### ARTICLES

<table>
<thead>
<tr>
<th>Author</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay H. Lambrecht</td>
<td>257</td>
<td>Ours Should Be to Reason Why: Descriptive Cataloging Research in 1990</td>
</tr>
<tr>
<td>James Bradford Young</td>
<td>265</td>
<td>Crisis in Cataloging Revisited: The Year’s Work in Subject Analysis, 1990</td>
</tr>
<tr>
<td>David S. Sullivan</td>
<td>283</td>
<td>Books Aren’t Us? The Year’s Work in Collection Development, 1990</td>
</tr>
<tr>
<td>Maralyn Jones</td>
<td>294</td>
<td>More Than Ten Years After: Identity and Direction in Library Preservation</td>
</tr>
<tr>
<td>Thomas A. Bourke</td>
<td>307</td>
<td>The Reproduction of Library Materials in 1990</td>
</tr>
</tbody>
</table>

### FEATURES

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letters</td>
<td>332</td>
</tr>
<tr>
<td>Book Reviews</td>
<td>333</td>
</tr>
<tr>
<td>Index to Advertisers</td>
<td>352</td>
</tr>
</tbody>
</table>
EDITORIAL BOARD

Editor and Chair of the Editorial Board .................................... RICHARD P. SMIRAGLIA

Editorial Assistant ................................................................. GREGORY H. LEAZER

Assistant Editors:

JUDITH A. HUDSON ........................................... for Cataloging and Classification Section
CARLA J. MONTORI ........................................... for Preservation of Library Materials Section
SUZANNE CATES DODSON ..................................... for Reproduction of Library Materials Section
MICHAEL T. RYAN .................................................. for Resources Section
MINNA C. Saxe ...................................................... for Serials Section
D. KATHRYN WEINTRAUB ..................................... Special Editor
EDWARD SWANSON .................................................. Special Editor
RICHARD D. JOHNSON ............................................. Book Review Editor

Ex-Officio Members:

JOAN W. HAYES, Chair, Council of Regional Groups
KAREN MULLER, Executive Director, ALCTS

Library Resources & Technical Services (ISSN 0024-2527), the quarterly official publication of the Association for Library Collections & Technical Services, a division of the American Library Association, is published at ALA Headquarters, 50 E. Huron St., Chicago, IL 60611. Business Manager: Karen Muller, Executive Director, Association for Library Collections & Technical Services, a division of the American Library Association (ALANET User ID: ALA0110). Send manuscripts to the Editorial Office: Richard P. Smiraglia, editor, Library Resources & Technical Services, School of Library Service, Columbia University, 516 Butler Library, New York, NY 10027 (ALANET User ID: ALA0334). Advertising Sales Manager, Stuart M. Foster; Advertising Coordinator, Connie Barone, c/o Choice, 100 Riverview Center, Middletown, CT 06457, phone (203) 347-6933. ALA Publishing Services: David Epstein, Eileen Mahoney, Dianne M. Rooney; Production: Donavan Vicha, Amy Brown, Bruce Frausto, Josephine Gibson-Porter, and Daniel Lewis. Subscription Price: to members of the Association for Library Collections & Technical Services, $22.50 per year, included in the membership dues; to nonmembers, $45 per year in U.S., $55 per year in Canada and other foreign countries. Single copies, $14.

Second-class postage paid at Chicago, Illinois, and at additional mailing offices. POSTMASTER: Send address changes to Library Resources & Technical Services, 50 E. Huron St., Chicago, IL 60611.

Library Resources & Technical Services is indexed in Library Literature & Information Science Abstracts, Current Index to Journals in Education, Science Citation Index, and Hospital Literature Index. Contents are listed in CALL (Current American—Library Literature). Its reviews are included in Book Review Digest, Book Review Index, and Review of Reviews.

Instructions for authors appear on p. 239–40 of the April 1991 issue of Library Resources & Technical Services. Copies of books for review should be addressed to book review editor-designate, Lawrence S. Auld, 1312 Rondo Dr., Greenville, NC 27858.

© American Library Association 1991

All materials in this journal subject to copyright by the American Library Association may be photocopied for the noncommercial purpose of scientific or educational advancement granted by Sections 107 and 108 of the Copyright Revision Act of 1976. For other reprinting, photocopying, or translating, address requests to the ALA Office of Rights and Permissions, 50 E. Huron St., Chicago, IL 60611.


Publication in Library Resources & Technical Services does not imply official endorsement by the Association for Library Collections & Technical Services nor by ALA, and the assumption of editorial responsibility is not to be construed as endorsement of the opinions expressed by the editor or individual contributors.
Please, Sir, I Want Some More:
A Review of the Literature of
Acquisitions, 1990

Karen A. Schmidt

The literature of acquisitions for 1990 is reviewed. A highlight is the large number of articles concerning vendor interaction and serial service fees. A resurgence of interest in education for acquisitions librarians on an international level is evident. The literature of acquisitions demonstrates a continued growth in definition in all aspects of the profession.

“Please, sir, I want some more.”...
“Mr. Limbkins, I beg your pardon, sir! Oliver Twist has asked for more.”
“For more!”...
“That boy will be hung... I know that boy will be hung.”

Charles Dickens,
Oliver Twist, Chapter 2.

Acquisitions wants more. Stuck as it is between the crunch of the economy and the growth of collection development, it cannot help but want more: more education, more appreciation, and more professional responsibility. Long ago and far away, acquisitions meant buying trips to Latin America and stops at The Strand to send home some real finds for the collection—not that these jaunts would necessarily be made by the acquisitions librarian. Today acquisitions means looking critically at the deals made with vendors, scrutinizing publishers’ promises, sharing as much information as possible about policies and procedures, and wishing for more of everything.

In 1980, scarcely more than ten years ago, there was no year’s work in acquisitions article written for LRTS. Acquisitions, for all intents and purposes, did not exist. Two literature review articles, one on serials and one on collection development and preservation, contained some incidental references to acquisitions. Serials librarians throughout the United States seemed to be watching the elimination of serials departments and fearing that computerization would bring an end to their work. Acquisitions concerns then were centered on descriptive discussions of the steps one must go through to order a book. Fortunately, acquisitions librarians have asked for—and received—more, and the literature of 1990 reflects this.

A note about the literature of acquisitions in 1990: a good portion of the work represents summaries from conferences. Acquisitions is having itself some very fine conferences these days: the College of Charleston Conference is known throughout the profession for its stimulating and freewheeling discussions, and the North American Serials Interest Group meetings are not far behind in reputation. Sharing
presentations from these conferences is a useful and meaningful exercise. Not everyone can go to Charleston, and if we could, it simply would cease to be the same. Still, there is some opinion afoot that the literature of acquisitions could be strengthened by more scholarship and less reporting. The 1990s will surely find the right balance.

It should also be noted that the editorship of a core acquisitions journal, *Library Acquisitions: Practice & Theory (LAPT)*, has changed hands after fifteen years. Scott Bullard, who really raised a baby to a fine young adult, has moved on to other pursuits, and acquisitions librarians now find *LAPT* ready for another spurt of growth under the guidance of Carol Hawks. It is a tribute to acquisitions librarianship and literature that *LAPT* has developed and will continue to grow with such strength.

**AUTOMATION**

“Something of a mind-boggling experience,” Alley calls it, describing the Baker & Taylor B&T Link system that allows a library to “see” the Baker & Taylor stock and guarantees delivery of any title in that stock. This system and others in various stages of development represent a major change in library acquisitions in this country. The ability to provide, with some high measure of confidence, a needed title in a remarkably short time is changing the way acquisitions has done business for the past decades. While the advent of the vendor-library electronic link will not change the relationships, it does alter the atmosphere in which we work. Pritchard describes the benefits of electronic ordering systems and discusses the present capabilities and ways in which these systems should develop. As these electronic communications systems develop further, new twists are being tried, as described by Kelly. Rather than having the library query the vendor database, Kelly presents a process in which the vendor dials into the library mainframe to communicate, with a resultant lowering in communication costs.

A description of a fully automated acquisitions system, including the levels of automation and the goals that may be achieved, was given by McLaren at the Charleston Conference. Hawks describes how audit transactions might be affected by automation, using the installation of the Innovacq system at the Ohio State University Libraries as a backdrop. The North American Serials Interest Group (NASIG) meeting in Claremont, California, provided an opportunity to discuss, among other items, serials automation from planning to implementation (Sommers) and the development of interfaces between the library systems’ vendor and the subscription agent (Foster). From the latter comes a review of the types of material a systems vendor and a serials agent might want to exchange and a discussion of the need for agreed-upon standards for exchange of electronic information. At the 1990 Conference on Acquisitions, Budgets, and Collections in St. Louis, Furler presented a guide to choosing automated acquisitions systems. Gardner discussed the decisions that went into the automation of a county library system, and Robson described the automation efforts in a multitype consortium (Genaway). Automating acquisitions is discussed by Phelps (A), who points out potential cost savings from more effective procedures, and by Le Guern, whose work in automating serials in a special library illustrates the cost benefits of work consolidation. The value of using an in-house program for automating acquisitions accounting is presented by Marshallak and Gottwald.

**MANAGEMENT AND ORGANIZATION OF ACQUISITIONS**

Many of the costs of running technical services areas are unknown to the average library administrator. One suspects this is particularly true for acquisitions work, where many of the procedures of acquisitions have only recently been automated and thus subjected to close scrutiny. These operational costs are the theme of the last issue of *The Acquisitions Librarian* in 1990. Topics range from costing out invoice processing and pre-order searching to identification of personnel costs for acquisitions work. Schmidt (A) presents a formula for determining the costs of pre-order searching and for determining the
effectiveness of the process, while at the other end of the acquisitions-processing spectrum, Marcia Anderson discusses the organization of invoice payment, and the actual expense of invoice payment is explored by Marsha Clark. Quantifying personnel costs and acquisitions procedures is the most fundamental component of cost analysis, as Coffey (B, C), who also serves as the issue editor, points out in a particularly useful and thorough discussion of this area. Two very interesting articles, one by Strauch and Strauch (A) and the other by Morris, tackle the problems of how to figure the costs of providing Cadillac service for good public relations and how exceptions to the work flow can be minimized. A comprehensive bibliography on cost analyses (Haynes) is included in this issue of *The Acquisitions Librarian*.

The role of acquisitions and technical service librarians in public service work is investigated by Gasser and Deeken. They suggest that more and more medium-sized libraries are dissolving the distinctions between public and technical service work. A general overview of acquisitions work is offered by Schmidt (C).

In other articles addressing acquisitions management, Kruger (A) provides a very readable overview of the state of serials acquisitions, and Green compares the administration of serials procedures in libraries in the United States and Great Britain. Bids and contracts are highlighted in two pieces from the Charleston Conference (Clark and Winters, Heather Miller). The acquisition of agricultural materials, including sources for approval books and general agricultural books and serials, is provided by Elder and others. Also from the Charleston Conference comes acknowledgment that preservation of what we acquire is becoming ever more critical to libraries (Astle). Claiming of periodical issues is the topic of a wide-ranging and timely piece by Carlson, who questions what the average library claims and why. Ethical considerations come into play when libraries claim lost or stolen materials.

Two articles on fund accounting and acquisitions budget management are provided by Cargill and Kruger (B). Both authors discuss accounting techniques, with Cargill focusing on monitoring and Kruger highlighting the importance of a rational accounting system. Schenk discusses accountability and recordkeeping responsibilities that acquisitions librarians must deal with.

**Vendor Interaction**

By far the largest contribution to acquisitions literature in 1990 was on the subject of vendors and vendor interactions with publishers and acquisitions librarians. Following on the heels of the general concern over serials pricing, serials subscription charges account for the majority of these articles.

Deserving of the most credit for bringing this issue to the fore is the gentleman with the quaintly alliterative name, Bernard "Buzzy" Basch, who identifies the need to differentiate between the "department store" vendors and the "boutique" vendors. Basch advises libraries to look closely at their serials service needs and determine which services are the most critical. He also provides advice on how to negotiate service charges in a rational and informed manner (Basch and McQueen). Tonkery and Merriman provide similar advice and make projections about the future of service fees in a workshop presentation recorded by Merriman. Maddox's overview of the work of a "boutique" vendor highlights the need to develop a partnership between vendor and library, while Ivins (C) notes the need for both large, department store vendors and small, boutique vendors. Barker (B) provides a thorough and insightful discussion of the concept of unbundling serials service charges.

Order consolidation is the topic of Anderson's discussion of how one library consolidated its serial orders with a single vendor. McKinley (B) classifies types of serial orders and suggests the most effective ways to identify the best serial vendors for each type of order. Three publishers, three librarians, and five vendors join in a forum on the partnership among libraries, vendors, and serial publishers and how their interaction affects serial prices (Ivins, A).

One topic at the Charleston Conference on Acquisitions in 1989 was the issue
of buying directly from publishers. Overviews of these presentations were made available in LAPT and include Lassner’s discussion of the publication and marketing policies at Gale Research, Inc., a publisher that has actively targeted the library market. Farrell provides the vendor perspective on direct purchase, noting that circumvention of the library-vendor-publisher system creates problems in the overall health of the system. Phelps (B) looks at the labor-intensity of ordering directly from publishers instead of working with the vendor/wholesaler and concludes that direct purchase is often too costly an enterprise in labor.

A formulaic approach to vendor evaluation is given by Kflu, who reviews a study conducted at the State University of New York, Fredonia, library to determine the relative performance ability of four of its major vendors. In an interesting twist, Zeugner describes a new sort of vendor evaluation, in which the vendor evaluates a library acquisitions department’s overall performance. The survey, sent to nine vendors, enabled one department to focus in on its strengths and weaknesses.

Vendor cost, selection, and evaluation are the topics of chapters by Smith, Dannelly, and Reid. Two pieces on approval plans describe the ideal plan (Grant) and make proposals for a new type of gathering plan (Lockman, Laughrey, and Coyle). Nardini discusses the relative performance of approval plans from a vendor perspective.

**EDUCATION FOR ACQUISITIONS**

A topic has reappeared in the literature of acquisitions and was the object of a significant number of articles in 1990. The topic, education for acquisitions, generated seven articles covering much of the world, from Papua New Guinea, to South Africa, to the United States. Evans describes the provisions that have been made for acquisitions and collection development courses in Papua New Guinea, concluding that more work in this area is indicated. Two countries on the African continent, Ghana and South Africa, are investigated by Alemna and Nassimbeni respectively. Both authors concentrate more on collection development than acquisitions and agree that education in these areas is hindered by socioeconomic problems that affect education in general. G. E. Gorman and Kent each address the education of acquisitions librarians in Australia, in reports from a workshop in Melbourne in 1989. Gorman had previously identified some specific concerns, and his 1989 presentation discusses progress made and calls for the establishment of a working party on acquisitions. Kent provides a general overview of the 1989 Melbourne workshop. Hollender’s discussion of acquisitions education in Poland begins with the caveat that busy readers might be well advised to save up on the reading of the article, since so little has been done in this field. Historical development and changes in acquisitions education in the United States are the topics of Schmidt’s discussion (B).

**SOFTWARE ACQUISITION**

Procuring software for a library collection presents a unique set of problems for the acquisitions librarian. Licensing agreements, use restrictions, and ownership questions are among the issues that acquisitions librarians are facing in acquiring software. Ogburn’s discussions of electronic and software acquisitions provide the seminal articles, describing as they do the legalities of software licensing and procurement (Ogburn, B), copyright issues (Ogburn, A), and the bibliographic and procedural concerns that acquisitions librarians should have in dealing with this format (Ogburn and Fisher). Nissey (B) also addresses the issue of licensing, advising the acquisitions librarian who might be signing agreements to be aware of the content of the licensing document. How acquisitions departments handle CD-ROM products within their acquisitions procedure is the topic of Nissey’s (A) survey report of twenty-five libraries. She points out the need for establishing routines for this type of material, rather than treating it as an exception.

Although not dealing with electronic formats, Forrest and Hayes have contributed two pieces on nonprint materials and special formats, respectively. Each piece
gives an overview of the different kinds of materials with which acquisitions librarians have to deal.

**Publishing**

Publishing, one of the most important aspects of acquisitions librarianship, often has been overlooked in the past several years. The literature of acquisitions in 1990 has made significant progress in making up for this dearth of information. The world of mergers, acquisitions, and antitrust law is discussed in real-world terms by Hannay (A, B), an attorney whose interest is in making certain librarians understand the potential dangers of monopolization within the publishing industry. In another discussion of the legal world of publishing, Krebsbach reviews the regulations that govern publisher-library relations and discusses the American Library Association and American Association of Law Librarians’ committees that foster good relations with the publishing world. The quality and accuracy of publisher advertising are discussed by Axtmann, while Kingsley and Berwick delineate the problems libraries experience with publisher invoices and billing procedures. One way in which publishers and vendors gather information about library needs, through a mechanism called focus groups, is discussed in a forum edited by Clack and Riddick. For librarians, this discussion of marketing techniques is an enlightening look at the work both publishers and vendors put into meeting library needs. Five chapters by Flanagan, Melkin, Brown, Stevens, and Campbell in the text *Understanding the Business of Library Acquisitions* provide a thorough grounding in the fundamentals of publishing for librarians.

Selecting the appropriate material from the vast array of publishing each year is the topic of a discussion by Freeman and Winters, who point out the problems associated with the academic award system, which requires publishing, and the ways in which libraries contribute to the situation. Publishing is not fundamentally different in other parts of the world, as evidenced by George Miller’s review of the publishing industry in Indonesia, although differences in socioeconomic factors make acquisition of this material by foreign countries very difficult.

**Out-of-Print and Replacement Acquisitions**

Acquiring out-of-print and replacement items for the library collection can provide the acquisitions librarian with the greatest challenge. The method of choice for identifying the whereabouts of these kinds of titles many times seems to be serendipity. In the past year, some order has been imposed on this chaos. Barker, Rottman, and Ng provide practical information for organizing replacement and out-of-print work, based on successful acquisition of this material in a large ARL library. The idiosyncrasies of serial replacement orders are the subject of Pionesssa's article, which also looks at fulfillment rates for serial replacements. The Thor Power Tool Company decision is the basis for a discussion between a serial back-file vendor and two librarians. Lower print runs have been reported because of the Thor Power Tool ruling, which changed the way publishers could devalue their stock. The librarians discussed the differences in success rates when ordering replacement serial issues from a backlist vendor and from the publisher (McKinley, A). Out-of-print acquisitions is the topic of Landesman’s informative work. Flesch deals with second-hand books in Australia, as well as publishing and acquisitions in Australia and New Zealand in general. Tips for dealing with the second-hand market are offered by Miletech. The newest development in out-of-print acquisitions is the development of electronic databases to link library want lists with second-hand dealers’ stocks. Two viable systems became available in 1990, the Automated Bookman (Chernofsly) and BookQuest. Both systems hold computerized listings of desiderata and stock and match the buyer and the seller.

**Gifts and Exchanges**

It can be expected that more attention will be focused on gifts and exchanges as library materials budgets continue to
plummet and publishing costs rise. The responsibility a library has toward its donors is the topic of an article by Marsh (A). She sets forth Internal Revenue Service regulations affecting charitable non-cash gifts made to a library and suggests administrative policies for handling gifts. In a similar vein, White, Morgan, and Gordon discuss income- and estate-tax opportunities and how to use tax regulations to solicit contributions for libraries. Two thorough overviews of gifts and exchanges are presented by Barker (A) and Mae Clark in chapters in two monographs.

Foreign libraries also rely on gifts and exchanges for collection development. The library of the University of Ghana, suffering from severe financial difficulties, relies heavily on exchanges and gifts and its case history is detailed by Kedem.

The claiming of exchanges is the topic of a study by Fairbanks, who dispels the notion that exchange journal titles demand more claiming than subscription titles. Fairbanks found low claim rates for domestic exchange titles and high rates for foreign titles.

**ETHICS**

An entire issue of *The Acquisitions Librarian* was devoted to legal and ethical issues in acquisitions (Strauch and Strauch, B). The majority of the articles contained therein have been noted elsewhere in this review because they addressed some other particular aspect of acquisitions. Two others are treated here. Coffey (A) examines the basis for an ethical relationship between vendors and libraries. He notes that even though there are few cases of flagrant violations of ethical standards among the library community, this does not indicate that there are no problems. He makes some recommendations for establishing an ethical environment within the library. Goehner interviews both librarians and vendors to establish a philosophy of ethics for acquisitions librarians, and Marsh (B) discusses payment ethics, providing practical advice on how acquisitions librarians should interact with the for-profit sector.

In a completely different vein, Bazirjian uses the ethical theories of Kant and others to question the basis for the practice of discarding library materials. While it may seem the author uses a very large hammer to crack a very small nut, Bazirjian makes some very interesting points about the librarian’s need to maintain objectivity and to establish competency.

**MONOGRAPHS**

Acquisitions has never been replete with monographs on the topic. During 1990, one title appeared, and another devoted a sizable portion of its contents to acquisitions. The *acquisitions book, Understanding the Business of Library Acquisitions*, is edited by Schmidt (D) and is a compendium of chapters addressing several universal aspects of acquisitions. *Technical Services Today and Tomorrow*, by Gorman and Associates, includes five chapters devoted to acquisitions and covers acquisitions issues in several other chapters.

**ELECTRONIC COMMUNICATIONS**

The end of 1990 was marked by the advent of an electronic newsletter directed especially at acquisitions librarians. *ACQNET* was developed and is edited by Christian Boissonnas at Cornell University. The newsletter discusses all aspects of acquisitions, from vendor selection and suggestions to comment on American Library Association committee business to management issues. Another electronic newsletter, *Newsletter on Serials Pricing Issues*, is of somewhat less interest to the acquisitions librarian, focusing as it does on the state of serial publishing and its economics as it affects libraries. Finally, an electronic bulletin board, *SERIALST*, is edited by Pamela Bluh of the University of Maryland and relays a wide range of questions on serials, including both acquisitions and cataloging.

**CONCLUSION**

In a ten-year period, the literature of acquisitions has grown enormously, much as has the discipline of acquisitions itself. This growth is evident in the renewed interest in education for acquisitions, the success of the acquisitions conferences that attract a diverse group of librarians, the proliferation of journals specializing in acquisitions issues,
and the increasingly serious nature of the publications that grace these journals.

The literature of acquisitions in 1990 is distinguished by the many articles that connect acquisitions to the rest of librarianship, articles that respond to the needs of collection development librarians and discuss the very real administrative problems facing this part of librarianship. Like Oliver Twist, acquisitions librarians have asked for more, and, like Oliver, are being rewarded in the end for the effort.

BIBLIOGRAPHY


Alley, Brian. "WYSIWYG Acquisitions: We're Nearly There...Well Almost." Technicalities 10, no.6:1 (June 1990).


Kingsley, Marcie Stevenson, and Philip C.


Pionessa, Geraldine F. "Serials Replacement..."


"I don't just lead the team, I'm part of it."

"Teamwork is a primary reason EBSCO has successfully served the serials management needs of librarians for so many years. Our concept of providing subscription service is based on teams of dedicated employees serving customers in specific regions. My staff and I serve libraries in the Mountain/Plains States while eight other U.S. teams handle the serials needs of customers from Maine to Alaska to the Virgin Islands. And there are 17 more EBSCO offices located throughout the world, all fully staffed with a work force of serials professionals committed to working toward one goal.

"Maintaining a team effort is a lot of work. It requires constant communication, cooperation and corrective action from everyone.

We stress that every job and every detail, no matter how small, is important to the superior service our customers have come to expect. And we take nothing for granted."

Juanita O’Neill
Vice President/General Manager
Denver, CO Regional Office

At EBSCO, we think librarians deserve to be served by a service-oriented subscription agency. Don't you?

EBSCO
Subscription Services
International Headquarters
P.O. Box 1943
Birmingham, AL 35201
(205) 991-6600
Preservation and Access

Microfiche Editions
The Corvey Library. About 33,700 titles of the main literary genres (novels, short stories, plays, and essays) published in English, French, and German from the mid-18th to the mid-19th centuries. New sources for research in language, literature, history, culture, women’s studies.

La Caricature. The political and satirical drawings of the journal of the same name, also containing contributions from some of the best known writers and artists of the time: Daumier, Traviés, Monnier, Grandville.

The Stein Library. The most significant collection of works regarding the history of the international labor movement. History of capitalism and society, culture of the working class, newspapers of various labor movements, theory of socialism, trade unionism.

Videodisc Editions
19th Century Painting
(Selection)
German Renaissance Painters
Dutch Baroque Painting
Codex Vat. Lat. 39
(With software for retrieval and authoring for all computer platforms: MS-DOS, Macintosh, UNIX)

Products and Services
Retrieval and authoring software for laser discs
Preservation of text and image collections
Front end for collection management
CD-ROM production
The Digital Library™

For more information, check the item(s) of interest and mail this page (or a copy) to:
Belser Knowledge Services, 54 West 21 Street, Suite 309, New York, NY 10010

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>State</td>
</tr>
<tr>
<td>Telephone</td>
<td>Fax</td>
</tr>
</tbody>
</table>
Ours Should Be to Reason Why: Descriptive Cataloging Research in 1990

Jay H. Lambrecht

The descriptive cataloging literature of 1990 reveals a relatively settled discipline. A selection of articles and books on the theory and general practice of descriptive cataloging, the treatment of materials in special forms, automation, authority control, retrospective conversion, and the role of catalogers is reviewed. The literature suggests that researchers are answering questions related to how descriptive cataloging is performed, but few are asking why catalogers describe works as they do.

INTRODUCTION

The descriptive cataloging literature of 1990 reflects the concerns of a relatively settled discipline. Descriptive cataloging is practiced on items that are produced in a limited number of forms, and no new forms have had a significant impact since computer files became a common medium. Principles that were defined a century or more ago, and which were based on even older bibliographic practice, form the basis for current descriptive cataloging rules that are continuously or regularly revised. The publication of a compilation of Anglo-American revisions in 1988 seems to have eliminated the need for (or temporarily destroyed the collective appetite for) substantial additional changes. To the extent that automation and bibliographic utilities have become commonplace, the recording of descriptive cataloging data for the great majority of publications has become routine.

These circumstances provide an ideal opportunity to reexamine the effectiveness of descriptive cataloging practice in its various parts and to expand knowledge and practice beyond the borders of the routine. The published research of 1990 reveals that admirable attention is being paid to various segments of descriptive cataloging practice and makes valuable additions to our understanding of the cataloging of less common materials such as archives and conference proceedings.

A settled discipline also can be a complacent discipline, and it is difficult to review the descriptive cataloging literature of 1990 without noting its limited focus on core issues. In a period of economic retrenchment in libraries, some library administrators are serious advocates of “cataloging simplification.” The ability of descriptive catalogers to control the scope and depth of the simplification process may be limited by their inability to cite recent empirical research on the value of recording illustration statements and dimensions, employing square brackets, or...
recording descriptive data elements that online public catalog users never see. While we note and celebrate the achievements of the descriptive cataloging literature of 1990, we need to consider the urgency of the questions it does not address.

**THEORY AND GENERAL PRACTICE**

The theory of descriptive cataloging was advanced in 1990 by studies of the progress of universal bibliographic control, the needs of users and the reflection of those needs in the tenets of bibliographic control, and possible new approaches to improving access to types of materials that often are described inadequately. Studies of the Anglo-American Cataloguing Rules, second edition, 1988 revision (AACR2R), and their use combined with new or revised cataloging manuals to yield improvements in the literature of general cataloging practice.

Universal bibliographic control is the ultimate aim of all catalogers who describe bibliographic items in a network environment. The largest network is one envisioned decades ago by international planners, in which a worldwide system makes bibliographic data on all publications issued in all countries promptly available in a standard form. Robert describes the objectives and progress of the International Federation of Library Associations and Institutions' (IFLA) UBCIM (Universal Bibliographic Control and International MARC) Programme and suggests a number of areas in which further research could be performed to help the program reach its objectives. Cochrane concludes that universal bibliographic control still is far from reality, especially for developing countries and in the area of authority control. The initial cost of universal bibliographic control is enormous and is borne largely by national bibliographic agencies. The British have attempted to shift some of the burden of cataloging to publishers, and Dempsey considers the possibility that new structures and new standards may be necessary to speed cataloging and serve the needs of a broad range of users. Svenonius, in an essay that is only partially devoted to descriptive cataloging, acknowledges the cost considerations that drive cataloging practice. She decries the lack of empirical research to guide catalog code design and points to areas in which more research needs to be performed. Gorman urges changes in AACR2R and MARC to acknowledge the changes that automation has brought to descriptive cataloging. He believes that the concept of the main entry and the distinction between a heading and a reference have been subverted and that descriptive catalogers need to admit and adapt to these changes.

To the extent that catalogs contain information only on forms of materials that catalogers agree to process, the promise of universal bibliographic control is hollow. Smiraglia (B) argues that universal control of recorded knowledge is brought closer to reality as the use of the MARC format for Archives and Manuscripts Control (AMC) increases. Not only is access to archival materials improved by their addition to the catalog, but archival control techniques are made acceptable for use in library collections. Orbach discusses methods for making photographs and other still images available through the catalog. She describes six critical features of visual materials that require special consideration, considers the functions of the descriptive cataloging record for photographs, and describes tools that may help the cataloger.

If some bibliographic forms traditionally have not been represented in the catalog, others have been represented in confusing ways. Crystal Graham, in a paper that she produced for the consideration of the Multiple Versions Forum held late in 1989, identifies the causes of the proliferation of identical works issued in multiple physical versions. These items present a problem for users and catalogers and bring into question the relationship between bibliographic description and holdings data. This problem ultimately may be solved anywhere from local library systems to new international standards. Regardless of the outcome, this work places the problem in a valuable theoretical context.

Five articles considered AACR2R as it defines general Anglo-American descriptive cataloging practice. Swanson considers choice and form of access points with
emphasis on archival and manuscript materials, but his analysis is largely applicable to all types of materials. Tull, Velez-Vendrell, and Halverson synthesize the rules for establishing geographic names according to the Anglo-American standards. Tucker considers the rules for determining the limits of the title proper and concludes that a cataloger’s judgment sometimes is vital even in making this apparently routine decision. Maccafferri considers the significant difficulties in using Ottoman Turkish personal names consistently in descriptive cataloging. His study proposes rules for romanizing, choosing, entering, and distinguishing Ottoman names. Weinberg considers the index of AACR2R in light of basic criteria for indexing and suggests improvements that could be made in the next version.

Two monographs published in 1990 served as manuals of cataloging practice that focus to varying degrees on descriptive cataloging. The second edition of Chapman’s work is brief, British in focus, and devoted to the full range of cataloging and processing procedures. Piggott limits her manual to consideration of descriptive cataloging as outlined in AACR2R.

Examination of the theory and general practice of descriptive cataloging as addressed in the literature of 1990 reveals that we have made further progress toward an understanding of how to catalog. Peter S. Graham’s article on defining quality in cataloging states that we have not done enough to question why we describe bibliographic works as we do. He asks which elements of the catalog record are essential and which are merely useful in light of the costs of cataloging and the service goals of the library. In this area, the theoretical and general descriptive cataloging literature of 1990 reveals no new research or results. This is fertile ground for the researchers of 1991 and beyond.

**Materials in Special Forms**

Much descriptive cataloging literature is written as if monographic printed materials were the only materials held by libraries. The antidote to that perspective is provided by those who specialize in writing about cataloging those works published in other forms. A wealth of articles appeared in 1990 that were primarily concerned with special forms of published materials.

Serials were the focus of many in the descriptive cataloging community. Intner (A) considers the essence of the bibliographic unit that is a serial, while Glasby places serials cataloging rules in a historical context dating back to the writings of Charles Ammi Cutter. Cataloging of changed serial titles under latest (rather than successive) entry still is fresh in the minds of many who are cataloging, but only those libraries willing to violate Anglo-American standards perform latest-entry cataloging today. Turitz summarizes the history of the controversy surrounding uniform title access for serials, while Mering considers the costs and benefits of reverting to latest-entry practice. In an article that will help to document the history of this movement and the direction of serials cataloging practice in the late 1980s, Williams examines the trends and developments of serials cataloging in 1988.

Other research on serials cataloging published in 1990 aimed in new directions. Evans considers the imminent integration of the variety of MARC formats into a single format and elucidates the implications of integration for serials cataloging. Cole promotes the key title, which is constructed according to internationally accepted guidelines, as a preferable alternative to the uniform title main entry of Library of Congress guidelines. Van Avery considers the relative merits of recataloging and retrospective conversion of serials, while Zotova’s focus is on the cataloging of serials in Bulgaria. The extraordinary extent and range of the year’s literature on serials cataloging serve as evidence that this is one of the least-settled subdivisions of descriptive cataloging. It is an area in which history continues to be examined and researchers are vitally interested in both how and why. Their research should lead to improved understanding and practice.

Catalog records for conference proceedings typically are difficult for descriptive catalogers to establish and difficult for
users to find and understand. McGarry and Yee make a valuable contribution to our ability to serve users by examining their behavior and preferences when searching for meetings and by proposing several possible methods of improving descriptive cataloging rules to serve their needs. Berman provides useful information on the history and treatment of conference proceedings but proposes a solution based upon classification rather than improvements in descriptive cataloging.

Cartographic materials constitute another bibliographic form that provides a challenge to the descriptive cataloger and the user. Ercogovac, as part of her doctoral research, describes an empirical project designed to improve our understanding of the concept of "map author." Parker advocates increased use of multilevel description to improve access to sets of sheet maps. Vick and Romero consider the problems of describing rare maps, which combine the challenges of cartographic and antiquarian description. They advise that cartobibliographic research is the key to providing the best possible descriptions.

Maps are often found in archival depositories, and Corsaro considers the differences between the bibliographic and the archival descriptions of cartographic materials. This is part of the larger question of how bibliographic records can best describe archival materials. Practical issues must be addressed and the relationship of catalog records to other forms of archival finding aids must be understood before Smiraglia's vision of universal bibliographic control can be realized. Fox's article serves as an effective and concise explanation of how the two descriptive traditions can be made to converge.

Sound recordings also are found in archival collections, and Thomas examines their processing. He concludes that bibliographic records for sound recordings in archives do not need to be substantially different from records for textual archival collections. Music cataloging in general, and especially the appropriate role of the paraprofessional in that process, are the subjects of an article by Kranz. His case study and comparison of the practices of seven libraries indicate that even the cataloging of this special form of material can be transferred successfully to paraprofessionals. Weitz's monograph on coding and tagging of bibliographic data for scores and sound recordings serves as a useful tool for the novice.

Computer files and microforms also were the subjects of scrutiny in the descriptive cataloging literature of 1990. Thorburn considers the precataloging decisions that need to be made in the processing of computer files and especially in the cataloging of magnetic-tape files. Patterson considers the bibliographic control of microforms from the public-services perspective and urges that more libraries purchase and load bibliographic records for the analyzed parts of major microform sets.

It is clear that the problems of dealing appropriately with special forms of material, and the special constituencies of catalogers that are dedicated to doing so, made this a popular area for research in 1990. While the emphasis was on improved descriptive cataloging practices, it is clear that the research originated with the special needs of users. To the degree that it is not settled and addresses known problems, it is a most rewarding subset of the year's research.

**Automation**

Descriptive cataloging is inextricably linked to automation for most catalogers. The library and cataloging literature of 1990 is replete with research into automation, but much of that literature is out of the scope of our present consideration. Only writings that focus on descriptive cataloging in an automated environment are reviewed.

Archival cataloging was given special attention in 1990, and the automation of archival records was no exception. Weber considers various examples of MARC records for archival materials, looks ahead to the impact of format integration, and concludes that MARC formatting has led to some changes in the archival profession. Roe examines the appropriate design of systems to make archival descriptions readily accessible in the context of the catalog.

Quick and universal access to materials
of all types is one of the goals of library automation. Several authors studied the success of various systems in making cataloging copy available promptly and widely. Shaw concludes that, at least for medical books and fiction, the Online Union Catalog of the Online Computer Library Center (OCLC) succeeds in making cataloging copy available for the vast majority of titles by the time they are announced by their publishers. Allan studies the relative availability of cataloging copy in four different online sources, and finds the highest hit rate in OCLC. Bleil and Renner summarize the status of copy cataloging and bibliographic networks. They see performance standards as an issue for the future of shared cataloging. McCallum believes that the linkage of information systems in computer-to-computer networks has led to the relaxation of standards. She concludes that this will lead to serious problems in the future and identifies areas in the greatest need of standards.

The ultimate aim of some is to replace catalogers with expert systems. Anderson examines the progress to date of experiments to apply expert systems to cataloging and concludes that such systems are not now and may never be adequate to the task. Svenonius and Molto consider a single aspect of this question, the automatic derivation of name access points in cataloging. They conclude that approximately 88 percent of name access points used in Library of Congress or National Library of Medicine cataloging could be derived automatically from title page data.

Finally, for those who question the wisdom of abandoning the card catalog in favor of the online catalog, Knutson's case study indicates that the online catalog might be more accurate than the card catalog. He concludes that an aging card catalog is likely to present ever greater problems for users.

**AUTHORITY CONTROL**

The online catalog, like its manual counterpart, has a limited ability to serve the needs of users if authority work is not performed. The syndetic reference structure that helps to relate items within a catalog is one of the means of distinguishing a catalog from a simple list of bibliographic items. Research into authority work in 1990 must be considered within the context of Johnston's assertion that major vendors frequently are unable to translate a cataloger's best authority record into an effective authority control system.

One system that directly links bibliographic and authority records is the Western Library Network (WLN). Coyne and Mifflin describe the WLN database and its authority file, which is an example of a shared authority control system. Matters writes about the transition of archival catalogs from small local resources to part of the larger bibliographic universe and focuses on the authority work implications of that transition. Botero, Thorburn, and Williams describe a method for using serial bibliographic records as a basis for series authority records.

Two authors considered the larger issue of authority control in 1990. Clack's monograph, while general in nature, addresses the control of particular categories of headings. Wajenberg summarizes the need for authority work and focuses on the importance of authority work in an online environment.

Authority control is another area of the descriptive cataloging process in which empirical evidence of the value of the activity was not produced in 1990. The addition of authority control capabilities to existing online catalog products should provide an excellent opportunity for libraries to document the value of authority control. Without such documentation, library administrators may conclude that keyword searching capabilities are an adequate alternative to costly authority work.

**RETROSPECTIVE CONVERSION**

The process of automating a library's entire holdings through retrospective conversion was the subject of some research in 1990. *IFLA Journal* devoted an entire issue to retrospective conversion in the international context. The Council of Europe Working Party on Retrospective Cataloging has recommended principles to help determine the allocation of funds for retrospective conversion projects. Among the more substantial papers in response to
those recommendations is Sule’s proposed list of bibliographic standards to be applied to retrospective conversion. Willemseu describes the Dutch experience but places it in the context of retrospective national bibliography in all countries.

Preparation and management of retrospective conversion projects also was the subject of some research in America. Both Kroll and Murphy consider the problems of vendor conversion of school media library collections. Russman discusses data entry planning for an in-house retrospective conversion project. Lambrecht proposes strategies for managing an in-house conversion project to a successful conclusion. Each acknowledges the importance of the endeavor to the quality of the library catalog, to remote access, and to interlibrary cooperation.

**ROLE OF CATALOGERS**

The role of catalogers is of inherent and abiding concern to catalogers, perhaps because it is of financial concern to library administrators. For whatever reason, the duties, supply, education, and selection of catalogers was a focus of considerable research in 1990.

The pattern of long-term change in the duties of catalogers is studied by Eskoz, who concludes that changes are occurring slowly and that there will continue to be a role for professional catalogers. Furrta’s study goes back to 1970 and measures the shift in professional responsibilities of catalogers as measured by job advertisements. Hoerman chronicles the short supply of catalogers in the 1980s and concludes that recognition of the shortage may lead to its elimination. Rapp suggests that the improvement of recruitment and selection for cataloging positions would go far to ease the perceived shortage. Intner (B) reports on responses to a survey of cataloging educators and practitioners and finds no general agreement on the categorization of cataloging topics into either theory or practice. If cataloging theory is to be taught in library schools and cataloging practice is to be taught in libraries, it would be useful to be able to distinguish between the two.

**CONCLUSION**

The primary objectives of research into descriptive cataloging should be to understand the needs of the users we serve and to discover and document the best means of meeting those needs. By doing so we retain control of our own discipline and move it forward.

The descriptive cataloging literature of 1990 is much better at telling us where we have been than where we might go. It largely assumes that the needs of users are understood and devotes its energy to improving processes in order to meet those assumed needs. Its accomplishments are broad and numerous, but its foundations may be weak. Gorman contends that automation has changed cataloging fundamentally, even though we haven’t adequately acknowledged or adapted to it. Svenonius writes of a paucity of empirical research to help us evaluate catalog code design. If these two leaders of the field are correct, we do not have a clear view of the larger picture. We cannot assume that we know what users need from description in the online catalog, and we are not asking them. In a period in which “cataloging simplification” is in vogue, failure to conduct this sort of research may result in failure to avoid changes imposed by those whose primary concern is cutting costs.

The descriptive cataloging literature of 1990 increases our understanding but does not satisfy the need to know much more. If it reflects a complacent discipline, we must hope that more questions will be asked and answered in 1991.

**BIBLIOGRAPHY**


Mering, Margaret V. “Would the Reintroduction of Latest Entry Cataloging Create
More Problems Than It Would Resolve?"  


Crisis in Cataloging Revisited: The Year's Work in Subject Analysis, 1990

James Bradford Young

The integration of mainstream American library traditions of subject analysis with modern indexing and classification theory and their adaptation to an online environment are bringing about a revolution in the practice of subject analysis. The research literature published in 1990 in the following categories is examined: subject cataloging, classification, classification in online systems, subject access, indexing, the online environment, special materials, and special subjects. The literature gives evidence of a second crisis in cataloging, which will require a reconsideration of conceptual foundations.

For some time now, those who follow events in subject analysis have observed a parallel to the crisis in cataloging articulated by Osborn in 1941. Yee has reviewed the period in which reorganization at the Library of Congress (LC), attempting to deal with the perceived "crisis in cataloging," set the stage for profound changes in cataloging theory and its application. The absence of an event in subject cataloging parallel to the historical development of descriptive cataloging standards is intriguing. The portions of Cutter's Rules for a Printed Dictionary Catalog that were concerned with description and access gave rise to successive expansions sponsored by both the Library of Congress and the American Library Association (ALA), while the portion for subject entry has had no such official successor. An understanding of certain important events leading to the development of Anglo-American Cataloging Rules might aid an understanding of the absence of a similar development in subject cataloging. Osborn's 1941 article "The Crisis in Cataloging" dramatically galvanized widespread dissatisfaction into a call for action. In response, a penetrating analysis and distillation of the essence of the Anglo-American cataloging tradition was found in Lubetzky's Cataloging Rules and Principles. LC's commitment in commissioning and supporting this work over many years as part of its reorganization recognized the fundamental role of thoughtful research in library management. International agreements, embodied in the International Conference on Cataloging Principles and the International Standards for Bibliographic Description, emerged as a result. Pondering the potential for a parallel process for subjects might be instructive. Who will be the Osborn and the Lubetzky of subject cataloging? Who can mandate and

sustain the work needed to comprehend the past and envision the future of subject access?

There are multiple roots to the current crisis in subject access to library materials. Most immediately apparent is the aging of the mainstream systems, which may be compared to a declining infrastructure of the common intellect, requiring periodic reinvestment and renovation, as do bridges and highways. The standard subject analysis tools for American libraries, Library of Congress Subject Headings (LCSH), Library of Congress Classification (LCC), and Dewey Decimal Classification (DDC), all took shape over a century ago. They represent an accumulation of great wealth but also, in some cases, of inconsistency. Miksa has made a thorough analysis of ways in which this accumulation has undermined the effectiveness of subject headings. All three major tools have been both enriched and burdened by the passing of time.

Recent theory has not been well integrated into the existing systems. Indexing and classification theories have experienced a dramatic revolution in the last quarter century. These advances were not readily incorporated into the structures of standard library tools. Their widespread use in other bibliographic systems now creates a highly visible and unsatisfactory comparison, which contributes to the sense of crisis.

Rapid movement into an online environment seems to have been accompanied by a shift in expectations for subject access in the library catalog. Application of online search techniques, such as keyword indexes and Boolean operations, has exposed the weaknesses of traditional tools as much as it has enhanced their use. Indeed the potential for their improved use online is widely perceived as having dramatic implications, while the impact on their inherent structure remains unclear.

The expanding scope of subject analysis has also undermined the acceptability of conventional methods. Library subject analysis techniques are being applied to an ever broader range of materials and topics. Just as with descriptive cataloging, the need for an effectively integrated approach has become increasingly apparent. Attempts to resolve the resulting tensions have demonstrated that subject cataloging and classification lack a sufficiently broad conceptual foundation to support adequate access to a wide range of material in a single integrated system.

Most recent work reflects at least one of these issues. Contributions to subject analysis work in 1990 are analyzed here in relationship to these concerns as aspects and evidence of a second crisis in cataloging. The focus of this study is research, which includes all types of refereed studies, published in 1990. Some 1989 publications not included in the previous review for Library Resources & Technical Services are also included here. Some other activities of importance are documented through news items and published reports. The scope is traditional library subject analysis work: subject headings, classification, and subject access through library catalogs as a primary focus. Some related fields, such as indexing and information retrieval, are represented if the research has important implications for the above. Relevant material is identified, cited, and, as much as possible given the parameters of this study, synthesized in relation to the four issues stated above.

Perhaps this year's most significant trend is that many studies with divergent topics and methods reconceive the framework of subject analysis. In a masterful review of bibliographic control's research agenda and lacunae Svenonius writes:

The computer has brought to cataloging potentialities and difficulties. . . . The development of expert systems . . . is clearly emblematic of a trend. It is a trend that promises not only to ease the economic burden of bibliographical control, but also to rationalize its conceptual foundations and improve its effectiveness.

The consideration of a single year's work in a segment of library science, while helpful, might impose narrow limitations on its perspective. Equally important is the recognition of a cyclical cross-fertilization in subject analysis among various disciplines. Lancaster, Elliker, and Connell, reviewing subject analysis literature, note:

Substantial progress has occurred in the
This progress has been accompanied by the increasing convergence of information science and library science. Much of the progress in information retrieval occurred through the efforts of scientists, engineers, lawyers, and others who were not information professionals. These individuals were not familiar with the literature of library science, and some reinvention of the wheel occurred. Today a reverse situation may be occurring, with members of the library community reinventing methods that were developed (and perhaps tested and rejected) outside the community many years ago.

This process has a highly extended time frame. Commenting specifically on this aspect, they continue:

The field of information science seems to have a short collective memory. We know of work done three or four years ago but are unaware of, or have forgotten, work done much earlier. ... [Annual review] is of immense value in providing a review and synthesis of research in broad areas performed during relatively short periods of time, but it does not obviate the need for longitudinal reviews, covering perhaps 20 or 30 years, on more specific topics.

Given the parameters of breadth and length noted above, it must be understood that this review often examines only a narrow slice of the issues identified.

**Subject Cataloging**

The role of subject cataloging through controlled vocabulary clearly remains a central concern of library service. McCarthy, with a reference librarian's view of the online subject catalog, perceives a need for more extensive and consistent use of subject headings. She suggests subject specialists monitor their development and use. Murdock perceives the failure of subject cataloging as a crisis resulting from inadequate communication among public and technical services staff in providing library service responsive to public needs. Svenonius (B) presents a highly original synthesis, across several disciplines, of the current state of knowledge in controlled-vocabulary design, including its purpose and role in information retrieval, sources and selection of terms, nature and degree of syntactical and semantic relationships, problems in compatibility and structural design, and evaluation and effectiveness of controlled vocabularies.

Frost reports a study to assess the value of title terms as entry vocabulary to controlled lists by analyzing frequency and type of matches among title and subject heading terms. Further study is suggested to determine the value of linking mechanisms. Whitehead details the rationale and techniques for mapping subject headings into the Art & Architecture Thesaurus (AAT), which recognizes the need to provide effective interfaces among existing standards and the emerging discipline-specific controlled vocabularies. Reynolds discusses, in personal terms, the difficulties of planning a research project in subject cataloging, including relating practical concerns to a theoretical foundation.

The concept of a subject code continued to elicit comment in 1990. Studwell (B) advocates preparation of a subject cataloging code and considers whether it should be a description of current LC policy or a set of broader principles or if it should cover applications as well as formulation of LCSH. Chan (E) provides a brief analysis of questions to consider: What is a subject code? Do we need it? Is it currently feasible? Who will develop it?

**Library of Congress Subject Headings**

The Library of Congress Subject Headings, the most widely used subject analysis tool, is undoubtedly also the most often maligned. Carlyle prepared a taxonomy of user vocabulary matches to LCSH used to analyze transaction logs from keyword-supported systems in an online public access catalog (OPAC). She suggests poor LCSH performance and details needs for further investigation. Calderon, in a frankly polemic piece, considers vested interests versus the real needs of an information society. He documents widespread dissatisfaction with LCSH and attributes the failure to achieve improvements to a political failure of the profession, its national institutions, and leaders.
Discussion of revised practices at LC, perhaps encouraged by internal dissent, provided a minor tempest, mostly significant in the reaction it provoked. Flagg reports anxiety in the library community over possible changes in LC subject analysis priorities. Assurances were made that studies of cataloging simplification, including legitimate questioning of current subject practices, are aimed at increased effectiveness through efficiency, not degradation of service. The article entitled "LC Quashes Subject Rumors" reported soon after that LC had denied rumors that simplification studies would lead to reduction in subject cataloging at LC.

In response to the cancellation of addresses, essays, lectures as a subdivision, Wilson and Robinson propose a systematic basis to the subject cataloging practice of adding form subdivisions to topical headings in terms of description by topic and kind. They offer a preliminary taxonomy and call for the review and expansion of this practice. Tull, Velez-Vendrell, and Halverson review methods and sources for establishing geographic names as subject access points consistent with LC practice. Lajinger describes a simple program in dBase III+ for an LCSH authority file and printed list for special libraries. The file provides quick access to all the primary subject headings used in the library and the shelf number assigned to each heading.

As a first step in the systematic reform of its subject cataloging practices, LC has organized a conference on the use of subject subdivisions. Four position papers were commissioned and distributed by the Office for Technical Services Research. Conway and Drabenstott propose expanded use of free-floating subdivisions; Pietris suggests limited use of free-floating subdivisions; Mandel, Leighton, and Wovlen advocate streamlining subdivision selection and establishing strings as headings; and Chan (A) promotes alternatives to subject strings as headings. The proposals were intended to foster debate; no proposal was intended to be adopted to the exclusion of the others. Many key concepts are shared and all aim to increase efficiency, encourage cooperation, and improve OPAC subject access.

**CLASSIFICATION**

**DEWEY DECIMAL CLASSIFICATION**

The new edition of *DDC* recently published and periodic revision being planned are considered with a focus on international and automated use. Van der Merwe gives a critical review of the new edition, written from the point of view of a teacher of classification in South Africa. She describes features of the classification scheme that are considered helpful and points out some areas where explanations and instructions are inadequate and therefore are confusing. Several studies of the radical revision of the music schedule included in *DDC*, twentieth edition, are described below.

The article "Dewey: An International Perspective" reports on a conference session on international use of *DDC* given during the 1989 Paris meeting of the International Federation of Library Associations and Institutions (IFLA). The talks included an overview by Sweeney and papers on the use of *DDC* in the Arab world by Mohammed Aman, translation of *DDC* into Italian by Daniele Danesi, use in France by Annie Bethery, and international aspects of the twentieth edition by Julie Beale.

Chan (B) describes the Decimal Classification Editorial Policy Committee's agenda for planning a twenty-first edition, considering future operating environments for library classification, roles supported in addition to the arrangement of monographs, changes that might support both the current and projected roles and environments, and the potential impact on classification of general trends in information retrieval.

Drabenstott and others report results of the *Dewey Decimal Classification* Online Project in which terms from the *DDC* Relative Index and Schedules were automatically added to bibliographic general subject terms from online classification data were not otherwise found in the subject and keyword indexes. This suggests the value of the *DDC* as an index vocabulary source as well as a classification tool.

Dewey, in an essay on the beginnings of decimal classification recognized as a
Library Journal classic and reprinted from the February 15, 1920, issue, documents the broad conceptual basis of his classification in support of popular education through library service and the essential role he perceived for subject access.

**CLASSIFICATION IN ONLINE SYSTEMS**

The use of subject headings is widespread in online catalogs, while the ability to exploit classification data is still being developed. Speller provides an introduction to and summary of the proceedings of the 1988 Annette Lewis Phinazee Symposium on the topic of classification as an enhancement of intellectual access to information in an online environment, published as an issue of Cataloging & Classification Quarterly. Williamson details the potential role of classificatory structures among online retrieval mechanisms and identifies ongoing research and need for further conceptual development. Comaromi argues against using classification merely as an augmentation of other online retrieval capacities instead of as a unique indexing language "organized by discipline rather than by the alphabet" and favored by subject experts. He concludes that the structure and index of the classification need to be better and more widely understood before being successfully employed for online access.

The Library of Congress Classification online is considered as a subject access point in computer-based retrieval by High. He analyses the potential value of LCC online searching for end-user groups of varying purpose and sophistication. Saye provides a reaction, identifying obstacles to online end searches of call numbers, which include lack of adequate indexes, the complexity of and inconsistency in structure of LCC, and user resistance. Chan (C) enumerates unique retrieval capacities of LCC online, not only for subject browsing but also for known item searching and enhancement of keyword and controlled term searches. While recommending it be combined with other approaches, she also identifies obstacles.

Of DDC in the online environment, McAllister-Harper reports a survey of North Carolina libraries with results indicating little access to online use of DDC. She discusses enhancements, especially online classification data, which might support expanded use. Hill (B) responds with an analysis of obstacles to widespread online retrieval by DDC. She asserts that these obstacles are not only technical, such as lack of authority structure for classification data, implementation costs, etc., but also political. Expectations are mismatched with realities, and there is need for a persuasive demonstration of the unique value of online DDC retrieval.

**SUBJECT ACCESS**

Whitcomb and Noreault, Nita, and Kriss detail the subject searching capacity of the EPIC system of the Online Computer Library Center (OCLC), which offers a new way to search the OCLC database for subject access. The EPIC service is a full-featured, online reference system that provides subject access and keyword and Boolean searching to a variety of databases. Currently the OCLC Online Union Catalog (OLUC) is available. Designed as a reference tool for use in all types of libraries by librarians and end users, the EPIC service offers a choice of interfaces to accommodate expert to novice users. Development of the EPIC service, experience of the first subscriber to EPIC, and the role of the OCLC Reference Services Advisory Committee in providing input for EPIC are described. Providing end-user subject access to the world's largest bibliographic database has the potential for dramatic expansion of the basic availability of information.

The application of expert systems technology holds great promise as the foundation for future improvements in subject access. Making subject analysis tools and data amenable to such applications is an ongoing field of interest. Vickery and Vickery consider the nature of intelligent systems and the kinds of information skills that need to be incorporated in intelligent information software. They also consider the online search process and the problems involved in providing intelligent aid for the inexperienced searcher. Molholt describes the possibilities of artificial intelligence for subject access and reviews its current limitations and future consideration.
tions. She particularly identifies the potential for artificial intelligence systems' use of MARC records if relational data can be adequately mapped within and among them. Integration of topical content analysis with other nontopical aspects is seen as a goal for such systems.

Online use of bibliographic records presents the possibility of increasing subject access through various novel forms of content enrichment. This usually refers to the inclusion of a table of contents, an index, or other data to be retrieved in keyword indexing as a means to greater recall in subject searching. Van Orden, in a summary of selected research, reviews experiments that address the value of content-enriched access by inclusion of data such as tables of contents, indexes, references, or readers' comments and suggests that such components must be well selected and linked to improved search methodologies and user interfaces. Better understanding of the structure and use of knowledge are seen as crucial to continued progress in this area.

In the context of planning subject enhancements for OPACs, DeHart and Matthews report on an experiment to explore the use of contents, reviews, and abstracts in conjunction with LCSH. Michalak describes an experiment in enhancing catalog records at Carnegie-Mellon University, including the criteria and process used to enhance selected bibliographic records with contents and chapter titles. In light of sustained interest in implementing such projects, special importance can be attached to Dillon and Wenzel's investigation. They report OCLC research on retrieval effectiveness of enhanced bibliographic records, including abstracts and contents, indicating that precision suffers with the increased recall achieved by this technique.

Questions about the basic goals and purpose of subject access systems continue to be raised in thoughtful and sometimes startling ways. Cochrane assesses the role of universal bibliographic control in the availability of information and knowledge. She provides an insightful critique of the UNESCO/IFLA program for Universal Bibliographic Control, citing the need for initiating an effective plan of universal subject access as the anticipated next step among others in a truly integrated international and technologically advanced information environment.

Bland, writing of the catalog as a tutorial guide to the literature, distinguishes between the retrieval of pertinent literature—that which is useful to a reader—and that merely relevant to the topic of interest, supported in the library catalog by identifying the bibliographic form, intellectual level, and purpose of a document. Responding, Summersville reviews opportunities, including expert systems, and obstacles for expanding subject access to include intellectual level, form, and purpose. Wilkinson concludes that the technical problems, cost, and infeasibility of providing intellectual level as a search enhancement in the online environment outweigh the potential value of online access by intellectual level.

Continuing the cause of undiscovered knowledge, Swanson demonstrates medical literature as a potential source of new knowledge. He has found specialized biomedical literatures that are implicitly linked by arguments that they respectively contain, but which do not cite or refer to one another. The combined arguments can lead to new inferences and conclusions that cannot be drawn from the separate literatures. Examples are reported, and a model and an online strategy are described. It is designed as an aid in identifying other related, noninteractive literatures. He suggests that this technique might provide the foundation for a literature-based approach to scientific discovery.

Skenotius (A), in a bibliographical essay, assesses recent work and identifies lacunae in the research agenda for classification and subject cataloging. The need for empirical research and rationalization of conceptual foundations are apparent in every field. Implications of online use for traditional classification tools has been a fruitful research topic. Automated classification investigation and fundamental psycho-cybernetic exploration are promising. Subject cataloging research has focused on
display, enhancement, cooperation, and consistency in assignment of LCSH. Matching LCSH to natural language queries and integrating it with other thesauri have been innovative research topics. Interest in expert systems for subject access offers the potential for bringing together many of these trends but, more important, for identifying their common intellectual basis.

The commercial provision of subject analysis data has provoked, particularly in Europe it seems, a new analysis of the market for end-user subject access service and the factors that control it. This topic will undoubtedly increase in importance. We can only speculate how the other developments reported here, such as the new EPIC system from OCLC, will influence American views. Jouguet (B) reports developments in France for subject access in online catalogs. She gives a description of online subject access to bibliographic data in France, a recent development but rapidly widespread through MINITEL (three million installations) and other public access databases. Feeling that books have been left out in the expansion of subject analysis services, Frantz gives a rousing polemic suggesting Essay and General Literature Index include subject indexing for chapters of nonfiction monographs contained in Book Review Digest.

Evaluating subject access and commercial bibliographic data, Jouguet (A) makes an assessment of competing market forces on online subject analysis data available in France. There is little advocacy for serving end-user needs, which does not yet seem to be commercially viable. In ideas originally presented at the 1989 Dawson’s research seminar, Line similarly analyzes commercial and nonprofit market factors for bibliographic data in Britain. He sees that bibliographic records for users must move “from disordered superabundance to cost-effective satisfaction” and identifies adequate subject access as the key to progress.11 He goes on to review the technical and administrative options that need to be brought to bear. He proposes three levels of subject analysis, from the local support of browsing at the most superficial, to international files of full content and index data at the most comprehensive.

INDEXING

A variety of topics in the indexing world reflect similar concerns in subject cataloging. Zang’s overview of abstracting and indexing services in China traces thirty years of modern indexing, through much difficulty, to the recent introduction of computers. Wittmann quantifies characteristics of subheadings used in award-winning indexes that were found less frequently in other indexes. Booth looks in detail at consistency in MEDLINE indexing. A known item search revealed that documents from the same annual volume had been indexed twice. Fifty-seven references were retrieved, comprising twenty-eight pairs of duplicates. Four categories of descriptors—major descriptors, minor descriptors, subheadings, and check tags—were compared for depth and consistency of indexing. Lessons that might be drawn from the study are discussed. Svenonius (C), in a review of the new edition of Eric Coates’ Subject Catalogues: Headings and Structure, reflects on the continuing interest of Coates’ work in chain indexing theory.

Many articles involve the application of computers to existing indexing activities. Sano describes facet tabulation of index terms through an algorithm devised for automatic display of index terms in tables by facet. Lirov and Lirov present REX, an expert systems approach to bibliographic processing written in PROLOG and used for automatic creation of a subject bibliography. Raw bibliographic data are downloaded, then processed into a subject bibliography with the REX program. Dyksia very clearly explains the possibilities for use of the Preserved Context Indexing System (PRECIS) in the online catalog. Her presentation may help to make this important system better understood in this country. Although it incorporates modern concepts of indexing and classification, PRECIS was not developed primarily for online retrieval. She details those syntactical features of PRECIS rooted in analytico-synthetic classification
that support postcoordination and permit it to function very effectively in an online environment. She further explores the inherent potential of PRECIS for the even greater enhancement of online subject retrieval.

Automatic indexing is an area of indexing theory research with strong implications for subject analysis in libraries. Korycinski and Newell survey the role of natural-language processing in automatic indexing and summarize the statistical and analytic approaches to automatic generation of book indexes. Similarly, Salton, Buckley, and Smith review the application of syntactic methodologies in automatic text analysis and summarize the application of various linguistic approaches for document analysis in retrieval systems, particularly syntactic phrase generation. Detailed studies conducted at Syracuse University of anaphora in natural-language processing and information retrieval are analyzed by Liddy. She discusses anaphora, abbreviated subsequent reference, in-text analysis and retrieval systems, and term weighting. Hahn explains topic-parsing structures in full-text analysis and introduces automatic parsing to analyze natural-language structures in full-text database retrieval systems.

Retrieval technique research is another frontier of information theory highly relevant to library practice. Fuhr describes some important results of information retrieval research that can be used to implement more effective retrieval systems, even for existing databases; for instance, stemming algorithms can generate variants of the search terms. Ranking algorithms based on document and query term weighting significantly outperform Boolean systems. Relevance feedback data can be used for further improvement of retrieval quality as well as for semiautomatic query expansion. The outline of a user interface for a system based on these concepts shows that it is possible to implement user-friendly retrieval systems that are effective as well as efficient.

Simulation of search term generation by an automated lexical net is reported by Rapp and Wettler. To retrieve information from a bibliographic database, the searcher has to translate natural language into an expression of a query language that can be processed by the retrieval system. This requires a careful selection of the search terms by a human searcher. This project simulated such a process on a computer. A lexical net was built up using fully computerized procedures. Examples show that there is a surprising coincidence between the word associations of the system and those of humans.

**The Online Environment**

Moving into an online environment has had a dramatic effect on every aspect of subject analysis. Many studies have been directed at understanding this transition per se. The effect on searching is immediately apparent. Looking at subject searching in British OPACs, Slack and Wood identify subject searching as the most difficult aspect of OPAC use and foresee greater public library end-user subject searching with expanded OPACs, gateways, and networked CD-ROMs.

Research into user behavior and conceptual problems is needed to support more effective interfaces and instruction. Also in Britain, Hancock-Beaulieu evaluates the retrieval, search formulation assistance, and compares the matching approach of OPAC subject searching to the contextual approach in manual use of a PRECIS index. She suggests that the online system should cater to both by providing query expansion through structured contextual retrieval, search formulation assistance, and various searching aids in matching.

In a study with very exciting implications for long-term enhancement of subject retrieval by integrating traditional tools and modern concepts online, Drabenstott and Vizine-Goetz detail the use of search trees for subject searching in online catalogs. Trees would control system response to determine appropriate subject searching approaches to user queries, based on the extent to which they match controlled vocabulary and place responsibility for this determination on the system, rather than the user. Summarizing the vocabularies for online subject searching of bibliographic databases other than
library catalogs, Piternick provides a lengthy synthesis of the dramatic impact online search techniques have had on their use. Online search mechanisms introduce control into natural vocabulary transcending the barrier between controlled and uncontrolled techniques. She reviews existing search vocabularies and aids to their selection in terms of indexer pre-control, authority systems used in searching, and searcher post-control, the process of vocabulary control online.

Implications for OPAC design and use are a recurrent concern. Banks and Higgerson describe a bibliographic instruction brochure about the conceptual and mechanical aspects of subject headings to assist users searching for subjects in an OPAC. They reflect the need to assist OPAC users in better understanding the conceptual framework, structure, and sources of subject headings. Klugman identifies failures in OPAC subject retrieval. Online retrieval techniques eliminate some failures in the use of subject headings but still need to provide further automated links and leads. Broadbent experimented with providing both dictionary and classified access in the online catalog. Alphabetical and classified indexes were generated from subject headings and their linked LCC class numbers found in a group of MARC bibliographic records to assess the feasibility of providing both a dictionary and a classified catalog from data in existing catalog records. An effective classified catalog was not found to be possible without further classification.

Geyser questions whether the end user is able to perform advanced subject searches using an OPAC. She discusses some advantages of verbal classification, such as the use of keyword searching, Boolean operators, manipulation of terms in different fields, authority files, and browsing. She asserts that the OPAC is more than just a verbal answer to a nonverbal problem and discusses several advantages of OPACs: more and better access to records, keyword searches, truncation, and the use of information in the fixed fields as parameters. Geyser also mentions end users' reactions and proposes criteria for evaluating OPACs.

An article entitled “Classification and Indexing Meeting” reports on conference papers from the Paris 1989 IFLA meeting. There were three papers reported. First was a talk by Marcia Bates on designing OPAC subject access to meet user needs, in which she advocated expanded entry vocabulary through a superthesaurus. Jouguet then spoke on subject access and the sale of bibliographic data in France, warning of a monolithic approach that disregards various end-user needs. Finally, Joyce Butcher spoke on adapting PRECIS to online use at the British Library.

Krieger describes the subject authority control features of the Dynix system OPAC. Although it is successful in displaying references and verifying headings, the maintenance procedures are cumbersome and labor intensive. Control of subject subdivisions presents the largest single obstacle.

In Chan (D) the best use online of traditional subject analysis tools is considered. Both traditional and potential uses, and the requirements for efficient online use, are reviewed. Dale has compiled a bibliography of subject access in online catalogs. This is an overview with annotations of selected items from a rapidly growing literature divided into background study, research and development, and future projections.

Several interestingly specialized topics are explored. Borgman and others report children’s use of an interactive science library. Researchers in library science and biology are cooperating to study the use of an information retrieval interface in a classroom science simulation project. The retrieval interface offers the students direct access to a database in the school library. The research concerns relate to students’ abilities to formulate and implement searchable queries and the design considerations for constructing a browsing interface for elementary school students. Rolland-Thomas and Mercure explore the achievement of true bilingual OPAC searching, in which one search retrieves headings in both languages, through classification, authority links, and even an automatic translation module. They cite the implications for multinational databases. Barnett and Petersen detail the modifications required for effective accom-
moderation of the use of the AAT in MARC records, bringing it into the online environment. They give the rationale for providing, in contradistinction to LCSH, nontopical and faceted access.

**Special Materials**

Subject access to various specific types of material has become increasingly important as subject cataloging is applied to a wider range of materials. A continued commitment to integrated collections and the centralization of bibliographic data both in networks and local systems have supported this trend. Many are types of material traditionally found in libraries. Foster reports a project at Western Kentucky University to provide subject access to periodicals through a combination of mainframe and Macintosh technology. She describes the compilation of a subject guide to current periodical titles in a medium-sized academic library based on the innovative use and local refinement of LCC and subject headings found in online serial records. Berman, coping with access to conference proceedings, gives a detailed account of the Penn State library's decisions in regard to classification. Monographic, rather than serial, description of conference proceedings complicates sequential shelf arrangement in open stacks as the specific topic of a given conference can vary, and established conferences can split or merge.

Even widely accepted forms of non-book materials present problems in adapting subject cataloging principles and integration into established systems. Reviewing recent trends, Young describes three developments that represent important new directions in subject access to music materials and the principles of nontopical and faceted access common to all of them. Yee identifies the conceptual issues underlying subject access to moving image materials in a MARC-based environment, including the diversity of genres involved, application of the concept of aboutness to these various genres, integration with related material in other formats, display of multiple retrieval vocabularies, and the need for various levels of nontopical access.

Most library catalogs have never provided subject access to fiction, despite the central place this material occupies in most library collections. The article "ALCTS Approves Subject Headings" reports American Library Association approval of the Subject Analysis Committee's guidelines for subject access to fiction and its recommendations to LC on the priority of access by form, genre, and fictional character. *Guidelines on Subject Access to Individual Works of Fiction, Drama, Etc.* suggests norms for access to works of imagination by topic, setting, and fictional characters. It also includes a list of terms for form and genre access keyed to LCSH. It is hoped that these guidelines can provide the foundation for OCLC-based cooperative efforts, in conjunction with LC, to provide access to works of imagination.

Widespread implementation of the MARC format for archival and manuscript collections has created an explosion in access to archival material. This has included an intense effort toward applying subject cataloging practices to this immense and invaluable class of material. Not only is the possibility of expanded access important, but so too is the contribution to research that integrated subject access to primary and secondary sources would provide. Smiraglia advocates subject access to archival materials using LCSH. He enumerates the advantages of using LCSH for subject access to archival material, considers selection of the appropriate depth of indexing for collections, and presents an innovative scheme for subject analysis of archival material in which provenance is recognized as the central element in topicality (i.e., records of the Glass Blowers Association are about the glass blowing industry).

Similarly Ostroff supports integrated subject access to archival and manuscript material. She identifies problems, needs, and possible remedies for archival use of existing cataloging vocabularies. The need for understanding of subject analysis techniques and guidelines for their application to archival work is fundamental. For Monroe and Roe the purpose for which material was created is reflected in functional access to archival records. They demon-
strate the use of the MARC field 657 (for Function Term) with terms from the functions hierarchy of the AAT to provide access to archival collections by this essential aspect of their provenance.

Increasingly, awareness is demonstrated of the need to provide access to objects as subjects themselves. This is true of traditional library materials, such as rare books, as well as the art and history material of museum collections. Access to the object as subject is provided by genre, form, and physical characteristics. Dooley and Zinkham articulate the need for access to various special formats of library and archival material by form of material and other characteristics. They detail various options for the use of existing controlled vocabularies in MARC records and point to the need for a unified direction in related developments among diverse communities of users. Evans demonstrates cataloging an artifact in the USMARC format for a historical collection. She illustrates the use of the MARC visual materials format to describe realia, specifically a costume, identifying the obstacles to adequate faceted, non-topical access through existing means. Hennessy introduces the Inventory of American Sculpture use of MARC for artworks and describes the use of a special subject term guide to overcome limitations of existing tools in analyzing museum objects for the National Museum of American Art.

**Special Subjects**

Not surprisingly, much of the literature of subject analysis concerns access to particular subjects, topical or otherwise. "Oxford UP Publishes Art and Architecture Thesaurus" reports the publication, in print and electronic versions, of a major new tool that establishes a standard vocabulary for the documentation of art and architecture. AAT, of which Toni Petersen is director, was published on behalf of the Getty Art History Information Program by Oxford University Press. As well as a lengthy introduction, which constitutes a significant contribution to the literature in itself, about half the projected hierarchical displays are now available. It is already reported to be used by more than two hundred institutions and has been loaded as a special file in the Research Libraries Information Network (RLIN). The work was compiled by the analysis and mapping of existing vocabularies; its key features include support of faceted analysis and non-topical access, considered crucial for integrating the wide range of materials and applications necessary for adequate documentation of the field of art and architecture. The possibility of similar developments for other discrete subject fields has already been identified and might prove the most enduring legacy of this pioneering achievement.

The need to relate existing vocabularies for a particular subject is also reflected in studies about comparing and adapting various science-oriented tools. Van Camp analyzes subject code searching in biomedical databases. She discusses the various types of subject codes used in biomedical databases, as they are searchable on the major online services, and compares their search structures and vocabulary. Markham compares classification systems for literature about algae, finding DDC hierarchy conceptually favorable in that it corresponds more closely to botanical systems, but LCC preferable in bringing out algae as a topic in various applied science literatures. His analysis reflects the complementary character of hierarchical and enumerative classification and the role of literary warrant in schedule development.

The article "Toward More Consistent Access to Agricultural Information" describes a meeting on agricultural thesauri held at the World Bank, Washington, D.C., in October 1989, to explore possibilities for improved access to agricultural information through creation of a universal agricultural thesaurus. It would need to be multilingual, meet the needs of all agricultural organizations, be compatible with CAB Thesaurus and AGROVOC (existing international tools), and perhaps support a multilevel structure because of its projected size.

Classification of particular subject literatures is the focus of several studies. In a series of historical studies Bradley (A) investigates the work of pioneer music librarian Oscar G. T. Sonneck, who, when
appointed chief of the Library of Congress music division in 1902, was faced with the
problem of classifying a very large music collection thoroughly enough to be mean-
ingful and still be intelligible to readers. Bradley (B) continues with George Sher-
man Dickinson, who in the 1930s developed an innovative analytic-synthetic classifica-
tion for the Vassar College Music Library, reflecting both the need for alphabetic and classed arrangement of a com-
poser's works.

The Music Library Association sponsored a program session on the radical revision of the 780 Music schedule in the twentieth edition of DDC. In Celebration of Revised 780 (Wursten, A) is a technical report derived from the contents of that session and published by the Music Library Association in 1990. Wursten (B) summarizes the criticisms of the previous music schedules that led to the current phoenix schedule. Chief among these were the inability to distinguish music from musical literature, illogical subject sequences, and a great many fixed-class relationships between independent characteristics, such as form and medium. Sweeney describes the process of revision and reviews the concepts and structures in the revised schedule. These are founded on an analysis of the field, which reveals seven basic fac-
cets and identifies distinct citation orders appropriate to both music and musical lit-
erature. Matthews describes in detail each major section of the new schedule. Important changes are indicated and the main options outlined. The high degree of synthesis employed is illustrated in complex examples.

Efficient adoption of a phoenix schedule can be a daunting task. Thomas reviews in detail the administrative obstacles encoun-
tered in the implementation of the new music schedule in the context of a medium-sized public library. Forrest and Smiraglia report an experiment to assess the effect of the new music schedule on the shelf arrangement of a random sample of books about music. Such factors as the proportion with different class numbers, most populous and fast-growing classes, and the impact of dislocation on brows-
ability were considered. Intershelving was not found to create major disturbances. Furthermore, the potential for greatly enhanced online retrieval was demonstrated in the sample. Wajenberg proposes an innovative system of MARC content des-
ignation, which supports online end-user retrieval to exploit more fully the highly faceted classification of the new music schedule.

Gurevich compares pre-revolutionary and post-revolutionary systems for the per-
iodization of Russian and Soviet history and describes their use in library classification. The Soviet Library-Bibliographic Classification (BBK) follows the Marxist model, while American classifications use the earlier system. Neither approach achieves an adequate degree of objectivity for such a controversial subject as history. Moreover, both fail to integrate the geopolitical structures of the various nations and regions, each with a distinct pattern of development.

Aderibigbe and Udoh, making a case for revision of the classification of African languages, identify the underdevelopment of LCC for sub-Saharan language and liter-
ature. It is little more than an alphabetic list, lacking arrangement by linguistic group or geographic origin or the capacity for expansion, and is found inadequate for use by African research institutions. The authors recommend an extensive expansion predicated on a hierarchy of language groups by origin with a broad-based nota-
tion to accommodate subdivision. Collins describes the effects of computerization requirements on the Bahá’í Classification Scheme in use at the Bahá’í World Centre. Creation of online subject authority rec-
ords with cross-reference to the appropriate classification revealed interesting discrepancies between the subject head-
ings and the classification. Many enhance-
ments were made as a result.

Standard techniques used for particu-
lar specialized settings are reported. Stone looks at subject searching in law library OPACs and details the implications of various online subject retrieval features for the particular problems of this special subject literature. Some are similar to those for general collections, while some are surprising distinctly. Heller describes the
original cataloging provided for audiovisual materials at the New York Chiropractic College media resources library and discusses in detail the local use and adaptation of various standard tools for subject cataloging and classification of audiovisual material in a special subject. She expresses the need to integrate and adapt them extensively.

Two studies have implications for both specialist and interdisciplinary approaches, especially in the humanities and area studies. Hay examines the subject specialist in the academic library with a review of the literature on subject bibliography for American, European, and Third World academic libraries. He finds specialist transcending the functional organization of research libraries, including taking a role in expert subject analysis and classification. Broadus documents the range of subject literatures used by humanities scholars at the National Humanities Center. Library materials requested by research fellows in the humanities were analyzed by LCC for two years. The mean number of subjects requested by each scholar was 26.3. More than half had requested material from all five major subject divisions, suggesting the importance of interdisciplinary subject control.

CONCLUSION

The integration of mainstream American library traditions of subject analysis with modern indexing and classification theory and their adaptation to an online environment are bringing about a revolution in the practice of subject analysis. Although their conceptual framework has been profoundly challenged, the century of accumulated wisdom and service represented by our subject headings and classifications is being incorporated into future developments. The perception of a crisis in subject cataloging can support continued growth through a process of critical inquiry and functional analysis similar to that of fifty years ago.

REFERENCES

9. Ibid., p.64.

BIBLIOGRAPHY


Frost, Carolyn O. “Title Words as Entry Vocabulary to LCSH: Correlation Between Assigned LCSH Terms and Derived Terms from Titles in Bibliographic Records with Implications for Subject Access in Online Catalogs.” *Catalothing & Classification Quarterly* 10, no.1/2:165–79 (1989).


Kreiger, Michael T. “Subject Authority Control on the Dynix System.” *Catalothing &

"LC Quashes Subject Rumors in Letter to ALA's ALCTS; Rumors of Subject Headings' Demise Greatly Exaggerated." Library Journal 115, no.4:115 (Feb. 15, 1990).


Rolland-Thomas, Paule, and Gerard Mercure.
Wilkinson, Catherine L. "Intellectual Level as a Search Enhancement in the Online Environment: Summation and Implications."


Books Aren’t Us? The Year’s Work in Collection Development, 1990

David S. Sullivan

The literature of collection development in 1990 is selectively surveyed. Topics covered include general works on collection development; library materials budgets; serials and the economics of scholarly publishing; collection evaluation; cooperative arrangements; selection, deselection, housing, and preservation of library materials; staffing and organization; and the impact of nonbook formats on collection developers. Collection administration is moving into new partnerships with systems librarians, academic computing specialists, and network planners as the library begins to become an address, not a place.

The director of academic computing on my campus remarked, as of a distant age, that in the 1970s calculators with the power of those now housed on pocket-size bits of plastic were kept chained to desktops. Recalling the chained tomes of monastic libraries, I reflected that it took books about a millennium to make the same transition from carefully guarded rarities to cheap, ubiquitous mass-market commodities. The point of the anecdote, and its pertinence to the question posed in my title, is not the comparative speed with which microprocessors have infiltrated our lives, but the collocation of two images powerfully reminding us that the functional convergence of books and computers as tools for storing, disseminating, and manipulating texts is close at hand; that, though books will long be with us and will long engage most of the attention of collection developers, this convergence will in our lifetimes change not only how we do our work, but what the work is and what the institutional context will be in which we perform it. These are not novel observations, but they are observations that resonated through the literature of collection development in 1990.

The literature itself is spreading into new channels as collection administrators find themselves in the same forums as networking experts, electronic publishers, and computer visionaries. Some of us, indeed, must become collection visionaries if the mission of getting the right source to the right user (with all the implications this entails relating to the organization and preservation of the historic record) is not to pass into other hands.

What is new rarely supplants what is old, at least in libraries, and the traditional concerns and activities of collection development have not gone away. Rather, they continue their own evolution as well as absorb ideas from the emerging culture of

information. At the same time, adverse economic conditions affecting higher education in general have prompted a rebirth of the literature concerning the economics of scholarly publishing (last seen in quantity during the serial boom of the mid-1970s) and brought renewed attention to the problems of predicting and justifying the costs of building library collections. In this article, I will first survey these more traditional areas, adapting slightly and supplementing the useful rubrics devised by Schmidt, and return finally to work that is stretching the definition of what collection development is and does.

This survey is selective by design; like our colleagues in academe, we probably publish too much, to put it bluntly. I have omitted much, in the interest of throwing themes into higher relief, by concentrating on work presenting original results, methods, or observations; new ways of thinking about our field; or important trends. The survey is also largely limited to the U.S. scene, less by design than because collection management and development as a distinct specialization is only beginning to be recognized outside this country. Lastly, most original work in collection development is currently produced in research libraries or library schools. This is ironic in a way, since, as Osburn notes, the literature of collection management grew out of that concerning selection for public libraries. The practices and values of academic-style collection management are widespread in other kinds of libraries (see, e.g., Jacob), but now more needs to be done to evolve distinctive paradigms and procedures suited to those very different settings.

**GENERAL**

The year 1990 saw no major book-length general treatment of collection management and development but witnessed Osburn's thorough and concise review of the methodological and intellectual milestones of our field. As close to an up-to-date history of collection development as we have, it is all the more valuable for its numerous and stimulating suggestions for further research.

An important work that spans the field of collection development for a special area is Scarborough's manual for ethnic collection development. Brown notes that amidst rapid technological change, internal to the system to which we belong, equally profound demographic changes are transforming those we serve. The essays gathered by Scarborough discuss the theoretical, administrative, and practical issues differentiating collection building for ethically diverse clientele from the "standard model," and they provide resource guides to African American, American Indian, Asian/Southeast Asian, and Chicano/Latino collections.

**BUDGET AND FINANCES**

The shock of ever-rising serials prices combined with the crunch in higher-education funding and the attendant concern for accountability and effectiveness have summoned forth a large body of work on budgeting for library collections. Lynden (A) provides a lucid account of the data gathering needed to support budget requests, and the same author (B) describes the budget document Brown's library submits to university administrators: it stresses cost increases, literature growth, and academic program development. Henderson (former vice-president of marketing with Pergamon Press) adds two arguments to strengthen the library's case for ever more dollars: library budgets and materials expenditures are shrinking as a percentage of GNP; published output is rising. To these he joins the dubious assertion that only the "Alexandrian" library is sufficient to maintain the competitiveness of American research. An intriguing—some will find it unsettling—approach to fine-tuning allocation of the book budget is taken by Britten and Webster: circulation analysis by class should be used to make sure that money is not being inappropriately spent on low-use collections. Stankus recommends enlisting science faculty as allies in a battle to capture for library acquisitions more of the indirect costs recovered by university administration. Gregory summarizes her mainly descriptive study of formula funding for libraries in a number of southern states.

Budget methods and measures feature largely in the proceedings of the Confer-
ence on Acquisitions, Budgets, and Collections, held in St. Louis last year. Among noteworthy contributions in the published papers, titled Acquisitions '90, Fahy puts forward a case for establishing common measures for a "publishing universe," the total documentation produced during any one time period for a given discipline's use. He advocates applying these measures as benchmarks for the efficacy of collection building and as guides to budgeting. Emery presents evidence for a statistically significant correlation between acquisitions expenditures and circulation, or, as he puts it, between input and output. Ring reminds us that budgeting for serials "off the top" (that is, prior to making subject allocations) is certain to lead to unbalanced collections, and he rightly discourages budgeters from supposing that there is a correct ratio of serial-to-monographic expenditure. Lowry describes a matrix model for departmental allocation of the material budget using a small number of differentially weighted variables, each normalized as a percentage of the institutionwide total in each category.

Regardless of budget method, knowing what materials cost and getting that knowledge at a bearable price are crucial to collection development officers. Lynden (C) describes the very limited information now available on the cost of academic books and calls for national library associations to create book and serial price indexes by subject for their countries' output. Griebel traces the development of the several cost and price indexes of German books and notes the biases and limitations of each.

Despite this flurry of publication, the literature still lacks descriptions of successful budget models that link expenditure, collection goals, and collection achievements (goals that have been reached) in a rational and clear fashion. In the current environment, this is an urgent desideratum.

SERIALS AND THE ECONOMICS OF SCHOLARLY PUBLICATION

The literature here has moved beyond alternately doleful and outraged recitations of price hikes and now offers substantial analyses of their economic causes, making it possible to imagine remedies for the high cost and volume of scholarly, especially scientific, information.

Likening publishers to farmers fattening cattle on the village green and scholars to industrial polluters, Byrd claims that the situation is a "commons" tragedy: individual rewards (tenure for researchers; profit for publishers) so outweigh each individual's share in the common loss (inability of libraries to purchase all the wanted literature) that market forces will never correct the situation. Libraries compound the problem by attempting to build comprehensive collections (even, I might add, if the collections are access oriented, with fewer copies of each journal acquired and more broadly shared). He doubts that technology in itself will provide a fix, but reconceptualizing the library (as access provider, not archive) or the information industry (commercially, on the model of banks, holding income-producing "deposits" of information, or by retaining control of scholarly publishing within the academy) might.

Hunter reports on current and near-term pricing trends of paper journals (the news isn't good) and discusses issues in the development of new economic models for the delivery of journal articles in electronic form: payment per use; division of roles among primary and secondary publishers, libraries, and networks; the need to find a substitute for the hidden subsidy of advertising. She also makes the important point that the economic issues of scholarly publication are now inextricably intertwined with the technological ones—hence the inclusion in this section of a few more works on electronic publishing to which the Society for Scholarly Publishing devoted its eleventh annual meeting. Strauch (A) raises many of the same issues as Hunter and defines a librarian's utopia in which "[i]nformation—all of it—is free." Utopia indeed. A more sober account of potential for the growth of electronic access to information is given by Downes: in the short term (5-7 years), electronic publication will lead to gains in efficiency but will not contain costs.

Rice develops implications of the theme "from acquisitions to access" in a future scenario of predominantly elec-
tronic publication of scholarly articles: universities will maintain their own databases of local research; commercial publishers and serial vendors will do much of the work to make distant databases transparently accessible; in-depth access will be created at the point of the article's creation; libraries and computing centers will fit together in different ways than they do now; and the archival role of the library will decrease in importance. Arms describes a small-scale experiment in creating such an electronic system for information distribution, the Mercury Electronic Library at Carnegie-Mellon University, and sketches an interesting model for payments across different zones of use of a text: author, publisher, library, user.

**Collection Evaluation and Analysis**

Both the need to provide better accountability to administrators and the sheer shortage of funds and space prompt librarians to look closely at the collections they have already assembled. Though presented to a group of specialized librarians, Richardson's paper is an excellent, concise introduction to this topic as a whole. Discussion of the information process in the scientific community and the function of collection development serves as background to his description of the uses of collection evaluation, practical planning steps, and a variety of rapidly sketched methodologies. In the same volume, Fuseler-McDowell follows up with a discussion of the use of citation-analysis techniques for collection evaluation, especially for the evaluation of periodical collections, which includes a very handy bibliography.

Elzy and Lancaster combine two common approaches to collection evaluation: checking holdings against standard bibliographies, and the reverse, testing to see which titles owned appear in no list (and so might be of low quality). Use of the two methods identifies needed titles and lays the basis for weeding in one process.

Evaluating a corporate reference collection by looking at the needs of key clientele—decision-making executives—O'Connor and Dyer found that the ideal collection does not embody a core of materials held on-site; ownership of items is not an issue; the library relies heavily on referral services; and, in view of the criticality of timely delivery of information, the library can be functionally redefined.* This is not so far from some models of the academic library of the future.

Finally, Baker describes an ingenious method, primarily of interest to librarians in smaller institutions, to use a turnkey automation system and microcomputer software to extract data for collection analysis.

Though attacked persistently and vigorously, the Research Libraries Group (RLG) Conspectus has emerged as the de facto instrument for collection description in the United States and, increasingly, abroad. With its spread, issues that once concerned only RLG, the National Collections Inventory Project (NCIP), and a few others are attracting more attention. Lucas repeats some of the vagaries in level assignment turned up by prior RLG verification studies. He reports on Howard White's simplified method for conducting the needed verification of Conspectus information, using very small, stratified samples ranked by expert opinion according to their suitability for a collection ranked at each of the five Conspectus levels. White's method is being applied to verify Conspectus values used by libraries in the New York group METRO; the project is described by Fedunok.

Matheson describes the generally positive Scottish reaction to a crash program to profile eleven research libraries using the Conspectus and sketches plans for using the information assembled for collaborative projects. Wider European interest is evidenced by Heaney's account of the working group formed by LIBER (Ligues des Bibliothéques Européennes de Recherche) to "Europeanize" the subject breakdown of Conspectus. He echoes Matheson in noting that the most quickly realized benefit of performing Conspectus analysis is deeper knowledge of local collections, and he looks toward the day when major international collaborative ventures can be planned around the knowledge of collection strengths embodied in the Conspectus. Also in the European context, Leonhard sketches national differences in
the organization of research libraries that have affected the impetus toward cooperative collection development, describing the possible uses of Conspectus by German research libraries and reporting on its application in the British Library.

**COOPERATIVE ARRANGEMENTS**

Dowd contributes an important overview of these. Avowing herself an inveterate categorizer, she presents a four-branch typology of cooperative programs: (1) those to extend resources; (2) those to limit cost by dividing collecting responsibility; (3) those to improve clients' access and develop delivery systems; (4) those to reduce storage and maintenance (housing or preservation) costs. She claims the first will succeed if costs are equitably assessed and realistically estimated. Programs of the second type—e.g., the RLG/GEOS geoscience project reported by DeFelice, or the longstanding University of California, Berkeley/Stanford University Latin American cooperative collecting agreements described by Breedlove—have, she feels, not yet demonstrated an achievement in savings when all costs are reckoned in. The third type of program, encouraged by the development of national bibliographic databases and liberalized interlibrary loan procedures, represents to her the most significant and substantial benefits of cooperation. Snyder and Shapiro report on one such program, involving a mix of Online Computer Library Center (OCLC) and RLG libraries, carried out by the eleven members (the Big Ten universities plus the University of Chicago) of the Committee on Institutional Cooperation. National Endowment for the Humanities (NEH) preservation grants represent Dowd's fourth kind of program. She calls for more attention to the national preservation program's directions and objectives now that funding has become available.

The Conspectus' original aim, according to Mosher, was to facilitate local and consortial planning by providing an infrastructure for cooperative efforts. He calls for a new mythology going beyond interinstitutional cooperation, proposing instead the notion of individual collaboration among small communities of bibliographers scattered among different libraries. He encourages us to view librarianship as an enterprise having "culture rather than structure at its base," and, as cooperative collection developers, to evolve mutually desirable interdependencies. He cites the Conoco Study of German and Geology selectors as an example of the formation of such communities of collaboration.

**SELECTION, DESLECTION, HOUSING, AND PRESERVATION**

All these activities (which, with the exception of the last, form the core activities of classical collection development) do the same thing: provide physical access for users who wish to consult an item once it has been identified. Atkinson (A) notes the potential for conflict between collection developers and preservationists. Although both aim to secure access to what he calls the representational ideal (i.e., all that has been written on all relevant subjects), developers select predominantly on judgment of potential use by current clientele, while preservationists use scarce funds to preserve demonstrably low-use materials. The synthesis of which his title speaks can occur because new technologies for preservation (mass storage of texts on film or digital media) give us "the opportunity to achieve a limited, retrospective version of collection development's most cherished goal, the representational ideal." In an important aside, Atkinson notes that this is different from the long-term transmission of the written record that libraries have assisted in up to now. Libraries, as part of a larger machinery of textual validation, have always suppressed many more texts than they have preserved. We can now preserve a far more complete record "of what was thought by the writer, rather than by readers, to be worth retention."

In technology Atkinson sees a way to avoid making what amounts to deselection decisions when items are not preserved, but Broadus (A), in a different context, echoes what I might call the nostalgia for completeness in his anxiety that, having no sure way of judging future readers' wants, we are on shaky ground at best when we weed our collections. He cites himself (B) to the effect that humanities scholars are
likely to use materials from all branches of knowledge, not from their narrow specializations. Woe to the weeder who works in ignorance of this.

Hard-pressed science librarians and others facing either shrinking budgets or trimming stacks have to evolve tough-minded ways of viewing their collections. A suite of articles proposes methods for trimming science-periodical collections. Miller and O'Neill review some earlier attempts to quantify the deselection process, and they propose a formula incorporating the opinion of local experts on the quality of journals. They admit that the title-by-title ranking involved makes their method cumbersome for libraries with large serial lists. Hunt reports a similar formula that calculates an institutional cost ratio for titles, based on factors such as costs for subscription, interlibrary loan, and staffing, in addition to local use. Review of titles with high cost ratios led to cancellations that cut subscription costs 46 percent and foregone use by only 8 percent. Wible combines citation studies based on local faculty research, swept use, and Institute for Scientific Information (ISI) impact factor to arrive at serials cancellations. His results show that the labor-intensive gathering of local data was necessary to avoid serious deselection errors that would have resulted from reliance on ISI data alone. Zipf and Kjaer propose an intermediate zone of journals (constituting, according to their hypothesis, the bulk of titles) that are neither peripheral nor part of the core. They found that, for these journals, the major ownership functions—current awareness and article retrieval—could be fulfilled more cost-effectively by providing tables of contents to local users and relying on a vendor to supply only those articles that are wanted.

A whole issue of Reference Librarian, edited by Pierce, is devoted to the special problems of weeding and maintaining reference collections; many of the essays are of broader interest and implications. Truett surveyed fourteen libraries, academic and public, and found a low level of basic knowledge concerning the collections. Few institutions know even the size of their collection, use studies are uncommon, and libraries tend not to have written policies for collection review. Biggs summarizes her earlier research, which indicated that most of a large sample of academic libraries have never performed use surveys of the reference collection. She discusses various techniques for use studies and recommends that, on their basis, librarians can create reference collections that are small enough to be "well known and thoroughly exploited." Engeldinger, citing Biggs' earlier study, conducted a five-year use study at one institution and found that the collection could be trimmed by one-third by setting the minimum level of use for retention at once in five years.

Much of the literature on selection is subject specific and will be passed over here—specialists already know of new bibliographies and the like. Some contributions of more general interest include Hannaford's, which shows that the literature on faculty versus librarian selection in college libraries is long on assertion and short on proof. Strauch (B) covers the same ground, concluding that librarians should be responsible for selection, since they are accountable for the funds spent, but until librarians define collection goals, no judgments can be reached on what constitutes effective selection. Johnston and Weckert disappoint those who may have been misled by the article's title into thinking that an expert system for selection advice is available, but their (nonworking) model does suggest a framework for selection decision making that is of some interest. Kovacs applies a model borrowed from theories of administrative behavior to describe selection decision making in case studies drawn from libraries of all kinds. Unfortunately, the model obscures rather than illuminates the differences in practice in the various settings.

**Staffing and Organization**

A useful complement to Osburn's historical survey of the literature of collection development in general is Hay's review of subject specialists in academic libraries.
Starting with the language and area specialists called for as part of the nation's defense program during World War II and continuing to include the specialists hired to cover broad academic fields, Hay charts the successes of, and resistances to, the subject specialist model in American, British, German, and Third World libraries. He concludes that shrinking resources make this model more, rather than less, appealing.

One of the major resistances to subject specialization in America, as in England, has been that it crosses the traditional functional division of responsibilities; Schad addresses this issue, noting that collection development integrates work and staff across functional boundaries. As a result, it has not yet found its organizational niche: dual-responsibility selectors often fail to balance their work between collection development and other activities, and they feel unsupported by their organizations. To create a more effective organizational context for these selectors, Schad advocates the use of matrix management, in which the traditional hierarchy is overlaid by explicit lateral lines of authority; he offers a six-point plan for action to overcome the inherent inefficiencies of matrix organization.

Bullard builds on Schad: selectors naturally form anarchic tribes, ranging laterally across the closely watched frontiers of functional divisions, and, just as naturally, are therefore regarded as internal enemies by the guardians of hierarchy. He calls on library administrators to back up their roving selectors when "hierarchical retentives" find their territory invaded, or even colonized.

More concretely, Jasper supplies good lists of expectations that need to be met by managers in order for dual-assignment selectors to perform both selection and reference functions well. Key recommendations are mechanizing as much of the selection process as possible; giving selectors autonomy and demanding from them accountability; and providing centralized leadership for collection development.

Probably no organizational structure can guard effectively against the failure to acquire nondisciplinary or interdiscipli-

## New Directions

At times, there do seem to be new things under the sun. In opening this essay, I spoke of a functional convergence being at hand, of books and computers (used here as shorthand for microprocessors, storage devices, and communication networks) as technologies for the storage and manipulation of texts. When this occurs and is widespread, a new system for the storage, distribution, and use of scholarly resources will have been born. Precisely what it will be like is still unclear, but collection developers will be working as part of it, and its broad outlines are beginning to be discernible. They were the subject of the Institute on Collection Development for the Electronic Library organized by Sam Demas and Jan Olsen.

The conference was important as much for the mix of participants as for what they said. Corporate vendors, library directors, collection developers (including, significantly, preservationists), copyright experts, and network planners discussed strategies for a reconceptualization of the position of collection development in a new environment of scholarly communication and production. Because the presentations have already been summarized by Guappone, Shapiro, and Bullard, and analyzed in masterful fashion by Hayes, there is no need to do so here. Instead, my focus will be to contrast two visions, partially disjunct, partially converging—one that of a collection administrator; the other, of a computer scientist.

Atkinson (B) differentiates information in electronic form from that in printed books, above all because the former is mutable; only the latter inherently possesses the stability that he believes is necessary for communication to occur. He
stresses the communication across time that libraries have specialized in, that is, preservation of the historical record. Definition of the record is "one of the library's primary social and epistemological functions" and is the core rationale for collection management. Amid much talk of access as a substitute for purchase, Atkinson warns strongly that libraries must not assume the role of merely switching point, but must rather fulfill their traditional role of stabilizing a selected body of information. (Glicksman also insists on the library's role in preserving information in an environment of flux; Brown expresses similar concerns for the capture and cataloging of electronic information flows, avoiding what Hayes calls the "loss of trace of intellectual development."). Atkinson describes three central functions for the library in the online setting. First is mediation, the identification of needed information. Second is what he calls primary record definition, which corresponds to traditional collection development: the creation of a stable and carefully selected database of online publications in a sort of safe haven from the world of electronic ephemera. Last is secondary record definition. This is a new function of the library, like Rice, Atkinson sees the library as the vehicle to upload new contributions to a shared database, in effect replacing commercial publishers.

Atkinson, then, sees textual stability and selectivity as the primary concern of administrators of electronic collections and text mutability as the primary danger to the coherence of the historical record. Nelson proposes an alternate electronification of literature, exploiting the possibilities for interconnection and recombination among texts in what he calls a docuverse. Rather than impose a second tier of document abstraction on top of the texts themselves, as has traditionally been done by libraries, he suggests returning to a system in which each text is a voice in unmediated dialogue with many others. References back and forth between documents create the navigational tools for readers and writers. Selectivity and the definition of the record plays a far less important role or, rather, is generated by the users themselves. Atkinson, however, would probably be in sympathy with Nelson's objective: "a coherent, stable world for a unified, lasting literature . . . a reasonably static landscape that can be seen through any of the new, dynamic electronic windows."

In concluding, let me remark that the underlying issues here are not about technologies of communicating and recording knowledge, but about practices and values. The enormous base of knowledge recorded in books is not going to be converted to electronic format anytime soon, and even if it were, books would be the technology of choice for many uses and users. Books are us.

The introduction of the technology of writing in Greece may serve as a comparison for our present state. Four centuries after the Greeks learned to write, oral testimony was needed to confirm written contracts in legal disputes. Writing simply did not seem to them superior to memory and speech as a way of recording the past. And Plato was not alone among his contemporaries when, in a fable, he had the Egyptian king Thamus remark to the inventor of letters that his invention, far from being an elixir of memory, would "produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory."

There is no reason that the power of computers may not be harnessed to meet the objectives of collection administration as articulated by Atkinson, and it will surely be one of the main tasks of collection development to lend our expertise to the design and maintenance of electronic collections of record. If we succeed in this task, which can only happen if there is broad social consensus on its value, we haven't any reason to side with Plato and the pessimists and think that our collective obliviousness is doomed to be multiplied as our collections migrate to other media.

References and Notes


BIBLIOGRAPHY

DeFelice, Barbara. “Cooperative Collection Development and Preservation Projects in


Osburn, Charles B. "Collection Development and Management." In Academic Libraries:
Wible, Joseph G. “Comparative Analysis of Citation Studies, Swept Use, and ISI’s Impact Factors as Tools for Journal Deselection.” In Burkhart and Burkhart, eds., IAMSLIC at a Crossroads, p.109–16.
ment of mass and single-item deacidification systems and experimental techniques for coating or impregnating brittle paper to make it again usable.

Sparks discusses relevant technical and logistical factors an institution should apply when evaluating mass deacidification systems for contracting services. While the technical considerations outlined could be applied impartially to any system, the level of independent testing required would be beyond the resources of any single institution except LC.

McCready (D) presents excerpts from the LC request for proposals for deacidification services. She reports that independent testing of the efficacy of each deacidification system will be accomplished as part of the evaluation of each system by LC, saving the rest of the nation expense and effort. According to the article, the LC request for proposals confirms that test data will be released or published.

While mass deacidification vendors claim to slow the embrittlement of large numbers of books and documents, conservators treat selected items on an individual basis, using aqueous or nonaqueous baths. Bredereck, Haberditzl, and Blüher; Lienard and van Damme (A); and Hindhaugh evaluate various methods of deacidification and paper washing to neutralize and buffer book papers against future acid attack, and they compare efficacy and cost-effectiveness of the methods. Lienard and van Damme (B) summarize the effects of washing paper with tap water and solutions of alcohol and water. Their results confirm the value of washing prior to aqueous deacidification (current the practice of many conservators) because washing removes substantial amounts of deteriorated size and other acidic products, causes cellulose fibers to swell, and increases the rate of absorption of alkaline salts during deacidification.

Despite substantial work in deacidification, many experts urge further research into the long-term effects of the process on paper. While single-item deacidification is still considered an appropriate treatment on occasion, it is being investigated for its long-term efficacy. Deacidification has been widely practiced since the 1970s, but because of the difficulty of predicting aging properties of paper, less is known about its benefits than is needed, especially in polluted storage environments. Hindhaugh and Daniel, Flieder, and Leclerc document research. Herrera and Pavelka record observations of the effect of natural aging conditions on paper artifacts. Pavelka outlines a system for observing over time the condition of samples of paper deacidified or bleached and stored in different ways.

The results of Daniel, Flieder, and Leclerc’s research indicate different types of paper (such as book paper, newsprint, and 100 percent rag paper) respond differently to deacidification when subjected to atmospheric pollutants. Test results show that after deacidification by various methods and exposure to pollutants, acidic book papers demonstrate greater levels of oxidation and poorer strength characteristics (folding endurance, burst strength) than the control group, but no explanation for this surprising result is given. With large sums of money and energy being devoted to deacidification systems, the potential importance of these findings can hardly be overestimated.

Hindhaugh’s pH survey finds that acids are more concentrated at the head and fore and spine edges of books but that acids penetrate more deeply from the head down. He posits that absorption of pollutants from the environment accounts for more of this acid than do manufacturing residues.

Two articles discuss the use of synthetic polymers to restore strength to embrittled paper items. In Vodopivec and Cernic-Letmar’s summary, methylcellulose performed best of the polymers tested to consolidate paper, but the authors consider their research inconclusive. A problem with their study is that they did not include all current methods in their investigation. Humphrey contributes a paper concerning batch methods of application of Parylene to brittle paper. Although in Europe at least one paper-strengthening method is operating on a fairly large scale (Bredereck, Haberditzl, and Blüher), in the
United States paper strengthening is still considered an experimental technology.

**Preservation Replacement**

With the size of the budgets devoted to this work nationally, the number of articles about projects and issues surrounding the replacement of embrittled texts with microforms and, more recently, preservation photocopies, is no surprise. Two articles provide much-needed analyses of components of the complex preservation replacement work flow, specifically searching for existing copies (DeCandido) and choice of microfilm vendors (Lockhart and Swartzell).

DeCandido presents a formula for determining when searching for replacements is cost-effective and notes two possible reasons to omit searching from the preservation replacement work flow. The first reason concerns single-subject replacement projects in which sample searching identifies few hits, probably because little previous work has been done in that subject. In this case the number of titles found does not justify the staff time to find them. The second reason is most relevant to projects for which most or all replacements would be from a single substandard source—for example, an underdeveloped country. In this case, rarely mentioned publicly, it might be preferable to make redundant reproductions because, DeCandido asserts, the quality or completeness of the extant reproduction is less than what can be produced from one’s own original.

Lockhart and Swartzell demonstrate that price should not be the only criterion for selection of a microfilm service bureau. Other factors include “experience in filming bound books, turnaround time on shipments, ability to meet stated deadlines, turnaround time on corrections, shipping, and communication (both written and oral) which cannot be underestimated [sic] in the comparison and evaluation of vendors.”

Oakley provides a comprehensive review of copyright legislation affecting replacement of library-owned titles. For the current complex system of permissions, he outlines a number of possible solutions for simplifying and standardizing the obtaining of permission from copyright owners. Factors contributing to the complexity of determining and conforming to relevant legislation include potential withdrawal of originals after reformattting and choice of medium (including electronic database) used for the replacement.

Fortunately for most preservation programs, as Oakley states, if the program is simply replacing irreparably deteriorated items with copies, “the statutory obstacles will be relatively low. If, on the other hand, the goal is to build an online datafile of current material . . . there will be another set of considerations and the barriers will be significant.” It is shown that traditional one-for-one preservation replacement does not pose serious copyright problems; only when libraries begin to compete with publishers in the national or international distribution of information online will we risk legal complaint. Articles by Bourke, Holley, and Gwinn take historical views of the progress and outlook for major microfilming efforts.

**Newer Reformatting Technologies**

For several years, since the popularization of personal computers, automated public catalogs in libraries, and demonstration projects for digital and optical storage in various formats, the preservation community has considered itself poised to adopt some computer-based technology to succeed (and presumably to improve upon) microforms to preserve utterly deteriorated texts. This year papers sponsored by the Commission on Preservation and Access explore possibilities.

Lynn and the Technology Assessment Advisory Committee of the Commission have assembled a useful glossary of terms the committee feels are applicable to preservation and access of library materials. The glossary is not a value-neutral work; indeed, it “is highly selective (and even highly subjective) in its choice of terms to include, and very much slanted towards the use and impact of digital technologies.” As such, it promotes the committee’s goals in encouraging the nation’s libraries to convert collections to digital
technology. The report begs the questions raised when the original format of library materials is such that replacements will not serve for research, because it is oriented toward "the inexorable pressure caused by the exponential growth of recorded knowledge, and the ever-increasing complexity, costs, and other problems associated with the storage and distribution of, and access to, such information." Another report published by the Commission on Preservation and Access (Lesk) compares microform reproduction with digital technologies qualitatively. Lesk discusses the benefits and costs of microform and eight digital technologies. As a conclusion, Lesk reafirms the conclusion of Subcommittee C of the National Archives and Records Service Committee on Preservation—digital technologies sufficiently cheap and sufficiently standardized for large-scale use in preservation programs are not yet available. Microfilm, which may be inexpensively transferred to a digital medium when the latter technology is more readily available, is still the recommended replacement medium.

**Management of Preservation Programs**

One is gratified to find two articles by library directors urging their colleagues to implement plans for preserving their collections, both on moral and practical grounds. Schmude outlines five perceptions that might be inhibiting the pace of preservation program establishment:

1. the magnitude of its impact on library operations;
2. the cost of a new program;
3. confusion over what a preservation program does (is it rare book conservation or massive microfilming?);
4. potential impact on the library's goals of public service (do we need to sequester our collections from use to preserve them?); and
5. the difficulty of appropriate levels of cooperation necessitated by cooperative preservation projects.

He concludes that "acceptance of responsibilities on the part of individual institutions within a context of goals and objectives that transcend institutions" is needed before libraries will be willing to act. In this respect Schmude agrees with Banks that moral suasion regarding liability for the protection of cultural property might be a more compelling argument than the practical necessity of making collections available for use.

Stevens voices a similar plaint. He says, "basic preservation programs have, for no good reason, yet to become a reality in most libraries," and he points a finger at libraries for not incorporating basic preservation procedures and policies into their ongoing programs. With some justification Stevens claims that many components of preservation programs are already in place in most libraries—but they must upgrade the skills of existing staff in collections maintenance and not wait for the national program to solve all problems. The theme of moral responsibility for preservation of collections reappears in Stevens' editorial under the headings "The Obligations of Libraries" and "The Obligations of Librarians." Although it is a powerful argument, it has not yet sufficed to inspire most libraries into paying more than lip service to maintenance of their collections, even those unique to their locale.

Typical of the Association of Research Libraries SPEC kits (but with better print quality than some), *Preservation Organization and Staffing* (SPEC Kit 160) is a collection of in-house documents from library preservation programs, including their organizational structures, long-range preservation plans, and job descriptions of such preservation positions as program head (preservation librarian), grants manager, book-repair technician, bindery-preparation clerk, and library conservator. Even more revealing than these are the six preservation plans from academic libraries that document and prioritize existing and recommended program components. In them can be seen various strategies of persuasion and reasoning employed to justify creation and funding of full-scale preservation programs and to guide preservation activities according to the goals of the institution.

Atkinson offers his most recent analysis of the problems of selecting materials for major microfilming projects. In this article
Atkinson assumes that the scope of preservation programs is coterminous with efforts to replace millions of acidic or brittle volumes in the nation's libraries and contends that wholesale, subject-based, cooperative preservation replacement grant projects are best able to preserve important research materials for future research. The two factors of poor condition and high use should not be used to select items for preservation replacement, Atkinson appears to reason, because the least-used items will never be attended to, though they very well may be of the most interest to future scholars. The basis for this position might be the assumption that less-damaged, unused, brittle volumes whose replacement is deferred will be lost. Evidence supporting this widely held assumption does not appear in the literature, however.

**Education for Preservation Professionals**

With the announced closing of the Columbia University School of Library Service, and the unknown future of its conservation education programs, the nation is braced for a severe setback in the education of preservation professionals. Nevertheless, the demand for librarians and conservators trained in library preservation theory and practice grows, influenced perhaps by the need to husband existing collection resources because of shrinking budgets for new materials. There might be also an element of tenderness to the young field of preservation (Hazen argues so) that could make librarians feel they are keeping up with the times if they so much as make a part-time assignment of the work.

A committee of library administrators, preservation experts, and library school educators, sponsored by the Commission on Preservation and Access, has issued a report concerning the need for training part- and full-time preservation librarians and for implementing basic preservation courses for all library school students. The eponymous Wye Institute generated the ideas published as *Preservation Education Institute Final Report* (Marcum), an effort to develop a consensus on a national approach to preservation education. Among the report's recommendations are the following: that the American Library Association Committee on Accreditation of Library Schools require that at least three hours of the core curriculum be devoted to preservation, that preservation be a component of other standard library school courses, and that in-depth, specialty programs like the Columbia programs be encouraged. Retraining of working librarians in the specialty of preservation was a recognized need, and the task force was encouraged to develop in-service training models, such as the Berkeley Preservation Implementation Project and the Solinet project, to address this need. Harris (A-C), currently director of the Columbia conservation education programs, outlines in several articles the nature of the Columbia programs and contrasts that approach with the alternatives: workshops, seminars, self-training.

**Library Binding**

This year saw the publication of the most important educational work on the techniques of library binding since Maurice Tauber's *Library Binding Manual* (1972). Merrill-Oldham and Parisi prepared *Guide to the Library Binding Institute Standard for Library Binding*, a compendium of the best current thinking about what makes a good library binding and a careful discussion of those issues still being debated, such as the merits and drawbacks of rounding and backing and adhesive binding. The guide explains and illustrates these technical points in a way accessible to those not necessarily sophisticated in library binding technology. Paragraphs of the guide correspond numerically to those of the *Library Binding Institute Standard for Library Binding* (8th edition), elaborating on the language of the standard.

The Library Binding Institute (LBI) and the Library of Congress National Preservation Program Office jointly produced a video tour of a typical library bindery: *Library Binding: A Shared Responsibility, A Collaborative Effort* (Vogt). This videotape takes the viewer through the binding process for several types of volumes—periodicals, paperbacks, and damaged books—and explains and demonstrates LBI-approved binding techniques.
STATE, NATIONAL, AND INTERNATIONAL PROGRAMS

A positive development in library preservation is increased attention to preservation at the state level, nationally and internationally. Action in the states, whether directed from state libraries or from the ground up at the regional level, can be seen in several articles. Gleaves (A–C), Butler and Davis, Lowell, McColgin (B), Morris, and McCrady (F) report on state or regional projects, from disaster-response networks to new legislation mandating permanent paper for state documents. News items about developing statewide efforts are routinely covered by Abbey Newsletter and Conservation Administration News.

At the national level, the biggest news may be the passage of joint resolutions in the House and Senate leading to Public Law 101–423 requiring the use of permanent paper for certain government documents.

Articles on the international front include the activities of the International Federation of Library Associations and Institutions as well as reports from individual library preservation programs abroad. Examples of the latter are Badu, Pacey, and Kastaly.

GENERAL TOPICS

Many other articles and news items cover a variety of topics within the field of preservation. In this field, in which so much information is transmitted orally, over electronic mail, or hidden in grant proposals, the publication of the first major monograph devoted exclusively to the history of the preservation of library collections is truly noteworthy. Higginbotham’s Our Past Preserved: A History of American Library Preservation, 1876–1910 takes a scholarly approach, tracing the field from the beginnings of the American Library Association (and the professionalization of librarians), when library economy dictated careful management of collections and resources, nearly up to World War I. So many of our current problems and solutions were foreshadowed by Victorian librarians that this volume presents a novel view of our own work. It sheds light on some binding, maintenance, and repair practices with which we still contend.

More coordinated attention to preservation problems by college libraries is furnished by a new column in College & Research Library News, called “Preservation News,” edited by Brown. For the college library audience, the column recap news and events apparently gleaned (at least in part) from the preservation press and news releases.

CONCLUSION

Only a few of the publications cited above describe the world of library preservation as many of its practitioners know it: preservation administrators charged with keeping collections available for use in whatever form is most appropriate for the institution, at costs that are commensurate with resources, juggling competing collection needs and values.

More than ten years after the establishment of the Preservation of Library Materials Section, the field of preservation is still debating fundamental issues. A balanced picture of library preservation exists in the literature as a minority view, if at all. The question remains: Why does such a fragmented view of the field prevail?

One reason might be the lack of basic research supporting or contradicting our operating assumptions. Another might be that the little research and development that is undertaken goes largely unnoticed. Perhaps we do not question our own assumptions enough. It appears that, like the adolescent, parts of the field are almost grown, while others are still maturing. This year’s output reflects a profession where fundamental operating assumptions are not yet agreed upon and basic research is not complete—a profession still embroiled in an adolescent struggle for identity and direction.

REFERENCES AND NOTES

3. Paul N. Banks, “Preservation, Library Collections, and the Concept of Cultural
4. Ibid., p.106.
8. Ibid., p.7.
13. Ibid., p.5.
17. The Preservation of Library Materials Section (PLMS) was established in 1980 as a section within the Resources and Technical Services Division, now the Association for Library Collections & Technical Services, a division of the American Library Association.

BIBLIOGRAPHY

deCesare, Kymron B. J. “Safe Nontoxic Pest


Gracy, David B., II. "Between Muffins and Mercury . . . : The Elusive Definition of 'Preservation.' " New Library Scene 9, no. 6:1, 5-7 (Dec. 1990).


LRTS • 35(3) • More Than Ten Years After


Vodopivec, Jedert, and Meta Cernic-Letnar. “Applying Synthetic Polymers to Conserve


The Reproduction of Library Materials in 1990

Thomas A. Bourke

The reproduction of library materials literature of 1990 is reviewed. Issues include the activities of the Reproduction of Library Materials Section (RLMS), bibliographic control, copyright, electronic imaging, microforms in libraries, micrographics equipment, micropublishing, photocopiers and photocopying, preservation microfilming, standards, and technical production of microforms.

Last year's review article on the reproduction of library materials aptly pointed out that establishing the boundaries for a survey relevant to the reproduction of library materials has become an increasingly difficult task.1 Traditional practices for the reproduction of library materials, such as photocopying and preservation microfilming, are challenged anew by those who advocate the necessity of original documents for scholarly research.2

Preservation microfilming is being carried on to a greater extent than ever before but receiving more criticism from those who favor electronic imaging.3 In addition, preservation photocopying and deacidification are increasingly being touted as alternatives to preservation microfilming and perhaps even to electronic imaging. Differences of opinion surround not just technical issues but also criteria for selection of library materials for preservation microfilming, preservation photocopying, electronic imaging, and physical conservation. Some controversy has arisen concerning guidelines from the National Endowment for the Humanities (NEH) that stipulate that NEH funds be used only for single-copy preservation microfilming. Support is growing for a comprehensive approach to preservation programs. This would mean that preservation measures such as repair, deacidification, rebinding, replacement, and preservation photocopying also should be funded as alternatives and complements to preservation microfilming. This controversy is sometimes couched in terms of a national approach and a local approach. The national approach favors using preservation microfilming, whereby an item is "republished" and made widely available upon demand either on interlibrary loan or by generating an additional service copy from either the camera or printing master negative. The local approach favors physical restoration and retention, whereby originals are preserved in local repositories. This might yield an original more suitable for interlibrary loan, but it does not create a reproduction made directly from the original that might be used to generate additional copies without rehandling the original.

The debate continues to rage over selection criteria for preservation microfilming. Strategies advocated include the clean sweep of all items in a subject collection, condition at the shelf based on the degree of embrittlement, and condition

THOMAS A. BOURKE is Chief, Microforms Division, New York Public Library. Invited paper received and accepted for publication March 22, 1991.
and use based on embrittlement and actual or anticipated use. This latter strategy of selection, advocated most strongly by Barclay Ogden, University of California, Berkeley, aims at making immediate maximum use of available funds for preserving material in imminent danger of irreparable loss while awaiting the arrival of affordable and practical newer technologies, such as mass deacidification and electronic storage.

An article appearing in late 1989, shortly after the release of the new American National Standards Institute (ANSI) standards for silver, vesicular, and diazo film, summarized technical issues such as comparative image stability, technical compatibility of micrographic and electronic imaging media, and economic factors surrounding both preservation microfilming and electronic imaging. Many of the issues raised in this article were discussed in the literature of 1990.

REPRODUCTION OF LIBRARY MATERIALS SECTION (RLMS) ACTIVITIES

The chair prepared the 1989–90 annual report of the Reproduction of Library Materials Section (Borck). RLMS and the Cataloging and Classification Section (CCS) cosponsored a preconference, “Bibliographic Control of Microforms,” at the 1990 annual conference of the American Library Association (ALA), held in Chicago. RLMS and other participants prepared a preconference report for the 1990 Association for Library Collections & Technical Services (ALCTS) president’s program, entitled “Preservation, the Common Ground.” Planning continued for the 1991 Atlanta Annual Conference, where RLMS will sponsor the program “Managing Library Photocopying in a Digital Age.”

BIBLIOGRAPHIC CONTROL

Several important issues were discussed at the 1990 “Bibliographic Control of Microforms” preconference. Topics included full- versus minimal-level cataloging of microforms, and the possibility that full-level cataloging might divert money from increased preservation efforts, and also the two-tiered multiple-versions approach to describing different physical manifestations of the same item using the USMARC Format for Holdings Data. By this approach the description of the original appears in the base record, while subsidiary records contain only information that varies from this record. A full report on the preconference prepared by Robert P. Holley and Jill Parchuck was scheduled to appear in the first 1991 issue of Microform Review. A brief report by Holley (A) has already been published.

The Research Libraries Group (RLG) has implemented a change to the USMARC Format for Bibliographic Data field 533 (Reproduction Note) for records indicating microfilmed serials or monographic sets or series. This is the addition of subfield m, which should be used to describe the dates of publication or sequential designation of issues reproduced. RLG began the loading of bibliographic records from the National Register of Microform Masters (NRMM) into the Research Libraries Information Network (RLIN) bibliographic database.

The Association of Research Libraries (ARL) in cooperation with the Library of Congress (LC) is administering the conversion of approximately 460,000 bibliographic records for monographs in the NRMM into a machine-readable format master file. ARL received the necessary funding from the Andrew W. Mellon Foundation. ARL is currently using the services of the Online Computer Library Center (OCLC) to produce the records. OCLC began production in June 1990. Over the first seven months conversion of records was increased gradually. By the end of January 1991, OCLC had converted 32,585 records, and it plans to convert another 200,000 by the end of 1991. Approximately 61,400 records from an initial conversion by the Computer Company between 1987 and 1989 are also available. The goal is to complete the conversion of the NRMM monographic records by the end of 1992.

The OCLC Preservation Task Force has developed guidelines for recording preservation data in OCLC’s Online Union Catalog (OLUC). This facilitates the avoidance of duplication of effort for those preservation projects funded by the NEH, whose guidelines stipulate that such pres-
The reproduction of library materials in 1990

Libraries that hold specific items should be able to produce bibliographic records for newspapers microfilmed as part of the United States Newspaper Program continue to be entered into OCLC's database. Holley has prepared an updated report on this program. Vitelio has described progress on the European Register of Microfilm Masters. RLG and Chadwyck-Healey finalized their deal to have Chadwyck-Healey issue a CD-ROM version of the RLG database of preservation master negatives created over the past eight years by RLG's collaborative preservation efforts. This new tool is entitled RLIN Preservation Masterfile. The first edition of the Guide to Microforms in Print was issued by its new publisher, K. G. Saur Verlag, a German publishing concern and a subsidiary of Bowker.

The Commission on Preservation and Access awarded a contract to Hazen, Harvard College Library, to conduct a study on the status of the production and bibliographic control of Latin American microforms in the United States. Thomas has prepared an account of a project to create a local microform database at the New York Public Library. An account of a similar project at Texas A&M also has been prepared (Alexander and Page, B). Hirons reported on serial microform cataloging at LC. Patterson (A) has expounded the public-service perspective on the need for better bibliographic control over microforms.

Electronic Imaging

The Commission on Preservation and Access, Xerox, and Cornell University are collaborating on a pilot project to test the recording of brittle books in digital form and reproduce high-quality copies on demand. The project will result in the exploration of the technical feasibility and cost-effectiveness of the process, the criteria for selecting material, and methods of recording and accessing the material. The commission has also issued a report comparing digital imaging and preservation microfilming (Lesk). The Commission on Preservation and Access contracted with Yale University in November 1990 for a three-month study to explore the feasibility of a major, multiyear project to convert microfilmed texts to digital images and to provide access to the converted information. A new still-camera and computer to record and preserve archival materials were described (Whitaker).

A survey on electronic and optical storage technology appeared (Saffady, B). LC proceeded with work on creating electronic copies of its collections of photographs, manuscripts, music, motion pictures, books, and sound recordings ("American Memory Project"). The Perseus Project is an ongoing attempt to amass a large hypermedia database of materials pertaining to classical Greece. It will contain Greek texts and translations, a Liddell-Scott Lexicon, color images of archaeological sites, and topographical maps (Crane, Heath). Full-text religious texts on CD-ROM were examined (Stover), as were cartographic materials (Armento, Littlejohn, and Parker) and multimedia (Desmarais). A report on a project at the Virginia State Library and Archives to digitize material previously reproduced on photo-stats appeared (Harrington and Braunschweig). Several articles examined the relationship between preservation microfilming and electronic imaging, including the use of microforms as an input device for digital storage (Bourke, A; Breuer; Broadhurst; Burger; Cady; Diets; "Digital Images"; Landau; Lesk; Mims; Rouyer; Saffady, A; Ubico; and Urrows and Urrows). Applications of electronic imag-

Copyright

The copyright implications of large-scale preservation programs raise specific concerns and issues of copyright compliance arising both from massive reformatting and document delivery. These have been examined in a study issued by the Commission on Preservation and Access (Oakley).
ing for preservation, which were discussed at the aforementioned ALCTS president’s program, were summarized by Watson. A clarion call for the use of electronic imaging in lieu of preservation microfilming was sounded (Smith, B). Market acceptance of CD-ROM was examined (Nelson, A, B). A report appeared on implementing technologies for optical card, an electronic-imaging storage medium similar to sheet microfiche (Cory).

A collaborative pilot project to use satellite transmission of graphic images between LC and the Avery Architecture Library at Columbia University in New York City is being underwritten by GTE. This involves the use of lossless compression algorithm techniques to achieve maximum image fidelity. A similar project with the Getty Art History Information Program, Santa Monica, California, is also being underwritten by GTE. An imaging system at Getty has been described (Ester).

The Association for Information and Image Management (AIIM) issued a new technical report on the role of facsimile in electronic imaging (Association for Information and Image Management, B). AIIM also published a monograph on telefacsimile (Jordahl). A description of Ohio State University’s network fax project appeared (Kalal).

**Microforms in Libraries**

This year’s literature included studies on the use of microforms in libraries (Holloway and Sutton), microform circulation (Alexander and Page, A), the acceptance of microfiche by students (Gabriel and Flesner), the use levels of microforms in libraries (“College Libraries Committee,” “Concept of a Central Collection,” and “Idea of a Central Depository”), and bibliographic control to increase access and use (Alexander and Page, B; Patterson, A; and Thomas), microform conversion (Gagne), reprint characteristics of vesicular and diazo microforms (“Reprint Characteristics”), and microfilm cleaning (Sleep).

Art students developed a wish list for futuristic microform image retrieval equipment (“Art Center Students”). Three scholars gave their views on the research value of large manuscript collections in microform (Hill, Ilardi, and Stoller).

Interest continued in combating the problem of blemishes on silver-halide microfilm, both the well-known redox blemishes, a sort of microforms measles appearing as minute reddish rings caused by reduction oxidation of the silver in images created on the film, and silverying, or mirroring, where the phenomenon appears as solid patches or lines. A well-publicized case of the latter at the University of British Columbia was reported to RLMS in 1988. Wassell reported on efforts in Illinois to combat oxidation problems. A cautionary comment regarding the Illinois approach was published by the Image Permanence Institute, which has been experimenting with solutions to this problem (Reilly).

Two articles compared microforms and electronic-imaging media in libraries (Cady, Rouyer). A report on the electronic text service at Columbia University appeared (Lowry). Image stability of various electronic-imaging media was discussed frequently (Novick, Ranade, “RLG Connects,” “Standards Summit”). The dilemma of acquiring, maintaining, and reproducing a permanent textual record in an online environment was discussed from the collection development perspective (Atkinson, B). The new edition of the Library Association’s text on nonbook materials in libraries appeared (Fothergill and Butchart).

**Micrographics Equipment**

A new motorized-roll microfilm reader was introduced. The Library Researcher Gideon 1000, manufactured by Microimage Technology, Inc., of Schaumburg, Illinois, has a continuous zoom lens giving 15x–24x magnification.

Research Publications announced that it had been authorized by the U.S. Patent and Trademark Office to add dual-level blipping to selected patent products it supplies on microfilm. These blip marks will appear on the leading edges of each patent in accordance with ANSI/AIIM MS8-1988 (Image Mark (Blip) Used in Image Mark Retrieval Systems) and allow the automatic retrieval and printing of an entire referenced patent.
One state-of-the-art computer-controlled Hermann and Kraemer 16/35-millimeter microfilm camera is in operation at the Micrographic Preservation Service (MAPS, formerly the Mid-Atlantic Preservation Service), and six more are being ordered. It is likely that this camera will eventually replace the classic Kodak MRD-2, which is no longer manufactured. MAPS began to prepare specifications for a special composing-reducing camera capable of digitizing 35-millimeter microfilm, producing film in different formats, copying film to paper, and creating CD-ROM products.

MICROPUBLISHING

A noteworthy event was the publication of the autobiography of Eugene B. Power, the founder of University Microfilms International back in 1938 (Power). Power was a pioneer in scholarly commercial micropublishing, and his perspectives on the origins of micropublishing as a limited-edition endeavor are of interest today as the micropublishing and electronic-imaging industry increasingly aim for the mass market as well as for the narrower scholarly market. The micropublishing industry underwent major changes in the 1980s. Microform Review published an analysis of the recent past and future prospects of the micropublishing industry (Bourke, B). This analysis adds to the narrative history as told by Power this year and previously by Alan M. Meckler. A report of the survey-form protest prepared by the American Association of Law Libraries for the Commission on Preservation and Access was published (Meredith and Ronen). This worldwide survey is intended to compare commercial micropublishers’ adherence to standards for archival preservation microfilming for the production and storage of master negatives and to examine the relation between preservation microfilming and scholarly micropublishing. The Meckler Corporation sold Microform Review, Guide to Microforms in Print, and Microform Market Place to K. G. Saur Verlag. A history of Saur’s micropublishing activities, written by the company’s president, appeared (Saur).

Cyclical changes in the economy caused major changes in marketing fortunes. Major consolidation of the micropublishing industry through mergers and acquisitions took place in the 1980s. In 1990 micropublishing was prolific both for current material (such as newspapers, journals, and patents) and for research collections. In addition, traditional micropublishers continued to incorporate electronic-publishing activities into their operations and are still evaluating the impact of this diversification into complementary technologies (Landau, Ubico).

The micropublishing industry is traditionally vulnerable in times of economic crisis, when retrospective materials lose their allure. It now remains to be seen if the micropublishing industry will be successful in marketing its retrospective research collections in a difficult economy. The severe economic crisis that befell scholarly micropublishing in 1987 and 1988 could well recur.

An analytical comparison of microform and electronic publishing appeared (Cady). A commercial micropublisher enumerated twenty factors determining micropublishing pricing (Nicely). A library publishing consortium discussed comparative pricing of preservation microfilming and electronic imaging for retrospective materials (Dupont). The image problem for micropublishers who issue pornography in microform was discussed (Patterson, B). A library-oriented version of a standard microform publishing contract appeared (Carpenter and Carr). A related piece discussed general library-vendor micropublishing agreements (Bond). Several articles discussed specific micropublishing projects (Boehm; Hoag and Wears; Holbrook and Holbrook; Imholtz, A; B; Steuart; and Theoharis). The micropublishing of government documents continued to arouse interest and controversy (Carpentier, Collins and Fredette, Luebbe, Kidd, Pelzman, Rogers, Snowhill, and Wilson).

PHOTOCOPIERS AND PHOTOCOPYING

RLMS planned a 1991 program session for the ALA Annual Conference entitled “Managing Library Photocopying in a Digital Age.” A study of the increasing viability of preservation photocopying of brittle
bound volumes as an alternative to preservation microfilming was prepared (Orr). The role of photocopying services in generating revenue was addressed (Eisner). Survey reports on photocopying activities were produced at CIMTECH in the United Kingdom (Williams A-C).

**Preservation Microfilming**

The ALCTS Preservation Microfilming Committee has been one of the most active agents in promoting preservation microfilming according to applicable standards. An overview of its history since its establishment in 1980 and a synopsis of its ongoing efforts were given by its past chair (Gwinn).

RLG and OCLC entered into a cooperative agreement that encourages increased participation in RLG’s preservation program. Under the two-year agreement OCLC will subsidize program fees for eligible OCLC member institutions that are not already affiliated with RLG’s preservation program. To date they have exchanged approximately five hundred thousand bibliographic records for microfilmed items that are entered in RLIN and OCLC.

A report on the preservation microfilming workshops offered by the Northeast Document Conservation Center with support from the Pew Charitable Trust appeared (Swartzburg). A survey of five leading commercial preservation microfilming service agencies was carried out by the University of California, Berkeley (Lockhart and Swartzell). MAPS was acquired by OCLC. A report on the preservation microfilming activities of the American Theological Library Association appeared (Hurd). Bourke (B) gave a conceptual overview of the current division of labor between library preservation microfilming activities and commercial micropublishing. DeCandido (A, B) evaluated statistical methods for determining the cost-effectiveness of searching for microform availability before selecting items for microfilming. A related article from the perspective of the acquisitions librarian pointed out the need to search for microform availability when searching the out-of-print market for collection development (Barker, Rottman, and Ng). The recommendation to centrally store preservation master negatives was examined (“Concept of a Central Collection”).

Princeton University completed the first year of a three-year NEH grant to microfilm approximately nine thousand titles on brittle paper in its Arabic collection. The microfilming is being performed by MAPS. NEH awarded RLG a $724,814 grant to microfilm twenty-five endangered archival collections important to research in American history. This project is called the Archives Preservation Microfilming Project. It will last three years, during which thirteen RLG members will participate to produce approximately two million frames of preservation microfilm.

The Andrew W. Mellon Foundation awarded grants in 1988 to implement a five-year program of preservation microfilming by libraries in the United Kingdom. All participating libraries are committed to produce preservation microfilm to specified standards and to submit bibliographic records of preservation microforms to the Register of Preservation Microforms administered by the British Library. The Mellon Microfilming Project reported on a visit by the working group in May 1990 to observe preservation microfilming techniques and administration in the United States.

NEH is supplying partial funding in the amount of $212,000 for the RLG Art Serials Microfilming Project. More than a hundred endangered art and architecture serials published in the late nineteenth and early twentieth centuries will be reformatted by 1992. Project participants will also experiment with a centralized approach to physical preparation, queuing in RLIN to record intent to film, filming, and inspection to minimize costs, ensure quality, and reduce training needs of participating institutions. The preservation microfilming will be performed by MAPS.

Patterson (B) examined the ethical considerations in expending preservation microfilming funds to save pornographic material. The Holbrooks discussed the preservation microfilming of Massachu-
setts' vital records. Steuart described a cooperative preservation microfilming program in Indiana carried out by the American Genealogic Lending Library. A status report on microfilming maps at the Library of Congress and the National Geographic Society to document LEnfant's plan for the District of Columbia appeared (Ehrenberg). Four different accounts described preservation microfilming efforts in Europe (Courtot, C; Kastaly; Poprady; and Weber).

As mentioned above, the controversy over criteria to select candidates for preservation microfilming and physical conservation continues. This controversy was well articulated in two recent LRTS articles. The controversy has become increasingly heated now as the national preservation effort seems to be attuned to a more holistic and comprehensive approach to preservation and conservation. In addition, limited funds mean that not everything that needs to be saved can be saved immediately, if indeed at all. Therefore a set of criteria needs to be identified in order to establish what sort of materials should be preserved and by what method and in which order of priority. Three articles address these issues (Atkinson, A; Hazen; and Schmude). A comparison of the merits of deacidification and preservation microfilming appeared (McCready). A related topic is that of whether electronic imaging should be used routinely in lieu of preservation microfilming. Articles appeared favoring the pros (Smith, B) and cons (Webster) of this position. The president of the Commission on Preservation and Access defended its position of favoring NEH preservation microfilming rather than physical conservation of originals (Battin, and "Pat Battin Replies").

**STANDARDS**

Two major ANSI/AIIM standards were revised (American National Standards Institute, A, B). ANSI/AIIM MS23-1990 is a revision of what is regarded as the fundamental standard for producing high-quality original microimages from source documents. It covers neither duplicate films nor computer-output microforms. ANSI/AIIM MS5-1990 is a revision of the standard for microfiche. It takes into account the improvements, modifications, and refinements in microfiche since it was last issued in 1985.


**TECHNICAL PRODUCTION OF MICROFORMS**

The demise of the Kodak MRD-2 microfilm camera has caused concern for future preservation microfilming operations, although the Hermann and Kraemer camera may fill the need. An article appeared on how to select a source-document microfilm camera (Dorfman, B). Quality control was also treated (Dorfman, A). A statement on the use of 16-millimeter microfilm in Denmark was reprinted (Jorgensen). The role of the ALCTS Preservation Microfilming Committee in fostering high-quality microforms made to archival standards was discussed (Gwinn). Two microfilm research projects were completed by MAPS and reported to the Commission on Preservation and Access. A report on a project to develop specifications for a composing-reducing camera (CRC) concluded that costs were too high to be supportable. Specifications called for a special CRC capable of digitizing 35-millimeter microfilm, producing film in different formats, copying film to paper, and creating CD-ROM products. A second report discussed a prototype "densities on the fly" unit to collect density data as the film exits a film processor ("Two Microfilm Research Projects").

Interest continued in the image quality and long-term stability of color microforms. The Getty Grant Program awarded $254,000 to the Commission on Preservation and Access to support a research project on the dark stability of color microfilm,
to be conducted by MAPS, and a demonstration project on the use of high-resolution color microfilm, to be performed by the Image Permanence Institute. Claims for the long-term image stability of Cibachrome color film were discussed ("Cibachrome") and the use of Cibachrome to preserve color graphic material was discussed (Silver).

**NOTES AND REFERENCES**


**BIBLIOGRAPHY**


"Art Center Students Present Futuristic


Kastaly, Beatrix. “Preservation and Conserva-


“RLG Connects Preservation and Electronic Access: Research Libraries Group Outreach Brings Together Such Diverse Mate-


The Rise in Consumerism: The Year’s Work in Serials, 1990

Jana Lonberger

Major issues and trends in serials management represented in the literature published during 1990 are examined. Topics covered include general works relating to serials management; discussions of the pricing crisis; publishing and scholarly communication; cancellation projects; technological developments and alternatives to print; claiming and replacement activities; acquisitions and collection development; cataloging and classification; and serials reference work. The 1990 serials literature reflects the profession's attempt to come to terms with the ongoing crisis brought on by spiraling price increases.

It is clear that we have been in a period of “rising consumerism” for at least the past three years. By this statement I mean, among other things, that we as librarians have been working hard to become better consumers—to learn more about the system of journal publishing and purchasing to which we are so closely tied.1

This declaration from a recent article by Becky Lenzini characterizes the overriding theme of the 1990 serials literature. The overpowering influence of the serials pricing crisis has forced those involved in serials management to look beyond the symptoms and begin searching for the underlying causes of their predicament. The range of publications reviewed in this article reflects the search for answers to our deepening dilemma.

Most works published in 1990 were reviewed, although a few 1990 journal issues that appeared in early 1991 were not available for examination. Focus was restricted primarily to the literature from the United States; publications dealing with non-U.S. libraries or issues have for the most part been excluded. Although articles on pricing issues and the scholarly communication process have begun to surface in the literature of other disciplines, time and space considerations precluded a review of works outside the library and information science field.

**General Works**

Two significant compilations of essays appeared in 1990. Volume 3 of *Advances in Serials Management* is highly recommended reading for all serials specialists and for any librarian wanting to gain insight into the publication, control, and use of serials. Editors Cook and Tuttle have assembled contributions on a wide range of topics. Most noteworthy is the chapter by Dean on serials binding, which includes illustrated descriptions of present binding practices and a brief but useful glossary. Gorman and Associates’ *Technical Services Today and Tomorrow* examines past, present, and future trends in technical services work. While discussion of serials is not the

---

Jana Lonberger is Head, Serials Control Department, Georgia Institute of Technology, Atlanta, Georgia. Invited paper received and accepted for publication March 22, 1991.
central focus here, there is much of relevance to serials librarians, such as Kruger’s chapter on serials acquisitions.

Several continuing sources of information on serials should also be noted. Clack and Riddick’s “Balance Point” column, which appears regularly in Serials Review, aims at presenting balanced viewpoints on a wide range of thought-provoking topics. In addition to covering current activities of the North American Serials Interest Group, The NASIG Newsletter frequently reports on conferences and meetings of interest to serials librarians. The ALA Yearbook of Library and Information Services offers an annual overview of issues in serials librarianship; the 1990 essay, which covers events from the previous year, is written by Houbeck. For a detailed examination of 1989 serials literature, see the review article by Susan Davis.

**THE SERIALS PRICING CRISIS**

While blatant examples of “publisher bashing” are becoming less frequent than in the recent past, the ongoing serials-pricing crisis continues to take center stage in the literature. In an insightful summary of current publishing and pricing trends, Lenzini states that developments revolve around two major issues: the growth in the number of manuscripts and in the number of journal titles being published and the concomitant growth in journal prices. Pascarelli suggests ways in which librarians can wield their considerable economic power with the publishing industry. Bebensee, Strauch, and Strauch apply econometrics and the concept of elasticity of demand to an examination of publisher behavior in setting journal prices. Douglas examines Peter Drucker’s vision of entrepreneurship management for its applicability in addressing the unsettling changes libraries are presently experiencing. Byrd maintains that the twin crises of spiraling growth and prices of scholarly journals are indicative of a “distorted economic marketplace.” Libraries’ growing reliance on technological solutions might enable them to handle larger volumes of information at lower unit costs, but this strategy fails to address the underlying pattern of overproduction and overconsumption.

Careful analysis of price statistics is gaining tantamount importance in the struggle to maintain adequate serials budgets. Hamaker and Grinell compare publisher volume growth with concurrent price increases to support their contention that publishers can and do control production rates, and Lynden reviews standard sources of data on both serial and monographic prices. Young and Carpenter produce the 1990 U.S. periodicals price index, which appears annually in Library Journal, and Clack analyzes price increases for U.S. serials services. The periodicals survey indicates that over the past four years the library materials price index has increased annually at a rate two and a half times that of the consumer price index, proof that periodical prices are continuing their relentless upward trend. Young also identifies patterns and trends in Faxon’s annual comparative study of domestic and foreign journal prices for the period 1988–90. Anderson surveys price trends for veterinary science journals, and Sapp offers a breakdown of core mathematics journals into domestic versus foreign and commercial versus nonprofit categories.

Two ongoing sources of information have arisen in response to the burgeoning interest in pricing issues. The electronically produced Newsletter on Serials Pricing Issues, edited by Tuttle, along with Ivins’ “Serials Prices” column in Serials Review, serves a vital role as current awareness services on this hot topic.

**PUBLISHING AND SCHOLARLY COMMUNICATION**

The rise in consumerism has also led to closer scrutiny of the publishing industry and scholarly communication process. Papers from two professional meetings that addressed these topics were published in 1990. Presentations from the Seminar of the Future of the Scholarly Journal, held in 1988 at Chapel Hill, were reproduced in a 1990 issue of Library Acquisitions: Practice & Theory (LAPT). Taking a publisher’s perspective, Hunter (B) predicts that the crisis will have a negative impact on the current awareness function of the scholarly journal, but that the print format will continue to exist. Conversely, Rice foresees the
extinction of the print journal in favor of online publication databases created and maintained by universities. Hatcher, Thomas, and Thyfault also see great promise in electronic knowledge dissemination but warn that paper is here to stay until adequate computer technology is available to all researchers. Addressing the complex economic aspects of a move to electronic information delivery, Kaser nevertheless suggests that scientists will demand journals in electronic format. Although publishers and librarians are not in agreement on the scholarly journal's fate, this dialogue reveals two recurring themes: that economic constraints will force libraries to emphasize access over ownership and that electronic technology eventually will transform the knowledge dissemination process.

LAPT also published papers from “Publish or Perish: The Future of Journal Collections in Libraries,” a program at the 1989 American Library Association (ALA) annual conference in Dallas. Stankus (B) submits that librarians excel at inventory control but fail miserably in the customer satisfaction department. He proposes the cultivation of stronger alliances with faculty, who are the real revenue generators in the scholarly communication equation. Hunter (A) returns to the theme of technological advances, stating that advances in identification, retrieval, and document-delivery systems are of paramount importance in designing a new economic model for information dissemination. The establishment of a university copyright policy, whereby universities retain an ownership interest in the intellectual property produced by their faculty members, is supported by Campbell.

Publication in journals serves not only as a mechanism for scholarly communication, but as a vehicle for peer review as well, according to Blake and Tjoumas, who review the research activities of library and information science educators. The U.S. scholarly communication machine and the fuel that makes it run are also examined in an entertaining historical account by Carrigan. Scholars, publishers, and university administrators all have a vested interest in perpetuating the system, leaving the university library to serve as an information storehouse and as a market for the ever-growing universe of published material.

Although the focus appears to be gradually moving away from the publishing industry toward the author end of the scholarly communication chain, the practices of publishers continue to receive attention. Ulshen and Garfunkel portray the roles played by authors, reviewers, editors, and editorial boards in the journal production process. Examining the development and production of Environmental Periodicals Bibliography, St. John suggests that the growing inability of libraries to maintain comprehensive collections in particular subject areas makes the function of indexing tools and other secondary sources all the more important. Focusing on the ethics of journal publishing, Serebnick and Harter surveyed the editors of library and information science journals to ascertain their attitudes toward such practices as multiple submission or publication of manuscripts, “watered-down” research, and questionable coauthorship. Although the results were fairly predictable, the study revealed that most of the journals surveyed offer few or no ethical guidelines for authors.

**Cancellation Projects**

The pricing crisis has also contributed to the growing body of literature focusing on de-selection, or (to invoke the more negative but widely used phrase) cancellation projects. There are an increasing number of tales of painful lessons learned through frequent practice, as large rounds of cancellations have become more common.

Most cancellation projects take into consideration a number of factors: language, price, relevance to the curriculum, publisher reputation, use, coverage in indexing and abstracting sources, physical format, local or regional availability, duplicate subscriptions, and faculty rankings are examples of criteria used in making de-selection decisions. Use studies seem to be gaining acceptance as one of the most effective methods in identifying titles for cancellation. Perkins asserts that across-the-board cuts and heavy reliance on faculty opinion are less desirable than use
studies in making cancellation decisions. Naylor provides a good overview of the existing literature in describing a use study at the Science and Engineering Library of the State University of New York, Buffalo, that employs the reshelving count method. Naylor also advocates creating a database of title and use information that allows for better manipulation of data, as does Walter. Use studies often are not a viable option when time is of the essence, but they can be conducted at a later date to validate the results of a cancellation project, as reported by Bustion and Treadwell. In a twist on the typical use-study methodology, Rooke demonstrates that measuring non-use of serials can also provide quantitative support for cancellation decisions.

Embarking on cancellation projects can illuminate the pros and cons of various budget allocation formulas. Biblarz details Arizona State University's negative experiences with an unallocated budget, in which funds are divided by format rather than by discipline. Tighter budget restrictions have provided the impetus to gravitate toward subject allocations. Conversely, Roth contends that allocating by discipline and giving departments responsibility for collection development decisions eventually results in a very uneven collection and the inability to attract general institution funds.

Fenske assesses the relative value of two current awareness services for the purpose of making a cancellation decision; evaluation was based on a number of factors, including amount of overlap and non-overlap, and journal coverage in relation to user-group characteristics. In examining the de-selection literature, Miller and O'Neill theorize that a journal effectiveness factor could be constructed by surveying faculty and using the results to assign scores to a wide range of elements, such as those enumerated above. Relating a journal's cost to its impact on the field for which it exists could then be used in making appropriate de-selection decisions.

Automated Systems and Alternative Formats

There were fewer articles about automated serials systems and their implementation in 1990 than has been customary in recent years. Descriptions of migrations from one system to another are becoming more commonplace. The transfer of Hamilton College's serial records from the Online Computer Library Center (OCLC) Local Data Record format to the USMARC-based VTLS system, as described by Chickering, Strozik, and Gulbenkian, is a good example of this phenomenon. Goldberg and Burton provide an account of the University of Louisville's NOTIS implementation and its effect on the workflow of the serials-cataloging section. Bibliofile and CD-CATSS, two CD-ROM products, are reviewed by Jacsó for their suitability in supporting retrospective conversion projects. Factors to consider when purchasing CD-ROM-based catalogs include hit rate, record quality, search flexibility, downloading capabilities, and customization options. Jacsó views such products as viable alternatives to online cataloging services.

It could be argued that alternative formats (online databases, CD-ROMs, and other alternatives to print) are all serial in nature and therefore merit inclusion in a review of the literature on serials. A detailed examination of this subject would go far beyond the scope of this paper. Consequently, only a small portion of the relevant literature has been selected for review.

In 1989 Loyola University loaded Business Periodicals Index, Social Sciences Index, and Humanities Index into a local file on its online catalog. The immediate effect on services, staffing, and collections at two campus libraries is the subject of a paper by Bakowski and Moeckel. Their study revealed that questions at the periodical desks of both libraries increased 82 percent in the first three months following implementation, and a substantial amount of time was devoted to user training. Online searching and interlibrary loan activities were also significantly affected. Managerial and budgeting concerns inherent in the implementation of stand-alone reference services in microform, CD-ROM, optical disk, or diskette format are addressed by Hernon and Heisser. Some of the factors that management must con-
sider include start-up and continuing costs, relationships of stand-alone services to their print equivalents, training needs, heightened user expectations in terms of document delivery, and fragmentation of reference service. Wall, Haney, and Griffin report on a survey to determine whether print subscriptions to selected abstracting and indexing services are being canceled owing to their availability online. Results indicate that online access is a less important factor than cost and perceived use in making cancellation decisions. However, a significant number of respondents who have canceled print subscriptions report that they are reallocating funds to subsidize the costs of online searching.

No longer a flight from reality, online full-text retrieval is now viewed by a growing segment of library professionals as a viable alternative to ownership of print journals and as the logical extension of the now-familiar online bibliographic database. A study conducted in 1987–88 at Washington State University made available online the full text of articles from selected expensive low-use journals. As reported by Kuag and Croft, costs for the project were considerably lower than comparable subscription costs for the journals retrieved. Jaramillo and Squire review the development of the Colorado Alliance of Research Libraries' (CARL) UNCOVER database, which provides article-level access to journals. CARL plans to offer full-text searching through utilization of optical scanning and optical disk technology to promote cooperative collection development among its members.

In two separate articles, Delsey and Riddick offer different views of recent technological advances. The number and range of systems supporting serials processing tasks have grown tremendously, but technologies to link these systems have not kept pace, according to Delsey. The Open Systems Interconnection (OSI) reference model, which provides a framework for standard interfaces, is breaking down technological barriers and will have a significant effect on the production and dissemination of serials literature. Riddick links the development of artificial intelligence to the evolution of serial publications. Central to the development of artificial-intelligence applications is a body of nearly comprehensive valid data on a given subject, hardware with the capacity to store and process the data, and software sophisticated enough to manipulate the data and offer valid conclusions. The information specialist will continue to serve an intermediate role by assisting researchers in the creation of new, machine-created knowledge.

CLAIMING AND REPLACEMENT ISSUES

The automation of claiming functions is enabling libraries to streamline this labor-intensive activity. It is also exposing librarians to charges of irresponsibility from vendors and publishers who contend that they are being inundated with unverified claims. Carlson (B) conducted a study at the Medical University of South Carolina to ascertain the impact of automation on claiming activity and found that only 16 percent of claims sent were erroneous or premature. She concludes that the key to responsible automated claiming lies in incorporating well-designed review procedures into the process. In a look at the ethics of claiming from the viewpoint of both library and publisher, Carlson (A) again touches on the topic of premature and excessive claiming but examines other issues as well, including publishers’ claiming restrictions and the practice of ignoring first claims, the publishers’ obligation in notifying subscribers of changes in frequency and publication schedules, and libraries’ claiming of issues received but subsequently lost. In describing a methodology for electronic transfer of claims to a European vendor, Rhine asserts that this is a much more efficient means of accelerating delivery of missed issues than sending claims by airmail delivery. Data collected in a study by Fairbanks on claim rates for exchanges and subscriptions indicated that the number of claims appears to be determined not by the method of acquisition but rather by the ease and effectiveness of communication between library and supplier.

The oft-neglected subject of replacing lost or stolen periodical issues generated three significant articles. Poinessa pro-
vides a thorough discussion of the procedures, problems, and issues unique to ordering of replacement issues. She notes that the refinement of document delivery systems has had a positive effect on the ability to obtain articles more quickly from off-campus sources, thereby making ownership of complete periodical runs less imperative. Barker, Rottman, and Ng report on the merger of out-of-print and replacement functions into one centralized unit at Berkeley and provide an appendix of sources and tools of the trade for out-of-print and replacement work. A unique, low-cost alternative to the practice of tipping in replacements for mutilated pages is described by Collver. Hypothesizing that being “ripped off” is a good predictor of future reader interest, the serials department at the State University of New York, Stony Brook, devised a “rip-off” file of copies of articles reported as missing from their bound periodicals collection. Material from high-risk titles or subject areas can then be placed on reserve or ordered in microformat.

ACQUISITIONS AND COLLECTION DEVELOPMENT

In addition to the aforementioned essay by Kruger, several works deserve mention in a discussion of the serials acquisitions and collection development literature. Presentations from the 1989 College of Charleston Conference, edited by Marsh, appeared in volume 14, number 3, of LAPT. The conference theme, “Remembrance of Things Past,” was an attempt to come to grips with the fundamental changes taking place in the scholarly communication chain. This meeting generally has much to offer for serials acquisitions and collection development librarians; topics included the publish-or-perish syndrome, the peer-review process, copyright and antitrust issues, bidding, and ordering direct. Against the Grain, a newsletter edited by Strauch, is an excellent current awareness source featuring news from the acquisitions and publishing arena. It includes “Bet You Missed It,” a regular column devoted to summarizing relevant articles from nonlibrary science journals such as Science.理解the Business of Acquisitions, a new ALA publishing imprint edited by Schmidt, focuses on the mechanisms that govern the creation and dissemination of information. Broken into five parts (the publishing industry, vendors, out-of-print and second-hand markets, nonprint publications, and accounting and business practices), this collection of essays is evidence that acquisitions has become a defined subfield within the library profession.

Several authors identified tools for selection of serials. Komorous looks at sources for accessing Canadian periodicals and newspapers. Suggesting that the periodical literature of American organizations is poorly represented in most libraries, Block recommends use of Encyclopedia of Associations and its companion publication, Association Periodicals, to identify titles that would add depth to a collection. DeLong’s ongoing column in Serials Review indexes reviews to serial publications in approximately 180 journals in all disciplines.

Collection development librarians decry the growing proportion of their materials budgets being devoted to serials, but no objective guidelines exist for determining an optimum serial/monograph ratio. Devine and Kellogg suggest that an appropriate ratio for individual subject areas can be devised by combining local priorities with citation analysis statistics from published studies on the characteristics of literature usage in a particular discipline. Several collection analysis techniques were also explored. Using a 1986 study of planning literature publications as a model, Berger and Devine illustrate a means of combining traditional collection evaluation methods with relational database technology. Sauer reports on a study indicating that unused periodical issues will continue to receive little or no use when bound or replaced by microfilm. This correlation could prove useful in making cancellation, storage, or binding decisions. Stout and Stunz advocate compilation of core lists of serials and periodicals as a means of identifying and retaining essential titles during a budget crisis.

Bibliographic reviews of publications within a particular discipline are abundant, and space considerations do not permit a
full accounting of them here. Serials Review publishes many bibliographic essays, and in 1990 the journal featured a series of articles on the underground press of the Vietnam War era. Historical accounts of The Great Speckled Bird by Gabb, and the San Francisco Oracle by Cohen are two of the better offerings. Serials Review also publishes two columns of note. An irregular column by Lang (C) reviews government-published serials in a wide variety of subject areas. Similarly, Schofer and Richards (B) produce the annual “Little Magazine Interview Index.” CD-ROM Librarian and CD-ROM Professional are excellent sources of information and reviews on CD-ROM products; a review of general periodical indexes in CD-ROM format by Tenopir and Smith can be found in the latter.

CATALOGING AND CLASSIFICATION
The issues of format integration and form of entry were recurrent themes in the literature pertaining to cataloging and classification of serials. Papers by McCallum, Stephen Davis, Bales, and Gibbs from an ALA program on MARC format integration are reproduced in an issue of Information Technology and Libraries. Evans views format integration as a means of describing the “seriality” of any title, regardless of physical format. Mering relates Louisiana State University’s consideration of reverting to latest-entry cataloging and the implications for its use in an automated serials control system, and Turitz reviews the ongoing debate over use of uniform titles for serials. Cole builds on his earlier discussions of the Library of Congress (LC) guidelines regarding uniform titles and serials entries in general and recommends construction of uniform titles and title-added entries according to internationally accepted provisions as an alternative to present U.S. practices.

Two articles address online cataloging issues. Van Avery compares the merits of retrospective conversion projects, which make heavy use of machine matching of records, with the more labor-intensive practice of recataloging. She suggests that retrospective conversion projects defeat the purpose of shared cataloging by failing to contribute to the updating of national bibliographic databases. In a study comparing bibliographic data from current journal titles with their corresponding records in OCLC, Soper found that a substantial percentage of OCLC records contain inaccuracies, indicating that automation of serials cataloging data might not have a positive impact on record accuracy.

Other topics covered include Bross’ review of objectives to be considered in determining an appropriate classification scheme for a periodicals collection. Developments that have precipitated the multiple-versions controversy are identified by Graham. Berman describes the evolution of Penn State University’s policy on the cataloging of conference publications. Glasby explores popular “fashions” in serials cataloging from Charles Cutter to the Anglo-American Cataloguing Rules, second edition (AACR2), and Williams provides an overview of serials-cataloging topics from 1988, based on LC Rule Interpretations (LCRI), Cataloging Service Bulletin announcements, developments within the ALA, and published literature.

Serials catalogers will also want to make note of Leong’s Serials Cataloging Handbook: An Illustrative Guide to the Use of AACR2 and LC Rule Interpretations. Utilizing the case-method approach, Leong combines title-page facsimiles, bibliographic records, and MARC-tagged work forms, along with applicable AACR2 rules and LCRI, to illustrate problem areas in serials cataloging. In addition to a topical index, the handbook also includes indexes of AACR2 rules and LCRI cited in the text, making this a handy desktop reference tool.

PUBLIC SERVICES
The examination of serials work from a public-services viewpoint is often lacking in the serials literature, but thanks to a new monograph and a double issue of The Reference Librarian devoted to serials reference work, this topic was well represented in 1990.

Puccio’s Serials Reference Work is intended to be a practical guide to the tools and techniques of the trade; an impressive number of standard reference sources are described, and extensive bibliographic
notes suggest further reading. Technical services personnel will find the discussions of the technical aspects of serials work rather simplistic, but Puccio's purpose is to emphasize the impact of technical processing of serials on reference work.

Three articles from *The Reference Librarian* focus on the information-seeking behavior of academic library users. Baxter theorizes that the unmethodical search strategies of social science faculty can have a negative influence on their students, who often lack the skills required to seek out and evaluate information. Blandy denounces the reference librarian's tendency to discourage undergraduate research on hot topics and proposes a means of supplementing the usual popular periodicals collection with house organs and junk mail to help students discover the complexities of these current affairs issues. A comparison of the information needs of undergraduates versus graduate students and faculty is offered by Taylor. Because undergraduate courses often stress the learning of research skills, undergraduates commonly need background information on broad subjects. Undergraduate library users are therefore often ill served by the large research library, which concentrates its energies on addressing the needs of the experienced researcher.

Widely available online access to serials bibliographic and holdings information is having a profound effect on staffing patterns and is challenging public-services personnel to modify their approach in providing service to library users. In their articles, Rast and Bertucca refer to the blurring of traditional lines between technical and public-service functions and to the recognition of the value of the serials specialist as interpreter of records and provider of quality service. The need for reference librarians to familiarize themselves with the unique characteristics of bibliographic records for serials, local cataloging practices, and search strategies for successful retrieval of information from the online catalog is stressed in articles by Decker, Benson, and Mueller and Whittaker. Using the Association for Computing Machinery Special Interest Group (ACM SIG) publications as a particularly effective example, Krieger depicts the difficulties in providing reference service caused by local cataloging variations and urges catalogers to consider the needs of the user in creating bibliographic records. Peritore assesses the impact of public access to serials control information on reference service.

Several articles examine the provision of quality reference service through use of serial sources. Emphasizing the complexities and labor-intensive nature of providing reference service to periodicals, Pinzelik details the bewildering maze a user must navigate in order to gain access to a periodical. Success requires much persistence and patience on the part of both librarian and user. Burns takes a more humorous approach to illustrating the trials and tribulations of reference work with periodicals. Work reviews the availability of United States Newspaper Program data through the major bibliographic utilities and advocates its use as a powerful reference tool. The physical and bibliographic separation of government-produced periodicals from the rest of the library collection discourages their use, according to Lang (A), who encourages more cooperation between personnel in documents and general reference divisions for utilizing a full range of resources to meet users' information needs. Broadway and Qualls describe Memphis State University's training program, which is intended to acquaint staff with periodicals' public-service work and to foster a better public-services philosophy. Zackey's brief annotated bibliography on the relationship between reference work and serials provides useful suggestions for further reading on this topic.

**Miscellanea**

The pricing crisis seems to have tipped the attention of serials specialists toward the author-publisher end of the scale and away from vendors and their intermediary role in the dissemination of information. Nevertheless, a few authors addressed vendor-related issues. Most noteworthy is Barker's article on the unbundling of vendors' service charges. Unbundling, as defined by Barker, is the selling of individual services by vendors, in order to give their custom-
ers the opportunity to pick from a wide range of services and pay for only those they actually use. Although unbundling has become a fashionable concept, it has not yet been put into practice by any of the major vendors. Using the banking industry as a model, Barker discusses the forms unbundling might take and the advantages and risks involved in its implementation. Reducing service charges is also the subject of a paper by Basch and McQueen, who cite methods for lowering library costs without sacrificing essential services. McKinley enumerates criteria to be considered in choosing a vendor for government documents, foreign titles, and other types of serials.

The topic of standards was the subject of two excellent contributions from Postlethwaite and Tseng and others. Postlethwaite continues her crusade for a publication pattern database. In addition to promoting efficiency in predictive serials control systems and online catalogs, Postlethwaite asserts that a centralized source for publication pattern information would be useful in acquisitions, binding, circulation, interlibrary loan, and resource-sharing functions. The Committee to Study Serials Standards (a committee of the Serials Section, Resources and Technical Services Division, American Library Association) conducted a survey in 1988 to assess the level of serials standards awareness. Tseng and others report on the results of the study, which indicate that more awareness and support of International Standard Serial Numbers, Serials Industry System Advisory Committee (SISAC) bar codes, holdings, and other standards on the part of libraries and publishers is warranted.

The emphasis on automation in library schools, and the lack of science majors who choose to enter the field, result in a lack of orientation to science journals for new professionals, according to Stankus (A). He outlines a workshop designed to emphasize the nature of the scholarly communication process and the scientific publishing industry. Ensor recommends use of a projector and software to create canned presentations of database searches. Search simulations eliminate the expense and uncertainty of online demonstrations.

A few articles on storage, maintenance, and security issues as they relate to serials appeared in 1990. A study to review a decision to permit use of periodical issues outside of the periodicals department at the Texas A&M University library is summarized by Bustin, Cook, and Harrell; Cyeszly, Bustin, and Treadwell describe the creation of a temporary storage facility for low-use serials at the same location. The effect of these measures on public service is considered at length in both articles. An accounting of a Brock University project to clean and mend a serials microfilm collection is offered by Sleep.

As mentioned in the introduction, the serials literature focusing on non-U.S. practices was not reviewed in depth, but a small sampling of these articles from The Serials Librarian is mentioned here. The effects of a severe economic downturn and foreign trade restrictions on the purchase of periodicals at the University of Ghana are detailed by Kedem. Ali laments the lack of native information infrastructures compares serials processing routines at England's Leeds University with serials administration at Cornell.

CONCLUSION

A review of the 1990 serials literature clearly reveals the extent to which the disease of spiraling prices has spread throughout the library world. There are signs of hope, however, as serials managers move past an examination of the symptoms and begin to study the origins of this epidemic. There is more misery ahead, but we seem to be headed in the right direction.

REFERENCE


BIBLIOGRAPHY


Clack, Mary Elizabeth, and John Riddick, eds. "The Balance Point." Column in *Serials Review*. 


Decker, Jean S. “Is This a Serial?” The Reference Librarian no.27/28:141-59 (1990).


Ivins, October, ed. “Serials Prices.” Column in Serials Review.


The NASIG Newsletter. Media, Pa.: North American Serials Interest Group, Jan. 1986-


Newsletter on Serials Pricing Issues. Chapel Hill, N.C.: Association for Library Collections & Technical Services, Mar. 30, 1989-


Letters

From Mary E. Jackson, Co-editor, Advances in Preservation and Access, Philadelphia:

Proposals for contributions to volume 2 of Advances in Preservation and Access, a new annual published by the Meckler Corporation, are invited by co-editors Barbra Buckner Higginbotham (Brooklyn College) and Mary E. Jackson (University of Pennsylvania). Individuals are asked to submit one-page abstracts for papers on current topics on library preservation, conservation, and related access issues, including education, cooperation, standards, management, and technique. The abstract should contain the name, address, telephone (voice and fax) of the potential contributor; brief biographical data; and a 250-word abstract. In order to be considered for volume 2 all proposals must be received no later than July 1, 1991. Persons whose papers are accepted will be notified no later than September 30, 1991; papers (2,500 to 3,000 words in length) will be due January 1, 1992. Mail proposals to Mary E. Jackson, Co-editor, Advances in Preservation and Access, 431 E. Allens Lane, Philadelphia, PA 19119–1104; Voice phone: 215/898-7558; FAX: 215/898-1471; E-mail: BB.MEJ@RLG.BITNET.

From Gerard B. McCabe, Director of Libraries, Clarion University of Pennsylvania:

Re Karen A. Schmidt’s leadoff article in LRTS 35, no.1 (Jan. 1991)

She remarks on page 20 that the University of Michigan Library School has produced a larger number of graduates working as acquisitions librarians than other library schools. In my view there is no puzzle about this; it’s more the influence of the library and its internship program than anything else. I was a library service scholar and fellow at the University of Michigan assigned to the Order Department, as it was known then. But prior to going into administration, I worked in acquisitions for several years, serving for seven years as department head. At one time it was my understanding that many of the top acquisitions librarians in this country were UM people. Serving in acquisitions work at Michigan for many years meant receiving training under such notable bibliographers as R. C. Stewart and Mona East. No question about it, it isn’t so much the library school as the library itself.

From Norman Horrocks, Vice-President, Editorial, Scarecrow Press, Inc.:

I was interested to read Karen Schmidt’s article “The Education of the Acquisitions Librarian” in the January 1991 LRTS. In it she mentions the possible link between the Michigan school faculty members Mary Carter, Wallace Bonk, and Rose Mary Magrill with our title Building Library Collections as influencing the number of Michigan graduates involved in acquisitions work. She cites quite correctly the fourth edition (1974) of this title, which was issued under those three authors. Just to complete the record of publication, however, the fifth edition (1979) was by Wallace Bonk and Rose Mary Magrill; the sixth edition (1985) was by Arthur Curley and Dorothy Broderick; and Curley and Broderick are now preparing the seventh edition of this work.

Preservation Organization and Staffing


Selection of Library Materials for Area Studies: Part I. Asia, Iberia, the Caribbean and Latin America, Eastern Europe and the Soviet Union, and the South Pacific

Understanding the Business of Library Acquisitions

American Archival Analysis: The Recent Development of the Archival Profession in the United States

Abridged Dewey Decimal Classification and Relative Index, 12th ed.

In Celebration of Revised 780: Music in the Dewey Decimal Classification, Edition 20

LC Romanization Tables and Cataloging Policies

Expert Systems in Libraries

European Library Networks


Automated Acquisitions: Issues for the Present and Future

Scientific and Technical Literature: An Introduction to Forms of Communication

Linked Systems for Resource Sharing

How to Interpret Statistical Data: A Guide for Librarians and Information Scientists

New Horizons in Information Retrieval

The Thomas Handbook of Quality Control for the Microfilm Industry

Advances in Library Resource Sharing, v. 1


Using OCLC is a manual on searching the Online Computer Library Center (OCLC) Online Union Catalog (OLUC) and on the processing of materials using the OCLC Cataloging Subsystem. It defines in detail the construction of the numeric and derived search keys, the idiosyncrasies of OLUC searching, and the manipulation and creation of OLUC records for cataloging. Part of Neal-Schuman's How-to-Do-
It-Manuals series, Using OCLC tells us how to do it a little too late. It is fairly well written and, for the uninitiated, could have been quite useful at a different point in time. But with release 1 of the OCLC PRISM Service (which includes the initial redesign of OLCU searching and total redesign of the Cataloging Subsystem) imminent, the value of this title is fairly limited.

Although well written, the text contains some inaccuracies. Because some facets of OCLC are known only to those who have worked there, a few difficulties could be forgiven. However, the authors didn't do their homework (the Serials Subsystem hasn't existed for almost two years) and didn't read the manuals (the usage of a circumflex is not limited to derived search keys; it can also be used to precede the LCCN) in several cases. If the material were still timely, such inaccuracies wouldn't keep me from purchasing the book. Still, the authors should have been more careful to provide accurate information when it is published elsewhere quite clearly. Actually, the lack of an editor or reviewer from OCLC is surprising. It would have made for a more noteworthy, and trustworthy, publication. The authors should also have included instructions in the use of the OCLC Authority File, an intricate part of cataloging on OCLC for most libraries, as well as a section on the use of spine labels. An index also would have been helpful.

A few titles already accomplish what this manual does, but not so many that, had this volume been issued a few years back, the need for this one would have been in direct competition with Gabriele E. Copei's Coping with the OCLC Subsystems (1986) and her Coping with the Cataloging and Interlibrary Loan Subsystems (1987), as well as Martha Manheimer's manual, OCLC: An Introduction to Searching and Input (Neal-Schuman, 1986).

One redeeming aspect of this book is that the instructions on searching the ORUC are a little basic but well presented. Ironically, because of this feature, it could still be useful for learning to search OLCU for interlibrary loan and union listing purposes (parts of later releases of PRISM), exactly what the introduction notes it is not intended for. However, OCLC libraries should be switched to the PRISM Service for cataloging and enhanced searching by spring 1992. I recommend that libraries make this buying decision quite carefully.—Rosanna M. O'Neill, Pennsylvania State University, University Park.


SPEC Kit 160, the most recent kit to deal with preservation issues, contains organization charts, professional and support staff job descriptions, and planning documents, along with a flyer discussing trends and issues and a brief summary of the ARL preservation statistics for 1987/88.1 It is an interesting follow-up to the 1985 kit, number 116 on the same subject. That an update is justified becomes clear from the fact that twenty-seven libraries could be identified as having or planning preservation departments in 1985, while four years later the 1988/89 ARL preservation statistics report seventy-three libraries with preservation departments.

In 1985, many of the existing preservation units had reporting lines and internal structures that largely reflected historical accident. No one administrative placement predominated, and preservation departments varied widely in their constituent components. A number of libraries handled preservation through decentralized units coordinated by a librarywide preservation committee. The optimum structure needed to be discovered, and Kit 116 contained organizational charts and job descriptions, including some brief justifications of particular structures.

In 1990, reporting lines still vary, and so do constituent components. Importantly, however, preservation has become a centralized department whose structure and operation in most cases have been carefully designed though systematic planning efforts such as the ARL/OMS Preservation
Planning Program. Over half of Kit 160 is
devoted to seven meaty documents con-
cerned with the establishment and contin-
ued development of preservation
programs for the near and long term. They
provide useful reading not only for manag-
ers new to preservation planning, but also
for experienced preservation officers faced
with the need for five- and ten-year plans
and interested in comparing and evaluat-
ing existing programs.

There is deliberately little overlap among
the libraries whose documents make up the
two kits. Together they present organiza-
tional charts, job descriptions, and planning
documents from twenty-six libraries of vari-
sous sizes and a historical spread from 1979
to 1989. Anyone interested in organizing,
or reorganizing, a preservation program
will find useful information to suit almost
any style of academic or research library.—

Janet Gertz, Columbia University, New
York.

Reference
1. The full compilation is available in ARL
Preservation Statistics 1987-88, Jutta
Reed-Scott and Celeste Feather, comp.
(Washington, D.C.: Association of

Edition of One: The Autobiography of
Eugene B. Power, Founder of Uni-
versity Microfilms. Ann Arbor,
Mich.: University Microfilms Interna-
tional, 1990. 438p. $24.95 (ISBN 0-
8357-0898-5), paper, $9.95 (ISBN
0-8357-0899-3). LC 90-10808.

Edition of One not only deals with
resources and materials available to the
academic and library community but also
describes an individual's lifelong interac-
tion in the unity of scholars at all levels.
Power has worked on the project to donate
the famous Battle Abbey Estate in Has-
tings, England, to the British Crown, sup-
ported the theater arts, local hotel and
conference business and marketing, and
been involved with native Eskimo art. He
was honored with the Insignia of the High
Honor by Her Majesty Queen Elizabeth II
and held a long term as Regent of the
University of Michigan.

It is not impossible, but doubtful, that
the library world will see a figure like Don-
ald Trump or Michael Milken in their
legions anytime soon, but the career of
Eugene Power provides interesting read-
ing about the world of business and information, a combination of enterprise and honor, and makes it clear that he is certainly an Edition of One himself.—Ann Swartzell, University of California, Berkeley.


Librarians throughout the United States will need to become cosmo-politans as the world becomes one global village. Thus the appearance of part 1 of a comprehensive handbook on collection development entitled Selection of Library Materials for Area Studies is most welcome at a time when academicians and government officials are attempting to rekindle (or ignite) a spirit of internationalism.

This volume is the third in a multivolume series issued under the aegis of the Collection Management and Development Committee of the Association for Library Collections & Technical Services (ALCTS), a division of the American Library Association. The first volume, published in 1985, describes selection in the humanities, social sciences, and sciences. The second volume, published two years later, covers allied and interdisciplinary fields. This volume contains nineteen essays on selection strategies for area studies on Asia, Iberia, Latin America and the Caribbean, the South Pacific, and Eastern Europe and the Soviet Union. Part 2 of the third volume will cover Africa, the Middle East, Western Europe, Australia, and New Zealand.

Area studies encompass the literature, art, languages, history, demography, economics, government, and politics of a definable geographic region. Because the universe of published materials from which the librarian/selector must choose is elusive and multifarious, Johns has assembled a group of distinguished area-studies specialists who share their practical experience by walking the reader through innovative strategies that result in the desired acquisitions with minimal pitfalls. The present volume is addressed to the novice area-studies librarian who has to identify and select materials to support the curricular and research needs of an academic institution or to satisfy the needs of immigrants who patronize the local public library.

The essays are arranged in four separately edited sections: Asia, edited by Linda J. Gould; Eastern Europe, edited by Joseph Brint; Iberia, Latin America, and the Caribbean, edited by David Block; and the South Pacific, edited by Margaret Davis Feix. Gould and Block provide introductions to their sections in which regional commonalities are identified and the area's bibliographic control apparatus is assessed.

The contributors usually begin their essays with an overview of the historical, geopolitical, and cultural factors that shaped the book trade and publishing industry in the particular region. Authoritative books are cited to enable the selector to acquire a thorough understanding of the country or region. Each essay describes current and retrospective sources for identifying books, periodicals, newspapers, reports, and documents generated by scholars and writers, the academic and research communities, and government offices. A list of the names and addresses of indigenous book dealers is appended to each essay.

Most authors discuss the attributes and limitations of the bibliographic aids and resources they cite. All of them give a candid assessment of the mind-set, business style, and reliability of the book dealers and librarians in the area. A recurring motif is the recognition that there is a wide gap between identification and procurement of materials because of the local publishers' short press runs with their low production levels; a fledgling, or nonexistent, antiquarian book market; an ineffective distribution system; and cumbersome government restrictions on exports. Most essayists include addresses of noncommercial sources that might circumvent some of the obstacles the selector typically encounters. For example, associations, university
institutes, and research centers that issue newsletters or libraries that prepare bibliographies and accessions lists can enter into exchange agreements that are mutually beneficial. The contributors stress that in many parts of the world, the most reliable contacts are made in person. Thus selectors, who either travel abroad themselves or make contacts through faculty who travel, have found exchange programs the most effective vehicle for dissemination of research in Latin America and the Caribbean. Exchanges also form an important part of the Iberian and Eastern European scholarly networks.

There is considerable variation in the length and scope of the various essays. Some authors cite publications selectively and refer the reader to definitive books on the area's scholarship. Other contributors assume the role of a mentor who engages the reader on a trek through extant sources. Some discussions are extremely basic, but most essayists effectively convey the adventure, challenge, and occasional heartache of collection development through intercontinental acquisitions. Only two minor shortcomings were detected. First, in part 3, there are contradictory statements about the top three book-producing countries. Second, although this volume was copyrighted in 1990, the essay on Eastern Europe and the Soviet Union was written before the political and economic changes took place; consequently, there is no real assessment of the impact of glasnost and perestroika.

The editors and authors are to be commended for a very thoughtful and extremely useful publication. The book will be invaluable to both new and experienced selectors when they assume new selection responsibilities in area studies. — Art the ree McLaughlin Wright, Howard University, Washington, D.C.


This collection of eighteen articles encompasses the publishing industry, vendors, markets, nonprint publications, and accounting and business practices. The editor remarks that "much of the work in acquisitions is liaison in nature. Acquisitions is the bridge between the profit-making and not-for-profit worlds of publishing and librarianship" (p.xi). This intermediary view of the acquisitions process provides a common theme linking each of the five parts of Understanding the Business of Library Acquisitions.

Although the library world appears to enjoy a commonality of professional concerns and practices, it is as diverse as the world of publishing. The thrust here is primarily academic, with fourteen of the nineteen contributors (including the editor) from academia; four represent the publisher perspective; and one lonely voice represents the public library sector (the latter writing on acquiring special formats). Despite this imbalance, the book will be an invaluable source for library school students and anyone concerned with the business aspects of acquiring materials.

One can only wish, however, that the editorial approach had been more general, with less emphasis on such specialized areas as European book pricing, scholarly journal publishing, and the acquisition of books from Australia, New Zealand, and Oceania. These particular essays could
have found their intended audiences in *Library Acquisitions: Practice & Theory* or *The Acquisitions Librarian*.

Part 5, "Methods of Accounting and Business Practices," is a valuable discussion of a topic that is barely touched on in library schools. However, the subject has been treated in depth in Katz's *The Acquisitions Budget* (Haworth Press, 1989), which also appeared in *The Acquisitions Librarian* (no.2, 1989). Appreciating the problems with publication time lags, it is still disappointing that Katz is not cited here.

The major gap in what could have been a state-of-the-art landmark is the absence of any discussion of automation and its impact on the business aspects of acquisitions. Marion Reid's excellent article on vendor evaluation would have benefitted enormously from a discussion of the analytical tools we now have available with automated acquisitions modules. She comments that "vendor evaluation is a time-consuming process that is lauded by some (primarily those who have done it) and viewed by others as too inconclusive, ephemeral, or expensive to be worth the time invested" (p.123). Any reasonably good automated acquisitions module will present you, with your morning coffee, an up-to-the-minute vendor performance report that includes all of the analytical factors cited here. Recommended for professional collections.—Terence Walton, Lee County Library System, Fort Myers, Florida.

**American Archival Analysis: The Recent Development of the Archival Profession in the United States.**


Until now the archival profession has lacked a good historical overview of itself and its mission. The 1983 publication of Richard Berner's *Archival Theory and Practice in the United States: A Historical Analysis* and the 1987 Australian publication of *Keeping Archives*, edited by Ann Pederson, together come closest to providing a comprehensive statement about the current status of the archival profession. Cox states that his collection of fifteen essays is not intended as a definitive work but should instead be considered his personal view of the profession during the second half of the 1980s. Already he is preparing a second volume that will examine archival institutions and education.

Like Berner, Cox has organized the fragmented archival literature into a cogent statement synthesizing the past and present stages of development. The fifteen essays provide a historical and theoretical discussion focusing on four areas of interest to archivists. The themes include discussion about the needed development of archival theory, the development of the supplementary areas of research and education, and the establishment of multidisciplinary relationships with the burgeoning information field and the historical profession, including application of the techniques of analytical bibliography to the study of documents and manuscripts. Criteria for preservation selection are of increasing relevance and serious concern to all archivists, no matter how small the collection under their care. Cox's proposed agenda for leading the profession into the 1990s should be considered a call to action for all archivists. In the final chapter one can do no better than to consult Cox's substantial bibliographical essay about recent thought and analysis of the profession.

The scope and range of his essays are impressive. What is lacking, oddly enough, is any discussion about automation. After all, the introduction of the MARC format for Archival and Manuscripts Control (AMC) promises a revolution in practice and theory. Two requirements of an online national system are standardization of form and standardization of content for the purpose of providing access. Use of an archival format meets the first requirement. As for the second, T. R. Schellenberg's precepts of informational and evidential values are presently being reexamined in light of their basic relationship to subject analysis. In conjunction with the capacity of the MARC format to make use of *Library of Congress Subject Headings*, archivists now have the opportunity to provide standardized subject access to unique archival materials.
Cox's clearly written essays provide an excellent overview of a maturing archival profession, distinct on the one hand from the historical profession and yet closely bound in values and practices to its parent profession. His discussion of the work of public historians and archivists underscores the subtle distinction between the two. Care has been taken with the production of the book, but there is a typographical error, specifically a repetition of half a sentence beginning on page 118. This collection of essays is recommended for both the novice and seasoned archivist. One hopes that it will serve as a catalyst (as the author intended that it should) for further discussion and development of archival theory and practice. As a faculty member at the University of Pittsburgh's School of Library and Information Science, Cox is bound to influence a new generation of archival students.—Dianne Stalker, Columbia University, New York.


Publication of the Abridged 12 has long been awaited. The eleventh edition was published in 1979, and many changes have occurred since that time. Abridged 12 is a true abridgment of Dewey Decimal Classification (DDC), twentieth edition. Substantial revisions have been made.

The manual for this edition is included in the volume and should prove to be a boon for classifiers who have used previous editions of the abridged DDC or for those with questions concerning classification practice in the abridged edition. Flow-charts are found in the manual. For example, the charts at 780 (Music), 913–919 (Geography and travel), and 930–990 (History) are quite useful and should be extremely helpful for those needing assistance in building numbers in these areas of the classification schedules. Several changes have also occurred in the tables. In table 1, the standard subdivision 07 has been changed from Study and teaching to Education and related topics. Standard subdivision 08 (formerly Collections) has been reused and is now History and description with respect to kinds of persons.

Table 2 has also undergone revision. The addition of maps defining key areas and regional concepts should be useful to those who know the location of a country or region on a map but have no clue to its location in the table. The area numbers for Southern Africa (68) have been restructured to provide separate country numbers for Namibia (6881), Botswana (6883), Lesotho (6885), and Swaziland (6887). Although this restructuring makes the numbers longer, the distinctions are necessary. The area number for Melanesia has also been removed from New Zealand and placed in 95 with New Guinea.

The schedules themselves have some major changes. The expansion and inclusion of the 004–006 (Data-processing and Computer science) are welcome and have long awaited incorporation into this edition, as have the changes in 301–307 (Sociology). The 780 (Music) schedule is the only schedule completely revised in this edition. Other changes have been included that reflect the changes made in DDC 20.

The part of the edition that impressed this reviewer is the Relative index. Terms for new concepts have been added. For example, the terms “AIDS” and “ATV (Vehicles)” have been included. Place-names are in proper form according to the Anglo-American Cataloguing Rules, second edition, with appropriate qualifiers. Changes in terminology are a relief from the older editions. A comparison of one minor section of the indexes in the eleventh edition and the twelfth edition will serve as an example.

11th edition
Homosexuality see Sexual deviations

12th edition
Homosexuality
medicine
social problems
Homosexuals
female
male
The index in the twelfth edition also has the appropriate numbers, and see references have been eliminated. Listed in the index is Lesbians with a number as well as Homosexuals, female, with the same number. The eleventh edition has an index entry under Mortality that reads “Mortality see Deaths.” The twelfth edition has an entry under Mortality, demography, with the number 304.6 as well as an index entry under Death, demography, with the same number, saving the user a two-step lookup process.

This edition represents a significant improvement over previous editions, particularly in the indexing. The structure of Abridged 12 will allow a library to convert to Unabridged 20 with little difficulty. Commendations are due to the Decimal Classification Division at the Library of Congress, to the Decimal Classification Editorial Policy Committee, to the Subject Analysis Committee’s Subcommittee on Dewey Abridged 12, and to all who worked on this volume. This edition will be extremely useful for small public and school libraries with collections of up to approximately twenty thousand volumes, and it represents an enormous amount of work and effort. This reviewer is quite impressed with the results.—William A. Garrison, University of Colorado at Boulder.


In Celebration of Revised 780 derives from papers given at the 1989 Music Library Association (MLA) meeting, supplemented by one by Pat Thomas from the 1989 American Library Association Annual Conference.

The introduction by Wursten and Russell Sweeney’s “Grand Messe des 780’s” provide the historical and theoretical overview. Wursten, enthusiastic, is not blind to some of the new 780s limitations. Overall it “remains nonetheless a truly impressive achievement, and one that merits the attention of music librarians everywhere” (p.19). Sweeney discusses the events that led to rethinking music in Dewey, from using Coates’ as a model to the final synthesis.

Wynton E. Matthews takes the reader through the use of the resultant new music facets in a practical manner with well-chosen examples, among them “left-handed handbell ringing” (785.884851.9366). Next is a proposal by Arnold S. Wajenberg with clearly worked-out examples for online hierarchical retrieval applying MARC content designation to the new 780. This opens up ideas for different subject approaches, not only using Dewey. “In celebration” maybe, but Pat Thomas was not celebrating, at least at the time, and expected to wait “until the dust settles” (p.89) to adopt the music part of DDC 20 in her medium-sized public library. Perhaps she can take comfort in the limited study of The Proposed Revision of 780 Music (1980) undertaken by Charles Forrest and Richard P. Smitagliola at the University of Illinois at Urbana-Champaign, also included in the MLA report. Their conclusion is that “it appears that in the main, intershelfing of works . . . would not create major disturbances for general collections of books about music” (p.75).

Clearly aimed at the initiates steeped in the mysteries, others can learn and find material of interest in the MLA Technical Report, number 19.2—David Sommerfield, Library of Congress, Washington, D.C.

REFERENCES AND NOTES
2. Perhaps, to paraphrase W. S. Gilbert (Patience, Act II), “the immortal fire will descend on them, and they will be of the Inner Brotherhood.”


Catalogers have long needed to have the
romanization tables and related materials appearing since 1945 in the Library of Congress's Cataloging Service and Cataloging Service Bulletin under one cover. Their wide dispersion has been an ongoing impediment to consistent and systematic cataloging of nonroman materials and, thus, to reliable and systematic retrieval. In LC Romanization Tables and Cataloging Policies, Tseng and her associates have at long last brought these materials together in a compilation that will no doubt be most welcome by catalogers of nonroman materials and by users of catalogs, who for years have had to rely on intuition and good luck when the tables were not readily available.

Tseng has collected the latest versions of romanization tables and related addenda, corrections, and cataloging policies for more than one hundred languages appearing in Cataloging Service (no.1–125, June 1945–spring 1978) and Cataloging Service Bulletin (no.1–47, summer 1978–winter 1990). The materials have been photocopied, and in some cases enlarged, to make them easier to read. Nevertheless, the typographical flaws of the originals are not resolved by this process. Many remain difficult to decipher, undermining their purpose. Materials are alphabetically arranged by language. When a table is used for more than one language, it is reproduced under each, though some inconsistency is evident. For example, the Hindi table is reproduced under Rajasthani but not under Awadhi, even though both are listed in the table of contents. The table of contents lists each of the languages for which tables exist, although here again inconsistencies are evident. For example, Bihari, for which the Hindi table is used, is not listed. Because the original materials appeared at different times, some information is contradictory. A Kurdish table has been developed, for example, even though a statement to the contrary is found under Syriac. A comprehensive index overcomes many if not all of these difficulties by providing access through key words, terms, phrases, authors, and titles and gives the most accurate access to the appropriate tables for less familiar language materials.

While this publication is long overdue, its timing is unfortunate. The Library of Congress has announced that it will publish its own compilation in the spring or summer of 1991. Many will want to wait for its appearance before deciding which to purchase. One hopes that the Library of Congress publication will overcome the typographical shortcomings of the original tables and, given their volatile history, issue them in a loose-leaf format to facilitate ongoing revision and additions.

Despite its inhospitable format, unfortunate timing, and minor shortcomings, catalogers and catalog users will be grateful for LC Romanization Tables and Cataloging Policies. One can only wonder why it took so long for someone to fill this long-standing and obvious need.—Daniel V. Pitti, University of California, Berkeley.


This book is ahead of its time. This is so because the thing discussed in the seventeen essays and bibliography, which make up this book, does not exist. There really are no expert systems in libraries. Yet.

In the book's first chapter, Richard Vedder explains: "Expert systems are programs which inform, make recommendations, or solve problems in a manner and at a level of performance comparable to that displayed by a human expert in the field. The name leaves something to be desired, for to date most expert system applications are decidedly not expert" (p.4).

Aluri and Riggs have organized these essays into a collection that seems to be arranged so that the reader moves, on one plane, from the general to the specific and, on another plane, from the practical to the theoretical. In the chapter following Vedder's overview, Kenneth Harmon describes the components of expert systems and the software tools used to build them. In the next chapter, Samuel Waters segues into the application of expert system technology in libraries by describing some of his experiences and the experiences of other librarians in producing expert system prototypes for libraries.

Six chapters then deal with more appli-
The next five chapters attempt to define what librarians do when they index documents, search databases, and catalog. These chapters round out the book.

While this book deals with a fascinating area, I found reading it something like eating ice: all of my effort yielded little of substance. The writing is, with notable exceptions, difficult to read. Add this to a subject matter, which, because it deals with something not yet realized but only imagined, is largely conceptual in nature, and you have a book that takes a real commitment to read cover to cover.—David T. Buxton, Gonzaga University, Spokane, Washington.


The editors, Neubauer and Dyer, have brought together nineteen articles on Western European library networks. The topics range from an excellent “Overview of European Library Networks,” by Wolfgang Binder, to multiple networks in the same country (France, by Catherine Lupovi; the United Kingdom, by J. K. Robert and M. Price), and to descriptions of specific networks from the multinational to the local.

Most articles on specific networks have a limited scope. They describe the history, organizational structure, computer equipment, supported library functions, products, and costs. This concentration on factual data, often from a systems perspective, leaves out the interesting bits about network philosophy and member relations. Hardware, software, costs, and outputs have undoubtedly changed since the last updating at the end of 1989. As the editors state in their preface, “much of the information . . . will soon be of more historical value.” A few articles on individual networks take a somewhat wider perspective, notably “Library Information System (Libris),” by Kjell Nilsson, Mayre Lehtii-Olson, and Mari Bud; “Sibil and Rebus,” by H. Villard; and “SCOLCAP, The Rise and Fall of the Scottish Library Network,” by Bernard Gallivan.

The three summary articles on Europe, France, and the United Kingdom are more useful, because they give greater attention to the relationship among the often-competing networks and evaluate the relative failure or success of differing network philosophies. I found particularly valuable the varying perspective that came from a three-tiered description of networks in the United Kingdom, because many networks had individual articles and also appeared in both the United Kingdom and European summaries. An overview article on the German situation would have helped unify the five articles on individual German networks.

The last part of the book is an extensive one-hundred-page-plus bibliography on networks, not only in Europe but around the world. The bibliography has three sections, “General,” “Countries & Continents,” and “Networks & Systems,” with
further subdivisions to refine the topic. Cross-references in "Countries & Continents" refer to appropriate individual networks. With its extensive coverage, this bibliography could be the best reason for buying the book.

Apart from the bibliography, I have trouble seeing a large American audience for this collection. Most articles on individual networks will become quickly dated. In my opinion, the three overview articles with their broader perspective do not justify the book's purchase. More evaluation and less description would have made for a more interesting and useful book.—Robert P. Holley, Wayne State University, Detroit, Michigan.


The first three editions of Immrath's Guide to the Library of Congress Classification have become classics and standard fare for practitioners and educators alike. The standard of excellence started by John Phillip Immrath in the first and second edition was carried into the third edition by Lois Mai Chan and, as expected, continues into the current fourth edition. However, much has happened to the Library of Congress Classification (LCC) schedules since 1980, when the last edition of the guide appeared. This newly updated edition is badly needed and eagerly awaited. The resultant volume is not a disappointment.

The first two chapters on history and principles of usage remain substantially unchanged in organizational structure. Chan has updated specific items, such as plans for automating the schedules, the role of Gale Research in keeping the cataloger informed of updates, and new publications (such as Subject Cataloging Manual: Shelving) of importance to the practitioner and student of the LCC.

Chapters 3, 5, and 6, on specific classification schedules and cataloging of special materials, have not been reorganized, but the contents have been completely revised and updated. New records have been found for almost all of the examples, using 1985 and later records from the LC MARC database. These chapters follow the now-familiar pattern of breakdowns of number examples, easily understood explanations of each classification schedule and its usage, and brief synopses of the history of the schedule updates. No other tool recently or formerly published offers as much information in as understandable a format as does Immrath's Guide to the Library of Congress Classification.

Chapter 4, on classification tables, has been updated, completely revised for currency, and reorganized for ease of use. The tables are now arranged according to the amount of usage given each table in the classification schedules, with tables of general application appearing first. This new arrangement greatly improves access to one of the most complex uses of the LCC schedules, that of interpreting and using the myriad tables included in the scheme. In addition, the fact that the tables are the ones appearing in the current schedules does reduce the amount of confusion and frustration in trying to use the earlier editions to interpret new tables.

Supplementary materials in the form of extensive bibliographies and appendixes finish off and flesh out this excellent volume. The bibliographies at the end of each chapter and at the end of work have been updated and include many excellent and very recent writings in the area of LCC. The appendixes provide a quick reference to the most commonly used tables and to tables for specific applications. The volume is further enhanced by an extensive index.

In conclusion, the reviewer cannot say enough good about the current efforts of Chan. There are no comparable works in existence and certainly none that could be better. This volume should be in every library and every library school.—Christine E. Thompson, University of Wisconsin-Milwaukee.

The Index and Abstract Directory, originally published in 1989, was a monumental work, listing more than thirty thousand serials and more than seven hundred abstracting and indexing (A&I) services. The present edition represents a considerable revision and expansion of the previous volume, as its growth by over six hundred pages clearly demonstrates.

The work consists of two main sections and a series of indexes. The first section lists titles of more than thirty-five thousand serials that are covered by one or more A&I services. The arrangement follows the same general pattern established by EBSCO's Serials Directory and is by subject. Within subject, arrangement is alphabetical by primary title (usually the key title or title and statement of responsibility, but occasionally by uniform title derived according to the Anglo-American Cataloguing Rules, second edition). Complete bibliographic information similar to that found in the Serials Directory is given for each title. This is followed by a list of the A&I services covering the title.

The second section, now 927 pages in length, is perhaps the most useful and what renders the directory unique. It is an alphabetical list of the A&I services, some sixty of which are new to this edition. More than ninety online and CD-ROM services are included as well. The section gives bibliographic data for each service, together with a complete list of the various serials that it covers.

Three indexes complete the work. First is an alphabetical index of both the serials and A&I services by their "primary" titles. Next is a subject index to the A&I services. This is followed by an ISSN index.

Information for the directory was taken from questionnaires returned by the publishers of the A&I services, from EBSCO's internal database, and from the CONSER database. (CONSER began an A&I project in 1983. Records for serials resulting from the project are being continuously maintained and contain information as to where a serial is indexed or abstracted.)

As with any still-new publication, several difficulties exist. It is to be hoped that these can be corrected with time. The first of these is the occasional use of the uniform title as primary title. While the title and statement of responsibility can offer a close approximation of the key title, the uniform title might not. For example, the uniform title "Bulletin (Geologinen Tutkimuslaitos (Finland))" is found as the primary title on page 333, with the title and statement of responsibility "Bulletin/Geological Survey of Finland" given in parentheses. The mixture of key titles and titles and statements of responsibility likewise causes problems in romanized languages, because they may be romanized according to different standards. For instance, one serial is found on page 2540 of the title index under its key title "Zurnal obsej ..." separated by many entries from another serial on the previous page, romanized "Zhurnal obschei ..." in accordance with the Library of Congress standard. (No diacritics are used in the directory.) A more dramatic example involves the romanization of Chinese, where titles are variously romanized "Zhongguo ..." or "Chung-kuo ..." in accordance with the Pinyin or Library of Congress—Wade-Giles—standards. A slight difficulty of inconsistency, related to the use of key title, is that earlier or later serials might well not be cited by that form of title. For example, the entry for "Zhonghua Fangshe Yixue Yu Fanghu Zazhi" on page 948 says that the serial was formerly entitled "Fang Shi i Hsueh Yu Fang Hu" rather than the Pinyin "Fangshe Yixue Yu Fanghu." The last problem, perhaps one of space and economy, is that the title index includes only primary titles; no variant titles—parallel titles, etc.—are listed, nor are titles proper ("Chung-kuo ...") when the serial is cited under key title ("Zhongguo ...") or uniform title. As the directory gravitates more and more toward key title, therefore, romanized titles in the index will become
less and less accessible to users knowing only the Library of Congress standard. (These comments are equally applicable to EBSCO's Serials Directory.)

To find out where a serial is indexed or abstracted, reference librarians can also consult Ulrich's International Periodicals Directory, or, if they have access to the CONSER database via a bibliographic utility such as OCLC, they can check the MARC record itself. The chief value of The Index and Abstract Directory is perhaps found in its second section, the list of A&I services and the titles that each covers. Though incomplete—lacking, for instance, Informationsdienst Bibliothekswesen, issued by the Deutsche Bücherei—this might well be the best source for this type of information, other than the A&I services themselves, and is of value not only to reference librarians but also to those involved in collection development who are considering the acquisition of a given A&I service.—Jim Cole, Iowa State University, Ames.


Fothergill and Butchart have produced a definitive work on nonbook materials. The text is divided into six parts: "Background," "The User," "Materials," "The User and the Materials," "Management," and a bibliography and an index. Beginning with a historical overview of the evolution of nonbook materials, the text discusses the whole range of nonbook materials (visual materials, sound recordings, computer files, etc.) and covers topics ranging from acquisitions, cataloging and classification, collection management, and care and maintenance of nonbook materials. Unlike other texts on this topic, this considers factors such as the reason librarians have been reluctant to integrate nonbook materials into collections, nonbook materials as self-financing resources, and the reason that patrons lack awareness of nonbook resources.

The authors have attempted to cover the topic very thoroughly. Each part begins with an introduction, followed by a historical overview, a discussion of the existing situation, and solutions. The text is often more detailed than is necessary. For example, in the section "Equipment: Principles of Operation" in part 3, the paragraph on magnetic materials begins: "Messages are recorded by the magnetic realignment of particles on one surface. This action is brought about by changes in the magnetic flux on the head which rubs against the surface, the variations in the flux being caused by electronic translations . . ." (p.117). Simple principles of operation would be more appropriate. Similarly, the "Manual of Practice" section, also in part 3, is unnecessary. Operation of equipment, such as record players and microfiche and microfilm readers, is often simple and fairly obvious. Additionally, principles of operation vary greatly with type and manufacture of equipment, and it is impossible for one text to detail operating procedures for all equipment necessary to access nonbook materials.

In contrast, part 4, "The User and the Materials," is very practical and offers timely suggestions for the acquisition, cataloging, and storage and retrieval of nonbook materials. Bibliographic organizations and printed sources that librarians may consult are also listed. Although the authors state that this section does not attempt to give all the details of nonbook cataloging, it does provide specific and helpful information. Examples of blank and completed cataloging and classification pro forma are included. The authors also recommend texts that are useful for cataloging nonbook materials.

The third edition has been expanded and updated to include new technology (optical storage systems, laser disks, audio CDs) and developments in nonbook librarianship. The organization of the third edition is also different from that of the second edition. References in the third edition are cited at the end of each part, rather than at the end of the text. However,
the biggest changes are in the organization of the text, the updated contents, and the quality of the print and illustrations. The print in the third edition is clearer and easier to read, and outdated illustrations have been omitted.

Non-Book Materials in Libraries is well written and concise. The text is organized in a logical fashion, beginning with the historical background of nonbook materials and continuing to discuss the user, materials, and management of nonbook collections. Despite its British slant, this publication will certainly be valuable for American audiences. The scope and coverage of the text make it suitable for library school students, nonbook catalogers, librarians in school and public libraries and learning resource centers, and also for technical staff in media centers.—Mary Beth Fecko, Rutgers University, Piscataway, New Jersey.


The inaugural issue of The Acquisitions Librarian, a Haworth journal, has now been republished as a stand-alone monograph. As Dykeman indicates in the introduction, the collected articles, dealing as they do with the automation of acquisitions, “describe the hands-on experience of librarians who have implemented various types of acquisitions systems in this changing environment” (p.2). This hands-on perspective is both the strength and the weakness of the collection.

How so? First, this is great stuff if you haven’t yet brought up a new automated acquisitions system and if you use one of the many systems described herein. The articles run the gamut from issues related to planning for and selecting systems, implementing changes in workflow and organization, maintaining relationships with software and materials vendors; they look at integrated systems (locally and externally developed), shared systems, stand-alone systems, microcomputer systems, vendor-based systems. Both the nitty-gritty details and some of the big-picture considerations are examined. The perspectives represented include those from very large and moderately small academic libraries, as well as a couple of public library viewpoints. Although there is one notable exception (DOBI-S), most of the big names are here (NOTIS, Innovacq, Geac, Dynix), and the microcomputer-based systems favored by smaller libraries aren’t slighted. There is much to be gleaned by librarians poised on their first major automated acquisitions project.

On the other hand, if you have brought up one of these systems, or a different system altogether, the tendency is to think either “Why am I reading this? I know it already” or “They think they have it bad? My system won’t let me overencumber!” Either way, one is anxious for a sequel—one in which authors, perhaps the same individuals who wrote these articles, come to grips with the generic problems inherent in each type of acquisitions automation system. “How did it here” is all well and good until one is beyond that point; some underlying theory and rationale are in order now. Which brings up the other weakness: by now these articles are probably two years old and maybe older. If Haworth intends to republish these journal issues as separate monographs, one would hope for a speedier publication cycle; interest in this material is likely to begin diminishing rapidly.

Despite these weaknesses, overall quality is good to very good. The latter category includes Carol E. Chamberlain’s article on distributed acquisitions; Heather S. Miller’s refreshingly candid discourse on short- and medium-term monetary and work-load costs associated with implementing a new system; Michael Kreycie’s provocative thinking on the implications for approval plans; Mary Ann Garlough’s succinct description of the gains and losses inherent in a multiuser, shared-system environment; and Stephen Bosch’s useful discussion of considerations for automated systems relative to ordering out-of-print and not-yet-published titles. Reading between the local lines, one can reach some generic conclusions. Examples
Acquisitions is now precipitating the same major reorganizations in work flow that occurred when cataloging operations were automated in the 1970s (Somers, Nicol, Iacono). Or what one gains in terms of speed of processing and ease of accessing orders is oftentimes offset by the limitations of system-generated reports for fund accounting, materials tracking, vendor performance, etc. (Garlough, Harrell). Norman Desmarais' overview article on microcomputer-based systems is likewise an exception to the general local-system-centric attitude.

Given the general neglect of acquisitions practice and theory in the nation's library and information science programs, this title is a must-purchase for library science libraries. Whether other libraries are willing to make the $39.95 commitment will depend largely on where they are in the automated acquisitions implementation process. If still on the horizon, they will want to acquire.—Richard P. Jasper, Emory University, Atlanta, Georgia.


While there are two types of communication—formal and informal—this book examines several levels of communication but focuses on formal reports within scientific and technical literature. Public and restricted report formats explored in this work include journals, conference proceedings, technical reports, patents, maps, secondary literature, and online services. The authors see communication within the scientific and technical community as serving seven functions: (1) answers to questions; (2) a way to stay up-to-date on developments within a field; (3) information about a new research field; (4) a review of major trends; (5) additional evidence in a research area; (6) expansion of researchers' interest areas; and (7) a way to elicit critique of research.

In their introductory chapter, the authors discuss different types of communications and the roles they play. Each subsequent chapter focuses on a type of formal report communication. An example of the type of coverage provided can be given by describing the journal chapter, which discusses the history of journal literature, types of journals, the concept of refereeing, page charges, publication practices, preprints, the way journals fit into the communication process, and electronic journals.

The other chapters provide similar coverage of other types of formal communications. The chapter on secondary literature covers abstracting and indexing services, while the online services chapter covers the electronic version of the same secondary literature.

The illustrations are helpful in that, in addition to illustrating the chapter, they provide actual information the reader can use. Examples are the list of reference collections of U.S. patents, patent cross-references, and an illustrative depiction of the communication process.


While scientists might find this helpful as they learn more about publish-or-perish criteria, the audience that will benefit most from this book will be librarians specializing in collection development for and service to the scientific and technical community. This volume is recommended as a practical review of literature in science and technology.—Jennifer Cargill, Rice University, Houston, Texas.


Despite widespread interest in issues involved with automated support of resource-sharing efforts, this brief volume
is likely to have a rather limited audience. However, those currently involved in setting up a formal cooperative resource-sharing effort between libraries may find some good reminders in the text as well some useful examples in the sample documents. The volume's eighty-six pages of text offer a brief overview of recent developments, a discussion of management issues, guidelines for coordinating collection development among academic libraries, a short discussion of standards, and two case studies. These topics are covered in six chapters, of which all of Chapter 3 (the description of the IRVING Library Network's linking of local dissimilar systems in Colorado) and most of Chapter 5 ("Model Criteria for Coordinating Cooperative Collection Development") are reprints of material by other authors.

The text's appendices are four Illinois documents, including an agreement form and bylaws of the Illinois Library Computer Systems Organization, its interlibrary borrowing code, and the Illinois State Library Automation Committee's Plan for Funding Automated Resource Sharing in Illinois Libraries. Although these appendices may be partially useful as models, they naturally include much material related to local circumstances and the content, particularly of the plan, already contains some significantly out-of-date material. The appendices, which make up fifty pages of the volume, are not indexed.

As is true of the appendices, the two case studies, IRVING and ILLINET, contain material that reflects local conditions and history. Unfortunately, in the rapidly evolving area of library automation, this material is no longer up-to-date upon publication. It does, however, provide information about cooperative approaches that have proven successful.

Perhaps the most useful portion of the book, contained in Chapter 4, is the author's formulation of a list of questions to be addressed by both local librarians and network developers during the planning process for an automated resource-sharing project. Drawing on his experience as director of the Illinois Library Computer Systems Office, the author covers, in outline form, the what, why, how, and when issues, including considerations of funds, operations management, and evaluation. In a later section, there are some astute reminders about standards and how they evolve, allow options, and often apply incompletely.

Although the book has some potentially useful features, it is likely that only a limited number of libraries will find it immediately applicable to the extent that they can justify its purchase in these days of tight budgets.—Karen L. Horný, Northwestern University, Evanston, Illinois.


Librarians and library school students learning about statistics need to know (1) how to compute a procedure and (2) which statistical test is most appropriate for a particular situation. Simpson's Basic Statistics for Librarians (Library Assn. Publishing, 1988) covers the former, and the title under review addresses the latter.

In a scant fifty-six pages of text, Simpson offers many examples and exercises and covers descriptive statistics and the graphic and tabular presentation of data. Chapter 4 summarizes probability, the binomial distribution, the Poisson distribution, and selected statistical tests (t-test, Z-test, F test, chi-square test, analysis of variance, and regression) from Simpson's 1988 textbook. There are, however, new examples and exercises. This twelve-page chapter is too brief to provide adequate coverage of any of these tests.

The guide does differentiate between qualitative and quantitative data; but given the number of recent writings on the difference between the two, the discussion is too cursory. Furthermore, any explanation of the graphic presentation of data should address microcomputer software.

Simpson maintains that "if data are to be useful and produce reliable statistics, the greater the quantity of data the better" (p.11). Actually reliability depends on
more factors. Finally, the selection of an appropriate statistical test depends on a number of factors not covered in the book. For example, library researchers must determine what the number of independent and dependent variables is, whether they are willing to risk a type I or type II error, whether the distribution has one or two tails, which measurement scale is needed, and whether parametric or non-parametric tests are more appropriate.

Instead of the purchase of this companion guide, this reviewer would recommend the purchase of a good statistics textbook or a companion guide that compensates for the shortcomings of the title under review. Two examples of useful textbooks include Arthur W. Hafner's Descriptive Statistical Techniques for Librarians (American Library Assn., 1989) and Farell E. Bloch's Statistics for Non-Statisticians: A Primer for Professionals (National Foundation for the Study of Employment Policy, 1987).

Peter Hernon, Simmons College, Boston, Massachusetts.


This well-written monograph covers the various advances that have been made in information-retrieval research, beginning with the pioneering studies undertaken in Cranfield I and II. The experimentation drew the attention of librarians and of information scientists, and a lively round of experimentation ensued. Ellis has made an excellent summary of what is past and goes forward from there.

In the extension of origins of the various kinds of pioneering research, Ellis points out that progress has been made in totally different ways. The value of his approach provides considerable background in preparation for the future. In particular, Ellis reconsiders other major systems in which retrieval was dealt with via the computer. For example, beginning with the Smart System in 1971, he follows a step-by-step process right up to 1989, including hypertext and hypercatalog.

One of the many things that have been interesting is the number of different ways in which experimenters have dealt with information. Thus computers now have much more to work with than was the case not so long ago.

Prior horizons, building upon statistical and probabilistic types of retrieval methodology, have limitations, which the author explains. Newer methods, such as cognitive user modelling and expert intermediary systems, have opened ways of handling information not readily available a few years ago. These are described in detail.

Last, but by no means least, is a chapter in which step-by-step possibilities are shown from the original article, “As We May Think” (1945), through the “Potential and Problems of Hypertext.” Each chapter has an extensive set of references, mainly from the 1980s, and there is an eight-page bibliography. The author is to be commended for providing so much background material for the new reader. Would that every monograph was as helpful as this. — Phyllis A. Richmond, Chagrin Falls, Ohio.


The Thomas Handbook of Quality Control for the Microfilm Industry is a guide to film-processing control and quality assurance of master negative microfilms. The loose-leaf-bound handbook is intended to be a user-friendly, nontechnical source of information. The author's tone is quite jocular, and each chapter is followed by a brief quiz. Pull-out quality-control forms and processing charts are provided to be photocopied for use.

Some sound and simply stated explanations are given, such as those for silver microfilm composition, processing control, densitometry, archival permanence of microfilm, and quality-control equipment. However, the information provided on camera-exposure control, acceptable film-density ranges, required resolution, splicing of retakes, and bibliographic targeting
is more applicable to a microfilm service bureau engaged in the microfilming of business and legal documents than to library preservation microfilming programs engaged in the microfilming of brittle books and manuscript collections.

The Thomas Handbook is directed to the microfilm industry of which library and archive preservation microfilming is a very small and specialized part. The standards of density, resolution, physical quality, and content to which microfilm for library preservation purposes must adhere are much more stringent than those to which the microfilm industry in general must adhere. The intended audience is records managers and technicians with limited technical knowledge of microfilm and photography who perhaps have a more limited need for such knowledge than those engaged in preservation microfilming. Individuals responsible for the quality control of library preservation microfilm must have a more complete understanding of the technical processes and quality requirements of microfilm produced for libraries and archives than this handbook provides.

Although no one handbook of quality control is available that provides complete explanations of microfilm processes and addresses the particular standards and concerns of preservation microfilming for the library and archives community, the necessary information can be gleaned from several sources, all of which could likely be purchased for the $93 cost of The Thomas Handbook of Quality Control for the Microfilm Industry. While The Thomas Handbook might be useful in the microfilm service bureau environment, it has little value for preservation microfilming programs.—Eileen F. Usovicz, MAPS The Micrographic Preservation Service, Bethlehem, Pennsylvania.


This is the first volume in what is planned as an annual publication on the issues of library resource sharing. Perhaps because it is an initial volume, it is to some extent an introduction to the issues; the sixteen articles are divided into five sections.

The first section, a single article by Richard M. Dougherty and Carol Hughes, sets the stage by discussing, in detail, the history of resource sharing in libraries in the United States since 1905, with special attention to the current critical role of technology. They maintain that technology itself might today be a barrier to information sharing and document delivery, as some librarians emphasize the maintenance of local systems at the expense of national systems.

The second section includes several articles on traditional aspects of resource sharing. Thomas L. Kilpatrick discusses the historical issues of interlibrary loan and then proceeds to view the problems in an age of OPACs and other technological innovations. James R. Mouw's article on the Center for Research Libraries describes the current challenges for an organization that was once a pioneer in resource sharing but that now is threatened by loss in membership. Michael Carpenter presents a scholar's view of resource-sharing issues and lambastes librarians' inappropriate behavior, that is, their lack of willingness to truly provide access.

The third section of articles discusses current practices in resource sharing, including CD-ROM union catalogs in various consortia in Texas (Pamela A. Zager) and ILLINET's telefacsimile network (Carolyn Grangaard Smith). Two excellent articles detail successful conspectus projects: Suzanne Fedunok describes New York's METRO project, and Carolyn Kacena and others recount Southern Methodist University's experience with the OCLC/AMIGOS-supported collection-analysis system.

Only some of the projects described in the previous section are on the cutting edge of library resource sharing; the fourth section looks to the future. Marsha Ra's and Marilyn K. Moody's articles discuss librarians' involvement with technologies, including group access for smaller libraries, linked systems projects, and the use of
CD-ROMs, as well as more theoretical issues. Adrian W. and Julia S. Alexander’s article on intellectual property rights and Bonnie Juergens and Gloriana St. Clair’s article on accountability for authors both explore the changing perspectives demanded for publishing in electronic media. The volume concludes with an excellent annotated bibliography by Gloriana St. Clair, Karyle S. Butcher, and Shirley R. Scott.

This first volume of Advances in Library Resource Sharing focuses on large academic and research libraries in the United States. While most librarians may consider it appropriate that such libraries take the lead on resource sharing, certainly other libraries have been intensely involved in major resource-sharing projects. It is to be hoped that later volumes will also focus on the efforts of smaller academic, public, school, and special libraries and address issues of international resource sharing.

The volume has no index; cataloging-in-publication data and LCCN are not included. As with most compilations, the writing is uneven; some of the articles are rather weak. Still this series should be considered for most libraries’ standing order budgets.—Mary Margaret Benson, Linfield College, McMinnville, Oregon.


This little book, in sixty-eight pages, does what the speakers set out to do: present how-to coverage of remote storage of dead or little-used library materials, from planning and consulting to carrying through, with most of the speakers giving “testimony.” The passage of time from the conference to publication does not reduce the value of this information.

Beginning with the options for dealing with an overcrowded collection—weeding, microfilming, reduced seating, compact shelving, or storage—the speakers go on to describe how to implement the decision to employ storage. They cover (1) the political process (who is to be involved in deciding); (2) how to decide (date, subject, or clear evidence of little use by lack of circulation); and (3) the mechanics of the operation (record changing and implementation).

Speakers previously involved in remote-storage installations tell of their experiences in site selection, construction costs, environmental controls, funding, moving materials, governance, services, and levels of access. The constituencies that have roles in storage decisions include patrons, collection development librarians, public service librarians, and those in technical services. Resistance to storage will be lessened if all of these groups are deeply involved, if clear procedures are followed, and if access is reasonably good, with a good prompt recovery and delivery system. Claire Q. Bellanti reports the main goal of delivery is to put a stored item into the hands of users when they need it (i.e., “The right book for the right reader at the right time”). Wendy Pradt Lougee raises a little-considered but very relevant issue for remotely stored boxed materials: be alert for brown recluse spiders. Judith Paquette includes a substantial bibliography.

Surprisingly, no mention is made of the Center for Research Libraries—perhaps because of the conference’s western setting. There might have been more consideration of ownership decisions in cooperative storage, especially if sets are consolidated and duplicates are to be sold or discarded. Most of the issues relevant to remote storage, however, are covered. Any library with a need to reduce the number of its materials—by weeding (sometimes a less desirable alternative to storage but one involving many of the same decisions and the same people to be consulted), creating a local storage arrangement, or entering into cooperative storage—needs this book.

Those faced not with storage but a relocation or moving situation will find much help in Donald G. Kelsey’s chapter “Movement of Materials.” He covers just about
all options except mass borrowing to be returned to the new location or a line of students passing books to one another from old to new site. He also missed one option used at the University of Missouri, that of removing loaded hook-on shelves to truck to the new site.

If your library is considering remote storage, you need this book.—Ambrose Easterly, Dowelltown, Tennessee.
It's now even bigger, faster, and more accurate — connecting you to our 10 million book inventory plus any in-print, out-of-print, and forthcoming title.

Fill all your book ordering needs in one place in record time thanks to B&T Link™ — an extraordinary system of search and order software modules from Baker & Taylor Books. With more refinements and conveniences than you ever dreamed possible, B&T Link literally puts any book at your fingertips.

**Module 1: Ordering**

*Get it smarter, faster, easier.* No matter how simple or intricate your ordering method, ordering through B&T Link gives you lots of new advantages. Our special order feature lets you customize every line item with customer requests, multiple distribution notes, as well as print notification postcards. Now, in addition to sending orders upon completion, you can also transmit orders automatically into our mainframe at a convenient predetermined time. Use our new ordering interfaces to output data in a variety of standard formats to other software products. Or check in shipments with our new on-screen receiving.

And of course, B&T Link still provides the most comprehensive confirmation report you can get. And it's yours free.

**Module 2: Database, The Title Source**

*Find any book, in every detail.* B&T Link's new Module 2 bibliographic software on CD-Rom puts you in complete command of over 1.2 million book, video, audio, calendar, in-print, out-of-print and forthcoming titles. You'll enjoy extraordinary accuracy through our system of "linked" ISBN's that automatically takes you to the most recent ISBN. Nine easy ways to search our comprehensive database allow you to quickly create a title listing, including hard-to-find titles. We've even made searching up to 20% faster.

Database, The Title Source reports on everything from multiple bindings to the latest price and publication status, and is updated every month to include more than 80,000 changes.

**Module 3: Inventory**

*Take stock at a glance.* Using B&T Link Inventory software is like standing in our warehouse. You'll know immediately what's in stock and what's on order in your regional service center. You'll get weekly updates on diskettes of an inventory with over 120,000 titles. And that's not all. Soon to be added to the B&T Link system are Invoicing, Ordering History, Fund Accounting, and Open-to-Buy modules. When it comes to getting a book, B&T Link is the system that does it with convenience and the any book advantage.

For more information, call 800-233-3657

BAKER & TAYLOR Books
a GRACE Distribution company

© 1990 Baker & Taylor Books WE'RE LEADING THE WAY®
How many times have your students or patrons used Granger’s Index to Poetry, the Essay and General Literature Index, or the Short Story Index only to find that your library didn’t own the books they needed? How many librarians have tried to use these standard indexes as acquisition tools only to discover that their book budgets never stretched far enough or that the books were unavailable?

CoreFiche® is the answer to these questions. CoreFiche is the micro-publishing program that provides your library with thousands of full-text, unabridged books cited in the standard indexes found in most libraries. CoreFiche is designed to bridge the frustrating gap between reference and referenced material. It offers the books that these standard references index. Hundreds of thousands of poems, essays, short stories, and plays are always accessible and instantly retrievable. Students and patrons will always find the full text they really need. Their search won’t be frustrated by books you don’t own or because books you do own are ‘missing’ or ‘checked out.’ CoreFiche also provides a unique approach to collection development and reference enhancement by combining primary sources (books on microfiche) with secondary ones (companion indexes).

The CoreFiche Program

CoreFiche: Anthologies Listed in Granger’s Index to Poetry plus... 1,360 volumes/1,628 fiche (total to date—ongoing series). The largest, most comprehensive poetry collection and collateral index ever assembled. Over 140,000 different poems in English.

CoreFiche: Books Listed in the Essay and General Literature Index. 1,810 volumes/2,199 fiche (total to date—ongoing series). The most comprehensive collection of expository writing extant.

CoreFiche: Books Listed in the Short Story Index. 314 volumes/348 fiche (total to date—ongoing series). More than 4,000 short stories are contained in this broad-based international selection.

CoreFiche: World’s Best Drama. 860 plays/160 fiche. An original compilation of plays, by 275 dramatists from antiquity to the Twentieth Century.

Special focus and smaller library programs are available. Please call us for details.

Print and CD-ROM Indexes Provide Easy Access

All of the poems, essays, short stories and plays contained in CoreFiche can be quickly accessed through our specially created print indexes. Electronic access is available through our newly published compact disc, CD CoreWorks®. This allows your students and patrons to go directly from ‘Grangers,’ EGLI, and the Short Story Index to the exact fiche they need. A print index is provided free with the purchase of any phase of CoreFiche. We make extra copies of all our indexes available at very reduced prices, ideal for resource sharing.

CoreFiche and CD CoreWorks are trademarks of Roth Publishing, Inc.

Roth Publishing, INC.
5 Great Neck Road • Great Neck, NY 11021
327-0295 or (516) 466-3676 • Fax (516) 829-7746