universities contributing to the data base, the new *Retrospective Index* provides an invaluable source for locating various American doctoral dissertations.

Summary

National bibliographic control of American doctoral dissertations began in

1912 with a listing by the Library of Congress of printed dissertations only. In 1934 the Association of Research Libraries inaugurated annual lists of all titles of dissertations awarded in the United States and Canada. This series is considered to be the most comprehensive source for titles of dissertations available today.

A third series dealing with dissertations was begun in 1938, with titles referring back to 1934. Its purpose was to make titles available on microfilm. Although its coverage of titles is incomplete, this series *(Dissertation Abstracts)* is considered by most library users to be the primary source for American doctoral dissertations rather than the series now known as *American Doctoral Dissertations* (1934–1969).

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Julie L. Moore is a member of the staff of the Gerontology Center, University of Southern California, Los Angeles.

An Educational Model for Library Problem-Solving

Teaming Librarians, Students and Faculty

Edwin E. Olson, James W. Liesener, Donald H. Kraft

School of Library and Information Services, University of Maryland, College Park, Maryland 20742

■ A cooperative agreement between the National Agricultural Library (NAL) and the University of Maryland brings together library school faculty and students and librarians in an applied research team to develop a new approach to training for problem-solving in libraries. The participants develop proficiency in problem-solving by applying analytical concepts and methods to new problems each semester. Each semester's work provides inputs to the following semester. The conceptual approach and procedures which have been developed provide the basis for initiating a similar training program in any large library within commuting distance of a library school.

IN FEBRUARY 1970, the National Agricultural Library (NAL) and the School of Library and Information Services (SLIS) at the University of Maryland signed a cooperative agreement to develop an experimental educational project. We wanted to explore new ways in which library school students and faculty could join together with working librarians to improve library education both for those about to enter the field and those who have been in practice.

Background of Project

We were particularly interested in discovering an optimal approach to analytical training for graduate library students and librarians employed in large library operations. John Sherrod, director of NAL, shared our view that there was a need to develop more effective and efficient means of training library students and library personnel in the new analytical concepts and methods which have been produced in library science *(1)*. Rather than wait for ten or more years for the new approaches to have an impact on the field, new methods of teaching need to be developed which can speed up the dissemination process.

Previous experience over the past several years in instructing librarians in various institutes, conferences, and workshops convinced us that a new approach was needed. Although many librarians are anxious to update their skills *(2)*, the short-lived workshops in which we participated usually did not give librarians enough confidence to apply these new skills upon returning to their own work environment. Our experience in instructing students in a library school setting, while providing more time to give the students confidence in their technical ability to do research, was unsatisfactory. Their isolation from an actual work setting seriously limited their ability to translate these skills into operational behavior once the transition was made from a student role to a professional role.

It was hoped that the joint endeavor between NAL and SLIS in which librarians and students would work together in a real library environment would rep-

resent a breakthrough. The librarians would receive training relevant to their working environment and over a long enough time period to have a significant impact on their ability to do research, and the participating students would see that the research skills they were learning could be actually used by working librarians to identify and analyze authentic library problems.

In addition to our interest in developing a new model for library education and continuing education, the project would also open up new avenues for relating the library school to libraries in the geographic area. We believed that a library school has an obligation to develop laboratory experience for its students, particularly in planning, management, and research *(3)*. The laboratory experience envisioned would differ from the more traditional internship arrangement where skills in library practice are developed under library supervision. We also wanted something other than a traditional field visit with observations of library activities. The laboratory experience was also to be substantially different from merely conducting a course for students and librarians in a library rather than in a library school classroom. The model for the course which would be developed in the NAL–SLIS cooperative agreement would be similar to a research approach. This seemed to be appropriate since the purposes were to train participants in analytical methods. Adopting a research model also would allow us to develop findings about the library processes at NAL which, to the extent they could be generalized, could add to the body of library and information science.

Objectives

The major objective of the course developed by the project is educational. The primary need is for analytic skills which can be used by librarians to deal with library problems on the basis of quantitative data. The assumptions are that 1) all library professionals have need for these skills in their regular work, and 2) all librarians will be better consumers of research reported in the literature if they have developed their own ability to do research.

The secondary objective is to produce findings about library operations at NAL which will be useful for decision-making by management. There did not seem to be a contradiction between these two objectives since previous experience suggested that students and practitioners will more effectively absorb and apply research methods if these methods are learned in the course of tackling problems that are important and of interest to them.

Procedures

The kind and number of participants each semester are:

SLIS

- Faculty project director: 1
- Faculty guest lecturers and consultants on aspects of the research projects: 3–4
- Student research assistants: 1–2
- Students taking course for credit: 10–16

NAL

- Staff liaison officer: 1
- Professional librarians regularly participating in class: 3–5
- Middle-level and top-level management serving as resource persons: 2–3

The students receive 3 semester credits for the course "Analysis of the Library Service Process." Participating librarians have the option of receiving academic credit as a special student or a special certificate from SLIS.

Each semester the participants identify one or more problems of interest to the NAL librarians which can be studied within one semester. Experiences over several semesters indicate that the process of problem identification is crucial. The inability of both students and practitioners to frame problems conceptually seems to be universal and consistently requires considerable attention in this process. There are also many dilemmas in the process, many conflicting aims

which need to be balanced. If the librarians choose the problems, they may not be appropriate to develop educational experiences for the students. If the student or faculty choose the problems, they may not be perceived as relevant by library management. If narrow, well-focused research problems are chosen, there will be enough time to complete them during one semester. However, broad, more ill-defined problems allow the student more opportunity to wrestle with the definition of the problem and, usually, an opportunity to explore and choose among a larger variety of research methods.

A range of problems is proposed primarily by the library participants and discussion ensues to identify problems which represent an optimal trade-off between the many considerations of problem definition—problems in which the goals of all participants can be balanced. This dialogue requires a process of mutual education and mutual regard which must be developed over several semesters.

The first section of the course (five weeks) is devoted to learning basic research skills, including reorganizing problems into more specific and testable hypotheses, reading tables and graphs, understanding basic statistical measures, recognizing data elements in library research, collecting data, analyzing data, and reporting recommendations to management. No skills beyond arithmetic are required to learn these research skills. Also, during these first five weeks, students have a chance to practice analytical skills by working with "canned" problems of the National Agricultural Library which have been identified and studied in previous semesters. Small groups of participants discuss these problems following weekly lecture sessions.

The final ten weeks are devoted to analysis of three or four small current NAL problems or three or four subproblems of a larger problem. Students divide into research teams, one team for each problem, and perform the following tasks:

1. Reformulate the problem;
2. Identify data elements and methods appropriate for the problem;
3. Design the methodology for the problem;
4. Collect data;
5. Analyze data;
6. Evaluate data;
7. Draw conclusions and make oral recommendations to management;
8. Receive feedback from management;
9. Develop a final written report.

Meetings with the project staff, oral and written progress reports, and intergroup criticism are important parts of this phase.

Some of the problem areas investigated in the project were: capability of providing material to meet the needs of a particular user group; relationship of document of selection and document delivery; management information system for maintenance and weeding of library materials; coverage and timeliness of the *Bibliography of Agriculture.*

Benefits of Project

In several semesters the participants evaluated the extent to which the knowledge and skills gained during the semester could be applied in other library situations. For example, in one evaluation, students received a copy of an annual report of an academic medical library (picked at random from a file of such annual reports) and were allowed 15 minutes for study and 30 minutes to criticize the annual report in view of what was learned during the semester. We could determine that most students were able to discuss effectively the enumeration of events and a few unanalyzed statistics contained in the annual report.

Although we have not conducted a more thorough analysis of the educational benefits, we are convinced that the project is a prototype which should be extended to other special libraries, to other types of libraries and perhaps to other areas of the library school curriculum. Plans are currently underway to extend the project to other federal libraries in the Washington metropolitan area. The educational materials developed in

the project including the "canned" problems are being revised for wider distribution. The benefits of the project as a problem-solving mechanism for the participating library are also being realized, according to the feedback we have received from top management on the recent problems we have studied.

NAL draws upon research and training expertise in a library school. The library school participants benefit by learning analytical methods, by exposure to current problems and developments, and by developing research findings which are relevant to theoretical and applied concerns of library science. Line *(4)* evidently had this mutual benefit in mind:

If the practice of questioning, rather than acting on answers taught us long ago, is to become habitual—if librarianship is to become, or remain, a vital and positive profession—the presence in the library of persons whose prime function it is to question and investigate is likely to contribute greatly towards this. It should have a vitalizing, if initially disturbing influence on the whole staff. At the same time, ordinary library staff should be able to contribute to the research in all kinds of direct and indirect ways. It is also of great importance to the research that it should keep some sort of contact with the practical library world, and not go up blind alleys trying to answer questions that no one wants to ask.

Acknowledgment

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Edwin E. Olson is professor, James W. Liesener is associate professor, and Donald H. Kraft is assistant professor, University of Maryland, School of Library and Information Services, College Park, Maryland.

The Cataloger's White Knight?

MARC

Hillis L. Griffin

Argonne National Laboratory, Argonne, Illinois 60439

SOMETIME, on a nice, quiet day in your library, when all of the problems have been solved, and the phone is not ringing off the hook, give a thought to the part of your library where problems are eternal and where, if they are ever solved, it is at great expense and redundant effort. This activity is called cataloging, and holds forth day and (sometimes) night, depending upon the balance of the input of books to be cataloged. It is influenced to some extent by requests from users for books, obviously received by the library, to be cataloged. Output will rise or fall depending upon the weekly arrival of proof slips from the Library of Congress, or the receipt of an occasional printed *Card* from the Library of Congress for a book received months earlier. As a last resort, you may decide to give original cataloging to a book which has been on hand for some time and for which, as surely as night follows day, cataloging will issue forth from the Library of Congress within two weeks of the time you catalog it. Worse yet, *they* will not agree with you. Indeed, if we were to convene an international symposium (federally supported, of course) with the attendance of the 473 catalogers who have already cataloged this book, we would probably fail to find substantial agreement among them on almost any contentious point. What should really cause us dismay, however, is that 472 of these people had to spend any time at all cataloging that book. Given a certain level of professional cataloging, I would imagine that most of the 472 would have been able to apply appropriate modifications (the name of this game is called proof-sheet cataloging, in case you do not recognize it) to the catalog record received from the Library of Congress in rather short order, which would have given more time to demonstrate against the 17th edition of Dewey, or to demonstrate for the 18th. At any rate, I submit that one of the real problems in librarianship today is not whether rugs have a place in all libraries, or whether the computer will replace the book. As things are going now, we will still have some 1970 imprints awaiting cataloging if and when the computer is ever ready to replace them. And while you are at it, you might shed a tear for the user who could have profited from having the use of that book. Poor fellow! Our real problem is getting those books cataloged.

If there is still a dry eye among you at this point, consider the number of publications which were not listed in *Publishers' Weekly* last week, or the week before that, and so on. These were the publications of societies, institutes, symposia, and other bodies both noted and obscure. We each have our secret methods for finding them and acquiring them, so that we can "not-catalog" them because they are so difficult that even the

Library of Congress will not touch them, except under extreme duress.

I sometimes think that we rate rather poor marks as information merchants to ourselves. Not only do we have problems identifying the world's literature, and cataloging it, but we also have problems in making known to ourselves the availability of catalog information. And once it is available we spend time and effort in typing cards, in typing call numbers, tracings and the like on the card sets which must then be broken up, alphabetized, and ultimately filed in the right place in our catalogs. In all of this the real problem is the amount of time we spend—clerk and cataloger—looking for information, identifying items to acquire so that we can try to locate catalog information for them.

Cataloging in Publication

Cataloging in source would be a marvelous answer to this dilemma. Some of you may remember when, for a time, some books arrived with a catalog card printed on the back of the title page, or at the end of the book. Things were certainly easy then. Unfortunately, this scheme apparently made life so easy for the librarians that it was abandoned. Some attempts are now being made to resuscitate this ghost under the guise of Cataloging in Publication. I hope that it will succeed, for we very desperately need every program of this kind that we can nurture to assist in getting the cataloging done. I wish that I could view this as the answer to the problem, but reflect for a moment. Consider which publishers will never put the standard book number on their publications, because they do not know what *the* standard book number is, much less what *their* standard book number is. This same tribe of bibliographic gypsies will not be champing at the bit to catalog their books in publication either. Indeed, I would gather that some of the pleasure they derive from publication is thinking about librarians around the world trying to establish reasonable subject headings for their last offering before the next one comes along.

. . . the basis for any substantive computer applications at the Library of Congress was the development of some way to represent and manipulate bibliographic information.

Before you decide to throw in the towel and line up at the local unemployment office, I do want to say that help is on the way. The good guys in the white hats at the Library of Congress have not been idle. We have been watching the emergence of a solution for several years now, and it seems more viable with each passing year. Not many librarians have seen it, although many have heard of it. Some who have heard of it have wondered what it will do *for* them, and others have wondered what it will do *to* them. Others have written it off as just another half-baked antic of the computer crowd, doomed to be too expensive and too limited to be of much use to any library, except the largest, for whom it will surely be too expensive simply because of its sheer bulk. And anyhow, computers are too expensive for libraries. And if they are not too expensive, then they will not do "it" right. And besides, we do not understand about computers, and we do not want to understand about them either.

An Answer?

The name of the white knight is MARC, which stands for *MA*chine *R*eadable *C*ataloging. I have never ceased to marvel at the genius who was able to connect cataloging with an acronym of any sort. Its genesis came from a meeting in 1963 at which the computer-related future of the Library of Congress was discussed by librarians and computer-related non-librarians. Very little was settled, but it seemed rather basic to some that the basis for any substantive computer applications at the Library of Congress was the development of some way to represent and manipulate bibliographic information. Not just 80 col-

umns of bibliographic information in a punched card, but an even more comprehensive representation than was then found with the Library of Congress printed cards. Henriette Avram and her group persevered, and from this work came the MARC Pilot Project in 1966, distributing comprehensive bibliographic information for over 55,000 English language monographs to the 16 participating libraries in 2½ years. These libraries did things with the information—produced catalog cards, book catalogs, acquisitions lists, cataloger work sheets, book selection lists, and more. They evaluated MARC for the jobs that they had in mind in their libraries. They found its weak points—and its strengths too. Most of all they determined that it was an answer, and that it had to be refined, expanded, made to work, and continued. The Library of Congress, for its part, had not only to evaluate MARC in relation to its own bibliographic activities, but had to explore efficient and accurate methods to put this information into machine-readable form, and to do it rapidly.

Both of these groups saw the fruition of their efforts in MARC II, which seems to have two meanings. First, we have the MARC II format which is really a scheme for fully representing bibliographic information in machine-readable form (let us say "on computer tape" for convenience) in a standard arrangement that will be generally usable and can easily accommodate such changes and modifications as are later found to be desirable. The main problem arises with the identification of the elements of information within the bibliographic record. The computer, because of its gross stupidity, finds it very difficult to distinguish a geographic subdivision from a form subdivision in a subject heading, for example. It can do it, but at considerable expense. Better that this information be formally identified as such if we are to minimize expense to the user. So MARC II is, for one thing, a standard, and is so recognized by the American National Standards Institute, and by the professional library organizations. It is a format for the *transfer* of information from one library to another, but it is certainly not the ideal format for the *storage* of this information. It is not even used by the Library of Congress to store MARC data. But it is an elegant and sophisticated format for the transfer of information among and between a large group of information receivers.

Second, then, is the meaning of MARC II as a distribution service of the Library of Congress. The Library distributes weekly, on magnetic computer tape, the accumulation of new data records for the cataloging of English language monographs which have been accepted into the system during the past week. This information is distributed to over 65 users in the United States, Canada, Great Britain, Europe, and the Far East. An average week's output will be about 1,200 records—over 60,000 records each year—representing *all* the English language monographic cataloging output of the Library of Congress. The service costs subscribers $800/year—about a penny per record. It is now in its third year of operation.

What to Do with It

What can you do with these records that come to you each week? One thing you can do is to use this information to prepare catalog cards. That is what the Library of Congress is doing with it—photocomposing catalog cards instead of producing them on the old brass press. It has sometimes been rumored that Capitol Hill is nothing more than a great dome built over the filing cabinets that contain all of the in-print LC printed cards produced since Man was created. If this is true, then this new method of card production means that the Pentagon is safe from requisitioning as a depository for further card storage, since cards will now be photocomposed and printed "on-demand" as they are ordered.

Library and library-related users have followed suit, albeit less elegantly, printing their cards on computer printers—some in upper and lower case character sets with a full complement of diacriti-

Some libraries wait forever for the Library of Congress.

cal marks, and some in upper case only without diacriticals. Some libraries use MARC as input to their production of book catalogs. One library is providing a current awareness service in several subject areas (library science among them) to many libraries about the country. The important thing to note is that MARC is being effectively used by a number of libraries (many not even subscribers) in this country, probably nearly 100. I could go on at some length about how MARC can be used to provide these products, but this is an ongoing activity, and more applications are developed each month.

I hope that I will not provoke a rush of tears to your eyes by harking back to the agonies of cataloging to which I referred earlier. You remember—everybody cataloging the same book. The reason that they were all cataloging it, of course, was that none of them knew that the other was. Given their druthers, some of them would not have cared if somebody else *were* cataloging it—they would have gone on and done it "right," anyway. The problem which we face in our library, and which I wish all libraries faced, is that the books arrive at our library the same time as they arrive at the Library of Congress. So we are tempted to play the waiting game, seeing whether we can outlast them, before we finally yield and do original cataloging for these books. Some libraries wait forever for the Library of Congress, and some have even been known to purchase a microfilm copy of a book which crumbled to dust waiting on a shelf in the catalog room to be cataloged.

MARC should be able to get the cataloging information to libraries sooner, especially since the regular catalog cards will be photocomposed from the MARC information. Libraries should no longer have to file proof slips, but should, instead, be able to rely on locally generated indexes to a MARC data base, or to interrogate this file via remote consoles. I emphasize that such a system can work very nicely in a non-interactive environment. A major difficulty in finding catalog information is that most files are arranged by main entry, and main entries are rather difficult to predict. It would appear that indexes arranged by title offer some advantage in searching for catalog information. With the computer, and with machine-readable catalog information, you can arrange the indexes in any form, for any time span, and even reject certain materials automatically.

Another important use of MARC information is as a selection tool for ordering. Although the MARC record can be used to generate purchase orders, it can also be used very nicely to generate a selection list, arranged by class. The best material to order is the material you can catalog as soon as it arrives at your library, and, if you use the MARC data base as a source for ordering, you guarantee that you will move these books out into circulation very rapidly.

Toward a National System

All of this activity still places each library in a rather passive role relative to generating catalog information. We are still in the same situation—waiting for the Library of Congress to get around to cataloging *our* book. We have defined a method of communicating information from one library to another, and we have defined the rules for the bibliographic elements which must be included and identified. But it is still a one-way street. Now we need to consider sharing. We need an interactive catalog information system which will enable us to secure cataloging information if it is available. If it is not available, we need to be able either to leave a message that we want to

. . . so many people wax eloquent about conserving our human resources and yet condone our technical processing systems.

receive it when it is available, or that we will volunteer to catalog it and make it available. Such a system would be much like a reservation system for airline seats.

If we have to catalog all of our books without outside assistance, we pay a terrible price, and without giving—or receiving—charity. Or we may refuse to pay the price, letting the users pay instead, by not providing them with the information they need. If there was ever a method devised for giving a library a reputation for poor service, and for creating a large group of ex-users, then this is surely it.

We talk very glibly about cooperation, but you have probably noticed that libraries have great difficulty cooperating among themselves, especially after the euphoria of conferences and discussions has worn off. Costs are rising, and budgets are decreasing. There are more books and journals to acquire, and fewer dollars with which to process each one. Surely no area of librarianship is in such tragic condition, or suffers so much active neglect, as this business of getting the materials processed and out on the shelves. And things will continue to go this way until we all realize that it is in the best interest of all of us to do something about this problem. The methods and equipment are at hand. We lack only concerted and responsible support for such an undertaking. I am amazed that so many people wax eloquent about conserving our human resources and yet condone our technical processing systems.

I am looking toward this needed, and logical, next extension of MARC. You must remember that the Library of Congress is simply that—the congressional library. It is not our national library, built to serve the national community of libraries. What we are really looking for is an interactive National Union Catalog to make available to libraries everywhere our current bibliographic resources, and to give them active support in building these resources together, not in splendid isolation. MARC is the vehicle through which this can occur, and which makes it possible. The MARC system which we see today must be the forerunner of a more comprehensive, interactive system of shared bibliographic information. We simply cannot afford to reinvent the wheel thousands of times each day. Nobody is going to offer you this system ready-made. You are going to have to invest *your* time and sweat and money in it, and others are going to have to do the same. The ultimate worth of such a system is beyond measure, and the time for its appearance on the library scene is long overdue.

The MARC system which we see today must be the forerunner of a more comprehensive, interactive system of shared bibliographic information.

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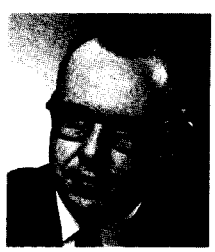
Hillis Griffin is director, Library Services Department, Argonne National Laboratory, Argonne, Illinois.



Use of the MT/ST at a Remote Facility to Produce Catalog Cards

Ann T. Brown

The Timken Company, Canton, Ohio 44706

■ Mechanics for producing thousands of catalog cards needed on a "catch-up" as well as a continuing basis were implemented by the decision to use a magnetic tape typewriter already in operation within The Timken Company. Major problems of typist instruction and supervision arose due to the location of the research library at a facility twelve miles from the main plant typewriter installation. Redundant handling and loss of materials posed real dangers. Analysis of procedures feeding into the proposed card production system suggested a solution making use of work sheets and continuous typing forms.

THE TIMKEN RESEARCH LIBRARY collection represents a highly specialized interest in ferrous metallurgical and engineering investigations. As an industrial research library, it must make recorded knowledge readily available in order to avoid costly duplication of research effort. Fragmented parts of a collection, served by no central index reflecting complex holdings, become vulnerable to incomplete or inaccurate search for already reported information.

Checking the card catalog against the shelves showed that thousands of catalog cards were needed to "catch-up" with the existing collection; and further, that thousands more would be needed in the future on a continuing basis for incoming material. The intended goal would be provision of an accurate, in-depth central index. For items cataloged by The Library of Congress, purchase of printed cards was specified; but the bulk of the collection would still need original catalog cards.

Analysis of workloads carried by library personnel indicated no appreciable increase in card typing could be realized from this source. Nor was typist help available elsewhere in the research center. However, at the main plant location some twelve miles distant, the company had within its service structure a central typing facility, including an IBM Magnetic Tape Selectric Typewriter (MT/ST). These facilities were available, and it was possible to convert MT/ST output tape to computer tape for storage and later use. There was also a central computer facilities area, undergoing considerable expansion to relieve heavy scheduling. Internal mail delivery arrived four times a day and included pick-up and delivery at the research center.

Problems

Location of the research center twelve miles from the main plant presents two

problems inherent to distance: handling of materials and typist supervision. Pencil markings on the books and reports for catalog card format did not seem too objectionable, but sending these materials *in quantity* through the internal mail system *did* seem objectionable. And there was the undesirable feature that items parked on a distant desk during typing were unavailable for primary use. Later each item would have to be handled again for insertion of circulation control records. Redundant handling and loss of materials posed real dangers. Although no appreciable increase in production could be expected from research library personnel, their special training was available to draw upon if there were some practical way to transfer library "know-how" to the MT/ST typists for mass catalog card production. A practical solution to both problems seemed to be offered through the use of catalog typing worksheets.

The Worksheet

A Catalog Typing Worksheet (CWS) would have to meet the following:

- Supply must easily be maintained; typing onto a multilith master would allow printing on standard 8½" × 11" paper.
- It must be able to contain complete and sufficient information to serve in place of the item needing catalog cards.
- It must allow typing in a consistent, repetitive pattern or format. No library personnel would be present to answer questions during typing: typing instruction could not vary from one CWS record to another.
- It must specify for each record how many and what types of cards were to be typed.
- It must provide sufficient specificity to allow search and retrieval capability for both the MT/ST and the storage medium.
- It must allow provision for later update of stored records.

Layout for the CWS was designed to make maximum use of standard 8½" × 11" paper. Line and space numbers inside the boxes refer to elite type, or 12 pitch on IBM machines, positioned on a 125mm × 75mm catalog card, using 17 vertical lines and 59 horizontal spaces as a standard. Design format was finalized *after* discussion with MT/ST typists.

An MT/ST equipped with library option works on a two-tape principle. One tape carries a set of typing instructions and the other holds the copy being worked on, eventually to come out of the MT/ST as the master tape. Master tape output contains information from the catalog typing worksheet broken down into blocks and assigned identifying reference code numbers.

Training MT/ST typists to become familiar with the terms of the material they were expected to type and with the terms of the instruction was accomplished in a two-hour session. Providing samples of cards which the library staff had typed according to instruction allowed the MT/ST typists to follow the same instructions and compare results. Planning and testing the program of machine instructions to carry out the library search option took several days time, and was facilitated by prior knowledge of *what library catalog cards looked like* (Figures 1, 2). The key to consistent typing was a set of instructions for library personnel indicating standard procedures to follow in filling out the CWS.

Format Followed

Block **1** is reserved for the shelf number (call number) indicating location. In many instances the shelf number could be a Library of Congress classification number; it could as easily be an AD number from *USGRDR*. Shelf numbers appear on catalog cards in the upper left corner beginning line 2, space 2. Typing instructions direct that the number be picked up exactly as it appears on the CWS; library procedures for filling out the CWS indicate the use of a flexible combination of letters and numbers, up to a maximum eight spaces and eight

i	SHELF NUMBER (line 2 - space 2)

AFMDC
70-1
1970

ii	TOTAL CARDS 18
	Unit Cards 4 label
	HEADING Cards 14 (line 2 - space 10)
	arabic 8 roman 6

iii	ACCESS NUMBER (line 15-space 2)	iv	ORDER NUMBER (line 17-space 2)

1 011 023 7108076

v	MAIN ENTRY (line 4 - space 10, can continue margin 10)

Air Force Machinability Data Center. Metcut Research Associates Inc. Cincinnati, Ohio.

vi	TITLE (line 5 - space 12, or next line following MAIN ENTRY; can continue margin 10)

MACHINING OF HIGH STRENGTH STEELS WITH EMPHASIS ON SURFACE INTEGRITY.

vii	IMPRINT (leave one space, then immediately following TITLE on same line; can continue margin 10)

AFML(MAAM) Wright-Patterson AFB, Ohio.

viii	PARAGRAPHS (skip a line following IMPRINT space 12; can continue margin 10)

~~Authors:~~ Michael Field, William P. Koster, John B. Kohls, Robert E. Snider, John Maranchik, Jr. Contract No. F33615-69-C-1112. Project No. 8975.

ix	TRACINGS (skip a line after last PARAGRAPH space 12; continue margin 10)

electrochemical machining
fatigue strength
grinding
high strength steels
nondestructive testing
plastic deformation
residual stress
stress corrosion
+ inspection
+ heat treatment

I. Title.
II. Title: SURFACE INTEGRITY.
III. Metcut.
IV. Contract No.
V. Field, ~~Michael.~~ M
VI. Koster, ~~W. P.~~ WP

UC - WEL + AJ Burnett
MC
SL
4
Thes - Met o.k. 11/8

Figure 1. Catalog Typing Worksheet.

lines. In actual practice, maximum fill is almost never utilized.

Block ii serves a dual purpose: it instructs the typist how many and what kind of cards to make, and to insert a coded reference at this point reserving room for future use. None of the instructions or information in this block is typed onto the catalog cards.

Use of continuous card stock had been anticipated, to cut down on the time necessary for insertion and alignment of individual cards. Trial on a comparative basis of continuous card stock and strip form card stock led to selection of the strip form for use; no typewriter changes were needed, leaving the MT/ST immediately available for routine office use.

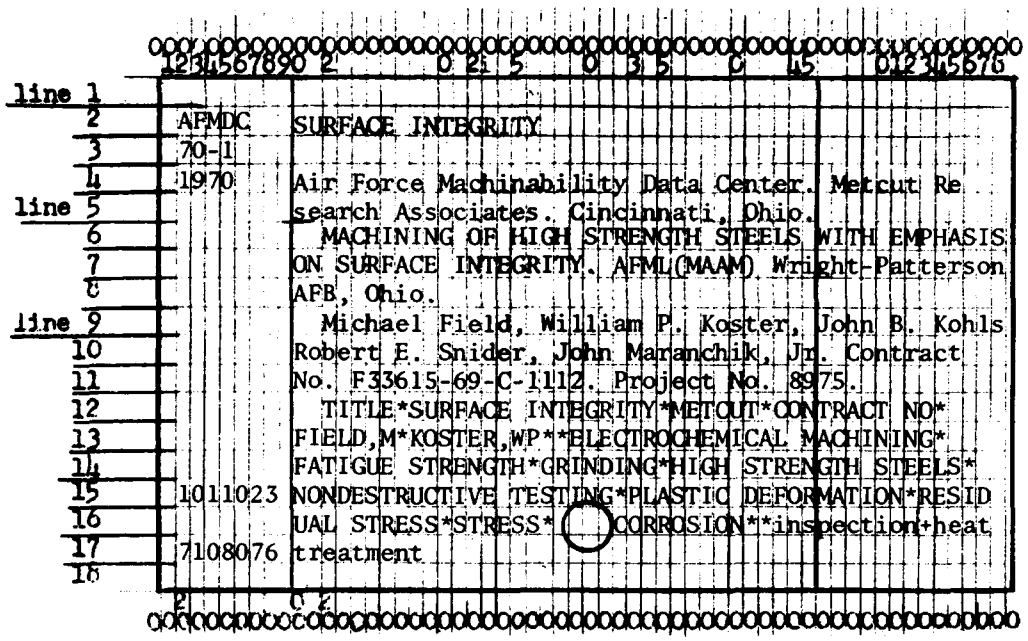


Figure 2. Catalog Card Typed from Information in CWS in Figure 1.

Our first experience with card stock in strip form was with 8-up strips having prepunched holes, which the typists used to line up for typing position. It turned out to be too easy to mis-align type which would be chopped off at cutting; it was also too easy for the big cutter blade to make uneven divisions. This led to the design and use of a card stock in 10-up strips having both holes and lines, plus stubs on the top and bottom.

Label typing specified in block ii is done concurrently with a batch of card stock typing. Label stock is a two-part, 5-up perforated strip-form, whose typing provides labels and circulation control records. The upper layer consists of die-cut self-adhesive labels, one large and two small. Typing on the large label would be from the unit record (first only if more than one card) and would produce a carbon copy typed onto the verso of the circulation control card underneath. Typing on the two small labels would print out the shelf number, one copy of which becomes the spine label. No other layers lie under the small labels. Perforations run the width of the form and allow separation without cutting (Figure 3).

Circulation records are filed during use by shelf number. These cards are pre-printed on one side to receive the user name, with space allowed in the upper left corner for a small label containing the shelf number; on the verso is a carbon copy of unit record information.

Since the label stock would not need to undergo a separate operation for cutting, this would allow preparation of the article for shelf readiness prior to the arrival and filing of the catalog cards. Large labels can serve as folder labels, eliminating the necessity for separate typing. It is cheaper to discard unwanted parts at this point than to specify for non-typing.

Block iii contains a 7-digit access number referring to the entire record represented on the catalog typing worksheet. It appears on the catalog card in the lower left corner.

Block iv is reserved for cost data. Order numbers relating to acquisitions are filled in here, to provide a reference to supply information: always seven digits.

Block v is reserved for author main entries, quite often corporate. This block is reference coded to pick up and type

out the entire contents of this entry. Titles as main entries appear in the following block; searching for title main entries will be handled on an author AND/OR title logic.

Block **vi** will hold title entries; titles as main entries will be discernible by the empty space in block **v**. In picking up block **vi** for a heading card, only those letters in capital letters will be typed. Subtitles and article titles will not appear on HEADING cards; they will be contiguous with that part in caps during a block **vi** or Title search.

Reference codes are not made to blocks **vii** and **viii**. Information appearing in these two blocks will be printed out as part of the unit card record, but is not separately searchable. Specific added entries may be made as roman numerals, where provision exists to code each individually.

Since all CWS records at this point would contain both fixed and variable length fields, and since the number of fields could vary according to the number of tracings used, there is a constant number of blocks (fields) each having only one reference code, followed by a final block containing a variable number of reference codes. Blocks **i** through **vi** always are referenced in the same order, and have one reference code each which includes the entire content of the block.

Block **ix** contains all tracings, both subject and added entries. The number of tracings varies considerably according to the nature of the materials being entered. As many reference codes to individual entries may be made as desired. It is also possible to include entries in this block which will be printed as part of the unit record, but which will not be reference coded or made into HEADING cards.

Final Preparation

Following typing, the card stock must go through a separate process for cutting. Label stock comes directly to the library for immediate use. Worksheets are returned to be filed in access number order. Cards are returned from the cutting

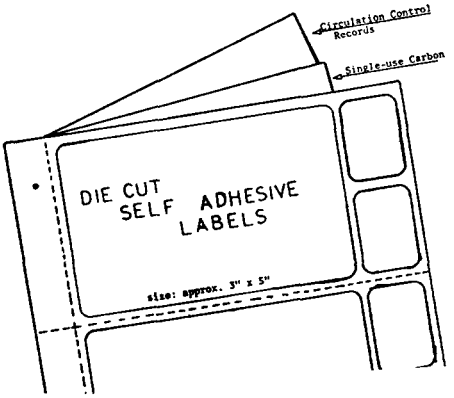


Figure 3. Label Typing.

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operation ready for insertion into the files. Storage of the master tape is continued in MT/ST cartridge form until approximately 40 are accumulated for transfer to computer tape.

There are undoubtedly other methods of card production which are quite workable, and whose cost features are attractive. However, for the combination of factors involving distance and personnel limitations, the use of catalog typing worksheets leading to the production of catalog cards is very workable. And these worksheets provide us with the basis for expansion of research library services and capabilities.

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Ann T. Brown is research librarian, The Timken Company, Canton, Ohio.

Many Benefits from Centralized Library Services

Thomas Morey

Xerox Corp., Rochester, New York 14603

THE BENEFITS of a small, but highly competent, centralized unit called Library Services (LS) are being demonstrated by Xerox Corporation's information product activities.

Library Services ties together three company reference libraries located in downtown Rochester, Webster, N.Y. and Henrietta, N.Y., suburbs of Rochester.

Established in 1965, LS is responsible for the acquisition and processing of all books, periodicals, internal and external reports, and translations for not only the libraries but also for all individuals in the Rochester area and all information products branch and field locations throughout the country. It also serves corporate headquarters in Stamford, Conn.

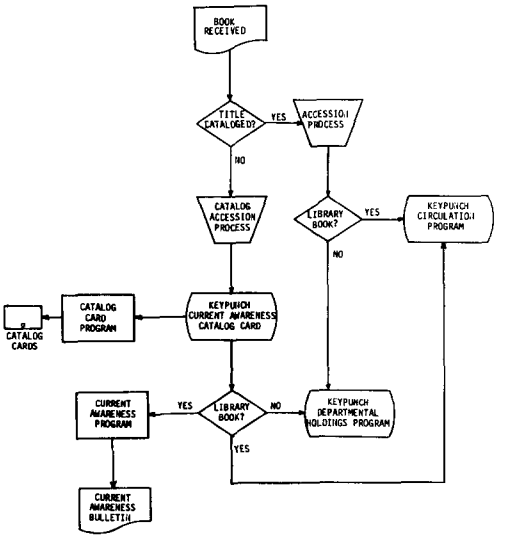
Benefits are numerous. The economies of mass purchasing are significant when a single check and order suffice for as many as 50 subscriptions to the same journal. The actual cost is prorated among the activities requisitioning the purchases rather than being borne by Library Services.

Each subscription is keypunched as processed. Data elements include title, cost, subscriber, his location, budget center, and expiration date. The program is run on a Xerox Sigma 7 computer. It automatically sorts and prints in three formats: alphabetically by title, alphabetically by subscriber, and alphanumerically by budget center. In the third printout each budget center is "page ejected." That is, each center is listed on separate pages with a total cost summation of the subscriptions charged to it at the bottom of the listing.

When a new book is received by LS, the procedure is this (Figure 1):

1. Is the title cataloged? That is, is a duplicate already in the system? If yes, a new 5-digit accession number is assigned and stamped on the title page. An exterior label containing the catalog number of Library of Congress classification is added and an interior slip affixed to the end paper. If circulation is contemplated (i.e. a library copy), a card pocket goes on, and the book is keypunched for the circulation program. If the book is not to be circulated, the book is key-

Figure 1. Flow Chart of All Books Received.



punched for the departmental holdings program and delivered to the department that requisitioned it.

2. If a new book has not been cataloged, it is classified according to Library of Congress and keypunched for the catalog card program. The rest of the procedure is the same as above. If the book is to become a library book, it is included in a current-awareness program, and notice of its arrival is given in the next monthly current awareness bulletin.

Since the inception of the program in 1965 a Thesaurus of Descriptors has been compiled and is constantly updated for the indexing of internal and external reports.

All reports are accessioned for filing and retrieval purposes and assigned descriptors. They are then processed by subject, authors (personal and corporate), accession number, special numbers and location. All of this information is keypunched and entered in the data base.

Through the centralized function for all informational material a master file record is organized and keypunched. From this master file record an automated operation for producing catalog cards evolves.

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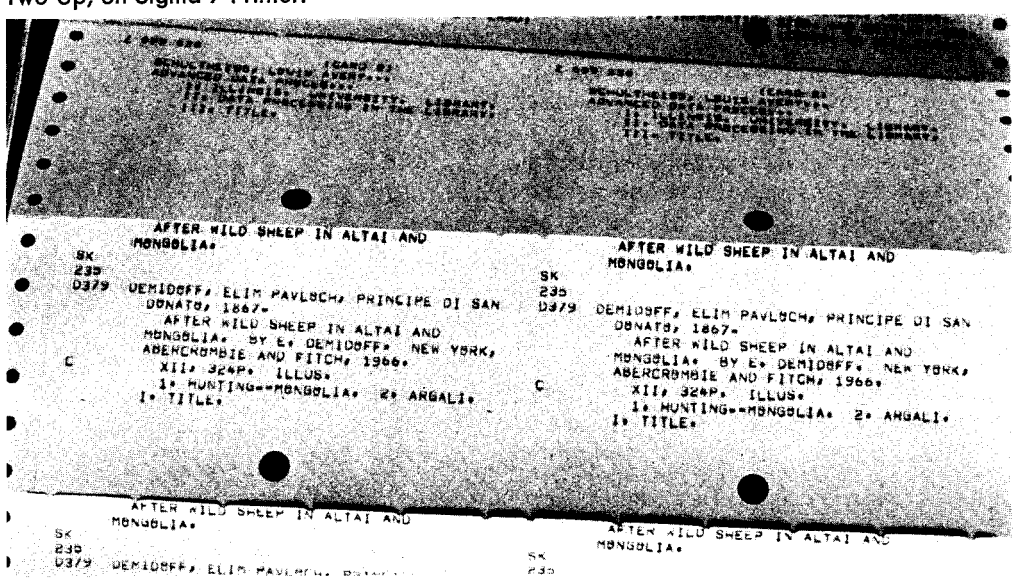
Figure 2. Catalog Cards Are Printed Out, Two Up, on Sigma 7 Printer.



A catalog card generator (Figure 2) automatically produces four similar library catalog cards from keypunched card input. One card goes to each of the Xerox libraries, and the fourth remains in Library Services.

This program currently handles books, internal reports, external reports, and translations. Data elements punched on the card include title, author, subject headings (called descriptors for reports and translations), special numbers, and added information. Data are entered by a remote terminal (Figure 3), processed in a Univac 1108 computer, and printed on a Xerox Sigma 7.

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Figure 3. Operator Places Keypunch Cards into Sigma 3 Terminal.

The printed cards come out alphabetically arranged, ready for filing.

The same keypunched card data that generate the library catalog cards are used to produce the current awareness bulletin. This monthly program is identified as the "permuted index system." Permuted index evolved from the company's keyword-in-context program, which was merely a rotation from end to end of a book or report title and the alphabetical listing of the key words in it.

In the system, the program assembles subject index keywords and author index terms and rearranges, or permutes, them in alphabetical order, with various data elements representing reports or books indexed under the respective indices listed below each term (Figure 4).

The current awareness bulletin contains three sections. The pages are color coded according to category: books (blue), internal reports (green), and external reports (pink). The internal reports are cross referenced according to author on white sheets, and the external reports are cross referenced according to originator index, also on white.

Under a proposed expansion, the keypunched input used to generate both catalog cards and current awareness bulletins will find a further use in an Information Storage and Retrieval (IS&R) system. Periodically the input will be read onto a master magnetic tape. In conjunction with another proposal, the Selective Dissemination of Information system (SDI), this tape will be updated periodically as new data (reports, books, etc.) are cataloged.

The SDI system will use the input for the master tape. Specific interest profiles in various logic arrays will be entered onto another tape and, as the master tape is updated the profile tape will be run against the new input. All "matches" will be printed out and distributed to those on the SDI network.

This entire automation package is nearing programming completion for conversion to a *C*omputer *O*utput *M*icrofilm (COM) system. A trial session will be initiated to prove a faster turnaround time, better quality print for the catalog cards and bulletin, plus an overall economical program.

Since Library Services is a young unit, its centralized procurement and processing methods employ modern aids like data processing. Such measures have proven both efficient and economical, and, as Library Services moves toward further substantial help in Xerox activities, it is reasonable to suggest that it will introduce even more sophisticated innovations.

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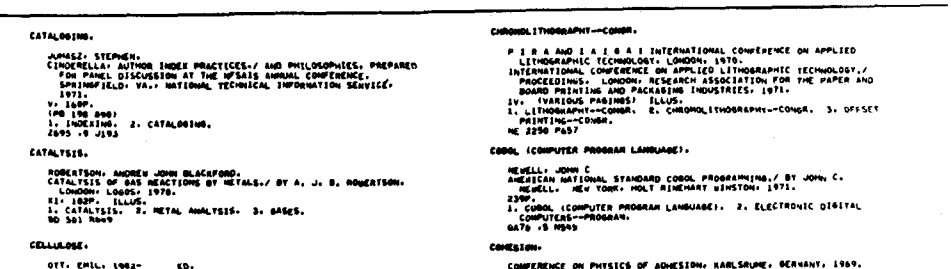
Thomas J. Morey is manager, Systems and Services for Libraries, Xerox Corporation, Rochester, N.Y.

Figure 4. Portion of Sample Page from Current Awareness Bulletin.



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Z695 .9 J193

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1. LITHOGRAPHY--CONGR. 2. CHROMOLITHOGRAPHY--CONGR. 3. OFFSET PRINTING--CONGR.
NE 2250 P657

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NEWELL, JOHN C
AMERICAN NATIONAL STANDARD COBOL PROGRAMMING./ BY JOHN C. NEWELL. NEW YORK: HOLT RINEHART WINSTON, 1971.
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QA76 .5 N565

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197P. ILLUS. EDITED BY REINHARD POLKE AND PETER HOHN.
1. ADHESION. 2. COHESION. I. POLKE, REINHARD, ED. II. HOHN, PETER, JT. ED.
QC 183 C643

Current Literature in Technical Processes

A Selective Annotated Bibliography

George V. Hodowanec

Drexel University, Graduate School of Library Science, Philadelphia, Pa. 19104

THIS ANNOTATED BIBLIOGRAPHY is an outgrowth of a course in technical processes offered at the Graduate School of Library Science, Drexel University. The need for an up-to-date collection of materials dealing with the various aspects of technical services prompted the development of this list of readings. To account for varying nomenclature and different organizational arrangement of sections within the technical services division, certain articles are cross referenced and listed in more than one place. This bibliography, which is as current as the availability of resources in a given aspect of technical processes permitted, is by no means comprehensive but rather includes materials which are relevant to the topics covered in the course as well as those which the students found useful while working on their assignments. Topics which are discussed in this course are:

- Circulation department and various charging systems in use;
- Operation of the acquisition department;
- Operation of the serials department;
- Cataloging department;
- Management of binding, mending and repairing tasks;
- Cooperative acquisition projects;
- Administration of technical processes division.

J. Thomas Vogel, a student and a graduate assistant at the Graduate School of Library Science, Drexel University, has assisted in the compilation of this bibliography.

I. TECHNICAL SERVICES

A. General

1. Adams, Charles J. / Statistical Chaos: Technical Services in Public Libraries. *Library Journal* 91: p.2278–2280 (May 1, 1966).

   This survey of 29 libraries serving cities from 100,000 to 130,000 population presents a broad spectrum of information on technical services departments. Most libraries use Dewey, do their own processing, and employ a combination of LC and Wilson cards. The personnel range was 1.5–14, total salary expenditures varied from $6,500 to $60,000, total book budgets from $16,000 to $100,000, total annual cost of ordering, cataloging and processing from $17,000 to $60,000, average processing cost/book from $0.25 to $5.00. Estimated time for getting books to the public is 14–20 days. This survey underscored the lack of adequate statistical records in many libraries. Attempts to analyze the data generated found no correlations of any strength.

2. Auld, Larry / Functional Organization Plan for Technical Services. *Library Resources and Technical Services* 14: p.458–462 (Summer 1970).

   Auld is head of technical services at the Oregon State University Library. In this article he proposes basing the organization of technical services on function rather than form of materials. There should not be separate divisions for handling serials, audio-visual software, microforms, etc. because of duplications of time and effort and because this ignores the raison d'etre of a library—content. Technical services should be divided into four functional areas: selection, purchasing and receiving, access to materials, and physical preparation of materials. The possible clash between professionalism and function is considered, but not resolved.

3. Dennis, Donald D. / *Simplifying Work in Small Public Libraries.* Philadelphia, Drexel Institute of Technology, 1965.

The result of an 18-month study of the routines followed in small public libraries, this manual contains practical methods for doing routine tasks in the most efficient manner. The appendix provides charts of cataloging and book preparation costs.

4. Lindgren, William F. / CSU Reorganizes Technical Services. *The Colorado Academic Library* 6: p.9–11 (Spring 1970).

   When the cataloging backlog at the Colorado State University Libraries began to reach 50% of the year's acquisitions, a reorganization of technical services was undertaken. This resulted in the centralization of bibliographic searching in an Identification Unit, eliminating overlap in searching; the reorganization of the card catalog, giving the title section of the public catalog new importance; and responsibility for the preparation of LC-NUC copy being given to a new Preparations Unit. These changes have allowed catalogers to increase their output of original cataloging by 42% in a one-year period.

5. Pirie, James W. / Junior College Library Processing. *Library Trends* 14: p.166–173 (Oct 1965).

   This article is based on a survey of 135 junior college libraries conducted by A. R. Rowland in 1962/63. It reveals that most junior college libraries are small in terms of collection and budget and have a small staff—often only one librarian. The staff size determines the processing systems used and makes absolute division of work into professional and non-professional tasks unfeasible. Despite this, most libraries reported doing their own cataloging, using Dewey Decimal classification, LC subject headings, and ALA filing rules.

6. Piternick, G. / University Library Arrearages. *Library Resources and Technical Services* 13: p.102–114 (Winter 1969).

   This article reports the results of a survey of arrearages in 86 American and Canadian university libraries and is designed to fill a serious gap in the literature. After discussing recent factors—increased expenditures, shortage of trained personnel, etc.—which may have affected arrearages, the questionnaire and its results are examined: 78% of the libraries surveyed reported arrearages; arrearage items were usually selectively deferred due to complexities they presented for cataloging, i.e., an item which could be processed more rapidly was given higher priority. Great diversity emerged in the handling of uncataloged books in regard to inclusion in the card catalog, arrangement and physical storage, circulation and shelving. However, it was found that about ½ of the libraries attempt to list some or all arrearage books in their catalog; that over ¾ circulate arrearage books, and that 3/5 of the libraries with arrearages expect the arrearages to increase.

7. Randall, G. E. / Special Library Standards, Statistics and Performance Evaluation. *Special Libraries* 56: p.379–386 (Jul-Aug 1965).

   Randall is the librarian of the Watson Research Library of IBM. He presents a wide variety of statistics and comments on the operation of his own library and attempts to generalize from his own situation to all similar libraries. He employs such figures as circulation/user, circulation/acquisition, as well as the ratio of professional/non-professional. He finds that photocopying figures are a good indicator of a library's relative strength.

8. Storm, Herman R. / Some Common Types of Technical Services Departments: Standard Features and Variations. *Wisconsin Library Bulletin* 63: p.166–167 (May-Jun 1967).

   Storm discusses the composition of the technical services division which he sees as composed of three functional areas: ordering, cataloging and classification, and physical preparation. He feels that the ordering and classification functions must be closely associated and he includes a flow chart indicating the positions that are best for organizing the tasks to be performed.

B. Centralized Processing

9. Darling, Richard L. / Is Centralized Processing for You? *Library Journal* 91: p. 6153–6156 (Dec 15, 1966).

   This article evaluates the case for centralized processing. Its primary contribution is the examination of the efficacy of the frequent, even weekly, placement of orders. The advantages cited include: fewer errors by avoiding periodic overload in processing, reduced idle time in non-peak periods, and a reduction in long delays in ordering. There is also a review of existing research and a bibliography.

10. Greensboro (North Carolina) Public Schools / *Centralized Ordering, Cataloging, and Processing of Library Materials: An Outline*. Greensboro, N.C., Greensboro Public Schools, April 1969.

    This bulletin outlines the procedures of the technical processing center for the libraries of the public schools in Greensboro, North Carolina. Statistics are given that relate to the size of the school district and the volume of work done by the processing center. Detailed description of the facilities, equipment and staff are included, as are copies of forms used. No operational costs are given.

11. Hendricks, Donald D. / Centralized Processing: A Directory of Centers. *Library Resources and Technical Services* 14: p.355–389 (Summer 1970).

Arranged by states and with addresses given, this directory provides information on non-commercial central processing centers which serve two or more different jurisdictions. It also indicates whether the center serves school or public libraries or a combination of the two.

12. Holmes, Rose and Lively, Gladys / Computer Processing for All Media in Madison Schools. *Wisconsin Library Bulletin* 66: p. 319–324 (Sep-Oct 1970).

This article discusses the central cataloging and processing center of the Madison, Wisconsin, public schools. Established in 1953, it now serves 52 units, catalogs over a half million books and 4,000 audiovisual items. The center uses a computer for compiling recommended purchasing lists, for computer ordering, for budget control, and for other records and reports.

13. Jones, Milbrey L. / Technical Services for School Libraries—Exploring New Methods. *The Bulletin of the National Association of Secondary School Principals* 50: p.52–58 (Jan 1966).

Jones discusses the inordinate expenditure of the librarian's time in processing even the simplest books and audiovisual items. He cites the recommendations of the American Association of School Librarians for central processing when the school system is composed of three or more schools. The use of commercial cataloging is discussed and the fact that little commercial cataloging of non-book materials is available is stressed.

14. Kurtz, Helen G. / Centralized Processing—Diversified. *Library Journal* 95: p.1807–1812 (May 15, 1970).

The Processing Center of the Rhode Island Department of State Library Services began with the concept of freeing librarians for better service to the public. Service is provided to both public and school libraries and the assignment of a code number indicating the type of processing desired by each library permits variations in the treatment of books destined for the various libraries. One of the problems encountered was the uneven flow of work due to the fact that school book orders were placed twice yearly.

15. Leonard, Lawrence E., Maier, Joan M. and Dougherty, Richard M. / *Centralized Book Processing: A Feasibility Study Based on Colorado Academic Libraries.* Metuchen, N.J., Scarecrow Press, 1969.

This book summarizes the results of a 14-month study of the feasibility of establishing a book processing center to serve the nine state-supported college and university libraries of Colorado. It includes a brief history of centralized processing, a profile of the participating libraries, operational characteristics and a cost analysis of technical services. Tables of summary data are included in the text to support the findings of each section, while more detailed data summaries and forms used in collecting and analyzing the data are located in the appendices. A scope list of standardized technical processing activities used in library cost analysis is included.

16. Whitenack, Carolyn I. / Technical Processing of Materials in the Instructional Materials Center. *Drexel Library Quarterly* 5: p.170–173 (Jul 1969).

This article makes the following points: if technical processing is managed outside the IMC, the librarian has more time to work with students and teachers; more technicians and clerks must be used at the district and regional levels to spare professional time from being wasted on clerical routines; technical processing must be planned in units sufficiently large so that it will be economically feasible to have a professional supervisor with clerical personnel; systems too small to operate a processing center should consider cooperating with other school districts or establishing central processing on the state level.

II. ACQUISITIONS

A. General

17. Byrd, C. K. / Subject Specialists in a University Library. *College and Research Libraries* 27: p.191–193 (May 1966).

This article describes the duties of the ten subject specialists at Indiana University whose creation was an attempt to meet the needs of those academic departments not well served by the existing library organization. Better service was to be accomplished through improved book selection, better and more personalized service, and improved communication. While the addition of these specialists to the library staff necessitated an increase in the budget, improved balance in the collection and communication with the faculty justify the expense.

18. Danton, J. P. / Subject Specialists in National and University Libraries with Special Reference to Book Selection. *Libri* 17: p.42–58 (1967).

This article examines book selection by subject specialists in large European university libraries. The methods employed in these libraries are described, particularly

as they involve the utilization of the skills of scholarly subject specialists who are also trained librarians. Much of the article is given over to the comparison of American and Continental practices in this field. The author recommends that American libraries adopt a comprehensive plan of book selection by library staff specialists to insure that important books in relevant fields are acquired, place authority where only responsibility presently exists, and make book selection subject to library administrative control and supervision.

19. Dougherty, Richard M. and McKinney, Abigail / Ten Years of Progress in Acquisitions, 1956–1966. *Library Resources and Technical Services* 11: p.289–301 (Summer 1967).

    The last ten years have brought changes in acquisitions work including federal aid to libraries, mass purchasing techniques, inter-institutional cooperative acquisitions programs and mechanization of ordering and related procedures. This article reviews these changes in some detail. For similar treatment on an annual basis see: *Library Resources and Technical Services*, "Acquisitions in 19XX."

20. Haro, Robert P. / The Bibliographer in the Academic Library. *Library Resources and Technical Services* 13: p.163–169 (Spring 1969).

    Haro states that the bibliographer should not be a part of the acquisitions or reference departments, but rather that he "should be directly responsible to an assistant director of libraries who is responsible for the development of the collection." The duties of Haro's "bibliographer" include: 1) selection of library materials, 2) dissemination of information concerning the arrival and availability of materials, 3) guiding the development of the collection of the library, 4) preparation of annotated bibliographies, 5) advanced reference service, 6) instruction in library use. He feels that the qualifications of such a bibliographer are: 1) a master's degree in library science, 2) a subject background attested to by an advanced degree, 3) proficiency in one or more foreign languages, 4) knowledge of the book trade.

21. Huff, William H. / The Acquistion of Serial Publications. *Library Trends* 18: p. 294–315 (Jan 1970).

    See annotation #95.

22. Jackson, Isabel H., ed. / *Acquisition of Special Materials*. San Francisco, Special Libraries Association, San Francisco Bay Region Chapter, 1966.

    This book is a collection of articles on the problems of and the sources for acquiring government documents, serials, out-of-print titles, technical reports, trade catalogs, specifications and patents, conferences and symposia, maps, and microtexts. Also covered are interlibrary loan, standards, and photocopying.

23. Lopez, Manuel D. / A Guide for Beginning Bibliographers. *Library Resources and Technical Services* 13: p.462–470 (Fall 1969).

    This article describes the steps a bibliographer should take upon entering a new position: 1) become familiar with the collection, 2) consider local resources, 3) determine philosophies and policies of various departments of the library, 4) evaluate the collection, 5) learn the procedures and problems of the acquisitions department, 6) develop own sources of information, 7) review periodicals. The author states that the functions of the bibliographer include: 1) book selection, 2) assisting other departments in verifying bibliographic information or to locate addresses and resolve cataloging problems, 3) introductory tours of the library for new faculty and graduate students, 4) preparing bibliographies for the faculty, 5) consulting with faculty and graduate students in research projects, 6) evaluating his own work.

24. Maier, Joan / Analyzing Acquisitions and Cataloging Costs. *Library Resources and Technical Services* 13: p.127–136 (Winter 1969).

    See annotation #155.

25. Mitchell, B. J. et al. / Junior College Materials. *Choice* 6: p.28–33 (Mar 1969).

    "The purpose of this paper is to explain why the selection of technical-vocational materials is difficult for the junior college librarian and to suggest some approaches to solving the difficulties." This article suggests that selection is made difficult by three factors: the number (198) and variety of technical and vocational programs, the liberal arts orientation of junior college librarians, and the lack of selection guides.

26. Quinly, William J. / Selection, Processing, and Storage of Non-Print Materials: Aids, Indexes, and Guidelines. *Library Trends* 16: p.274–282 (Oct 1967).

    See annotation #163.

27. Thompson, Lawrence / Acquisition of Books and Pamphlets. *Library Trends* 18: p.280–293 (Jan 1970).

    This article emphasizes research libraries and discusses the ways and means of acquiring the approximately 25% of the library collection which is not readily available from commercial sources, but is, nevertheless, of considerable interest to some patrons. The areas covered include the intellectual qualifications for acquisitions li-

brarians, probable gaps in collections, the selection of foreign and domestic jobbers, and the specialized demands of academic users.

28. Treyz, Joseph H., Evans, Robert W., and Richards, James H. / The OP Market. *Choice* 2: p.283–286 (Jul 1965).

See annotation #55.

29. Tuttle, Helen Welch / An Acquisitionist Looks at Mr. Haro's Bibliographer. *Library Resources and Technical Services* 13: p. 170–174 (Spring 1969).

Helen Tuttle feels that Haro's broadening of the concept of a bibliographer's duties serves to place that position beyond the capabilities of a single individual and is a distortion of the true function of the bibliographer as well. She advocates a return to the more traditional view—that the bibliographer does not exist to criticise and evaluate the content of books, but to examine the physical format and details. He should make his selection guided by the suggestions of the faculty and students. Therefore, his duties only consist of: 1) seeking information that is complete enough to avoid duplication of titles already in the collection, 2) enabling the agent to identify and secure the title wanted, 3) exercising the bibliographic control over the title while it is in the process of acquisitioning and cataloging.

30. Whetstone, Gloria / Serial Practices in Selected College and University Libraries. *Library Resources and Technical Services* 5: p.284–290 (Fall 1961).

See annotation #102.

31. Wulfekoetter, G. / *Acquisition Work*. Seattle, University of Washington Press, 1961.

See annotation #57.

B. Cooperative

32. Bishop, G. H. / Computers and Acquisitions: The Experience of the Libraries at the State University of New York at Binghamton. *Library Resources and Technical Services* 14: p.407–420 (Summer 1970).

See annotation #109.

33. Coppola, Dominick / The International Bookseller Looks at Acquisitions. *Library Resources and Technical Services* 11: p. 203–206 (Spring 1967).

Faced with a rapid expansion in collections, librarians should keep abreast of developments in the booktrade. The author urges librarians to avail themselves of the services offered by the international dealer for both domestic and foreign titles because these dealers often possess bibliographic information not found elsewhere. He cites successful cooperation between libraries and the book trade in acquiring Latin American publications and cites as a further example of the services that can be rendered by foreign book traders the acquisition of selected foreign fiction.

34. Downs, Robert B. / Future Prospects of Library Acquisitions. *Library Trends* 18: p.412–421 (Jan 1970).

This article contains a history as well as a description of cooperative library acquisitions programs in the United States, including the Library of Congress global acquisitions program, the Farmington Plan, PL 480, and the Latin American Cooperative Acquisitions Program (LACAP). Downs feels cooperative ventures have a good future as a method for libraries to deal effectively with the "publications explosion."

35. Dudly, Norman / The Blanket Order. *Library Trends* 18: p.318–327 (Jan 1970).

This article reports the results of a survey of the heads of the acquisitions departments of 52 member libraries of the Association of Research Libraries. It indicates that most research libraries have one or more blanket orders, usually in the social sciences and humanities, rather than in the sciences. The advantages of blanket ordering most frequently reported were the prompt receipt of titles after publication and the even coverage of all subjects (as contrasted to the uneven coverage resulting from faculty selection). The disadvantages reported included uncertainty as to a specific title being received, an increased number of duplicates, and more ephemeral and marginal material. Nevertheless, those libraries who have blanket orders like them and none of the libraries queried intended to cut back on them. In fact, most libraries expressed a desire to increase such orders.

36. Morrison, Perry D. / A Symposium on Approval Order Plans and the Book Selection Responsibilities of Librarians. *Library Resources and Technical Services* 12: p.133–139 (Spring 1968). With reactions by Leroy C. Merritt, p.140–142; Joseph P. Browne, p.142–144; Stanley A. Shepard, p.144–145.

This article states that there is a trend in academic libraries toward delegating a much larger role in book selection to librarians and with it an increasing reliance upon blanket approval orders. It makes the case for approval plans and weighs the advantages and disadvantages of different types of plans. In the discussion that follows Dean Merritt agrees that a better job of selection can be done with the book in hand as opposed to a review in a magazine; Rev. Browne, addressing himself to approval plans for libraries with small budgets, suggests that limited approval plans

that fit into the specific needs of the college involved can be useful, but warns that unwanted books must be returned without fail; S. A. Shepard believes that some form of a plan can be worthwhile to any acquisition program, if a library can fit it into its budget.

37. Rebuldela, Harriet K. / Some Administrative Aspects of Blanket Ordering: A Response. *Library Resources and Technical Services* 13: p.342–345 (Summer 1969).

In response to an article by Thom (see #38) Rebuldela contends that blanket ordering need not mean more costly routines. She distinguishes between "blanket ordering" and "approval plans": the former, usually placed with a publisher, specifies that everything a firm publishes be supplied and does not include unquestioned return privileges; the latter is an agreement giving a dealer responsibility for supplying current books in special areas with return privileges. The author suggests that clerical procedures and searching can be simplified by printing simple bibliographic data to identify the item and then temporarily filing them by title. If routines involved in blanket ordering are too complicated, the library should consider switching to an approval plan which supplies 3″ × 5″ forms with each book. Screening books can be organized by general subject classification and scheduled for weekly reviewing by the faculty.

38. Thom, Jan W. / Some Administrative Aspects of Blanket Ordering. *Library Resources and Technical Services* 13: p.338–341 (Summer 1969).

This article does not discuss the blanket ordering of monographs, which has risen sharply in university libraries over the last decade, on its merits as opposed to title by title ordering, but instead focuses on its effect upon clerical routines. Initially it finds that there is less work involved in using blanket orders. However, when the books arrive, clerical routines are increased. Typing up a temporary slip for interim control from the original order form is not possible when dealing with blanket orders because the books arrive by the truck load with no original order forms listing title or any other bibliographic information. Therefore, this information must be garnered from the book itself. It may be possible to sacrifice interim control and have no record of the book until it appears on the shelf. Another suggestion is to hire more clerical help. The author contends that it may well prove more costly to acquire books by blanket ordering.

39. Wilden-Hart, Marion / The Long-Term Effects of Approval Plans. *Library Resources and Technical Services* 14: p.400–406 (Summer 1970).

This article contends that approval plans can be advantageous for adding the necessary basic books to a collection and at the same time can give librarians more time for special selection. Since it is important to select the plan most suitable to the needs of a given library, seven different types of jobber and publisher approval plans are described. The author urges that after using a plan librarians evaluate the service that they have received and the long-term effects it has had on collection development. While it is difficult to evaluate the cost of buying books in this manner as opposed to the cost of title by title selection, as each library evaluates its own plan and pools its experience with that of others, the long-term effects of approval plans on academic and research libraries can be estimated.

III. SEARCH

40. Coppola, Dominick / The International Bookseller Looks at Acquisitions. *Library Resources and Technical Services* 11: p. 203–206 (Spring 1967).

See annotation #33.

41. Fristoe, A. J. / Bitter End; The Searching Process. *Library Resources and Technical Services* 10: p.91–95 (Winter 1966).

This article describes the statistical methods for minimizing the cost of searching by finding the optimum number of tools to be searched and the optimum sequence of searching, starting with the most productive tool and ending with the least productive. It advocates that the searching process be designed for the "large bulk of uncomplicated entries." Also included are the results of a study undertaken to determine the optimum searching depth and sequence for current American imprints. It was found that a random bitter-end search of six tools cost $2,000/year as opposed to one productive sequence searching three tools costing $500. Costs were calculated on the basis of an estimated 30 seconds/search with a wage scale of $1.90/hour/searcher.

42. Heppell, Shirley G. / A Survey of OP Buying Practices. *Library Resources and Technical Services* 10: p.28–30 (Winter 1966).

This article reports the results of a survey of 151 college libraries in the United States regarding their out-of-print buying practices. Of the 92 questionnaires returned, it was found that 75% of the desired titles were in the social sciences and literature. The sciences and fine arts were listed as the next most crucial areas for wanted titles. The article concludes that at least 50% of the libraries assigned a relatively low priority to OP buying and that many librarians lacked knowledge of common practices which could enrich their holdings.

43. Lazorick, G. J. and Minder, T. L. / A Least-Cost Searching Sequence. *College and Research Libraries* 25: p.126–128 (Mar 1964).

This article is a study of the procedures of the acquisition department of the Pennsylvania State University Libraries. It indicates that an order had a high in-process time and that the "bottleneck" was in the searching procedure. The method devised to solve this problem involved the implementation of an optimum searching sequence based on an "adequate information" philosophy. An optimum sequence for English language monographs is included, but the author cautions that his findings (times, percentages) cannot be considered conclusive due to the inadequacy of the sample.

44. Lowy, G. / *A Searcher's Manual.* Metuchen, N.J., Shoestring Press, 1965.

This is a manual of searching procedures, based on the practices of the searching units of Columbia University Library and of 25 large university libraries surveyed by the author. It contains summary charts of various procedures, sample order forms and work sheets, and lists of bibliographic sources, including their coverage and abbreviations. Also discussed are alternative methods of maintaining outstanding order and in-process files.

45. Reichmann, F. / Purchase of Out-of-Print Material in American University Libraries. *Library Trends* 18: p.328–353 (Jan 1970).

This article includes a survey of the literature and interviews with representative librarians, book collectors, and book dealers in regard to searching procedures, purchasing practices, the administration of searching, and the maintenance and review of desiderata files. It also includes discussion of second-hand catalogs, auctions, advertisements, book scouts, U.S. Book Exchange, reprints and microreproductions, and percentages of book budgets devoted to OP materials. The history of antiquarian book trade is sketched and a six page classified bibliography is appended.

46. Searching. *Hawaii Library Association Journal* 24: (Dec 1967).

This special issue is devoted to searching because the editors believed that the subject had been neglected in the literature. The articles describe the detailed searching procedures of four American universities: Duke, Drexel, North Carolina, and Pennsylvania State.

47. Smith, Eldred / Out-of-Print Booksearching. *College and Research Libraries* 29: p. 303–309 (Jul 1968).

This article describes the procedures of the search division of the library of the University of California at Berkeley, whose desiderata file usually contains 30,000 items. It also discusses the methods of choosing dealers, of rotating lists among dealers so that a given item usually is sent to a new dealer every six months, and of reviewing files continuously so that every item is reexamined every eighteen months. The article includes comparable statistics of results produced by the current and previous methods.

48. Treyz, Joseph H., Evans, Robert W., and Richards, James H. / The OP Market. *Choice* 2: p.283–286 (Jul 1965).

See annotation #55.

IV. ORDERING

49. Hensel, E. and Veillette, P. / *Purchasing Library Materials.* Chicago, ALA, 1969.

This book reviews the bidding and buying practices of three public and three school libraries. It suggests how to find a good jobber and how to work efficiently with him once you have found him.

50. Jackson, Isabel H., ed. / *Acquisition of Special Materials.* San Francisco, Special Libraries Association, San Francisco Bay Region Chapter, 1966.

See annotation #22.

51. Paige, Nancy / Goals for Service. *Library Journal* 90: p.937–941 (Feb 15, 1965).

This article reports the results of a survey of book ordering by school libraries. It discusses the advantages of installment ordering (breaking up large orders), ordering by district or school and state contract. It concludes that time of year, size and placement of order are important factors in prompt delivery and percentage of books delivered.

52. Paige, Nancy / Is It Habit or Law? Cutting the Red Tape of Library Book Buying. *Library Journal* 89: p.909–913 (Feb 15, 1964).

This article states that high discount can often mean poor service, leading the author to ask for the elimination of the low bid requirement for purchases of books. It is more important that the school district take cognizance of the quality of the service provided by the jobber than his discount. This article reports on an on-going *School Library Journal* survey and suggests how to improve speed and efficiency in the delivery of book orders.

53. Smith, Katherine R. / Serials Agents/Serials Librarians. *Library Resources and Technical Services* 14: p.5–18 (Winter 1970).

See annotation #100.

54. Thompson, Lawrence / Acquisition of Books and Pamphlets. *Library Trends* 18: p.280–293 (Jan 1970).

See annotation #27.

55. Treyz, Joseph H. et al. / The OP Market. *Choice* 2: p.283–286 (Jul 1965).

Three academic librarians briefly discuss procedures, dealers, advertising, exchanges, gifts, searching, reprography, and various approaches to the acquisition of OP materials against a background of their own experiences.

56. Whetstone, Gloria / Serial Practices in Selected Colleges and University Libraries. *Library Resources and Technical Services* 5: p.284–290 (Fall 1961).

See annotation #102.

57. Wulfekoetter, G. / *Acquisition Work*. Seattle, University of Washington Press, 1961.

Among the chapters of interest in this work are Chapter 5, "Order Work," which describes in detail standard procedures for the verification of titles, checking for publication status, and finding sources of supply for both trade and non-trade books, and Chapter 9, "Serials, Binding and Other Acquisitions Work," which describes methods for the acquisition of serials, including the completion of sets.

V. CATALOGING

A. General

58. Dolby, J. L. and Forsyth, V. J. / An Analysis of Cost Factors in Maintaining and Updating Card Catalogs. *Journal of Library Automation* 2: p.218–241 (Dec 1969).

While indicating the problems that arise in studying comparative costs, this study attempts to compare the costs of manual and computerized catalogs. Automated methods seem to have a cost advantage for full entries, but costs do not seem to vary substantially for short entries. The data are tabulated and presented in tables.

59. Elrod, J. McRee / The Staffing of Technical Processes. *Library Journal* 91: p.2275–2277 (May 1, 1966).

See annotation #130.

60. Guha, M. / Helpful Cataloging. *Assistant Librarian* 62: p.64–65 (May 1969).

This article prescribes three functions to a catalog card: to show the location of a document within the library, to characterize the document and identify it precisely, and to indicate if the document will be useful. The author maintains that traditional cataloging obscures these functions for the public library patron. Therefore, he advocates a "mini-annotation" designed to assist the patron.

61. Hicks, Warren B. and Tillin, Alma M. / *Developing Multi-Media Libraries*. New York, Bowker, 1970.

See annotation #160.

62. Maier, Joan / Analyzing Acquisitions and Cataloging Costs. *Library Resources and Technical Services* 13: p.127–136 (Winter 1969).

See annotation #155.

63. North Carolina State Department of Public Instruction / *Organizing Audiovisual Materials in the School Media Collection*. Raleigh, Department of Public Instruction, February 1970.

See annotation #162.

64. Piercy, Esther J. / *Commonsense Cataloging*. New York, Wilson, 1965.

This is a manual for the organization of books and other materials in school and small public libraries. This well-illustrated work covers the establishment of cataloging procedures and preliminaries as well as directions for typing catalog cards.

65. Riddle, Jean et al. / *Non-Book Materials: The Organization of Integrated Collections*. Ottawa, Canadian Library Association, 1970.

See annotation #164.

66. Rosenthal, Joseph / Non-Professionals and Cataloging: A Survey of Five Libraries. *Library Resources and Technical Services* 13: p.321–331 (Summer 1969).

This study finds that non-professionals are performing effectively in cataloging and related operations in five university libraries and points out the advantages and disadvantages of making wider use of such personnel in the area of technical services. The data were gathered through a questionnaire and follow-up interviews. Among the questions raised were: is a distinction made in your library between professionals and non-professionals; what cataloging activities are assigned to non-professionals; what are the personnel classification levels of non-professionals; what are the characteristics of the non-professionals actually employed; do professional and non-professional job conditions and benefits differ; what are the statistics for cataloging output; is the performance of non-professionals satisfactory?

67. Taylor, D. / Classification Trends in Junior College Libraries. *College and Research Libraries* 29: p.351–356 (Sep 1968).

This article reports the results of a 1968 survey of the classification schemes used in 690 American junior colleges. Although the majority of junior colleges still use Dewey classification, the trend seems to be increasingly in the direction of the LC system. In

spite of his support for LC classification, the author is amazed by the number of junior colleges that have initiated costly reclassification within a few years of founding. Although this is an obvious embarrassment to the profession, the author argues that the LC system is less costly and certainly should be used by all new junior colleges. He recommends that a junior college without a large staff to order and process books should turn to commercial processing or to cooperative processing.

68. Waller, Salvador / Thoughts on Cataloging and Classification in a Small Medical Library. *Bulletin of the Medical Library Association* 58: p.51–57 (Jan 1970).

This article grapples with the dual problems of a small budget and specialized needs of a small medical library in the areas of cataloging, classification, and reprography. It suggests reducing added entries and using simple descriptive information, simple Dewey numbers, and, if the library produces its own cards, an inexpensive hand stencil.

69. Westhuis, Judith L. and DeYoung, Julia M. / *Cataloging Manual for Nonbook Materials in Learning Centers and School Libraries.* Ann Arbor, Michigan Association of School Librarians, 1966.

See annotation #165.

B. Pre-Cataloging

70. Badten, Jean and Motomatsu, Nancy / Your School Library Considered. *The Instructor:* p.120–122 (Nov 1967).

This article discusses commercial processing firms and the services they offer. It attempts to give precise costs of these services for districts which might wish to investigate the prospects of such a venture. In addition, it provides a series of questions which schools may wish to ask themselves before they decide to opt for commercial processing.

71. Can You Save Money on Book Processing? *School Management* 14: p.20 (Apr 1970).

This article gives a breakdown of costs for individual processing as compared to commercial processing for school libraries. It concludes that hidden costs are eliminated by commercial processing so that a library knows exactly what is being purchased at what price.

72. Clapp, Verner W. / CIP in Mid-1970. *Library Resources and Technical Services* 15: p.12–23 (Winter 1971).

A review of the near-success of the 1958/59 experiment with cataloging-in-source is included in this report of a recent survey of 191 libraries. It covers some 18 categories concerning attitudes toward prepublication cataloging.

73. Frary, Mildred P. / Commercial Cataloging and Processing in the Los Angeles Schools. *School Libraries* 15: p.11–15 (Jan 1966).

This article describes the experiences of Los Angeles schools in moving from central processing to commercial cataloging. Since commercial firms offering professional technical processing services answer the demand for immediate access to materials by students and teachers, Los Angeles contracted with a company whose cataloging standards matched their own and which cataloged all titles. Miss Frary states that in her experience it takes at least three years of working with a company to develop a *smooth operation;* therefore, yearly bidding should be discouraged if at all possible. In accepting commercial work, librarians may find that "it is to their advantage to give up some long-standing items of processing or cataloging in favor of speed and lower costs."

74. Jones, Milbrey L. / Technical Services for School Libraries—Exploring New Methods. *Bulletin of the National Association of Secondary School Principals* 306: p.52–58 (Jan 1966).

See annotation #13.

75. Welsh, William J. / Report on Library of Congress Plans for Cataloging-in-Publication. *Library Resources and Technical Services* 15: p.23–27 (Winter 1971).

This is a report of Library of Congress plans for a new study of cataloging-in-publication. The author, director of the processing department of the Library of Congress, expresses great enthusiasm and high hopes for a pilot project scheduled to begin in 1971. He also deals with the possible uses of CIP, the use of MARC tapes for "advance" editions of CIP, and the eventual use of computer print-outs.

76. Westby, Barbara M. / Commercial Processing Firms: A Directory. *Library Resources and Technical Services* 13: p.209–286 (Spring 1969).

This directory lists all the commercial companies, jobbers, and publishers who, as of 1969, were providing card service and/or physical processing in the United States and Canada. It includes a short article highlighting the problems of commercial processing—that the quality and quantity of the cataloging vary as does the completeness of the processing—and offers guidelines to those vagaries. The reasons for discontinuing such services by some libraries are cited: slow service, high cost, paucity of titles for which service is available, and the need to make changes on the catalog cards.

C. LC Cataloging

77. Dillenberger, John / Traditional Library Functions and the Economic Factor. *Theo-*

logical Education 6: p.70–78 (Autumn 1969).

This article advocates the adoption of the Library of Congress classification system and the use of LC catalog cards without revision in all U.S. theological libraries as a means of reducing cataloging costs. A sequential system of book numbering and placement on shelves will prove economic and efficient. The thrust of the article is in its suggestions for meeting the rising costs of library operations.

78. Richmond, Phyllis A. / Commentary on Three Topics of Current Concern. *Library Resources and Technical Services* 11: p. 460–467 (Fall 1967).

The three main concerns are: 1) the adaptation of LC cards, 2) professional catalogers and clerical work, 3) user's jargon as catalog entry points. Also included is a flow chart for the adaptation of a Library of Congress catalog card by computer.

79. Scilken, Marvin / Background to Frontlog. *Library Journal* 94: p.3014–3015 (Sep 15, 1969).

See annotation #92.

80. Waters, S. T. and Constabile, S. L. / Proof of the Pudding: Using LC Proof Slips. *College and Research Libraries* 28: p.87–91 (Mar 1967).

This article describes the uses of LC proof slips: as aids in bibliographic verification, in the book and LC card ordering processes, in card production, and in selection. The article includes a model technical services system in which proof slips are used throughout, from selection to preparation of an accessions list.

D. Card Preparation

81. American Library Association / *Catalog Card Reproduction.* Chicago, ALA, 1965.

This extensive report on card catalog reproduction lists the various types of machines, their use, operations, costs, and problems. The full-size stencil duplicator is recommended for smaller operations, even though it is more costly than the postcard size. Its construction is better, it operates at a higher speed, and it will not become obsolete with an increase in the quantity of materials to be processed.

82. Bryan, H. and Slight, O. E. / Cataloging Drive Using the Polaroid CU 5 Close-Up Camera. *Australian Library Journal* 17: p.311–321 (Oct 1968).

This is an account of a crash effort to catalog 28,000 books in the University of Sydney library by photographing the National Union Catalog and Library of Congress book form catalog entries with a Polaroid camera. The photograph was taken, trimmed, mounted and Xeroxed to produce the final catalog card. The author believes that this proved to be a good method for the large number of books handled. An assessment of comparative costs is also included.

83. Donahugh, Robert H. / Of Vista Wax and Drums; Duplication with the Xerox 914. *Ohio Library Association Bulletin* 35: p. 3–4 (Apr 1965).

This article describes the process of the Youngstown Public Library for the direct reproduction of LC cards or proof slips, six-up. It also describes the outcome of a preliminary test of the 914 vs. an Addressograph system. It gives costs of the operation, including the hidden costs in using the Xerox 914.

84. Edelen, Joseph R., Jr. and Hack, Frederick / A Different Approach to Catalog Card Acquisitions—And It's Working! *South Dakota Library Bulletin* 55: p.237–242 (Oct 1969).

A catalog card reproduction center that was organized to serve the University of South Dakota Libraries is described. In order to obtain faster and more inclusive service than that offered by Library of Congress, LC proof slips are duplicated with a Xerox 720. Also discussed are searching operations, duplicating problems, the size of staff and their responsibilities, and time schedules.

85. Johnson, Donald W. and Benedict, Joel A. / The Bibliographer's Camera at Arizona State University Library. *Library Resources and Technical Services* 14: p.434-448 (Summer 1970).

An economical and ingenious method for Xeroxing from the *National Union Catalog* is described in detail. The author states that approximately 250 prints per day can be processed with the aid of an on-campus developing service. The total cost is $0.20 per usable positive print. This system is compared with the CU 5 Polaroid system developed at Indiana University.

86. Treyz, Joseph / Equipment and Methods in Catalog Card Reproduction. *Library Resources and Technical Services* 8: p.267–278 (Summer 1964).

This article includes a comparative examination of the use of typewriters, stencil duplicators, offset or multilith equipment, and Xerox. It examines specific brands and describes their operation and prices. Of special interest are recommendations concerning the applicability of types of equipment for different sizes of library units.

87. Waller, Salvador / Thoughts on Cataloging and Classification in a Small Medical Li-

brary. *Bulletin of the Medical Library Association* 58: p.51–57 (Jan 1970).

See annotation #68.

E. Binding

88. Ratcliffe, F. W. / Manchester University Library Bindery: A Study of Library Efficiency and management. *Libri* 20: p.77–88 (1970).

This article describes the advantages of the bindery operation of the Manchester University Library: no book is out of circulation for more than one day; small repair work which would ordinarily be done outside the library is done quickly inside; and the improved library service has led to better public relations.

89. Whetstone, Gloria / Serial Practices in Selected College and University Libraries. *Library Resources and Technical Services* 5: p.284–290 (Fall 1961).

See annotation #102.

90. Wulfekoetter, G. / *Acquisition Work*. Seattle, University of Washington Press, 1961.

See annotation #57.

VI. CIRCULATION

91. American Library Association and the Council on Library Resources / *Study of Circulation Control Systems*. LTP Publication #1. Chicago, ALA, 1961.

This comprehensive report on circulation systems gives performance statistics for the various systems and provides criteria for deciding on the system most appropriate for a given library situation.

92. Scilken, Marvin / Background to Frontlog. *Library Journal* 94: p.3014–3015 (Sep 15, 1969).

Scilken, library director of the Orange (N.J.) Public Library, describes, in a lighthearted fashion, how he combats the delay in getting books to the shelves while waiting for LC printed cards. He provides temporary cataloging consisting of an identification number for the book and shelves it in the new book section ready for circulation. The system has been so successful that he has found books circulating more with their special position and temporary cataloging than after full classification and normal shelving.

VII. SERIALS

93. Belch, David E. / The Computer-Controlled Periodicals System at the San Francisco Public Library. *Library Resources and Technical Services* 13: p.531–532 (Fall 1969).

This article describes the development of what is claimed to be the first completely computer-controlled periodicals system in an American public library. The recent publication of a computer-produced three volume book catalog is its major achievement; the first volume lists the library's periodicals by title, the second arranges the periodicals under 1,430 cross-referenced subject headings, and the third depicts materials printed wholly, or in part, in a foreign language.

94. Clasquin, Frank F. / Procurement of Periodicals on an Annual Bid Basis. *Sci-Tech News* (SLA) 19: p.10–12 (Spring 1965).

This article deals with the problems inherent in the bid process. If the only function of the subscription agency awarded the contract is that of placing the order with each publisher for the period contracted and paying the publisher at the rate known at the time of the bid, then the annual competitive bid will accomplish its purpose. However, publishers' policies change and prices change. Extra costs to the library will be the annual listing of the library's titles for the bid invitation. The cost of services offered by a responsible agency acquainted with the library's problems, requirements, demands and expectations cannot usually be purchased by the lowest bid. Long term offers should be taken advantage of. If the agency handles a library's list of periodicals on an efficient continuing basis only additions and deletions need be supplied annually. Emphasis is placed on the necessity that the librarian be permitted to evaluate the subscription agency instead of just awarding a contract to the lowest bidder.

95. Huff, William H. / The Acquisition of Serial Publications. *Library Trends* 18: p. 294–315 (Jan 1970).

A questionnaire to which 49 libraries of the Association of Research Libraries responded is the basis of this article on problems in the acquisition of serial publications. It covers such topics as costs, organization of serials acquisitions, policies, selection, forms and equipment, backfiles and reprints, agents and services, standing orders, blanket orders, gift and exchange programs, and foreign serials. The development of the National Serials Data Program and a MARC format for serials are also discussed.

96. Lebowitz, Abraham I. / The AEC Library Serial Record: A Study in Library Mechanization. *Special Libraries* 58: p.154–159 (Mar 1967).

This article examines the role of the systems librarian in the mechanization of the library's functions. It indicates that he must consider the library's requirements and its human, mechanical, and financial

resources. After indicating the reasons for the selection of the serials collection for mechanization, the outputs of the system are classified and discussed under four categories: tools for the reference staff, tools related to the procurement of journals, tools for other internal processing, and tools related to the checking and claiming of individual issues. Other systems considerations—problems, shortcomings, and revisions—based on the AEC experience are indicated.

97. McGrath, William E. and Kolbe, Helen / A Simple, Mechanized, Non-Computerized System for Serials Control in Small Academic Libraries. *Library Resources and Technical Services* 10: p.372–381 (Summer 1966).

This article describes the steps involved in setting up a simple mechanized system for listing periodicals and for encoding many of their characteristics. The emphasis lies in the fact that computers are not necessary to initiate serials automation. With the use of a keypunch, an accounting machine or "card lister" and a card sorter, serviceable lists with a wide variety of information and flexibility can be produced. "If desired, the system described could provide the basis, with little change, for later computerization." Among the problems discussed are fields (codes and categories), the printed lists, and cost analyses.

98. Reitz, Conrad / Organizing the Acquisition of Serials for Greater Efficiency. *Ontario Library Review* 51: p.158–161 (Sep 1967).

This article discusses how a library should be divided by operation; the order department should do the ordering of all materials, etc. Reitz states that the librarian should constantly study and reevaluate his procedures and records, drawing flow charts when needed. The bibliographic searching unit should be responsible for all searching—serials, monographs, gifts, and government publications. The library should have just one file of holdings, not several scattered in various departments; it should "have clearly stated objectives and arranged records and procedures" to make all information readily accessible.

99. Scors, T. et al., comps. / Periodical Price Index by Categories and Selected Years 1957/59 and 1965 to 1969. *Bowker Annual Book Trade Statistics,* N.Y., 1970.

This table was compiled by T. Scors, H. Tuttle and A. Sebker for the Library Materials Price Index Committee, RTSD Acquisitions Section, American Library Association. Data for each year are published in the July issue of *Library Journal,* giving average prices and indexes for the time period covered.

100. Smith, Katherine R. / Serials Agents/Serials Librarians. *Library Resources and Technical Services* 14: p.5–18 (Winter 1970).

This article contends that even though serials agents now attach service charges rather than give discounts, the cost is still small in comparison with that of maintaining a library staff to replace the agent. However, an agent must still be chosen with care with due regard to 1) the kind of service the library needs and 2) possible inaccuracy in the representations made by the agent. This holds true for both the initial selection of an agent or the reevaluation of an existing relationship. Two possible complications must be kept in mind: 1) indirect contact with the agent through the institution's general purchasing agent and 2) putting the subscription list up for bids, especially annual bidding. Maintaining the relationship with the agent, once established, a completeness of records is essential and to correspond with the agent in a business, rather than a literary, style is recommended. "Librarians . . . should take the professional responsibility of attempting to discover the parameters of interaction between their routines and those of agents and publishers."

101. Szigethy, Marion C. / Mechanized Serials Handling System. *Special Libraries* 60: p. 601–605 (Nov 1969).

This article discusses the mechanization of the library of Radio Free Europe. Rather than waiting for a total systems effort, a pilot project involving serials was initiated to bring together existing resources—the people, the processes, and the EDP equipment already available in-house. The methods employed, the preparation of input, equipment, and cost are all described. The net result is a mechanized system based on the previous manual one and compatible with a future conversion to computer operations. Also included are samples of a coding sheet, legend, and a sample page of the basic output.

102. Whetstone, Gloria / Serial Practices in Selected College and University Libraries. *Library Resources and Technical Services* 5: p.284–290 (Fall 1961).

This article discusses the procedures of serials departments of selected universities based on a questionnaire sent to institutions with holdings of 4,000–6,000 periodicals. Of the universities studied, one serials department did all of the ordering and acquiring of serials, two had the order department do it, and in three both departments did some. Fifteen universities cataloged the serials and twelve libraries classified all periodicals. In some of the libraries the serials department was in charge of the binding of

serials only, some took care of the binding of books and serials, and in some the bindery department took care of it all. As for the servicing of periodicals and serials—some was done by the subject department, some by public service divisions, some by the reference division, and some by the circulation division.

103. Wilkinson, W. A. / A System for Machine-Assisted Serials Control. *Special Libraries* 58: p.149–153 (Mar 1967).

This article traces the history of serials mechanization at Monsanto. When a new system became necessary, a system study was made that reached two basic conclusions: "1) significant improvements could be made by combining all of our serials records into a single punched card file, which would be the source of several outputs; 2) our level of activity and the required outputs did not require elaborate computer programs; in fact, all processing could be done on unit record equipment." The system design is described as is the implementation of the system. It is anticipated that conversion to a computer system will become necessary in the future. Therefore, the present system has been established with that probable future firmly in mind.

104. Williams, Gordon / *Library Cost Models: Owning vs. Borrowing Serial Publications.* Bethesda, Maryland, Westat Research, 1968.

This article examines the cost of providing access to serial literature in four university research libraries. It provides mathematical models for libraries to use to determine at what level of use it becomes less expensive for a library to acquire a photocopy of an article from a journal from another library when needed, rather than subscribing to and maintaining copies locally. The author maintains that unless a title is used more than six times per year, it is less expensive for the library to make photocopies of articles from other sources when it is requested.

105. Wulfekoetter, G. / *Acquisition Work.* Seattle, University of Washington Press, 1961.

See annotation #57.

VIII. MECHANIZATION

106. American Library Association / *Catalog Card Reproduction.* Chicago, ALA, 1965.

See annotation #81.

107. Axford, H. William / An Approach to Performance Budgeting at the Florida Atlantic University Library. *College and Research Libraries* 32: p.87–104 (Mar 1971).

This article discusses the reorganization of the Florida Atlantic University library after the failure of initial attempts at automation. The proposed improvement of the library program has as its bases: 1) reorganization of the public catalog and elimination of all typing on its card sets and 2) a computer-assisted budget control program for acquisitions. A specially designed cost study provided a detailed analysis of average unit costs per volume for processing—and an analysis of functions of professionals, sub-professionals, clerical employees and student assistants. The author proposes greater application of the unit cost study approach to technical services operations.

108. Belch, David E. / The Computer-Controlled Periodicals System at the San Francisco Public Library. *Library Resources and Technical Services* 13: p.531–532 (Fall 1969).

See annotation #93.

109. Bishop, Gwynneth H. / Computers and Acquisitions: The Experience of the Libraries at the State University of New York at Binghamton. *Library Resources and Technical Services* 14: p.407–420 (Summer 1970).

This article describes a system that was converted from manual to mechanized operation in 1965, using a 407 IBM unit record device; in 1968 to a fully computerized system; in 1969 from a disc operating system using a 360/40 to a 360 operating system. The last has been operating for a year and is described in detail here, including the process from purchase request to shelving the book, distribution cards, updating or changing an order record, claiming, partial receipts, and cancellations. The chief advantages of the computer system are said to be automatic claims and the printing of a regular fund report.

110. Byrn, James H. / Automation in University Libraries—The State of the Art. *Library Resources and Technical Services* 13: p.520–528 (Fall 1969).

This survey, based upon questionnaires received from 95 libraries, reveals that automation accomplishments in university libraries are minimal. In practice, automation has not proved to be the panacea that was promised. Of the 95 libraries surveyed, 59 were automated, 31% in the area of acquisitions. The conclusions drawn in this article include: 1) little major progress has been made in automation except in technical processing, 2) attitudes toward MARC are not enthusiastic, 3) information retrieval is not very advanced, 4) problems are exacerbated by the lack of skilled personnel, funds, and suitable facilities.

111. Dolby, J. L. and Forsyth, V. J. / An Analysis of Cost Factors in Maintaining and Up-

dating Card Catalogs. *Journal of Library Automation* 2: p.218–241 (Dec 1969).

See annotation #58.

112. Edelen, Joseph R., Jr. and Hack, Frederick / A Different Approach to Catalog Card Acquisitions—and It's Working! *South Dakota Library Bulletin* 55: p.237–242 (Oct 1969).

See annotation #84.

113. Holmes, Rose and Lively, Gladys / Computer Processing for All Media. *Wisconsin Library Bulletin* 66: p.319–324 (Sep-Oct 1970).

See annotation #12.

114. Huff, William H. / The Acquisition of Serial Publications. *Library Trends* 18: p. 294–315 (Jan 1970).

See annotation #95.

115. Jackson, Eugene B. / The Use of Data Processing Equipment by Libraries and Information Centers—The Significant Results of the SLA-LTP Survey. *Special Libraries* 58: p.317–324 (May-Jun 1967).

This article reports the results of the SLA-ALA/LTP survey of library mechanization. The survey covered the mechanization of the following library functions: accounting, acquisition, serials control, circulation control, catalog card production, book catalog production, accessions lists and announcement bulletins, KWIC, retrospective searches, current awareness service, union lists, microform materials, and interlibrary communications. Among the findings were: 75% of the libraries using data processing equipment are academic or special libraries; 90% of the libraries with authorized plans for automation are academic or special libraries; any mechanization system for widespread utilization must accommodate more than 50,000 books and more than 1,000 periodical titles; the most common current use of unit record equipment is for serials control; a majority of functions are run on equipment under the control of the higher authority to which the library reports. Also of significance was the ranking of the functions by frequency of mention.

116. Johnson, Donald W. / The Bibliographer's Camera at Arizona State University Library. *Library Resources and Technical Services* 14: p.434–448 (Summer 1970).

See annotation #85.

117. Lebowitz, Abraham I. / The AEC Library Serial Record: A Study in Library Mechanization. *Special Libraries* 58: p.154–159 (Mar 1967).

See annotation #96.

118. McCusker, Mary Girolama / Implications of Automation for School Libraries. *School Libraries* 17: p.23–27 (Fall 1967).

This article emphasizes library automation and points out the need for the thorough study of library programs to isolate non-professional from professional jobs and to employ systems analysis to determine the effective use of personnel. Among the topics discussed are programs appraisal, new Library of Congress services, and systems analysis. Some of the problems caused by lack of standardization which presents difficulty in compatibility for automation are noted.

119. McGrath, William E. and Kolbe, Helen / A Simple, Mechanized, Non-Computerized System for Serials Control in Small Academic Libraries. *Library Resources and Technical Services* 10: p.372–381 (Summer 1966).

See annotation #97.

120. Richmond, Phyllis A. / Commentary on Three Topics of Current Concern. *Library Resources and Technical Services* 11: p. 460–467 (Fall 1967).

See annotation #78.

121. Szigethy, Marion C. / Mechanized Serials Handling System. *Special Libraries* 60: p. 601–605 (Nov 1969).

See annotation #101.

122. Treyz, Joseph / Equipment and Methods in Catalog Card Reproduction. *Library Resources and Technical Services* 8: p.267–278 (Summer 1964).

See annotation #86.

123. Weiss, Rudi / The State of Automation: A Survey of Machinery Used in Technical Services Departments in New York State Libraries. *Library Resources and Technical Services* 9: p.289–302 (Summer 1965).

This article reports the results of a questionnaire on the kinds of machines used in selected school, public, and college libraries in New York State. The data are summarized in four tables and the questionnaire and guidelines employed are located in the appendix. It concludes that more information on machines and their uses should be made available to librarians through some system of information sharing, possibly directed by the Library Technology Project of the ALA. This might help librarians to make proper choices of equipment for their peculiar needs.

124. Wilkinson, W. A. / A System for Machine-Assisted Serials Control. *Special Libraries* 58: p.149–153 (Mar 1967).

See annotation #103.

IX. STAFF

125. Axford, William H. / An Approach to Performance Budgeting at the Florida Atlantic University Library. *College and Research Libraries* 32: p.87–104 (Mar 1971).
See annotation #107.

126. Byrd, C. K. / Subject Specialists in a University Library. *College and Research Libraries* 27: p.191–193 (May 1966).
See annotation #17.

127. Danton, J. P. / Subject Specialists in National and University Libraries with Special Reference to Book Selection. *Libri* 17: p.42–58 (1967).
See annotation #18.

128. Dougherty, Richard M. / Manpower Utilization in Technical Services. *Library Resources and Technical Services* 12: p.77–82 (Winter 1968).
This article indicates that attempts at automation and standardization have been less than successful. It locates part of the problem in the deficiencies of library education, which is treated at some length.

129. Edelen, Joseph R., Jr. and Hack, Frederick / A Different Approach to Catalog Card Acquisitions—And It's Working! *South Dakota Library Bulletin* 55: p.237–242 (Oct 1969).
See annotation #84.

130. Elrod, J. McRee / The Staffing of Technical Processes. *Library Journal* 91: p.2275–2277 (May 1966).
This article examines the assignment of duties in technical processes to professional and clerical personnel. It describes an assembly line organization of tasks. Five areas have been programmed for the instruction of clerical staff by Educational Methods, Inc. of Chicago. They are: 1) the construction and adaptation of the unit card from a marked title page, 2) catalog and shelf list filing, 3) classification, 4) choice of subject headings, 5) choice of main and added entries. In this way nonprofessional staff can be trained to handle all materials except those requiring original cataloging.

131. Haro, Robert P. / The Bibliographer in the Academic Library. *Library Resources and Technical Services* 13: p.163–169 (Spring 1969).
See annotation #20.

132. Jones, Milbrey L. / Technical Services for School Libraries—Exploring New Methods. *Bulletin of the National Association of Secondary School Principals* 306: p.52–58 (Jan 1966).
See annotation #13.

133. McCusker, Mary Girolama / Implications of Automation for School Libraries. *School Libraries* 17: p.23–27 (Fall 1967).
See annotation #118.

134. Richmond, Phyllis A. / Commentary on Three Topics of Current Concern. *Library Resources and Technical Services* 11: p.460–467 (Fall 1967).
See annotation #78.

135. Rosenthal, Joseph / Non-Professionals and Cataloging: A Survey of Five Libraries. *Library Resources and Technical Services* 13: p.321–331 (Summer 1969).
See annotation #66.

136. Tuttle, Helen Welch / An Acquisitionist Looks at Mr. Haro's Bibliographer. *Library Resources and Technical Services* 13: p. 170–174 (Spring 1969).
See annotation #29.

137. Voos, Henry / Standard Times for Certain Clerical Activities in Technical Processing. *Library Resources and Technical Services* 10: p.223–227 (Spring 1966).
This article is based upon a doctoral dissertation on time studies of clerical activities at Rutgers University Library. The value of the work is in its attempt to establish standard time units for repetitive library operations so that a library manager, wishing to time his operations, can bypass the do-it-yourself stop-watch routine and begin instead with a list of operations performed and the standard times which match these operations.

X. COSTS

138. Adams, Charles J. / Statistical Chaos: Technical Services in Public Libraries. *Library Journal* 91: p.2278–2280 (Mar 1, 1966).
See annotation #1.

139. American Library Association / *Catalog Card Reproduction.* Chicago, ALA, 1965.
See annotation #81.

140. Axford, H. William / An Approach to Performance Budgeting at the Florida Atlantic University Library. *College and Research Libraries* 32: p.87–104 (Mar 1971).
See annotation #107.

141. Badten, Jean and Motomatsu, Nancy / Your School Library Considered. *The Instructor:* p.120–122 (Nov 1967).
See annotation #70.

142. Can You Save Money on Book Processing? *School Management* 14: p.20 (Apr 1970).
See annotation #71.

143. Clasquin, Frank F. / Procurement of Periodicals on an Annual Bid Basis. *Sci-Tech*

News (SLA) 19: p.10–12 (Spring 1965).

See annotation #94.

144. Dennis, Donald D. / *Simplifying Work in Small Public Libraries.* Philadelphia, Drexel Institute of Technology, 1965.

See annotation #3.

145. Dillenberger, John / Traditional Library Functions and the Economic Factor. *Theological Education* 6: p.70–78 (Autumn 1969).

See annotation #77.

146. Dolby, J. L. and Forsyth, V. J. / An Analysis of Cost Factors in Maintaining and Updating Card Catalogs. *Journal of Library Automation* 2: p.218–241 (Dec 1969).

See annotation #58.

147. Donahugh, Robert H. / Of Vista Wax and Drums; Card Duplication with the Xerox 914. *Ohio Library Association Bulletin* 35: p.3–4 (Apr 1965).

See annotation #83.

148. Fristoe, A. J. / Bitter End: The Searching Process. *Library Resources and Technical Services* 10: p.91–95 (Winter 1966).

See annotation #41.

149. Gipson, J. S. / Total Cost of Acquisitions in a Community College. *College and Research Libraries* 28: p.273–276 (Jul 1967).

The author, a mathematician, has given a step-by-step method of analyzing the total cost of placing a new book on the library shelf—the cost of the volume plus the cost of selecting, acquiring, and processing a volume. He illustrates how the total costs of acquiring a book in the Macomb County Community College library was estimated at $4.85 plus the price of the volume.

150. Huff, William H. / The Acquisition of Serial Publications. *Library Trends* 18: p. 294–315 (Jan 1970).

See annotation #95.

151. Johnson, Donald W. / The Bibliographer's Camera at Arizona State University Library. *Library Resources and Technical Services* 14: p.434–448 (Summer 1970).

See annotation #85.

152. Jones, Milbrey L. / Technical Services for School Libraries—Exploring New Methods. *Bulletin of the National Association of Secondary School Principals* 50: p.52–58 (Jan 1966).

See annotation #13.

153. Lazorick, G. J. and Minder, T. L. / A Least-Cost Searching Sequence. *College and Research Libraries* 25: p.126–128 (Mar 1964).

See annotation #43.

154. Leonard, Lawrence E., Maier, Joan M. and Dougherty, Richard M. / *Centralized Book Processing: A Feasibility Study Based on Colorado Academic Libraries.* Metuchen, N.J., Scarecrow Press, 1969.

See annotation #15.

155. Maier, Joan / Analyzing Acquisitions and Cataloging Costs. *Library Resources and Technical Services* 13: p.127–136 (Winter 1969).

This article describes how the costs of original cataloging were established at the Colorado Academic Library Center. The average cost, as determined in this study, was $4.50/book; the largest portion being a $3.39/book labor cost.

156. Raffel, Jeffrey A. and Shisko, Robert / *Systematic Analysis of University Libraries: An Application of Cost-Benefit Analysis to the MIT Libraries.* Cambridge, Mass., MIT Press, 1969.

This book presents clearly and concisely the justification for the application of cost-benefit analysis to libraries through illustrations taken from experience and studies at the MIT Libraries.

157. Scors, T. et al. / Periodical Price Index by Categories and Selected Years 1957/59 and 1965 to 1969. *Bowker Annual Book Trade Statistics,* N.Y., 1970.

See annotation #99.

158. Tesovnik, Mary E. and DeHart, Florence E. / Unpublished Studies of Technical Service Time and Costs: A Selected Bibliography. *Library Resources and Technical Services* 14: p.56–67 (Winter 1970).

This article contains a bibliography of 15 unpublished time and cost studies gathered by the authors who sought such studies from 193 institutions. The bibliography is arranged by the type of operation studied, followed by indexes to the libraries and to the types of libraries represented. The studies covered such technical service operations as: ordering, cataloging, card production, and reclassification to LC. The authors conclude that the absence of uniform methods for gathering statistics and the complexity of the operations being studied discourage libraries from conducting such studies, as well as making comparability difficult.

159. Williams, Gordon / *Library Cost Models: Owning vs. Borrowing Serial Publications.* Bethesda, Maryland, Westat Research, 1968.

See annotation #104.

XI. NON-PRINT

160. Hicks, Warren B. and Tillin, Alma M. / *Developing Multimedia Libraries.* New York, R. R. Bowker Co., 1970.

This book concentrates on the often neglected areas of acquisition and cataloging of non-book materials. Part one provides an overview of the problems involved in developing a multimedia library, including its function, its problems in acquisitions, organization, cataloging, storage of materials, physical processing, and communication with the patron. Part two gives examples of practical procedures; giving very specific cataloging suggestions and showing sample forms for the cataloging of each type of non-print material.

161. Holmes, Rose and Lively, Gladys / Computer Processing for All Media. *Wisconsin Library Bulletin* 66: p.319–324 (Sep-Oct 1970).

See annotation #12.

162. North Carolina State Department of Public Instruction. *Organizing Audiovisual Materials in the School Media Collection.* Raleigh, N.C., State Department of Public Instruction, Feb 1970.

This manual was developed by the staff of the Division of Educational Media of the North Carolina State Department of Education. It is designed to present methods of organizing audiovisual media, i.e., both Dewey and a numerical system. It gives general procedures for classification and cataloging and specific procedures for organizing each audiovisual medium. The authors' primary purpose was to encourage and facilitate more uniform and efficient procedures in the organization and management of a unified collection of educational media.

163. Quinly, William J. / Selection, Processing, and Storage of Non-Print Materials: Aids, Indexes and Guidelines. *Library Trends* 16: p.274–282 (Oct 1967).

This article deals with tools for the control of educational media, new systems for speeding the delivery of media, i.e., computers, the design of new media centers, especially storage facilities, and audio, video, and graphic distribution systems. Quinly sees the future role of the library as that of a resource center containing a vast array of non-book materials. He feels that dealing in such materials means a new set of problems to be faced, compounded by the lack of professional literature to aid in selection and acquisition.

164. Riddle, Jean, Lewis, Shirley, and MacDonald, Janet / *Non-Book Materials: The Organization of Integrated Collections.* Ottawa, Canadian Library Association, 1970.

This book strongly recommends that media be organized by unified classification with emphasis placed on content rather than form. Cataloging has been simplified (samples given) using only those elements absolutely necessary. Since there is still no standardization of terminology for non-print materials, the authors attempt to define the terms used. Hints on storage and handling are given and a bibliography is attached.

165. Westhuis, Judith L. and DeYoung, Julia M. / *Cataloging Manual for Non-book Materials in Learning Centers and School Libraries.* Ann Arbor, Michigan Association of School Librarians, 1966.

This manual was published in an attempt to standardize the cataloging of non-book materials. While it was written specifically for the Grand Haven Public Schools (Michigan), its procedures can be readily adapted to other systems.

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George V. Hodowanec is assistant professor of library science, Graduate School of Library Science, Drexel University, Philadelphia, Pa.

sla news

SLA Election Returns

GILLES FRAPPIER has been elected to the office of President-Elect of the Association for 1972/73; and Mary A. McNierney, to Chairman-Elect of the Advisory Council. The two new Directors, elected for 1972/75, are Anne C. Roess and Charles H. Stevens.

The 1972/73 Board of Directors will hold its first meeting in Boston on Friday, June 9. Walter G. Strable automatically succeeds Efren W. Gonzalez as President, and Mr. Gonzalez will serve on the Board as Past President. Zoe L. Cosgrove succeeds Forrest H. Alter as Chairman of the Advisory Council. John P. Binnington and Miriam H. Tees will serve the third year of their three-year terms (1970/73) as Directors. Mark H. Baer and Molete Morelock will serve the second of their three-year terms (1971/74) as Directors. Janet M. Rigney will serve the third year of her three-year term (1970/73) as Treasurer.

Guidelines for Association Property

Following is the "Guidelines for Administering Property Acquired by Units of SLA" as approved by the SLA Board of Directors at its Winter Meeting, Feb 1972, in Richmond.

1. Units should be aware of the Association's Extra Association Relations Policy which contains this statement: "An agreement, contract or obligation entered into by any Association unit requires advance approval by the Association's Board of Directors if liability exceeds available or budgeted funds."
2. These guidelines apply to property (such as office machines, filing cabinets, etc.) having a purchase value exceeding the unit's available or budgeted funds or exceeding $1,000.00.
3. The Executive Director at SLA Headquarters should be informed of the purchase value, the name of the individual responsible for the property, and the address of its location immediately upon receipt of the property. The property should be clearly marked: "Property of the Special Libraries Association, 235 Park Avenue South, New York, New York 10003."
4. Appended to the annual financial report of the unit should be a property report listing the date of acquisition, the purchase value and the name of the person responsible for the property and address of the location of the property.
5. The proper care and maintenance of the property is the responsibility of the unit.
6. When the unit disposes of the property, SLA Headquarters must be informed immediately and any outstanding debt on the property must be discharged by the unit.
7. All Association property will be insured, at the discretion of the Executive Director, by the addition of riders to the Association's insurance policy. To meet the requirements of the insurance company, it is mandatory that the permanent location and the responsible custodian be identified. Units will be billed at cost by Headquarters for such insurance.

Accreditation and Special Librarianship

In the April 1972 issue of *Special Libraries* (p.205) it was reported that in January 1972, SLA presented formal testimony before the ALA Committee on Accreditation (COA) concerning the proposed ALA *Revised Standards for Accreditation.* Informal discussions were also held between COA and SLA representatives. As a result, some specific suggestions were made of ways special librarianship can be more closely integrated in library education:

—arrange formal liaisons between Chapters and local library schools;
—invite faculty to visit special libraries and arrange a program geared to their interests;
—arrange student team projects with special libraries as workshops;
—arrange for faculty members to work 3 summer months in special libraries;
—gather sets of anecdotes and questions which reflect the special library idea and give them to faculty members to use;
—provide opportunities for faculty members to participate in the evaluation of special libraries;
—don't overlook the non-accredited schools;
—work with the Library Education Division of ALA on the development of guidelines for special library education;
—develop a statement of expectations of what is expected in special libraries of students who come to work for us.

ALA's Committee on Accreditation is a standing committee. Its members are: F. William Summers, Chairman (Grad. Libr. Schl., Univ. of South Carolina, Columbia, S.C. 29208) (1973); Sister Peter Claver (1972); Robert E. Lee (1972); Andrew H. Horn (1973); George S. Bonn (1974); R. Brian Land (1974); Doralyn J. Hickey (1975); Allen B. Veaner (1975); John T. Eastlick (1976); Mrs. Carrie C. Robinson (1976); Staff Liaison, Dr. Agnes L. Reagan.

U.N. Conference on the Human Environment

Mary Anglemyer, Librarian, Woodrow Wilson International Center for Scholars, has been appointed SLA Representative and Signe R. Ottersen, Bibliographer, Alternate to the United Nations Conference on the Human Environment to be held in Stockholm, Jun 6–17, 1972. This has come about through the publication of a two-volume work entitled: *The Human Environment,* Volume I: A Selective, Annotated Bibliography of Reports and Documents on International Environmental Problems; Volume II: Summaries of National Reports Submitted in Preparation for the United Nations Conference on the Human Environment, available from the Center. Price $10.00. Agenda item IV is entitled: Educational, informational, social and cultural aspects of environmental issues. The Association has submitted a position paper to the Advisory Committee. The paper urges that any worldwide information network be undertaken in cooperation with UNISIST and other already existing mechanisms.

Our representatives are in urgent need of supporting information and suggestions and they would appreciate hearing from the membership. If you have any suggestions, please send them to Mary Anglemyer, Librarian, Woodrow Wilson International Center for Scholars, Smithsonian Institution Building, Washington, D.C. 20560.

Mary Anglemyer
Woodrow Wilson International Center for Scholars
Washington, D.C. 20560

SCHOLARSHIP FUND

Donations Received Jan–Dec 1971

Name	*Amount*
H. W. Wilson Foundation	$ 4,000
Anonymous (Ann Arbor Trust Company)	3,093
Southern California Chapter	1,454
Insurance Division	1,000
Sci-Tech Division	1,000
New Jersey Chapter	500
In Memory of Elizabeth Burrows	462
Alcan Aluminum Corp. Staff	
Business & Finance Division	
Metals/Material Division members —Leola Michaels, Virginia Seidel, Jean Summers	
Metals/Material Division	
Alcan Secretariat Ltd.	
Mrs. Adam Robertson-Neighbor	
Mr. & Mrs. George E. Burrows	
Eric A. Trice	
Mrs. Carolyn S. Kirby	
Mr. & Mrs F. E. Burrows	
Mr. & Mrs. Donald P. Albeneze	
Mr. & Mrs. W. D. Blouch	
Mary G. Harrington	
Robert Young	
Merle Hostetler	
Mary V. Lindner w/Joan Bacha, Terry Brussee, Alice Morrissey, Arden Pittenger, James Mason	
Louella & Margaret John	
Julia Edwards	
Julianne Collins	
Mrs. Charles E. Smith	
Mr. & Mrs. C. L. Martin	
Mr. & Mrs. Tom Allen	
Atlas Chemical Industries, Inc.	250
Institute for Scientific Information	212
Time Inc.	150
Public Utilities Division—In Memory of Virginia Edgington	131
F. John Neverman	126
E. I. du Pont de Nemours & Co.	100
Connecticut Valley Chapter—In Memory of Whitney Morgan	100
Mrs. Anne Marie Breiger	100
Newspaper Division	100
Pacific Northwest Chapter	100
Standard Oil Co. of California	100
The Cordon—In Memory of Catherine A. Simms	50
Elizabeth J. Gibson	50
Gordon Randall	50
Cincinnati Chapter—In Memory of Rosco C. Eads	50
Michigan Chapter—In Memory of Helen Tuttle and in memory of the father of Patricia Snyder	35
Michigan Chapter—In Memory of Rae E. Rips	25
Hester C. Meigs	25
Virginia Chapter	25
Alabama Chapter	25
Pittsburgh Chapter—In Memory of Anna B. Pomeroy	25
Frances J. Rugen	25
Mrs. Carolyn S. Kirby	20
Dorothy A. Lourdou	20
Michigan Chapter—In Memory of Ray Detwiler	20
Margaret F. Mackellar	20
Mrs. Betty Nevin	20
Washington D.C. Chapter—In the name and honor of Catherine I. Bahn	15
Jean Flegal—In Memory of Virginia Bersagel	10
Washington D.C. Chapter—In the name and honor of The Social Sciences Group	10
Total Other Contributions	1,119
Total Contributions Jan–Dec 1971	$14,617

H. W. Wilson Company Award

At the 1971 Fall Meeting the SLA Board of Directors approved an award to be established to be presented to the author of the best paper in *Special Libraries.* A Special Committee was appointed to set up guidelines for the award. At the Winter Meeting, the Board approved the Committee's recommendation that the initial award be given at the Boston Conference to the author of the best article published in *Special Libraries* in 1971. The H. W. Wilson Company has agreed to the broad parameters established and has generously agreed to provide an award of $250.00.

Allotments/1972 for Chapters and Divisions

Chapter and Division allotments for 1972 were mailed from the New York offices to Chapter and Division treasurers the end of February. Chapters receive $3.00 per member based on the Dec 31, 1971 count of all membership categories, excluding Student Members. Divisions receive $2.00 per member. The amounts each Chapter and Division received are as follows:

Division Allotments

Advertising & Marketing	$ 692
Aerospace	444
Biological Sciences	1,208
Business and Finance	1,828
Chemistry	482
Documentation	1,728
Engineering	504
Geography & Map	460
Insurance	234*
Metals/Materials	410
Military Librarians	624
Museums, Arts & Humanities	612
Natural Resources	300
Newspaper	354
Nuclear Science	232
Petroleum	270
Pharmaceutical	334
Picture	346
Public Utilities	200
Publishing	424
Science-Technology	3,124
Social Science	1,360
Transportation	290
TOTAL	**$16,460**

Chapter Allotments

Alabama	$ 195
Baltimore	246
Boston	915
Cincinnati	177
Cleveland	327
Colorado	252
Connecticut Valley	273
Dayton	192
Florida	255
Greater St. Louis	216
Heart of America	183
Illinois	1,179
Indiana	225
Louisiana	150
Michigan	627
Minnesota	387
Montreal	600
New Jersey	660
New York	3,543
North Carolina	150
Oklahoma	150
Pacific Northwest	492
Philadelphia	813
Pittsburgh	456
Princeton-Trenton	192
Rio Grande	183
San Diego	174
San Francisco Bay Region	1,041
South Atlantic	213
Southern Appalachian	150
Southern California	1,170
Texas	510
Toronto	666
Upstate New York	534
Virginia	237
Washington, D.C.	1,794
Wisconsin	189
TOTAL	**$19,716**

* These monies were not sent at the request of the Insurance Division

Royalty Payments on SLA Publications

The annual royalty payments have again been paid by Special Libraries Association for Non-Serial Publications sold in FY 71. Checks were mailed from the New York offices to each publication's sponsor (Chapter or Division treasurer) or to individual authors the end of March.

Aviation Subject Headings and Classification Guide. Virginia W. Earnshaw and Agnes A. Gautreaux, comps. 1966	Transportation Division	$ 17.50
German Chemical Abbreviations. Gabriele E. M. Wohlauer and H. D. Gholston, comps. 1969	Chemistry Division	28.77
Guide to Metallurgical Information. 2d ed. Eleanor B. Gibson and Elizabeth W. Tapia, eds. 1965	Metals/Materials Division	65.84
Guide to Scientific and Technical Journals in Translation. Carl E. Himmelsbach and Grace E. Brociner, comps. 1968	Carl E. Himmelsbach and Mrs. Grace E. Brociner	57.71
The Library: An Introduction for Library Assistants. William C. Petru, ed. 1967	San Francisco Bay Region Chapter	398.54
National Insurance Organizations in the United States and Canada. Ruby C. Breitner, ed. 1957	Insurance Division	5.97
Sources of Commodity Prices. Paul Wasserman, comp. 1960	Business and Finance Division	27.78
Sources of Insurance Statistics. Elizabeth Ferguson, ed. 1965	Insurance Division	38.79
Special Libraries: A Guide for Management. Edward G. Strable, ed. 1966	Illinois Chapter	330.88
Subject Headings in Advertising, Marketing and Communications Media. Elin B. Christianson and Edward G. Strable, comps. 1964	Advertising & Marketing Division	31.79
U.S. Sources of Petroleum and Natural Gas Statistics. Margaret M. Rocq, comp. 1961	Petroleum Division	16.67
		$1,020.24

CHAPTERS & DIVISIONS

Alabama—Dr. James D. Ramer, Dean of the University of Alabama's new Graduate School of Library Service, addressed the Chapter's Oct 1 meeting.

The Chapter met Feb 11 at Auburn University to see the new veterinary school complex and its library.

Baltimore—The Chapter's Nov 16 meeting featured Carl N. Everstine, Director, State Department of Legislative Reference, speaking on the Department's activities and services.

At the Jan 18 meeting, John M. Becker, chief of research, Baltimore Department of Planning, spoke on "Census of Population, 1970: What Can the City Planning Department Supply?"

Boston—The Chapter's Sci-Tech Committee sponsored the Nov 10 meeting at Ledgemont Laboratory in Lexington. A tour of the library was followed by dinner. Speakers were Ruth Smith, Institute of Defense Analyses, and Louis Rains, Office of Naval Research. Mrs. Smith discussed Information Hangups and Mr. Rains spoke about Regional User Groups in New England.

An Education Committee Seminar was held Jan 12. The topic was "Periodicals on Microfilm: Fact or Foible."

The Chapter's Apr 5 meeting featured a visit to the new Monroe C. Gutman Library of the Harvard University Graduate School of Education.

The Chapter has established the Paul W. Riley Memorial Fund to promote and sup-

port student membership in the Simmons–SLA Student Group.

Cleveland—The Chapter's Dec 4 meeting was a wine sampling party and tour of a winery, a book auction, and a smorgasbord dinner. The book auction was for the benefit of the Betty Burrows Scholarship Fund.

Jan 20 was Bosses' Night. The meeting was concerned with communication.

A computer tour was the feature of the Feb 16 meeting. Samuel Wolpert, President of Predicasts, Inc., was host.

A tour of the Cleveland Health Sciences Library was held Mar 20 with Robert G. Cheshier, Director.

Connecticut Valley—The Chapter participated in the 81st Conference of Connecticut Library Association, Apr 25–26. Discussions centered on Management and Money.

Dayton—Joseph F. Shubert, Ohio State Librarian, addressed the Chapter's Mar 2 meeting on "The Ohio Library Development Plan and Special Libraries."

Florida—The Chapter co-sponsored, with the University of Florida Libraries, a seminar and show on microforms titled "Microforms—The Now Happening." The seminar was held Mar 17 and 18 in Clearwater, Fla. General sessions featured speakers, and class sessions offered informal problem-solving discussions to consider applications of microforms to information and communication systems.

Greater St. Louis—The Chapter's Feb 12 meeting was held jointly with the St. Louis Library Club. Dr. Harold Holland moderated a panel on "Cost Effectiveness in Libraries."

Indiana—The Chapter's theme for the year is communications. Paul Barton, Professor of Community Dentistry and Journalism at Indiana and Purdue Universities, discussed "Some Advice on Writing and Elementary Geometry" at the Dec 1 Chapter meeting.

Joseph M. Dagnese, Director of Libraries, Purdue University, was luncheon speaker at the Chapter's Mar 4 meeting held at the Indianapolis Museum of Art. Tours of the museum and library were conducted.

Illinois—At the Chapter's jointly held meeting with ASIS on Jan 18, Frederick W. Lancaster, University of Illinois at Urbana-Champaign, discussed "On-line Information Retrieval Systems, Characteristics and Evaluation."

At the Chapter's Feb 23 meeting, Louis Lerner, a trustee of the Chicago Public Library, spoke on the work of the committee.

Bruce C. Harding, chief, Archives Branch, Chicago Branch Federal Records Center, addressed the Chapter Mar 21. His topic was "National Archives and You."

Louisiana—The Chapter met in Baton Rouge Mar 24 during the Louisiana Library Association Conference, which was Mar 23–25. Professor Gerald McLindon, dean of Louisiana State University School of Environmental Design, spoke at a luncheon meeting. At the Chapter's afternoon meeting, Dr. Donald D. Foos, new director of the LSU Library School, spoke.

Minnesota—A "round table rap" was held Apr 4. The event afforded students and other interested people an opportunity to speak informally with Chapter representatives.

The Chapter co-sponsored with ASIS its National Library Week Symposium III on Management, Apr 20–21. Speakers discussed budgeting, cost-benefit analysis, personnel, and what management expects of the information service.

The Chapter has prepared an attractive brochure as part of its 1972 membership drive.

Montreal—The Chapter met Dec 2 at the McGill Library School to discuss reference sources, indexes, and current awareness.

A joint meeting was held Mar 3 with the Library Association of Ottawa at the National Research Council. Dr. Jack E. Brown addressed the group. A model of the new National Science Library was on display and tours were arranged.

New Jersey—The Chapter's Wine and Cheese Party, held Dec 3, realized net proceeds of $225 for the SLA Scholarship Fund.

"Trends in Library Education" were discussed Feb 15. Dr. Theodore C. Hines (Columbia School of Library Science), Mel Weinstock (Institute for Scientific Information), and Dr. Tom Shaughnessy (Rutgers—Dana Library) considered various facets of the topic.

"Library Headaches" was the topic under consideration at the Chapter's Mar 16 meeting. Subscription agencies, book dealers and book binders were the specific concerns with

representatives from each field available for discussion.

New York, Business and Finance Group—The Group met Dec 16 for a slide presentation on New York City bookstores.

New York, Geography and Map Group—Howard E. Welsh, map collector, addressed the Group's Jan 25 meeting. His topic was "Maps, Atlases, Globes: Enjoyment Through Collecting."

New York, Picture Group—In cooperation with the Hament Corporation, the Group held a meeting Mar 8 on "The Processing of Color Photographic Materials."

New York, Publishing Group—The Group met Jan 6 at Bankers Trust Co. Systems Development Division. David Lynn, Division Vice President, discussed the organization, materials, and services of the facility. Eleanor Crouse, librarian, led a tour of the related Technical Information Center.

Oklahoma—The Chapter held an all-day workshop Feb 25 at the University of Oklahoma in Norman. The program concerned applied management techniques and communications within the organizational structure. Charles A. Parsons, Phillips Petroleum Co., spoke on "The Computer—A Communication Tool." Dr. Raymond P. Lutz, School of Industrial Engineering, University of Oklahoma, discussed "The Communications Manager." A practicum for librarians was held in the afternoon with Chapter members participating.

Pacific Northwest—An early 1972 Chapter meeting was held for students of the University of Washington School of Librarianship. Twelve tables representing various special libraries in the Seattle area were staffed by librarians who supplied samples of their publications and equipment.

At the Chapter's Feb 12 meeting, G. L. Filippelli, administrator, Information Services, Cominco Ltd., discussed the Vancouver City Center Information Handlers' Group which he organized.

The Chapter met Mar 25 in Portland, Oregon. Tours of the Oregon Historical Society Library and the Portland Art Museum Library were featured.

The Chapter's continuing education seminar, Apr 22–23, had as its theme, "Librarians, Are You Communicating?" Dr. Vernon E. Buck and Dr. Preston P. LeBreton, Professors of Management and Organization at the University of Washington Graduate School of Business Administration, led the sessions. Topics included concepts of communications, human relations and management, as applied to the library, with emphasis on motivation, effective exchange of ideas and managing change.

Pittsburgh—The Chapter met Nov 3. Mrs. Donna Deane, director of the Allegheny County Bureau of Consumer Protection, and Paul Yound, co-chairman of the Grievance Committee of the Alliance for Consumer Protection, discussed various facets of crime in the marketplace.

Rio Grande—On Dec 3 the Chapter met at the Los Alamos Scientific Laboratory. A visit to the main library was followed by a tour of the Bradbury Science Museum, the Occupational Health Facility, and the Meson Physics Facility.

Southern California—The Chapter held a wine tasting and raffle as its annual Scholarship Event on Dec 10. Proceeds of $937 were donated to the Association.

The Chapter cooperated with five other organizations (The Coordinating Council of Library Organizations) to sponsor a joint annual symposium on Feb 23. The afternoon and evening conference explored new information sources and services. Carlos Cuadra, System Developing Corp., gave an after-dinner talk on "National Planning for Libraries: Who, What and When."

President-Elect Edward G. Strable was the Chapter's guest at its meeting Mar 21. Discussion centered on the connections among Chapter members, the Association, and special librarianship. The meeting marked the Chapter's 50th anniversary. Chapter past presidents were especially honored.

Texas—SLA President Efren Gonzalez was the Chapter's guest at its Oct 22–23 meeting. The group viewed the film on the Spires/Ballots Report.

The Chapter's Dec 3–4 meeting was based on the general theme of aids to better communication. A colloquy on microfilms in the library was led by Joe E. Grimsley, president of the North Texas Chapter of the National Microfilm Association.

Texas A & M University Library was host for the Chapter's Feb 19 meeting. Mrs. Leatha Miloy, head of the Department of

Marine Resources, spoke on "The Sea Grant Program and Information Sources."

Dr. Donald W. Zacharias, Associate Professor of Speech, University of Texas at Austin, addressed the Chapter's Apr 15 meeting. His topic was "Interpersonal Communications for Special Librarians."

The *Texas Special Libraries Directory,* prepared by the Texas State Library in cooperation with the Texas Chapter and the Special Libraries Division of Texas Library Association, is available free of charge as long as the supply lasts. Requests may be directed to Sara Aull, University of Houston Library, Houston, Texas 77004. The directory has been distributed to Texas members.

Toronto—"PR and the Library User" was the topic under discussion at the Chapter's Feb 17 meeting. Carol Lindsay *(Toronto Star),* Kris Vaiciulenas (Canadian Standards Association), Clara Miller (Imperial Oil Limited), and Margaret Randall (Bank of Nova Scotia) were speakers.

The Chapter met Mar 16 at the Centennial College of Applied Arts and Technology. A tour of the library and building was featured. Douglas Light, President of the College, outlined the purpose of the College and its place in the educational program of Ontario.

Washington, D.C.—At the Chapter's Jan 18 meeting, held jointly with ASIS, Scott Adams discussed UNISIST.

A new member reception was held Feb 29. The motto for the evening was "Leap into Membership."

A joint meeting of the Biological Sciences, Military and Science and Technology Groups was held Mar 15. David E. Marra, U.S. Naval Oceanographic Office, presented an illustrated lecture on marine oceanology.

Mar 25 was the Chapter's continuing Education Workshop on Libraries and Information Science. Update 72 was a cooperative effort of five local library organizations. Charles Stevens (Executive Director, NCLIS) was luncheon speaker.

SLA STUDENT GROUPS

SLA Student Groups were formed for the first time in Fall 1971. As of the SLA Winter Meeting (Feb 1972), six such Groups had been officially chartered [*Special Libraries* 63 (no.4): p.206 (Apr 1972)]. Since that time, the Student Group at UCLA has been organized. Following are data concerning the seven SLA Student Groups recognized by Mar 1972.

University of California (Los Angeles)—The Group has held three visits to special libraries—Aerospace Corporation, MGM Studios, and Huntington Library. The latter visit included a formal business meeting. Members are also attending meetings of the Southern California Chapter.

Chairman and Representative to the Chapter Advisory Board	:	Anita Friedman
Faculty Advisor	:	Johanna E. Tallman
Number of charter members	:	11

University of Illinois (Urbana-Champaign)—The Group met Dec 17 to consider the topic, "An Introduction to Special Libraries: Organization and Operation." Speakers were SLA President-Elect Edward G. Strable, Illinois Chapter President William D. Murphy, and Jane Wilson, coordinator of SLA Student Groups in Illinois.

Richard Press and Russell Maylone, Northwestern University, addressed the Group Mar 22 on collection development for university libraries.

Faculty Advisor	:	George Bonn
President	:	James Bobick
Secretary	:	Linda Smith
Liaison to Illinois Chapter	:	Samuel Morrison
Number of charter members	:	22
Number of current members	:	28

North Texas State University (Denton)—The Group has organized informally and has met three times, the last meeting having occurred Mar 27 when a group of special librarians addressed the Group.

Chairman (Oct-Dec 1971)	:	John Willingham, Jr.
Co-Chairman (Oct-Dec 1971)	:	Patricia Kastritis
Chairman (Jan-Jun 1972)	:	Mindy Boehner
Faculty Advisor	:	Paul Kruse
Number of charter members	:	7
Number of current members	:	23

University of Oregon (Eugene)

President and Representative to the Chapter Advisory Board	:	LaVonne Jacobsen
Vice President	:	Leo Hollenbeck
Program and Publicity Chairman	:	Tom Phelps
Faculty Advisor	:	Robert Berk
Number of current members	:	12

St. John's University (Jamaica, N.Y.)—The Group cooperated with St. John's Department of Library Science and the ASIS Student Chapter to sponsor an ERIC Workshop, Apr 19, at the campus. J. I. Smith, Associate Director of ERIC/CLIS, was director of the Workshop.

President	:	Helen Valente
Secretary	:	Betty Hoppenwasser
Treasurer	:	Andrew J. Merkovsky
Faculty Advisor	:	Mohammed Aman
Number of current members	:	13

Simmons (Boston)—The Group heard Loyd Rathbun (1972 Boston Conference Chairman) speak at its Oct meeting. A panel of Boston Chapter members discussed "Special Librarianship: Opportunities and Analysis" at the Nov 22 meeting. The Group's Mar 2 meeting, "What Is a Library Bindery?", featured Dudley A. Weiss, Executive Director, Library Binding Institute. A meeting on library subscription agencies was held Apr 12. Frank Clasquin, F. W. Faxon Company, spoke.

President (Oct 1971–Jan 1972)	:	Barbara E. Fraser
Secretary (Oct 1971–Jan 1972)	:	Mary A. Litterst
President (1972)	:	Virginia Eager
Secretary (1972)	:	Bernice J. Berzof
Faculty Advisor	:	James M. Matarazzo
Number of charter members	:	28
Number of current members	:	27

State University of New York (Albany)

Chairman	:	Frances Kurtz
Vice-Chairman and Student Representative to Upstate New York Chapter	:	Lawrence Randall
Secretary-Treasurer	:	Barbara Guay
Program Chairman	:	Beth Mehalick
Faculty Advisor	:	Irving Klempner
Number of current members	:	36

Deceased Members—1971

Following is a list of SLA members reported deceased in 1971.

Elizabeth H. Anderson
Roberta F. Armbrister
Samuel Baig
Mrs. Evelyn Branstetter
Eugenia D. Lejuene
John H. Moriarty
Bertha M. Pehrson
Saro J. Riccardi
Donald A. Riechmann
Paul W. Riley
Mrs. Barbara B. Schneider
Mrs. Helene Singer
Mildred Stewart
William D. Stimmel
Beatrice L. Stuart
Elizabeth R. Sullivan
Eleanor M. Tafel
Helen Trettien
Adeline Wassermann

Call for Papers 1973

64th Annual Conference
Special Libraries Association

PITTSBURGH 1973

Pittsburgh, Pennsylvania
Hilton Hotel
June 10–14, 1973

Theme: "Wide Angle View of the Future"

The 1973 Conference theme indicates that special librarians are interested in what is projected for the future. Three general sessions are planned:

1. Expectations for the Future (speakers will cover future demands in research, academia, government, law and the international scene).
2. Planning for the Future (planning ahead, redevelopment [for which Pittsburgh is noted], projectization, and fitting the new library technology into the old library budget).
3. Adapting to the Future (papers by special librarians on this subject).

Papers are solicited from SLA members, library school faculty and students, and others interested in making a contribution related to the theme of the third General Session, "Adapting to the Future," which will consist of five sections: (1) Things We Can Learn From the Past, (2) Things We Should Stop Doing, (3) Things We Would Like to Do, (4) Things Others Would Like Us to Do, and (5) How to Adapt to Environmental Factors: Lack of Money; Research Cutbacks; Space *Out*—Ecology *In*. Because the first two general sessions will be closely coordinated and very specific in nature, papers are not solicited for these events. In an effort to have a fully coordinated Conference, papers appropriate for presentation to a specific Division will be forwarded to the Program Chairman of that Division for consideration.

Papers should be based on original research or development or on personal experience and must not have been previously published or presented to any national or international group. Final papers should be approximately 1,500 words in length. Accepted papers will be considered for publication in *Special Libraries.*

Information and Instruction for Authors

1. Send an abstract of your proposed paper, title of the paper, and names of the author(s) to:

Dr. Virginia Sternberg
(Program Chairman, SLA Pittsburgh '73)
Westinghouse Electric Corporation
P.O. Box 79, West Mifflin, Pa. 15122

2. The abstract must not exceed 100 words.
3. The abstract must be received by Friday, Sep 15, 1972.
4. Use the official abstract form, which may be obtained from:

Special Libraries Association
Publications Secretary
235 Park Avenue South
New York, N.Y. 10003

5. Papers will be accepted only if an author expects to be present at the Conference.
6. Abstracts will be reviewed by the Conference Committee to determine their interest to SLA members. Notification of acceptance will be given no later than Wednesday, Nov 15, 1972.
7. The full text of all papers must be received by Monday, Jan 15, 1973.
8. In case of co-authorship, the name of the person expected to present the paper must be underlined. The name and address of the institution or company sponsoring the paper should be stated, as well as the names and addresses of the current professional affiliations of the author(s).
9. The author(s) should prepare their abstract carefully so that it will arouse interest in and do justice to the actual paper. The abstract should set forth the purpose of the paper, important results of work done, and a conclusion. Avoid historical summaries and generalities.
10. Special Libraries Association retains first right to publish all papers presented at its meetings. Papers not accepted for publication in the journal will be returned to the author(s).
11. Diagrams and data to be presented visually are to be made legible through the use of large letters, heavy lines, and limited data on each illustration. Lettering should be readable from 150 feet. Projection equipment must be specified and requested at the time the abstract is submitted.

Some Implications for Libraries of the Recent Williams & Wilkins Decision

The recommendation of Commissioner Davis of the United States Court of Claims filed on February 16, 1972 finding in favor of the plaintiff, Williams & Wilkins, in its copyright infringement suit against the National Library of Medicine and the National Institute of Health Library appears on the surface to have some reasonable basis. However, it overrules the traditional "fair use" photocopy principle which has been a guide to libraries for 37 years. Commissioner Davis' report if affirmed by the Court will work unusual hardships on libraries, and, more importantly, have a negative effect on the research process. It will present libraries with additional tedious, unnecessary and burdensome tasks to perform, and will drastically slow down the vital communication process directly affecting the speed with which research results are disseminated to the scientific community.

What is the evidence for this? Although Williams and Wilkins does not seek to enjoin the photocopying and "merely seeks a reasonable royalty," they can, based on this decision, at some future date change their policy and not grant license to photocopy. W & W cannot speak for other publishers who may decide that it is in their best interest not to follow the particular path chosen by W & W. Individual publishers may enjoin libraries from photocopying in an attempt to increase subscription sales or offset decreasing sales.

If the W & W opinion is upheld in the U.S. Court of Claims, it will mean a sharp rise in costs to libraries. The most common figures quoted are 2 or 5 cents per page in royalty charges. Thus, a library photocopying 100,000 to 200,000 pages per year would be charged somewhere between $2,000 and $10,000. But this may only be a beginning. Once licensing is accepted, royalty payments could rise very sharply over a period of time (10, 15, 20 cents per page) particularly if publishers were dissatisfied with their profit margins.

Record keeping for libraries would become costly and burdensome. W & W assumes an ideal solution: a single representative of all publishers would negotiate a yearly rate for library photocopying rights. This may be a completely unwarranted assumption. Some publishers may decide not to participate in such a scheme and libraries would then have to become involved in negotiations with individual publishers. In all probability, libraries would find it necessary to keep records of all photocopy requests by publisher to determine an accurate royalty fee due them by the library. It is not difficult to foresee controversy, wrangling, and even litigation.

The Commissioner's opinion has a much greater impact on non-governmental libraries than on governmental since the Public Health Service has ruled that after July 1, 1965, PHS sponsored or supported research may be photocopied by the government without payment or royalty. Thus, the ruling may have minor impact on governmental collections, but major consequences for non-governmental libraries.

In discussing the relationship of copyright and photocopying two future directions are considered: legislative and judicial.

The legislative path may not necessarily offer a sound solution to libraries and the "fair use" yardstick unless there is a liberal Congress, since the underlying issue is a variation of the theme of Public vs. Property Rights. A conservative trend in Congress will undoubtedly mean a stricter enforcement of copyright and a greater emphasis on the rights of ownership.

The judicial path vis à vis the Supreme Court also appears not to offer an optimistic future to "fair use" (although historically the Supreme Court is somewhat unpredictable), since our present Court is definitely of a conservative hue. It is possible that if the U.S. Court of Claims upholds Commissioner Davis' report, the Supreme Court may de-

cline to rule on W & W vs. the U.S. In this situation the Davis report will be considered as law.

Although highly unlikely, the best position for libraries on this whole question would be the maintenance of the status quo.

It is clear that we need support outside the library community, particularly in the academic world. But there is a great deal of confusion present since many academicians feel that W & W has a justifiable case. We must make our case with them on the following bases:

(1) Copyright licensing and royalties create unnecessary red tape and slow down dissemination of scientific results.

(2) W & W has not made a case that photocopying has significantly endangered periodical publishing.

(3) The "fair use" principle, one copy of an article per reader, has been abused from time to time in libraries, but its abolition or redefinition would be detrimental.

(4) Increased costs to libraries will be passed on to users with no added benefits.

(5) Library staffs will be burdened with unnecessary tasks which will detract from their important service functions.

By way of an addendum, it appears to me that there are certain distinctions regarding copyright which are glossed over in Commissioner Davis' opinion. Conventionally, one has in mind a book (usually fiction) or a piece of music in discussions of copyright and royalties resulting therefrom. In the case of a periodical publisher with researchers contributing articles, there seems to be some important variances from the conventional copyright situation. For example:

(1) The authors of articles appearing in scientific and technical journals give up their ownership right and do not share in the royalties. In fact, in some cases they pay a page fee to the publisher for the privilege of having the article printed. This is generally not so in the case of the author of a conventional book or composer of a song.

(2) The author of scientific and technical periodical articles do not have as their goal protection of ownership interests. Rather, their interest is in having as wide a dissemination of an article as possible without material gain resulting from the sale of the periodical.

(3) Traditionally, copyright exists to protect both the publisher and the author. The author in the case of the scientific and technical periodical is not a participant in copyright protection; only the publisher is.

(4) In many cases the research resulting in published scientific articles has been totally or partially supported by grant funds of the U.S. Government. In an immediate sense the people as a whole have thus contributed. It seems grossly unfair that these results should then be used for private gain.

Philip Rosenstein
College of Medicine and Dentistry of New Jersey
Newark, N.J. 07103

More on Copyright Infringement

Following is a memo sent to Medical Library Association members regarding the recent Commissioner ruling in the Williams and Wilkins Company v. United States copyright infringement case. That ruling was reported in *Special Libraries* 63 (no.3): p.155 (Mar 1972). The memo is reprinted here with permission of MLA.

TO: Medical Library Association Members

FROM: Committee on Legislation

SUBJECT: Williams & Wilkins Case

We have all been watching with great concern the progress of the pending case of the Williams and Wilkins Company v. the United States, a copyright infringement action which involves the National Library of Medicine and the National Institutes of Health Library. On February 16, 1972 a Commissioner's Report was filed with the United States Court of Claims which would, if adopted, adversely affect the programs of the two libraries named and would ultimately affect all libraries. It should be pointed out that this is a Commissioner's Report. The Commissioner's function is to advise the Court, and his opinion does not have the force or effect of law, unless the judges of the Court of Claims uphold it. We

are further advised that the judges are in no way bound to accept these findings, may reject them in whole or in part, and must ultimately make their own independent ruling and decree. This is the first copyright case to reach trial in the Court of Claims, and its ruling will undoubtedly be appealed. The final decision may well rest with the Supreme Court of the United States. The appeal procedures are long and time consuming.

Until the final decision is reached, it is desirable that the library world should continue existing policies and practices with respect to photocopying of copyrighted materials. We have been advised that nothing is to be gained if libraries refuse to give photocopy service as a reaction to the Report. It is understood that the National Library of Medicine, on advice of counsel, will continue the policy and practice with respect to library photocopying that it has followed until now.

Libraries may soon be deluged with offers from publishers to provide copyright protection with royalty-paying arrangements. It would seem to be premature to accede to any of these before the Williams and Wilkins case has been finally decided; such action could severely damage the libraries' case and weaken their ranks. The MLA Office would be interested, however, in hearing from libraries to which such proposals have been made.

Hasty decisions should not be made at this time. Any quick judgment by individual libraries might do irreparable damage to our common cause. What is needed is a cooperative effort on the part of libraries and the entire scholarly community toward a realistic copyright law which is equitable toward all interested parties.

The foregoing statement is consistent with those issued by the Association of Research Libraries and the American Library Association to their membership.

New Science Information Center

The University of Kansas Libraries announce the formation of a Science Information Center. This service, the first of several computer-based services planned by the Libraries in cooperation with the University of Kansas Computation Center, is designed to enable chemists and scientists to stay abreast of the latest advances in theory and technology by alerting them to current information reported in approximately 700 of the world's leading chemical journals. An American Chemical Society data base which contains all the information in the printed issues of *Chemical Titles* is searched every two weeks according to search instructions submitted by the users. Approximately 5,000 articles are examined during each bi-weekly search, and complete bibliographic citations for all articles matching the user's request are printed in any order desired (i.e. alphabetically by author, title, estimate of relevance, etc.).

The computer search has capabilities far beyond the use of the printed indexes. Much more complex descriptions of the user's interests are possible. The computer searches are available one to three weeks before the printed version, and frequently before journal issues are received. The computer search will be done regardless of how busy the user is and will not overlook a pertinent citation. Trained staff are available to help the user create his own personalized search request, and to modify it for continuing high relevance and precision.

The Library is able to provide this service for a modest price of $47.00 per year for air mail return within the continental U.S.A. A one time $20.00 charge per profile covers all costs in consultation and revision of the profile. This charge may be waived at the discretion of the Library if the user is capable of creating his own profile.

The University of Kansas Libraries welcome all inquiries on this service and would be glad to be of service to anyone who wishes to submit a profile. For further information consult: Science Librarian, 605 Malott Hall, University of Kansas, Lawrence, Kansas 66044.

LTP Reports to SLA

The Council on Library Resources, Inc. approved three grants to LTP for evaluative and test programs. The first, CLR-532, is a grant of $10,219.74 to carry out performance tests on 16 plastic card catalog trays with wood fronts. The program, which will continue over a 12-month period, will complement a test of all-plastic trays carried out in 1971 with funds from *Library Technology Reports*. The second grant, CLR-533, authorized payment of $3,709 for a six-month investigation to evaluate the effectiveness of film rejuvenation treatments.

A proposal for the evaluation of a vinyl-clad particle board card catalog cabinet will be funded by CLR under CLR-537 in the amount of $4,015.43.

Progress continues on planning three manuals to be published by LTP. Final plans were completed for the publication of an administrative manual on library security. The next step will be the selection of an author and a formal proposal for grant funds. Members of the advisory committee for the publication of a manual on the organization and operation of a library microtext reading room met to discuss the outline for it submitted by Dr. Francis Spreitzer. Committee recommendations are being incorporated. A time and cost estimate for the preparation and writing of a manual on the operation of a photoduplication laboratory has been delivered to LTP.

Extended user-testing of microform readers is now being carried on in a cooperative program under the auspices of LTP and the National Archives, where microform readers are used for extended periods of time. Such usage is expected to provide a more accurate picture of how the machines stand up in actual use than did the short term user tests previously employed by LTP. Presently undergoing evaluation at the National Archives are roll film readers; testing of microfiche readers will begin at a later date. Several machines tested in the laboratory by LTP in 1971 are included in the program. Results will be shared by the National Archives with LTP.

The January 1972 issue of *Library Technology Reports* featured a survey of microform readers suitable for library use, and six reports on office electric typewriters. A report on Republic Steel's bracket type steel shelving also appeared, completing, with one exception, evaluations of such shelving now available on the market. The exception is the Ames shelving. This company was recently sold, and when production facilities are reopened, LTP will evaluate a sample of its shelving if appropriate.

The March issue of *Library Technology Reports* featured a series of evaluations of flatbed photocopiers and a chart for figuring how much copies cost. Products tested include the new IBM 6800 which copies on uncoated bond paper, and several high-volume Xerox machines. The photocopier reports, by Buyers Laboratories, supplement the previous evaluations carried out for LTP by William R. Hawken Associates. By examining the costs of different machines under rental, lease, or purchase plans, the Cost-Per-Copy Chart enables the librarian to select the photocopier which is most economical for his particular needs.

Telephone inquiries to the LTP Information Service have increased significantly and now amount to approximately 200 calls a year. In 1971, LTP's free information service answered approximately 500 written and 150 telephone requests for information on library equipment and supplies. Written requests answered during the 12 month period ending February 29, 1972, were about the same in number as previously reported, while telephone requests increased to approximately 200 (4 or 5 calls per week).

An analysis of the inquiries indicates that the top ten subject areas in which librarians sought the advice of LTP are: microforms and related equipment, a/v equipment, library shelving, library furniture, bookbinding, book labeling devices (including SE-LIN), library insurance, book preservation, theft detection systems, and floors and floor coverings. This shows little shift in emphasis from a year earlier, when a similar study was made. Each request is given individual attention. Every attempt is made to supply the inquirer with the most current and accurate information available. In instances when the Information Service is unable to answer a question, the inquirer is referred to appropriate alternate sources of information, or as appropriate, LTP develops the information needed by the inquirer. This is particularly important in view of the increasing sophistication of questions and the resulting increase in the amount of time that needs to be devoted to each inquiry. One third to one half the questions received need two to three hours' information search.

Marjorie Weissman
LTP/ALA, Chicago, Ill. 60611

REVIEWS

Information Retrieval Systems; Records Management Handbook, FPMR 101–11.3. General Services Administration, National Archives and Records Service, Office of Records Management. Washington, GPO, 1970. $1.75.

This handbook describes 51 representative nonconventional systems used for information storage and retrieval. These are primarily computer, microfilm/microfiche and aperture card or other optical coincidence systems. To quote the introduction, "the purpose of this handbook is simply to describe selected information retrieval systems in use today, so that those seeking information on the subject may learn what others are doing to solve their information retrieval problems. No attempt has been made to evaluate the relative merits of the systems described or to include all of the information retrieval systems in use within the government today."

The handbook is not a directory. In fact, some of the most important government IR systems: MEDLARS, Nuclear Science Abstracts, National Technical Information Service, Smithsonian Science Information Exchange, etc. are not included. However, by using the indexes, one can identify systems by agency, by equipment used, and by function. Functions are document reference systems, document storage, combined reference and document storage systems and finally data or fact retrieval.

The system descriptions are brief, rather general and frequently omit essential information such as the name and source of the specialized commercial equipment or the computer programs needed to operate the system. In fact, in most instances, there is no indication that a system is built around a piece of specialized, commercial hardware. The handbook could be useful as an introduction to various retrieval systems and as a guide where one could go to see a working system.

One must emphasize again: This is not a directory. Only a few representative systems are described and their descriptions are essentially on how they operate rather than their contents and services.

I. A. Warheit
IBM Corp.
San Jose, Calif. 95114

Encyclopedia of Information Systems and Services, edited by Anthony J. Kruzas. Ann Arbor, Michigan, Edwards Brothers, 1971. 1,109 pages. $67.50.

Professor Kruzas' *Encyclopedia of Information Systems and Services* is essentially a variation of his older and more useful *Directory of Special Libraries and Information Centers.* The volume under review is not an encyclopedia in the usual sense of the word, but, to quote the preface, "first of all a directory of information systems and services in the United States and Canada." The editor defines these information systems and services as Information Centers, Computerized systems and services, Networks and cooperative programs, Data banks, Documentation Centers, Information storage and retrieval systems, Micrographic systems and services, Research centers and projects, Clearinghouses and referral centers, Coordinating Agencies, Consulting and planning organizations and services, Information offices, Industrial research information centers, Professional associations, Specialized library reference services. To continue the preface, "Not included are traditional commercial and legal services, technical information centers which are essentially special libraries, public information offices . . . conventional indexing and abstracting services, and library automation programs which are limited to housekeeping functions, such as circulation, serials control, and acquisitions."

There are 833 entries in this directory and these are indexed by personal name of director, subject, computerized abstracting and indexing services, computer applications and services, consulting and planning services, data collection and analysis centers, micrographic applications and services, networks and cooperative programs, research projects, SDI systems, a list of the periodicals and serials published by the organizations and a dictionary of the acronyms used.

The information was gathered primarily by questionnaire. Each entry, which in almost every case fills a single page, gives the name, address and telephone number of the establishment, date established, head of the unit, staff size, a brief description of the system and services, the scope and subject coverage, input sources, size of the holdings, the serial and nonserial publications produced, the microform services, magnetic tape services, other services, computer and information processing equipment and the user restrictions.

This type of compilation suffers from the lack of any agreed-upon definition of what are information systems. There are no established categories. Worse still, many of the categories lack any real definition. What, for example, does one include in data banks, documentation centers, information storage and retrieval systems and so on? Every person has his own definitions and makes his selections based on his special interests. It is very easy, therefore, to fault the compiler because his categories and his selections do not agree with your own. But even in the well defined categories one is puzzled about the inclusions and omissions. Under consulting and planning services one can find Becker and Hayes, System Development Corporation and the University of California, Los Angeles—Institute of Library Research (and be sure to look under University—cross references are lacking),

but where are Herner & Co., or Arthur D. Little Inc.? Under Abstracting and Indexing one can find the Air Pollution Control Association and its *APCA Abstracts* but where is the U.S. Department of Health, Education and Welfare's National Air Pollution Control Administration and its *NAPCA Abstract Bulletin*? Within organizations, using my own company, IBM, as an example, why were two units selected while the major information service, extensively computerized, is not listed? But then, there are many difficulties in compiling directories, especially those that depend almost entirely for their compilation on questionnaires.

Will the *Encyclopedia of Information Systems and Services* be useful in a library? Libraries have an insatiable appetite for directories, but this directory contains such an odd mixture that it is probably useful only to a select number of libraries. Furthermore, many of the entries can be found in other directories. Also considering the high price of the volume, one should proceed with a great deal of caution before acquiring it.

I. A. Warheit
IBM Corp.
San Jose, Calif. 95114

COMING EVENTS

May 19–21. ASIS, Mid-Year Regional Conference . . . at University of Dayton, Dayton, Ohio. For information: ASIS, 1140 Connecticut Ave. N.W., Suite 804, Washington, D.C. 20036.

Jun 8–29. Short courses in library-information science . . . at CUNY Center for the Advancement of Library-Information Science. Tue. and Thu. evenings. For information: Vivian Sessions, director of the Center, City University of New York, 33 West 42nd St., N.Y.

Jun 10–16. Canadian Library Association . . . in Regina, Sask. For information: Mrs. Ann Lachance, 282 Martin Ave., Dorval, P.Q.

Jun 12–Aug 11. Short courses . . . at University of Denver Graduate School of Librarianship. Offerings vary in length. For information: Graduate School of Librarianship, University of Denver, Denver, Colo. 80210.

Jun 14. Symposium on Medical Information Systems . . . at the New York Hilton. Technicon International Congress is sponsored by Technicon Instruments Corp., Dept. R40, Tarrytown, N.Y. 10591.

Jun 26–30. Third International CODATA Conference on "The Generation, Compilation, Evaluation and Dissemination of Data for Science and Technology" . . . at Le Creusot, France. For information: B. Vodar, B.P. 30,92—Bellevue, France.

Jun 28–30. COMTEC (Computer Micrographics Technology User's Group, Third Semi-Annual Conference . . . at Radisson Denver Hotel, Denver, Colo. For information: COMTEC, P.O. Box 25605, West Los Angeles, Calif. 90025.

Jul 10–14. Gordon Conference on the Languages of Scientific Information . . . in New London, New Hampshire. For information: M. M. Henderson, Center for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234.

Jul 10–21. Archives-Library Institute on Historical Research Materials . . . in Columbus, Ohio. For information: David R. Larson, Institute Director, Ohio Historical Society, I-71 and 17th Avenue, Columbus, Ohio 43211.

Jul 15–18. National Audio-Visual Convention and Exhibit . . . at Municipal Auditorium, Kansas City, Missouri. For information: NAVA, 3150 Spring St., Fairfax, Va. 22030.

Jul 16–Aug 11. Institute of Archival Studies . . . at University of Denver. For information: D. C. Renze, director, Institute of Archival Studies, 1530 Sherman St., Denver, Colo. 80203.

Jul 17–19. American Association of Colleges of Pharmacy, Librarians Section, seminar and annual meeting . . . at Center for Tomorrow, Ohio State University, Columbus. Theme: "Evaluation of Pharmacy Libraries and Resources for Improvement." For reservation form (due Jun 17): Virginia B. Hall, College of Pharmacy, Ohio State University, 500 W. 12 St., Columbus, Ohio 43210.

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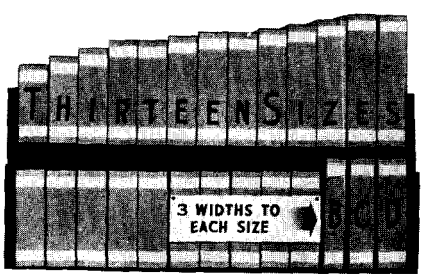

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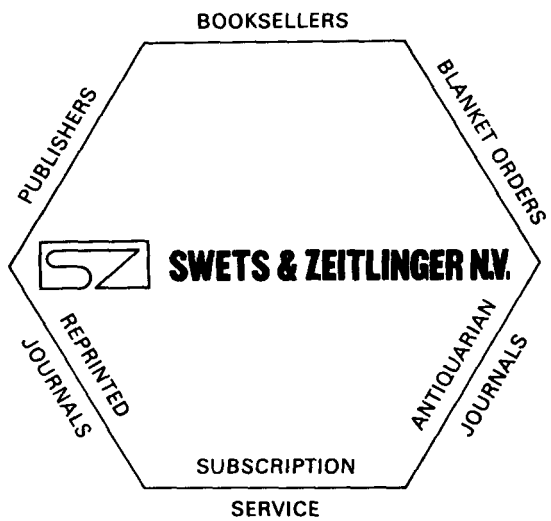

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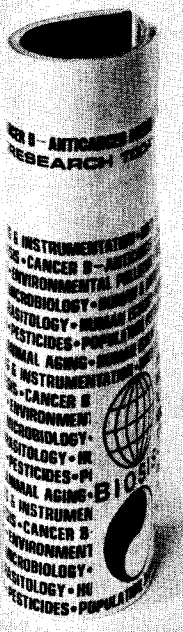

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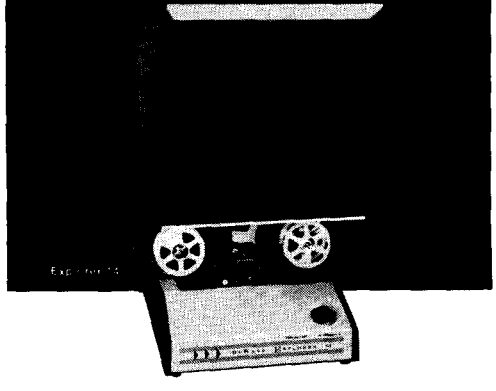

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Copy for display ads must be received by the first of the month preceding the month of publication; copy for line ads must be received by the tenth.

Classified ads will not be accepted on a "run until cancelled" basis; twelve months is the maximum, unless renewed.

Special Libraries Association reserves the right to reject any advertisements which in any way refer to race, creed, color, age, or sex as conditions for employment.

POSITIONS WANTED

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Librarian—BA, MSLS, four years' experience in business library, also in technical and school libraries. Seeks public service position in academic or special library. Some teaching and/or editorial responsibilities desired. Prefer Northeast. Box D-189.

Librarian-Veterinarian—BLS, DVM, seeks position in veterinary, medical or agricultural library. Four years' reference experience in public and university libraries. Dr. L. G. Green, 3313 107 Avenue, Edmonton, Alberta. Phone 474-1744.

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Information concerning the Employment Clearinghouse to be held at the 1972 Annual Conference in Boston appeared in the March 1972 issue of Special Libraries.

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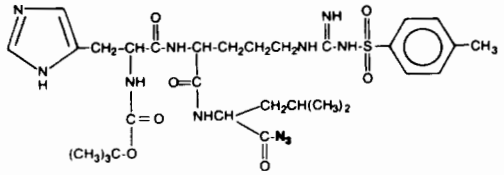

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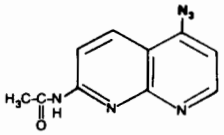

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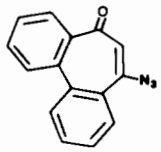

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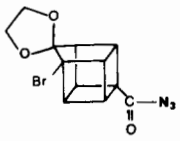

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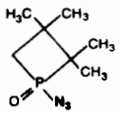

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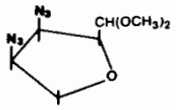

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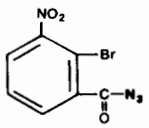

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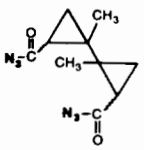

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