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Do you agree or disagree that RTSD publications should include more practical information? Of the 544 persons who responded to this query in the Planning and Research Committee’s recent membership survey, 58.3 percent agreed. Even before the results were reported, however, and even before we knew that April had been designated School Library Media Month, we were planning to include in this issue of *LRTS* several papers on technical services in the small library, defined for this purpose as one with a collection no larger than 150,000 titles.

We tried out the idea on a technical services librarian with some ten years’ experience in small school and public libraries in Illinois—Lizbeth Bishoff, the 1984 Piercy Award winner. She was enthusiastic and, to the editor’s delight, agreed to serve as guest editor for this issue. She was also willing to prepare a paper on management and to suggest other authors knowledgeable about technical services and small libraries. They have contributed papers on the facets of technical services we thought most likely to interest librarians in small systems: the collection development and bibliographic control of books, magazines, and nonprint materials; preservation; and automation.

Four papers of interest to a wider audience complete the issue. Complementing the article on automation is one on network and vendor authority control, deemed worthy of publication by several participants at the RTSD authorities institutes. The results of the three studies reported here suggest future directions for the development of area studies classification, specialized subject heading lists, and the cataloging of conference publications.

With many thanks to the authors, we present this issue in the hope that *LRTS* readers will find these papers interesting, informative and . . . practical.—Elizabeth L. Tate.
Managing Technical Services in the Small Library

Liz Bishoff

The management of technical services in the small library is presumed to be different from the management of technical services in the large library. This belief is held by the librarian in the small library as well as by the librarian in the large library. This paper suggests that size is not what differentiates the large technical services department from the smaller one, but rather that it is the goals of the organization. For the technical services department to operate effectively and efficiently, goals that complement and support the operation of the entire organization must be established.

When one discusses the Anglo-American cataloging code or the MARC format or Library of Congress subject headings with a librarian from a small library, the comments one frequently hears are similar to these: “those rules aren’t written for my small library” or “I won’t have to worry about MARC format; after all it was created for large libraries” or “unabridged Dewey numbers are too long for my users.” Indeed, until the implementation of the Anglo-American Cataloguing Rules, second edition (AACR2), the national standard for the bibliographic description of materials was designed for the general research library. The introduction to Anglo-American Cataloguing Rules (1967) states, “These rules have been drawn up primarily to respond to the needs of general research libraries.” AACR2, in contrast, was developed around the philosophy that all libraries, regardless of size or types of materials acquired, should be able to use the code.

The role of technical services in a library of any type or size is basically the same, that of acquiring and organizing materials to meet the library’s information needs and making these materials accessible to the staff and users. The complexity of the process will depend largely on the goals of the organization. In reality, whether one uses the abridged edition of the Dewey Decimal Classification or the unabridged edition, the Sears List of Subject Headings or the Library of Congress Subject Headings, the MARC format or a non-MARC formatted database depends on the desired degree of access to the collection. Does the collection contain materials that are difficult to browse, such as films or sound recordings? Is the

Liz Bishoff is Principal Librarian for Support Services, Pasadena Public Library, Pasadena, California.
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collection principally composed of rare books, where greater access to the content of the item is desired without the necessity of handling the item? Is the library designed to be self-service, as many public library branches are, or is it a closed stack collection requiring staff retrieval of materials? These characteristics, as well as the users’ requirements, should dictate the role of the technical services department, rather than the size of the organization.

To best manage the technical services department, the library administration, department manager, technical services staff, and other staff must see that the functions and tasks of the technical services department are designed to meet the goals of the library. Rarely, however, does one find a technical services librarian discussing the goals of the organization; rather they discuss the tools that are used to accomplish the goals. It is from the approach of determining organizational goals that I will address the issue of the management of technical services.

DETERMINING ORGANIZATIONAL GOALS

Alan Jeffreys, in a paper presented at the Library Association seminar on current practices in cataloging and classification in 1976, began by saying “A manager’s first job is to define his objectives and then to set about achieving those objectives with the resources available.” The technical services manager must do exactly that. Jeffreys goes on to question, “But what are a librarian’s objectives?” For that question to be answered, each technical services department must look to its own mission statement or goals, for there is no textbook answer, no standard program that can be followed, no model to be used. Each library must establish its own goals or mission, and in turn the technical services department can establish its goals. The goals of the special company library with a mission of meeting the information and research needs of the research and sales staff are not likely to be the same as the goal of a school library, that of supporting the academic curriculum. Both libraries may have the same level of staff and the same-sized collection, but they have very different users with very different needs. The identification of these needs is the first step in establishing objectives for the department.

Tools, such as the Public Library Association’s A Planning Process for Public Libraries, can assist library management in establishing organization goals. But since for this article established library goals are assumed, let it suffice to say that the technical services librarian should look to the goals of the organization as a whole in developing the goals of the department. Developing department goals is a critical process. It requires many managerial skills, particularly those of communication and interpersonal relations, as staff from the technical services and other departments and the users should be included in the process. Drawing from the knowledge and viewpoints of this varied group will result in goals that meet the needs of the entire organization and its users, and will also result in support for the actions that follow.

From the mission statement or goals of the organization, the technical services manager and staff will be able to design the technical services
If one is reviewing the organization of an existing department or establishing a new department, one of the first steps should be a task analysis. What are the current tasks and responsibilities of the department? What staff are assigned to what task? Who has responsibility for what project? Is the cataloger interacting with the public service staff? Who is assigned to search the bibliographic utility for cataloging copy? Is the individual responsible for binding and preservation meeting with the collection development staff? Who is responsible for original cataloging? All these questions and more can be answered in a task analysis. Each individual in the department should complete a job analysis sheet detailing the tasks that are done daily, weekly, monthly, and irregularly. The analysis should include the tools that individual uses and indicate the staff with whom the individual interacts on both a formal and an informal basis. Lastly the job analysis can indicate the experience and education necessary to perform the job. This type of periodic analysis of department activities in conjunction with an evaluation of organizational goals and objectives will assure accomplishment of the job. One helpful by-product can be a flowchart of department activities detailing the acquisition, cataloging, and processing functions.

Providing Access to the Collection

What is the responsibility of the technical services department in a small library? The highest priority should be the organization of library materials to provide maximum access to the collection by staff and patrons. The processes include the bibliographic description of an item, the determination of access points, both name and subject, and the assignment of classification numbers for the materials. To accommodate the variety of needs of different organizations, the major tools have been designed to provide flexibility. The national standard for the bibliographic description of materials, AACR2, was written to be usable by a variety of libraries. "These rules are designed for use in the construction of catalogues and other lists in general libraries of all sizes." This flexibility is evident in the provision of three levels of descriptions. The first level, a brief description including author, title, edition statement, publisher's name and date of publication, a brief physical description and standard numbers, was intended for use by libraries requiring minimum cataloging; however, it is not the level that must be selected by the small library: in many cases the third, and most detailed, level must be used to meet the needs of the library. For example, a rock music library specializing in Beatle memorabilia will want detailed descriptions of the various materials in the collection. Lengthy notes describing the various markings on a particular item will allow the Beatle aficionado to determine if this scarce item is indeed what he or she is searching for. The same case can be made for the school library that has an in-depth collection of film material or realia that gets heavy use by students and faculty. The only way a library can justify the degree of cataloging, and its associated cost, is by the access that the users' information needs require. If the small library finds AACR2 too complex for its needs, *The Concise AACR2* should be considered. Written by Michael Gorman, coeditor of
AACR2, *The Concise AACR2* allows the library to follow the national standards for access points, but simplifies the descriptive details. Rules for the access points and forms of headings parallel those of *AACR2*.

As with cataloging, classification can also be tailored to meet the needs of a special clientele. Small libraries can use the abridged edition of the Dewey Decimal classification schedules if they have a general collection covering the entire range of knowledge. However, the small but specialized library with materials concentrated in a narrow area may find it necessary to use unabridged numbers and standard subdivisions and tables to provide the hierarchical arrangement required by the specialized collection. Other small libraries find it necessary to borrow from the Library of Congress classification scheme or use more specialized classification schemes. The characteristics of the materials and the patrons' needs should dictate the level of classification, rather than the space available on the spine.

**DECIDING ABOUT THE BIBLIOGRAPHIC UTILITIES**

Many small libraries are reluctant to consider one of the bibliographic utilities for cataloging and classification. At an initial glance the costs charged by the utility appear higher than those charged by the major jobbers for their card services. In 1980 the Illinois Valley Library System began a project funded by the Library Services and Construction Act, whose "... purpose was to examine the costs and benefits of using OCLC in small and medium-sized libraries of all types."¹⁸ *OCLC Experimental Project Description, Report 1*, explains "The project was designed to introduce libraries to OCLC and give their staff hands-on experience while relieving them of most of the costs of OCLC membership."¹⁹ Librarians considering use of one of the bibliographic utilities should review this study. By doing an in-house cost analysis the library may find that the utilities can be cost-effective, particularly when considering the large number of cataloging records one finds when searching the large bibliographic utilities. In a 1983 survey of OCLC usage by all types of libraries, conducted by the OCLC Pricing Committee, public libraries accounted for 10% of the total original cataloging entered into the system, while academic libraries accounted for 33% of all original cataloging.¹⁰ It is not unusual for public libraries to report a hit rate as high as 99% for monographic cataloging on OCLC. Once again the important element in the decision is the analysis.

A variety of options exists today for the small library wishing to use one of the utilities. The library can purchase or lease a dedicated terminal that is especially designed to search the bibliographic database. Within the last several years both RLIN and OCLC began offering the option of accessing the database with a microcomputer in dial access mode. This option is particularly attractive for libraries cataloging fewer than two to three thousand titles per year. The annual authorization fee for dial access for OCLC libraries is approximately $200, with hourly online charges of $9.60 and a $48 annual Tymnet or Telenet password fee.¹¹ For each record used, the library is charged a fee, plus a small addi-
tional charge for offline products such as catalog cards or magnetic tape. Additionally the library can participate in the interlibrary loan subsystems that are part of these utilities and enhance the resource-sharing capabilities of all libraries. In addition to cataloging and interlibrary loan, OCLC offers two subsystems, serials control and union listing and acquisition. For many small special libraries, where the monographic collections are small but the periodical collections are large, serials control may be a plus. This past year OCLC introduced a new terminal, the M-300 workstation, an IBM-PC microcomputer modified by OCLC to include the ALA character set and special OCLC access protocol. In addition to using the terminal either in dial access or as a dedicated terminal, the M-300 can serve as a microcomputer to search online reference databases or to perform word processing, spreadsheet, or other office automation functions. The small library, which previously considered OCLC too costly due to the limited use of the terminal, will now be able to use the microcomputer-based workstation for multiple purposes. It is this type of cost-benefit analysis that must be involved in decision making for technical services.

Another option for participating in a bibliographic utility is through a cooperative. Numerous informal cooperatives have been established for the sole purpose of sharing an OCLC terminal. As early as 1978, five corporate libraries located in the Sears Tower in Chicago shared a portable printer terminal for dial-access OCLC cataloging. As previously mentioned, when the Illinois Valley Library System undertook a three-year project in 1980 to demonstrate use of OCLC, many of the smallest libraries shared terminals. In California small libraries within a similar geographic area are forming clusters, their primary goal being resource-sharing using OCLC. Cooperative ventures of this type require flexibility on the part of the participants, a willingness to work out scheduling problems, and support from the network. The benefits of resource sharing and cost-effective cataloging frequently override these drawbacks.

As microcomputers move into the libraries, more and more of the routine clerical functions can be automated. Small libraries are no longer precluded from the automation market because the more powerful microcomputers with their ever-increasing storage capabilities and decreasing costs can meet their needs. Many special libraries are reporting the development of in-house systems for serials control, acquisition, card production, and online catalogs.

**Husbanding the Resources**

**Materials**

A technical services function frequently overlooked by the small library is preservation. The library’s mission may not call for the development of a collection with special preservation needs. However, many school, public, and special libraries have collections that are unique. For the public library, it may be a local history collection; for the special library, it may be a collection of research reports. The technical services manager must identify those unique materials and establish standards and procedures that will assure their continued existence while providing access for users. These procedures should be devised in consultation
with the reference staff, and the entire range of options for ensuring availability should be considered, including photocopying, microfilming and, in the near future, laser disk storage.

STAFF

Proper utilization of staff is as essential for the successful management of the technical services department as the appropriate application of the new technologies. Technical services, with many clerical tasks, can be labor-intensive. The responsibility of the manager is to see that the goals of the department are accomplished with minimal staff. Processes must be reviewed to determine if all steps are necessary. Questioning why a particular step is done and asking if it is important that it be continued are a must. The continuance of a particular step must contribute toward the accomplishment of the department’s goals. Occasionally this type of analysis will identify an area where a step needs to be added. For example, suppose the staff is reporting a high level of duplicate cataloging in the online circulation system. To reduce the duplication rate an additional searching step may be required before adding a new bibliographic record.

For the staff to participate in this type of continual review of processes, they also need to participate in the establishment of department standards, which must be established in accordance with the objectives to be met and the community to be served. The entire library staff must understand the standards and objectives they will help to accomplish.

CONCLUSION

What of the future for the technical services manager? With the increased automation of technical services in many libraries, staff are faced with fewer responsibilities requiring their special skills for organizing and providing access to materials. Will individuals possessing these skills continue to be necessary in the automated library, large or small? Indeed they will, for a new area is developing that will require the skills of the technical services librarian, that of design, implementation, and maintenance of local information databases. Many libraries are using microcomputers to handle files previously in print form—the ready reference files, periodicals lists, and lists of local officials, clubs, and organizations. Unlike their print ancestors, these online databases, with their multiple access points, free text searching, and nearly limitless storage capability, are posing new problems to reference librarians unfamiliar with the organization of information for retrieval. Authority control, consistency in forms of headings, and standards of data entry are concerns in the functioning of information databases. Creation of thesauri and the establishment of standards are necessary for the effective retrieval of information in these local databases. The technical services librarian possesses the skills and knowledge to organize this information, making participation by the technical services department necessary for the successful implementation of these new programs. Realization of this role can come only through active participation in the library’s goal-setting process.
REFERENCES

3. Ibid.
9. Ibid.
As the small library begins the transition into the twenty-first century, it must evaluate collection development plans and procedures. The catalog should be examined in terms of collection control. Machine databases should be built for future online catalogs that will improve access to collections. The small library must become involved in research to improve the bibliographic control of monographs.

As we approach the twenty-first century, librarians in small libraries can expect change. Will services change? Will delivery of services change? Will technical services librarians be replaced with clerks using terminals to large-scale computers? Will the small library exist? Perhaps as the world becomes smaller through improved communication, the new world might center around the grandchild of the small library. Whatever the future, we can begin this transition to the twenty-first century with understanding of library users and technology for improved collection development and bibliographic control.

The Book and the Technical Services Librarian

Considering the prophecy of the 1970s of the demise of the printed book with its replacement by technology and the substitution of the computer for skilled technical services librarians, it is interesting that articles a decade later should deal with collection development and bibliographic control of monographs by humans.

The printed book is not a resource humankind will reject lightly. Likewise the technical services specialist has not been replaced by the automation of technical processes. Quite the contrary; few specialities have enjoyed a more challenging, exciting, and rewarding atmosphere than the community of technical services librarians during the past decade. Maurice Freedman relates to the future of the technical professional in his statement, "The computer will enhance the professional’s performance by creating options totally unavailable with manual files."

Principles of Collection Development

Traditionally, most philosophies of collection development agree on
the necessity of selecting the right book for the library user; most would agree on the necessity of planning for library collections. Differences of opinion occur, however, as to the extent that demand should govern selection or that no school of thought should be overlooked. One view proposes to purchase according to requests of present library users; the other view reflects a desire to broaden the base of information for present users according to anticipated need and to increase use of the library by those now using it. One is a passive approach; let those who come, come; the library will have a collection to serve them. The other is an active approach; buy through the whole range of subjects in order to enhance the interest of users, present and future.

In addition, some very practical problems have forestalled a satisfactory resolution of these questions for most librarians. If the library is limited in funds, as are most small libraries, the librarian may well have cause to hesitate before attempting to build a well-rounded collection at the expense of not meeting present demand. If book “A” is purchased because it has intrinsic worth, expounds its subject brilliantly, is the product of a highly authoritative writer, but does not represent a present reading interest in the community, then some book “B” which is of interest in the community cannot be purchased.

Another principle to be considered concerns the quality of books rather than the interests of the potential users. Will some standard of excellence be applied in selection, or will anything requested be purchased? Librarians committed to the view that materials acquired should meet high standards of quality in content, expression, and format emphasize authoritativeness, factual accuracy, effective expression, significance of subject, sincerity of purpose, and responsibility of opinion. These librarians might resist buying a book that fails to meet these standards, even if the book were in heavy demand. The opposing view would not hesitate to purchase a mediocre book which will be read in preference to a superior book that will not.

In Building Library Collections, we are reminded of Cutter’s observations on this subject.

While the judgments of the past are being called to bear witness, let the following words of Charles Cutter—who also summarized this problem in his colorful and effective rhetoric—be introduced as evidence: When you have a perfect people you can afford to have only perfect books, if there are such things. When you have a homogeneous public you can hope to have a stock of books exactly fitted to them all, and no book shall be unfitted to any one of them. But so long as there is a public of every diversity of mental capacity, previous education, habits of thought, taste, ideals, you must, if you are to give them satisfaction or do them any good, provide many books which will suit and benefit some and will do no good, perhaps in some cases may do harm, to others. It is inevitable. There is no escape from this fundamental difficulty. . . . Select your library then, as Shakespeare wrote his plays, the highest poetry, the deepest tragedy, side by side with the comic and the vulgar. . . . To sum it up, what I have been trying to show is the great diversity in very many respects of those who come to the library, the consequent diversity of the best each can read, the necessity of providing many different kinds, qualities, degrees of good books, the impossi-
bility of limiting one's choice to any one degree of good, lest it should be too high for some and too low for others.'

Two libraries of similar size and environment can be two very different institutions, reflecting choices of selection and services. As we approach the twenty-first century, what seems most essential is that librarians acknowledge these variations and clearly implement a service point of view.

**THE COLLECTION DEVELOPMENT PROCESS**

The collection development process should be a collective process using the expertise of as many individuals as possible. In the small library all professional librarians and some paraprofessional employees would be included. A growing trend is to use expertise from neighboring institutions. It should be possible for selection in a local public library to include individuals from neighboring universities, e.g., the Spanish-language literature section of a public library may be selected by an employee of the Spanish department of a neighboring college. This process provides the mechanism for stronger collections but requires greater coordination in the acquisition or collections departments of the public library.

Most important to a process that uses a wide variety of selectors is a method of allocating funds, accounting, and evaluations of the selection process. An evaluation process should include the immediate supervisor of the selector for library employees and the coordinator of collection development if the staffing includes such a position. An evaluation should begin with an understanding of the existing collection in the area to be selected, an understanding of the use of that area, some perception of the market for new materials, current budget allocations, and selection tools. As simple as this may seem, few selectors are evaluated with regard to process.

**COLLECTION STUDIES**

The Subcommittee on Use and User Studies, Collection Management and Development Committee of RTSD has prepared a Guide to Collection Evaluation through Use and User Studies. This guide is printed in *Library Resources & Technical Services*, October/December 1983 issue, and provides a tool for selecting methodology for use and user studies.

Collection analysis should continue using varying methodology to determine use patterns and to anticipate growth. William Katz has divided evaluation into two parts: evaluating the collection quantitatively and evaluating the collection according to the needs of library users. The RTSD Guide to Collection Evaluation through Use and User Studies summarizes approaches that can be used for these two parts of evaluation. Carolyn Moore, in an article published in the January/March 1982 issue of *Library Resources & Technical Services*, shows detailed application of a collection profile study for the small public library.

It is possible that collection studies have not been used extensively within the community of small libraries. We can learn from studies completed by larger libraries. If a collection is unable to produce necessary
information when users need it, should that collection be judged inadequate? Let each of us not begin the twenty-first century without data developed from strong collection studies at our libraries. It would appear that most collection studies should develop profiles of existing collections; should evaluate use of the existing collection including circulation and in-house use; should study users and their needs; should evaluate interloan use by area; and should show the relationships of these studies to each other. A large part of these tasks includes the gathering of statistics. The automation of circulation functions is most always of assistance with data gathering but usually requires professional decisions in the interpretation and combining of statistical areas. Some skill with the use of statistics is helpful; expertise outside the library is usually available. Finally, adequate staff time is required to collect, arrange, and interpret data.

Profiles of existing collections should be developed for as many parts of the collection as possible. Ideally, broad areas such as history should be divided into ten to twenty areas. Within each area of the profile, items should be counted by copyright date. These data are compared with circulation and in-house use of the items. Interlibrary loan requests should be compared with each area of the profile to indicate unmet needs. This entire process is extremely labor-intensive, but rewards are great. Ideally, the collection profile for an area should be done by the individual responsible for developing the collection in that area. At the end of the process the individual selector is most knowledgeable of all areas and needs within each assigned part of the collection. It is necessary to have at least one individual responsible for the coordination of building the profiles if a number of people are involved.

THE CATALOG IN THE SMALL LIBRARY

Any discussion of transitional technology and bibliographic control for the small library should include discussion of the catalog. The card catalog has served libraries well. But, Michael Malinconico observes, use of a library requires greater assistance than any catalog can provide. Yet Malinconico continues his statements concluding that the online catalog has potential to provide more than the traditional catalog can offer. In light of the potential for improved service through the online (interactive) catalog and because of the extensive manual effort required for catalog maintenance of the traditional card catalog, preparation for the future with an online catalog should be supreme in planning for the small (as well as the large) library.

In her article, “The Online Public Access Catalog in 1984,” Emily Gallup Fayen recommends several features that should be part of an online catalog:

- A database consisting of bibliographic citations for materials in one or more collections
- Indexes to the records in the database
- Authority control linking related headings
- Methods of display of records
- Ease of use

The online catalog in the small library should, in my opinion, provide
two additional types of information:

- Holdings information linking circulation information and bibliographic data
- In-process data about acquisitions on order or being prepared for use

Each small library can best prepare for the twenty-first century by providing the foundation for a strong machine-readable database. All future automation depends upon this step. One point seems clear in the preparation of databases for the next century. Converted records should be available somewhere in each system developed for each library, large or small, in full MARC format prepared according to standard cataloging practices. If a library should use, at present or future, varying automated systems for cataloging, acquisitions, circulation, or other applications, it is this common format that will best preserve continuity and prevent multiple databases. If the industry should make today’s technology obsolete, it is this common format that will provide the most complete insurance package available to prevent rekeying data.

Some of the most common access points in bibliographic databases include author, title, subject, call number, ISBN, ISSN, and LC card number. Commercially produced software offers varying access points for files contained in their systems. One should bargain for more indexes than are available in the traditional card file. A library should seek file arrangements best suited for the needs and economy of the individual library. The library community should pressure vendors to produce filing arrangements less frequently associated with computer sorting and more frequently associated with library filing.

Providing linkages between authorized and variant forms of the same entry is among the most traditional and important tasks of any catalog. Russell Gardiner refers to “authority work” as the “killer in cataloging.” If one can be objective it might be observed that we have not been as successful as we could have been with linking forms of entry in the past. If one could see the future, the automated system will likely address this problem more extensively than any other, revolutionizing library service in the process. Prepare for the transition to the next century of library service with extensive understanding of the need for good authority control, with clear expectations of the computer to assist with linkage of entries, and with commitment for improvement. Automation of bibliographic control in the small library will not be successful unless the problem is adequately addressed.

Ease of use and manner of display are characteristics of any online catalog that require careful study. Ideally the system should be able to provide display of full bibliographic records in formats familiar to the user and in formats useful to the technical services staff for their work, e.g., data with associated tagging structure. The system should be able to display citations in shorter form than the full bibliographic record form, for ease in browsing. Each system will have methods unique to itself for use of terminals and software for searching.

Service is improved tremendously whenever the item (holdings and circulation data) is associated with the bibliographic data in an online catalog. Users searching for a title are assisted with the knowledge that
copies exist in more than one library of a particular university or library system. Library staff receives assistance whenever information is available from the online catalog that a particular item is presently in circulation. In addition, both users and staff are aided in their work whenever in-process information is available from the online catalog concerning books on order and in process.

**Automated Circulation Control**

Few library functions affect the library user as closely as circulation control. Yet, because of the volume of activity, few functions are as clerical and leave as little time for emphasizing service. Automated circulation control systems not only facilitate improved service and access to materials, but also serve as a valuable tool in collection use and user studies.

It is important, however, that the automated circulation system be integrated into the strong bibliographic database on which the online catalog is constructed. The maintenance of this database should be the responsibility of the technical services staff.

**Research**

If we acknowledge the importance of the catalog to the services that a library provides and if we recognize the potential of computer science to offer something as equally revolutionary as the card catalog, then surely technical services professionals can be permitted five percent of their time for research during this time of transition to the twenty-first century. First we must convince administrators and other library staff of the importance of this type of activity; secondly, we must begin in areas somewhat unfamiliar. Technical services librarians in small libraries must accept responsibility for research, sharing this task with librarians in large libraries. Research effort by technical services staff in the small library can gather information from users concerning access points used in locating information. Research procedures can be developed for understanding the level of difficulty experienced by users in locating information. Without adequate research, the installation of an online catalog may simply replace the card catalog; every effort should be made to provide increased access to collections.

**Accountability**

Accountability requires that each service be performed within an established time period, with a stipulated use of resources and in accordance with certain performance standards. Information should be available for outside review and clear and complete records are essential. It is amazing that the library director who is very firm in the matter of vendor contracts can be noncommittal about the quality of service offered by his or her library or that the employee who is most vocal about participation in decision making can be so vague about the reasons for deteriorating performance.

In discharging its responsibility for accountability, the technical services department will need to refine its techniques for measurement to
show what has been accomplished. The goals that are set, however, should not be just those that are easily attainable and measurable. Accountability is not just a matter of counting the number of monographs acquired or the number of entries input into the online catalog per hour; there also needs to be evaluation of the ease of access we have provided to the collection and the satisfaction the quality of that collection brings the library users. During the period of transition into the technical services of the twenty-first century, we must be completely accountable for providing top-quality bibliographic control.

**SUMMARY**

User demand, budget, and overall collection development plans should play equal roles in determining selection. The collection development process should be a collective process using the expertise of as many individuals as possible. The selection process should be evaluated regularly.

Collection studies should maintain current profiles for each area of the collection to show the makeup of each; should evaluate use of the collection with circulation data and methods of evaluating in-house use, and should include interlibrary loan data. The task of determining whether the user is locating desired information is a professional task.

The small library can prepare for the twenty-first century by providing the foundation for a strong machine-readable database with records in full MARC format using standard cataloging. Preparation for an online catalog should be supreme in planning. Prepare for the transition to the next century of library service with extensive understanding of the need for good authority control.

**REFERENCES**

Serials in the Small Public Library: Not Out of Control

Robert E. Boyer

Practical procedures adopted by small public libraries for the collection development and bibliographic control of serials must be responsive to the local community and only as sophisticated as is necessary to keep the serials from getting out of control. Restrictions of small staffs and budgets must not impede potential for future growth, adherence to standards, and delivery of service.

The term "serial" in the public library is often meaningless to the average patron and is confused with a product of Battle Creek, Michigan. This examination of collection development and bibliographic control, however, is concerned with three categories of library materials which are important to the library manager and can be identified as serials: (1) magazines (even though they may be scholarly journals); (2) reference books (directories, yearbooks, indexes, periodically updated reports and loose-leaf services); and (3) ordinary books which can circulate separately (and only the librarian who selected them realizes that they are related as a series with a common title). The scope of this discussion is limited to practical suggestions for the small public library which is not preparing for automation, does not belong to a bibliographic utility, has a small staff, and has modest resources.

It is almost impossible to improve upon the very fine studies of the theory and process of serials work to be found in Osborn and in Magrill and Hickey. They are concerned with libraries of all types and sizes, and public librarians should be aware of the standard practices, even though some of these may not always apply to smaller institutions.

SELECTION

All discussions of collection development boil down to one basic concept, namely meeting the library needs of the patrons in the local community. The nature of each town and the presence or absence of other information-providing services can result in wide differences of public library function. The four major factors which most affect the collection development and control policy are the public school, the potential for growth, the responsibility for collecting local history, and the amount of available funds.

Robert E. Boyer is Associate Director of the Arlington Public Library System, Arlington, Texas.
The most important of these factors is the local public school and its own library resources. These resources will determine the needs that students will bring and the choice of magazines and reference books that will be required to meet them. For example, if the school keeps microform back files of magazines indexed in the Reader's Guide, or if there is a community college or university in the immediate area, the public library would be justified in slanting the selection of titles toward those which relate to general adult interests and leisure reading. In the opposite case, the public library may be the only community resource for periodical back files and research materials. In this case, careful attention must be paid to collecting titles which are well indexed, and to deciding how to retain back files. Space limitations may dictate microform only. In either case, the local perception of the roles of the school and the public library are very important, and cooperative planning between the two institutions is necessary.

The second most important factor is the potential for growth. This potential may be affected by proximity to a large metropolitan area, by expanding local industry, or any number of other factors, such as location in the Sunbelt; but the long-range plans for a growing community may have a tremendous impact on choices of the number and types of serials to be collected and the level of bibliographic control necessary from the very start. Even a library in a remote and static community with little potential for growth may have the opportunity to participate in shared collection building and information service through regional systems, consortia, and cooperatives. Such cooperation leads both to the opportunity for upgrading cataloging records and to the necessity for keeping accurate, complete, and standard bibliographic control. Including the International Standard Serials Number in the basic bibliographic record may seem to have little use now, but with the potential for growth or cooperation in the future, it could become a key element and shortcut for building union lists or accomplishing a machine-readable retrospective conversion.

The responsibility for collecting unique materials about the local community is the third factor affecting serials collection policy. With a few notable exceptions, most small towns have no other agency to collect, preserve, and organize a record of that community's life, and it is very important that the public library acquire and retain such serials as the telephone book, the newspaper, and the city directory (if there is one). In some cases, it is entirely appropriate to acquire a copy of the high school yearbook. If space is crucial, having materials microfilmed may be the best solution in the long run, even if the Friends have to pay the Police Department to do the photography. As regional cooperation and union listing grow, a library which was concerned with only its own patrons will discover an increased appreciation, by a larger audience, for its collections of local materials and its unique strengths.

The fourth factor is funding. At some point in the budget cycle the amount allocated for serials must be weighed against the amount for monographs, as the decisions are made as to how to stretch limited funds most effectively. It is helpful to separate the periodical subscriptions from the other continuations and regularly updated replacements which
are used more like "books" than "magazines and newspapers." Then one portion of the budget for periodicals and another for continuations does not look as frightening as a combined line item for all serials in the broadest sense. Magrill and Hickey define as "pseudo serials" these hybrid works which include successive editions of reference works, directories, and biographical lists of the "who's who" type. They explain, "Any publication that appears in separate parts or editions, under a consistent title, and continues for more than one or two years is likely to be handled as if it were a serial, even though it does not fully match the technical definition." Sometimes financial procedures of the parent body do not allow the public library to commit itself to purchase books in a true monographic series if they are released over a period of time longer than one fiscal year. The selector either must order the books as separate monographs or must wait until a future date when all titles in the series have become available. Frequently the items are cataloged and circulated as separate pieces anyway. For budget allocation purposes, the serial aspect of these items seems to fade away, and they become individual monographs high on the "want list." Nevertheless, the librarian must keep track of both the pseudo serials and the true series items while performing the delicate balancing act of applying the limited amount of funds available to all the titles desired and needed.

All of these factors of community and institutional analysis contribute to the selection policy and the acquisition plan, both of which should be written down. The decision to acquire a serial title is an important one because the library is committing itself to purchase the title into the future. There have been several examples of sharing this decision through direct patron involvement in the serials selection process, such as the procedures at Columbus, Ohio, in which sample copies of titles under consideration are put out for patron evaluation. Most publishers will send an examination copy of their magazines upon request. At Tucson, Arizona, and at Baltimore County, Maryland, heavy weight is given to patron requests. The procedures in the small community library may not be as formal as this, but the principles are the same. Regular interchange with patrons will reveal user needs and specific titles of magazines, pseudo serials, and monographs in series which do or do not meet their needs. An adventurous spirit is required for looking beyond the standard periodical indexes and catalogs for titles not indexed but still representative of the cultural, business, or historical flavor of the local region.

ACQUISITION

Acquisition of serials is complex enough to require some outside help. Magazine subscription agents can handle the majority of the public library's periodical subscriptions. The advantages for any library are consolidated billing and combined correspondence. Most governing bodies will quickly agree to the sensibility of using an agent if it means fewer invoices and vouchers. However, the librarian must assume that any agent will make a few mistakes. Rather than choosing automatic renewals, it is better for the public library to insist that the agent provide an annual printout or list to be authorized by the librarian before the
actual renewals are placed. Since some subscriptions are noncancelable, errors on the list must be detected prior to placement and before small mistakes grow into large problems. If pseudo serials are not carried by the subscription agency, they are often available through the continuations plans of the book jobbers. Most provide for the setting of alternate buying cycles by a library with a small budget. Actual purchase of a work published annually, for example, can be limited to every second or third year. In spite of these sources, there will always be some problem titles which must be ordered directly from the publisher. Some indexes, reference sets, and journals (such as those which come as part of a membership) cannot be ordered through any agent or jobber. The library has no choice but to keep up with the renewals as best it can through tickler files, calendars, or checklists.

A good source of additional titles is through gifts. In the larger libraries, the preference is for the donor to contribute the money and let the library order the serial through its agency. In a small library it is sometimes less work to have the patron place and renew the subscription, deliverable to the library.

One final source, government publications, should not be forgotten. The Government Printing Office has launched an aggressive sales policy which makes acquiring government publications simple and convenient. More titles than in the past can now be handled through the jobbers. Direct orders can be placed over the telephone with any of the GPO bookstores in twenty-one cities, and payment can be made by credit card or prepaid deposit account number. Standing orders may be placed for regularly updated titles such as the Occupational Outlook Handbook, Statistical Abstract of the United States, United States Government Manual, or the Congressional Directory by writing the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for order forms, price lists, and details about establishing a deposit account. This information and the forms are also contained in the Monthly Catalog of United States Government Publications, which can be examined along with many of the titles of interest at any one of the 1,370 libraries across the country which function as depositories of U.S. government publications. Many public libraries are in this group. Government Periodicals and Subscription Services: Price List 36, a quarterly available free from the Superintendent of Documents, quotes the prices for the true periodicals. An excellent list of free and inexpensive serial and pseudo serial government documents is the quarterly Consumer Information Catalog, free by request from the Consumer Information Center (P), Box 100, Pueblo, CO 81002. Libraries which can distribute twenty-five copies or more can be put on the automatic bulk quarterly mailing list for this catalog, which lists publications from thirty federal agencies. Most of the titles are pamphlets and monographs, but the catalog includes regularly updated free items such as the General Services Administration’s monthly Sales of Federal Surplus Real Estate, the annual Consumer Resource Handbook from the Office of Consumer Affairs, and the Department of the Interior’s U.S. Government Oil and Gas Lottery, which is updated approximately every two years. Another approach is to write an individual agency and ask for a checklist of free and inexpensive materials. An example of such a list is the free an-
annual Gas Mileage Guide: EPA Fuel Economy Estimates, which can be requested from the Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. Once a library is placed on an agency’s mailing list, it will receive an annual renewal request card for remaining on the list. Both the free materials and the priced items can add greatly to the library’s resources of helpful and current information.

**Bibliographic Control**

The bibliographic records for serials collected by small public libraries may not need to be as detailed as for some other types or sizes, but the control of receipt must be carefully monitored. Berman believes that the cataloging needs in public libraries are unique because public library collections are current, user-responsive, quickly changing, and generally entitled to "now" cataloging. Should serials be included in the card catalog? Perhaps the different categories of serials require different degrees of bibliographic control. Unless the Reader's Guide is very close to the main catalog, magazines should probably not be included there, but a general sign should direct patrons to the magazine area. If drawer space and staff time permit, directional see references may be filed under the magazine titles to point the user to the periodicals area. (Would anyone like to propose a General Material Designation [Magazine] for small public libraries?) Generally a small public library will choose instead to indicate the basic magazine holdings through typed lists or separate card files placed near the periodical indexes, or by means of marks on the contents pages of the Reader's Guide. For a very small library, a workable cataloging record can be extracted from Ulrich's International Periodicals Directory and typed onto cards. Suggested LC subject headings and the ISSN are provided there. Larger libraries will have their usual sources and union lists to consult if more standard and detailed cataloging is desired. It is ironic but true that a very small library which has to get the most use from limited materials will have the most to gain from a very liberal policy of making numerous subject entries for magazines. Larger libraries which accumulate back files of periodicals generally need more detailed descriptive cataloging records than the smaller ones. However, according to Randall, "If a library does not permanently retain periodicals, there is no need to catalog them, so long as this use poses no problems for the users and the staff. Usually, libraries that do not retain their periodicals permanently do not have large collections of serials, so there are no problems of access or retrieval." Classification is also unnecessary, since practically no small library would need to place the magazines in any arrangement other than alphabetical. If the current issues are displayed in plastic binders, it is wise to mark the back with the title on a small piece of tape so that if the item is removed from the binder, the librarian will not have to spend time guessing which magazine it was.

Newspapers create an unusual bibliographic control problem because their greatest value is in the last few issues held. Their next greatest value is the historic worth of the oldest issues held. If older issues are retained at all, they are usually on microfilm, with all the cataloging problems characteristic of that medium. For current newspapers, patrons need ac-
accurate holdings records more than detailed descriptive cataloging. The receipt records should be presented in such a way that the patrons can determine for themselves which issues are on hand and if an issue never arrived. Sometimes this is most easily achieved by posting a chart in a clear plastic cover at the service desk facing the patrons. An emergency plan for supplying a substitute copy of the local daily or the *Wall Street Journal* should be devised for those occasions when the library's copy fails to appear. One method is to list on the record, for the benefit of both patrons and staff, the nearest locations where the newspaper may be purchased.

Should the rest of the serials and pseudo serials be included in the card catalog? Yes, of course. Reference books appearing serially should be cataloged as open entries in the main catalog. Often the newest volume of an annual is placed in the reference collection and the earlier volumes are moved to the circulating collection. Notes to this effect should be on the catalog cards and also on “dummies” in the stacks next to the older books. This method will cut down on confusion and directional questions. Periodically updated reports and loose-leaf services should appear in the catalog as well. Cooper presents a logical argument for cataloging loose-leaf services with an open entry and treating them as serials because the entire contents may be replaced eventually, a few pages at a time.

If the bibliographic record is left as an open entry without holdings, then the records of receipt become a very important extension of the catalog. Although it requires looking in two places for the whole story, dividing the open-entry bibliographic record and the holdings record can save considerable catalog maintenance time and still serve the patrons efficiently. Receipts and discards can be recorded on commercially printed grid cards held in flat drawer trays of the “Kardex” type or, for a very small collection, on ruled pages of loose-leaf notebook paper. If cards are used, notes should be written on the face only, as writing on the back is easily forgotten and overlooked. Any price information should be recorded in pencil, for it is sure to change. The serial check-in record should not be hidden in a back room, but rather placed at the public service desk for easy consultation. In a small library the daily magazine check-in will probably be performed at the service desk anyway. In theory, receipt records for all serials should be kept together, but depending on the size of the staff and the floor plan for work flow, an argument can be made for separating the files for the magazines from the files for the other serials. The pseudo serials, including directories, indexes, and reference sets published in parts, are handled more like monographs than periodicals as they move through technical processing. Frequently they are given copy or accession numbers and added to the shelf list like monographs, as well as being recorded among the serial receipts. As with magazines, the receipt record is both an acquisitions file for claims and renewals and a catalog file for holdings information needed in the public area. If a nonpublic area is used for unpacking shipments of new library materials, it may be helpful to keep the receipt cards for pseudo serials in transportable binders or trays which can be taken to the unpacking area as needed.
The check-in record can contain gems of extra timesaving information for bibliographic control, such as the exact form of entry, the call number for classified items, changes in the predicted issue pattern, or even a template showing the exact position and spacing for an unusual permanent spine label. Some serials, such as a few of the Wilson indexes, appear in both temporary paper issues and permanent hardbound accumulations. The temporary issues need not pass through all the stages of preparation such as accessioning, labeling, and shelf listing. After receipt of the issue has been recorded, a simple hand-penciled spine number and the ownership stamp are all that are required before releasing the item for patron use. The record of receipt is the logical place to capture the latest price changes and to begin the whole budgeting and selecting process all over again.

The future of serials control in small public libraries is certain to involve more standardization, more sharing of cataloging and holdings data, and more application of data processing techniques. The virtues of the old manual check-in system, however, have been lauded by Paul as being instantaneous, flexible, and not subject to erasure from a dip in the electric current. No doubt the automated online serials systems are improving, and soon there will be affordable systems, for all sizes of libraries, which will prove as reliable as the manual systems and which will once more integrate the bibliographic record with the receipt record.

This is but a brief glimpse of the handling of serials in one type of library. In the small public library, serials are carefully chosen, but as long as receipts are monitored, they may be kept under loose bibliographic control. However, they are by no means out of control. What are they then? They are available for the public to use, and that is what library collections are all about.

References

3. Ibid., p.157.
Serials in a Small College Library

Deborah Bolton Stagg

Serials management is a more problematic issue for small college libraries than it is for larger academic institutions. Due to budget constraints and limited personnel, small libraries generally have neither the gamut of necessary serial reference tools nor the depth of staff specialization to fully master the various complexities of serials administration. This paper examines some specific serials issues as they have been addressed by a small academic library and concludes that computer technology may be the means to professionalizing small library serials management.

Serials management in libraries is an extremely complex subject covered by an extensive literature. For the small college library, serials complexity is made more problematic by limitations of both staff and bibliographic resources. Often, responsibilities are either divided, comprising a small part of several staff members’ duties, or one staff member is in charge of serials as only one of many areas of responsibility. In either case, the lack of specialization, in-depth concentration, and exposure to the variety of serials issues can make serials management problems more difficult to resolve. In addition to the lack of highly specialized staffing, the small college library often lacks many of the costly bibliographic tools which are necessary to resolve serials questions precisely. Serials management for these institutions must seek to maximize external labor and expertise, and at the same time minimize costs.

Preliminary to discussion of serials issues, it is essential to define the term ‘serial’; as defined in AACR2, it is

A publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. Serials include periodicals; newspapers; annuals (reports, yearbooks, etc.); the journals, memoirs, proceedings, transactions, etc. of societies; and numbered monographic series.

At the Philadelphia College of Art, the serials department has generally not dealt with annuals (handled by reference and cataloging staff) or monographic series (subsumed under acquisitions, with book collection development, and cataloging). However, throughout this paper the broader definition will generally apply.

Deborah Bolton Stagg is Head, Technical Services, Philadelphia College of Art Library.
COLLECTION DEVELOPMENT

Collection development focuses on two primary questions:
1. how to identify the universe of serials which pertains to the curriculum and areas of subject specialty, and
2. how to select from that universe the subset that can best satisfy demands placed on the library and fit within the allotted budget.

First, the identification phase of collection development utilizes bibliographical finding tools, listings of which are readily found in the literature. Further, it is useful to pay close attention to publications which are frequently cited or discussed in serials (as well as other document forms) already received by the library. To go beyond the limitations of bibliographic materials, it is essential to go to the students, faculty, and researchers using the library to identify specialty publications which may be very new, or outside the mainstream of publishing. It is important to find out what the departments are subscribing to, what individual subscriptions are held by the library’s users, and generally what is being recommended by influential members of the library’s client base. Often, a single dynamic individual in a department has an enormous influence upon what is read by a large number of the library’s users. It seems essential that particular departmental philosophies (or biases) be recognized and to some extent incorporated into the library’s collection development policies.

After the identification phase, the selection phase of collection development requires a new set of criteria. At this stage a formal, written collection development policy is essential. This document must recognize the utility of applying criteria flexibly. For instance, at the Philadelphia College of Art Library, inclusion by Art Index or ARTbibliographies MODERN would weigh very favorably in an evaluation of a journal for acquisition, while indexing is less important for more immediate material such as newsletters, which may be of great utility for only a short period of time. A similar case can be made for English-language publications. When these serials are highly pictorial, however, we would not rule out a non-English publication.

The small college library that is located, as is the Philadelphia College of Art Library, proximate to a large number of other libraries with extensive serials holdings, is able to depend on outside collections to supplement its own holdings. A number of relatively low-use, high-priced annuals are being purchased on a biennial basis, allowing us to better allocate some financial resources to publications of higher use. In the last several years we have reduced the number of general-interest magazines, depending on cooperative use of nearby libraries for most material not specific to our areas of expertise. At the same time, we seek to enhance the value of our collection by looking closely at serials which contribute significantly to our subject specialties and are not collected by libraries in our geographic area.

A formal serials review takes place annually, with more timely review of particular titles occurring as necessary. Requests from the academic community are made throughout the year, and it is a good idea to encourage this participation in the selection process. The selection process
itself has become somewhat less intimidating with the general availability of journals in microform, allowing selectors to acquire previously missed or rejected titles.

To document this process of selection, there should be a decision file. This file, for a small library, contains a decision form for each title considered or requested, plus a sample issue if obtained. What is important here is the recording of negative decisions, and their reasons, to avoid repeating identical analysis (and purchase of sample copies) year after year. Of course, changes in serials over time can lead to a change of the original decision, as can changes in the criteria for purchase.

**Bibliographic Control**

One of the first decisions confronting the librarian in a small academic library is the choice between direct acquisition or acquisition through a serials vendor, such as EBSCO or Faxon. Two reasons favoring direct acquisition are:

1. somewhat more immediate control over starting and stopping a serial, and
2. cost savings, since vendors add a service charge to the total serials bill.

By contrast, acquisition through a vendor provides not just the subscriptions but an extensive administrative package. Although we, as a small college library, cannot afford participation in its online systems, Faxon’s own computerized systems have provided us with benefits such as common expiration dates, billing via a single annual printout, and summary reports of all our claims and publishers’ responses. In addition, Faxon supplies free to its customers its Librarians’ Guide to Serials, an invaluable tool, annually updated, which includes among other information current subscription price and LC subject class and, most importantly, shows at a glance where each title is indexed. Selection of the vendor method of acquisition over the direct method has been an easy decision for the Philadelphia College of Art Library. Presently, we pay a service charge of 4 percent of the subscription price totals and receive far greater value from their service.

A particularly tiresome problem has been determining how to handle the mail, the problem being, simply, that not all serials mail is easily identified as such and that unless each serial is checked in as received, renewal notices returned, and invoices paid, the system fails. Obviously, one solution is to identify all subscriptions in the same way, perhaps by including “Serials Dept.” in the address, but unfortunately the ordering information does not always make its way onto the publishers’ address labels. A solution which has worked best for us is to have all mail roughly sorted in the periodicals department. This particularly works well for a small library like ours where serials, invoices, renewal notices, etc., can be handled without delays. In the interest of precise identification, we retain the mailing label for each individual subscription, which identifies clearly the particular subscription and its duration. This step is necessary in identifying duplicate copies, missing subscriptions, and renewal errors.
The mailing labels are attached to cards in our check-in file. This file contains all currently received titles, including those clipped for our vertical file, held as desk copies, or even discarded. Each serial retained uses either a biweekly or monthly printed card which is stamped with date received. Volume and number designations are added if necessary. This method has enabled us to track a serial’s arrival pattern, information that has had much utility for predicting future arrival and allowing prompt claiming. This pattern data would be useful for implementing an online check-in system.

Two types of public files are maintained. Adjacent to both the periodical indexes and the periodical closed-stack area are two visible strip files, which include the minimal necessary data about our holdings: title and beginning and ending dates (if not continuing). In addition, serials are fully cataloged, since we recognize a need for subject access via the card catalog. These redundant files, which fill the various management and public services needs, are not an efficient way to meet these needs. Such multiple files are difficult to maintain accurately. Toward solving this problem, we are in the process of building a serials database using the college’s central computerized file system. As most small college campuses have some type of computer operations, it would be a good idea to gain access to the system and organize a single data file, which can then be manipulated to produce specialized products (cost analyses, listings by subject and by representation in particular indexes, etc.). This process involves careful analyses of existing recording procedures, and the process itself can streamline operating procedures, a benefit in addition to that of computerized data manipulation.

Physical storage of periodicals has become a matter of increasing concern in the last several years. Mutilation seriously weakened our holdings and was directly responsible for our closing the stacks. This action, in turn, has led to other benefits: the ability to track usage, easier stack maintenance and faster retrieval in this area, and better preservation and maintenance of the entire collection.

While most academic libraries seem to have given up classifying periodicals and prefer alphabetical shelving by title, titles often seem misfiled due to the vagaries of alphabetizing rules. A much better method for student shelvers has been shelving by Cutter number, which codifies the alphabetical arrangement.

Current issues are displayed in an open stack area, with the exception of frequently mutilated titles. Unfortunately, these titles seem to be the most frequently requested and most basic to our collection emphasis on contemporary art, crafts, and design. In the interest of balancing the issue of satisfying client need with that of collection integrity, we expect to duplicate most of these subscriptions to allow for open access to current issues while providing an intact issue for binding. An added advantage is that the full run of the serial remains available even when volumes are at the bindery.

Another cost versus value issue is the choice between a fully collated binding versus uncollated, more economical bindings. Full collation includes checking all page numbering to ensure volume completeness,
Seriak in a Small College Library

operations, effecting a net simplification for the libraries using their services. The Philadelphia College of Art Library uses Library Bindery Company of Pennsylvania, which maintains a record for each title we bind: spine imprint format, color, binding frequency, etc. Using the binding frequency information, they provide us with a multiple binding form for each volume due to be bound. This has the standard information already filled in; we have only to indicate volume, number, and year.

Concern for acquiring replacement copies of missing or mutilated periodicals seems most often, in our library, to be recognized at times of preparation for binding. For this problem, two kinds of files are needed—one is a file of missing issues, useful for quickly checking against gifts and lists of duplicate periodical offerings from other libraries. Obviously this file requires constant attention to insure prompt additions and deletions. The second should be a vendor file, a directory of back-issue vendors and the types of material they are likely to supply.

The proliferation of online union lists has aided both collection development decisions and bibliographic control. These facilitate purchase decisions by providing libraries with instant, up-to-date views of what serials are readily available through interlibrary loan. The caveat here is that prompt, continuous maintenance of each library’s records is essential if the users of these online facilities are to realize the full potential of online currency over the obsolescence of printed products.

Focusing on serials issues of special relevance to small academic libraries predictably reveals that the most significant development for us is the computer and, more importantly, its relatively recent economic accessibility to institutions with small budgets. Serials cataloging has become infinitely easier with the extensive participation in OCLC and RLIN by all types of libraries. In a small but meaningful way, these utilities and, indeed, computers in general have been great equalizers between small and large libraries.

With increased accessibility of online searching by citation and abstract, small libraries can now access indexes on a cost-per-use basis, thus covering a wide variety of indexes for which usage could not justify hard-copy cost. Indeed, in the future, the possibility of a custom index seems feasible. This index would cover only the individual library’s holdings, being formed from a combination of online products. For small colleges, the possibility of an index whose citations can be completely satisfied within that library alone is a very exciting prospect. There is such a great difference in user satisfaction between index use in a large university library, which houses most of the periodicals refer-
enced, and a small college library holding only a portion of the citations retrieved. An index of this type would be intended for specific use as a tool for teaching research methodology to undergraduates; obviously it would be inadequate for serious scholarly research.

For serials librarians, technology seems to facilitate the ability to develop and maintain their collections. For small libraries, technology tends to reduce the serials librarian's isolation from serials management practices in the larger world. Technology, for us, has shifted our focus from clerical matters to professional concerns.

REFERENCES

3. Marcia Tuttle, Introduction to Serials Management (Greenwich, Conn.: JAI Pr., 1983).
Nonprint Materials in the Small Library

Shirley Lewis

This paper outlines practical steps to be taken that will include nonprint materials in the mainstream procedures of technical services operations—from selection, through ordering, cataloging, and processing, to shelving.

Nonprint materials are finding their way into every kind of small library, regardless of the type of clientele. Small professional libraries, such as those serving nursing schools, hospitals, law firms, or business establishments, are just a few of those that have found the transparency, videorecord, sound recording, or computer software effective in keeping their clientele up-to-date. They have found that acquisition of “high-tech” media, with their fast reproduction ability, is a good method of keeping patrons abreast of fast-developing technology. Small school and public libraries also have found their patrons well served through the use of filmstrips, kits, art prints, and other graphic reproductions. So thoroughly has the use of nonprint material permeated the public consciousness that it is no longer of interest or concern to the library patron that an item is not in book format. Subject matter has become the major factor for the person in search of information, who now expects nonprint to be a part of the library’s resources.

Nevertheless, the proportion of nonprint to print material is staggeringly weighted in favor of print. Not only are most subjects available only in print format, but information about nonprint material, especially that of interest to small libraries, is less accessible than is information about print material. As a consequence, nonprint material in most small libraries represents about 10 percent of the holdings.

Common sense dictates that procedures for selecting, ordering, processing, and circulating materials be designed primarily for the preponderant category, with other types handled as exceptions. Most procedures for print materials are appropriate for nonprint and only rarely are modifications required. This paper will deal with the minor variations that seem necessary.

Most of the problems arise because of the formats of nonprint materials and require policy decisions regarding physical arrangement. Once

Shirley Lewis is the President of Shirley Lewis Information Services, Etobicoke, Ontario.
technical services departments have clear direction as to the shelving, patron access and loan policies, the labeling and handling aspects quickly fit into the processing procedures.

THE INTEGRATED COLLECTION

In the past, the treatment of nonprint materials has been governed by the philosophy that physical format is paramount and subject matter is secondary to such factors as fragility, size, and the need for climate control and operating equipment. Such technical considerations intimidated the librarian familiar with handling books and accustomed to manipulating files based on book processing. The introduction of each new format required further special accommodation and caused further segregation by format with no regard for intellectual content. It has subsequently been realized that this approach is not only unnecessary but is detrimental to the concept of efficient service in the small library. Arrangement by subject both in the catalog and on the shelves is a major factor in patron use. Segregating by format materials whose content may be outdated long before the packaging has deteriorated discourages maximum use.

Patrons have learned to locate books with varying degrees of success by familiarizing themselves with subject classification systems. As the ratio of professional to clerical staff has declined, the patron, especially in smaller libraries, has accepted the self-service concept. If the collections are reasonably arranged and the shelves are clearly marked, the self-service concept works as well in the library as in the supermarket or department store. The special, often expensive, shelving arrangements and the special cataloging and coding that have been developed for nonprint materials are likely to hinder rather than help the patron locate desired information. Small libraries that have experimented with integrated collections have reported higher use and fewer retrieval problems when technical services and loan procedures are standardized and nonprint materials are not given special treatment.

When the organization of the collection is governed by the philosophy that format is secondary to content, accommodation need be made for nonprint material only when absolutely necessary, as is done with oversize and undersize books. For these exceptions, packaging improvements, such as specialized boxes designed by the library, can cause intershelving problems to be reduced to a minimum. In her book Accessible Storage of Nonbook Materials, Jean Weihs has offered practical suggestions for packaging, storing, and intershelving nonprint materials. For the librarian considering the integrated collection, this book will be invaluable.

If nonprint materials are to fit into the mainstream, the following aspects of technical services need to be examined: selection and ordering, cataloging and other processing functions, shelving, and circulation.

ACQUISITION

Selection

Nonprint materials are more often selected from catalogs or on shop-
ping trips to local nonprint dealers than on the basis of reviews. Although such tools as *Library Journal* and *Booklist* feature reviews of nonprint material, mainstream periodicals review little of it and small libraries are not likely to subscribe to the specialized periodicals that do. The shopping trip, especially for art reproductions, records, tapes, and videorecordings, is a better answer for the librarian concerned with the subject content of the collection.

**Order Records**

Technical services librarians will, therefore, be handling fewer items selected from reviews that provide them with professional citations and will be required to prepare records from the actual piece or from audiovisual catalog citations. These records can be prepared according to the practices followed for print material with the following adaptations.

**Titles.** The problems of citing titles for nonprint materials tend to be similar to those for print materials, e.g., change of title upon publication, title misquoted in catalogs, etc. Because nonprint materials are less familiar to the system, there is a tendency to magnify the problem, but librarians and wholesalers dealing with materials on a large scale report that title citation problems related to acquisition and receipt are equally numerous for print. The addition of an ISBN or equivalent is a bonus in identifying an item if the title citation is not definitive. When selection is made from a catalog, the two major problems are title citation and lack of an ISBN. The latter is a problem even when the item is in hand.

**Medium Designation.** Following the title the medium designation that will be used in cataloging should be added, giving the specific format, e.g., sound recording cassette. The medium designation will ensure proper identification when the item is received or when a claim notice is prepared. It may be advisable to allot extra space for the title to accommodate the medium designation, which may in some cases be rather lengthy.

**ISBN.** While some nonprint items will bear an ISBN or internationally recognized number, the majority will not. It is recommended that a number be assigned to the item, using the company product number, serial number, or other previously assigned number as an interim ISBN equivalent, so that nonprint materials can be accessed in the same manner as print materials in an automated system. In the future, as international numbering encompasses all types of material, these numbers will appear on the items. For the present, use of whatever number can be found will have to suffice; and if no number can be found on the item, using the supplier's catalog number is preferable to creating a number. As a last resort, a numbering system devised by the library can be used, but this number must be attached to the item also, either written on a gummed label or directly on the container. By using the ISBN or equivalent, standard ordering and processing procedures can be extended to all materials, and a special "stream" becomes unnecessary for nonprint materials.

In other respects, the procedures for the acquisition and receipt of nonprint can be the same as those for print materials. It is recommended
that special instructions be devised only as required for other circumstances and regardless of medium.

PROCESSING

Cataloging

Not even the smallest library should now improvise any aspect of cataloging. With the development of networks and microcomputers that can be plugged into forthcoming smaller networks, there is no reason to develop a cataloging system that is exclusive to one library. Even if librarians in a small library believe that computerization is now far beyond present capabilities, it would still be wise to catalog according to the standard rules of entry and description. The second edition of the Anglo-American cataloging code includes all media and allows for three levels of cataloging. Even a very small library can prepare minimal level cataloging to attain a basic system that will not intimidate the user. The code offers the most complete coverage and is a good source to consult. Another helpful source is Nonbook Materials: The Organization of Integrated Collections. It follows the principles of the Anglo-American Cataloguing Rules, but deals with nonprint materials only and presents the rules chapter by chapter for each medium.

Postcataloging Operations

Procedures for processing nonprint materials depend upon policy decisions for the organization of the collection. If nonprint media are integrated on the shelves with print materials, then packaging becomes important. Materials must be put into boxes or containers that are convenient for integrated storage. Labels can be the same type as those used for print materials. If, however, nonprint materials are to be shelved separately, and more particularly if they are to be housed in specially designated units, the repackaging is not advisable and processing procedures will vary accordingly.

Reference Sources

For those formulating processing policies and procedures the following publications may be helpful.

Accessible Storage of Nonbook Materials, mentioned above, advocates integration and intershelfing of print and nonprint materials. It gives the philosophy behind the advocacy, including practical advice on packaging, shelving, and the care and handling of each genre of material, and devotes careful attention to full and/or partial integration of each type of material.

In "Integrated Multi-Media Libraries: At What Stage the Integration?"—an article written for the Audiovisual Librarian by Robin Bateman—the concept of integrated shelving and storage is opposed with supporting reasons. Letters published in subsequent issues concur with this opinion.

Cataloging, Processing and Administering AV Materials: A Model for Wisconsin Schools, by M. Hohenstein, offers concise practical advice, recommends integrated shelving, and includes diagrams as well as directions for processing each type of media.
Organizing the School Library, a 1980 publication by Kogan and Whalen, is designed particularly for school librarians and offers helpful advice on the cataloging and processing of all media.

"A System for Processing and Shelving Works of Mixed Media Format," by Thomas Mann, gives the guidelines used in the Louisiana State University Library for processing and shelving both integrated and segregated collections.

CIRCULATION

It is difficult to suggest circulation techniques because circulation policies vary with local conditions. However, the following general guidelines may help a small library that is considering its policies.

LOAN PERIOD

Nonprint materials seldom differ enough from print materials in format or demand to require a different loan period. Variation in loan period is confusing for the user, who has to keep track of enough dates already, so that it is inadvisable to vary the return dates unless there are compelling reasons for doing so.

CHECKOUT TECHNIQUES

Wherever possible, the same system should be used for charging out all materials. If a computerized circulation system is used and bar-coding is available for print materials, do not hesitate to extend the system to nonprint materials. If the materials are too small for attaching a bar-code, a bar-coded card that identifies the item can be used. The bar-coded cards can be kept at the circulation desk and filed for easy access at the checkout counter. This method is especially feasible for the small library in which nonprint is a small part of a small collection. If the circulation system is manual, a borrower's card can be prepared for each item too small to hold a pocket and card, and the cards can be kept at the circulation desk, filed for easy access, as above.

INSPECTING RETURNS

If the library does not check the condition of each book on its return, then it is inconsistent to check the condition of each nonprint item. It is time-consuming and expensive to clean and inspect materials. A policy that takes into account the cost-effectiveness of inspection is recommended. It is suggested that staff check only those items that warrant the effort, such as films, multimedia kits, or expensive items. These items should be flagged to indicate that inspection is required.

CONCLUSION

In summary, nonprint material is an asset to the small library. It adds a dimension that is appreciated by the user and may attract persons oriented to sound and visual media who have avoided the library because it offers only "books." The handling of nonprint material need not cause undue effort for staff or patron. Systems devised for print material need only minimal changes to be suitable for multimedia use.
REFERENCES

2. Weihs, *Accessible Storage*.
Micro-Preservation: Conserving the Small Library

Robert and GraceAnne A. DeCandido

This paper offers suggestions and outlines procedures for the preservation of the resources of a small library. It includes sections on environment, library binding, simple in-house repairs, the care of unique objects, and disaster planning. A brief bibliography is appended.

The manager of the small library is likely to quail in the face of advice from preservation experts. Particularly in the one-, two-, or three-professional library, so much needs to be done in the basic areas of reference, acquisition, and technical processing that the question of preservation is seen as irrelevant—or even impertinent. Even more unfortunate is the attitude of some of the preservation experts, who treat all questions with an eye to the ages and with no thought at all to the present pragmatic problems of keeping the library's broken-down 'untreasures.' So what is the poor librarian to do? This paper suggests guidelines for the conservation of collections in small libraries. Following most of these suggestions costs little or nothing in money, if somewhat more in thought and energy. Its purpose is primarily practical.

We assume the following:
1. There is no preservation officer in the institution of which your library is a part.
2. There is no preservation budget except for routine binding.
3. The librarians and paraprofessionals involved have no formal knowledge or training in conservation.

One has to start with an imaginative leap that is difficult but essential to make. You must think of the book as a physical object and not in terms of its contents. Bibliographic terms that you are accustomed to using are no longer relevant. Perhaps it is this basic difference in viewpoint that has caused the neglect of preservation in library education. Preservation professionals and especially professional conservators tend to talk in technical language to place their field on a strong scientific footing. Like all specialized vocabularies, it serves the purpose of exactly and un-
equivocally expressing what they wish to say. But do not be put off by the jargon. Understanding preservation requires common sense more than scientific training. The practical applications of conservation research findings are available in many publications, the most useful of which we have included in the bibliography. From these sources and from our own experience and research, we have distilled some practical suggestions for protecting your library’s resources by minimizing damage from the environment, from poor binding, repair or protective practices, and from disasters.

ENVIRONMENT

TEMPERATURE

It is to be hoped that your facility is air-conditioned. If so, you should know generally how and when the air conditioner is cleaned and serviced and whether your unit serves only the library or other sections of your institution. You also need to know whether the unit includes humidity control and if a leak in the system will flow directly onto the books.

Air-conditioning systems should be checked at least once a year if they are cooling systems, or at least twice a year if they are part of an integrated heating, ventilating and air conditioning system. If there is a danger of leaks onto your collection, consult your maintenance people on how you might reduce or eliminate the risk. If the danger is the result of the system design, make contingency plans for dealing with a leak part of your general disaster plan (see below).

The chemical reactions that cause paper to deteriorate accelerate at higher temperatures and slow down at lower temperatures. The cooler you can keep your library the longer your books will last.

HUMIDITY

Humidity is a related problem. Unless steps are taken to remove the water vapor from the air, the humidity will rise as the temperature drops. This is the reason some libraries in hot, humid climates have discovered mold growing on books stored in front of air-conditioner vents. Mold will grow on books if the relative humidity is above 70% and will grow vigorously if the temperature also is high—more than 80 degrees F. If temperature and humidity are kept low enough, library materials are safe from the danger of mold. The optimum range is 50% to 70% relative humidity with the temperature as cool as staff comfort and utility bills allow.

HOUSEKEEPING

In the matter of general handling and cleanliness, common sense and good judgment are the best guides. Insects and rodents are attracted to food and garbage. It is very much in the best interests of your library to prohibit eating and drinking where books are stored, processed, or read.

Proper shelving and handling of books can do more to improve the condition of a collection than perhaps any other single action. Almost all libraries segregate their very large volumes on separate shelving. If your
library does not also separately shelve intermediate-sized volumes (those between 12 and 18 inches), you should consider doing so, if possible. Standard sized bookends do not support these volumes well, and their awkward size can lead to their edges being banged and scraped on the shelves. You should also avoid shelving books on their fore-edges. It only assists gravity in pulling the pages away from the covers. Very large books (over 18 inches) should be shelved lying down, in a stack no more than three books high. There may not be enough staff time for the possible relabeling this arrangement may involve, but perhaps it can be regarded as worth the time investment, since it is a great space-saver in terms of shelving.

The staff of the library should be taught how to remove and replace a book from a shelf. The method of pushing back the two adjacent volumes and grabbing the book by its sides at the center (as opposed to yanking and ripping the top of the spine) should be demonstrated to each new staff member. A number of AV presentations, teaching how to shelve, how to load a book truck, etc., have been made for specific institutions but are available for general use (see bibliography).

One more aspect of general housekeeping should be mentioned. Neatness counts. A library which is kept clean and in which the books are neatly shelved encourages its users to treat it respectfully. Poorly kept shelves invite abuse.

Dusting books can be a ticklish business. Dust contains pollutants detrimental to paper. Dirt on the outside of books can easily be transferred to the inside during handling. Books that are brittle or breaking apart should be cleaned very carefully. Volumes in good condition can be wiped or vacuumed. This should be done with the book held firmly shut so that dirt is not pushed into the book. When wiping the top edge of the book, wipe away from the spine. An extensive explanation of cleaning can be found in Horton’s *Cleaning and Preserving Bindings*.

**Light**

Light fades color. The deterioration caused by light goes further than color changes. Light also causes the structural deterioration of paper and binding materials, and ultraviolet light does the most damage. Sunlight and fluorescent light have a great deal of ultraviolet, incandescent lights have relatively little. The effect of light is cumulative, as anyone who has sought to get a suntan without getting a sunburn knows.

It is therefore important to control the intensity of the light (its brightness) and the length of time the light is on. There are several ways of doing both. Is your shelving overlit? Shelving areas need enough light to make it possible to find a book, not to read it. Try bulbs of a lesser wattage, or remove some bulbs or tubes entirely. Since fluorescent lighting is much more destructive, pay most attention to areas lit this way. Can all the stack area lights or lights in individual aisles be turned off automatically or manually when not in use?

If there is fluorescent lighting throughout your library, the amount of ultraviolet light can be reduced to almost nothing by fitting the tubes
with ultraviolet filters. These clear or tinted plastic tubes remain effective much longer than do the lights themselves so that when a light wears out, the filter can be removed and slipped onto the replacement light. These filters are relatively inexpensive and can make a significant improvement in the direction of preservation.*

When books are in displays or exhibits, their exposure to light is multiplied. The internal parts of the book—the print and images on the pages—spend their time on the shelf in virtually complete darkness. Overexposure to light can be a critical factor in the deterioration of drawings, watercolors, and photographs. Because it is exposed to all aspects of the environment a book will deteriorate more from a few months on exhibit than from many years in a poor storage environment. A sensitivity to this problem will lead to care in display and perhaps a more regular rotation of items on display.

Light, heat, and stress are, of course, also hazards of photocopying. For most of your collection, there need as yet be little concern. But a book with crumbling paper or a broken binding can be quickly photocopied to death. Many small libraries reserve the right to refuse photocopying privileges for any material deemed too fragile. Once again, the need for the copy must be weighed against the value of the book in hand.

**BINDING**

The book, or codex, is a simple and elegant structure which has been in constant use for about two thousand years without significant changes. It maintains its contents in correct order and protects them, while providing quick random access to any of its parts in a neat and compact form for storage. A good binding will significantly extend the useful life of the book. A bad or inappropriate job will accelerate the book's deterioration.

The choice of binding style is a complex decision. There are more than thirty steps in the binding process, most of which can be varied in one way or another. This leaves a bewilderingly large number of possibilities. Fortunately not all of them are relevant or significant to the librarian.

Your binder is a great resource. The binder should be willing, even anxious, to talk to you and can explain the advantages of each type of binding and the cost differentials (if any). Do not accept evasive answers and vague generalities. A second opinion from another binder, to see what else might be offered, is always wise. Do not, however, expect your binder to make preservation decisions for you. You need not even choose the same option for all the volumes that you bind.

Several factors should be considered in making decisions about bind-

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*Advertisements for fluorescent bulb jackets appear in Technology & Conservation (ISSN 0146-1214). In the New York area, the jackets may be purchased from the following concerns: Litetab Corp., 76 Ninth Ave., NYC 10011 (phone: 212-675-4357); Lighting Services, 150 E. 58th St., NYC 10155 (phone: 212-838-8633); Solar Screen Corp., 53-11 105th St., Corona, NY 11368 (phone: 718-592-8222).
ing. Your answers to each of the following questions will affect your choice of a style.

- How is the book used? Is it a frequently consulted reference volume? Is it a circulating copy? Is it photocopied often?
- Does the book have any unusual physical characteristics such as foldouts, insertions, or loose material in pockets?
- How long do you expect to keep this book? Are you committed to retaining it indefinitely? Or do you expect to replace it with another copy or a microform?
- Does the item have any intrinsic value as an artifact? Is it valuable or rare?

If the answer to the last question is yes, library binding is not an option you should choose at all, but there are steps a binder can take to help preserve valuable items. The answers to these questions will assist you in selecting the binding style or method of leaf attachment that is most suitable for a given book.

There are four principal methods of leaf attachment, which is the way leaves of paper are held to each other in a binding. The traditional way of holding leaves together is to sew them through folded sections. Most library binders can sew through folds where such folds exist. Volumes in which the leaves are attached in this manner are very flexible, easy to read, and easy to photocopy. They are also easy to rebind at a later date because they can be resewn with relative ease and with no loss from the inner margins. In terms of flexibility and longevity, sewing through the folds is usually the best option.

Oversewing is a method of leaf attachment developed for library binding. It was designed for volumes in which there are no folds and from which the folds have been removed. This is done by a special machine which sews each section, as it is fed in by an operator, to the two sections above it and the two sections below. The result is an interlocking network of stitching which is extremely strong and fairly rigid. Volumes sewn in this manner are very durable but less flexible than those sewn through folds. Oversewn books are less comfortable to read and more difficult to photocopy. They can, though, stand very heavy use. Rebinding an oversewn volume can be nearly impossible because the sewing uses up so much of the inner margin. Oversewing can also cause deterioration if the volume is retained long enough to become brittle.

A third technique of leaf attachment uses no thread, only adhesive, and is known as adhesive or "perfect" binding. The type of adhesive binding most appropriate for libraries is known as the double-fan technique. In this method the adhesive is applied twice, once while the leaves are fanned to one side and once when they are fanned to the other. By this method, adhesive is deposited on a small area on the sides of the leaves as well as on the edges. Books bound in this way are much stronger than those which are adhesive-bound without fanning. A book thus bound will be very flexible, read easily, and photocopy easily but will not be as strong as an oversewn volume. It is a technique that does not work well on coated paper used in periodicals such as Vogue.
The fourth option retains the original sewing in the book and just replaces the case or outside cover. This is an excellent choice because it creates least stress on the volume, but it often costs a bit more because it involves an interruption in the usual binding process.

The relative costs of all of these options must be worked out with the individual binder.

Even this brief analysis indicates that the decision must be made in terms of a number of trade-offs. Oversewing might be the best method for a very heavily-used book, but the book will then be more difficult to photocopy. There is no simple right or wrong choice, but a better or worse one, or sometimes, even a worse or not so awful one.

One problem peculiar to the small library is lack of clout. Though library binders are themselves small businesses and it is in their best interests to keep even their smallest customers satisfied, they may find it unprofitable to provide the sort of service they normally offer larger customers to a library that binds only a dozen or so volumes a year. If this is your situation, you might consider a cooperative arrangement with other small libraries in your area. Your combined purchasing power will permit more effective bargaining with the binder and allow the binder in turn to provide services to you without losing money.

**Repairs**

Virtually all libraries do some repair work on their books. The temptation to slap a patch on something that is torn seems to be irresistible. A book is a machine that is engineered to move and to operate in a certain way. It can no more be fixed with the injudicious application of sticky tape than can a car engine or a sewing machine. Pressure-sensitive tape is unaesthetic, it is not permanent, and it promotes the deterioration of the book. The most important reason it should not be used is that it does not work. If you wish to make repairs that will last through a decent number of uses and will not damage the book, you need to make them in a way that is compatible with book structure and materials. Three excellent, recently published works are now available, all of which cover the basics and are well designed as instructional manuals. Any one would be a useful purchase, and all three would permit you to pick and choose among techniques. All include instructions on repairing torn pages, tipping in plates, making pockets, and other miscellaneous work (see bibliography).

What is the role of repair in the small library context? First, repairs are preventive measures. A book with a loose hinge where the cover board meets the spine can be quickly and easily repaired. If it is not repaired, the cover will soon become detached from the book, requiring a more time-consuming repair or a complete rebinding.

Second, repairs can, when efficiently and properly done, be cost-effective. Most materials for simple repairs are not expensive, so labor is the only cost worth considering. Since small libraries use existing staff for doing repairs, this is not an out-of-pocket expense. A repair is an attractive option compared to the cost of processing a replacement or paying for a rebinding. Third, if your binding budget is tight, repairing
when possible leaves money for volumes that must be rebound.

The works on repair in the bibliography give sources of supplies. As mentioned above, a cooperative arrangement among several small libraries might be useful in dealing with a library binder. A co-op might also be helpful for buying supplies for repairs at quantity discounts and for meeting minimum orders. If that is not possible, your library binder might be willing to sell you small quantities, since many items such as glue and cloth are in the binder's own regular stock.

**OTHER PROTECTIVE MEASURES**

**Enclosures**

You may have a number of books which have so deteriorated that they are too poor to be rebound, or you may have items which are inappropriate for binding, such as artists' books, portfolios of plates, or collections of maps and charts. If these are to be integrated into your regular collection, they must be placed in some sort of container or enclosure that permits labeling of contents and placement on a book shelf. These enclosures are also a step in a preservation program. When correctly made of proper materials, they give protection from light, dirt, and pollution and also give structural support to material during storage. Your binder can probably make boxes, wrappers, and portfolios to order. Care should be taken that the binder uses material that is acid- and lignin-free. A variety of enclosures can be made in-house. Instructions can be found in the books by Greenfield, Horton, Kyle, and Morrow, cited in the bibliography.

These references give instructions for making acceptable pamphlet binders also. Even though pamphlets are nearly always a problem, it is a good idea to bind those you expect to use for a long time. Commercially available pamphlet binders with pregummed flaps that attach to the covers of the pamphlet are a preservation "disaster" in the long run. For this category of material, constructing your own enclosures is preferable.

Polyester encapsulation is a form of protective enclosure for individual pieces of paper. The technique sandwiches the paper between two sheets of flexible transparent polyester which are then sealed to each other around the edges. The paper remains free inside this capsule and can be removed with no damage by cutting open the capsule. The Library of Congress, which developed this technique, recommends that paper be chemically stabilized before it is encapsulated. Polyester folders and pockets made to standard sizes, with one, two, or three sides already sealed, are commercially available from the same sources as repair supplies. These pockets and folders are most useful for managing the storage of loose paper collections which are in brittle condition. The LC pamphlet listed in the bibliography explains the uses and limitations of this technique.

**Microfilming**

The purchase or production of microfilm for preservation purposes is not beyond the resources of small libraries. The replacement of old files
of serials and newspapers by microfilm can mean such substantial savings in space that they become cost-effective options. A number of small libraries in historical societies have already successfully completed microform projects involving clipping files and other fugitive material. Runs of local newspapers, corporate and institutional papers, and some manuscript collections are typical candidates for microform preservation. Because converting such collections to microform is a discrete project, funding for it can be sought outside your library’s regular budget.

Before beginning such a project, one should make a thorough search to see if some other library or commercial publisher has already filmed your newspaper or serial title. A few of the major finding tools for such a search are listed in the bibliography. The works cited there under “Microfilming” will guide you in choosing a microfilming bureau, and the bibliography by Borck will give you sources on preparing material for microfilming.

**Preserving Unique Items**

Often the first items to come to mind when conservation is mentioned are the rare or unique materials found in almost every library, no matter how small. They are, of course, to be treated differently from the bulk of your collections. They warrant more attention and more money because of their intrinsic value. It has been our intent to emphasize, however, that conservation is an umbrella meant to protect your entire collection in a day-to-day fashion and not just to save the odd treasure.

But if your library includes an author’s manuscript, a rare book, or some other title that because of intrinsic or associative value deserves special treatment, it might be the moment to call in a preservation consultant, if you can afford it. If not, the physician’s rule of “first, do no harm” applies. Keep the volume or object clean, dry, and dust-free; limit its exposure to light; have a box or portfolio made for it if needed; and you will have done a good job.

**Disaster Plans**

If the library is located in a larger complex, such as an office building or university, there are some aspects of the physical plant over which you have no control. We have already talked about lighting and air-conditioning. If there is a disaster plan for the complex, you need to look at it with an eye as to how it affects your library. Think also about how your fire prevention system, if used, would affect your books. Sprinkler systems are ubiquitous, and many are the librarians who have sadly observed that smoke and fire damage could hardly be more destructive than was the soaking the collections received.

A generalized disaster plan is useful, particularly as it outlines procedures that need to be followed in a hurry. In the New York University *Disaster Plan Workbook* are suggestions for setting up procedures for such an emergency with a minimum of staff and time. People and places to call for assistance, things that can be done immediately, and a hierarchy of decision makers can be outlined through this guide.

No binder, no conservator, no expert can make decisions about what
to conserve and what to let be in your library. That is a choice that is in your hands, based on the user patterns and the strengths that make your library unique. Trust your instincts made thoughtful by history and experience. Care for the books that are your livelihood.

**Bibliography**

The titles listed in this brief bibliography are those the authors recommend as references for the small library.

**General Works**


**References on Repair and Handling**


Yale University. Library. *The Care and Handling of Books*. 35mm slide set and audiottape available from the Staff Development Office, Yale University, New Haven, CT 06520.

**References on Microfilming**


**Microform Sources**


TEXTS ON DISASTER PLANNING


These three inexpensive periodicals contain useful ideas for the conservationist: *Abbey Newsletter*, issued by the Preservation Dept., Brigham Young University (ISSN 0276-8291); *Conservation Administration News*, a publication of the University of Oklahoma (ISSN 0192-2912); and *The New Library Scene*, published by the Library Binding Institute (no ISSN).
Making Decisions about Automation for Small Libraries

Linda G. Bills

Automation is becoming increasingly available to small libraries. Smaller systems with library applications are being introduced, and generic microcomputer software is becoming easier to adapt to library needs. This paper suggests some practical steps the uninformed librarian can take to become more familiar with automation opportunities. It also discusses some of the issues that should be considered in choosing an automation system for the small library.

This article is based on the assumption that automation is becoming viable for all sizes of libraries. It is a tool that should be seriously investigated by technical services librarians, no matter how small their library. In the small library environment, however, there are special problems to be overcome. All libraries must be cautious in making automation decisions, but small libraries must be especially so because they can afford to make mistakes even less than a large library. An automation venture such as using a microcomputer to produce a specialized database, which is a relatively small experiment for a larger library, represents a much larger percentage of the small library’s time, money, and public image. Decision makers in small libraries may also have less access to automation experts than those in a larger library. This article suggests some practical steps librarians can take to familiarize themselves with library computer technology and the issues it raises.

Automation is rapidly becoming an indispensable tool for libraries in all phases of their operations: administration, public services, and technical services. Regardless of where automation is first used in your library, it is important that the technical services staff be involved in automation decision making. Many of the most useful computer applications are aimed specifically at technical services work, such as serials control and catalog production. However, even if automation is being considered for other areas of the library, there is a strong chance that it will end up involving technical services. Online public catalogs obviously must

Linda G. Bills worked, until recently, as Automation Librarian for the Resource Sharing Alliance of West Central Illinois. She is now a project manager, Local Systems Division, OCLC, Inc.
be based in good online bibliographic control; online database searches are bound to affect acquisitions decisions. It might be argued that programs like public access microcomputers will not affect technical services, but even here the interrelations of all library activities can be felt—the microcomputer software will have to be cataloged. More important than any consequences for specific technical services functions are two long-range concerns. First, any adoption of automation by the library may create opportunities and limitations for future applications that are expected to be compatible with the first one. Second, the experience of the library staff and patrons with any computerization is bound to affect their attitudes toward any future automation ventures.

The technical services librarian, therefore, must be aware of the implications of any automation that is implemented in his or her library. The librarian should not only react to what is proposed by others, but should actively and critically investigate opportunities to computerize technical service functions.

A critical evaluation is vital. Automation can hinder as well as help library progress, and can do so in both tangible and intangible ways. Although computers are changing rapidly, with more and more options opening up, choices made today can limit opportunities for the future. Also, a bad experience with automation, especially one which results from incomplete investigation of product claims, can have a long-lasting effect on staff and administration willingness to try other automation alternatives.

When library directors or staff members begin considering computerization, many look for a consultant to provide advice on what to acquire and how to use it. Small libraries, however, generally have less access to outside expertise than larger libraries. If there is no library automation expert already on the staff, there may not be enough money to hire one either as a new staff member or as a consultant. If they are lucky, they may have access to the services of a consultant through library network membership or from the library's parent organization—a school district, corporation, or college. Consultants from outside the library field, however, generally need to be educated about the library's special needs—a process that may be more time-consuming than educating yourself about computers. Even if consultants are available to you, it is obviously better to know something about automation yourself. Not only do you need to evaluate their advice, but you are also the person who must make the system work after it is purchased and installed.

Let us assume that automation is one of the tools you want to investigate and no expert help is readily available. How do you examine the options open to your library in the present chaotic state of computer development? Will you be better off with a microcomputer and your own programming or with a national system? Should your library obtain its own vendor-supplied system, or join with other libraries in the same neighborhood or with the same interests to share a system? How can you best evaluate and use the opportunities available to you?

This article cannot give you a step-by-step guide to decision making on computer applications. There is no formula into which you can insert
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local statistics to come up with an answer like "buy a micro with 128 K and word processing software" or "join a national bibliographic utility." Things are changing too fast, and conditions vary too much for such formulas to work. Also, there is a part of the automation decision that will and should be based on the preferences of the person(s) using the projected system. Once the choice is narrowed down to a group of acceptable alternatives, such preferences usually reflect intangible considerations that, although they can't be quantified, contribute to the success or failure of the automation project.

There are some frequently published guidelines on how to choose a computer system—guidelines that are usually recited to people buying microcomputer hardware and software. One example I recently encountered was in a microcomputer magazine; another was in the local Sunday paper. The recommended steps are all about the same, although the details may vary:

- Define your needs
- Identify the applications programs that will meet them
- Identify the hardware components needed to run the software
- Consider compatibility with other machines and other institutions
- Find something with which you are comfortable
- Plan ahead for future applications
- Set your cost limitations
- Evaluate documentation and training needs
- Provide for maintenance and support

As one article optimistically put it, once you have all this figured out, choosing a computer system should be easy.

Unfortunately, it is not that simple, especially not in libraries where the choice is not just which microcomputer components to buy, but whether a micro is the most cost-effective way to automate. Libraries have many automation alternatives available, from national bibliographic utilities (which are offering more and more services in a variety of sizes), to shared automation projects which promise to pool resources to get better systems, to the locally owned and operated small-computer systems with either generic programs or library-specific applications software.

There are no easy answers and no easy ways to find the answers. There are, however, many right answers. Probably, no matter how small your library, there is a way automation can help if you want it to, and if it is tried by a sufficiently informed person (not necessarily an expert). If you wait for a clear-cut, foolproof automation plan to surface from the present plethora of possibilities, you will probably be waiting a long time. Here are some things you can do to develop just enough expertise to feel ready to make decisions on automation.

GETTING ACQUAINTED WITH THE COMPUTER WORLD

The most important step in automating is developing some degree of confidence in dealing with the options. When one is considering microcomputers, this requirement means learning the right questions to ask,
and putting common library needs into terms the computer store personnel can understand. If you are considering larger-than-micro automation, translation is not as much of a problem. You will probably be dealing with library-community vendors who should be able to relate their product to your needs. The larger problem with these systems is evaluating the product, price tag, and vendor reliability. It is up to the vendor to understand and address library applications in your terms.

Microcomputers are another matter. The computer dealer in the local store won't have enough potential library customers to make learning their needs worthwhile. Besides, years of experience with larger computer systems have taught librarians that our applications are not easily understood by the uninitiated. There are several ways to learn enough computer-store language to be an informed purchaser. One is to get a book on computer jargon that doesn't take itself too seriously—like The Personal Computer Book by Peter McWilliams. It will introduce you to bytes, RAM, operating systems, etc. Another excellent book for the potential microcomputer buyer is the Whole Earth Software Catalog. It not only describes software and some hardware, it also addresses issues such as shopping, compatibility, and sources of information. To get a hands-on feeling for microcomputer operations, you might also take a class from a local computer store or continuing education source in basic computer operations—using diskettes, utilities, packaged programs. There is no need to learn programming, unless you have a natural desire to do so.

Having established a general vocabulary in computers, you can learn about products and library applications from several sources. The journal Microcomputers in Information Management is a good source for in-depth technical articles on microcomputer hardware and software. For a less formal exchange of information about what librarians are doing with micros, try the newsletters Small Computers in Libraries and Access. Library Hi Tech is a journal that covers all sizes of library systems, from micros on up.

To keep up-to-date on general microcomputer market developments, you can use reviews on new hardware and software from computer magazines. The Whole Earth Software Catalog will start you off with excellent reviews of the best current products. The reviews are balanced by including comments from several reviewers. If this book is kept current by new editions, it will continue to be a useful source. Besides this catalog, you will need to use journal literature to keep informed on new options. Find something like InfoWorld, which is not too technical for the layperson. Its weekly issues have reviews for both hardware and software. Although these may sometimes be biased by the reviewer's own preferences, they do alert you to new products and give you at least one informed opinion on how they work. If you want to investigate some options more thoroughly, you can find more reviews and articles through the online database Microcomputer Index, which covers journals in the field. Be persistent. Many of the words and comparisons won't make sense until about the fifth time you read them. You will know you are making progress when you find yourself annoyed that the writer is once again explaining the value of expandable RAM.
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Once you know the basics of the microcomputer environment and, through the library literature and conference exhibits, have become familiar with the larger systems available, you need to examine your operating environment for positive or limiting factors. These may point you in the direction of least resistance or help you avoid deciding on something you can’t get.

The factors to examine are fairly obvious. Does your director or governing authority present a problem or an opportunity? Do they have any preferences or dislikes in terms of automation alternatives? Has the organization of which your library is a part made any policy (de facto or de jure) about when and how to automate? Are there any machines or systems available in the organization that would be appropriate for your library’s needs?

If other libraries in your area (geographic or subject) are automated, what are they using? Can they offer you advice on what works and what doesn’t, and on what the true costs are? Outside your immediate area, a quick overview of recent articles in your specialty can help. But beware the newly converted! Microcomputer users in particular tend to get attached to their own choice of system.

What kind of support is available? Will your director support you? Will your staff have more confidence in a large system, or would it be better to start small? Can you develop a first application that will give fairly reliable results to calm the doubters, then move on to something bigger? What hardware and software maintenance is available in your community? Do the vendors of various library systems have good records on support? Are there other library or nonlibrary users who can
help you figure out bugs (on a small system) or influence the vendor (on a larger system)?

The cost factor must be considered from two angles—how much will be available to spend and when will these funds be available? Can you afford a fairly large up-front investment with low continuing costs? If so, a locally owned system—either single user or shared—is indicated. Or can you better arrange to make regular payments over a long period of time? When you are calculating the size of the investment, don't plan to get a system that will cost most of the amount you have available; automation always costs more than you expect. Either there are extra preparations you must make so it will be most effective, or you find that it will work even better with some additional component.

We have finally reached the point where most "how to buy a system" writers begin—defining the problem. The usefulness of automation in problem solving or service enhancement is much clearer after you have a realistic view of the opportunities and limitations it offers. If you start with a clear appreciation of the problem, but a poor understanding of automation, you are likely to overestimate what automation can do to solve it. If you begin with a basic understanding of automation, even without a clearly defined problem, you may be able to see realistic, attainable things that computers can do to help your staff and enhance your services.

Automation consultants caution us not to adopt automation just because it is there—without a clear view of what we want it to do for us. This is good advice, but it is also true that the definition of the problem and the criteria for the solution have to be worked out with a basic understanding of the available tools.

**CONSIDERING THE OPTIONS**

When you have identified a need for automation in your library, you should clearly define the criteria for success in your automation project—and the trade-offs that you might make to attain that success. Some of the options and issues in library automation are outlined in the remainder of this article.

One issue is whether you want an integrated or a specialized system. An integrated system (several functions working together on a single system) has several advantages. It is generally easier to learn because functions and their commands mimic each other and are built to work together. Data entry can be minimized if one or more files are needed by several functions. That is, you won't have to enter your journal titles once for serials check-in and again for the production of catalog cards. This efficiency in training and data entry can be very important if your staff is small and/or your database large.

On the negative side, an integrated system may have been built around one or two central functions and other functions may not work as well as they might in an independent environment. Specialized or non-integrated systems for specific applications are usually designed by companies or individuals who are experts in that specific field. They may, therefore, do that single function (such as serials control) better than a
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system designed to fulfill all a library's needs.

This integrated versus specialized comparison may apply equally to the generic programs designed for microcomputers. If what you need is word processing, it would probably be best to get a specialized word processing system, rather than an integrated package that does word processing, database management, and spreadsheets. A spreadsheet program that has been turned into an ‘‘integrated’’ package with several generic functions may be weak in the add-on areas. Besides, why should you pay a higher price to get functions you don’t really need?

Your decision on integration versus specialized applications must depend on your present needs, your future plans, and the potential for software integration. If your present need is for a single solution in one processing area, and other needs can either wait or be handled as well by other methods (automated or manual), then a specialized system may be best. This is especially true if the specialized software has potential for sharing its data.

The next issue, standardization versus independent development, is the basis of data-sharing potential. In the world of library automation, the most common standard is MARC. If your automation choice can make use of and/or produce records in MARC, you will not be cutting yourself off from future applications of the same data or from easy ways to add data to your system. Any data format you choose will limit your options for future integration, but MARC will limit them the least. Likewise, with micro applications, if you choose a program that can communicate its data in ASCII (a standard method of encoding alphanumeric information for transmission), you leave more avenues open for future related uses for the data.

Although standardization is desirable, there is sometimes a price to pay. The application program that best meets your needs or your budget may not be standard. If that need is important enough, you may want to accept the nonstandard alternative despite its drawbacks.

Another important consideration is the stability of the manufacturer of the hardware, the developer of the software, or the vendor of the library application. If you are looking at vendor-supported systems, the viability of the vendor is crucial to continued service. Thus, a vendor with a good customer base and a reputation for good service, as well as adequate financial backing, is desirable. However, the bigger the vendor, and the longer the vendor has been established, the less influence a single customer’s needs will have on product development. If you are one of the few customers of an emerging vendor, you will have more influence on how that vendor develops its products and services, especially if the vendor is targeting the small-library market. You pay the price, however in having to live through the growing stages of an entrepreneurial enterprise. And you take the risk of having that enterprise fail.

In the microcomputer world, a similar choice has to be made. It may be that the best microcomputer—the one that can use the Cyrillic and Greek characters that you need, the one with the most storage capacity on its disk drives, or the one with the lowest price and most attractive package of free software—is not a well-known brand. There may be no
dealer in your area who can maintain the machine and help you with software problems. The more popular machine that is easily available and supported may do less than you wanted or cost more than you want to spend. It may, however, have more potential for future uses because it is popular and lots of software is being written for it. Once again, you must make the choice, based on your present needs and future plans, on whether the best present solution is worth the possible future limitations.

Another issue is whether you should try to get your own system or share one—either locally or nationally. The shared system may allow you to get a better, more complete system for less investment in money, materials, and staff. Prominent examples of shared resources are the national library automation utilities which, through cost and data sharing by many libraries provide better cataloging and better use of staff time, especially for large libraries. Although their cost-effectiveness in smaller libraries is still debated by some, they are well worth investigating. Along with the benefits of sharing cataloging data, authority information, and interlibrary loan resources, and of building machine-readable records for future applications, there are some disadvantages. Participating in such a network can become a financial liability if the costs go up—a development over which the individual members may have little control. This possibility is especially likely at present when a large part of the cost of using such utilities is the price of communications which go chiefly through telephone lines, and prices for telephone services are unstable. In the future, as other technologies replace the telephone lines, this may be a more controllable cost.

Also, as a shared network becomes larger, the system functions may become more difficult to change or enhance in ways that suit the special needs of all users. The small libraries are especially vulnerable in a large, shared undertaking because they are unlikely to have as much influence over network development as the larger libraries. They cannot send staff members to as many meetings, nor is their contribution large enough by itself to influence decision making. They may, however, be able to exert influence as a group.

You may be able to share automation on a smaller scale by creating a regional group for joint automation ventures such as sharing cataloging and holdings information or creating serials union lists. In such a group you may have more influence over decisions on system choice and features, assuming the system you use has some built-in flexibility. Thus, there is more chance of getting a system that is adapted to your needs, rather than one to which you must adapt.

The most complete local control may seem to be obtainable by purchasing your own system. Of course, you are still subject to the limitations of the system you purchase, but within that range you are free to set your own standards and procedures. You may find, however, that a system you can afford to own has less built-in flexibility than a more expensive one that you can only afford if you share it with others.

For some applications, if you are not looking for complete integration, this kind of local system makes sense. Acquisitions and serials check-in are good examples, especially when the bibliographic records used are
not extensive or can be loaded from another machine-readable source, eliminating data entry as a major task.

For a sound evaluation of large shared systems in comparison with smaller local systems, you need to examine the kinds of services each system can offer you and how much flexibility you have in using them. It is not necessarily true that larger systems are inflexible; they may offer the library a wide variety of options and opportunities for customization. There may, in fact, be more options from which to choose than in a smaller system. However, because they are large and complex, such systems may take longer to change and adapt to new needs. A smaller system may have some of the options that are important to you, and lack others. It may, however, be easier to change.

In the microcomputer realm, one important issue is whether to get library-specific software or a generic program that you can tailor to fit your own needs. The most popular generic programs useful in libraries are database management programs (for designing, inputting, updating, and accessing files), word processing (for typing and revising documents), spreadsheets (for working with budgets and statistics), and communications programs (for accessing databases and other computers). The last three have few, if any, counterparts in library-specific software. Their functions are those generally needed in any office, planning or communications situation. If you plan to use a micro to keep your procedures manuals up-to-date, to keep track of statistics or to access other computers, there are a large number of these programs from which to choose.

Database management, however, is another matter. Libraries deal mainly in databases, and database management software for micros offers you a chance to automate files in order to have more access to their information and to compile useful reports. With a generic database management software package, you have a lot of freedom to develop your own files and reports. If your application is fairly unique, or if you enjoy developing your own solutions to problems, you may want to do this. The price you pay is the time needed to master the software and to document the application. Documentation, a written description of exactly what you did and how to use it, is absolutely essential if you want the application to continue to be useful and flexible.

If your need is fairly common to libraries or to your type of library, look around, especially in the more informal library and computer-in-library publications for others who may have already done the work. There are microcomputer programs available both from vendors and from other librarians that will perform many standard technical services functions such as catalog card production, serials check-in, acquisitions, special catalogs, and online public access for small collections.

CONCLUSION

Automation is a tool that can, when properly used, help you solve problems and enhance services. It cannot, however, organize the disorganized or give structure to chaos. In fact, if your procedures are disorganized before automation, introducing a computer may simply get
them disorganized at computer speed.

As you become more familiar with automation, you will also realize that it is not a cure-all; it may do some things more quickly than manual methods, but it can't do everything. Sometimes its limitations are logical—computers simply can't make all the distinctions and choices human beings can. At other times the limitations are practical—although it might be possible to program the computer to do every single thing on your "wish list," development time and operating capacity won't allow it to do them all at once.

This is not to say that you should not have a wish list, or even that you shouldn't put everything you can think of on it. What you must do, however, is to have clear priorities. Give much more weight to the most important items. Do not be tempted to buy a system because it does one of the minor items in a particularly fascinating and appropriate way. Make your priorities clear to vendors so they can be sure to show you the system features that best meet your most important needs.

Your wish list may also have to be divided into several smaller lists, since you may need several different solutions to different problems. Whenever you are considering automation as a solution, you should consider manual options as well. There are still many library functions that, although they can and have been computerized, may be handled just as well by an efficient manual system.

The most important step in automation is to commit yourself, your superiors, and your staff to try what you have selected. Staff relations are particularly important, since no system, automated or manual, will work well unless it is accepted by the people using it. Once again, there are many recent articles, both in library literature and outside it, on how to introduce automation in an organization. Keep in mind that staff dissatisfaction, when it occurs, is often based on real problems with the system and its implementation. If staff problems are examined instead of dismissed as fear of computers, they can often be solved. Sometimes misconceptions about the automated system need to be addressed; sometimes the system itself needs to be adjusted because it is not suitable for some of the tasks the staff needs performed.

Once you have implemented automation, you must, of course, evaluate the results. The best evaluation tool is a clear, explicit set of expectations, developed before implementation, against which you can measure your success. In other words, the success of the original undertaking should be measured in terms of what you expected when you proposed it. Any unexpected results, whether good or bad, that don't affect these criteria can be part of your planning for future improvements.

Automating is seldom a finite project with a clear beginning and end. It is a process. The pace may vary and the direction may shift, but it is very difficult to stop it completely once you have begun. Solving one problem, whether or not the tool is a computer, is just a step in defining a new problem. Every opportunity that you exploit creates new opportunities. Introducing automation, like any other change you make in technical services, is never going to be the final answer.
REFERENCES

7. *InfoWorld: the Newsweekly for Microcomputer Users* v.2- (Framingham, Mass.: CW Communication, 1980-).
8. *Microcomputer Index Database—DIALOG #233* (Los Altos, Calif.: Database Services, 1981-).
IN MEMORIAM:
M. RUTH MACDONALD, 1904–1984

Born and educated in the state of Washington, M. (Margaret) Ruth MacDonald, with a B.L.S. from the University of Washington, continued her formal education later at Columbia University. Her early career included experiences at Reed College in Oregon, the Seattle Public Library, and the University of Washington; later, moving ever eastward, she became chief of the Catalog Department of the Detroit Public Library in 1939, and, at the time of her retirement in 1960, was assistant librarian for cataloging at the National Library of Medicine. Her most eastwardly assignment was serving as consultant to the American Memorial Library in Berlin, 1952–53.

Following her own advice that “in the field of librarianship, you set your own limits of accomplishments,” Miss MacDonald’s parameters were ever expanding both in her professional and in her associational activities, significantly with those relating to cataloging and classification. Her major professional monument remains the published quinquennial book catalogs for the Armed Forces Medical Library, 1950–54, and for the National Library of Medicine, 1955–59, both reflective of new cataloging policies designed and implemented under her dynamic guidance.

At the height of her professional career, Miss MacDonald became president in 1947/48 of the Division of Cataloging and Classification, and it was never the same again! For too long the interests of the division had been given scant attention at ALA Headquarters. Convinced that the time had come for persuasive action, Miss MacDonald focused her attention on the need for a specialist, a salaried executive secretary, at headquarters; on defining, clarifying, and publicizing the objectives of the division; and on integrating the division effectively within the ALA structure. She shared in the achievement of the publication of the first issue of an official organ for the division, the Journal of Cataloging and Classification (later superseded by Library Resources & Technical Services); and, through her per-
sonal and persuasive charm combined with her steadfast goal of achieving more visibility for the division, catalogers of the country were given an awareness of their unique contributions to librarianship. During her term of office and later, increases in membership and in committee involvement attested to the growing strength of the division. The belated but inevitable appointment of the first salaried executive secretary at headquarters in 1953/54 acknowledged the recognition of the division long sought by Miss MacDonald.

While the reorganization of the American Library Association in 1957 that resulted in the creation of the Resources and Technical Services Division had not been anticipated in the objectives prepared a decade earlier, their near attainment had brought a maturity to the Division of Cataloging and Classification that enabled it to accept the new configuration with cautious optimism. The successful merging of the resources and technical services into one division was in itself a tribute to the sustained nurturing, under the enduring influence of Miss MacDonald, of the old Division of Cataloging and Classification, now functioning as the Cataloging and Classification Section of the Resources and Technical Services Division. In 1960 she was awarded the Margaret Mann citation for “distinguished and devoted service in the field of cataloging and classification as well as for high ideals and outstanding leadership.”

Miss MacDonald has been described by one of her peers as illustrious; she was exceptionally attractive in appearance, style, and manner; she inspired and challenged others to excel in the profession; to some, however, she was occasionally a formidable advocate in matters pertaining to the affairs of the DCC! Indeed, no one represented cataloging more effectively and dramatically than did Miss MacDonald throughout her career.

Following her retirement, Miss MacDonald returned to her home state. Her death date closed her “catalog entry” but a memorial to her will be etched some day in the as yet unbuilt marbled DCC hall of fame.—*Based on reflections by Margaret A. Ayrault (First elected DCC Executive Secretary serving with Miss MacDonald who became her mentor and friend). Professor Emeritus, Graduate School of Library Studies, University of Hawaii at Manoa, as told to Sarah K. Vann, Professor, Graduate School of Library Studies, University of Hawaii at Manoa.*
Classification in Area Studies Libraries

Doris Cruger Dale

This paper presents a few of the ways in which libraries with a special emphasis on area studies handle the classification of their materials in order to provide a geographical approach to their collections. The systems described are those developed and used in six libraries the author visited in Great Britain and South Africa.

Librarians who classify materials for area studies libraries do not find the traditional subject classification systems such as the Library of Congress Classification (LCC) and the Dewey Decimal Classification (DDC) a satisfactory way to group materials. When it began operation in 1946, the Joint Library of the International Monetary Fund and the International Bank for Reconstruction and Development decided to arrange its library materials along regional lines because the research departments in the two organizations were so arranged. The attainment of this arrangement presented many problems not only to this library but to other libraries wishing a geographical classification of materials by area or country. Both LCC and DDC classify an item by what the book is about rather than the geographical area that is covered. Although DDC provides a geographic approach, it is secondary to the subject. Scholars and researchers in African studies, Latin American studies, Asian studies, and studies of other regional areas want both a subject and a geographic approach to their materials.

After studying many geographical classification schemes the Joint Library decided to use DDC and drop the geographical subdivisions. The library then created a set of geographic numbers which were placed above the DDC subject number. The geographic numbers consisted of an area notation subdivided by a country notation. For example, North America was designated as 2, Canada as 2A, the United States as 2D. This system proved to be well suited to the needs of this special library.

A search of recent and past literature on the geographical classification of library materials revealed many articles on how DDC and LCC treat regional areas in their classification systems. Some authors have critically examined the arrangement of history and geography in both

Doris Cruger Dale is Professor of Library Science, Department of Curriculum, Instruction and Media, Southern Illinois University at Carbondale.
classification systems, and other authors have looked at the treatment of specific regions, such as Latin America, Africa, India, Bangladesh, Eastern Europe, Great Britain, Ireland, and Australia.

J. Gordon Brewer in *The Literature of Geography* states that "Division by region with systematic subdivision is as appropriate for geographical study as systematic classification followed by a regional breakdown."

There is little in the library literature about the methods by which area studies libraries arrange their materials. As I visited such libraries on various "busman's holidays" because of a personal interest in the classification of regional materials, I discovered several approaches.

This paper presents a few of the ways in which area studies libraries handle the classification of their materials. The libraries discussed are the School of Oriental and African Studies Library, University of London; the Royal Commonwealth Society Library, London; the Royal Institute of International Affairs Library, London; South African Institute of International Affairs Library, Johannesburg, South Africa; the Africa Institute Library, Pretoria, South Africa; and the Institute of Commonwealth Studies Library, University of London.

### AREA STUDIES CLASSIFICATION IN SIX LIBRARIES

**THE SCHOOL OF ORIENTAL AND AFRICAN STUDIES LIBRARY, UNIVERSITY OF LONDON**

The purpose of the School of Oriental and African Studies is to further research and study in the languages, literature, history, religion, law, customs, and art of the Eastern and African peoples. The library provides a reference and lending collection of books within these fields. "Its policy is to acquire all important contributions made in all fields of learning by Oriental scholars throughout the world, as well as representative collections of belles lettres written in Asian and African languages."

The present library building, which was opened in 1973, is arranged on six floors, has more than 500,000 items, and has space for about a million volumes. Books are generally arranged by region or in some cases by subject, for example, art. The collections are shelved near the specialist rooms of each area. An assistant librarian specializing in the region or subject is available near these specialist rooms to answer inquiries.

Books are classified by a letter or combination of letters to denote a country or region and a Dewey Decimal Classification number. Books with the same classification number are subarranged by the accession number rather than an author number, although the author's name may be part of the class number. In this system the geographical classification takes precedence over the subject classification number. For example, U, V, and W are used for countries in Africa and Y is used for African languages. Double and triple letters are used for specific countries: WK for South Africa, WQB for Botswana, WQS for Swaziland. Oversize books are indicated by the letter L before the geographical letters. Some examples are as follows: WK 923.2 372997 is the number assigned to *Vorster, the Man* by John D'Oliveira, and L.WK 916.8 378846 is the number assigned to *South Africa: Land of Challenge* by Maurice Tyack. In
this case, both the geographical letters WK and the digits 68 of the DDC number represent South Africa, which is obviously redundant. *Farm Labour in South Africa*, edited by Francis Wilson, has the number L.WK 331.763 385142. In literature, both author letters and an accession number may be used, such as WK 820.2 SCH 371740, which is assigned to *Thoughts on South Africa* by Olive Schreiner. This system sometimes creates excessively long numbers.

**The Royal Commonwealth Society Library, London**

This learned society, founded in 1868, has a major library of more than 400,000 items on the Commonwealth and its member countries including materials on countries which were for a time under British rule. The library classification was devised by Evans Lewin, a former librarian. It is a geographical classification subdivided by topics. The classification system follows the arrangement of the subject catalog, which is primarily by geographical areas, then by subject headings in alphabetical order. Within each subject heading the arrangement is chronological by date of publication. In assigning call numbers to books, first a geographical number is used, such as 4 for Africa, 5 for South Africa, 549 for Botswana (Bechuanaland), 55 for the Transvaal province in South Africa, and 552 for Pretoria. British possessions in America begin with a 6, with 6073 assigned to the United States of America and 62 to Canada. Australia is 8 and New Zealand is 89. Former foreign colonies are assigned letters and numbers, such as Po44 for Angola and Fr421 for Algeria.

After a geographical number is assigned, a subject classification tag is added. This could be either a single small letter or double small letters or a letter and a number; c is used for history, cb for general works on World War II, f for manners and customs, f95 for theatre and cinema, m for political questions, m91 for the army, and m92 for navy and naval history.

In a few topics the subject letter or letter and numbers are assigned first, followed by the geographical number. For example, D30 is used for poetry and general literature and drama. D305 is used for South African poetry, the 5 in this case being the geographical number for South Africa. This procedure deviates then from a strictly geographical approach. Other examples of call numbers: *The History and Social Significance of Motion Pictures in South Africa, 1895–1940* is assigned the class number 5f95. A minus sign before the class number indicates a pamphlet. The number assigned to *The Soviet Union and the Conventional Threat to South Africa: A Strategic Analysis* has the number - 5m9.

**The Royal Institute of International Affairs Library, London**

"In its Royal charter the aims of the Institute include 'to advance the sciences of international politics, economics and jurisprudence ... and to provide and maintain means of information thereon.' Its library, the Chatham House Library, contains more than 150,000 items, including the standard works on international relations as well as material cov-
The subject letter G stands for Defence and International Law with the letters A–H used for subject classification numbers and the letters J–T used for regional classification, thus providing both subject and geographical approaches.

The subject letter G stands for Defence and International Law with A the Generalia class, B–H used by themselves for subjects and also as divisions after regional notations. The B–H subjects used alone and not as subdivisions of regions "can usually be thought to be preceded by the words 'international,' 'comparative,' or 'theory of.'"

In the classification scheme the regional notations J–T are always followed by B–H subject subdivisions. The shelf mark for biographies, autobiographies, and collections of speeches is usually a regional number plus the subject's surname: J2 Churchill, with J2 being the number for Great Britain. The classification for purposes of the classified card catalog is used in the greatest possible detail. For shelving purposes, however, the shelf mark consists of the first letter and first digit only of the main subject number, whether or not preceded by a regional number. Shelving is therefore by subject rather than by country or region, with the shelf mark indicated at the top right hand corner of all catalog cards. The classification number in detail is at the top left hand corner of the subject cards. It is therefore the catalog that provides a detailed geographical approach and not the books on the shelf, a common approach in closed-stack libraries.

The subject letter G stands for Defence and International Law with G1 standing for Defence, strategy, security. J2 is the number for Great Britain and P1.1 is the number for the Republic of South Africa. The relationship of one country with another is indicated thus: P1.1/G1/J2 for South Africa: Defence, strategy, security: Great Britain. Form divisions are used in square brackets as subdivisions of A–H, for example [1] for Dictionaries, encyclopedias; [2] for Chronologies, yearbooks, etc. This system of close classification for the card catalog with the use of another mark for shelf location seems unnecessarily complicated.

**South African Institute of International Affairs Library, Johannesburg, South Africa**

Founded in 1934, this library is devoted to African affairs and international relations. In 1972, for administrative purposes, the library became a divisional library of the University of the Witwatersrand. The classification system used in this library is the Chatham House Library classification scheme developed by Barbara Kyle.

**The Africa Institute Library, Pretoria, South Africa**

The Africa Institute, founded in 1960, specializes in research on the economics, geography, political science, and anthropology of Africa.
south of the Sahara. Its reference library has more than 32,000 volumes and subscribes to more than 400 magazines and newspapers.

The library uses a classification scheme based on a geographical arrangement. The classification number begins with a two-, three- or four-letter abbreviation for the country, and then a chronological accession number is added. Examples of the abbreviations, which are based on the names of the countries in Afrikaans, are as follows: AFR—Africa, BAS—Bosetoiland (now Lesotho), BET—Betsjoenaland (now Botswana), SA—South Africa, and SWAZ—Swaziland. This is an easy classification system to use and one that is well adapted to browsing by country, but it would probably work well only for a small collection.

**The Institute of Commonwealth Studies Library, University of London**

Instead of using a geographical classification scheme, this library provides geographical access to the collection via the subject card catalog. The Institute's reference library of more than 90,000 volumes on the Commonwealth is concerned with modern history and the social sciences. The materials are arranged by a modified form of the Library of Congress classification. Although the LCC class subject number is used, the LCC author number is not used. Instead, the first three letters of the author's last name are used. For example, the call number assigned to *History of Sierra Leone* by C. Fyfe is DT 518 FYF. In order to provide the geographical as well as the subject access necessary in an area studies library, the materials are listed by both country or region and subject in the Subject/Area Catalogue.

**CONCLUSIONS**

The development of specialized classification systems using a geographical approach to materials now seems to be a very expensive and time-consuming process, one that most libraries have neither the funds nor the staff to undertake. However, as this paper indicates, a geographic approach is indeed a valuable and useful one for scholars, especially in area studies fields. A strict geographic classification seems impossible to attain, and several libraries combined both geographic and subject approaches. The approach taken by the library of the Institute of Commonwealth Studies seems to be a viable one for today's libraries. Pragmatically, it seems economically wise to adopt for shelf location a standard classification system making few changes, especially for closed-stack libraries, and to depend on a geographical approach in the catalog to provide geographical access. If robots are ever developed to retrieve books from the stacks, then a simple accession number could be used for shelf location. The computer catalog could be programmed in depth to provide geographical access as well as the subject, author, and title access points now provided in library catalogs. This approach should adequately serve students and scholars in the fields of area studies. Shelf arrangement by country could never reveal all the materials owned by one library on one country, as this arrangement cannot adequately cope with books dealing with many countries.
The MARC cataloging format of the Library of Congress provides a fixed field symbol for language of text and country of publication and a variable field 043 consisting of seven spaces to indicate the geographical area of the content of the book—the most appropriate access point for area specialization. The seven spaces may consist of a letter for the continent or other region, a hyphen, two letters for the country, a hyphen, and two letters for the state or other geographical subdivision. For example, U-S-IL indicates that the content of the book deals with the state of Illinois in the United States on the North American continent. All of the seven spaces need not be filled. For librarians wishing to arrange books on the shelves by geographical areas, this code could be superimposed above the classification number. If all libraries adopted the same country codes, there would be more consistency in geographical arrangements than has been indicated by the systems described in this article.

REFERENCES

2. Ibid., p.3-6.
3. Ibid., p.10.
16. Visits to the library by the author, Aug. 3 and 7, 1970.
Theological Subject Headings Reconsidered

W. Thomas Nichol

The inadequate coverage of religious topics in early editions of the Library of Congress Subject Headings (LCSH) led to the creation of several special lists of theological subject headings. Although these lists are no longer widely used, lingering dissatisfaction with LCSH among theological librarians suggests that the case for theological subject headings should be reconsidered. In the study reported in this paper all headings in the fifth modified (1982) edition of Catholic Subject Headings (CSH) were compared with their closest counterparts, if any, in the ninth (1980) edition of LCSH to determine the extent of duplication and the nature of the differences. It was found that 59.7% of the headings are identical or differ only through the addition of an LCSH standard subdivision. The remaining 40.3% are unique to CSH. On the basis of these findings, recommendations are made for the future development of theological subject headings.

The primary impetus for special lists of theological subject headings was the inadequacy of early editions of Library of Congress Subject Headings (LCSH). The Library of Congress, by its own admission in the prefaces to both the second (1919) and third (1928) editions of LCSH, offered few headings in the area of theology:

Subjects belonging to religion and theology and to foreign law are but sparsely and irregularly represented, owing to the fact that the assignment of such subject headings has been discontinued until the reclassification of these classes shall have been completed and their systematic recataloguing is well in hand. For the completion of that work no definite date can be assigned.1

Under these circumstances it is not surprising that there was significant interest in special lists of theological subject headings in the years before the appearance of the fourth edition of LCSH in 1943. Two major lists appeared. The first was prepared by Julia Pettee in 1924 for use at Union Theological Seminary.2 The second, Oliver Kapsner's Catholic Subject Headings (CSH), appeared in 1942.3

The fourth edition of LCSH showed considerable improvement in the coverage of theological topics. Although one subsequent edition of Pettee's list appeared in 1947 and five subsequent editions of CSH have ap...
peared, it is apparent from the literature that most theological librarians preferred to use LCSH headings whenever possible. Of particular interest is the 1965 report of the Committee on Cataloging and Classification of the American Theological Library Association (ATLA). On the basis of a questionnaire it was concluded that there was heavy reliance upon LCSH and that the majority of librarians would use only LCSH headings if they were to "start over."

The response to Catholic Subject Headings has been similar. A recent questionnaire mailed by the present author to all Catholic college and university libraries revealed that only 37 of the 191 respondents currently use CSH. An additional 58 respondents indicated that they had used CSH in the past. The reasons most often given for discontinuing its use are the acceptance of LCSH headings, the use of OCLC, the difficulty of using two lists, and the desire to simplify cataloging procedures.

It is also true, however, that neither the respondents to the ATLA questionnaire nor the respondents to the author's questionnaire were entirely satisfied with LCSH. Of the 113 respondents to the ATLA questionnaire, 47 expressed the need to supplement LCSH headings with headings drawn from Pettee or devised locally. In response to the author's questionnaire, some nonusers of CSH also indicated that adjustments have to be made for Catholic terminology. This lingering dissatisfaction with LCSH suggests that the case for special lists of theological subject headings should be reconsidered.

**Design of the Study**

As a first step in this process the author compared all headings in the most recent (1982) edition of Catholic Subject Headings to their closest counterparts, if any, in the ninth (1980) edition of LCSH to determine (1) the extent of duplication between headings in the most recent edition of CSH and the ninth edition of LCSH, (2) what differences exist between headings in cases where equivalents can be identified, and (3) how many headings in the most recent edition of CSH have no near equivalents in the ninth edition of LCSH and into what categories they fall. In 1942 Victor A. Schaefer of Catholic University compared the first edition of CSH to LCSH and reported that of the 2,300 entries in that edition of CSH, only 75 were true additions to LCSH, although an additional 700 appeared in a different form. Unfortunately, Schaefer presented neither the details of his comparison nor an explanation of his methodology. Other lists of subject headings have been compared to LCSH for different purposes, although usually on a sample basis. A notable exception is Muench's complete reconciliation of Medical Subject Headings (MeSH) and LCSH.

The present CSH-LCSH comparison was performed by checking every heading in the fifth modified edition of CSH for an identical heading or near equivalent in LCSH. If an identical heading was found, the fact was noted. If a near equivalent was found, it was recorded and all differences between the headings were identified. In some cases two or more LCSH headings were required to establish near equivalency. Pairs of headings displaying a common difference were then grouped and dis-
played in tables. *CSH* headings for which no near equivalents were found in *LCSH* were also grouped.

The following criteria governed the development of all groups, or categories, of headings:

1. Each category must be clearly definable.
2. Each category must represent at least the possible basis for a principle of revision.
3. Taken together, the categories must include all unique *CSH* headings.
4. In the case of near-equivalent headings, (a) the appropriate categories must describe exhaustively all differences between *CSH* headings and their nearest *LCSH* equivalents, and (b) the differences in each category must be consistent.

Differences between headings, in the case of near equivalents, were first categorized as differences of form, specificity, or terminology. These three major categories were then subcategorized.

On the basis of the above criteria, the following categories of differences were established:

**Form differences:**

- **Order of elements in the subject heading.**
  
  Example: *CSH* Archives, Church  
  *LCSH* Church Archives

  *CSH* heading more direct than the *LCSH* heading, i.e., no subheading in the *CSH* heading or one less than in the *LCSH* heading.

  Example: *CSH* Audio-visual Aids in Religion  
  *LCSH* Religion—Audio-Visual Aids

  *LCSH* heading more direct than the *CSH* heading, i.e., no subheading in the *LCSH* heading or one less than in the *CSH* heading.

  Example: *CSH* Bible—Symbolism  
  *LCSH* Symbolism in the Bible

- **Number (singular or plural).**
  
  Example: *CSH* Chorus, Sacred  
  *LCSH* Choruses, Sacred

- **Spelling or hyphenation.**
  
  Example: *CSH* Altar Cloths  
  *LCSH* Altar-Cloths

- **Use of abbreviations.**
  
  Example: *CSH* Apocryphal Books (N.T.)  
  *LCSH* Apocryphal Books (New Testament)

- **Punctuation.**
  
  Example: *CSH* Administrators, Apostolic  
  *LCSH* Administrators Apostolic

- **Use of dates or ordinal numerals.**
Example: *CSH* Canon Law—Early Church
*LCSH* Canon Law—Early Church, ca. 30–600

Context specified in the *LCSH* heading with one or more preceding headings; context assumed in the *CSH* heading.

Example: *CSH* Annunciation
*LCSH* Mary, Virgin—Annunciation

Context specified in the *LCSH* heading with a following qualifier; context assumed in the *CSH* heading.

Example: *CSH* Abbesses
*LCSH* Abbesses, Christian

Specificity differences:
*CSH* heading more specific through the use of a preceding adjective or noun.

Example: *CSH* Auricular Confession
*LCSH* Confession

*CSH* heading more specific through the use of a preceding heading.

Example: *CSH* Bishops—Insignia
*LCSH* Insignia Bishops

*CSH* heading more specific through the use of a following qualifier preceded by a comma.

Example: *CSH* Almanacs, Catholic
*LCSH* Almanacs

*CSH* heading more specific through the use of a parenthetical qualifier.

Example: *CSH* Abbesses (Canon Law)
*LCSH* Abbesses, Christian Canon Law

*CSH* heading more specific through the use of an additional subdivision.

Example: *CSH* Altars—Consecration
*LCSH* Altars

*CSH* heading more specific through separate treatment of closely related terms which are linked in the *LCSH* heading.

Example: *CSH* Abbots—Election
*LCSH* Abbots—Appointment, Call, and Election

*CSH* heading more specific as a part of, an aspect of, an example of, or a subclass of the *LCSH* heading.

Example: *CSH* Alms and Alms Giving
*LCSH* Charity
CSH heading less specific.

Example: CSH Abstinence
LCSH Fasting
Temperance
Chastity

Terminology differences:
Slight differences in wording, most involving only articles and prepositions, which are significant only in regard to filing.

Example: CSH Chastity (Vow)
LCSH Chastity, Vow of

Differences in the wording of subheadings.

Example: CSH Bible—Criticism, Higher
LCSH Bible—Criticism, Interpretation, etc.

Other differences in wording.

Example: CSH Altar Servers
LCSH Altar Boys

Categories were also established for CSH headings which have no near equivalents in LCSH:
Corporate bodies and movements, e.g., Adjutor Fratris (Organization)
Uniform titles, e.g., Acta Martyrum
Prayers, liturgies, litanies, processions, etc., e.g., Angelus
Feasts, e.g., Annunciation, Feast of the
Rites, e.g., Alexandrian Rite
Names, epithets, and peoples, e.g., Emmanuel
Shrines, statues, jurisdictions, and buildings, e.g., Fatima, Portugal (Shrine)
Terms linked in CSH which are not linked in LCSH, e.g., Asceticism and Dogmatic Theology
Other headings for which there are no near equivalents in LCSH, e.g., Acolytes (Holy Order)

RESULTS OF THE COMPARISON

The total comparison revealed that of the 3,010 headings in the fifth modified edition of CSH, 1,798, or 59.73%, are either identical to LCSH headings or differ only through the addition of an LCSH standard subdivision. The remaining 1,212 headings, or 40.27%, are unique to CSH and appear in the thirty tables which resulted from the comparison. In cases where the CSH heading displayed more than one difference from the corresponding LCSH heading, the heading appears in more than one table. All together, the 1,212 headings are represented by 1,391 entries in the thirty tables. (Entry refers to a CSH heading and its corresponding LCSH heading or headings, if any).

Among the variations from LCSH, form differences account for 17.39% of the entries in the tables, specificity differences for 36.66%, and terminology differences for 13.87%. The remaining 32.06% are en-
tries for CSH headings which have no near equivalents in LCSH. Of the 446 CSH headings which have no near equivalents in LCSH, 311, or 69.73%, are proper nouns. Since LCSH includes proper nouns only as samples or as introductions to specific subdivisions, the absence of these headings does not preclude their use in the same or modified form by the Library of Congress.

Categories of form differences, number of entries in each category, percent of total form differences represented by the category, and percent of total entries appear in table 1. The same data are presented for specificity differences in table 2, for terminology differences in table 3, and for CSH headings with no near equivalents in table 4.

### TABLE 1

**Form Differences in Two Subject Heading Lists**

<table>
<thead>
<tr>
<th>Difference</th>
<th>N</th>
<th>% of Form Differences</th>
<th>% of All Entries*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of elements</td>
<td>26</td>
<td>10.74</td>
<td>1.87</td>
</tr>
<tr>
<td>CSH more direct than LCSH</td>
<td>28</td>
<td>11.57</td>
<td>2.01</td>
</tr>
<tr>
<td>LCSH more direct than CSH</td>
<td>22</td>
<td>9.09</td>
<td>1.58</td>
</tr>
<tr>
<td>Number (singular or plural)</td>
<td>16</td>
<td>6.61</td>
<td>1.15</td>
</tr>
<tr>
<td>Spelling or hyphenation</td>
<td>22</td>
<td>9.09</td>
<td>1.58</td>
</tr>
<tr>
<td>Use of abbreviations</td>
<td>41</td>
<td>16.94</td>
<td>2.95</td>
</tr>
<tr>
<td>Punctuation</td>
<td>10</td>
<td>4.13</td>
<td>.72</td>
</tr>
<tr>
<td>Use of dates or ordinal numerals</td>
<td>30</td>
<td>12.40</td>
<td>2.16</td>
</tr>
<tr>
<td>Context specified in the LCSH with one or more preceding headings</td>
<td>29</td>
<td>11.98</td>
<td>2.08</td>
</tr>
<tr>
<td>Context specified in the LCSH with a following qualifier</td>
<td>18</td>
<td>7.44</td>
<td>1.29</td>
</tr>
<tr>
<td>Totals</td>
<td>242</td>
<td>99.99</td>
<td>17.39</td>
</tr>
</tbody>
</table>

*An entry is a CSH heading and its corresponding LCSH heading or headings, if any; the number of entries on which this table is based is 1,391.

### TABLE 2

**Specificity Differences in Two Subject Heading Lists**

<table>
<thead>
<tr>
<th>Difference</th>
<th>N</th>
<th>% of Specificity Differences</th>
<th>% of All Entries*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH more specific through use of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A preceding adjective or noun</td>
<td>33</td>
<td>6.47</td>
<td>2.37</td>
</tr>
<tr>
<td>A preceding heading</td>
<td>7</td>
<td>1.37</td>
<td>.50</td>
</tr>
<tr>
<td>A following qualifier preceded by a comma</td>
<td>64</td>
<td>12.55</td>
<td>4.60</td>
</tr>
<tr>
<td>A parenthetical qualifier</td>
<td>120</td>
<td>23.53</td>
<td>8.63</td>
</tr>
<tr>
<td>An additional subdivision</td>
<td>68</td>
<td>13.33</td>
<td>4.89</td>
</tr>
<tr>
<td>CSH more specific through separate treatment of closely related terms which are linked in LCSH</td>
<td>58</td>
<td>11.37</td>
<td>4.17</td>
</tr>
<tr>
<td>CSH more specific as a part of, an aspect of, an example of, or a subclass of the LCSH</td>
<td>116</td>
<td>22.75</td>
<td>8.34</td>
</tr>
<tr>
<td>CSH less specific</td>
<td>44</td>
<td>8.63</td>
<td>3.16</td>
</tr>
<tr>
<td>Totals</td>
<td>510</td>
<td>100.00</td>
<td>36.66</td>
</tr>
</tbody>
</table>

*An entry is a CSH heading and its corresponding LCSH heading or headings, if any; the number of entries on which these tables are calculated is 1,391.
### TABLE 3
**Terminology Differences in Two Subject Heading Lists**

<table>
<thead>
<tr>
<th>Difference</th>
<th>N</th>
<th>% of Terminology Differences</th>
<th>% of All Entries*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slight differences in wording which are significant only in regard to filing</td>
<td>13</td>
<td>6.74</td>
<td>.93</td>
</tr>
<tr>
<td>Wording of subheadings</td>
<td>18</td>
<td>9.33</td>
<td>1.29</td>
</tr>
<tr>
<td>Differences in wording not elsewhere accounted for</td>
<td>162</td>
<td>83.94</td>
<td>11.65</td>
</tr>
<tr>
<td>Totals</td>
<td>193</td>
<td>100.01</td>
<td>13.87</td>
</tr>
</tbody>
</table>

*An entry is a CSH heading and its corresponding LCSH heading or headings, if any. The number of entries on which this table is based is 1,391.

### TABLE 4
**CSH Headings With No Near Equivalents in LCSH**

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>% of Headings with No Near Equivalents</th>
<th>% of All Entries†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper nouns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bodies and movements</td>
<td>90</td>
<td>20.18</td>
<td>6.47</td>
</tr>
<tr>
<td>Uniform titles</td>
<td>133</td>
<td>28.82</td>
<td>9.56</td>
</tr>
<tr>
<td>Prayers, liturgies, litanies, processions, etc.</td>
<td>34</td>
<td>7.62</td>
<td>2.44</td>
</tr>
<tr>
<td>Feasts</td>
<td>12</td>
<td>2.69</td>
<td>.86</td>
</tr>
<tr>
<td>Rites</td>
<td>23</td>
<td>5.16</td>
<td>1.65</td>
</tr>
<tr>
<td>Names, epithets, peoples</td>
<td>8</td>
<td>1.79</td>
<td>.58</td>
</tr>
<tr>
<td>Shrines, statues, jurisdictions, buildings</td>
<td>11</td>
<td>2.47</td>
<td>.79</td>
</tr>
<tr>
<td>Terms linked in CSH which are not linked in LCSH</td>
<td>24</td>
<td>5.38</td>
<td>1.73</td>
</tr>
<tr>
<td>Other headings for which there are no near LCSH equivalents</td>
<td>111</td>
<td>24.89</td>
<td>7.98</td>
</tr>
<tr>
<td>Totals</td>
<td>446</td>
<td>100.00</td>
<td>32.06</td>
</tr>
</tbody>
</table>

*CSh = Catholic Subject Headings, modified 5th ed.; LCSH = Library of Congress Subject Headings, 9th ed.
†An entry is a CSH heading and its corresponding LCSH heading or headings, if any; the number of entries on which these tables are calculated is 1,391.

**DISCUSSION AND RECOMMENDATIONS**

Most form differences in the sample list could be resolved in favor of LCSH, as could many minor differences in terminology and the few differences in which CSH headings are less specific than their LCSH counterparts. Other differences, however, result from CSH headings which supplement LCSH and which, therefore, should not be abandoned. These include CSH headings which are more specific than their closest LCSH counterparts, headings using specialized terminology which is crucial to the interpretation of the subject matter, and headings which have no counterparts in LCSH. Included in the last group are many technical theological terms.

The case for improving or at least maintaining specialized subject access in theology is strengthened by several recent studies on subject searches. Cochrane reports:
Theological Subject Heading

The CLR/OPAC [Council on Library Resources/Online Public Access Catalog] survey..., online catalog transaction log analyses, focused group interviews, and data and statistical reports from several libraries (including the Library of Congress and the University of California Library System) attest to the "fact" that the great majority of library users are performing topical subject searches, not author/title or known-item searches. This is the overwhelming finding from these studies. It was also the finding from some earlier catalog use studies, but this time the weight of the evidence cannot be ignored or unheeded. On the basis of these findings, Cochrane predicts a "paradigm shift" in library science as greater attention is paid to subject analysis and subject access in library catalogs.

One pertinent example of this renewed interest in subject analysis is the Art and Architecture Thesaurus (AAT) Project; the project is an attempt "to improve the state of art indexing through the production of a comprehensive thesaurus based on art headings in Library of Congress Subject Headings (LCSH) and other art subject heading lists," and is of particular interest in connection with theological subject headings because it addresses a specific subject area. Important assumptions underlying the project, which would be shared in the area of theology, are that there is almost total dependence in the library field on LCSH; that LCSH will have to be assimilated into the AAT; and that if it is impossible to rebuild LCSH as a single thesaurus, it may be possible to revise it by subject areas, with relationships noted to connect the individual lists. Like MeSH, the AAT is to be divided into two sections: (1) an alphabetical list which gives scope and history notes, applicable subdivisions, and cross-references, and (2) a hierarchical display of the subject terms.

In light of the CSH-LCSH comparison, which reveals that there is a specialized theological vocabulary not covered by LCSH, CSH should be restructured as a modern information retrieval thesaurus along the lines of the AAT. LCSH, as it now exists, not only varies unnecessarily from LCSH, but also suffers from the drawbacks of a conventional subject heading list. The advantages of a modern thesaurus over a subject heading list are (1) that the relationships between subject terms are more explicit and (2) that the descriptors are designed for use in combination in postcoordinate searches. As online catalogs and databases replace or supplement the card catalog and traditional reference tools, these advantages will become more pronounced. A theological thesaurus could be used not only to supplement Library of Congress cataloging copy, as CSH is now used, but also as the controlled vocabulary of specialized theological data bases, bibliographies, and other references tools, and as a guide in free-text searching. If wording which identifies the context of a descriptor such as "Catholic" or "Catholic Church" were present, headings from CSH could be combined with other theological subject headings in a single theological thesaurus.

The comparison of CSH to LCSH is a first step in the preparation of a theological thesaurus. Other lists of theological subject headings should now be gathered and similarly scrutinized and the literary warrant of all non-LCSH headings reviewed before the work of establishing hierarchies of subject terms begins. Given the nearly total dependence of theo-
logical libraries on LCSH, differences from LCSH should be minimized without sacrificing specificity, abandoning correct terminology, or compromising standards for thesaurus construction. It would also be desirable to explore the possible relationship of the thesaurus to the vocabularies of the major theological periodical indexes.

References

3. Oliver Kapsner, ed., Catholic Subject Headings; A List Designed for Use with Library of Congress Subject Headings or the Sears List of Subject Headings for Small Libraries (Collegeville, Minn.: St. John’s Abbey Press, 1942).
8. Eugene V. Muench, Biomedical Subject Headings; A Reconciliation of National Library of Medicine (MeSH) and Library of Congress Subject Headings, 2d ed. (Hamden, Conn.: Shoe String Pr., 1979).
10. Ibid.
Citations to Conference Papers and the Implications for Cataloging

John W. East

Problems in the cataloging of conference proceedings, and their treatment by some of the major cataloging codes, are briefly reviewed. To determine how conference papers are cited in the literature, and thus how researchers are likely to be seeking them in the catalog, fifty conference papers in the field of chemistry, delivered in 1970 and subsequently published, were searched in the Science Citation Index covering a ten-year period. The citations to the papers were examined to ascertain the implications of current citation practices for the cataloging of conference proceedings. The results suggest that conference proceedings are customarily cited like any other work of collective authorship and that the conference name is of little value as an access point.

The cataloging of conference proceedings has caused much dreary labor in my professional life and as little thought as I could possibly bring to bear on the problems involved. My first recommendation to prospective catalogers of symposia is, don’t!

Many a true word spoken in jest. There must be thousands of catalogers in research libraries throughout the world who would admit that their own attitude to the cataloging of conference proceedings bears some resemblance to that expressed above. To the noncataloger, it must all seem a bit strange: “What’s so difficult about cataloging conference proceedings anyway?”

Take for example a publication entitled “Proceedings of the Symposium on Thin Film Phenomena—Interfaces and Interactions,” published by the Electrochemical Society, Princeton, New Jersey, in 1978. The title would suggest that the name of the conference was “Symposium on Thin Film Phenomena—Interfaces and Interactions,” and under our current cataloging rules, it should be entered under that heading. However, the very editors of the proceedings, in their preface, refer to the meeting (in the first paragraph) as “International Symposium on Thin Film Phenomena—Interfaces and Interactions” and then later (in the fourth paragraph) as the “International Thin Film Symposium”! What’s in a name? The diligent cataloger of conference proceedings is

John W. East is a Cataloger at the Science Reference Library, the British Library.
forced to scour prefaces, opening remarks, running titles, headings to lists of participants, and even photographs of banners at conference sessions in order to detect, and refer from, all the variant forms of the conference name. Is it worth all the effort?

**Rules for Cataloging Conference Publications**

The hazards of cataloging conference proceedings have been well known to catalogers for at least a century. In the 1891 edition of his *Rules for a Dictionary Catalogue*, Cutter devoted a separate rule to this class of material, advocating that conferences be entered under the name of the organization which held the conference. However, he was prepared to concede that the conference might be regarded as an organization in itself, and so he allowed for entry under the conference name, and thus was born (or at least popularized) the concept of the conference as corporate author. “Often the name is given in different forms,” admits Cutter.

For unnamed conferences, Cutter advocated entry under the place where the meeting was held, and the 1908 Anglo-American code adopted a remarkably similar policy. In 1936, the revised edition of the British Museum rules recognized (for the first time) the existence of conferences as a separate class of material and provided for entry of international meetings under the form-heading *Congress*, whereas meetings of distinct organizations were to be entered under the heading for the organization, and other meetings under the name of the country or town in which held.

Back across the Atlantic, the 1949 code of the American Library Association brought no changes in this area from the 1908 code, except that it now permitted terms such as *Conference* or *Meeting* to be used as subdivisions of headings for corporate bodies. Interestingly enough, this latter practice was rejected by the Americans when they compiled the 1967 Anglo-American code, while their British colleagues came out strongly in favor of it, thus making one of the few differences between the North American and British texts of *AACR1*.

The 1967 code finally dispensed with entry of conferences under place. On the face of it, the rule was simple: either the conference was a named one, and thus entered under its name, or else it was unnamed and thus entered according to the general rules (i.e., under title). The problem of course was “What is a name?” and the code has a lengthy footnote about the fine distinctions between a “specific appellation” and a “general description.” Unfortunately, this was one of many problems AACR2 failed to resolve. The new code has brought some kind of relief, however, in that it firmly rejects main entry under a conference name that does not appear “prominently” in the item being cataloged and seems also to advise against even an added entry for a nonprominent conference name.

*Plus ça change, plus c’est la même chose.* . . . The concept of the conference as a corporate body is still very much with us, despite all the problems of distinguishing a name from a “general description,” and despite the numerous “aliases” that these shady organizations seem to adopt as and
when it suits them. It is hardly surprising that in recent years several writers have challenged the whole concept of the conference as a corporate author. In 1971, Michael Gorman suggested entry of conferences under the form-heading Conferences, subdivided by subject and year (a sort of keyword conference index within the catalog!). John McKinlay in 1972 posed the question, "How do users search for conferences?" and suggested in reply, "Not, it would seem, by the headings which we so lovingly construct." So thought McKinlay, but, as Gorman warns, "anyone's idea of the library users' expectations is likely to be highly subjective, a projection of one's own beliefs rather than a statement of facts."

But must it be so? Can we do no better than speculate about how users look for conferences in the catalog? Consider the average scientific researcher looking for a conference publication in the library. In a few cases the searcher may have heard of, or even attended, a meeting on a particular subject and be curious to see if the library holds the proceedings of that meeting. But in the vast majority of cases, the searcher will be following up a reference to a particular conference paper. What form will that reference take? What information will it give the researcher?

**CITATIONS TO CONFERENCE PUBLICATIONS**

The invaluable Science Citation Index (SCI) fortunately enables us to arrive at some sort of answer to these questions. Thanks to SCI, it is possible to select a sample of published conference papers and then trace references to them in the literature. One can then examine those references to see what the researcher is likely to be looking for in the catalog. We can thus determine which access points are likely to be "sought" or "unsought."

For the present study, a sample of ten conferences held in the field of chemistry during 1970 was selected from the British Library Lending Division's Index of Conference Proceedings Received. In selecting the sample, reference was made to the findings of Mills on the publication pattern of conference proceedings, which may be summarized as follows:

1. that 40% of conference publications are issued as serials
2. that 32% of conference publications are issued as separate books
3. that 28% of conference publications are published as special issues within serials.

The first of these categories was ignored, on the grounds that it presents fewer cataloging problems. The second category was represented by six titles in the sample, and the third category by four titles.

From these ten collections of papers, the first five papers were selected from each to give a sample of fifty conference papers. Each of these fifty references was then searched manually through SCI for the ten-year period from 1970 to 1980, and all citations of them noted. Particular care was taken to detect citations both to the published and to the unpublished versions of those papers. From the abbreviated citation given in SCI, it was usually possible to determine what details had been given by the citing author, but in cases of doubt the citation was followed up and checked.

The fifty papers of the sample yielded a total of 735 citations: an aver-
The age of about 15 citations per paper. Eight papers were not cited at all, and four papers were cited more than fifty times each.

The thirty papers from conferences whose proceedings were published as individual books were cited a total of 377 times. Only 10 of these 377 citations (2.7%) fail to cite the correct title (or series title) of the proceedings volume, a finding that suggests that even if such works were cataloged only under title proper and series title, an extremely high success rate should still be achieved by users tracing references to them in the catalog. Of course, many of the citations give further details as well, but what becomes perfectly clear is that a volume of conference proceedings is, in virtually all cases, cited like any other work of collective authorship.

The twenty papers from conferences whose proceedings were published as special issues of serials were cited a total of 358 times. Of these citations only 2 (0.6%) fail to give details of the serial in which the paper was published. These results suggest that a conference paper published as a journal article is cited, almost invariably, like any other journal article. Thus from the point of view of author/title cataloging, analytical entries for conference proceedings published as special issues of serials must be virtually worthless.

The citations which would not have been retrieved had the conference proceedings been cataloged simply under title/series/editor (or under journal title, in the case of conferences published as special issues) were either just incomplete references or references to the unpublished form of the paper. These latter references pose the same problem as if faced by a user who, rather than following up a specific reference, is just looking for the proceedings of a known meeting. It is generally felt that keyword indexing is the only solution to this problem. Certainly when a work published under the title “Tecnica ed economia della produzione di acqua pesante” is cited as “Simposio di Torino sugli aspetti tecnici ed economici della produzione di acqua pesante” (a form of name which does not appear anywhere in the publication), it is only a keyword index that is likely to retrieve the required item. On the other hand, when the same work is cited as “Schwerw. Symp. Turin,” even the keyword approach is unlikely to be of much help!

Interdoc and the British Library Lending Division’s Index of Conference Proceedings Received have made the practice of keyword indexing for conference proceedings so popular that even Library of Congress has adopted a procedure of regularly referring from “inverted names” of conferences, to provide a sort of keyword approach within the framework of conventional author/title cataloging. Thus, for example, in cataloging the proceedings of the International Congress of Microbiology, Library of Congress catalogers would make a reference:

Microbiology, International Congress of

See International Congress of Microbiology

To what extent the need for such keyword indexing will be removed by the possibilities of text-word searching of computerized catalog files remains uncertain.
CONCLUSION

All of the above tends to suggest that the "conference name" is of little value as an access point, except where it is the same as the title, or where it begins with some term that defines the subject of the meeting. More than twenty years ago, Jolley declared that "title entry is the only proper form of entry [for conference proceedings], but the nature of most current titles is such as to make the title entry of little use in identifying the work." He was writing, of course, at the end of an era which had always been suspicious of title entry. In our modern, post-AACR2 world we have come to realize that title access points can usefully be given for almost any publication, and where an "untidy" title page suggests more than one possible title proper, the solution is to provide more than one title access point.

In her detailed study of the whole question of corporate authorship, Eva Verona concludes her chapter on conferences with the statement:

If we would wish to reject the author cataloguing principle for conference proceedings, the only other acceptable method would be entry under the title proper of the proceedings. However, this method would render the collocation of successive conferences still more difficult, and in many cases would not even be effective for the location of a particular conference.

As to the first of these objections—"the collocation of successive conferences"—we have only to examine the example given in Rule 26.3C1(c) of AACR2 to realize the absurdity of even attempting such a thing. It is the function of the subject catalog and the classification scheme to achieve this sort of collocation. Verona's second objection—that title entry "in many cases would not even be effective for the location of a particular conference"—was not supported by any evidence.

In this paper I have attempted to demonstrate that the title, taken in conjunction with other standard access points (editor, series, prominent corporate body), provides as satisfactory a means of retrieval for conference proceedings as we can reasonably expect to achieve.

REFERENCES

3. Ibid., p.30.
13. British Library, Lending Division, Index of Conference Proceedings Received 1964– (Boston Spa: The Division, 1964–).
Not too long ago, an article on network and vendor authority systems would have been mostly speculative and futuristic in nature. As a matter of fact, in the 1979 LITA Institutes on Authority Control, Mary A. Madden pointed out that the vendors were NOT providing authority control and told why. She speculated that there were two reasons: first, the tremendous cost involved in setting up an authority control system, and second, the fact that librarians by and large seemed only remotely interested in the matter. When we first began gathering information on authority control at the 1982 ALA Midwinter Meeting, we asked several vendors what they offered in the way of authority control. Most said something like, "WHAT control?" or "We don’t have any" or "Oh, you mean changing all the headings for ‘aeroplane’ to ‘airplane’!" At the 1983 ALA Annual Conference, representatives of the same vendors said, "Sure, here’s a summary" or "Let me explain it a little now, and I’ll send you more information when I get back to my office." Authorities Institutes have been held around the country and have served to raise consciousness among both librarians and vendors. Network and vendor authority control is an idea whose time has come.
MANUAL VERSUS AUTOMATED AUTHORITY CONTROL

For years, many libraries provided authority control in a manual mode. But whether a manual authority file is in the catalog itself or is in a separate file, the only link between a manual authority record and its associated bibliographic records is an intellectual one. Human intervention is required to determine whether the prescribed text, including all diacritical marks, spelling, and punctuation, has been transcribed accurately in a particular heading. Human intervention is also required to locate all records associated with a heading when that heading needs to be changed. Furthermore, the creation of all references and their reciprocals and the de-blinding of references (see appendix A, Glossary) requires human effort in a manual file. That is, if a reference says “Clemens, Samuel Langhorne, see Twain, Mark,” and if the only bibliographic record for “Twain, Mark” is withdrawn from the catalog, someone must see that the reference is also withdrawn.

With the advent of automated authority control systems, we no longer have to rely completely on an intellectual link between authority records and bibliographic records. Automated authority systems can mechanically check newly input headings against the authority file to determine whether the established form of name has been transcribed. When a name or term is entered into an automated authority file for the first time, the system can alert the cataloger that this new term (called an unprecedented heading) needs to be validated. An automated authority file can also serve as an index to the bibliographic file, bringing together all works of an author whether that author is searched in “correct” form or in one of the forms from which a reference has been made.

With automated authority to authority links, references can be generated and de-blinded automatically. In addition, such an authority system can change all occurrences of a superseded form of name to the newly authorized form, in what is known as a global change. Automated authority to authority links also allow us a kind of control almost never achieved when we had to rely on manual authority files. Using this system we can change every occurrence of a heading used as a qualifier or as a subdivision of a main heading, as well as changing the term in primary position. For example, when Ceylon is changed to Sri Lanka, headings such as “Colombo, Ceylon” can be changed automatically to “Colombo (Sri Lanka).” Or, when “Africa, South” is changed to “South Africa,” a heading such as “Education—Africa, South” will become “Education—South Africa,” without manual intervention.

AUTOMATED AUTHORITY SYSTEMS: LEVELS OF SERVICE

While the features just described are all possible, they are not all available in all the systems currently in operation. These systems fall generally into two groups.

One group offers magnetic tape processing in which a library’s...
machine-readable data files, that have typically been created as “archive tapes” during the time the library has participated in a bibliographic network, are edited to change older forms of heading to new forms; to correct spacing, subfielding, and MARC tags; and to detect “near matches,” such as records with nearly identical dates, common spelling errors, etc. A vendor offering one of the most sophisticated of such tape processing services, Blackwell North America, can also match on parts of a heading. For example, the old form of subdivision “Bibl.” can be spelled out to the current form “Bibliography” even if the Blackwell North America authority file does not contain the exact subject/subdivision combination. This processing may also be used to create a machine-readable authority file consisting of every heading from the bibliographic tapes over which the library wishes to maintain authority control. The bibliographic files thus edited, and the accompanying authority file when created, either can be used in the creation of COM catalogs or can be loaded into local online catalogs.

The second group of authority systems offer online access to bibliographic records and authority records. These online systems fall generally into two categories:

1. Authority files that are completely separate and unlinked to the system’s bibliographic files.
2. Authority systems that are integrated or linked with the system’s bibliographic database.

Network Systems

An example of the first type (authority and bibliographic files separate and unlinked) is provided by OCLC. From OCLC’s beginning, a sort of partial de facto authority control has been exercised, because the Library of Congress’s MARC records, themselves produced under strict authority control, make up a sizable portion of the database. But no similar control exists to regulate the consistency of headings contributed by member libraries. In theory, an LC-MARC record will replace a duplicate member-contributed record already in the database. Actually, as is obvious to anyone who searches the OCLC database, the matching algorithm may let duplicate or miscataloged records slip by, resulting in several entries with several forms of the author’s name for a single item. If one of these is an LC-MARC record, most member libraries will use that. But too often a search for a single item will bring up varying versions with differing headings, none of which has been input by LC.

In an attempt to alleviate the problem of inconsistent headings in the database, as well as to aid in making the switch to AACR2 forms of names, OCLC loaded the LC machine-readable authority records into the OCLC database in December 1979. This file contains all types of names, series, and uniform titles. However, the OCLC-LC name authority file is not a complete list of the headings used on the OCLC database, and there is no provision for OCLC members, except for the few libraries who participate in the Library of Congress Name Authority Co-op (NACO) Project, to input other names to the authority file. It should be noted, however, that the new OCLC Local Library System
(LS/2000) includes the capacity for local online authority files.

The LC authority file in OCLC, as already mentioned, is not linked in any way to the OCLC bibliographical file. It is hoped that catalogers will search headings in the authority file before inputting new cataloging into the database, but there is no mechanism for automatic checking or validation of headings to ensure consistent form. It is possible, however, to link the files temporarily in batch mode for the purpose of making global changes to headings in the bibliographic database. This was done in December 1980 when headings in the OCLC bibliographic files were matched with records in the LC authority file and either verified as already AACR2 or changed to AACR2 form where LC had identified such forms in the authority file.

The other network systems (RLIN, UTLAS, and WLN) fall into (or will soon fall into) the second category, that of having more or less integrated authority and bibliographic files. At present, RLIN users have access to LC authority records in the same way that OCLC users do. RLIN has plans for linked authority control to become operational eventually. At that time, RLIN plans to have a system in which the cataloger will tag fields that should be under authority control as each new bibliographic record is added to the database. The tagged fields will be checked automatically and the cataloger advised of any that are unauthorized. References will be activated in the authority file, but not in the bibliographic database. Global changes in headings will be possible on a batch basis overnight. The text of the headings will be stored both in the bibliographic record file and the authority file, but the planners are considering an enhancement that would allow the automatic transfer of text from the authority record to the bibliographic record so that it would not have to be rekeyed each time it is used.

In the UTLAS network system, an automatic online verification process links headings in bibliographic records to authority records. By working through CATSS (Catalogue Support Systems), names, uniform titles, and subject headings are searched against the authority file. If an exact match is found in the established heading (1xx) or see reference (4xx) field of an authority record, an automatic link is created between the heading in the bibliographic record and the corresponding authority record, and an authority sequence number is substituted for the heading in the bibliographic record file. Texts of headings are not stored in the bibliographic database, but only in the authority file. Every time a bibliographic record is to be displayed on the screen, or a product is to be generated from this record, the system goes to the appropriate authority sequence number, gets the text of the heading(s), and puts it into the established heading (1xx) or subject heading (6xx) or added entry (7xx) field of the bibliographic record. Text replacement also occurs if the cataloger searches an unauthorized (i.e., see reference) term. In this case the established heading, not the reference, displays when the bibliographic record appears on the screen.

Validation of headings in the bibliographic database is also available in batch mode, in what UTLAS calls a database walk. In this process, files of bibliographic records are matched against the authority record base.
If an exact match is made, the heading in the bibliographic record is linked to an authority record. If no match is made, a skeletal or mini-authority record is generated from the unmatched heading. This mini-record may be upgraded at a later date.

All UTLAS authority records are linked by appropriate see references as well as see also references. This means that references are “de-blinded” automatically when a heading is changed or removed from the database.

If a heading has several subdivisions, the UTLAS system allows the creation of individual authority records for each part. These separate authority records may be combined or linked to facilitate the automatic validation process, through a system called nesting.

The WLN authority file is also linked to its bibliographic database. When original cataloging is entered into the database, the cataloger gives a check command, whereupon each heading is checked mechanically, character by character, against existing records in the authority file. If the heading is found to be identical to one already in the authority file, it is validated and the machine-assigned number of that authority record is stored in the bibliographic file along with the descriptive part of the catalog record. If the heading does not match a term in the authority file, the system indicates either that the heading is new or that it is in the file as a cross-reference. In the latter case, the form referred to is given on the screen, and the cataloger can delete the invalid form.

When LC MARC records are added to the WLN database, headings are stripped off and compared. New authority records are automatically made for headings that have no match, and these are listed. This list is reviewed by the WLN cataloging review staff once a week. When validated for addition to the database, new names and subjects are automatically assigned numbers and stored in the authority file.

The WLN system allows the searching of subfields in headings. For example, a user entering the term Chicago can retrieve both government headings with the term as the entry element and headings with the term used as a subdivision or qualifier.

As in the UTLAS system, all headings for any given cataloging record are stored only in the WLN authority file, not in the bibliographic file. When a record is called up from the bibliographic database, also as in UTLAS, the screen displays the information in conventional format, with all appropriate access points translated from their machine-assigned numbers to readable headings.

This method of storing text of headings in the authority record only has the advantage of saving space in the computer file, but it is not universally viewed as the best approach. A number of vendors have chosen to store the text of headings in both bibliographic records and authority records in order to give better response time to search requests. It should be obvious that in large systems response time is slowed when the system must retrieve the text of one or more headings from an authority file before displaying a bibliographic record. On the other hand, when a change is made to a heading, a system that stores text of headings in all bibliographic records must locate every record and change the text. This
step usually must be accomplished on a batch basis overnight or perhaps less often. When the headings are stored in the authority file only, a needed change is made only to this record. The updated authority information is immediately reflected in all bibliographic records displayed online and in any products generated from the system.

**Vendor Systems**

Networks such as OCLC, RLIN, UTLAS, and WLN provide services to their member libraries from a common database. Commercial vendors of online systems, on the other hand, are in the business of providing libraries with catalogs unique to their own collections.

Many vendors start service to a library by running the library's machine-readable bibliographic records through a program that lists all the terms used on those records as headings. Catalogers may then edit the list, make changes, consolidate names, or do whatever may be necessary. This list then becomes the library's automated authority file. From then on, all headings in new bibliographic records are checked via computer against the file. When a heading matches one in the authority file, the record number, or a pointer to the record, is added to those already associated with the heading. In some systems, when a heading does not match, it is referred to the cataloger for checking before it is added to the authority file. In other systems, the system automatically creates mini-authority records for the unprecedented or nonmatching headings found. Also in some systems, if the heading matches a see reference, the system automatically changes the heading to the authorized form. However, such a practice can lead to problems. Conflicts can arise with names, in particular, but also sometimes with series and uniform titles. For example, an authority file may have an entry for "Harrison, Twyla Rene" with a reference from "Harrison, T.R." Subsequently, an entry may be made for a "Harrison, T.R." who is not the same person. Automatic changing of the latter because it matches the reference for the earlier name would be quite undesirable.

While all the authority files serve as indexes to the bibliographic files, at least two of the vendors, DataPhase and Marcive, create indexes (called a dictionary by DataPhase) instead of authority files. The difference is that an index entry does not have reference or note fields associated with it. References are entirely separate, having only an intellectual link to their referents. A major advantage of the authority file, as opposed to the index approach is that references can be generated and de-blinded automatically. The advantage of the index system is the saving of disk space and response time. Some research evidence indicates that fewer than half of all name authority records contain references, and that many of the references in the remaining half are not really useful in an online system. NOTIS may soon have the best of both methods. Planned enhancements of NOTIS are designed so that authority records are made only for names that require references. The index to the system will then be created by including all names and references from both the authority file and the bibliographic file.

A few vendors, such as BLIS, allow headings to be set up so that bib-
liographic records will appear under both the authorized heading and under the form from which a see reference has been made (called invisible referencing). This method probably presents relatively fewer problems in searching subject headings than in searching names. If a user asks for "Nuclear geology" and then is given titles for the subject heading "Nuclear geophysics," the user will not likely be confused. However, if a user requests an author search for James Lucey and then is given works by James R. Lucey and works by Matthew James (pseudonym of another person named James D. Lucey), there could be considerable confusion. Therefore, most systems display some sort of explanation when a user asks for a name that is a see reference. In some of these systems, the user must rekey the correct heading. In others (e.g., VTLS) the user may request that the appropriate records be displayed without having to rekey (e.g., by hitting the carriage return).

Several of the vendors have the means for total authority control of library databases. In several systems (e.g., DOBIS), the system prompts for the parts of a bibliographic record. If an authorized heading is input, the system O.K.'s it by going on to the next prompt. If an unauthorized heading is attempted, the system responds to that effect, and the cataloger can create the authority record. If a form is input which is a see reference to another form, the system will respond with the established form. Pressing "return" will enter that form into the bibliographic record.

Two of the integrated authority systems being vended are related to the networks. Biblio-Techniques Library & Information System (BLIS) is a turnkey system based on Washington Library Network software. BLIS includes all cataloging and authority control programs developed by WLN. OCLC's Local Systems LS/2000 is an enhanced version of the Integrated Library System originally developed at the National Library of Medicine, further enhanced by Online Computer Systems, and marketed by AVATAR, now absorbed by OCLC. In this system, all bibliographic records entered into the system are checked for unauthorized headings and matched with the authorized form. New headings are automatically entered into the authority file, but an "audit trail" is left in the Catalog Review File for the cataloger to review and validate. If headings are revised in the authority file, all bibliographic records containing those headings are automatically revised (i.e., via global change). In addition blind references are automatically deleted.

A major advantage of a totally integrated system is that headings do not have to be rekeyed with every use, nor does a reference number have to be copied separately to be input on a different screen. The text of the heading can be automatically transcribed into the bibliographic record if the advantage of better response time for bibliographic database searching is desired; the use of this technique is planned by CLSI. Or the authority record number can be transcribed if the advantage of immediate updating is desired; DOBIS offers this feature. A major disadvantage of such a totally integrated system is that the inputer of original bibliographic records must be qualified to set up authority records for unprecedented headings. When decisions have to be made at the terminal,
more terminal time is required for original cataloging.

CONCLUSION

To summarize, machine-readable bibliographic data files can be non-integrated, partially integrated, or totally integrated with machine-readable authority record files. Most systems in the United States are partially integrated, although two of the largest ones (OCLC and RLIN) are not. It should be remembered, however, that regardless of how integrated the system, a human is ultimately responsible for deciding whether a particular entry in an existing authority record represents the same person, place, corporate body, or title as the one to be represented on the bibliographic record being entered. We have not yet automated the ability to think!

One must keep in mind that systems currently available offer different kinds and levels of authority control. Appendix B suggests questions that need to be raised when consulting with a potential vendor or service. Appendix C lists the names and addresses of vendors and networks known to the authors at the time of writing. Each of these systems presents a moving target in this fast-developing arena. Indeed, automated authority control is emerging as one of the most fluid and exciting concepts in the building of total library systems.

REFERENCES


APPENDIX A

GLOSSARY OF UNUSUAL AUTOMATED AUTHORITY CONTROL TERMINOLOGY

De-blinding of references—removal of see and see also references that refer to headings that are no longer represented in the bibliographic file.

Global change—using one command to change all representations of a heading from one form to another form.

Invisible references—term applied to the effect of linking authority files and bibliographic files in such a way that when a user searches a term from which a see reference would ordinarily be made, the bibliographic records associated with that authority record will be displayed.

Linked records—bibliographic records connected to their related authority records; also, authority records connected to related authority records.

Mini-authority records—skeleton authority records—records generated by machine from headings in bibliographic records; these can be filled out later with references and notes.

Reference generation—automatic creation of see and see also references for every heading that needs such references.

Unprecedented headings—those headings that are not already represented in a particular authority file or index.

Validation—process of checking a new heading against authority file headings and references to determine whether the heading has already been established, and to verify spelling and content designators if it has been established.
APPENDIX B

QUESTIONS TO RAISE
IN CONSIDERING VENDOR SYSTEMS

PRODUCTS AND SERVICES
Are machine-readable records used to generate products of the library’s choice?
- e.g., COM catalogs
- book catalogs
- cards
- archive tapes
- processing of archive tapes
Does the vendor provide online cataloging? local online catalogs?
Does the vendor provide name authority records in MARC format?

RECORD CREATION AND CONTROL
Does the vendor:
- include all terms in the library’s database for which authority control is desired?
- check new headings against authority file (or index)?
- add record number to the listing for a matching heading?
- notify cataloger of unprecedented headings?
- automatically change headings that match a see reference to the authorized form?
- automatically create authority records or index terms from headings in bibliographic records?
- require that a heading be entered into the authority file before it can be entered into a bibliographic record?
- provide cumulated authority lists in printed form?

CROSS-REFERENCE CREATION AND CONTROL
Does the system:
- generate automatic references in the bibliographic file?
- provide automatic de-blinding of references in the bibliographic file?
- require references to be added as individual entries in the index that are not linked to the names to which they refer?

DISPLAY TO USERS
Is user given records even if a see reference term matches the search term (i.e., invisible referencing)?
Is user told that another heading is “correct” when a reference term matches the search term?
If so, must the user rekey the “correct” heading in order to retrieve records, or can the records be retrieved without rekeying?

METHOD OF STORAGE
Is text of headings stored in both bibliographic record and authority record?
Is text of headings stored in authority record only?

APPENDIX C

NETWORKS AND VENDORS

(Note: The information below was updated in January 1985.)

ADL LIB
Advanced Library Concepts
9343 Tech Center Dr.
Suite 175
Sacramento, CA 95826

Auto-Graphics
AGILE II On-Line Data Base Management System
Auto-Graphics, Inc.
751 Monterey Pass Rd.,
Monterey Park, CA 91754
ATLAS
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For the Record

Annual Report of the Decimal Classification
Editorial Policy Committee,
July 1, 1983–June 30, 1984*

Margaret E. Cockshutt, Chairperson

The Decimal Classification Editorial Policy Committee (EPC) held its eighty-fifth and eighty-sixth meetings at the Library of Congress (LC) on October 27–28, 1983 and May 3–4, 1984.

The EPC received a report of decisions made by the Forest Press Committee (FPC) on continuous revision and production scheduling for the Decimol Classification (DDC). These matters have been outlined previously in the EPC’s 1982–83 Annual Report. The FPC affirmed its commitment to a longer ten-year publication cycle, so that the twentieth full edition and the twelfth abridged edition of the DDC will be published about 1990. With the previously accepted principle of continuous revision of the DDC, phoenix (completely revised) and other schedules with major revisions may be published as separates between editions. New editions, therefore, will cumulate schedules, tables, and/or indexes published as interim separates. Separately published schedules and tables will be applied, following their publication, by the Decimal Classification Division (DCD) of the Library of Congress.

In the future, prices will be established for the basic full and abridged editions. Interim separate schedules, tables, and/or indexes will be priced as they are released. Decimal Classification Additions, Notes and Decisions (DCAD) will be sold on a subscription basis to purchasers of both the full and abridged editions of the DDC.

The EPC considered various drafts of a phoenix schedule of 003-006 Data Processing (formerly 001.5), together with related concepts in 384.3 Computer Communications and 621.39 Computer Engineering (formerly 621.38195), and the effect of this phoenix on s.s. 0285 Data Processing in Table 1. It is hoped that this phoenix, for which there have been many requests from the field, will be published in 1985.

For the first time the EPC established formal working relations with the Subject Analysis Committee (SAC) of the American Library Association. This will permit the EPC to work with a series of SAC subcommittees on prepublication critiques, by subject-specialist DDC users, of special draft schedules which are undergoing phoenix or major revisions. Through the efforts of Lizbeth J. Bishoff, ALA’s continuing representative on the Editorial Policy Committee, SAC established review subcommittees to consider drafts of proposed revisions of Data Processing and Computer Science, Education, and Music. Similar but

*A summary of the complete report, which is scheduled for publication in late spring 1985 in Decimal Classification Additions, Notes and Decisions, V.4, no.5.
less formal arrangements are being made through the (British) Library Association Dewey Decimal Classification Committee, with the help of Russell Sweeney, the Library Association's representative on the EPC. The EPC looks forward to continued, fruitful cooperation with these groups and to strengthening this review process. However, the EPC recognizes that it bears the final responsibility for policy decisions on the classificatory and subject content and for recommendations on publication to the Forest Press Committee.

The committee had previously discussed a request for the reinstatement of an option, last provided in Edition 18, to add time to place in the specification of a complex topic. In Edition 18 an optional provision under s.s. -093-099 and under areas -3-9 had permitted the addition of historical period numbers from 930-990 to the notation for the locale. It should be noted that the ability to specify both place and time is increasingly important for precise online subject searching and retrieval. The EPC has now accepted the principle of an option to add time to place, but the mechanisms for deriving and adding the period notations have not yet been fully determined.

Committee members have long recognized that over the years Table 1, Standard Subdivisions, has become poorly organized and thus difficult to apply, but they have also been greatly concerned at the enormous ripple effect that radical relocations in the table would have throughout the DDC and on shelf arrangements. The EPC has now decided that only s.s. -071 Schools and Courses and other subdivisions of the -07 s.s. Study and Teaching should be considered for revision in the context of a possible phoenix schedule for 370 Education. Remaining parts of s.s. -07 and the other standard subdivisions will not be considered until Table 1 can be examined in its entirety. No date has been set for such an examination, with its major implications for the whole of DDC, but it will not occur until after the publication of Edition 20.

It is now anticipated that expansions of Table 2 for areas -52 Japan and -68 South Africa will be published in DC& 4:5, to be published in 1985, with centralized application by LC's Decimal Classification Division upon publication. It should be noted that these area expansions have been requested by classifiers in the countries concerned to meet local needs, and the expansions are in accordance with local literary warrant. Thus publication is in accordance with the previously accepted principle that the DDC is and must continue to be a classification of international use.

During 1983-84 the EPC also discussed a proposal to vacate 310 Statistics, so that demographic statistics would classify with the subject plus a standard subdivision. A standard subdivision must be developed, and for at least some topics it appears desirable to specify the place, using the area table, before this standard subdivision for statistics is added.

In its consideration of possible draft schedules for phoenix or major revision, the EPC examined two alternatives for a phoenix revision of 351-354 Public Administration. As in 340 Law, the central issue is whether the citation order of the schedule should require the topic to come first in the synthesized notation, followed by the jurisdiction, or whether the jurisdiction should come first with the subsequent synthesis of the notation for the topic. While an option for the less-preferred alternative would be provided in the schedules as in 340, the basic, official provision would be applied by the division in the LC centralized distribution mechanisms.

The EPC has also considered, in principle only, a revision of 560-590 Life Sciences being carried out by a group of biologists and librarians in England, in cooperation with Forest Press and the DCD.

Undoubtedly the committee's most difficult task has been to discuss and recommend priorities for sections of the DDC to receive phoenix or major revisions.
for Edition 20. While final decisions on certain sections must be deferred to 1985 to give review committees time to meet deadlines which had already been set, the committee hoped to make some firm decisions at the Fall 1984 meeting concerning both priorities for publication and issuing sequences.

In committee business, the EPC passed resolutions of thanks to and appreciation of Betty M. E. Croft, who was an EPC member for thirteen years, and Joseph H. Howard, who served for seven years. Margaret E. Cockshutt was reelected as chairperson to October 1985.

**CALL FOR VOLUNTEERS**

Would you like to serve on a jury to select the papers to be published in LRTS “Best of Conference” issue? We are planning to publish the six “best” papers presented at the RTSD program meetings at the 1985 Annual Conference. The best papers will be selected by juries composed of nine members each, some chosen from those who volunteer and some from those nominated by the Conference program chairpersons or the LRTS assistant editors.

If you plan to attend the Chicago Conference and are interested in serving on one of these juries, please send me your name, address, and phone number and indicate your primary program interest. RTSD programs for which juries are needed are to be presented on the following schedule: July 6, 2–4 p.m., “Illusions of Longevity? Microforms and Optical Discs in Permanent Library Collections”; July 7, 9–11 a.m., “Options for Coordinated Collection Development”; July 7, 2–5:30 p.m., “International Issues in Resources and Technical Services”; July 8, all day, “Trends in the Children’s Book Field”; and July 8, 2–4 p.m., “U.S. Newspapers Project.”

Send this information, postmarked no later than April 30, 1985, to Elizabeth L. Tate, Editor, LRTS, 11415 Farmland Dr., Rockville, MD 20852.
From: Robert D. Rodriguez, Associate Catalog Librarian, Florida International University Library. — In considering Carol A. Mandel’s question “Should library catalogs provide access to parts of books?” (“Enriching the Library Catalog Record,” Jan.-Mar. 1985), it seems necessary to take into account the character and nature of the monograph versus the journal article. Are monographs merely extrapolated articles, such that the old “analytics” approach to content can be extended to subject? The monograph is usually intended to be a self-sufficient entity, constructed around a theme or method or approach which in turn gives cohesion to its subject(s). The chapters of a monograph, even when about different subjects, are not equivalent to journal articles. Nor will an entry in a book index automatically yield sufficient treatment of a specific subject to merit subject access distinct from the book as a whole.

If considered in the environment of Library of Congress Subject Headings, subject access to parts of books—for which there is no successful precedent nor demonstrated consensus on the need—represents a significant departure from past theory and practice, and confuses cataloging and indexing.

Editor’s note: Letters sent to the editor for publication in this column cannot be acknowledged, answered individually, or returned to the authors. Whenever space is available in an issue, selected letters will be published, with little or no editing, though abridgment may be required. Letters intended for publication should be typed double-spaced.
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