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Editorial: On Falling from the Tree

This issue marks a major change—the inaugural issue of a new editor. Presenting this issue is a little bit like being an unfledged bird whose first attempt is a toss-up between flying and falling from the tree. In addition, following in the footsteps of Elizabeth L. Tate as editor is both an honor and a trifle frightening. Under her aegis, LRTS has achieved great scholarly recognition, a venerable tradition that I wish to continue.

Nevertheless, flying—or editing—would be no challenge if it did not bring with it the ability to investigate new territory. A few changes will be apparent immediately; for example, the inclusion, once again, of reviews of recent publications. Seven reviews are included in this issue, and others are planned for future issues. A new name on the masthead is that of Richard D. Johnson, now book review editor for LRTS as well as the RTSD Newsletter. More changes are planned for the inaugural issue of volume 32, two issues hence; I have no wish to earn the “Snake in the Grass Award.”

Interestingly, several authors of articles in this issue are noteworthy for their identification as public service librarians, including David Vidor, Elizabeth Futas, Tony Stankus, and Kevin Rosseel. Such crossovers into our territory are likely to become commonplace in future issues as library functions are viewed in a more unified manner. The announcement at ALA Midwinter of new gateways between Dialog and two bibliographic utilities—OCLC and RLIN—are indications of the pervasiveness of this unity and its value to libraries. The interest of public service librarians in topics of importance to LRTS readers is indicative of the central role of technical service activities in providing library services.

Future issues will bring more visible changes both to LRTS’ format and content. You may anticipate different styles for our cover, typefaces, and arrangements of editorial and advertising matter. New emphases in addition to book reviews include working papers of current research, brief studies of practical problems, news of automated systems, and editorials. The annual review of the literature, scheduled for this issue, will appear in the fall because of budget constraints. (See “A Letter to Our Readers from the RTSD President” by Judith P. Cannan.)

Your responses to all of this are invited, whether to praise or censure, taking the form of the “Interactions” column. To interact, kindly send U.S. mail to the editorial offices or email via ALANET: ID = ALA1371. (Electronic replies will be faster.)—Sheila S. Intner, Editor.
Dear Members and Subscribers:

I was asked by the editor to write this brief note to you to explain why volume 31, number 3, is only sixty-four pages long. RTSD ended fiscal year 1986 with a deficit. The Executive Committee of the RTSD Board of Directors and the chair of the RTSD Budget and Finance Committee, Arnold Hirshon, have worked hard all year to ensure that RTSD would be able to pay back the deficit and end this fiscal year with surplus funds. However, since the 1987 ALA Midwinter Meeting, division revenues have been substantially reduced due to the cancellation of some continuing education programs and others that ran at a loss or a minimal profit. Consequently, RTSD's financial position is once again extremely bleak. To make certain that RTSD ends fiscal year 1987 with a balanced budget, even if it is unable to settle last year's deficit, it was necessary to take some drastic measures. One such measure was to reduce the size of the final issue of LRTS for fiscal year 1987.

Through the efforts of the Executive Board and the Budget and Finance Committee, all issues of LRTS are budgeted at the normal size throughout fiscal year 1988, and the journal will return to ninety-six pages with the next issue.

I thank you for your continued support and want to assure you that the onetime reduction in the size of LRTS was only made as a last resort.—Judith P. Cannan, RTSD President.

**OPEN FORUM**

The RTSD/CCS Task Force on Education and Recruitment for Cataloging Open Forum: A Personal Report from the Chair. Chicago, Illinois, 17 January 1987: Sixty attendees at the RTSD/CCS Task Force on Education and Recruitment for Cataloging Open Forum, mostly catalogers, catalog administrators, and educators, listened to five brief, formal presentations and then launched into a wide-ranging question-and-answer session covering recruitment into the profession as well as into cataloging, preparation for entry level positions, the library degree, the accreditation process, and the nature and reputation of cataloging work.

Task force chair Janet Swan Hill opened the program by providing the task force’s history and its findings thus far. She introduced Bernard Schlessinger, associate dean of the Texas Woman’s University library school and former COA member, who described the accreditation process and ways to influence it. Pat Oyler, faculty member at Simmons College Graduate School of Library & Information Science, talked about teaching cataloging and course content. The two educators were followed by two practitioners: Heidi Hoerman, associate university librarian for Technical Services, Montana State University, and Liz Bishoff, principal librarian for support services, Pasadena Public Library, discussing cataloging issues in academic and public libraries, respectively. Schlessinger generated the biggest shock waves by revealing how little curriculum content has to do with accreditation.
The Dichotomous Collection

David L. Vidor and Elizabeth Futas

Library collections supporting professional education were examined using a business collection as a prototype. The coexistence of professional and academic materials within the library collection was determined before an examination of patron use for each component was conducted. In addition to measuring potential use of library materials during their first three years on the shelf, the researchers compared relative patron use of academic and professional books during a maximum of nine shelf years. The researchers tested the hypothesis that, because of their nature and content, professional books would become obsolete before academic books.

The very nature of professional education—whether it be in such diverse fields as library science, nursing, or business—places demands on a library collection that are not present in the more traditional academic programs such as history or English. While the curriculum in professional education can be seen as a blending and melding of the academic foundation with the know-how of that profession, programs such as history or English have curricula that focus exclusively on the academic nature of the subject. Library collections supporting professional education should mirror the curriculum and thus reflect a duality, containing both the traditional academic material needed for research in an education program with a goal of acquainting the student “with the theory, the principles, and the techniques of analysis, organization, planning, and control common to all institutions” as well as the contemporary practical literature of the discipline required for a successful professional career. If graduates of professional education programs are to function successfully as practitioners, their educational process must draw upon both the broad, theoretical foundation of academia and the precise reality of that particular profession at the present time.

Although a review of the literature did not uncover any relevant articles concerning professional school library collections, the researchers believed that a dichotomous—academic and professional—library collection for professional education existed; that belief led to a hypothesis that the use of the professional, practical books is at least as great as the

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This research was made possible through a faculty/librarian collaborative grant from the Council on Library Resources.
use of the traditional, academic books. The belief in a dichotomous collection also led to a hypothesis that the obsolescence rate, as measured by a lack of circulation, for professional books is higher than the obsolescence rate for academic books because the professional books contain more popular titles and include information that becomes outdated, irrelevant, or erroneous in a shorter period of time. In this study, academic materials represent literature on the theory and principles of business and industry, and professional books focus on the practices and applications within a business or industry. For example, two books considered to contain academic material are *Auditing: An Integrated Approach* and *Economics of Marketing*, while two professional or practical books are *The Entrepreneur’s Manual: Business Start-ups, Spin-offs, and Innovative Management* and *Big Mac: The Unauthorized Story of McDonald’s*.

Professional business education was selected as the prototype library collection to be analyzed since the two researchers were most familiar with its curriculum, student body, and library collection. An analysis of the collection development activities for the School of Business Administration at Emory University was conducted for the years 1977 and 1983 under a cooperative research grant from the Council on Library Resources.

**Existence of a Dichotomy**

The very existence of a dichotomous collection was confirmed through an analysis of the materials acquired for the business collection in 1977 and 1983. Titles from selected categories in *New Books in Business and Economics: Recent Additions to the Baker Library* and *Recent Additions to the Baker Library* were examined to determine how many had been purchased by the Woodruff Library at Emory University. The following categories were selected as areas in which comparisons could be made for titles acquired in 1977:

1. Accounting and control
2. Corporate and business finance
3. Economic and social conditions of the United States
4. Financial institutions and capital markets
5. International business
6. Management
7. Marketing
8. Organizational behavior
9. Personnel
10. Production management

For material acquired in 1983, the following categories were compared:

1. Accounting and control
2. Finance
3. Human resource management
4. International business
5. Management
6. Marketing
7. Production and operations management
8. United States social and economic conditions

Of the 1,046 titles appearing in the selected categories in the Baker list in 1977, 443 (42.3%) were also owned by Emory University. In 1983, 1,663 titles appeared in specified categories of the Baker list, and 610 (36.7%) were also in the Woodruff Library. Titles added to Harvard University's Baker Library in any given year represent scholarly, academic books and serve as the foundation for the academic component of the library collection in this study.

The presence of the professional, practical component of the library collection was measured by comparing the business books reviewed in five popular business periodicals during 1977 and 1983 to the holdings of the Woodruff Library. The five business periodicals chosen were cited most often by alumni of the School of Business Administration in a survey. Emory University owned 63% (109 of 173) of the business titles reviewed in 1977 and 70.9% (105 of 143) of the business titles reviewed in 1983.

Business school faculty members had the primary responsibility for library selection in 1977, with librarians assuming collection development duties by 1983. The relatively high percentage of practical, popular business titles added to the collection in both years reflects an acknowledgement of the value of that material as well as a decision by both selector groups to address the dichotomous needs within the business collection.

**USE OF THE BUSINESS COLLECTION**

The circulation records of a sample of professional books were compared with circulation records of a sample of the academic books in order to support the authors' hypothesis that the use of professional, practical books is at least as great as the use of traditional, academic books. The sample constituted a random 20% of the items owned by Emory University that were included on the Baker list as well as a random 20% of the business books reviewed in five business serials and owned by Emory University. Only those books that circulate or those books with potentially identifiable circulation statistics were included in the working population; consequently, reference books that do not circulate and government documents that do not retain a circulation record at Woodruff Library were not included. Because the working population for academic books was much larger than that for professional books, the number of items in each academic sample was greater than the professional sample, even though the same percentage was applied to both categories. The sample size for each group was as follows: 1977 academic sample, 70; 1977 professional sample, 17; 1983 academic sample, 84; 1983 professional sample, 17. The only measure of library use was an examination of the circulation data, even though circulation records cannot reflect in-house use of library materials.

There were 17 books in the professional, popular sample and 70 books in the academic sample for 1977. The circulation statistics for the 1977 sample are presented in figure 1.

The circulation sample supports the hypothesis that professional,
practical books are used as much as academic books. In fact, in the 1977 sample, a higher percentage of professional books than academic books had circulated (88.2% versus 78.5%), reflecting a very real interest on the part of library patrons in information found in practical, popular books of the profession.

The interest by library users in professional literature compared with academic materials was even more intense for the 1983 sample than it had been for the 1977 sample. Only two-thirds of the 1983 academic sample (56 of 84 titles) circulated, while 100% of the professional sample (17 titles) circulated.

Clearly, circulation data for 1977 and 1983 support the hypothesis of equal or greater use of professional literature over academic materials. Professional school library patrons, i.e., faculty, students, or alumni practitioners, appear to utilize those books recognized within the profession more frequently than those identified within academia.

**Obsolescence of Professional Literature**

The practical, popular business literature would have a higher obsolescence rate over time, the researchers hypothesized, than academic business literature. The very nature of the content of professional literature, moderately trendy, how-to, or pragmatic, was the basis for this hypothesis. The researchers believed that the more theoretical and traditional material found in academic business books would be more useful to library patrons over an extended period of time. In this study, circula-
The Dichotomous Collection

The dichotomy of an item measured usefulness, while the lack of circulation indicated obsolescence. Again, any in-house use of either professional or academic material was not measured and was disregarded for the purposes of this study. When this study was conducted, sampled materials from the 1977 Baker list and professional reviews had a maximum of nine years in which to circulate.

The results of the sampling of circulation records have several interpretations. While this sampling appears to indicate that use of professional and academic materials was almost equal during shelf years seven through nine, there was, in fact, a greater decline in use over the entire nine-year shelf life for professional books than for academic books. The professional books had a circulation rate of 88.2% over the entire shelf life and 73.3% during years seven through nine, for a difference of 14.9%. Academic books had a much smaller difference: 4.1%, reflecting a circulation rate of 78.6% over the entire period, and 74.5% during years seven through nine. Circulation rates are depicted in figure 2.

As a corollary to circulation rates of older materials, the 1977 books were also examined to determine how many items that had circulated at least once during the entire study (1977–1985) had circulated between 1977 and 1979, a period of time equal to the entire shelf life of the 1983 sample and a relatively short period of time after the purchase of the more recent material. Since filled circulation record slips were removed

![Figure 2](image_url)

Circulation Rates for 1977 Titles
from books, actual circulation data cannot be determined for those items with evidence of a removed record slip. However, since evidence of a removed slip does indicate some activity, the sample for 1977 academic books suggests that 74.5% had the possibility of circulation during 1977, 1978, or 1979, while the 1977 professional books sample had a potential circulation rate of 80% during the same period.

These data gain significance when compared with the circulation data for the 1983 sample. In samples from both years, a greater percentage of professional books circulated during the first three years on the shelf than did academic books. Circulation rates for both material types selected in 1977 and 1983 are compared below.

**Circulation Rates during First Three Years on Shelf**

<table>
<thead>
<tr>
<th>Year Selected</th>
<th>Professional Books</th>
<th>Academic Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977</td>
<td>80.0%</td>
<td>74.5%</td>
</tr>
<tr>
<td>1983</td>
<td>100.0%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

A comparison of obsolescence rates between professional and academic books in the 1983 sample is not yet possible because these books have had only three years in which to circulate. An analysis of circulation statistics should be conducted after these books have been on the shelf for a longer period of time.

Data gathered in the sample seem to indicate that the initially higher circulation rate of professional books is dissipated over time, resulting in an almost equal circulation rate in both categories of materials in shelf years seven through nine. Academic books in the 1977 sample maintained an identical circulation rate (74.5%) for the early shelf years and the later shelf years, reflecting a steady use over nine years.

**CONCLUSION**

The existence of a dichotomous collection was supported by the examination of the use of business materials acquired at Emory University in 1977 and 1983. The rationale for developing such a dichotomous collection was demonstrated by measuring the circulation records in a sample of academic and professional materials. While the circulation records do not indicate who—students, faculty, or alumni—checked out each book, if use by any library patron is a justifiable rationale for collection development activities, the circulation data obtained in this study argue persuasively for the presence of both academic and professional materials in a library collection supporting professional education.

When circulation records were examined three ways—(1) the first three years of shelf life, (2) shelf years seven through nine, and (3) the entire shelf life to date—the professional, practical books consistently had a higher circulation rate than did the academic books, except during shelf life years seven through nine. Many reasons can be suggested for the disparity in circulation statistics between professional and academic books. Students might select professional books more often because the material complemented assigned readings in textbooks. Or, the teaching methodology employed by faculty members in the School of Business
Administration might require using the type of information found in the professional books. Another reason might be that the content of the professional books could serve as a guide or model for the graduates of the business school who are trying to be successful practitioners.

That a greater percentage of the 1977 professional books circulated during shelf years one through three than circulated during years seven through nine reflects the greater likelihood of books circulating within three years of purchase and their subsequent decline in use and is consistent with findings in other studies. Due to their relative currency, the materials in the 1983 sample should be examined several years hence to determine if the expected decline in usage occurs over their extended shelf life.

The authors’ hypothesis that professional, practical books would experience obsolescence, as measured by lack of circulation, sooner than the academic books was not supported by the findings of this study. Even though the percentage decline in circulation rates of professional books was greater than that of academic books, actual circulation rates in years seven through nine were almost identical (approximately 74%) for each category of books.

While business education and the library collection at Emory University served as a model for this study, the authors hope that when the study is replicated for other professional disciplines the data will continue to support the importance of dichotomous library collections for programs of professional education.

**References**

6. Ibid., p.9.
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The Rise of Eurojournals: Their Success Can Be Ours

Tony Stankus and Kevin Rosseel

The number of science journals that focus explicitly on European research is increasing. These Eurojournals are compared with individual national and international titles. Their success is gauged, and their remaining shortcomings discussed. As they earn the loyalty of the best European contributors, they provide Americans with an attractive alternative to a large assortment of foreign subscriptions.

A torrent of criticism concerning high and discriminatory pricing has recently cascaded upon European publishers, threatening to drown out a very positive development in science publishing: the emergence of Eurojournals. If these journals succeed in their goal of consolidating the best European research, Americans may succeed in ameliorating one of their problems: the proliferation of journals for each country at a time when some U.S. libraries can afford only a few.

EUROJOURNAL CHARACTERISTICS

Eurojournals, which have been steadily increasing in number (see figure 1), have been evolving certain common traits (see figure 2).

• First and foremost, Eurojournals are intended to create a sense of identity and fraternity among European scientists. The strategy involves assembling quality papers by Europeans in a European outlet, along with conference proceedings, commentary, etc.

• Eurojournals often have predecessors in single-nation journals, some with histories going back eighty years. These Eurojournals have an advantage over entirely new journals, which must often wait for sufficient manuscripts to fill an issue, construct a reviewer network, build a certain academic respectability, and engender a faith in continuity necessary to maintain subscribers. For Eurojournals developed from single-nation journals, success is often a matter of progressively enlarging a good operation across frontiers.

• Some Eurojournals are endorsed by Pan-European scientific research societies. In some cases individual national societies have

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dropped their own titles and united with like-minded societies behind a Eurotitle.

- Some Eurojournals are based at designated European multinational research centers. These institutions, largely founded after World War II, have generally been outstanding both in research output and in promoting a sense of camaraderie.
- A source of strength for many Eurojournals is their affiliation with very strong publishing empires: Pergamon in England, Springer-Verlag in West Germany, Karger in Switzerland, Munksgaard in Denmark, Elsevier in the Netherlands, etc. This link provides quite an advantage in both advertising and distribution.
- Virtually all Eurojournals are based in Western Europe. This need not be the case in the future, particularly given the warm and open academic relations of countries such as Hungary and the immense research history of some East German institutions. A start-up by capitalists was probably for the best, however, given certain initially unpopular policy decisions and the levels of investment necessary for successful Eurojournals.
- The almost exclusive use of American English as the language of publication was the toughest of these policy decisions and had overtones of political and cultural imperialism. Editors also tended to lose their lofty independence in a number of matters, particularly in the ponderous pace at which issues were put together. Many journal editors were forced by their publishers to discard their time-

![Bar Chart](image)

**Figure 1**
The Number of Scientific Eurojournals by Decade
<table>
<thead>
<tr>
<th>TITLE</th>
<th>PUBLISHER</th>
<th>AFFILIATION</th>
<th>PREDECESSORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Journal of Biochemistry 1967</td>
<td>Springer; West Germany</td>
<td>Federation of European Biochemical Societies</td>
<td>Biochemische Zeitschrift</td>
</tr>
<tr>
<td>European Neurology 1968</td>
<td>Karger; Switzerland</td>
<td>International Society of Neuroendocrinology</td>
<td>Psychiatry et Neurologia</td>
</tr>
<tr>
<td>Pfluegers Archiv; European Journal of Physiology 1968</td>
<td>Springer; West Germany</td>
<td>European Southern Observatory</td>
<td>Pfluegers Archiv fuer die gesamte Physiologie des Menschen und der Tiere</td>
</tr>
<tr>
<td>Astronomy and Astrophysics 1969</td>
<td>Springer; West Germany</td>
<td>European Society for Clinical Investigation</td>
<td>Formed by the merger of five European national journals</td>
</tr>
<tr>
<td>European Journal of Clinical Investigation 1970</td>
<td>Blackwell; United Kingdom</td>
<td>Societe Europeenne de Chimie Therapeutique</td>
<td>Archiv fur klinische Medizin</td>
</tr>
<tr>
<td>European Journal of Medicinal Chemistry 1974</td>
<td>Elsevier; Netherlands</td>
<td>Federation of European Microbiology Societies</td>
<td>Chimica Therapeutica</td>
</tr>
<tr>
<td>FEMS Letters 1977</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Journal of Respiratory Diseases 1980</td>
<td>Munksgaard; Denmark</td>
<td></td>
<td>Formerly the merger of Acta Tuberculosea et Pneumologica Belgica and Scandinavian Journal of Respiratory Diseases</td>
</tr>
<tr>
<td>European Heart Journal 1980</td>
<td>Academic; United Kingdom</td>
<td>European Society of Cardiology</td>
<td>—</td>
</tr>
<tr>
<td>EMBO Journal 1982</td>
<td>IRL; United Kingdom</td>
<td>European Molecular Biology Organization</td>
<td>Formerly Wilhelm Roux's Archiv fuer die Entwicklungs-Mechanik der Organismen</td>
</tr>
<tr>
<td>Roux's Archives of Developmental Biology 1985</td>
<td>Springer; West Germany</td>
<td>European Developmental Biology Organization</td>
<td>Formed by the merger of Lettere al Nuovo Cimento and Journal de Physique; Lettres</td>
</tr>
<tr>
<td>Europhysics Letters 1986</td>
<td>European Physical Society; French office</td>
<td>A consortium of 15 societies share some responsibilities</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2
A Dozen Characteristic Eurojournals
honored, but stodgy, academic layouts and ancient typographies and even to accept advertising. The production of many of these journals became thoroughly Western: very slick, increasing high-tech, and quite expensive, but generally more likely than their predecessors to be delivered on time. Readers today typically find heavily illustrated, U.S.-format pages with double columns. Multi-font computer typesetting is interspersed with computer graphics. More Western European journal publishers are putting into their scientific, engineering, and medical titles the same concern for quality that has long made their handling of visual arts materials so admired. As Eastern Europeans accept these conditions and acquire advanced graphics capabilities, they will become more credible candidates for Europublishing.

- Most Eurojournals deal with the life sciences, perhaps reflecting recent explosions in bioscientific research. This may also reflect some negative experiences in bucking rather well established and highly conservative single-nation chemical, physical, mathematical, and geological societies.
- Finally, most, but not all, Eurojournals have the word European tucked somewhere in the title or subtitle.

DIFFERENCES BETWEEN EUROJOURNALS AND OTHER JOURNALS PUBLISHED IN EUROPE

Eurojournals are not synonymous with just any European journals, nor is the somewhat informal Eurojournal movement synonymous with certain formal publishing developments there.

- Eurojournals are not the same as those single-nation journals that accept many papers from both other European and non-European countries. Examination of the latter's editorial boards, level of local professional society controls, placement services, product advertisements, etc., still reveals an essentially national flavor, even if contributions have become more international.
- The Eurojournal movement is akin to the Europhysics journal movement—indeed, two Europhysics journals qualified for our purposes as Eurojournals—but there are important differences. The Europhysics journal designation is given to a rather large assortment of well-established and often mutually competitive journals. One of the purposes of this commendable arrangement by the European physics community is to limit further duplication. But the essentially unorganized Eurojournal movement is probably more successful. Few, if any, Eurojournals compete with one another. Each seems to have held onto the stake it has claimed.
- Finally, Eurojournals are generally smaller in variety of author nationality than most international journals, both of U.S. and European origins. While Eurojournals will accept some U.S., Japanese, and Third World papers, there are noticeably fewer than in most international journals. Indeed, most Eurojournals have a higher proportion of purely European papers than most single-nation journals that have an international circulation. See figure 3 for a
comparison based on the categories of designated Eurojournals, U.S. journals, and a Common Market category. This last group was composed of equal parts single-nation journals with a tradition of international authorship and designated international journals—both types based in Europe. Thirty matched journals with more than three thousand papers were sampled.

**TWO MEASURES OF EUROJOURNAL SUCCESS**

How are Eurojournals doing? We have devised two performance measures. First we took a look at their market share of manuscripts in the life sciences—the most prevalent disciplines for Eurojournals. Using the corporate index of the *Science Citation Index*, we classified the output of articles from five of the most influential European universities and research centers for the period 1982–85. We used the same journal categories as in figure 3. The countries selected for study—West Germany, England, France, the Netherlands, and Switzerland—are not only important as homes for these institutions, but are also cases of very competitive publishing environments. These countries have publishing empires within their borders, and their authors traditionally have a cosmopolitan outlook in the dissemination of their papers into the Common Market.

With Eurojournals constituting less than 2% of all journals available as vehicles for their research, how often did prestigious research centers submit papers to them? See figure 4. After examining exactly 14,578 articles, we got some answers. Eurojournals hold a disproportionately high share (from 6 percent to 10 percent) of these prime markets. These figures are remarkably consistent from year to year. In all the nationali-
ties except English, there was actually a gradual two-point gain in market share. (The British gained only one point).

Grabbing a good share of papers—even those of leading institutions—may not demonstrate conclusively whether the journals are of high quality. Our second test involves "impact factor" measurement. This gives us a figure roughly equivalent to "average citations per article per year." When comparing Eurojournals with national titles in the same subject field, impact factors can be another useful yardstick of quality. Fifteen sets of matching journals from the five previously mentioned countries were studied, plus journals from the U.S., as a test group against our Eurojournals. Eurojournals placed third out of seven, rather closely followed by West German journals, but exceeded among the European titles only by the British. See figure 5. It is clear that, at the very least for smaller European scientific powers, Eurojournals are not only a popular choice but also a higher-quality one.

Despite these generally excellent showings, some nagging questions remain. What would it take to improve the standing of Eurojournals? What is holding them back from always being the best in Europe and even seriously challenging the Americans in impact factors?

**FAILINGS AND OPPORTUNITIES**

*Is there a failure of the British to see themselves as Europeans?* The excellent overall performance of British journals was quite consistent in each contest. Rarely did any British journal rank below third in any matchup. Some of the credit must go to the unique qualities of British research and publications, and some is attributable to the fact that British journals share many of the characteristics and functions that make Eurojournals
attractive outlets. Both types of journals use English, have strong publishers with wide distribution, feature modern design, etc. Yet with few exceptions (specifically *Nature*, *Lancet*, and the *Journal of Molecular Biology*) they, too, have little chance of catching up with U.S. titles. Moreover, the notion of having all continental Europe come to Britain for a better outlet is probably less practical than wholeheartedly integrating those high-quality British papers into continental European journals.

*Is there overextended generosity—and a failure of critical judgment—in accepting so many non-European papers?* One of the most striking impressions formed during the course of this research was the enormous number of Third World papers in European journals of any sort. While some of these papers are excellent by any standard, many show the effects of poor funding and reduced contact with the most current trends in developed countries that one finds in the less-affluent scientific centers. Americans could certainly take on more Third World papers as part of their duty to promote science in underdeveloped countries. It is also high time for those ubiquitous and economically capable Japanese contributors to European journals to aggressively promote Pan-Asian or Pacific Basin English-language journals. With the marketing and production skills for which they are justly esteemed, the Japanese could develop journals worthy of their own excellent research. These journals could also serve as an effective magnet for a reasonable share of the best work of their talented Third World neighbors.

It is easy—and regrettably appears racist—to single out Third World or Japanese papers as ones whose individual impact factors are likely to weaken those of the journal overall. Previous work suggests that at least some U.S. papers could also stand closer scrutiny. The cited study asks...
why Americans, whose journals—as demonstrated in figure 5—almost always have the highest impact factors, still send so many of their papers to European outlets. While the increasing attractiveness of some of these journals is a consideration, and while no definitive interpretation could be reported, some surprising results were demonstrated. U.S. papers on average do not raise the impact factors of European journals that publish them—in fact, they lower them. Generally, European impact factors are already lower than those of U.S. journals. After a moment’s reflection, one discovers a common denominator in some U.S. manuscripts exported to European journals: impact factors of only half the value of U.S. papers intended for publication in U.S. journals. See figure 6. Embarrassingly, a lingering number of U.S. scientists still use European journals as a dumping ground for research of less-than-stellar quality, a tradition that must be discouraged by Eurojournal editors who seek to command the respect of themselves and others. We acknowledge the criticism that it would take a doctoral dissertation’s worth of verification to demonstrate this condescending misbehavior. As for the criticisms that (1) Eurojournal issues would become too slim; or (2) they would become chronically delayed waiting for enough papers to fill the void in issues bereft of non-European papers; or (3) Americans won’t subscribe to journals in which they can’t readily publish, we offer answers in the last two discussion items.

Is there still a lack of confidence in Eurojournals on the part of some Europeans? We have extended this work to look at the other side of the coin: the impact factors of purely European papers appearing in U.S. journals that have Eurojournal competition. While the 110 European papers studied fell short of those of their U.S. hosts, their impact factors were higher than if they had published in the matching Eurojournals. Ironically, this gives us a definition of “best European papers” that still holds lingering validity for some Europeans: those manuscripts sent off to U.S. journals. Once again, see figure 6. Eurojournal editors must work harder to win over these defectors.

Is there a lack of leadership in the European publishing community? While some firms have done well in realizing the profits presented by Eurojournals, it is time for thoughtful, concerted action. Perhaps there should be a division of publisher responsibilities according to discipline: Springer for biochemistry, Munksgaard for clinical medicine, etc. A general goal would be the buy-out or merger of European-based single-nation or international Eurojournals. While all this sounds unfair in terms of promoting monopolies or cartels, it may be the only fair way for one continent—Europe—to compete in impact factors and prestige with what amounts to another continent—the U.S. These consolidations would offer advantages for both European authors and U.S. subscribers. Both groups would have fewer, but more respected, journals to deal with. There would be less bewilderment concerning choice for either manuscripts or subscriptions. With all this consolidation one gets more substantial and timely issues that are not dependent on waiting for lesser contributions from authors outside Europe to fill a number. One
also sustains truth in advertising: European journals that are overwhelmingly European.

Consolidations would not come cheaply, and some U.S. libraries would choose to opt out of Eurojournals altogether. But those who cannot afford a serious commitment to science have been canceling already, one scattered title at a time, and their absence from subscription rolls is inevitable. Such subscriptions to Eurojournals as remained would be indicative of genuine interest and would be dependable. Emphatically, they will not be taken for the demeaning and ultimately unreliable reason that some U.S. librarians will maintain them as occasional outlets for the lesser papers of their U.S. faculty clients. Rather, the best U.S. scientists will be smart enough to know that they need access to the best in European research, and the best U.S. librarians will be smart enough to provide it.

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11. A preliminary study of 110 European papers appearing in U.S. journals showed them scoring about 27 percent less impact factor than their host journals overall. This was still 10 percent better than the rate for the comparable Eurojournals. The fact that neither exported U.S. nor European papers did well suggests that papers, like some wines, do not travel well.

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The Office for Descriptive Cataloging Policy at the Library of Congress

Ben R. Tucker

Functions and concerns of the Office for Descriptive Cataloging Policy at the Library of Congress are explained. The office answers questions about cataloging rules and interprets them for its staff and for others outside the library through correspondence, telephone calls and person-to-person discussion, and documents decisions in the form of rule interpretations. In addition, it maintains documentation of procedures for its own operations as well as for the tables eventually issued as ALA/LC Romanization Tables.

Catalogers may immediately comprehend the basic functions of the Office for Descriptive Cataloging Policy at the Library of Congress by considering what the chief cataloger or head cataloger does in any other library having a cataloging unit large enough to warrant naming a principal. As the name of the office suggests, however, these basic functions at the Library of Congress relate exclusively to descriptive cataloging, whereas in most other libraries in the United States the principal of a group of catalogers would have responsibilities also for the subject side of cataloging. At the Library of Congress descriptive cataloging refers to bibliographic description and to the formulation of name headings and the assignment of these headings to bibliographic records as access points. In this way, descriptive cataloging is distinguished from subject cataloging, which refers to the creation, maintenance, and assignment both of Library of Congress Classification numbers and of Library of Congress Subject Headings to bibliographic records. The Office of the Principal Cataloger in the Subject Cataloging Division of the Library of Congress performs principal cataloging functions on the subject side.

The Office for Descriptive Cataloging Policy was formed in 1979 as a unit within the cataloging directorate of the Processing Services Department. It functions directly under the director of cataloging as the Library of Congress authority on descriptive cataloging for all units that do any descriptive cataloging; these are primarily the Descriptive Catalog-

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No copyright is claimed on this article, which the author wrote as part of his official duties as an employee of the U.S. government.
ing Division, Shared Cataloging Division, Special Materials Cataloging Division, Serial Record Division (all within Processing Services), and the cataloging unit of the Geography and Map Division, a division of the Research Services Department. Formulating the policy for descriptive cataloging and coordinating its application in uniform practices to be followed by descriptive catalogers in the five divisions named means, first of all, the development and maintenance of the Anglo-American Cataloguing Rules. The chief of the office has been a member of the Joint Steering Committee for Revision of AACR since 1976 and in this capacity writes rule revisions to be proposed by the Library of Congress, attends meeting of this international committee, evaluates the proposals of others, and participates in the discussion and decision-making process for all proposals. The office contributes to the development and maintenance of AACR in other important ways.

1. It answers questions about the rules and interprets them as necessary for Library of Congress staff members.

2. It does the same for other librarians, publishers, editors, authors, and library users when questions arise in correspondence, telephone calls, or personal visits to the office.

3. It documents decisions on the rules, certain answers to questions about them, illustration of certain rules via examples, etc., in the form of rule interpretations.

In addition to the formal rules for descriptive cataloging, the office is also responsible for documentation of routines and procedures followed by descriptive catalogers at the Library of Congress. (The corpus of these routines and procedures is entitled the Descriptive Cataloging Manual.) Examples of this type of documentation are not only the basic instructions for searching and descriptive cataloging as an aspect of the larger work flow of the processing of materials at the Library of Congress, but also specific instructions for creating, revising, and canceling name authority records.

A third type of formal documentation for which the office is responsible is the production and maintenance of the romanization tables submitted for approval by the Library of Congress to the American Library Association for eventual issuance as the ALA/LC romanization tables.

The office has eight staff members: a chief, a secretary, and six others, each of whom has the title Descriptive Cataloging Specialist. In addition to assisting the chief with the formal documentation described above, the descriptive cataloging specialists also spend much of their time consulting with the large Library of Congress cataloging staff on any difficult problem in descriptive cataloging and answering questions about AACR2 or about any of the following: the Library of Congress Rule Interpretations, the Descriptive Cataloging Manual, and the ALA/LC Romanization Tables. They participate in various research and investigative efforts for any projects or programs that are related to descriptive cataloging or may arise through various cataloging developments at the Library of Congress. (Examples have been the Cataloging in Publication program and the shift to online searching from card catalog searching, which is informally called TOSCA.)
Of all these activities, the one that probably contributes more to the visibility of the office outside the Library of Congress than any other is the production of rule interpretations for AACR2. It is consequently appropriate to provide some more detail about this particular activity.

The Library of Congress Rule Interpretations (LCRIs) is a miscellany of statements about policies or other matters that are properly accessible through an AACR2 rule number. The principal categories of these statements are the following.

1. AACR2 contains a number of optional provisions, plus a few alternative rules, and after wide consultation and extensive discussion before AACR2 began to be applied on January 2, 1981, the Library of Congress made formal decisions on each optional or alternative rule. The LCRIs include as an essential element the official record of these decisions.

2. AACR2 contains many other permissive statements not explicitly called an option or alternative rule. (Such rules are identifiable by terms such as "if necessary, etc.) The introduction to AACR2 explains that in some cases a library would decide, legitimately, whether the instruction should be applied consistently by its catalogers. The official record for decisions made to promote such consistency by the Library of Congress is included in the LCRIs (e.g., at 7.1F1).

3. Some rules (e.g., 6.1G1) include an explicit choice (... or ...), and for the cases in which the Library of Congress has made a policy decision about the choice, the decision is included in the LCRIs.

4. The Joint Steering Committee for Revision of AACR has decided on a number of changes in AACR2, including the addition of some new rules (e.g., 6.4D4), the revision of some existing rules (e.g., 24.13 and 24.18), and the cancellation of a few rules (e.g., 2.1F2). The LCRIs include all such changes made by the committee.

5. A few rules in AACR2 need some further illustration by new or revised examples (e.g., 8.5C13, 8.5E1, or 21.4B).

6. Certain rules need to be explained, interpreted, etc., due to problems in understanding or misinterpretations that have surfaced. Such explanations, interpretations, etc., are included in the LCRIs (e.g., at 21.0B or 21.1B2).

7. Certain rules need to be amplified to apply their provisions not only in the situations covered by the wording of the rules but also in certain additional situations (e.g., 21.1C, 22.16, 21.17B).

8. A few rules are not applied by the Library of Congress, and statements to this effect are included in the LCRIs, e.g.:

- 2.12-2.18: early printed monographs cataloged instead according to Bibliographic Description of Rare Books
- 11.0A: microreproductions cataloged instead in terms of the original, not the microreproduction—as far as the body of description preceding the note area is concerned
- 12.7B1: frequency note always made
- 22.12, etc.: titles preceding forenames added at end of headings
Categories 6–7 represent the group that is of greatest interest. These come from questions, problems, etc., that arise in cataloging at the Library of Congress or at another library in contact with the Library of Congress (NACO libraries, libraries corresponding with the Office for Descriptive Cataloging Policy, etc.). This category depends on hands-on experience, which not only generates these particular LCRIIs but also causes them to be reworded, added to, revised extensively, or canceled, as experience provides a rationale for further action.

Except for those formulated by the Joint Steering Committee for Revision of AACR (rule revisions), the office formulates all "rule interpretations." They are drafted by the office, and the drafts are routed to the director for cataloging for review. They are also routed to one or more of the following: heads of descriptive cataloging sections, chiefs of the division engaged in descriptive cataloging, the Subject Cataloging Division, MARC Editorial Division, Cataloging in Publication Division, etc., as necessary. After comments are considered and approval is finally received, the LCRIIs are duplicated and distributed to LC catalogers and other concerned LC staff members. This distribution is in the form of a separate page for each rule under which a statement is made, on the recto only, with holes punched for three-ring binders. (This allows an update of some kind to be made to one statement, without necessitating the incidental reissue of other statements.) Quarterly, the LCRIIs produced by the process described are published in Cataloging Service Bulletin.

References

2. Currently, the staff members are Ben R. Tucker (chief), Gail M. Moorthouse (secretary), Nathalie Delougaz, Robert B. Ewald, Kay D. Guiles, Adele Hallam, Diane C. Humes, and Judith A. Kuhagen (descriptive cataloging specialists).

NEW ENGLAND ASIS MEETING

Sixty members of the New England chapter of the American Society for Information Science met on May 2 at the Sterling and Francine Clark Art Institute, Williamstown, Massachusetts, to hear four speakers discuss the latest developments in computerized access to art literature—a subset of ASIS’ broadening interest in computerizing the humanities.

Uniform Title as Author:
A Problem in Online Catalogs?

Thomas R. Sanders

The author reviewed a wide range of retrieval problems that arose in connection with the implementation of the NOTIS system at Auburn University, especially the problem of retrieving uniform titles coded as if they were authors. Though NOTIS programming subsequently was altered to cause these access points to index twice—once in the author index and again in the title index—it might be more appropriate to consider whether changes are needed in the underlying format so that there is a universal solution to this potential retrieval problem.

This article grew out of the author's experience implementing a specific online integrated system at a specific locality. The Northwestern Online Total Integrated System (NOTIS) was installed at Auburn University in February 1984 and by autumn 1984, enough records had been tape loaded for the system to be made available to both the library employees and the public. In September and October 1984, the library also began a retrospective conversion project. The first cards pulled and sent to the agency doing the conversion were shelflist cards representing currently received serial titles and related earlier titles. As tapes from this project were received and loaded, the serials department staff began the simultaneous tasks of matching records in order to add acquisitions information, shelflist holdings, series authority file decisions, and current receipts/check-in. In addition, as technical service staff received more intensive training than did public service employees in the use of NOTIS, technical services librarians held formal training sessions for representatives from each public service area and answered questions about specific records.

RETRIEVAL PROBLEMS WITH NOTIS

As head of the serials department, the author reviewed a wide range of retrieval problems that arose. He was warned at the NOTIS Users Group meeting in July 1984 that the library would have to adjust to differences in search strategy. Once the system was available online, it quickly became apparent that there were large, unanticipated differences in retrieval between the existing card catalog, divided into an

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A MORE PERVERSIVE PROBLEM

As part of the committee that selected an automated system for Auburn University, the author developed some familiarity with the basics of several competitive online systems being marketed. One common characteristic seems to be a division of the indexing structure into author files, title files, etc., and the requirement that the library user specify whether the search key being entered represents an author, a title, a subject, a call number, etc. This division can be seen in standard reviews, such as Fayen’s “The Online Public Access Catalog in 1984.”’ So common is the practice that it is taken for granted in articles that explore possible solutions to problems of bibliographic instruction and uniform access (e.g., Buckel’s “The Uniform Catalog”). I less easy to determine without direct examination of the system is which MARC fields retrieve under which search keys. It is certainly not impossible, as the NOTIS example demonstrates, to call a particular field an author field while programming a system to retrieve it under a different search key (e.g., as a title).

The question raised here is similar in intent to that raised by Buckel, namely, Does this design in online catalogs lend itself to uniform, easily understood search keys? Or are changes needed at a higher level—the national level—to encourage greater uniformity and more ease of understanding?

Throughout the article there are references to MARC, i.e., machine-readable cataloging. These references are to what is commonly called USMARC. (For a concise history of the development of MARC, LC-MARC, and USMARC, and the relationships between them, please refer to the introduction to Crawford’s MARC for Library Use.) References in this article to specific field names/numbers may be clarified by exam-
ining the official documents issued by the MARC Editorial Office/ MARC Distribution Services, i.e., MARC Formats for Bibliographic Data (MFBD), or to Crawford's work.

It is the author's assumption, based on experience with a variety of reference librarians and library users in several very different libraries, that the users of catalogs make a clear distinction in their own minds between what is a title and what is an author; the difference between title and subject may be less clear. The concept of author is not equally clear to librarians, who may be more comfortable with the terms main entry heading and emanation.

If this is true, then a format for machine-readable cataloging that identifies certain titles as if they were authors must cause difficulties in end-user retrieval of bibliographic data (and actual items) that can only be overcome by (1) an extremely effective and far-reaching program of bibliographic instruction, or (2) retrieval programs that alter the identification. The alternative is recognition that the purpose of a cataloging system is effective retrieval of items required by library users and that the underlying bibliographic data should be formatted in a manner consistent with the construction of logical search keys.

**DEVELOPMENT OF UNIFORM TITLES**

The practice of assigning uniform titles grew out of a perception that all editions of certain works, republished numerous times with variant titles, should be accessible using the same access point in the printed catalog (either book or card format). This is the basis of most of the relatively sparse discussion of uniform titles to be found in library literature up until the past few years. The definition of uniform title found in the Anglo-American Cataloguing Rules, second edition, (AACR2) deals exclusively with this concept of the uniform title, stating:

Uniform title
1. The particular title by which a work that has appeared under varying titles is to be identified for cataloging purposes.
2. A conventional collective title used to collocate publications of an author, composer, or corporate body containing several works or extracts, etc., from several works, e.g., complete works, several works in a particular literary or musical form.

At the same time, the implementation of AACR2 and its interpretation by the Library of Congress, which is the official interpretation used by OCLC and RLIN, in effect, created an addition to the definition of uniform title:

3. A constructed title made of the title on the work plus a modifying term assigned by the cataloging agency, which serves to distinguish between two or more works with main entry under title where the titles would otherwise be identical, e.g., serials with non-unique titles.

While the third definition is not part of the AACR2 definition, its use is clearly set forward in the Library of Congress Rule Interpretation (LCRI) to AACR2 Rule 25.5B. This rule deals with the addition of modifying terms to headings to distinguish between otherwise identical headings.
The addition of this complex concept to the AACR2 definition marks a total change in meaning for the uniform title. Previously a means of drawing otherwise distinct bibliographic records together at a uniform access point, it is now also a means of creating distinctly separate access points for bibliographic records that might otherwise retrieve from the same access point. The decision to fit this new category of access points into the existing structure by giving it the same name as another, quite different, category of access points causes some confusion. It uses the same term for concepts with opposite meanings. At the same time, yet another concept was added to uniform title by incorporating into that term the few surviving form headings, such as those related to laws and treaties.

**Problems Resulting from the New Definitions**

One practical result of this expanded definition of uniform title occurring in the widespread implementation of AACR2 is an enormous growth in the number of uniform titles used as access points, particularly those coded 130 in the MARC formats, using a field usually identified with authors, a 1xx field. While the reasons for this increase should be obvious to practicing librarians, it may be useful to return to AACR2 on the use of uniform titles to emphasize this point. Chapter 25 ("Uniform titles") describes the utility of uniform titles:

Uniform titles provide the means for bringing together all the catalogue entries for a work when various manifestations (e.g., editions, translations) of it have appeared under various titles. They also provide identification for a work when the title by which it is known differs from the title proper of the item being cataloged.

The rule also includes a list of guidelines for deciding whether to use a uniform title:

1. the item bears a title proper that differs from the uniform title, or
2. the addition of another element (e.g., the name of the language of an item, see 25.5D) is required to organize the file.

Under these rules, which apply primarily to monographic works, the choice of whether to use uniform titles is strictly at the discretion of the local cataloging agency. This author’s experience is that many libraries develop limited lists of authors and authorless classics for which uniform titles will be generated locally or accepted from national databases. Of these, the list of authorless classics is relatively short and unchanging. It was uniform titles in this group—e.g., *Bible*—that were at question when the MARC formats were first drawn up, and it was agreed to continue in the online record the practice of treating as an author access point those uniform titles not associated with an actual personal or corporate author. However, the LCRI on uniform titles added to this group a much larger and ever-growing group of uniform titles for serials and series that otherwise would not have distinctive titles.

Rule 25.5A was subsequently revised by the Joint Steering Committee for Revision of AACR to take into account the new categories of uniform title. It currently states:
Use a uniform title for an entry for a particular item if
1. the work has appeared (in other than revised editions) under varying titles
   proper, and the item being cataloged bears a title proper which differs
   from the uniform title or
2. the title proper needs the addition of another element (see 25.5) to organ-
   ize the file or
3. the title used as the main or added entry heading for a work needs to be
distinguished from the title used as the main or added entry heading for a
different work or
4. the title of the work is obscured by the wording of the title proper (e.g.,
because of introductory words or statements of responsibility present in
the title; see also 25.3B).  

This use is embodied in the MARC formats, where the title proper is
given the same field number/name (field 245, "Title statement")
whether it is used as a main entry or not, but the uniform title may be in
either of two fields depending on how it is used: field 130, "Main
entry—uniform title heading," or field 240, "Uniform title." In the
case of title, the field number/name/structure relates to what is in the
field. In the case of uniform title, the field name/number/structure re-
lates to how the data in the field is used.

This is a serious difference. As a single example, the 1xx fields, includ-
ing 130, are "Bibliographic fields subject to authority control" but the
2xx fields, including 240, are not. The 1xx fields, except for 130, are
names of people or bodies having the capability of producing, creating,
or emanating works of various types and titles. In short, they are authors
of one sort or another.

Neither chapter 12 ("Serials") nor chapter 25 of AACR2 refers to the
use of uniform titles for serials; neither discusses whether uniform titles
are to be considered author equivalents in creating access points. This
use is seen more clearly in the Anglo-American Cataloging Rules (AACR1),
in which consistent reference is made to the uniform title's use as main
entry in a manner that clearly equates the uniform title with the concept
of author, although the word author is not used explicitly.

How does a title become an author? What is the rationale behind this
rule? And how does it affect access?

TRANSFORMATION OF THE UNIFORM TITLE

This author contends that the uniform title became an author not on
philosophical but on pragmatic grounds. The uniform title, unlike the
title proper used as main entry, was a title that, in the absence of a true
author, was logical to put in the author location on printed cards. This
usage allowed placing the title proper in the location traditionally allo-
cated to it. This approach avoided retrieval problems resulting from
placing a uniform title used as main entry in the position traditionally
occupied by the title proper. It also made possible use of the title proper
in filing either the main card, in libraries that wished to use that title as a
filing element, or as a secondary access point by itself (on a separate
card). The physical layout of the catalog card and the need for easier
problems in filing and retrieval made treating the uniform title main en-
try as an author a good, practical compromise in a period when card
catalogs were the primary means of displaying bibliographic informa-
tion to the library patron.
In retrieving bibliographic records in a card catalog, it is frequently necessary to have a second filing element in order to help users distinguish quickly between the various works represented in the catalog. In order to avoid extensive typing in the small space available at the head of printed cards, it was frequently necessary to line down on the card by physically drawing a line from the first filing element down to the second filing element. This practice was used when a second author or editor was the access point and needed connecting to the title or when the title added entry needed connecting to the author to aid in distinguishing between works with the same title.

Works cataloged with a uniform title where the entry was under author posed a relatively minor problem for filing cards to collocate the various editions in an understandable manner. You filed author—uniform title—and a third element, not the same in all filing rules. Larger problems arose in cases in which there was no author main entry, but main entry was under title. (It is difficult to reconstruct for librarians who do not predate online catalogs how vital the concept of main entry was in the card catalog era before all entries became access points that are essentially coequal.) It is difficult to file a catalog card with two titles and no author. The solution was to place the title proper in the usual position and the uniform title, as the more important access point, in the author position, thus creating a main entry in the anticipated form.

This procedure worked fairly well for monographic materials in catalogs in which the author entry cards and title entry cards were in the same alphabetical sequence. But what happens if the cards—or the access points—are in separate files, catalogs, or indexes? This separation is not uncommon in online systems, which may require the user to specify whether a search is for author, title, or subject. The separation means that a library user must know whether a particular access point is an author or a title or use both author and title indexes for all searches. This situation may confound adequate access for the typical library user.

**PROBLEMS OF AUTOMATION**

In automating library records for public access, much effort has gone into creating screen displays and access points (entries) that are quite similar to those familiar catalog cards. The assumption has often been that the fewer the visual changes, the easier the transition for library users and librarians alike. (This is something of an oversimplification. There are other reasons as well, and the author does not mean to suggest that many librarians have not spent many hours considering all problems of retrieval and display).

In developing the USMARC formats and their various derivatives, pragmatic decisions had to be made, and often these decisions were heavily influenced by existing cataloging rules (as well as the large card catalogs that already existed). In certain areas, decisions, based on card catalog needs such as treating uniform title main entries as authors, were perpetuated that may, in fact, inhibit access in automated systems. These areas need to be identified and studied and uniform solutions developed where genuine problems exist.

Problems arose from the division of index files into three or more
(rather than one or two) alphabetic sequences. Previously, catalogs had primarily been filed into a single alphabet (dictionary form) or into two alphabets (author/title and subject files). Under this system, the author uniform titles might have been filed a little differently than if they had been titles, but at least they were in relatively close proximity to where they could have been found as title entries. The difference was, in computer terms, transparent to the average user.

Now, however, access points in automated catalogs are frequently divided into three files or indexes: subject, author, and title. The library patron is expected to specify which file needs to be searched. This development makes treatment of uniform title main entries as if they were authors a disaster for unwary library users, including librarians using these files in their own institutions. The average library user looking for Bible will look for it as if it were a title, not realizing that Bible is filed as if it were an author (or both as an author and a title). In the portion of the Auburn University catalog that has been brought online on NOTIS, a user can find more than a thousand entries by searching Bible as a title and more than 1,000 entries by searching Bible as an author. The two lists are far from identical. In fact, there is relatively little overlap between them.

If as well established an author-equivalent as Bible is not generally recognized to be an author by those trying to use libraries, how should patrons realize that they can find pre-AACR2 cataloging in the title file under Lecture notes in mathematics as a title but post-AACR2 cataloging in the author file under Lecture notes in mathematics (Springer-Verlag)? And, if the library manages to update the pre-AACR2 cataloging so that all these entries are in the author file, how many mathematicians are going to search for it there, instead of concluding the library does not own any volumes in this long series? How are the people using the library to locate specific bibliographic units to know the vital difference between a 440 (Series statement—title [traced]) and an 830 (Series added entry—uniform title heading)? Should this sort of librarian-created distinction be permitted to intervene between the library patron and the bibliographic unit?

CONCLUSIONS

The answer, of course, is that no one should be expected to know that some titles are treated as authors, since titles are not, nor can they be, authors. The names for MARC fields 130, 730, 830 are “Main entry—uniform title heading,” “Added entry—uniform title heading,” and “Series added entry—uniform title heading”; indexing should be the same as for “Title statement” (field 245), which is indexed as a title whether or not it is the main entry.

It is somewhat more difficult now than in the past to discuss the concept of author, as AACR2 chose to replace it with the concept of “responsibility.” It is fairly clear, however, that this concept refers to individual human beings or to groups composed of individual human beings. That is certainly how the concept is commonly understood by the individual human beings libraries serve. Automated catalog systems are merely tools—improved tools, one hopes—for storing and retrieving
information about sources of information (the bibliographic units themselves). It should not be impossible to revise MARC field names/numbers and subfield name/letters to make clear the identity of uniform titles as titles even when they are used as main entries. Such a change would be consistent with the MARC treatment of the "Title statement." Consistent treatment of titles by what they are in preference to how they are used would reduce potential retrieval problems when users are confronted by retrieval systems requiring that they specify which indexes/sets of access points they wish to search. It would also work to eliminate any possibility that uniform title access points could be retrieved differently in the various online systems used in libraries.

I strongly recommend that such a change be considered. Undoubtedly, there are obstacles to such a change; the most important is the problem of machine conversion of these fields in existing online records. However, a change in the format itself is more likely to be successful in encouraging and enforcing uniformity than an informal agreement between vendors or librarians to access existing fields as titles.

References

7. Ibid.
9. Ibid., p.442.
"Scientific Illustration" in Some Boston Area Libraries: An Art Historian's View of Library Subject Analysis

Alexandra Herz

An investigation of the subject heading and classification practices in several Boston art libraries for books of scientific illustration. As an art historian and current student of librarianship, the author asks whether art libraries recognize scientific illustration as art, and if so, if this recognition is given expression through classification numbers and subject headings as an art historian might anticipate.

In the Mismeasure of Man (New York and London, 1981), Stephen Jay Gould includes a lithograph of an Araucanian Indian skull by John Collins, originally published with many others in S. G. Morton’s Crania Americana of 1839. In his caption to the figure, Gould describes John Collins as “a great scientific artist unfortunately unrecognized today.” Do art libraries, i.e., libraries specializing in books about art of all kinds, recognize scientific illustration as art? If so, is this recognition given expression through classification numbers and subject headings? Do the Library of Congress Subject Headings (LCSH) provide for distinctions in subject headings, and if so, how?

My investigations of some libraries in the Boston area showed that while each uses a number of subject headings provided by LCSH, these rarely provide the clear path to relevant materials. Works of very dissimilar content and intention, for example, are often indiscriminately arranged under Anatomy, Artistic. Works by artists known primarily for their anatomical, botanical, or zoological illustrations are frequently collocated under inappropriate headings. The crucial distinction between pictorial works and those dealing with some aspect of scientific illustration is often not maintained. The subject heading Scientific illustration itself is rarely used, and then, normally for books about scientific illustration rather than of scientific illustrations. This means that the heading is seriously underused, especially in smaller libraries or in art libraries that

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will not have enormous numbers of works on scientific subjects. Curiously, and most inconveniently, the heading Scientific illustration is never used with see also (sa) or see also from (xx) references. In this paper, I will briefly describe my attempts to find books concerned with scientific illustrations through subject headings at the Boston Museum of Fine Arts Library, Boston Public Library Music and Fine Arts Reading Room and General Research Division, Fogg Museum of Fine Arts Library, and two Harvard libraries.

**Boston Museum of Fine Arts Library**

The Boston Museum of Fine Arts Library does have the subject heading Scientific illustration—Exhibitions. Under it are two books having to do with exhibitions only. There is no heading Scientific illustration. The subject heading Anatomy includes thirty-nine books, most of which have to do with anatomy for artists. A book by J. L. Choulant appears here: *Geschichte und Bibliographie der anatomischen Abbildung nach ihrer Beziehung auf anatomische Wissenschaft und bildenden Kunst (History and Bibliography of Anatomic Illustration in its Relation to Anatomic Science and the Graphic Arts, 1852)*. Tracings lead to "1. Anatomy, Human—Bibliography, 2. Illustrated books." There is no tracing to Scientific illustration. The heading Anatomy, Artistic, includes quite a few books very similar in subject matter to those placed under Anatomy, i.e., by and large they deal with anatomy for artists. Leonardo da Vinci appears here and under the heading Anatomy, Artistic—Exhibitions, but there are, once again, no tracings to Scientific illustration. The great anatomist Andreas Vesalius (1514–64) appears under Anatomy, Human—Atlases, with no references or tracings to Scientific illustration. There is even a book on the illustrations from Vesalius' works under the heading Anatomy, Human—Early Works to 1800, with no mention anywhere of Scientific illustration. Audubon appears under Animals, along with other books about animals that involve scientific illustration, as, for example, E. Muybridge's *Animal Locomotion: An Electro-photographic Investigation of Consecutive Phases of Animal Movements, 1872–1885* (1887). Muybridge is now known for his contributions to photography, and his work could be placed effectively under Photography—Scientific applications. In this case, there should be a heading Scientific illustration, with a sa reference to Photography—Scientific applications. The heading Photography—Scientific applications does exist in this catalog, provided, accurately enough, for a very different sort of book, H. E. Edgerton's *Flash! Seeing the Unseen by Ultra-High-Speed Photography* (1939). It seems unimaginative not to include Muybridge under this heading as well. There is no heading for Biological illustration, while Audubon appears again under Birds.

History—Exhibitions, 2. Flower painting and illustration—History—Exhibitions, 3. Pierpont Morgan Library—Exhibitions." but none to Scientific illustration. One work appears under Botanical illustration—India—Exhibitions. Tracings for C. Nissen’s Die botanische Buch-Illustration, ihre Geschichte und Bibliographie (Botanical Book Illustration, its History and Bibliography, 1950) are to “1. Botany—Pictorial works, 2. Botany—Bibliography, 3. Illustrated books.” Botany—Pictorial works includes six books, of which at least two more correctly belong under the heading Botanical illustration—History. These are W. Blunt, The Art of Botanical Illustration (1950) and V. Kaden, The Illustration of Plants and Gardens, 1500–1850 (1982). In neither case are there tracings to Botanical illustration or Scientific illustration.

There are as yet no headings in the Boston Museum of Fine Arts Library for Drawing—Scientific applications, Medical illustration, Natural history illustration, or Technical illustration. There are quite a few books under the headings Zoology and Zoology—Pictorial works. One book under Zoology is Zoological Illustration (Bodleian Picture books, no. 4, 1951). One wonders why this book has not been placed under the subject heading Zoological illustration.

BOSTON PUBLIC LIBRARY MUSIC AND FINE ARTS READING ROOM

The Boston Public Library’s Music and Fine Arts Reading Room has been adding subject headings at a great rate and now has the most complete catalog in this respect in the Boston area. Furthermore, books held in other divisions of the library that might be of interest to users of the reading room are often included. Thus, there are no fewer than thirteen subject headings for various aspects of anatomy: Anatomists—England—Biography; Anatomy; Anatomy. Bibliography; Anatomy—Exhibitions; Anatomy. Artistic (see also: Animal drawing; Anthropometry; Expression; Figure drawing; Figure painting; Head. In art; Human body. In art; Nude in art), Anatomy, Artistic—Exhibitions; Anatomy. Comparative; Anatomy, Human; Anatomy, Human—Atlases; Anatomy, Human—Early Works to 1800; Anatomy. Microscopical (see Histology); Anatomy. Pathological; Anatomy. Surgical. Clearly the reading room has added new headings while temporarily, one hopes, retaining old ones. And certain ticklish problems remain. Where should the user look for the scientific efforts of Leonardo and Vesalius? Hard-won experience teaches that these masters are often collocated under Anatomy, Human—Early works to 1800. Would not Anatomical illustration—History, a heading that does not exist in LCSH, be easier and more accurate?

The various aspects of botanical illustration are well represented by subject headings in the Boston Public Library’s Music and Fine Arts Reading Room. A gorgeous book by G. Calmann entitled Ehret: Flower Painter Extraordinary: An Illustrated Biography (1977), will be easy for the user to find. It has three tracings: “1. Ehret, Georg Dionysius (1708–1770), 2. Botanical artists—England—Biography, and 3. Botanical illustration—History.” Aspects of Medicine, Natural history and
Zoology are also well represented here, but there are as yet no headings for medical illustration, natural history illustration, scientific illustration, and zoological illustration. Audubon is most unfairly collocated under Birds—Pictorial works. And conflicts between old and new subject headings may mean that users pass over useful works. S. Killermann's A. Dürers Pflanzen- und Tierzeichnungen und ihre Bedeutung für die Naturgeschichte (A. Dürer's Plant and Animal Drawings and Their Importance for Natural History, 1910) lies buried under the old heading Animal painting and illustration, while a recent treatment of the subject, F. Koreny's Albrecht Dürer und die Tier- und Pflanzenstudien der Renaissance (Albrecht Dürer and the Animal and Plant Studies of the Renaissance, 1985) has been placed under the new and more sensible headings Zoological illustration—Europe—History and Botanical illustration—Europe—History.

**BOSTON PUBLIC LIBRARY GENERAL RESEARCH DIVISION**

The Boston Public Library, General Research Division, has the heading Anatomy. Artistic, with several sa's, not one of which is Scientific illustration. Leonardo da Vinci appears here, though not under his own name. The heading, here as everywhere, is almost exclusively about anatomy for artists, though one example seems out of place: Rediscovered Anatomical Drawings from the Free Public Library, Worcester, Massachusetts (1958). The drawings are by the great animal painter George Stubbs. Why not put the book under Drawing—Scientific applications or even under Scientific illustration? The heading Biological illustration has five offerings, and these are all about biological illustration rather than of biological illustrations. There are three works under Botanical illustration, and two catalogs under Botanical illustration—Exhibitions. These two catalogs (deriving from shows at the Hunt Botanical Library and the Hunt Institute for Botanical Documentation in Pittsburgh) are interesting for their awareness of scientific illustrations as art. Both have tracings to Illustrators, Plants in art—Exhibitions, but not to Scientific illustration.

There is one book under Drawing—Scientific applications, which also appears under Biological illustration; it is E. G. Bethke's Basic Drawing for Biology Students (1969). Medical illustration has five books, largely about medical illustration, not of medical illustrations. There are no references anywhere within this category to Scientific illustration. There is no subject heading for Natural history illustration. Photography—Scientific applications is well represented and includes a book by W. D. Chesterman entitled The Photographic Study of Rapid Events (1951). I wonder, then, why Muybridge is not here also. Under Scientific illustration are seven books, all about scientific illustration and not of scientific illustrations. There are no sa or xx references here at all. There are only two books under Zoological illustration. One of these, A. M. Lysaght's The Book of Birds: Five Centuries of Bird Illustration (1975), more precisely belongs under Zoological illustration—History. Of the three works that do appear under Zoological
illustration—History, two are about birds. Curiously, neither Audubon nor Stubbs appears under either heading.

FOGG MUSEUM OF FINE ARTS LIBRARY, HARVARD

Of the libraries I visited, the Fogg Museum of Fine Arts Library proved to be the oddest. The heading Anatomy, Artistic has a’s to Proportion and to Human figure in art, but not to Scientific illustration. A large number of books may be found under Anatomy, Artistic; these are mostly about anatomy for artists. Leonardo da Vinci appears here, with no cross-reference to Scientific illustration, which to me misses the point. His experiments in dissection were carried out in the spirit of scientific investigation and had little to do with developing anatomy for artists. Leonardo was sufficiently worried about his work to write his notes on these drawings backward; he knew he could be tried by the church for interfering with God’s business if the drawings were discovered and the notes legible. Such a precaution would not have been necessary if he were only pursuing anatomy for artistic purposes. In fact, artists had been engaged in this latter sort of work for some time before Leonardo began his own research. Thus, it seems to me that K. D. Keele’s Leonardo da Vinci on Movement of the Heart and Blood (1952) does not belong under Anatomy, Artistic (as it is here) either. Until the heading Anatomical illustration—History is created, Keele’s book might more effectively be placed under Medical illustration—History, or Scientific illustration. Because there are so many books under the heading Anatomy, Artistic at the Fogg, it might be qualified Anatomy, Artistic—Animal, to distinguish books for artists on animal anatomy from human anatomy. E. Muybridge’s Animals in Motion (1957) is here also, and this seems altogether inapt. The book should be under a heading such as Photography—History and definitely under Photography—Scientific applications.

There are many books under Art and science; none has to do with illustration. Headings for Biological illustration, Medical illustration, Drawing—Scientific applications, Nature illustration, Natural history illustration, Photography—Scientific applications, Zoological illustration, and Animal painting and illustration are lacking at the Fogg. But there seems to be a kind of substitution. Thus, the heading Botanical illustration says “See Plants in art,” and there are twenty-five books under Plants in art. The heading Plants in art, moreover, says “See also Flowers in art.” As it turns out, most of the books under Plants in art are exactly that and have nothing to do with botanical illustration. But there are exceptions, which I will discuss shortly. The heading Nature in art seems to replace Nature illustration at the Fogg, while Animals in art replaces Natural history illustration. In the Fogg’s system, there seems to be a conscious effort to move away from any connection with the sciences, i.e., Botanical illustration becomes Plants in art and Flowers in art, and so on. It is almost as though this library feared that connections with the sciences would take the “art” out of the depiction or perhaps the book out of the Fogg. Con-
versely, Harvard’s Gray Herbarium Library and Museum of Comparative Zoology Library do not seem to labor under such fears, as I will show presently. I wish now to look briefly at a few examples of works that seem to have been especially inaptly collocated at the Fogg.

A large and beautiful book was produced by S. P. Dance, entitled The Art of Natural History: Animal Illustrators and Their Work (1978). It is a remarkable book in that the author tries to see zoological art as art, but at the same time as scientific art. Most of it consists of illustrations, and the plates are good enough to show succinctly why such illustrations may be considered art. The book, then, is really about the art, craft, and science of natural history illustration. Dance mentions George Stubbs and gives an illustration by him. He recognizes that Muybridge was a naturalist with a camera. Dance’s book appears under Animals in art, a heading that I think will serve only to bury it. The book should be placed under Natural history illustration, and/or Zoological illustration, and there should be an xx reference from Scientific illustration. To make these changes, the Fogg would have to change its philosophy and attitude, for its apparent “fear of science” seems to be consistent. Another quite similar case is A. H. T. Robb-Smith’s Zoological Illustration (1951), which, despite the title, has been placed under Animals in art. Yet another is Lysaght’s Book of Birds. Made up of zoological illustrations of birds by different painters from the late Middle Ages to the nineteenth century, it should at the very least be cross-referenced under Natural history illustration and Zoological illustration.

The same thing holds at the Fogg for books about botanical illustration. The Rijksmuseum Meermanno-Westreenianum/Museum van het Boek’s 1000 Jaar Bloem-illustratie (1000 Years of Flower Illustration, 1966) is a catalog of a show of plant illustrations. From the copious illustrations in this little book, it seems clear enough that the subject heading Botanical illustration—History should be considered for it. This book, too, is ill served by the subject heading Plants in art. The same comments apply to The Illustrated Herbal (1979), by S. Raphael and W. Blunt, and to F. A. Baumann’s Das Erbario carrarese und die Bildtradition des Tractatus de herbis, ein Beitrag zur Geschichte der Pflanzendarstellung im Übergang von Spätmittelalter zu Frührenaissance (The Carrara Herbal and the Pictorial Tradition of the Tractatus de herbis, a Contribution to the History of Plant Illustration in the Transition from Late Middle Ages to Early Renaissance, 1974). Both belong under Botanical illustration—History; the heading Plants in art seems woefully inadequate.

**GRAY HERBARIUM LIBRARY AND MUSEUM OF COMPARATIVE ZOOLOGY LIBRARY, HARVARD**

Harvard’s Gray Herbarium Library includes roughly 150,000 volumes, of which many thousands are illustrated. Since 1977, subject headings have been diligently added to the card catalog, and the various aspects of botanical illustration are now well represented. Surprisingly, many of these works emphasize art, such as J. V. Brindle’s Talking in Flowers: Japanese Botanical Art: Catalogue of an Exhibition, 5 April to 16 July 1982 (1982). Headings in use at the Gray Herbarium Library include
Scientific Illustration (two works about scientific illustration), Zoological Illustration—Brazil—Exhibitions (one entry), and Zoological Illustration—Catalogs (one). While the number of books arranged under these headings represents only a minute fraction of its holdings, this library seems less wary of art than the Fogg’s Fine Arts Library is of science.

Subject headings in use at Harvard’s Museum of Comparative Zoology Library are equally comprehensive. Biological Illustration, Photography, Biological, Medical illustration, and Scientific Illustration appear here, as well as Zoological Illustration, Zoological Illustration—History, Zoological Illustration—Indexes, Zoological Illustration—Greece—History, and Zoology—Pictorial works. Like the Fogg Fine Arts Library, the Museum of Comparative Zoology Library has its own copies of Dance’s Art of Natural History and Z. Kudar, Survivals of Greek Zoological Illuminations in Byzantine Manuscripts (1978), but in the latter they are properly and usefully collocated under Zoological Illustration—History and Zoological Illustration—Greece—History, respectively.

PROBLEMS IN CLASSIFICATION

Needless confusion is created for users when the distinction normally drawn by catalogers and classifiers between pictorial works and those dealing with genuine scientific illustration is not rigorously observed. Two books that may properly be considered pictorial works are J. Kieran’s An Introduction to Nature; Birds, Wild Flowers, Trees (1955) and B. Kuhn’s The Animal Art of Bob Kuhn. . . . A Lifetime of Drawing and Painting (1973). The first is a simplified book on nature with Christmas-card-like illustrations barely clear enough to identify species; the second is a work on “how to draw and paint animals” with the author’s notion of appropriate illustrations. Classifications of QH102 = Natural history—North America = 574.97 and QL46.5 = Zoology—Pictorial works = 758.3, respectively, are therefore adequate. Compared to these works, A. M. Lysaght’s Book of Birds is completely different. It reproduces illustrations of birds by zoological (or scientific) illustrators who were active at different times. The earlier depictions might not seem as scientific to our eyes as those of the nineteenth century; nevertheless, they were the sixteenth- and seventeenth-century versions of such illustrations. The differences between them and the fuzzy, sentimental pictures in Kieran’s book, for example, are readily apparent. Therefore, the heading and classifications given by the Library of Congress: QL674 = Birds—Pictorial works = 598.20222, seem wide of the mark. The book is very similar to Dance’s Art of Natural History and should receive the same heading and classifications, that is: QL46 = Zoological Illustration—History = 591.0222. It goes without saying that no book by Audubon should ever be headed or classified as Pictorial work, but always as Natural history illustration or Zoological illustration. In fact, the headings Pictorial work and Scientific illustration should be mutually exclusive.

Although classifiers usually have few problems dealing with works
about scientific illustration, any work of Leonardo da Vinci other than
*The Last Supper* seems to present an almost insurmountable problem. Here are some examples:


In nearly all of the above cases, clearly enough, the works are collocated along with everything else by and about Leonardo da Vinci. This is acceptable if one is shelving books, less so if one is organizing knowledge. My alternative suggestions for classifying each book noted above, respectively:

1. Braunfels-Esche: **Anatomy, Human—Early works to 1800 = QM21.L5 and 611.**

2. Exhibition of Leonardo’s anatomical drawings from the Royal Collection in Windsor Castle: **QM21.L5 and 611 = Anatomy, Human—Early Works to 1800—Exhibitions.**

3. Leonardo as anatomist and engineer of human movement: QM21 and 611, as above.

4. Leonardo as military engineer: **Engineering—History = TA15 and 620.009.**

5. Leonardo as inventor: **Engineering—History = TA15 and 620.009, or Inventions—History = T15 and 600.**

6. Leonardo as engineer: **Engineering—History = TA15 and 620.009 or Inventions—History = T15 and 600.**

7. Mechanical investigations of Leonardo: **Mechanics—History = QA802 and 531.09.**

8. The physico-mathematical works of Leonardo: **Physics—History = QC7 and 509.**
In the foregoing I moved some distance from Gould's tantalizing observation that the lithographer John Collins was "a great scientific artist unfortunately unrecognized today." This neglect now seems less surprising; general libraries in the Boston area at least still make do with haphazard and even careless collocation and classification of books dealing with scientific illustration, while area art libraries move at a snail's pace toward recognizing and accepting the art in such illustrations.

The user's search becomes correspondingly time-consuming and tortuous, and, thus, we are all impoverished. The trend of international scholarship has been and continues to be in the direction of interdisciplinary studies. Libraries should certainly try to keep up with this trend. With the insertion of a few subject headings, the appropriate placement of works and artists under these, and the imaginative application of classification numbers, libraries could even play an important role in cross-pollinating such studies.

REFERENCES AND NOTES

2. Harvard's Widener Library proved most disappointing in the area of subject headings. It has been suggested to me that the library's staff would rather buy books than make subject headings for the card catalog.

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Automating the Circulation Services of a Small Library

Jean Ann Gaudet

A discussion of the management predicaments encountered in decision making for a very small school library and the reasons procedures recommended in the literature may not be applicable. The author explains procedures for implementing an online circulation system in this setting.

Library literature teems with articles pertaining to large library automation, i.e., libraries where there are directors, task forces, and staff large enough to support such an undertaking. What seems to be lacking is published information on the perils and pitfalls of small library automation, small library being defined as having collections containing fewer than 35,000 volumes and a professional staff of three or less. Although the professionals in small libraries face the identical problems of their counterparts in large libraries, they have neither the staff nor the financial support to follow published advice. Thus, many small libraries are hindered in their efforts to automate services.

The Decision to Automate

The decision to automate library services is dependent on several variables, including the needs of the institution, the selection of software, availability of hardware, and cost of the project. In a small library setting, other variables assume importance, among them the lack of a professional consultant or task force and of an extensive work force and the existing hardware restrictions.

Several turnkey vendors, namely those specializing in microcomputer applications, are capitalizing on this situation and developing a lucrative market for their wares. To the librarian deciding about automating the circulation services of a small library, what vendor or program to use becomes the immediate challenge. This choice may be predetermined by computer hardware availability both in the local marketplace and on the site. By no means a strategic decision, it is one of the most common decision-making variables.

Ideally, a librarian should choose both the hardware and software that best suit the needs of the institution, but, unfortunately, many must make severely restricted selections. For school librarians, recent budgetary limitations have coined a new word, justification. Gone are the days of federal programs and free spending. Austerity and justification are the norm of the 1980s.

Many items must be considered when comparing the cost of comput-

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erized systems. Most obvious are the cost of the software, hardware requirements, supplies, guarantees, and vendor support (or lack of it). Among the most costly hidden charges are the work hours involved in inventorying the collection, attaching bar codes to materials, researching ISBN or LC numbers, keyboarding the data into online bibliographic files, and locating and entering patron information. Another hidden cost is the additional furniture that is necessary even when one owns enough tables to accommodate the computers, because the shelflist increases by half again when bar code labels are attached to the cards.

There is no general automation design methodology. The only constant to appear as an accepted standard is the MARC record. If the system under consideration makes use of or produces MARC records, then it will be useful for future applications. The standard MARC format is a requirement if networking is to be a possibility. If further automation efforts are contemplated, the use of the MARC format will insure compatibility of records, regardless of the application (online catalog, circulation, etc.).

Strategic planning tactics are a necessity for the professional in a small library. According to Schwartz, "The reason for a formal planning and selection process is to enable the library to find the most cost effective solution to any given problem. The goal of the selection process is to assist the libraries in separating fact from fiction." Most authors writing on strategic planning agree that there are at least six basic tenets. Cortez defines them as follows: (1) problem definition; (2) requirement specifications; (3) analysis and identification of alternative solutions; (4) systems design; (5) implementation; and (6) evaluation. This framework is used in discussing a planning process applicable to small libraries with small library limitations.

**Problem Definition**

Long before any particular system is contemplated, the librarians should assess the needs of the institution. According to Matthews, it is important to determine the needs and write them as specifications. These specifications become the nucleus of vendor contracts and evaluation instruments. What are the goals and objectives of the library, and what is necessary to achieve them? A major problem at this early stage is the professional standards by which the needs assessment is made. Large-scale organizations will have hired consultants and/or established task forces by now. The professional in a small library must serve in three capacities: (1) library director; (2) automation consultant; and (3) task force. (S)he must have the integrity to make clearly defined choices. It is in this phase that discussion should begin with the administration about the feasibility of automating library services.

**Requirement Specifications**

In defining the requirement specifications, the librarian needs to use scenario writing as well as research. One must look five and ten years into the future, since the process of automating services may only take place once in that time frame. Bryant advises initiating the automation process before pressure is exerted and deadlines for encumbering funds
She suggests making long-range plans before any requests for proposals (RFPs) are contemplated. The librarian should begin this phase as soon as possible, so that the specification can be ready if funding becomes available.

In most situations, defining specifications will not be a formal process. Instead, it will be one of assimilating and synthesizing information. The librarian will develop an instinct for what is needed. Rarely will this be documented. It is advisable to save professional literature articles or brochures on systems that seem to meet these instinctively felt needs thus establishing a starting point for further research.

**ANALYSIS AND IDENTIFICATION OF ALTERNATIVE SOLUTIONS**

As the specifications are assembled, the process of selecting a vendor begins. In-house development is rarely an option in a small library. Some librarians will be interested only in microcomputer vendors and, in some cases, only in programs available for existing hardware. When this happens, the term becomes *program availability* rather than *vendor selection*. In either instance, a contract in some form must be agreed upon. For some, it will be agreement with the terms and conditions of sale set by the vendor, but for others it will require contract negotiations. Rush suggests considering the following variables during the latter process: definition of terms; terms and conditions of sale; renewal/modification of conditions; requirements/conditions for contract termination; warranties; licensing and maintenance; upgrade procedures; compliance with local law; assignment of rights.

Since a major portion of the project budget will be applied to computer hardware, the following questions must be considered: Does the institution use hardware from only one manufacturer? Is there a formal agreement with that manufacturer that excludes others? Is there a computer in the library? Is networking ever likely to be possible and, if so, are telecommunications available in the library? Is the computer properly configured for most turnkey systems and does it have enough memory? Is there a printer and is it capable of printing bar codes? If hardware is not available, are there funds to purchase it or must the librarian wait a full budget cycle (or longer) for the funding? If hardware must be purchased, is future expansion, both in the library and in the realm of technology, taken into consideration?

In selecting a vendor, the librarian needs to consider several things: the vendor’s record on timely delivery; customer satisfaction and complaints; quality of training and documentation; financial stability of the vendor; and the vendor’s commitment to the market. The last two considerations are often difficult to ascertain, but any negative indications should be enough to give the librarian fair warning.

In a recent survey, respondents were asked to identify and give weight to the decision-making factors they used in selecting their turnkey systems. Their replies, in order of priority, were cost (45 percent); software (30 percent); vendor (11 percent); hardware (10 percent); other factors (3 percent). These statements show a dichotomy between what needs to be done and what is actually done in selecting a computer system vendor. Clements states that a "neglected area of research concerns exactly
what factors librarians actually use to make selection decisions and how they weigh each factor." On the other hand, vendors list the following when asked why librarians have problems with automation: poorly written RFPs; lack of proper information, especially on future needs; lack of testing to see if systems meet requirements; low bid acceptance; signing of standard, not customized, contracts; lack of business sense on the part of librarians; and lack of planning for expansion. This points out the underlying truth that librarians are not trained to do business as are other managers. As a result, librarians in small libraries without many resources are often at the mercy of the vendor. It is their job to "understand vendor capabilities, reliabilities, and responsiveness without much help from the vendor."

**SYSTEM DESIGN**

Wherever possible, the librarian should see the systems under consideration in full-scale operation. If this is not possible, most vendors will send a demonstration disk or arrange for a representative to visit the library. When requesting information from a vendor, supply as much data about your situation and needs as possible, including size of the library, number of patrons, hardware used or contemplated, average weekly circulation, and any special needs.

When making the final decision, base it not only on cost, but on the service criteria mentioned earlier, i.e., company reputation, longevity, documentation, and training. The old adage, You get what you pay for, is still true.

Once a vendor is selected, the librarian must ascertain what supplies are necessary and in what quantity. Unless directed otherwise, one should purchase initial supplies from the vendor, eliminating potential problems in bar code scanning and compatibility. If the system prints its own bar codes, be sure to order an ample supply of printer ribbons. If the library uses patron ID cards, those supplies must be ordered. Order several boxes of floppy disks (or other storage media appropriate to the system), regardless of the system selected.

**IMPLEMENTATION**

As soon as the order is placed, a complete inventory of the collection should be made after all inactive shelflist cards are removed. Advance planning at this stage enables a fast and accurate bar coding process later. It is also prudent when taking this inventory to write the ISBN or LC number for each title as well as any price information on the shelflist card. If the software allows for assignment of material categories, these should be established and this code entered on the shelflist, too. This speeds up the data-entry process.

When the program arrives, read all documentation before doing anything else. Follow all instructions as stated, since failure to do so could negate any warranties. Copies of all disks should be made before proceeding, the number depending on the number of typists and/or computers available.

At this point in the implementation phase, several activities may begin concurrently. Unless paid temporary help is provided, a cadre of vol-
unteers must be gathered. High school service organizations or senior
citizen groups are excellent sources. When using volunteers, one needs
to furnish hands-on training. Since they are probably unfamiliar with
library and computer terminology, care must be taken when making ex-
planations. Anyone with minimal typing skills can be taught to enter
data. Training should include a short in-service course on identifying
shelflist entries. Various styles of shelflist cards, preprinted and typed,
should also be shown and explained as vendors and jobbers may have
differing formats.

The teams doing the bar coding need training also. Although primar-
ily physical labor, it is important that the bar codes are attached to the
correct books, especially when multiple copies are involved. The ability
to recognize different editions or bindings needs to be emphasized. It is
also important for the teams to understand the handling of multivolume
sets. Here, the bar code must be matched with the volume number. It
should be possible for a team of three to process 100 books an hour. This
team consists of a person to code the shelflist card, one to code the book,
and one to attach the label protector, if necessary. It is possible to have
many teams working at a given time depending on the library’s floor
plan. When working with volunteer groups, take frequent breaks. These
tasks are not exciting, and not everyone will understand their impor-
tance and the need for consistency. The librarian needs to check each
team or typist after the first few minutes and then spot check them at
intervals. It is vital that the librarian be available for answering ques-
tions or solving problems as they arise.

As bar coding of a shelflist section is completed, work can begin on
data entry. The project speed is governed by the number of participants.
Although there will be more errors with a large number of data-entry
clerks, the errors are easy to correct. Most turnkey systems will operate
without a full database, so the librarian can begin to test the system as
soon as the bar codes are assigned. It is wise to begin staff training at this
time, while one can plan for contingencies. Some staff members may
need to get over their fear of the computers, and everyone needs time to
become comfortable with them. If, during this testing and evaluation
phase, all programs perform as expected, full-scale operation may begin
while the bibliographic data are batched into the system.

EVALUATION

Evaluation methods will vary, but all systems should be measured
against expected outcomes and/or vendor claims. If a system is not func-
tioning properly, the vendor should be asked to rectify the situation. For
all libraries, large or small, automating a service is an expensive under-
taking, and librarians should not “make do” or accept less than ex-
pected or promised. Most systems exceed expectations, and it is rare
when one does not.

POTOMAC SENIOR HIGH SCHOOL: A CASE STUDY

In late June 1986, after convincing the library supervisor of the need
to automate services, administrative approval was received to purchase
a turnkey circulation system. Using Cortez’ principles, the librarian ex-
pressed the problem in terms of administrative responsibility. Educational administrators are legally bound to adhere to standards determined by accrediting associations. These include information on the library program such as the number of volumes per student, total circulation, total circulation by percentage of student enrollment, and numbers of specific kinds of materials, e.g., unabridged dictionaries and general encyclopedias. One of the features of an automated system is the ability to produce statistics such as these. Another major administrative function is the proper use of staff time. By automating such time-consuming tasks as circulation reports and overdues, the professional staff has more time for patron service. Fiscal responsibility is another strategic point for administrators. In a school setting where students transfer on a regular basis, a manual circulation system does not have the flexibility to identify students with materials checked out on a moment’s notice. A check on overdue materials is generally all that is available. With an automated circulation system, however, there is instant information available, enabling the library to recover materials that would normally be lost, thus saving money.

The senior high school librarian in the Prince William County Public School System had discussed an automation project at several meetings over an eighteen-month period, but no consensus was achieved. The author decided to explore the choices available. The use of existing hardware, cost limits, and ease of use were among the chief requirements determined by a needs assessment.

After attending several regional and national conferences and demonstrations, the librarian asked representatives from Circulation Plus and Winnebago to provide demonstrations for the school staff. Other systems, such as the Gaylord modules, Dalton Computer Services system, Micro VTLS, and Library Circulation Manager, were considered, but did not meet one or more of the hardware, cost, or usage requirements. The cost of the two systems considered was less than $1,000, and both systems operated on already-owned Apple computers. Following the demonstrations, the staff selected Circulation Plus, based on its report ability, screen design, ease of use, and compatibility with Apple Works for future in-house development. If the hardware had not been available, the total package for either system would have been approximately $5,000.

Implementation of the project began with the completion of the year-end materials inventory. Purchase orders were prepared for the software and supplies. Work began on bar coding during the third week of August. The librarian contacted the sponsors of the National Honor Society, drill team, cheerleaders, and student government to ask for student volunteers. For three days, eighteen to twenty-four students worked in teams to attach the bar codes. The goal was to have the system operational by the first day of school. About 1,000 hours were spent in bar coding the materials, at a cost of soft drinks and three pizza lunches for the volunteers. Though not complete, the system was operational on the opening day of school.

As sections of the shelflist were bar coded, they were sent to thirteen students from the Office Technology II class who spent one class period a
day entering bibliographic data onto floppy disks. In six weeks of daily work, they entered 75 percent of the data. Including the library staff, less than 500 hours were spent on this task. In order to preserve confidentiality, the library staff created the patron database. By the end of October, both the bibliographic and patron databases were complete.

CONCLUSION

Although the implementation of the project at Potomac Senior High School was successful, the author was unable to make an ideally designed strategic decision. Having to use existing hardware limited the choices and the needs assessment. Since Circulation Plus does not contain MARC records, the system is not currently expandable. Though it resolves an immediate need for better circulation control and reporting, further expansion with another program such as an online catalog may require duplication of data entry.

The design for most microcomputer circulation systems is basically the same, varying in screen design, reporting programs, statistical packages, ease of use, and internal computer workings. Each institution must review the system designs based on its particular needs and objectives. Evaluation of Potomac Senior High School’s project will not be complete until the school year ends and all reports and inventories are complete. Thus far, the system exceeds all expectations, and no bugs were encountered. Patrons respond well to the new circulation method and are impressed that their names and all the book titles are in the computer. Student responses to reminders for overdue materials are better and, since notices are generated automatically, the library staff is more efficient in the management of this task.

Because of recommendations from the Potomac library staff, Circulation Plus is being installed in twenty of the largest schools in the county this year and is budgeted for the rest within the next fiscal year.

REFERENCES

10. Ibid., p.52.
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<th>Number of titles listed</th>
<th>THE SERIALS DIRECTORY</th>
<th>ULRICH'S STANDARD</th>
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<td>104,300</td>
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Includes both annuals and irregular series along with other type serials in one book
YES No* YES

Includes titles worldwide
YES YES No

Includes authenticated MARC record and CONSER file data
YES No No

Includes CONSER control numbers
YES No No

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Note: Publication date for the 1987 edition is September 1, 1987.

Legal looseleafs have frequently posed problems for librarians. Standards for their bibliographic control have been lacking. AACR2 barely mentioned them. There was even disagreement whether looseleafs should be categorized as serials or monographs. LC cataloged them as if they were monographs. Outside of LC, librarians responsible for cataloging and maintaining them frequently regarded them as serials.

With the recent publication of Cataloging Rules for the Description of Looseleaf Publications, LC has reduced the confusion and disagreement. The goals of LC’s guidelines are well articulated in Cataloging Rules. The spirit of pragmatic compromise is seen in LC’s first objective of the guidelines—“to take into account the special characteristics unique to looseleaf publications and to treat them bibliographically in their own right.” There is also a careful explanation why some of the features that looseleafs share with monographs require LC to catalog looseleafs as if they were monographs.

The logic of this mixed approach can be understood by librarians who work daily with looseleafs. The serials aspect of looseleafs predominates for librarians responsible for maintaining their currency. The updating releases are dated and numbered sequentially, like new issues of a serial. It appears the looseleaf will continue to be updated without end. By recording the number of releases as they are received, acquisitions staff can check if all issues have been received. But the monographic nature of a looseleaf is apparent to the reader. After a new release is interfiled into earlier pages, it ceases to have any independent significance or marking such as “release 58, Jan. 1986.” The reader follows the numbering system of interfiled pages, not of individual releases.

A cataloger preparing a bibliographic record may be perplexed. The cataloger may find the frequent replacement of the title page confusing. When a replacement of the title page bears a date different from that on the previous title page a decision must be made whether or not a new edition has been published and a new bibliographic record should be created.

In the past AACR2 did not resolve such questions. Looseleafs are mentioned but twice in AACR2; Cataloging Rules redresses this neglect. It begins with a detailed exposition of several criteria to determine the serial or monographic nature of particular looseleafs. Then, it proceeds to establish guidelines for the description of those looseleafs that have been categorized as monographs, namely “looseleafs for updating.” Law librarians, who deal frequently with looseleafs, will be glad to have a written statement of how LC thinks looseleafs should be treated.

The presentation of criteria for categorizing a looseleaf as serial or monograph is easy to follow. To be consid-
ered a serial, a looseleaf must do more than be continually updated. The looseleaf must also contain a basic section or basic volume that is issued periodically and covers a particular period. Also qualifying as a serial is that looseleaf publication in which new pages are filed chronologically. Another type of looseleaf, looseleaf for updating, should be cataloged as a monograph "even though the latter [updates] are frequently issued in packages carrying a numeric or chronological designation suggestive of serial publications." Also to be cataloged as a monograph is that looseleaf material "of permanent value (e.g., court decisions) that constitutes a section of a looseleaf publication and that at the end of the year or from time to time is transferred from the looseleaf binder to a permanent volume that contains the material previously received in looseleaf format."

The unique characteristic of a looseleaf that is not shared by either serials or monographs is also outlined in the introduction to Cataloging Rules. Unlike other publications, one title page replaces a previous title page of a looseleaf. Cataloging Rules explains clearly how to interpret the new data on the new title page. The librarian should disregard the appearances of a new edition that a new title page suggests. A new date on the replacement title page should not be taken as proof of a new or revised edition. Only a statement on the replacement title page, or in new prefatory pages or in a publisher’s announcement should be taken as evidence of a new or revised edition, requiring a new bibliographic record.

The unique treatment that LC now accords to looseleafs for updating can also be seen in the instructions on how to handle transfer binders. A transfer binder is a component of some looseleaf services whose content is permanent. Once a page is inserted into a transfer binder, it remains there. In the past, LC created a record for the transfer binder separate from that for the rest of the interim looseleaf binders. In Cataloging Rules LC sets forth a different policy—the creation of a single record covering all portions of the service, including the transfer binder. The policy is based upon an awareness of the exceptional combination of primary and secondary materials on a single topic, provided by a looseleaf service. By opting for a single bibliographic record, with an added entry and a mention in the contents note for the transfer binder, LC stresses the comprehensive scope of the looseleaf service and alerts the patron to that scope.

Cataloging Rules is written to harmonize as much as possible with the program and language of AACR2. It repeats entire sentences and paragraphs from chapters 1 and 2 interpolating additions and changes required by the distinctive qualities of looseleafs. The familiar, easy-to-follow text is complemented by examples of records of legal literature. The records are actual LC records showing both the correct and incorrect applications of Cataloging Rules, making the text very clear. An instance of that clarity can be found in examples of the right and wrong ways to describe a new date on a replacement title page. When faced with an original title page dated 1965 and replacement pages dated 1967, 1970, and 1972 for the same publication, the correct procedure would be to create a single record in which the date would be described as 1965-

It would be an error to create separate records with different dates as in 1967- i.e.,[1967]- or , 1972-

Some segments of Cataloging Rules could be shortened. For example, the discussion of how to describe the name and location of the publisher and distributor is several times longer than that in AACR2 on the same subject. The section is so long that the main points are obscured. Perhaps some of the text and examples touching upon unusual situations could be reserved for an appendix.
On other subjects, long instructions and examples give needed guidance. For example, the great number of subsections and formats included in some services raise hard to settle questions on how much detail and how many, if any, separate records to create. The solution LC recommends, of the several options described in the guidelines, is to make a single bibliographic record representing all the components. A single record will be appreciated by most librarians in their effort to demonstrate to patrons the range of a single service. An added entry and contents notes will inform readers of the distinctive titles of the component sections. The example illustrating the procedure is well chosen—BNA’s Environment Reporter.

The wide array of sections and formats of Environment Reporter is such that many people can remember their first feeble attempt to organize and record it. LC’s example record unifies and clarifies the structure of this service in the following way:

The reporter contains binders: Current developments; Monographs; State solid waste—Land use, Federal laws; Federal regulations; State water laws; State air laws; Mining; Decisions (later published in bound volumes as Environment Reporter—Cases)

The service is divided into five parts: Treatise / by Jacob Mertens, Jr. and others (v., loose-leaf) and bound volumes, 1954–1958— ; Code commentary (v., loose-leaf) and bound volumes, 1954–1960— ; Rulings, current volume (loose-leaf); Regulations, current volume (loose-leaf) and bound volumes, 1954–57–

The spirit of closer cooperation between LC and law librarians is apparent from the citations in Cataloging Rules from publications such as Law Library Journal. A long quotation is included from an LLJ article on treatment of special edition pamphlets sometimes supplied to service subscribers. Recognizing that it may be impractical for libraries other than LC to create a separate record for each pamphlet, other less costly solutions are offered. Solutions from the article by Nicholas Triffin range from placing the pamphlet on the shelf after the service, without creating a separate record, to simply discarding the pamphlet six months after receipt.

Preliminary explanations about the description of looseleafs directed at catalogers new to the field is an excellent feature of Cataloging Rules. The “Preambles” or preliminary notes containing the additional information are placed before several new sections of text. These provide a welcome basic orientation to novices but may not be enough to assist them. For those librarians there is one other publication, written in 1984 on the basis of observation of LC practice, Cataloging Legal Literature, by Peter Enyingi, Melody Lembke, and Rhonda Mittman. This AALL publication describes the authors’ interpretations of LC practice, cites from the Cataloging Service Bulletin, and uses actual LC records for illustration. The succinct outline of LC procedure of Cataloging Legal Literature balances the detailed, lengthy approach of Cataloging Rules. Used together, these two works will provide catalogers with an excellent foundation for describing looseleafs.—Maja Basioli, Benjamin N. Cardozo School of Law, New York, New York.


The stated objectives of this new serial publication are “to survey and document the past, to present today’s issues, and to take a speculative look into the future of our profession.” The editors have certainly lived up to their statement of objectives in this first volume of Advances in Serials Management. If subsequent volumes maintain the quality set forth in the first
volume, this series will prove to be a major contribution to the documentation of serials librarianship.

The editors have provided a good balance between the historical perspective and significant issues of today in putting together a collection of strong, well-researched articles on such topics as CONSER, the organization for serials management, selection of subscription agents, and serials pricing. Okerson’s article on “Periodical Prices” is particularly noteworthy by virtue of its international perspective and in its suggestion of additional research topics. A substantial portion of the volume is devoted to an update of the annotated bibliography that appeared in Marcia Tuttle’s Introduction to Serials Management (JAI Press, 1983) and covers the period 1982-85. This should be considered an essential addition to general library science collections as well as to those serving the needs of library science students.—Germaine C. Linkins, State University College, Potsdam, New York.


Many libraries not large enough to warrant the services of a professional cataloger rely on “homemade” cataloging schemes. Too often, these schemes change each time a new person takes charge of the library. Hoffman’s concise, well-written volume is an attempt to help small libraries overcome this piecemeal approach to cataloging. It provides a simplified yet standardized set of rules and procedures based on AACR2, ALA Filing Rules, LC and Dewey classification, and LC and Sears subject headings. The only significant departure from accepted cataloging convention is the suggested exclusive use of title main entry as a means of circumventing the complicated interpretations involved in AACR2 chapter 21.

Basic concepts such as distinctions between sets, monographic series, and individual titles are clearly explained, with an absence of professional jargon. Numerous, well-labeled illustrations supplement the text throughout. Library of Congress and Dewey call numbers are used without distinction in the illustrations, however, which could be confusing to persons unfamiliar with those two systems.

This second edition expands on the 1977 edition, featuring clearer illustrations and bringing the basic work up to date with AACR2, the 1980 ALA filing rules, the new format of machine-readable data files, and the use of word processing for cataloging. An index is included, and throughout the text are citations for various cataloging tools and addresses of organizations to contact for further information. A list of these tools and organizations at the back of the book, arranged by subject, would have been helpful for quick reference.

Trained librarians, especially catalogers, will likely find this book overly simplified for professional cataloging purposes. Nevertheless, Small Library Cataloging will provide its intended reader, the nonprofessional or volunteer in charge of a small library, with solid, well-organized information necessary to catalog a collection systematically.—Christina Sokol, Trinity University, San Antonio, Texas.


Based on the first edition by Mary M. Taylor (1981), this second edition addresses the impact of computers. The report of the 159 surveyed schools provides an overview of practices dealing with budgets, federal funds, computers, selection tools, reviewing, ordering, and weeding. Of the schools responding, 45 reported their policies were written between 1980 and 1985,
27 between 1975 and 1979, 16 between 1960 and 1974, and 23 had no known date. There were 48 schools reporting no policy.

As in the first edition, part 7, "Full Policies," presents documents from 15 school districts. Common elements are objectives, responsibility, criteria, selection procedures, and handling of reconsideration requests. None address coordinated collection development and other forms of resource sharing.

Part 2, "Partial Policies," has three new categories: computer software, duplication and replacements, and free or sponsored materials. Categories retained include philosophy and objectives; responsibility; selection principles; selection aids; criteria—general; criteria—special; weeding; interlibrary loan; and challenged materials.

Information previously presented in part 3 is still in part 3, "Procedures and Forms" and also in appendix 1. Part 3 provides forms for materials requests, media evaluation, computer software evaluation, reconsideration of materials, and media reports: inventory, circulation, and expenditures. Samples of procedure statements cover selection, ordering, receiving, processing, and weeding.

Appendix 1, "Resources for the Library Media Specialist," covers selection tools: books, periodicals, computer review sources; book jobbers; binders; magazine subscription agencies; national library organizations; and state education agencies. Care should be taken in using the selection tools listing because it does not reflect the latest edition of some titles.

Appendix 2, "Statements on Library Policies," includes items such as "The Students' Right to Read" and "The Library Bill of Rights."

As with the earlier edition, this work fills a void in the literature for those responsible for collections in school library media centers. Users need to heed the advice of the author that "the policies included in this book offer a variety of approaches used by districts to meet their own unique needs. They should be viewed only as examples to aid others in the process of developing a selection policy to meet their needs" (p.4).—Phyllis Van Orden, Florida State University, Tallahassee.


Offering thirty-nine different types of bibliographic displays, exemplified through several hundred illustrations, this work is a must for institutions considering automating their public catalogs, as well as for those who are interested in redesigning their public catalogs, as well as for those who are interested in redesigning the displays they already have. The authors, using a special program designed to manipulate bibliographic records into various screen designs, provide insight into various spacing configurations, show the possible compromises of labeled or cardlike displays (or their combination), as well as including statistics on the occurrences of one screen versus two screen displays.

Although they state some preferences, the authors did not attempt to come up with the absolute display (an impossibility they note), nor do they feel their work is exhaustive. What they have provided instead is a vast array of options upon which the library can begin to make the selection of the display that will best suit the needs of that institution. Worth noting is the chapter dedicated to nonbook materials and how records for such material can affect the bibliographic display.

While this work is based on the Research Libraries Group RLIN system, the styles and examples are ultimately applicable to any system. One of the more difficult aspects of automation is trying to imagine what the display will eventually look like on the
screen, and the authors and publisher succeeded well in making the illustrations look as much like VDT screens as possible, despite the restrictions of book printing.

I would highly recommend this to automation or system librarians and definitely suggest this as a reference source for anyone else who participates in the design or maintenance of their online public catalogs. — Rosanna M. O’Neil, OCLC, Dublin, Ohio.


This latest edition of Susan Martin’s portrait of the current status of library networks differs from its predecessors in more ways than its new format and the addition of a subtitle. Time has allowed both networks and Martin’s view of the “big picture” to mature to the point at which virtually all the issues of library automation have merged with the issues of networking. Librarians who neglect to read this edition, assuming that it has little new to offer (an assumption perhaps not entirely unjustified considering that the earlier editions tended to repeat much of the same information), will be doing both themselves and Martin a disservice. This book is full of new and valuable insights.

The addition of a subtitle is significant. *Libraries in Partnership* is a theme that pervades the book. Sometimes Martin uses it to describe what is happening, and sometimes she uses it to describe what should be happening. Earlier editions of the book contained concluding chapters that focused on the future of library networking, and in this respect this edition is no different from the others. However, this time Martin has improved it in several respects: the title “Trends in Library Networks”; the text as a summation of the issues treated in earlier chapters; and her fresh “Scenario for the Future,” which, while bearing a strong family resemblance to her earlier prognostications, contains much that is new. — David T. Buxton, University of Arizona, Tucson.


Dialog is beginning to address a variety of alternative markets for online database searching and has prepared attractive information/instruction packets tailored to these potential new user groups. This particular one is directed at technical services staff and concentrates on the databases, commands, and Dialog services that might find application in collection development, acquisitions, cataloging, and interlibrary loan. Packaged with a Dialog database catalog and various information sheets, the *Practical Guide* has been published (at least in draft form) in a loose-leaf binder and is divided into five sections: “About Dialog Services and Databases,” “Dialog Search Basics,” “Sample Searches Using Dialog,” “Dialorder,” and “Tables/Appendices.”

The introductory section concentrates on making the case for Dialog in the technical services setting, offering an overview of pertinent services and databases. The databases selected for discussion and example are principally those that offer access to monographs or unusual formats (such as conference papers, dissertations, audiovisual materials, government publications, and software) and databases that are the online equivalents of traditional technical services tools (for instance, Ulrich’s, *Books in Print*, and reviewing sources). The discussion of searching mechanics in section 2 is clear and straightforward, starting with the most useful commands, but also providing detail on some (not all)
of the more advanced techniques. Although the examples offered here are not always appropriate for technical services, section 3 consists entirely of sample searches specifically designed to speak to particular applications. The examples illustrate use of Dialog for verification searching, cataloging, collection development, and acquisitions, and each group of searches is accompanied by a general discussion of approaches to the task at hand. The last two sections are an explanation of online document delivery using Dialorder and a collection of useful technical notes, including dial access telephone numbers, using Dialog through RLG or OCLC equipment, SDI files, Dialmail (for interlibrary loan), and blue sheets (brief summaries) of the principal databases discussed in the manual.

While the manual does a good job of explaining how Dialog might be used in technical services operations, the question of why is addressed only minimally. At best Dialog cannot be seen as more than an adjunct to manual and computer-based resources, and an expensive adjunct at that. Since many different staff positions are involved in technical services and since use would probably be sporadic, the cost of training and maintaining familiarity would be considerable, and connect time would be unlikely to be spent in the most efficient manner. Most of the suggested functions are currently handled by up-to-date print sources or by access to bibliographic utilities and networks, and tasks such as bibliographic verification, for which Dialog is ideally suited, can be managed by such online search services as already exist within the institution. Dialog evidently feels that a market exists, having invested considerable time into producing this manual. It will be interesting to see whether the accompanying promotion can succeed in making the case.—Candy Schwartz, Graduate School of Library and Information Science, Simmons College, Boston, Massachusetts.
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