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Editorial: A Rose is a Rose is a Rose

What's in a name? This profound question has been asked by writers and philosophers, scientists and historians, linguists and lexicographers. At the Midwinter Meeting held in Washington, D.C., in January, the division and section boards wrestled with it, too, considering twenty-nine suggested name changes for Resources and Technical Services Division. Why should we change our name? What should a new name entail? How should we, as concerned members, respond? As a new century dawns, what will RTSD mean? How might a new name help us to meet the future?

Why change? Two elements in our present name raise concerns among the informed: use of the term *division* rather than the alternative *association*, and the presence of the somewhat old-fashioned term *resources* instead of a newer, broader phrase for this set of functions such as *collection management* or *collection development*. Another consideration raised during a board discussion is the absence of any reference to *preservation* or *reproduction* of information resources—functions that are clearly within divisional scope. And, although I don't recall specific mention of it in any deliberations, some want the words *bibliographic services* to replace *technical services* as the key code words for our focus.

What kind of name? Besides changing to an *association* for *collection, preservation, and reproduction* librarians (as well as serialists, catalogers, and classificationists, one hopes), other issues were considered: What acronym will immediately devolve upon us? Two rather nice names, "Collection Organization and Management Association" and "Resources and Technical Services Association," turn into dreadful acronyms: COMA and RATSA. Other abbreviations eliciting reactions of distress included COBRA (Collections Organization and Bibliographic Retrieval Association), MOMA (Materials Organization and Management Association—easily confused with the better-known Museum of Modern Art in New York), MAMA (Materials Access Management Association), LIMA (Library Information Management Association), ALMA (Association for Library Materials Access), and ADOIR (Association for the Development and Organization of Information Resources). One name missing from the original list was later suggested by *LRTS'* Assistant Editor Edward Swanson: ALA (Access Librarians Association).

Secondly, what spinoff changes might follow a name change? Would we need new names for *LRTS* and the *RTSD Newsletter*? How could we do this to our own serialists, who might retaliate by bestowing the "Snake-in-the-grass" award or, maybe, the "Et tu, Brute" medal on their own publications?

How to respond? One reply, distinctive in its precision, is: A rose is a rose is a rose. Alas, that is too simple and perfect. Leaving well enough alone is not necessarily the best response. We shall have to think long and hard as we mark our ballots later this spring, for a name change proposal appears there (which one, I shall not divulge). I don't know yet how I shall vote, but vote I shall. I urge you all to do so, too. The decision is in your hands—*Sheila S. Intner, Editor.*

Interaction: Letters to the Editor

From Sandra Hodges Gamal, Cairo American College, Egypt, to Richard D. Johnson (copy to Sheila S. Intner):

I would like to comment on two recent reviews in *LRTS'* July 1988 issue. The reviews appear on p.278 (*Nonbook Media*. ALA 1987) and p.287 (*Education and Training for Catalogers and Classifiers*. Haworth, 1987).

In both reviews the reviewers mention the lack of indexes for these publications, but only the reviewer of the Haworth title gave a "negative" review, and the index is only one of several reasons . . . for not recommending purchase of the title. . . .

. . . I believe that indexes in books are essential, and reviewers should reject publications which lack this essential "enhancement." Of course some books are so organized (dictionaries, etc.) to be easy to use, but collections of readings and any monograph needs an index.

I guess I am launching a one-person war on soft reviewers who are partially responsible for publishers being able to charge very high prices for low-grade books. . . .

Book Review Editor Johnson replies:

Thank you . . . for your comments about soft reviewers, and I benefit from your concerns as they will inspire me to be more critical myself as I commission reviews.

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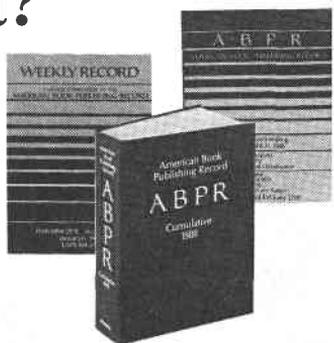
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On the Nature of Acquisitions

Joe A. Hewitt

Underlying traits of acquisitions departments arising from operational roles and the perceived nature of the function are examined. The paper attempts to demonstrate that recognition of role-conditioned attributes and frames of reference of technical service units can lead to expanded concepts of coordination and more sensitive management practices.

Departments in technical services are customarily described in management literature in terms of objective factors such as the functions they encompass, the type and volume of materials handled, the number and type of staff, the internal organizational structure, and the procedures used in carrying out their functions. This paper explores the possibility that there are also subjective characteristics of technical services departments that are shaped by the underlying conditions of departmental roles and the way these roles are regarded by administrators and other staff in the library. Such nonobjective factors may contribute to distinctive attitudes, inclinations, and perspectives among staff in the various departments and predispose them to particular concerns and sensitivities. Underlying departmental perspectives of this kind may also contribute to predispositions that create typical patterns of response to operational situations and management issues.

This paper will examine the question of a distinctive departmental frame of reference as it relates to the acquisitions department in a research library setting. Secondary purposes are to demonstrate the possibility of using an understanding of underlying departmental traits in a more comprehensive approach to coordination in technical services and to discuss research methods useful in arriving at such an understanding.

The discussion concludes with the general observations that acquisitions work, for a variety of reasons, tends to be undervalued and misunderstood; it may occupy a vulnerable position organizationally; it has minimal self-determination of its objectives and control of its work flow; and, regrettably, it receives less respect and exerts less influence than it deserves. Taken together, these conditions may lead to excessive stress on acquisitions staff, oversensitivity on the part of staff to certain management measures, defensiveness, and a general insecurity or vulnerability that may require special support and accommodation from upper-level

administrators. These conclusions are not based solely on observations of the organizational context described above, but also on participation in acquisitions-related professional meetings, on contacts with colleagues, and, to some extent, on commentary in the literature. Schmidt, for example, characterizes acquisitions as the "neglected stepchild of librarianship."¹ This paper basically concurs with Schmidt's perception and attempts to connect it to actual conditions in the workplace.

These observations are organized generally into four sets: (1) factors related to the perception and status of acquisitions work; (2) factors related to the role and function of acquisitions processes in the library organization; (3) sensitivities and predispositions of acquisitions librarians that may arise from the perceptual and organizational factors (and possible administrative remedies); and (4) concluding remarks regarding an expanded concept of coordination and the potential utility of qualitative studies that probe the nonsurface attributes of various specializations in librarianship.

PERCEPTION AND STATUS OF ACQUISITIONS WORK

The first problem that acquisitions must overcome to achieve its deserved status in the library organization and in the profession is one of image. Acquisitions work suffers from a reputation for being predominantly routine, process-oriented, and relatively simple. There is enough surface accuracy to this characterization that it is not easily displaced, yet it is an unfair and disabling characterization of many aspects of acquisitions work.

The status of acquisitions librarians also suffers as a result of the small size of their expert support group and the relative lack of familiarity with the demands of acquisitions work among colleagues in the library. This isolation derives in part from the fact that acquisitions is not often taught in library and information science curricula, which also results in the lack of an acknowledged academic knowledge base and further reduced status for acquisitions librarians.

THE ILLUSION OF SIMPLICITY

An evolutionary process has occurred in the organization of the collection development and acquisitions functions in academic research libraries over the past three decades. When selection was primarily the province of faculty, programmatic collection development as it is practiced today in research libraries hardly existed. Collection development activity actually conducted by the library, such as budgeting, liaison and negotiation with faculty selectors, and some degree of coordination of faculty selection, fell within the purview of either the director or the acquisitions department.

As libraries took on greater responsibility for and control of collection development, the function tended to be separated from acquisitions and located elsewhere in the organization. Although no predominant pattern for the organization of collection development has emerged, the patterns that have become common tend to have an identical effect on acquisitions—they entail the consolidation of order and receipt work, as opposed to collection development activity, in the acquisitions department.² This separation is sometimes expressed as a division of the intellec-

tual and the clerical aspects of building library collections.³

As a result of this division of responsibilities, the work of acquisitions is often perceived as clerical and highly routinized. Although the work of acquisitions departments, as presently constituted in most libraries, does indeed represent only the *process* of acquiring library materials rather than the intellectual aspects of collection management, its professional, managerial, and higher-level technical dimensions are far from routine and clerical. Apparent routinization creates a surface impression of simplicity that overlays an inherent procedural complexity and large numbers of exceptions occurring in the work flow. The bibliographic world and the book trade with which the acquisitions department must deal is international, multilingual, complex and disorganized. Many acquisitions tasks, albeit repetitive, reflect the complexity of interaction with this environment. At the University of North Carolina, for example, a CPA management consultant from the University's Systems and Procedures Department conducted a three-person, month-long study of the Acquisitions Department. He concluded that it was easily the most complex procurement operation he had ever examined. Even more gratifying was his conclusion that the department's procedural complexity was fully justified by the demands of acquiring library materials from an international market in a research library environment.

To have responsibility for a function which on the surface appears routine and repetitive, but which in reality is fairly complex, is not unique to acquisitions in the library world. In fact, the entire profession suffers from this misconception to some degree. It is, however, more pronounced in acquisitions than in departments that claim a theoretical or codified knowledge base or require some degree of subject knowledge for adequate performance, such as bibliographic control and collection development. In public services departments, the variety, ambiguity, and the need to exercise professional judgment in interactions with users are self-evident and support an impression of complexity and claims of professionalism. Acquisitions work, on the other hand, is particularly vulnerable to confusion of repetitiveness with simplicity, and this characterization has been encouraged by the commentary surrounding the movement to separate the intellectual aspects of collection development from the clerical routines of "order work." Such underestimation of acquisitions results not only in reduced status for acquisitions librarians relative to other specializations, but also in defensive reactions on the part of acquisitions staff that may be dysfunctional in the workplace. These will be discussed later in this paper.

PROFESSIONAL ISOLATION OF ACQUISITIONS LIBRARIANS

Unfortunately, acquisitions librarians must deal with the common misconceptions about the nature of their work from a weak position in terms of an informed and sympathetic support group. Staffing in acquisitions is characterized by a small number of professionals supervising a relatively large support staff. In a survey of ARL libraries, Schmidt found that the ratio of professional to support staff involved in acquisitions was 1:6.28.⁴ Some acquisitions departments of fairly substantial size operate with a single professional. As a result of such staffing patterns, professionals in ac-

quisitions may feel isolated due to the lack of a large collegial support group sharing the same professional interests and perspectives. Cataloging departments in ARL libraries will have considerably more professionals; the collection development function, particularly if organized in a manner involving numerous librarians on a part-time basis, will have many spokespersons; reference work and the branch libraries will also be represented by large and influential groups of professionals. The collegial base of the professional in acquisitions is quite small in comparison.

The relative isolation of professionals in acquisitions is reinforced by the fact that few librarians have the benefit of systematic exposure to content related to acquisitions in their professional education. Acquisitions is a professional specialization learned almost entirely on the job; acquisitions processes are not covered in library and information science curricula to the same degree as cataloging, reference, or collection development. Thus, acquisitions librarians cannot assume that their professional colleagues in the library possess even the most rudimentary understanding of and appreciation for acquisitions work.

It is in this respect that the lack of coverage of acquisitions in library school curricula is most detrimental. It may be unrealistic to expect programs of library education to prepare students to practice a specialization for which there are so few professional positions, yet there is a need for all librarians, at least in research library settings, to be generally familiar with the nature and demands of acquisitions work. Almost all librarians must deal with acquisitions as users of a service critical to their own functions, yet few are prepared to interact with acquisitions in an informed way.

Professionals in acquisitions are therefore subject to a sense of isolation resulting both from the small size of their expert support group and the general lack of familiarity with their specialization in the broader community of librarians. This isolation may reinforce and intensify feelings of vulnerability arising from characterizations of acquisitions described in the previous section.

LACK OF ACADEMIC CONTENT

As described above, the lack of acquisitions content in programs of professional education may contribute to a sense of professional isolation among acquisitions librarians. There are further consequences of this condition having to do with the status of the specialization in the profession. For many librarians, the inclusion of content related to a function in academic curricula constitutes a kind of validation, or at least a recognition that the knowledge base of the specialization contains respectable academic content. Such status has not been conveyed on acquisitions.

This author conducted a study that compared library school students' perceptions of acquisitions and serials based on readings in the literature, lectures, and presentations by the heads of the acquisitions and serials departments of a research library.⁵ The specific objective of the study was to determine student opinion on whether courses related to serials and acquisitions should be included in the Library and Information Science curriculum. The general image of acquisitions that emerged from this study was that of a complex, demanding, and eclectic area of activity, but one that

seems to lack a core content exclusive to its own domain suitable for a three-hour course in the curriculum. This study does not, of course, speak to the general perception of acquisitions in the profession, but it does illustrate the evidence and rationale by which a specific group arrived at a negative perception of acquisitions in terms of suitable academic content.

Related to this point is the fact that professional or disciplinary domain of acquisitions has been splintered and reduced by the organizational changes related to collection development noted above. Not only have these changes affected what acquisitions departments actually do in libraries, but they have also removed much significant professional content from the acquisitions domain. Issues such as collection analysis and management, cooperative collection development, and budget allocation for library materials are viewed as belonging to the collection development sphere rather than to that of acquisitions. A similar effect has resulted from the long-standing trend toward establishing serials departments as separate units in large technical services divisions. Serials librarianship has emerged as a separate specialization distinct from acquisitions, thereby disassociating yet another substantial area of concern from the traditional scope of acquisitions. Many collection management and budget issues center around publications in serial formats, widely recognized to be among the most complex and problematic materials acquired by research libraries. Serials are also closely associated with new technologies, such as electronic publishing, to a greater degree than are monographs. The study referred to above found that large majority of students perceived a need for a course dedicated to serials and that such a course could have suitable academic content, if properly designed.⁶

Taken together, the emergence of collection development and serials librarianship as distinct and vigorous specializations in the profession has greatly diminished acquisitions' acknowledged domain of professional expertise. Although professional acquisitions work is recognized as requiring strong management skills and a knowledge of bibliography, the book trade, and business practice, its knowledge base is derived for the most part from other fields and other specializations in librarianship. The specialization of acquisitions consists of focusing a variety of derivative skills and an eclectic range of information on a specific process-oriented library function; the *exclusive* professional domain of acquisitions is therefore seen as narrow and predominantly procedural.

If acquisitions librarians are to develop their own acknowledged and respected center of expertise, both within the library and in the realm of professional education, the most promising areas are publishing and the book trade. Libraries are highly dependent upon a critical, symbiotic relationship with publishers and booksellers, yet this is a relatively neglected area in terms of a systematic, research-oriented approach with a focus on the relationships between publishing and book distribution systems on the one hand, and the organizations that collect, organize, and preserve the published record on the other. The economics of the book trade, including pricing, mergers and takeovers, liquidations, the legalities and ethics of business relationships, and business strategies of the various segments of the industry, impinge dramatically on library budgets and operations. Any

library with a major acquisitions program needs its own in-house expert, interpreter, and counterstrategist in this complex relationship. The professional acquisitions librarian is the natural candidate for this role.

A concentration on book publishing and distribution systems would not only serve acquisitions specialists well in terms of status and professionalism, but also provide a much-needed service to librarianship. Academic respectability for acquisitions specialists would be enhanced by an external focus apart from internal policy, procedure, and organization; issues of considerable import and complexity would be encompassed by the domain of the specialty. At the same time, if acquisitions librarians were to spearhead a movement to develop a strong library-oriented base of research and informed professional commentary in this area, libraries as a whole would be in a better position to divest themselves of the naive, reactive, and largely dependent role they now play in the distribution chain. The challenge to acquisitions specialists is to stake their claim on this area of expertise through their own focused and productive activity.

It is not likely that the academic standing of their speciality is in itself particularly bothersome to most practicing acquisitions librarians, except to the extent that such status results in a lack of useful research. The relative lack of validation and respectability may, however, reinforce feelings of insecurity arising from the perceptions described above. As noted, acquisitions suffers from a reputation for being predominantly routine and clerical; acquisitions librarians may, in addition, have cause to feel a sense of professional isolation within their libraries. When a lack of respectability and professional empowerment resulting from the absence of a legitimized knowledge base is added to these factors, acquisitions librarians may be justified in feeling that they are librarianship's neglected stepchildren.

OPERATIONAL ROLES AND CONSTRAINTS OF ACQUISITIONS

Acquisitions is subject not only to the negative attitudinal and perceptual factors described in previous sections, but also contends with unique operational conditions and expectations that result in a distinctive frame of reference. These factors include acquisitions' role as an accommodating or adapting unit, its need to respond to work flow fluctuations that affect acquisitions in a different manner and degree than other processes, its need to emphasize expedients in shorter time frames, its lack of control over inputs and operating conditions, and its role as a mediator between the library and constraining external conditions.

ACQUISITIONS AS THE ACCOMMODATING UNIT

In the process of acquiring library materials and organizing them for use, the acquisitions department stands between collection development and cataloging, an uncomfortable position on many accounts. In a collection-intensive research library, the library's collection development programs embody the most compelling goals of the library and its user community. The catalog department, meanwhile, is engaged in organizing the collections and creating permanent bibliographic records, files, and

databases according to international codes and standards. Systematic development of the collections and high-quality bibliographic control are considered by many to constitute the core of the research library's mission and are clearly ennobling goals. The departments responsible for these activities may enjoy considerable status and be in a position to establish a number of operational imperatives.

Acquisitions, on the other hand, is a service unit to both processes; it deals in a temporary transaction and neither initiates nor completes the process of building an organized collection. As a result, the acquisitions department must frequently meet conditions set by others and is often called upon to be flexible, adaptable, and accommodating to the goals of other units. The position of acquisitions in the library organization is only slightly exaggerated by the analogy to antebellum North Carolina, with its small agrarian economy and culture, as compared to the plantation cultures of Virginia and South Carolina—"a vale of humility between two mountains of conceit."⁷

Ideally, acquisitions works with the departments it serves in an interdependent and coordinated fashion, which is the case in a large number of smoothly functioning technical services divisions. But acquisitions deals in means rather than ends, the hows rather than the whys, with execution rather than decision. Consequently, when departmental interaction and coordination are working properly, it often depends on the willingness of acquisitions librarians to accommodate their processes to the needs of others. Where acquisitions becomes controlling, which it may as a result of especially influential, dominant, or rigid acquisitions librarians, process will dominate and perhaps limit goals; acquisitions can become a suboptimizing unit undermining the broader objectives of the library's collecting and bibliographic control programs.

Thus, it is entirely proper in the typical research library organization that the role of acquisitions be to serve, to accommodate, and to adjust. Even when this role is understood and accepted by the acquisitions staff, however, it may not wear well with time. This is especially the case if other units, in fulfilling *their* roles, display tendencies to high-handedness or inappropriately assign values to roles which are simply different and coequal rather than superior and inferior. Acquisitions staff may begin to question why they must always change to accommodate others, why their needs cannot more frequently be treated as primary. Although the accommodating role of acquisitions is entirely appropriate, it may, nonetheless, contribute to underlying sensitivities of acquisitions staff that can become dysfunctional.

WORK FLOW CYCLES

The fiscal cycle is often a dominating concern in acquisitions, particularly if the department must meet the requirement that all funds be expended by the end of the fiscal year. Much planning activity is aimed at timely encumbrance and expenditure to meet this demand, often coupled with contingency plans for the possibility of one-time, year-end funding which must be expended on a quick turnaround. While concern for the fiscal calendar is shared with collection development, it is hardly of interest

to cataloging, except as a statistical reporting period. The academic calendar creates another cycle of special interest to acquisitions librarians insofar as it results in cycles of faculty ordering and/or acquisitions of reserve materials. Publishing cycles also contribute to fluctuations in the acquisitions work flow.

Taken together, these factors interact to create fluctuations in acquisitions work flow that are both more radical and different in kind from those experienced by other units. In cataloging, for example, fluctuations in volume of incoming materials are in effect evened out by the creation of rearranges at various points; the controlling factor on production is the capacity and efficiency of the department itself. In acquisitions, the requirement to meet fiscal deadlines imposes external limits that eliminate the option of indefinite backlogs. Yet in spite of great variances in work loads, it is rarely possible to staff the acquisitions department for peak load demands.

Severe fluctuations in work load have several operational effects on acquisitions departments and their interactions with other units. First, at various points during the year, the acquisitions staff may find it necessary to focus almost exclusively on internal departmental priorities, thereby diminishing the department's ability to respond in a timely way to special requests from other units. Secondly, peaks in work loads can be so extreme that when they occur it may be necessary to perform certain functions, such as preorder bibliographic verification, with less than the customary thoroughness and care. Finally, the contrast in periods of low and high volume may give the impression that acquisitions is working below capacity at certain points during the year, resulting in requests that staff be transferred to assist in other units. These conditions can contribute to an elaborate network of stresses and misunderstandings between acquisitions and other departments.

Although specific areas of tension may involve issues such as the effects of acquisitions shortcuts on cataloging or the inability to claim at times during the year, the real effects of these operational conditions are much more profound. The underlying operational principles of both collection development and cataloging are consistency and continuity. The long view is fundamental to building research collections and creating and maintaining the apparatus of bibliographic control. The goals of acquisitions, on the other hand, are framed in shorter time spans and are more subject to short-term operational crises. Thus the fundamental orientation of acquisitions will tend to be more pragmatic and tied to principles of expediency. Contrast, for example, the long process of deliberation that would ordinarily precede a cataloging department's decision to make use of a minimal-level cataloging standard to an acquisition department's decision to suspend temporarily full preorder bibliographic verification in order to process large numbers of orders in a short period of time.

Flexibility, expediency, and adaptability to the immediate situation are necessary and inherent characteristics of acquisitions, just as consistency, continuity, and deliberate policy control over extended time frames are necessary for collection development and bibliographic control programs. The qualities of reactivity demanded of acquisitions are perhaps more

similar to those of units such as interlibrary loan, reference services, and other public service units than to those of other technical service departments. These characteristics arise naturally from the roles and operating conditions imposed on these functions and are necessary if the units, as a coordinated group, are to meet the library's goal of building organized research collections in a cost-effective manner. In spite of the appropriateness of these differing orientations, they may result in incompatible approaches to problem solving and general technical services issues, particularly if they are allowed to remain as unexamined frames of reference.

LACK OF CONTROL OVER OPERATING CONDITIONS

All library departments must work within limits, especially resource constraints of various kinds affecting numbers of staff, book funds, equipment, supplies, etc. Other constraints are imposed by institutional policies and internal organization, e.g., personnel regulations or policies that define a department's scope of activity and/or authority. Such constraints are predictable and become a part of the basic operating environment; departments typically exercise a number of options in meeting their objectives within acknowledged limits on resources and other constraints. Acquisitions, like any other department, must work within these general limitations on the library within the institution. In addition, however, the acquisitions department, to a greater extent than other library departments, must contend with other constraints that impinge directly on its ability to meet day-to-day objectives. These constraints also offer fewer options for finding adequate solutions by manipulating factors under the department's control.

One category of constraint results from the department's dependence on external entities, particularly publishers and booksellers of various types. Poor dealer performance, short print runs resulting in books going out of print quickly, late and inaccurate dealer reports, inaccurate prepublication announcements, incomplete dealer catalog listings, prepayment requirements, postal strikes, unpredictable customs officials, foreign dealers whose standards of timeliness are grounded in more leisurely cultures, and any number of other events and circumstances can frustrate the department in acquiring library materials on the timely basis expected by its users. Such constraints are often coupled with crippling institutional accounting and audit requirements that reduce the department's effectiveness in dealing in a volatile and disorganized marketplace. Acquisitions is frequently placed in the position of operating with its hands tied in an environment calling for a flexible and even free-wheeling approach; in meeting institutional and governmental regulations, acquisitions may be forced to assume a bureaucratic and cautious posture that inhibits a proactive approach to its mission. Such constraints often result in failure by acquisitions to meet expectations due to circumstances beyond its control.

The acquisitions department not only must contend with the effects of these constraints on its own operations, but also frequently serves as the channel through which they are introduced into other library departments. Accounting and audit regulations may be identified as acquisitions depart-

ment policies; difficult-to-acquire materials become acquisitions' failures; the shortcomings of incompetent vendors and a book trade poorly organized to serve libraries are acquisitions' "management problems." Acquisitions may come to be regarded as the perpetrator of the very conditions that make its own work difficult and restrain other units from fulfilling their goals.

Dealing with these frustrations on a daily basis may affect the general frame of reference and mind-set of acquisitions librarians. Acquisitions managers will tend to anticipate practical problems that other managers do not fully grasp or appreciate. It becomes an inescapable corollary of the acquisitions department's role to be preoccupied with the practical implications and limits of collection development and bibliographic control decisions. Unfortunately, those who are placed too often in the position of calling attention to pragmatic constraints often appear to lack vision or even give the impression of obstructionism with respect to idealistic goals. This is a necessary but frustrating role, and those who play it may acquire an undeserved reputation that is not easily divested. The persistent pragmatism of acquisitions librarians is a telling example of a role-conditioned perspective that can be easily misunderstood if not interpreted in the light of operational missions and the conditions that influence success or failure.

SUMMARY OF PERCEPTUAL AND OPERATIONAL FACTORS

In summary, the acquisitions process is subject to a number of mutually reinforcing perceptual and role conditions that tend to support a distinctive image of acquisitions work. These include:

1. A characterization of acquisitions as predominantly routine and clerical in nature, resulting in a serious underestimation of the professional and managerial aspects of acquisitions work.
2. Relative isolation of acquisitions librarians both in terms of a strong immediate support group and a knowledgeable and understanding community of users.
3. Lack of academic recognition as a specialization in the profession and the absence of an acknowledged, coherent body of theoretical or codified expert knowledge.
4. An intermediate service role that calls for the execution of decisions made by others and an ongoing accommodation to goals determined by others.
5. The need to accommodate to fiscal and work flow cycles, which leads to an emphasis on short-term objectives and expedients, an orientation differing fundamentally from that of acquisitions' most closely associated functions.
6. A dependence on external entities to meet objectives and the need to meet externally imposed regulations while also serving as the channel through which these constraints are imposed on others in the library.

Taken together, these factors lend themselves to a negative, demeaning, and profoundly unjust characterization of acquisitions as a clerical and highly routinized activity lacking a truly professional knowledge base;

they also support an image of acquisitions managers as obsessively concerned with procedures, short-term objectives, practical problems, and bureaucratic regulations. These characterizations create more than an image; they may also result in defensive reactions and mind-sets in acquisitions librarians that can be the source of misunderstandings in the workplace.

DEPARTMENTAL SENSITIVITIES AND ADMINISTRATIVE RESPONSE

In all probability the factors described above rarely are explicitly stated by acquisitions staff or by others in the working environment. However, they may be expressed indirectly through particular sensitivities and predispositions of acquisitions librarians. For example, as a result of the characterization of acquisitions work as predominantly routine and clerical, acquisitions staff may be inclined more often than others to defend the position that their work is more complicated than it seems. This defensiveness, although natural under the circumstances, can take the form of resistance to management techniques that depend on the reduction of functions to basic work elements for purposes of analysis.

Departments that are particularly alert to the possibility that the demands of their work may be underestimated may tend to respond negatively to administrative decisions that do not appear to take all details and exceptions into account. In large-scale technical operations, many management decisions must be made at a level of generality that subsumes actual cases and exceptions, and deals, in effect, with functions and operations in outline form. Administrative decision making would be paralyzed if this were not the case, if operations were not considered in somewhat simplified terms for purposes of focusing on critical elements. In this process, it is *understood* that all operations are in fact elaborately detailed and complex, that exceptions and problems occur throughout the work flow. Departments that are sensitive to general characterizations of their work as routine and clerical may be more uncomfortable with this process of abstraction than more secure departments and, therefore, more inclined to introduce inappropriate detail and exceptions into general management discussions.

When faced with this problem, whether from acquisitions or another department, the technical services administrator is faced with a need to change attitudes and surface perceptions. First, it is necessary to encourage general recognition of and respect for the demands of acquisitions work by calling attention to the complications, exceptions, interactions, and anomalies involved in acquiring library materials from a disorganized and sometimes recalcitrant market in what may be a constraining institutional environment. It is neither effective nor becoming if these points are made exclusively by acquisitions staff; administrative support is required to change deeply rooted characterizations of acquisitions, or any other function.

At the same time, acquisitions staff must be given reason to trust that administrators, while out of necessity dealing with operations at a general level, nevertheless are cognizant of the entangled mass of complexity that underlies the simplified working constructs on which divisionwide deci-

sions are based. Such trust is necessary if the administrator is to be able to close off inappropriately extensive explications of detail without causing resentment. This may be accomplished in part by showing an interest in the details of the staff's work, particularly in the phenomena that show up on the "problem shelves" and files that are ubiquitous throughout technical services. Certainly, the administrator will not be of assistance in solving such problems (except, perhaps, to encourage a certain degree of risk-taking in the search for shortcuts), nor even comprehend them fully, but exposure to them is necessary to ensure the credibility of general acknowledgments of their presence in the system.

The technical services administrator must not only acknowledge the complexity of acquisitions work, but also be willing to defend it. It is an enduring stereotype of the profession that librarians are inextricably wed to overelaborate, "time-hallowed procedures" (as they were described by Daniel Melcher with specific reference to acquisitions)⁸ that obstruct the accomplishment of what are presumably simple, straightforward tasks such as buying books. Publishers, campus book store managers, purchasing agents, personnel classification specialists, academic administrators, and many librarians who are not intimately familiar with acquisitions processes may fail to appreciate the need for the elaborations and finer distinctions of acquisitions procedure. The fact is that even when all needless complexity has been purged from the acquisitions process of a major research library, much complexity will remain. The administrator must be in a position to defend the legitimate complexity of the process against all attempts to oversimplify, to understaff, to underclassify staff, or to streamline to the point of suboptimization, all of which are battles that a department with a reputation for being responsible for predominantly clerical, routine tasks will have to fight more often than others. Strong administrative support is needed to bolster the status, confidence, and trust of departments unfairly maligned by such underestimation.

The role of acquisitions as a service unit between collection development and cataloging may also lead to special sensitivities. Acquisition goals are set by the collection development programs; the standards for acquisitions output (in terms of acquired books delivered to the cataloging department with appropriate information) are determined by the requirements of cataloging; performance demands in terms of turnaround time are made by users, branch and reference librarians, and technical service administrators; and procedural requirements are set by institutional accounting and audit units. Within this tightly structured operating environment, acquisitions librarians may feel that their decision-making authority and the potential for self-determination are severely limited. A normal reaction to this situation is to guard closely their acknowledged areas of authority.

The technical services administrator must take measures to support acquisitions staff in a mission that may tend to be perceived as subservient. For example, the department should be allowed to exercise its authority without interference in spheres where the decision clearly resides in acquisitions, such as dealer selection. (The selection and evaluation of certain vendors, such as those for approval plans, should be a joint exercise of acquisitions and collection development.) The technical services adminis-

trator must protect acquisitions from *unreasonable* requests for exceptions to established procedures and requests to change procedures and standards for superficial reasons. And, finally, the goals of acquisitions should on occasion be allowed to assume priority status and take precedence over those of other units, for example, at the close of the fiscal year when the materials funds must be fully expended and the accounts balanced.

In spite of such measures, the acquisitions department may not escape the feeling of being at the beck and call of other units. It is important that the administrator promote an attitude among all staff that the actual execution of decisions, the accomplishment of procedural tasks, and follow-up on policy and programs contribute as significantly to meeting the library's goals as the determination of policy, the design of programs, and the collection development decision itself. The practical and procedural considerations of acquisitions must be given full and sympathetic consideration while not allowing them to unduly constrain objectives. Such a balanced perspective on the part of management and staff is the basic means of assuring that acquisitions work is properly regarded and its concerns adequately addressed.

The professional isolation of the acquisitions librarian also calls for special attention. First there is a need for education of the library community on the acquisitions process, which is undertaken most effectively through staff development orientations to the department, intensive training for staff of other departments who work closely with acquisitions, and well-prepared, analytical status reports on the factors impinging on the acquisitions process at a given time. It is important to avoid the appearance of defensiveness and advocacy by ensuring that an enlightened appreciation for acquisitions be conveyed as part of presentations focused on the immediate, concrete needs of other units.

Secondly, the technical services administrator not only must be cognizant of the possibility that the professional specialist in acquisitions may feel a vacuum with respect to empathetic professional support, but also must make a special effort to become informed of the problems and issues of acquisitions in order to play a supportive role. If the administrator has no background in acquisitions, it is important that he or she become well informed of departmental operations, remain current with the literature on acquisitions, take part in professional activity related to acquisitions, and interact as frequently as possible with acquisitions staff. The negative impact of isolation is increased exponentially when the next level of administration is removed from and poorly informed of the area of concern. On the other hand, even severe isolation from other colleagues can be greatly mitigated when the administrator is part of an informed and understanding support group, however small it may be.

The relative isolation of acquisitions specialists within the library may also call for special consideration in terms of flexibility and funding for travel. Impressionistic evidence suggests that acquisitions librarians are especially active in seeking opportunities to interact with colleagues outside the library. In proportion to their numbers in the profession, they seem heavily represented at ALA and other library conferences. They also appear prone to establish local and regional support groups. More so than

that of other specialists, the acquisitions librarians' community embraces nonlibrary colleagues, particularly booksellers, the best of whom constitute a better-informed and more empathetic support group than many library colleagues. Thus, the need for outside contact on the part of acquisitions librarians—both to be an effective agent of the library and to serve as an antidote to isolation—may require special administrative consideration and support.

In general, the best approach to supporting acquisitions and the other technical services departments, which also have distinctive role-conditioned and image-related characteristics, is a flexible and open style of administration that recognizes the legitimacy of different needs and points of view, and promotes the acceptance of varying perspectives as normal conditions of the workplace. Myths and simplistic characterizations of functions promulgated in the published literature cannot be accepted at face value and must be reality tested by the actual situation in the division. Open tolerance of different approaches and orientations within the framework of a unified mission should be promoted in the departments and the division as a whole. Finally, the administrator can attempt to turn the liabilities of a department's role and image into strengths.

In acquisitions, for example, the role of managers in dealing with practical obstacles can lead to a natural hardiness in an environment of organizational give-and-take; acquisitions librarians may acquire a reputation for "getting things done." Such skills can be put to good use in division- and library-wide committees and task forces, thereby enhancing the image of the acquisitions department. An acquisitions presence is especially useful on collection development committees. Acquisitions librarians' concern for process may result in the development of skills not readily available in other departments, and these can be made available to others on a consultative basis. The acquisitions librarian's penchant for outside contacts can be allowed to evolve into an acknowledged "window on the world" role. In short, "specialization" in the context of a technical services division relates not only to a functional division of labor, but also to specialization in organizational skills necessary to fulfill these functions. Where role-related skills have been developed to a high level, they should also be utilized in more general situations to which they can be applied. Such measures work not only to the benefit of the division and the library, but also promote recognition of the value of the staff and functions involved.

SIGNIFICANCE OF ROLE-CONDITIONED DEPARTMENTAL TRAITS

These comments and observations on the nature of acquisitions are far from exhaustive and definitely are not infallible; they are limited by the context of specific circumstances of any given technical services division and the personalities involved. It is hoped, however, that these observations are presented with sufficient substance and plausibility to raise the possibility that such traits exist and can have implications for technical services administrators and the relationships among departments in the division. Perhaps these observations are best viewed as an attempt to make explicit the effects of certain tacit understandings operating in the workplace.

The focus of this paper has been on acquisitions, and it is hoped that the foregoing observations have held interest for readers with a particular interest in the acquisitions function. A second objective, however, has been illustrative—to demonstrate the possibility that such tacit perspectives exist in a more general sense and that similar observations could be made for collection development, cataloging, serials, reference, or any other library function. The factors and conditions would have been different, but particular departmental roles, images, and operating conditions could have been shown to be tied to distinctive orientations.

For example, collection development officers involved in item level selection may develop a particular set of sensitivities based on the fact that they are faced with the unenviable task of making thousands of microlevel decisions, resulting in the expenditure of library resources, on the basis of what some may regard as subjective judgments—an activity as vulnerable to second-guessing driven by special interests as that of a sports referee. Do such sensitivities affect the interdepartmental relationships between collection development officers and other staff? How does the separation of the collection development decision from the process of practical follow-through affect the frame of reference of collection development officers? Are these effects positive or negative from the standpoint of the library's mission? Is there a danger that collection development work can come to be viewed more as an intellectual game than as a real-world exercise in the utilization of resources?

In cataloging, does a fundamental concern for standards and consistency in bibliographic practice lead to the application of inappropriate standards to the work of other library processes, resulting in negative effects on interdepartmental relationships? Do reference librarians, conditioned by the experience of dealing with countless unique, individual cases, find it difficult to generalize and abstract user needs? Is there an underlying role-conditioned responsiveness/consistency continuum on which departmental orientations vary? Such questions illustrate the possibilities of examining the subsurface traits of all library departments.

The purpose of this paper in describing certain role- and image-related attributes of a specific technical services department is twofold—to illustrate the need for an expanded concept of coordination in the administration of technical services and to point out potentially productive and largely unexplored areas of research that may be amenable to various qualitative methods that are gaining respectability in the social sciences.

AN EXPANDED CONCEPT OF COORDINATION

Coordination of technical services in the traditional sense, as in classic treatments by authors such as Tuttle,⁹ Schactman,¹⁰ and Dougherty, Wadsworth, and Axman,¹¹ is related to the systems view of library organization and management. Such coordination focuses on issues such as minimizing duplication of effort, rational articulation of work flow, sharing of files and tools, standardization, efficient utilization of space and staff in related processes, and interdepartmental operational communication, particularly as it relates to simplification and control. The goal of such coordination is to guarantee the efficiency of a large-scale total process broken

down into numerous organizational and functional units and to do so continuously in the face of changing technologies, resource levels, and institutional environments. The need for systematic coordination of this kind continues to be a major concern of technical services managers and, in fact, may be the basis for the persistence of current divisional forms of organization.

At the other end of the management spectrum is the concern for idiosyncratic factors related to the capabilities, personalities, and limitations of specific persons in management and staff positions. Such concerns are rarely dealt with in the literature, except in occasional casebook treatments, yet the oral tradition of technical services managers supports the fact that much time and effort are devoted to what might be called individual "staff problems." In fact, in a study of the impact of OCLC on 47 technical services organizations, this author found that much organizational change, or lack thereof in the face of compelling reasons to initiate change, revolves around a need to accommodate the individual management styles of key persons in the organization.¹² Thus, the day-to-day administration of technical services appears for the most part to consist of the management of two sets of variables that fall at polar extremes—objective systems factors related to interprocess coordination, and idiosyncratic, interpersonal variables related to specific staff and the particular mixture of staff present in the division at a given time.

The identification of typical perspectives and proclivities derived from a department's image and role in the organization opens up the possibility of an expanded concept of coordination. There is a massive grey area between the systems-oriented coordination of technical functions and the handling of problems and issues related to individual staff members. The former process is open, objective, and explicit, but tends to ignore personal variables important to the implementation of an operational plan. The latter process is private, frequently based on intuitive judgment, and often deals with conditions that are never explicitly defined. Staff "problems" in the form of particular sensitivities, or approaches and styles in conflict with those of others in the division, often act to limit or distort decisions made from the objective systems perspective. In the current paradigm of technical services management, these factors are treated as idiosyncratic variables related to individual personalities; dealing with them resembles more a process of accommodation than one of coordination.

If, however, there are role-conditioned and image-related traits working forcefully in the organization to create typical patterns in the underlying orientations of staff in the departments, new dimensions can be added to the concept of coordination. Some sensitive issues can be removed from the shadowy process of accommodation and treated in the open and objective process of coordination. Such an expanded concept of coordination involves the explicit and systematic blending of perspectives that otherwise operate as hidden agendas; it opens up a new arena of communication—one in which participants openly discuss where they are "coming from" as well as surface factors; it acknowledges the legitimacy of different frames of reference and openly attempts to balance them as part of the decision process.

As illustrated by the "profile" of acquisitions, deeply rooted and distinctive frames of reference are potentially substantive forces capable of affecting, positively or negatively, the overt forms of interdepartmental coordination. When open consideration of these factors becomes a part of the process, a more comprehensive form of coordination results. Such coordination no doubt already occurs in many technical services divisions, but probably not frequently as a consciously acknowledged part of the management process. Current professional knowledge is not adequate to support such coordination except as a predominantly intuitive exercise. There is a need for more research that probes the underlying attributes of organizational units in libraries if such coordination is to become systematic and effective.

NEED FOR QUALITATIVE RESEARCH

It is hoped this discussion of the potential of an expanded concept of coordination in technical services, in conjunction with the commentary on acquisitions, will serve to arouse interest in research that further probes these and similar phenomena. Such research would necessarily be qualitative in nature. Specialists in qualitative methodologies resist strict definitions of "qualitative research," but the term is used generally to refer to research conducted from a phenomenological rather than a positivist perspective. Qualitative research is descriptive and inductive, deals with holistic settings, and is tied closely to the empirical world. Qualitative research is characterized by the eclectic and flexible use of descriptive methodologies such as participant observation, in-depth interviews, document analysis, and a variety of ethnographic methods.¹³ Van Maanen and others make a compelling case for the use of qualitative methodologies in the study of organizational behavior.¹⁴

While much research related to technical services is descriptive, it tends to focus on concrete variables and for the most part has not been sufficiently probing and systematic to be characterized as qualitative in the sense that such research is practiced in other disciplines. In recent years, however, qualitative methods have been used to explore topics such as professionalization, stress in the workplace, and the effects of automation and change on the working conditions and perceived status of librarians. Ruth Hafter's work, *Academic Librarians and Cataloging Networks*, is an excellent example of this approach in terms of its ambitious focus on underlying effects.¹⁵ Numerous examples in the field of sociology demonstrate the viability of systematic study of factors such as those noted above in connection with acquisitions. The discussion of the nature of acquisitions, incidentally, is a prime example of unsystematic and subjective commentary, so common in the library literature, that needs to be followed by more systematic treatments. Suitable methods developed by other disciplines are available for application in library organizations.

CONCLUSION

Although the various functions encompassed by the library's mission share many characteristics in common, they are also differentiated by unique frames of reference arising from organizational roles and the per-

ceptions of others in the workplace. Possible distinguishing perspectives of a single department in technical services—acquisitions—have been used to illustrate the existence and potential effects of such image- and role-conditioned attributes. Explicit awareness of these factors in the work environment could lead to a more pervasive form of coordination, to more sensitive management, to a more refined understanding of the stresses and conditions bearing on the performance of staff engaged in various functions, and ultimately to improved effectiveness in meeting the library's goals. If such positive outcomes are to occur, a more active engagement in research strategies generally referred to as "qualitative" will be required.

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Networks and School Library Media Centers

Phyllis J. Van Orden and Adeline W. Wilkes

This descriptive, exploratory study of school district media centers belonging to at least one multistate, multitype library network addresses the impact of networks on collections and technical services. A questionnaire was used to survey members' insights into the benefits and barriers of networks; the implications of networking on cataloging, classification, and processing practices; interlibrary loan patterns; and resource sharing.

Over a decade has passed since the 1978 publication *Role of the School Library Program in Networking* recommended that "library networks in which school library media programs are full participating members be established and operational in every region, state, and area in the nation."¹ During that decade the number of school districts participating in networks has increased. Yet in 1988 the goal of schools as full partners in the networking of our nation's resources has not been realized. Patricia Glass Schuman stated in a February 1987 article, "Over 80 percent of our librarians work in school libraries, few of which currently participate in networks. Only about 7,000 U.S. libraries do participate in networks, mainly medium to large academic and public libraries."² A manual search of *Library Literature* and online searches of *ERIC*, *LISA*, *Dissertation Abstracts Online*, and *Information Science Abstracts* databases revealed numerous articles about the barriers and benefits of networking for school library media centers. Other articles reported on individual school districts and individual networks. None of the articles presented a national overview of the networking activities of school districts or the effect of network membership on school library media centers.

The concepts of networking and resource sharing are not new to the world of school library media centers, as exemplified by the 1975 guidelines *Media Programs: District and School*.³ The involvement of school library media centers with other types of libraries, regardless of location, is a newer phenomenon. Telecommunications connection is just one of the developments that has opened the way for schools to participate in today's networks.

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The term "networks" can be interpreted in different ways. Susan K. Martin's explanation guided this study: "In modern usage, a network can be defined as a group of individuals or organizations that are interconnected to form a system to accomplish some specified goal. This linkage must include a communications mechanism."⁴

THE STUDY

The purpose of this exploratory, descriptive study is to share the networking experiences of school districts in order to identify the services and implications of networking for the collections and technical services of school library media centers. A questionnaire was used to survey network members' insights into the benefits and barriers of networks; the implications of networking on cataloging, classification, and processing practices; interlibrary loan patterns; and resource sharing.

Earlier claims about what schools could do for and how they would benefit from participation in networks served as a framework for our investigation to ascertain if these predictions had come true; e.g., the 1978 report of the Task Force on the Role of the School Library Program in Networking noted that school library media centers are capable of making contributions by sharing specific resources.

The population was composed of school library media districts holding membership in one or more networks based on the "Directory of Networks and Members" appendix in Martin's book. Additional school districts were listed in "Elementary/Secondary Schools and School Systems Using OCLC" in the *School Library Media Annual, 1985*.⁵

After reviewing the literature, talking with individuals involved in networking, and listening to presentations on the development of networking systems in a number of states, the authors identified the areas in which they sought information. The investigation followed the design recommended by Dillman in *Mail and Telephone Surveys: The Total Design Method*.⁶

The questionnaire was designed and field tested through the cooperative efforts of school library media specialists and a state consultant for school library media services. The initial letter and questionnaire were sent to seventy school district media centers with three follow-up letters, prior to June 1, 1987. Of the fifty-seven responses, forty-nine met the criteria for use in the study, providing a response rate of 70 percent.

RESPONSES

The network membership reported by the respondents differed from the information obtained prior to the mailing. School districts reported participating in one or more of the following networks:

Online Computer Library Center (OCLC)	21
Michigan Library Consortium (MLC)	8
Illinois Library and Information Network (ILLINET)	2
Indiana Cooperative Library Services Network (INCOLSA)	8
Western Library Network (WLN) plus one read-only level	4
Bibliographic Retrieval Services (BRS)	4

Bibliographic Center for Research (BCR)	4
Area Library Services Authority—Indiana (ALSA)	2
Access Method for Indexed Data Generalized for Operating System (AMIGOS)	1
Federal Library and Information Network (FEDLINK)	1
OHIONET	1

In many cases the statewide network, such as INCOLSA or ILLINET, is the broker for OCLC. A pattern emerged revealing that school districts belonging to national networks tend to belong to other networks at the local, state, and regional levels.

Fifteen of the responding school districts had electronic networking capabilities within the school districts. None of the respondents reported this capability for *all* the media centers in their districts.

The student populations for these school districts ranged from eight districts in the 0—4,999 category to two districts with more than 100,000 students. None of the responding school districts fell in the 30,000—39,999 category. The districts included 43 with high schools, 40 with middle or junior high schools, 42 with elementary schools, 18 with vocational/technical schools, 16 with adult schools, and 3 with special education schools. Also included in the districts were one each of a nonpublic regional center, a private school, a preschool center, a science and mathematics center, and an alternative high school.

Staffs for the centralized services and operations in these districts varied, having a maximum of 5 administrators, 24 professionals, 49 clerks, 24 technicians, and 200 volunteers.

Six of the school districts use CD-ROM and online bibliographic services including *Books in Print Plus*. Six use vendor- or jobber-produced programs including *Lasercat WLN*, *Bibliofile*, and Brodart's *ACCESS, PA*. Three schools use *Wilsonline*, but only one school uses *Wilsondisc*.

NETWORK BENEFITS

Commonly cited benefits of network membership include those aimed at specific audiences. Students can access information located outside of the schools. Teachers have available an increased range of materials and information about materials, including human resources. Administrators can use data collection agencies and information services. Specialists can obtain professional materials, such as public health and guidance materials. Parents can access information about children's emotional and intellectual development. A further benefit claimed for the school library media specialist is more time to work with teachers. *Information Power*, the 1988 national school library media program guidelines, indicates that one of the missions of the school library media center is to provide "access to information and materials outside the library media center and the school building through such mechanisms as interlibrary loan, networking and other cooperative agreements, and online searching of various databases."⁷

Some of the advantages of networking memberships are the services and products offered. School districts identified newsletters (31), directories

(29), training packages (27), and guidelines about copyright (14) as products received. Other products used by at least one school district included microdisks of word processing programs, equipment, microsoftware, 16mm films, videotapes, catalog cards, current awareness services, union lists, and bibliographies. Twenty-six of the school districts reported access to online databases through the networks.

Twenty-seven school districts used the network's technical consultant services and twenty-five used the staff development and in-service activities. Thirteen schools used consultant services dealing with database management assistance. Thirteen schools received public relations services, ten utilized curriculum planning for teaching online searching, and one school used workshops for network users.

Networks are making an impact on the joint purchase of materials. Eleven school districts jointly purchased equipment, ten supplies, five audiovisual materials, and one serials. Five placed cooperative book orders and three coordinated acquisitions.

Examination centers and previewing arrangements were available in eleven school districts, while twenty-three districts had cooperative film libraries.

According to Sorensen, "As more and more library media specialists who are involved in interlibrary cooperation come to recognize that no collection can be truly comprehensive, they have come to concentrate more on building complementary collections rather than having a little bit of everything. The aim is to develop within a reasonably large geographic area a comprehensive selection, with each library or media center holding a portion."⁸

Resource sharing is taking place in a variety of ways. Seven districts had coordinated collection development programs and four had coordinated materials selection programs.

Primary collecting responsibility has been assigned to individual media centers and to individual school districts for specific materials: audiovisual (12), career education (10), children's (9), computerized instructional (9), those for students with special needs (9), ethnic (8), high interest/low vocabulary (8), professional (8), young adult (8), and also for instructional equipment (8).

Schools had responsibilities for the following nonbook formats: 16mm films, kits, filmstrips, models, video materials, realia, charts, maps, study prints, and transparencies. One school reported its extensive special education professional materials as its unique responsibility. Other examples of materials for special clientele include those for and about visually impaired, gifted, hearing impaired, native American, bilingual, mentally impaired, learning disabled, and academically talented persons.

A distinction between coordinated collection development and interlibrary loan (ILL) is noted by Fiels:

An interlibrary loan is reactive, coordinated collection development is proactive—its goal is to have the item there *before* [italics in original] it is requested. Coordinated collection development may include a number of related activities, including coordinated planning; collection analysis; standardization of policies; establishment of shared databases; and coordinated or joint acquisitions, retentions, storage, and preservation.⁹

Four of the school districts reported they do not participate in ILL. Seventeen of the schools used manual ILL systems, 9 were online, and 13 used a combination of manual and online. Thirty-eight school districts borrowed books, but only 34 lent them. Seventeen school districts borrowed audiovisual materials; 14 lent them. Twenty-two of the school districts borrowed serials; 16 lent them.

Four types of borrowing practices were used by the school districts. Twenty-nine borrowed from other schools in the district, 29 from non-school libraries, and 30 from members of the networks, as compared with only 23 who borrowed from schools in other districts. Lending practices included 30 school districts who lent to other schools in the district, 28 who lent to members of the network, and 26 who lent to schools in other districts and to nonschool libraries.

Delivery systems included 32 with school system couriers. Twenty-two school districts used the post office, 17 multitype library couriers, 14 United Parcel Service, one personal delivery, and one an interdistrict courier.

Borrowing privileges had been extended to teachers by 40 school districts, to administrators by 35, high school students by 31, to elementary and middle school/junior high students (24 each), to school board members by 23, to parents by 15 and to other community members by 14.

Twenty-four school districts were involved with ILL systems with formalized procedures through the network. Eleven had formalized ILL procedures through the state library. Four districts only lent materials through reciprocal borrowing agreements.

In eighteen school districts no charges were made for interlibrary loan materials, while three districts charged on a per item basis. Other districts included mailing costs and one district determined fees on an informal basis.

NETWORKING BARRIERS

Barriers to establishing networks are commonly cited in the literature. The report of the Task Force grouped in the possible problems under five headings: psychological (including attitudes), political and legal, funding, communication, and planning.

Thirteen of the schools mentioned inadequate fiscal commitment. Eight indicated barriers created by a lack of understanding of the concept. In seven school districts individual media specialists were unwilling to share, while six school districts faced lack of staff commitment. Only three school districts responded that they had faced restrictions based on the range of their collections. Two school districts indicated they had overcome the inhibition of free exercise of professional judgment.

How did school districts overcome these barriers? As one respondent wrote, the barriers were overcome "with time, establishment of trust and relationships, taking small steps, showing results, developing administrative support, information and directing," or through, to use another respondent's word, "persistence."

A chief argument used by respondents was based on the premise that increased fiscal commitment would address the problem of the cost of telecommunications, which leads to more consistent and efficient operations.

A further argument presented was that the provision of microcomputers in all school library media centers would provide automated management of library routines and greater student access to information. Workshops and discussions of the advantages and applications of administrative authority have helped staff and funding sources understand the concept of networking and thus support it.

Two school districts reported that some individual media specialists were still reticent about sharing, while in another district the skeptics became enthusiastic.

When asked what advice the respondents would offer to those considering participation in a network, a common reply was that one can learn from the experiences of others. Other suggestions addressed how the school districts had overcome specific types of barriers.

PSYCHOLOGICAL BARRIERS

For a network to succeed, overcoming psychological barriers is an important step. Sorensen states:

The most dramatic change has been in the attitude of the individual school library media specialist. This change is important because it directly affects service to users. The media specialist who has become involved in networking is conscious of the need to look beyond the building-level collection. The reference interview doesn't end with "I'm sorry, we don't have what you need." It continues, "But I think I know where we might find it."¹⁰

Respondents' advice regarding staff commitment was mixed. Some warned that the process must be mandated. Several felt that a positive commitment must be developed by moving slowly but deliberately. An individual advised that one should "involve people at every step, let them assume responsibilities and establish ownership, be visible and make frequent visits to local school libraries." Others wrote "explain thoroughly all implications."

Opinions differed about the impact on staff time. One useful suggestion was to prepare staff "to understand the rearrangement of work and work flow and that pressure times will change as will the load balance." Staff hours were rotated to utilize non-prime time on the networks. One person wrote, "when we joined MLC and OCLC we were able to reduce that cataloger's position from full-time to half-time. For this reason we were able to justify the move because personnel is so expensive."

POLITICAL AND LEGAL BARRIERS

Political and legal barriers need to be removed. The respondents agreed that it is important to have legal advice and avoid as much contractual matter as possible. One individual wrote, "only develop contracts where a proven need has been determined—beware of 'maybes and what ifs' and wait until there is a real 'problem' to fix before devising rules and regulations." Another person wrote that one should not only read the existing contracts carefully and solicit the school attorney's opinion, but also "be actively involved in governance and daily use of the network."

FISCAL COMMITMENT BARRIERS

Planning for funding is another key element. While agreeing that networking is cost-effective, the respondents noted that an ongoing fiscal commitment is necessary. A recommended way to achieve that goal is through the development of "a strong rationale to show need and increase library output for student achievement to present to supervisors, the superintendent, and board of education." One individual advised presenting "a breakdown of costs compared with your current operations." Or, to use another person's words, "be prepared, services are money, professional development excellence, *but nothing is free*" (original italics). Another respondent noted that while "the services, particularly meetings that enable us to be up to date and workshops that enable us to have 'hands on' activities, are invaluable" and that while high school students and staff make good use of ILL, "going online and/or networking is expensive."

Another respondent posed questions that more school library media specialists are facing: Who will use the services, and at what cost? She wrote:

We have not yet committed to a CD-ROM service. *Magazine Index* seemed a natural combined with online access (classroom rates) through DIALOG until I got down to dollars and cents and that terrified me (MAG Index most particularly). That requires more analysis when time permits this summer. I wanted kids to be able to search on CD without the cost and personnel interface needed for DIALOG online, but this will have major budget impact which will perforce affect collection development.

COMMUNICATION BARRIERS

Communications can be a barrier. To communicate members need telephones and other delivery systems. Communication between network members was via terminals at the district level for seventeen of the respondents. Five of the districts had terminals at the building level and six districts reported terminals at both district and building levels.

Telephones were available in nineteen of the districts at both the district and building level; while ten districts reported having telephones only at the district level, eight had them at the building level. The lack of a telephone at the building level has been documented by Miller and Moran in their study of 1,500 school library media centers, where they observed that one of the most startling facts to arise from the data is that 48 percent of the LMCs [school library media centers] do not have telephones, that most-basic of all communications technology. . . . any hope of being involved in resource sharing, inter- and intralibrary cooperation . . . is doomed to failure."

Telex was available in four district-level offices, and one school district reported having telex available at both the district and the building level. Other means of communication reported by one school district each were community television cable, electronic mail, and daily courier serving U.S. mail.

PLANNING

The planners of network arrangements may find themselves agreeing to

practices and procedures of benefit to the network, even though they are inconvenient for their own media centers. Many writers agree that representation on the planning and policy board of the network is important if the network is to succeed. School districts reported representation in the governance of formal networks through a variety of positions:

board representative	13
membership council	4
voting member	4
through member of central staff	2
elected representative to network	2

Other forms of representation were by type of library, school district, and advisory committees.

IMPLICATIONS FOR CATALOGING AND CLASSIFICATION

The cataloging and classification process was handled in various ways by the school districts, as shown in table 1. District-level staff handled the greatest amount, the network was the second most heavily used method, and outside agencies such as Brodart ranked third. Building-level staff and intermediate units serving more than one school district were the least used methods.

Processing materials (including labels for spines, cards and pockets, ownership stamps, bar codes for circulation systems, and sensing devices for security systems) was handled at the district level for thirty-one respondents, at the building level for thirteen, by outside agencies for six, and by an intermediate unit serving more than one school district for four.

The classification system used by most of the districts was the Dewey Decimal Classification. Forty-two respondents used Dewey, one used the Library of Congress Classification, and two used some other method of classifying materials.

Bibliographic records were customized for twenty-seven districts. Nineteen respondents indicated that records were customized for individual schools within their districts. Customizing included truncated classification numbers for twenty-five respondents, locally created subject headings for twenty-two, and other special treatment for eight.

An authority file for names was maintained at the district level by twenty

TABLE 1
METHODS OF HANDLING CATALOGING AND CLASSIFICATION ACTIVITIES

	25%	50%	75%	100%
By the network	5	3	5	5
By an intermediate unit serving more than one school district	1	0	1	12
By district-level staff	9	5	1	1
By building-level staff	7	1	1	1
By use of outside agencies (e.g., Brodart)	1	5	5	0
By other arrangements	3	0	0	0

districts. One respondent noted that the authority file was limited to artists, musicians, illustrators, and well-known authors. Eighteen districts maintained a subject authority file: eighteen did not.

Sears List of Subject Headings was the subject authority used most frequently. Twenty-three respondents used Sears, eight used the *Library of Congress Subject Headings*, and thirteen used more than one subject authority.

Thirty-nine districts used *Anglo-American Cataloguing Rules*, 2d. ed. (AACR2) as a standard; one did not. Fifteen districts reported that they used the first or minimum level of cataloging, twelve used the second level, two reported using the third level, and three used more than one level. One district used only commercial cataloging, and others used a combination of AACR2 rules and past practices.

Thirty-seven of the districts used the same cataloging standards for both books and audiovisual materials; seven did not. Differences included the use of locally developed subject headings, using KT as a classification symbol for kits in order to locate them in one section on the shelves, using additional codes for a film library, and the use of a state system.

Twenty-eight of the school districts used the network in cataloging operations, including activities such as preparing union lists of books (19 districts), audiovisual materials (15), serials (13), and the entire collection (9); and maintaining bibliographic records (16), authority files (13), and online catalogs (11). Only four of the responding school districts offered contractual cataloging services to other libraries. Fifteen of the school districts use the network in their processing operations.

Respondents offered advice relating to cataloging operations. One who "feels very positive about OCLC" wrote that in "joining the network, cataloging via OCLC does not cut down on staff requirements, but it does help to catalog and process books more rapidly." From his overall perspective, an individual wrote that "we have no way of knowing whether kids will actually plan ahead far enough to use this service [access to network] or even if our faculty use resources other than those in their own studies at home." Another warned prospective networkers to be prepared for the individuals who will complain about how the catalog cards are done. A fourth noted that retrospective conversion takes time, but in the long run saves time.

Eighteen school districts received funds to prepare for retrospective conversion of their records; nine did not. For five school districts the conversion was handled by the intermediate unit serving more than one school district. The regular school district staff handled the conversion for eight districts. In one school district, the district-level staff did the conversion for the elementary schools, while the building-level personnel did the conversion for the secondary schools. One school district contracted through another agency for the conversion; one school used OCLC.

Funding for the retrospective conversion came from several sources, including the district budget process, local school boards, LSCA, block grants, special grants, statewide funding programs, state libraries, and New York State Regional automation grants.

As preparation for the conversion, fourteen of the collections were

weeded, thirteen by building-level media center staff, four by district-level staff or centrally appointed teams, and two by intermediate units serving more than one school district. Seven school districts did not weed their collections in preparation for the conversion.

FURTHER RESEARCH

This exploratory study can serve as a beginning step in recording the developing role of school media centers participating in networks and the impact upon their collections and practices. Further studies are needed. While this investigation focused on the district level, the field needs information about the impact at the building level as well. Such an investigation could be further expanded to compare how informational needs are being met by schools belonging to networks with those who are not members. Such studies need to expand upon this preliminary work and address issues related to governance, operations, and, most importantly, how effectively informational needs are being met.

Correlations to be explored include the availability of forms of communication necessary for networking activities: telephones, telex, etc. Other studies could focus on the relationship of staffing patterns at the school district level to network membership. Further investigation also needs to be conducted in examining the influence of outside funding on the growth of networking activities at both district and building levels.

Although this investigation did not examine why school districts followed certain practices, such as the variety of approaches to resource sharing, the results do indicate that some school districts are taking greater advantage than others of the opportunity to address local informational needs through interlibrary loan.

The current study did not examine the relationship of the leadership role and responsibility of the central staff in terms of guiding the practices used in the system. If such responsibilities are not handled at the district level, on what basis are decisions being made about the level of involvement by individual schools?

The idea of individual schools lending and borrowing materials may be so new that discrepancies in practice may be the result of the untried, rather than lack of desire to participate.

As this study shows, there are many issues and practical matters on which school library media specialists must be prepared to make decisions. School library media specialists at the district and building levels need information to help them in their decision making.

CONCLUSIONS AND RECOMMENDATIONS

Findings of this study reinforce those of Miller and Moran,¹² which determined that school library media centers, particularly at the building level, lack the communication mechanisms to handle the linkages described by Martin as being a necessary element in a networking effort.¹³ Without these basic tools, building-level programs are unable to take advantage of the district's participation in a network. Schools contemplating membership in networks need to address this basic means of participation.

The favorable response to our questionnaire is only one indication of the

widespread interest in networking. The positive replies indicate that schools are able to overcome the barriers commonly mentioned in the literature. The respondents' comments on their experiences will provide practical advice for schools facing similar situations. Their remarks indicate they are willing to share their experiences with others. If a school is considering joining a network, it is recommended that the staff speak to and visit school districts that are participating in such activities.

This research has provided both questions and answers. The authors hope that through sharing what others have experienced, readers will find, in the words of one respondent, that "the benefits are enormous—both tangible and intangible—and the problems few," and will be led to share her "opinion [that] school library systems/networks represent the legacy this generation leaves to the profession."

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Form Headings in Subject Cataloging

Barbara L. Berman

Form headings are useful and they could be more useful if they were applied more predictably and if there were more of them. Many libraries need form headings that do not coincide with those of the Library of Congress. For more predictable usage, the Library of Congress should clarify and publicize its own usage of form headings. This would enable other libraries to follow its practice more easily and would also provide a starting point for those that wish to cooperate in compiling standardized alternatives. To fill the need for form headings not considered suitable for inclusion in LCSH, specialized standardized lists could also be compiled.

The distinction between "what it is" and "what it is about" has plagued subject catalogers since at least 1876, when Cutter stated that one of the objects of the catalog is to show what the library has "in a given kind of literature" as well as "on a given subject."¹ The ability to show what the library has "in a given kind of literature" depends upon routinely asking "what is it?" in regard to the item in hand. Form headings reflect the cataloger's response to that question.

ANALYSIS OF THE PROBLEM

There are at least three different kinds of form headings, corresponding to different kinds of answers. One kind, used in literature and the other arts, consists of standard categories, called genres, with well-defined, generally accepted characteristics, e.g., the sonnet. To these, the Library of Congress (LC) has added less technical forms, such as **Sea poetry** and **Canadian poetry (French)**, which answer the question in the same way standard genres do. A second kind of form depends primarily on the physical appearance of the item: one can generally tell what the item is by looking at it. This category includes, among others, dictionaries, manuscripts, telephone directories, and marriage licenses; and a related category, defined by a publication's structure and purpose, includes textbooks, cookbooks, environmental impact statements, and surveys. Finally, there is a category about which the question can be answered only in terms of the author's point of view or scholarly approach, as in feminist poetry, phenomenological sociology, or Marxist aesthetics. All of these different kinds of forms are valid responses to the question "what is it?" and each provides candidates for form headings.

There are specific problems associated with each type of form heading,

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but two general problems are that there are not enough LC-authorized headings and that the rules for applying those that exist are inconsistent and difficult to find. Both problems stem from the fact that form headings are traditionally grouped with topical headings to comprise the general concept of subject headings, but "subject" is synonymous with "topic" while "form" is different. Since a form is not a subject, that there are too few form headings in the thesaurus of subject headings issued by LC (*LCSH*) is perhaps less surprising than that there are any at all. Most of the headings listed in *LCSH* are in fact intended as topical headings, but not all of them are, and a major usage problem arises with terms such as "short stories" or "scientific illustration,"² which may refer either to the item being cataloged or to its subject. The cataloger is not free to use the listed headings in whichever sense s/he chooses: **Feminist poetry**, for example, may be applied to the poetry itself, but **Feminist literary criticism** is to be used only for works *about* that criticism. Sometimes there are scope notes to indicate how a particular heading is to be used, and sometimes the information can be found in the *Subject Cataloging Manual*³ or elsewhere,⁴ but too frequently, usage must be determined by observation rather than from precept.

Of the different kinds of form headings, those indicating genres of literature and the other arts have the most consistent rules of application and are the best represented in *LCSH*. Although there are exceptions, works about a literary genre are distinguished by adding the subdivision—**History and criticism** to the form heading; works about a musical form are represented in the catalog by a singular noun (e.g., **Symphony**), while the works themselves are represented by the plural (e.g., **Symphonies**); art and works about it are not differentiated in the catalog at all. In regard to the number of genre headings, a major concern has been the lack of headings for individual works of fiction.⁵ Because LC practice does not include form access to individual works of fiction, there are no entries in *LCSH* for such genres as historical novels, utopian novels, mysteries, or westerns. The problem is compounded by the existence of apparently suitable headings, such as **Science fiction**, that are intended for collections of stories rather than for novels.

For the second kind of form, based on the appearance or structure of the item, there is no predictable approach and too few headings. While some, such as **Manuscripts** and **Almanacs**, do exist, most kinds of publications that are neither music, art, nor literature are not, in fact, assigned form headings at all. The form of the item may be treated in a variety of ways other than form headings: Bibles and census reports, for example, are assigned uniform titles, while cookbooks are listed under the topical heading **Cookery**, along with other books on cooking that are not cookbooks. Frequently, the accepted practice is to provide form subdivisions under topical headings rather than direct access by form. **Public opinion polls**, for example, is a topical heading, to be used only for works on the technique of public opinion polling; for particular polls one uses **Public opinion**—[place], [Topic]—**Public opinion**, and/or [Class of person]—**Attitudes**. A person searching specifically for polls will not find them under the direct and obvious approach, **Public opinion polls**. The selection and use of form subdivisions under topical headings is as complicated as that of form

headings themselves, and more important, while they serve to subdivide entries under a topic, they fail to provide direct access to the "kind of literature" itself: form subdivisions are not an adequate substitute for form headings.

Although some kinds of publications in this class may not really require direct access by form (it is difficult to imagine a case in which textbooks, for example, would be sought without reference to a given subject), there are others, such as biographies, to which direct access may be desirable. Biography was considered important enough to be given its own fixed field in the MARC format, and it is so popular with readers that many public libraries deliberately separate biographies from their different places in the classification scheme, shelving them together in order to provide access by form. In cataloging, however, although it is noted that biography "has both a personal and a topical aspect,"⁶ the fact that biography is also a recognizable and highly popular form is largely ignored. Biography poses a number of representative problems: it exemplifies both lack of access by form and lack of consistency with other form headings in usage.

While *LCSH* does include the form heading **Biography**, that heading is used very sparingly; it is applied only to collective biographies in which the subjects are so diverse as not to fit into any single category except time period. Instead, the form subdivision—**Biography** is added to classes of persons, corporate bodies, etc., but not to the names of individual persons unless the person is a literary author. The form subdivision fails to provide access when the form itself is of primary interest. Readers more interested in a specific topic or literary author than in biography as such may be well served by current practice, but the reader searching for an individual biography with no particular person or topic in mind is not. Searching under **Biography** would not produce the desired result, and such a reader is hardly likely to look under, much less to exhaust the possibilities of, such headings as **Poets, English—19th century—Biography** or **World War, 1939–1945—Biography**. For this reader, the form heading **Biography**, subdivided by class of persons, etc., probably would be more useful. Unfortunately, it was decided long ago that paired headings, such as **Poets—Biography** and **Biography—Poets**, would not be used;⁷ and although there are exceptions to the no-paired-headings rule, biography is not one of them.

In addition to the difficulty of finding examples of biography in the catalog, finding works *about* biography is complicated by the fact that the structure of the heading is unusual: **Biography (as a literary form)**. Works about most forms are distinguished by adding—**History and criticism** to the form heading, as in literature, or the same heading is used interchangeably for both form and topic, as in art. **Biography (as a literary form)**, in isolation, may be preferable to either standard practice, but in the context of other form headings it adds an undesirable complication.

Of the two standard practices, adding—**History and criticism** to a form heading serves both to distinguish form from topic and to allow catalog records for works about a form to follow immediately those for examples of the form. There does, however, seem to be a trend toward simply allowing headings that look like form headings to be used as such. During the past year the *LCSH* scope notes under **Environmental impact statements**

and under headings for various kinds of surveys such as **Health surveys** and **Soil surveys** have been changed to permit the headings to be used for the items themselves as well as for works about them. Instead of having to decide whether a particular heading is meant to be a form heading or a topical heading, it is convenient to have the option of using it for either.

This option would be especially helpful with the third kind of form, which describes a particular approach to a scholarly discipline and which is totally unrepresented in *LCSH*. At present, all apparently relevant headings are intended as topical rather than form headings. In literary criticism, for example, headings such as **Marxist criticism**, **Deconstruction**, and **Feminist literary criticism** may be used only for discussions of the criticism, and not for examples of it. Thus a book like Paul Brodtkorb's *Ishmael's White World: A Phenomenological Reading of Moby Dick* receives an author-title subject entry for *Moby Dick*, but no form heading. The topical heading is fine for people looking for an analysis of *Moby Dick*, but some people are interested in Brodtkorb's book primarily as an example of a particular kind of analysis. What the book is, as opposed to what it is about, is phenomenological literary criticism. There is no way for a cataloger to provide such access at present.

SOLUTIONS

While the main purpose of this discussion has been to describe form headings and the problems associated with them rather than to propose solutions, it is clear that solutions can be divided into what LC can do and what others can do. LC could help resolve the general problem arising from interfiling form headings with topical headings in *LCSH* by supplying more generous scope notes, as well as a simple designation, such as an asterisk or dagger, to indicate whether a heading is intended as a form heading, a topical heading, or both. It would be more useful still to have a separate list of form headings, even if some of the headings duplicate those in the subject heading list; and such a list would be enhanced by annotations indicating how to handle works *about* the form in question. LC also can help by analyzing, clarifying, and publishing its own rules and policies for application.

LC should not be expected to alter its own cataloging policies simply to suit the needs of other libraries; it is the other libraries that must determine how best to adapt LC cataloging for their own purposes. Once a problem such as a scarcity of headings or inappropriate rules is recognized, it is not necessary to wait for LC to remedy it. Libraries that are more similar to one another than they are to LC can cooperate in specifying their own needs and working toward improvement.

To solve the problem of lack of appropriate headings, some action has already been taken. Lists of headings have been compiled for use with the MARC 655 field, form/genre, a field which will be indexed in the Research Libraries Information Network, thus providing access by form but bypassing *LCSH*. Because of the paucity of form headings needed in cataloging special collections, together with the fact that some headings, such as **Manuscripts**, are applied by LC to the items themselves while others, such as **Licenses**, are applied by LC only to works about the items, a list of appropriate headings (which includes **Biographies**, **Cookbooks**, and a

few form headings for individual works of fiction) was published by the Association of College and Research Libraries.⁸ Lists of terms for moving image materials and for graphic materials have been published by LC itself.

Another list, which may be recommended either for the 655 field or for some other use, is being compiled by a subcommittee established by the American Library Association's Subject Analysis Committee (SAC) to study the general problem of access to individual works of fiction, drama, etc. The lack of form headings in the third category could be remedied similarly by bibliographers and catalogers interested in specific scholarly disciplines. Once standardized, these lists could be circulated to interested libraries and codified for use in the 655 field, making retrieval of specific kinds of form headings available for libraries that need them, while allowing those that do not to ignore them.

Genre lists may help with the general problem of insufficient form headings, but no such mechanism has been established yet to cope with the other general problem, that of rules of application. In the case of the restriction against form access to individual works of fiction, the SAC subcommittee has recommended that it be removed: LC may or may not act on that recommendation. At least one library, the Hennepin County Library in Minnesota, has long acted independently in this area,¹⁰ and some experimentation has been done in Denmark.¹¹ Independent action has its drawbacks, however; in an environment of shared cataloging, group action is preferable.

Group action is predicated on similar needs. While libraries devoted primarily to recreational reading would probably opt to use **Biography** as a form heading, those devoted primarily to research would not, while the opposite is true for headings such as **Phenomenological sociology**. To prevent chaotic deviations, appropriate planning would be necessary, and part of the planning should include adapting standardized computer cataloging to serve the needs of different kinds of libraries for different kinds of form headings. This probably would involve additional coding in the MARC format. Coding can be used in several ways to provide better access to form headings. There already is a precedent in coding the subject fields: different coding has been established for different lists used in the 650 field (subjects), e.g., LC children's headings, or National Library of Medicine headings. The 655 field (form/genre) will also need coding for the separate genre lists recently compiled. More attention also should be given to the fixed fields. A fixed field is used for biography; this field should be made accessible to the library user searching for biographies. Similarly, the field that distinguishes between fiction and nonfiction might be expanded to include coding for different kinds of fiction, such as mysteries or westerns. It also could be used for access to genres rather than using terms from a genre list.

Another, more radical change might be adopted to accommodate the differing needs of libraries for subject headings. There could be a special subject code for libraries that prefer to follow such non-LC practices as adding **Biography** to individual biographies and form headings to individual works of fiction, using form and topic interchangeably when there is a single heading that fits both, or using paired headings. Although these subject

codes would indicate deviations from current standard approaches to subject cataloging, the deviations might be indicated in the MARC format in the same way that OCLC's K-level code indicates omissions in the records for descriptive cataloging.¹²

There are those who claim that, given the capabilities of local systems to provide keyword access, Boolean searches, and other electronic innovations, there is no need to worry about the distinction between form headings and topical headings, to fine-tune the headings themselves, or to tinker with their rules of application. However, it is still the case that not all catalogs are automated, nor do all local systems routinely provide access to fixed fields or to subdivisions of topical headings. Further, for keyword, as well as other kinds of access, somebody has to key in the necessary words if they are not present elsewhere in the record. Newer modes of access may augment, but not substitute for, improved authority control and a better reference structure. Subject cataloging, including the use of form headings, needs to be done adequately, whether or not future improvements furnish access in other ways.

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12. The possibility of two separate codes is discussed intermittently in *The Nature and Future of the Catalog*, Maurice J. Freedman and S. Michael Malinconico, eds. (Phoenix, Ariz.: Oryx, 1979). See particularly Joan K. Marshall, "The Catalog in the World Around It" (p.20-28), where the topic is raised, and the historical perspective provided by the remarks of Seymour Lubetzky (p.87).

RLIN CJK versus OCLC CJK: The Illinois Experience

Karen T. Wei and Sachié Noguchi

CJK online cataloging is a computer-assisted system designed to handle Chinese, Japanese, and Korean vernacular languages. RLIN and OCLC are the two online cataloging networks presently operational in the United States that have CJK enhancements. The Asian Library of the University of Illinois at Urbana-Champaign had a unique opportunity to use both systems as an RLIN CJK member and as a test site for OCLC CJK. Features such as hardware, software, searching methods and display, inputting methods, database, card production, membership, authority file and thesaurus, and cost are compared and discussed. Some possible and desirable improvements are suggested for both systems as a result of the evaluation.

It has been several years since the successful implementation of the East Asian library automation system—RLIN CJK—in North America. The East Asian library community warmly welcomed this achievement of the Research Libraries Group's (RLG) system for handling Chinese, Japanese, and Korean (CJK) vernacular materials. Since then, the Online Computer Library Center (OCLC) also completed its CJK system and successfully tested it among eleven American libraries in 1986. These CJK enhancements integrated East Asian materials into the mainstream of processing for the research library environment. It also is obvious that the future development and applications of these CJK automated systems will not only have great impact on East Asian libraries in the United States, but also will affect CJK collections and East Asian scholarship worldwide.

However, what are these two online CJK automated systems? What can they do? What are their characteristics, capabilities, functions, special features, and costs? What are their advantages and disadvantages or the similarities and differences between them? These are some of the major concerns and interests of many East Asian librarians, and they are discussed in this paper.

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has been an RLG associate member since 1984 and operational in CJK capacity since March 1985. The library also became a test site for the OCLC CJK project in 1986. This unique situation provided its staff with first-hand experience with both online CJK systems. The following observations and suggestions are made from an end user's point of view. It is hoped they will lead to possible future improvements in the two systems.

BEGINNINGS

For the CJK records, it is necessary for the system to accommodate four different scripts: roman alphabet, Chinese, kana, and hangul. Chinese characters are used in Chinese, Japanese, and Korean languages; however, they are read differently and have developed variant forms within each language community. In addition to the adopted Chinese system of writing, the Japanese use a syllabic script called kana and the Koreans employ hangul.

The Research Library Information Network (RLIN) CJK project was initiated by the Research Libraries Group at Stanford in April 1980. It was aimed at processing Chinese-, Japanese-, and Korean-language materials using a computer system, as has been done with western-language materials for years. The plan was supported by grants totaling \$1.1 million from the Ford Foundation, the Andrew W. Mellon Foundation, and the National Endowment for the Humanities to develop a system to input, store, transmit, search, display, and print the three East Asian languages as well as the roman alphabet. In 1981, Transtech International Corporation of Natick, Massachusetts, was chosen to design such a computer system. Based on the Sinoterm (a Chinese-language word processing and character-component entry system marketed in Taiwan) input strategy and modeled after its hardware structure, Transtech delivered the first CJK terminals to Stanford in October 1982. In 1983, the Library of Congress and major East Asian collections became the first RLIN CJK users. However, the automation of the East Asian libraries did not begin until the Library of Congress successfully created the first vernacular record containing Chinese scripts online into the RLIN database on September 12, 1983. Since then the RLIN CJK database has increased dramatically, reaching a quarter of a million records on March 2, 1987, and continuing to increase monthly by 8,000 records.

OCLC has been online since the early 1970s. Roman-language data was automated with relative ease. Although CJK materials were cataloged into the system before the implementation of OCLC CJK, there were no CJK data with these records. Shortly after the inauguration of the RLIN CJK in 1983, OCLC announced its decision to develop a version of its own. OCLC's guidelines were set as follows: (1) hardware must be a multipurpose workstation; (2) keyboard must be an English-language keyboard so that extensive training in keyboard operation will not be necessary; (3) various input methods must be provided for both dedicated CJK staff as well as casual CJK users; (4) software must be designed in a modular fashion so that additional capabilities can be added without having to redesign the entire software or workstation; and (5) price must be reasonable and affordable.¹

OCLC's approach was a challenge to the existing RLIN CJK system. After a couple of years' effort and modification of the existing M300 workstation, OCLC announced the test version of the CJK to be available in May 1986. Eleven American libraries officially participated in the test between May and July 1986, providing feedback to the OCLC for improvement. The production version of the system was made available in December 1986.

COMPARISONS BETWEEN THE SYSTEMS

HARDWARE AND SOFTWARE

The RLIN CJK terminal is essentially a cluster of hardware and software that includes a microcomputer composed of an LSI 11/23 CPU with 256 KB memory, an 8.9 MB Winchester/1.2 MB floppy combination disk unit, a Motorola monitor, a synchronous line interface to RLIN, and a specially modified GE Electric 3000 series printer. The microcomputer houses memory and a local dictionary and can support one to four CJK terminals and a printer. The monitor is a 15-inch video screen used to display 25 lines of 40 CJK or 80 roman characters on each line. The terminal keyboard, which has 179 keys, is about three times the size of a regular typewriter. There are 133 character-composing (component) keys, 36 function keys, and 10 control keys. Among the component keys, 123 are engraved with Chinese components or wordroots, 51 Japanese kana, 33 Korean hangul, and 49 roman and symbols. In order to use the keys correctly, an operator has to choose the correct language mode. There are four modes in all with corresponding lights, one each for Chinese, Japanese, Korean, and roman.

The components are logically arranged. The most frequently used components are located nearest the operator; lesser-used or more complicated ones are on the farther top row of the keyboard. Similarly shaped components are often grouped near each other. Combining 245 components and the local dictionary, a CJK system is capable of producing approximately 14,000 Chinese characters, 51 each of Japanese katakana and hiragana, and nearly 2,000 of Korean hangul. It can also type alphanumerical characters. Its printer is capable of printing screens but is not supported for catalog card production.

The OCLC CJK terminal, called CJK350 Workstation, is an enhanced M300 workstation based on the IBM PC/XT configuration. It is a multi-purpose microcomputer that can function as both an OCLC M300 and an IBM PC in addition to its CJK capability. Its keyboard is about the same size as a regular typewriter, with additional function and control keys. Unlike the RLIN CJK keyboard, it features no components or wordroots engraved on its keys. It is a phonetic or coding entry system rather than a character-component entry system. Since the OCLC CJK also uses RLIN East Asian Character Code (REACC), it can also produce approximately 16,000 characters. Its printer is a Toshiba model P351 capable of printing screens or CJK catalog cards.

There are three software packages for the OCLC CJK system: CJK Online Cataloging Package, CJK Card Production Package, and CJK Word Processing Package. The first is essential for online cataloging of biblio-

graphic records containing CJK vernaculars. However, unlike the RLIN CJK, which can display twenty-five lines of text, OCLC CJK can display only seventeen lines when the CJK online cataloging software is loaded. The card production software is optional but desirable because the OCLC CJK system allows cards to be printed by a local printer from online records. The word processing package is not immediately associated with library operations. It is an optional software for word processing and file management.

SEARCH METHOD AND DISPLAY

RLIN's search function is powerful in terms of both search capability and searchable indexes. The simplest valid form of search request follows one standard outline:

< command > < index > < value >

where the words in the angle brackets represent actual words or phrases. With this standard, users can perform most information-retrieval techniques: truncation, Boolean operators, and command chaining.² Search results can be modified by the "also" command for a specific field or range of fields.

To support processing and retrieval of materials in CJK languages, RLIN developed RLIN East Asian Character Code (REACC) by integrating the common variations of each character, which enables users to search for one character form and retrieve all its related forms (except when the "also" command is used) conversely, or to specify a particular form that excludes all others. The RLIN Chinese character set is thus a composite of characters derived from the three languages.

CJK system permits searching by vernacular characters or romanization. Indexes that can be searched by vernacular languages include personal names (PE, PN), titles (TP, TW, RT), corporate bodies (CP, CW), and subjects (SP, SD).

Once the system has retrieved all records that conform to the search, the results are presented in two ways. In the Books, Serial, Maps, Machine-readable Data, and Visual Materials files the records are displayed in clusters;³ in the remaining files (Scores, Recordings, and Archival and Manuscripts Control) they are displayed individually. RLIN permits seven types of display, including LC catalog card form, available only on CJK terminals.

On the other hand, OCLC's search keys use a distinctive format that determines the index file the system searches. There are two types of search keys: numeric and derived (roman alphabet). Numeric search keys include LCCN, ISBN, ISSN, CODEN, government document number, and OCLC control number. Derived search keys (title, name/title, personal name, and corporate name) are based on words in names and titles. Each type of derived search key is represented by the distinctive number of segments, each of which consists of the designated number of first characters in the words, and each segment is separated by a comma.⁴ Derived search keys can be modified by two types of qualifiers to narrow the results: record format type and year(s) of publication. Following this structure, OCLC has created additional search keys for vernaculars.⁵ The same qual-

ifiers apply to the vernacular search keys to improve the precision of the search. There is only one display for OCLC records: MARC format.⁶

Presently OCLC does not have subject search capacity, nor does it offer truncation, Boolean operator, or keyword searching. These are current limitations of OCLC search capabilities and apply to all items, not just CJK. The distinctive search keys, which are usually not the full text, also cause problems in retrieval. Because of the imprecise nature of the search key system, there may be no result or too many matching extraneous records may be retrieved, particularly when searching a title or name phrase beginning with the same or similar words. The same is true in a vernacular search. By comparison with the RLIN's direct word or phrase search, OCLC's search structure is more complicated and time consuming.

INPUT METHOD

RLIN CJK records are input in LC MARC format with parallel fields for vernacular data. CJK records can be input in both romanized and vernacular letters and retrieved in both.

RLIN's input method is based on the component or graphic system, not on language. Switching back and forth among the four character sets to input different scripts is made possible by the four character selector keys representing Chinese, kana, hangul, and roman. Basically, the roman alphabet and Japanese⁷ characters are single-stroke entries, while Chinese and Korean are multistroke. Chinese characters are entered from 245 basic wordroots called sinoroots, of which 150 can also be used as independent characters, and Korean script is composed from 33 basic components of hangul. Using these components, Chinese characters can be input⁸ with less than nine typing strokes, the average being 3.4.

RLIN employs a symbol called "aggregator" that combines romanized Chinese syllables into a semantic unit and enables users to estimate the contents more accurately and meaningfully. RLIN also employs the "geta," which is a place marker; it indicates that a character was not able to be entered at the time the record was created. The "geta" also is retrievable.

There are three basic commands for adding RLIN CJK records: "create," "create *(star)," and "derive." "Create" is for inputting a new record; "create *" is for inputting a record where edition or publishing data differs from an existing record; and "derive" is for copying an existing record without any modification, or with minor changes including CJK enhancement. For RLIN CJK records, parallels are required only on "core fields,"⁹ which comprise the body of the descriptive entry. Inputting of parallel fields other than the core fields is optional; some fields can be input with mixed scripts.

In contrast, parallels are required for all fields which contain CJK scripts in the OCLC records. Vernacular scripts are input as they appear on the material, and need not be completely parallel to the romanization. OCLC CJK records have neither "geta" nor "aggregator" functions.

OCLC CJK provides five input methods: Tsang-chieh, Pin-yin, Wade-Giles, Modified Hepburn, and McCune-Reischauer. Except for Tsang-chieh, all other input methods are based on the romanization of reading for

each language: Pin-yin and Wade-Giles for Chinese, Modified Hepburn for Japanese, and McCune-Reischauer for Korean. The Tsang-chieh system is the only character-based input method and employs the alphabet codes unique to each character.

Switching between input methods (roman, vernacular) is carried out by function keys.¹⁰ To select the vernacular input methods, one of the input method codes must be typed in the first block. When an input method is selected, the input cursor proceeds to the second or script block where the default script automatically appears. A single language should be input by using only one method.¹¹ Romanized reading is typed in the third or key-stroke block. If there is only one matching character, then the character will be sent directly to the text cursor. If there are two or more matching characters,¹² multiple matching characters appear in the fourth or homophone block; the number of the correct matching character is pressed in order to send the character to the text cursor position. Responses such as "Loading Tables" and "Illegal Character" are indicated in the fifth, or error message block. Table 1 shows valid input methods for CJK script forms and their codes.

OCLC's phonetic input based on reading is easier and faster than RLIN's component entry method. However, OCLC's input methods require loading the table for each different script. Although loading each table takes less than a minute, the process consumes extra time.

Another time-consuming factor of the OCLC system is its record-editing function. To edit a record, OCLC requires the transmission of command and information to the OCLC mainframe computer for each field, while RLIN requires it for each page or segment (bibliographic and holding). Editing during peak hours can slow down responses considerably and hence frustrate users. RLIN's editing function has the advantage in terms of input time.

Among the most useful features of the RLIN CJK input capabilities are the two save/copy function keys. Each save/copy key allows users to save/copy up to forty CJK characters or their doubles in case of alphanumeric characters. This function relieves users from the burden of rekeying a

TABLE 1
OCLC CJK INPUT METHODS AND THEIR CODES

Script Form	Code	Input Method			Modified Hepburn (HP)	McCune-Reischauer (MR)
		Tsang-chieh (TC)	Wade-Giles (WG)	Pin-yin (PY)		
Chinese						
Full	(CF)	*	*	*		
Simplified	(CS)	*	*	*		
Japanese						
Kanji	(JJ)	*			*	
Hiragana	(JH)				*	
Katakana	(JK)				*	
Korean						
Hancha	(KC)	*				*
Hangul	(KH)					*

string of characters that reappears several times within a record or records. This function also reduces the time to key in vernacular data. OCLC has eight similar user-defined function keys; however, the RLIN keys are easier and more efficient to use.

DATABASE

In the RLIN database, each library's record can be accessed on the system. Users can retrieve any record from any library any time the RLIN system is up, i. e., online search is always possible. These records are clustered when they are retrieved from the database. By identifying the individual library code from the cluster, a user can then retrieve the record from a particular library. The advantage of this design is that one can choose the best cataloging record for one's purposes. In fact, many librarians do have a preference as to whose records they use.

By contrast, the OCLC system is designed so that, barring duplicates, each unique title is counted as one record in the database. Once a record is entered, it will only appear on the individual library's archival tape. No library, not even the inputting library, can retrieve this unless it happens to have been the first record input. Even then, when the Library of Congress enters a record for that item, it displaces any earlier record, which then disappears from the online database.

CARD PRODUCTION

The demand for CJK printed cards has not diminished as a result of automation. Many advanced automated libraries no longer produce and file printed cards for western-language material. The same is not true in the CJK environment. This is partially due to the unique East Asian language problems. RLG, at the beginning stage, decided not to support 3-by-5-inch printed cards because of their high cost and limited market as well as the unavailability of suitable technology at the time. RLG was hoping that the CJK database would serve as an online catalog, eliminating the need for cards. It turned out that the demand for cards persisted and only one institution (Hoover) actually closed its card catalog.¹³ Some libraries decided to order printed cards from RLG; however, these cards have no CJK characters and library personnel have to add them to the cards.

As an alternative, the University of Illinois' Asian Library uses printouts of the LCC format (the Library of Congress Card format) from the screen to reduce into 3-by-5-inch size and produce cards from them. As a consequence, these cards bear no headings and manual typing to add headings becomes necessary. This is a serious shortcoming of the RLIN CJK system.

OCLC CJK, on the other hand, has card-production software that can produce printed cards with complete headings on each set. Its software is configured exclusively for the Toshiba P351 letter-quality printer. The printer can be set up in the library where card production can be handled locally, and if preferred, the printing can take place outside work hours.

AUTHORITY FILE AND THESAURUS

Both RLIN and OCLC have authority files in romanized records. As far

as using the Library of Congress' records, there are some differences in the format but the contents are the same. The OCLC system, however, does not display some of the diacritics, which are substituted by roman letters (e.g., umlaut by "h" and macron by "e"). These displays are confusing and easily misread. RLIN's capability to display all diacritics is certainly advantageous since all three CJK languages involve at least one diacritic. The OCLC system permits an authority search while inputting a record. Authority search keys are preceded by a square bracket. Because of OCLC's requirement of AACR2 verification and its source for their bibliographic records, its capability of authority search during inputting is necessary and convenient. RLIN does not require the same verification and an authority search is not possible while inputting. Authorities and cataloging are two separate activities in the RLIN system, and authority searches have to be done separately.

RLG developed the RLIN CJK Thesaurus, an online reference for Chinese characters, which was implemented on March 1, 1987. It is a resource file stored on the main RLG computer and includes approximately 35,000 records containing all the characters in four East Asian coding standards (CCCII, Primary Set, JIS, and KIPS). Users have online access to information about any character even while inputting a bibliographic record.

Each thesaurus record represents one East Asian character, and includes such information as readings in each of the East Asian languages, stroke count (including and excluding radicals), Kang-hsi radical number as well as the exact form of the vernacular radical, and keystroke sequence. It also gives related character information such as all currently available abbreviated or variant forms, up to seven. The online thesaurus greatly increases the ease of keying in Chinese characters, especially infrequently used ones.

OCLC does not have an online CJK thesaurus at the present time. Instead it offers a Coding List (in book form) for users.

COST

The cost of operating a CJK system is certain to influence an administrator's decision. It is clear that RLIN is more expensive in both hardware and maintenance. A detailed breakdown of costs is shown in table 2.

CONCLUSIONS

Implementation and enhancement of the CJK system for both RLIN and OCLC networks are library technology's greatest impact on Asian librarianship. Until 1987, when the OCLC CJK became fully operational (production version), RLIN CJK was the only online, network-based library processing and information retrieval system capable of handling CJK scripts. No one would dispute that the RLIN CJK system brought East Asian libraries into the mainstream. It also encouraged previously isolated East Asian collections to move towards resource sharing and the world of cooperative collection development. Subsequent development of the OCLC CJK system had made it possible for users to choose an alternate

system based on an individual library's needs and financial state. It also has made it possible for more libraries to do CJK cataloging, whichever system they may choose.

Although the RLIN CJK system is praised for its high quality, the cost of the hardware and maintenance is relatively high. OCLC CJK, on the other hand, is less expensive for both hardware and maintenance, thus providing a highly competitive alternative to potential users. Reduction of the cost for the RLIN system seems essential if it is to attract more users and retain those it has at present. Recently released second-generation RLIN CJK hardware, a multiscript workstation costing less than \$6,000 per unit with no contractual maintenance fee, makes the cost more comparable with OCLC. OCLC will benefit in the future when its new editing and subject searching capabilities are implemented, making it more comparable with RLIN.

There is no doubt that the two CJK systems have had a great impact upon each other. There is always room for improvement and for better service to users. The ultimate goal from an end user's perspective would be the linking of the two CJK systems. Should that happen, users of both would benefit.

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2. Command chaining is entering a series of commands, separated by slashes (/), into the system at one time. The system executes the commands in the sequence given, allowing the searching process to be considerably shortened.
3. A cluster is a group of records in the same file describing the same bibliographic edition of the work, linked together by the same or similar values for some or all of the following: LCCN, ISBN, title, publisher, publication date, pagination, and edition statement. A search request using a value that matches an access point from any record in the cluster retrieves the entire cluster. RLIN System Reference Manual, 3rd ed., glossary, p.8.
4. For example, a title search key is expressed by four segments separated by three commas.
5. Each key is preceded by a mnemonic roman alphabet prefix followed by a colon and has one segment, except the name/title search key, which has two segments separated by a comma.
6. If a single record is retrieved, the system displays the full bibliographic record in OCLC MARC format. If a search key matches two to thirty records, the system displays abbreviated entries. In addition, collective display or group display is prepared in response to the type of search key and number of records retrieved. However, these displays are not shown for each record by user's choice.
7. Japanese kana can be input by selecting the kana character set in conjunction with the shift key for hiragana (lower case) and katakana (upper case) and the kana shift key to input small kana (shoji). There are fifty-one keys for the Japanese syllabaries. These include obsolete *wi* and *we* (in both hiragana and katakana) and the katakana *wo*, plus the *nigori* and the *handaku*, and a key for the Japanese length marker (-). There are also ten small hiragana and twelve small katakana (shoji). Kana are typed in just like roman characters except for the *nigori* and *handaku*, which need two strokes (the kana to be modified, and the *nigori* and *handaku* key), and the small kana, which are input by pressing the kana and kana shift keys simultaneously; all kana are displayed directly at the input cursor position on the screen.
8. To input Chinese or Korean characters, the operator first strikes the proper character selector key and a scratch pad appears on the bottom of the screen; she/he then strikes

those keys containing the components which make up the character. Each component appears on the scratch pad one by one. After striking the components following a set of typing orders based on the natural writing stroke sequence of the character, the operator strikes the space bar; the unique keystroke sequence will then be sent to the cluster controller's local dictionary to retrieve the dot-matrix representation and REACC of the character defined. This character is then displayed at the input cursor position on the screen.

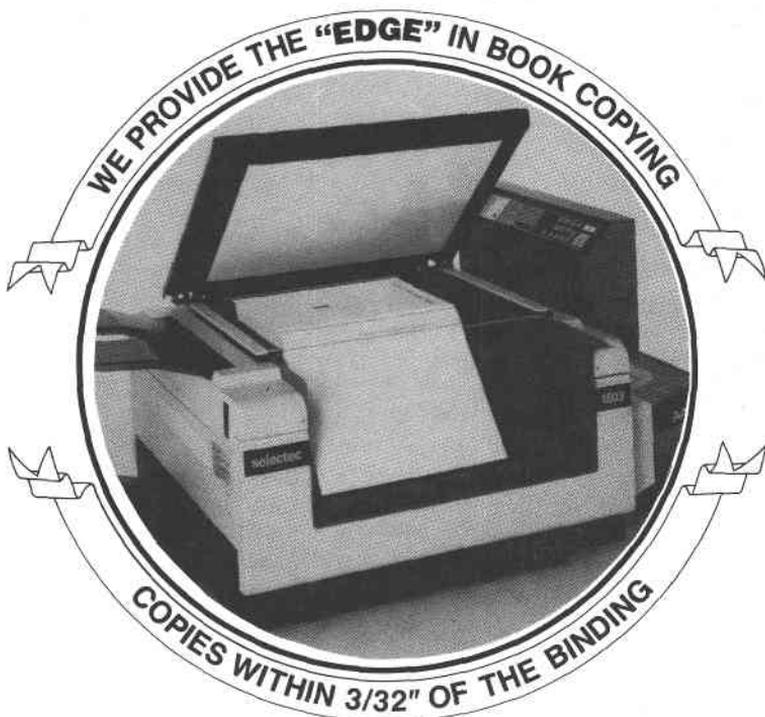
9. Core fields are 245, 250, 260, 300, and 4xx. There is no parallel field for 300.
10. When function keys (<CTRL> <F9>) are pressed, a blank input status line appears at the bottom of the screen, which consists of five blocks: Input-Method; Script; Keystroke; Homophone; and Error-message.
11. Switching from one vernacular mode to another is done by pressing <CTRL> <F11>. If a script other than the default script is needed, <CTRL> <F10> keys and script type code are pressed.
12. In the CJK languages, many characters have homophones, i.e., other characters with the same phonetic sound but different meanings and graphic representations. Homophones are displayed as a numbered list in the homophone block, up to eight characters at one time; if there are more than eight homophones, a new list will appear by pressing the space bar. The list of homophones "wraps around" so that the last character in the group is distinguished by an up arrow, while the last homophone in the list is followed by an exclamation mark.
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Notes on Research and Operations

Collection Development Officer, a Reality Check: A Personal View

Peggy Johnson

The position of collection development officer is a relatively recent phenomenon in academic libraries. Despite some exceptions,¹ much of the literature on collection development continues to focus on the selection and management of collections rather than the additional responsibilities now under the purview of collection development. After several months as an acting collection development planning officer in a major academic library, I have come to the conclusion that the ability to make good selection decisions is secondary to another set of essential skills. A successful collection development officer needs the political skills of Disraeli, the financial acumen of Trump, the wisdom of Solomon, Churchill's way with words (written and spoken), and a bit of Houdini's ability to get out of tight spots!

Osburn focused on the expanding nature of collection development responsibilities in a 1983 article. He sought to "reconceptualize" collection development by identifying significant changes occurring in the field. He proposed that the single most difficult challenge to be faced in the next five or ten years would be adapting to this greater scope of responsibilities.² He stressed that the directions taken by collection development must be explicitly chosen, not just followed by design, for they have direct bearing on the functions, goals, and missions of libraries.³ Collection development officers must be proactive, not merely responsive to the current situation.

Perhaps the most significant change already apparent is an increasing awareness of collection development as a central management function. Osburn defines collection development as "a process of establishing priorities that will allow the most effective use of a budget in achieving predetermined goals, both long-term and short-term."⁴ In many institutions, collection development officers assume the related function of presenting and defending a request for a materials budget. These officers are expected to explain the budget's rationale through commonly held expectations for the library and its community. A successful collection development officer

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must understand the connection among funding levels, purchasing power, expressed community needs, and selection decisions. In addition to budget formulation, collection development officers must inform the community, the provider of fiscal support, about the aspirations and limitations of the library.⁵

Futas also addressed the expanding role of collection development librarians.⁶ She noted a reluctance on the part of libraries when advertising vacancies to acknowledge increasing responsibilities, despite a trend toward the creation of collection development officer positions in larger academic and public libraries. She lamented a tendency to focus on subject expertise and literary background as the two primary qualifications for collection development officers. Many institutions continue to stress materials selection and collection analysis in their job announcements. Yet such areas as planning and policy making, preservation, user liaison, resource sharing, program evaluation, and fiscal management are now the more significant aspects of these positions.

Osburn proposes that collection development is one of the most central of library operations and pivotal in library/community relations. Collection development must be a very outward-looking process. He further suggests that this proactive approach runs counter to the traditional behavior of librarians within their organizations and communities, which he deems subservient or, more kindly, "low profile." He feels it is up to the collection development librarians, foremost, to lead in a movement toward the adoption of a new role and the establishment of a new image, since their processes are central internally and pivotal externally.⁷ The competencies presented at the beginning of this paper—political and financial expertise, the ability to think critically and creatively (wisdom), and communication skills—are critical in executing these processes effectively.

POLITICAL SKILLS

Pfeffer defines organizational politics as those "actions taken in organizations to acquire, develop and use power and other resources to obtain a preferred outcome in situations in which there is uncertainty or dissensus about choices."⁸ The ability to operate politically need not have the negative connotations traditionally associated with "politics." As De Gennaro has pointed out, "A library operates in a political environment and nearly all the really important decisions that are made at the highest levels have an overriding political component."⁹ This is true regardless of the type of library. Collection development librarians need to know how to succeed in operating politically in order to maximize opportunities and minimize liabilities. Organizational decisions are continually sought that will best achieve the library's goals. Rational decisions rely on the best information and analysis of the options that have been determined. Political activity implies conscious effort to muster and use force to overcome opposition and enlist support.¹⁰ Futas says that a successful collection development officer must strive to be a "consummate politician."¹¹

This ability to operate politically is critical for effectively executing both internal and external responsibilities. In order to be successful politically, a collection development officer needs to have a general understanding of

organizational culture and how organizational power (implicit and explicit) operates in his or her organization. Osburn calls this an understanding of the sociology of the community.¹² A collection development officer must be knowledgeable about the administrative structure in the library and the parent institution. This is as basic as who reports to whom and who has ultimate responsibility. Bureaucratic decision making, based on rules and procedures that have evolved in the organization,¹³ is always relevant.

Equally important in order to operate effectively politically is knowledge about the individuals in the hierarchy. The members of the library board, the mayor's assistant, the vice-president for academic affairs, and the chair of the university senate library committee all have the potential for being strong political allies. It is important to know them, their backgrounds, and their biases in order to be effective. Cultivating such individuals and groups is essential in order to develop what Mosher calls the "social contract"¹⁴—a continuing commitment on the part of the library's community to support the library.

Finally, since many collection development officers have little (or unclear) line responsibility, it is important consciously to place one's self politically within the library. Effective relationships among public services, technical services, and library administrators must be actively maintained. Mustering support and overcoming opposition within the library itself are a central component to success with external constituents.

Churchill said that politics is almost as exciting as war, and quite as dangerous. He understood the challenge and stimulation of acquiring and using power to obtain an objective. Collection development librarians must ensure that their political activities mesh with library and institutional objectives.

FINANCIAL EXPERTISE

Collection development officers are frequently responsible for developing and defending an overall library materials budget, budget allocation, and cost analysis. These responsibilities are intertwined and essential components of ongoing fiscal management. Cogswell stresses the significance of this aspect of collection development responsibility when he points out that sound fiscal management is often required as the acid test of any organization's overall effectiveness.¹⁵

Collection development officers require a fundamental understanding of budgetary processes and technical skills in compilation and manipulation of statistical data. Many if not most of these activities can be exceedingly time-consuming; e.g., budget analysis may involve compilation and manipulation of data not always the by-product of an automated acquisitions system.¹⁶ Expertise with microcomputers and relevant software is important. These can be used to create databases and spreadsheets for modeling, simulation, and other types of analysis.

Collection development officers need access to price increase information (foreign and domestic) and expectations of the strength of the dollar, plus an understanding of how to relate this information to the local environment. Effectively interrelating these elements is central to developing models for forecasting local materials budget needs. Up-to-date studies of

materials prices are often difficult to find, and erratic publishing schedules of those that continue to exist diminish their value in an annual budget process. Some institutions compile their own index of periodical prices. Understanding statistical techniques such as the regression analysis of least squares is useful in these situations.

Price increase information must be related to the local materials budget; consequently the library's own allocation and expenditure figures are needed. A variety of reports sorted by fund, library, class of material, type of expenditure, format, subject, country of publication, etc., is desirable, as is the ability to track information on expenditure and budget performance over several years.¹⁷

Once an adequate and acceptable methodology is developed for analyzing costs and projecting local needs, a collection development officer cannot assume that responsibilities in this area are fulfilled. What works today in articulating a need for an adequate materials budget to maintain acquisitions rates will not work forever. An acquisition model or inflation model will age, and collection development officers must be prepared to modify or develop an entirely new approach to convince funding bodies of the library's need for adequate allocations.¹⁸

Internal allocation of available funds may be a more familiar collection development responsibility. Certainly more appears in the literature on this topic. Wortman identifies two major considerations in devising allocation formulas: first, the recognition of and due consideration for the many internal and external details that must be factored in; and second, the problem of finding a rational and convincing mathematical way to link these details into a formula that apportions the right amount of money for each subject.¹⁹ Allocation formulas are always problematic. Wilson and Tauber's observation in 1956 that "a satisfactory formula for allocating book funds has not been developed,"²⁰ still holds true.

Shirk's article on the use of formulas sounds a warning about the traps that formulas can create for internal allocation once monies are in hand. The same caution is justified when preparing formulas for presentation to funding agents. Many, if not most, of the formulas are arbitrary conventions in many ways. Their success depends upon their political acceptance, not upon a defensible theoretical framework that relates objective variables to the collection's performance in a meaningful way. Shirk contends that "until theoretically and empirically sound formulas are developed, book allocation formulas will remain notationally simplified expressions of arbitrary procedures, whose widespread use is justifiably limited."²¹

WISDOM

Wisdom may be seen as the successful combination of creative and analytic thinking in decision making. Analytic thinking is the ability to organize and evaluate information in a logical and systematic manner. Creative thinking is intuitive, unstructured and unpredictable; it is necessary for innovation and progress.²² Wisdom is the ability to solve problems and have the solutions accepted—a combination of credibility and clout. It requires knowledge and experience, plus interpersonal skills in conflict resolution.

Wisdom is exemplified in what Mintzberg calls "initiating activity,"²³ in

managers or, in Osburn's premise, proactive behavior. Wise collection development officers actively look for and select situations that require decisions, seek alternatives and evaluate them, and consciously choose one alternative from among those available.

Wisdom produces a logical solution that is acceptable to those involved. Mintzberg writes about three managerial initiating activities: negotiation, resource allocation, and disturbance handling.²⁴ These are among the collection development responsibilities identified in this paper that are assuming greater importance and are clearly areas in which the exercise of wisdom is paramount.

A collection development officer becomes a negotiator when major, nonroutine interactions with other organizations or individuals are required, such as the presentation of an annual budget request. The collection development officer as resource allocator may apportion personnel as well as financial resources. He or she deals with the internal allocation of resources in times of retrenchment as well as expansion. As noted earlier, this is a political activity, but one that benefits from the exercise of wisdom in developing an acceptable distribution of available resources, particularly when they are limited.

An unforeseen event or a problem too long ignored may create a disturbance. These occur when individuals can't agree, when no one knows how to handle a difficulty, or when a crisis is perceived. For example, extreme journal price increases are creating crises in academic libraries nationally at this time. Information must be collected and continually updated that reviews the library's situation in the context of the pricing crises in order to evaluate alternative responses. Proposing to cancel large numbers of journals is not unlike Solomon proposing to cut the baby in half.

When Solomon made his suggestion, the parents quickly resolved their differences. Collection development officers cannot usually solve problems as easily. However, conscious exercise of logic coupled with an intuitive understanding of what is ultimately acceptable can increase the likelihood of success.

COMMUNICATION SKILLS

Communication skills are essential tools for collection development officers, who must collect and share information internally and externally. They must be able to write and speak effectively in order to convey this information to a variety of audiences. Bryant writes about the role of communication as "public relations" with Friends of the Library organizations, in negotiation of gifts, and when representing the collection development program to library governing agencies (boards of trustees, faculty organizations, and academic administrators) and to external resource-sharing organizations.²⁵ Public relations is an internal activity as well and describes a conscious approach to effective communication with all aspects of the internal library organization.

In order to get information, collection development officers need to build cooperative information networks, find formal and informal sources of information, extract what is relevant, and validate it. This is necessary in order to understand what is taking place in the library and its environ-

ment. The library's environment is not just local, but includes the national and international context in which libraries function. Gathering information about local user expectations, the publishing industry, peer institutions, new technologies, etc., is critical for positioning the library.

Effective user liaison has the potential not only to increase the collection development officer's knowledge base, but to gain library advocates as well. A collection development officer needs to cultivate informal communication with faculty extending beyond formal presentations at department meetings. Knowing how and when to express an interest in individual faculty activities can be a very successful mechanism for increasing the visibility of the library. The collection development officer becomes privy to academic initiatives and is perceived as a significant participant in the mission of the institution.

Information obtained from all sources must be packaged and shared effectively. This requires the ability to write well and to speak effectively in both formal and informal situations. Collection development officers are required to be informative, argumentative, or persuasive as the need arises. Good communication skills can be learned. Numerous books, articles, and classes are available. It is well worth the time to master the techniques appropriate to the situation. Knowing how to organize a presentation and how to prepare professional-looking visual aids to accompany it can make the difference between a successful budget justification and failed one.

According to Osburn, collection development should be seen as the "communications process driving an integral system of library, information universe, and community".²⁶ Good communication skills provide the framework through which the expanded role of a collection development officer is transformed from the abstract to the concrete.

CONCLUSIONS

Even a master collection development officer, one with expertise in all the areas outlined in this paper, will fail if the library does not consciously acknowledge and support collection development as a central function. Bryant makes the point that libraries need to assess the organizational support given their collection development operations.²⁷ The power implicit in the investment of enormous financial resources for collection development becomes meaningful only when collection development officers are organizationally placed in positions with explicit authority and adequately supported.

Both Cogswell and Bryant stress the need for administrative authority.²⁸ The collection development officer is more effective when located at or near the top of the library organizational structure. A collection development officer who does not participate on the library director's advisory team faces real problems. Obtaining and transmitting vital information on issues of major concern to the library through indirect means puts both director and collection development officer at a disadvantage.

In addition to administrative authority, collection development officers need administrative support. This means adequate clerical staff for activities such as word processing, data entry, and photocopying. Bryant refers

to figures that show that collection development historically has been conspicuously short of nonprofessionals and student assistants while technical services, public services, and administration have enjoyed ratios of two to one or better.²⁹ Administrative support also includes financial resources to cover the travel and telecommunications necessary to participate actively in national collection development activities and information sharing.

Collection development officers are seeing their positions develop as integral and vital within the library and as significant to the parent institution and user community. The success of Osburn's reconceptualized role of collection development—as a proactive communication link between the library and the community—is contingent on the mastery of skills presented in this paper. The opportunity is here. Political and financial expertise coupled with communication skills and the exercise of analytic and creative thought will make the possibility a reality.

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Public-Use Copiers in Library Services

Debra McKern

For the last five years, librarians have been increasingly concerned about the need to replace aging Xerox 4000 photocopy machines in their stacks. The 4000 model has been the workhorse of copy machines for many libraries because of its ability to copy tightly bound volumes. This feature, called edge copying, means that the glass platen abuts the edge of the machine, allowing a volume to be copied at a 90° angle (see figure 1). Edge copiers have two advantages: they prevent spine damage caused by having to open a book flat on the platen of a conventional copier (see figure 2); and they are able to capture more of the image in the gutter margin.

When the Xerox Corporation discontinued the 4000 model in 1984, libraries began nursing the machines they had hoping they would last until another edge copier came on the market. On behalf of my own institution and as a member of the Copying Committee of the Reproduction of Library Materials Section (RLMS) of RTSD, I began to talk to photocopier manufacturers about the need for an edge copier. In the course of these discussions, the manufacturers wanted to know what other features were important to include in a copier designed for the library market. As a preservation librarian my interaction with the public is limited; therefore, I didn't feel prepared to answer these questions without conferring with public-service librarians and library fiscal officers.

The result was a survey produced by the Copying Committee asking librarians what features of a photocopy machine were "essential," "desirable," or "not important." Conducted in June 1988, the survey was mailed to active RLMS members, to all ARL libraries, and to the fifty largest public libraries. It was suggested that the library staff member responding should be familiar with both copy service needs and library fiscal management.

The purpose of the survey was to answer two questions: (1) What fea-

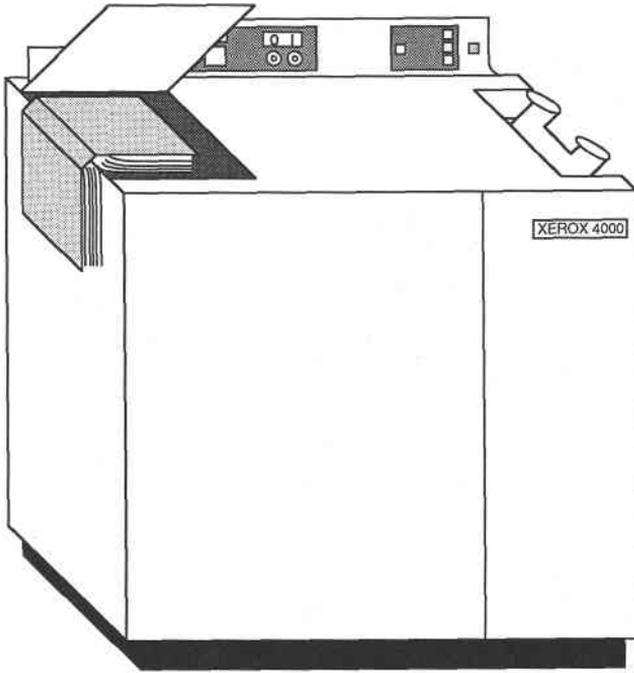


Figure 1. Book copied on an edge copier

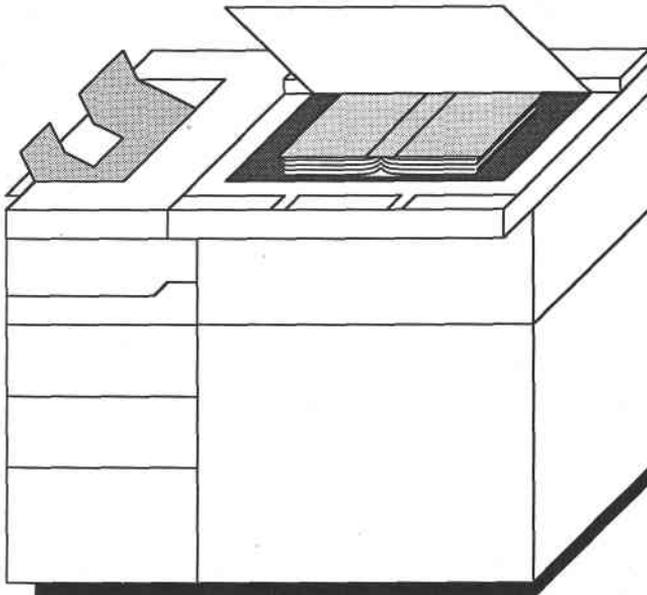


Figure 2. Book copied by placing it flat

tures are essential for public-use copy machines in libraries? and (2) What are libraries willing or able to pay for those features? Respondents were informed that results would be forwarded to the product-development units of photocopier manufacturers.

	NOT IMPORTANT	DESIRABLE OR ESSENTIAL
1. DURABILITY [minimal down time given high volume use]	0%	100%
2. QUALITY AND CONSISTENCY OF IMAGE	0%	100%
3. USER FRIENDLY OPERATION [ability of patron to operate machine without instruction]	0%	100%
4. EDGE COPYING	1%	99%
5. ACCESS DEVICES	2%	98%
Preference: 70% COIN & CARD		
16% COIN		
9% BILL		
4% OTHER		
1% CARD		
6. SECURITY	8%	92%
7. CONTRAST CONTROL	9%	91%
Preference: 47% AUTOMATIC [machine adjusts to tone of paper]		
24% FIXED [user selects from 2 or 3 settings]		
21% MANUAL [user sets any level]		
8% NO PREFERENCE		
8. SPEED OF OPERATION	15%	85%
9. REDUCTION	22%	78%
Preference: 42% FIXED		
22% MANUAL		
21% AUTOMATIC		
15% NO PREFERENCE		
10. ENLARGEMENT	28%	72%
Preference: 42% FIXED		
23% MANUAL		
19% AUTOMATIC		
16% NO PREFERENCE		
11. DUPLEX (DOUBLE-SIDED COPYING)	61%	39%
12. DOCUMENT FEEDER	83%	17%

Figure 3. Ranking of copier features

PLATEN		
Preference:	39%	11 x 17
	36%	8-1/2 x 14
	15%	17 x 17
	8%	NO PREFERENCE
	2%	OTHER
TRAY CAPACITY		
Preference:	44%	2500
	29%	1000
	16%	2000
	6%	NO PREFERENCE
	5%	500

Figure 4. Preferred sizes of platens and trays

NUMBER OF COPIERS: (owned or leased)	1 - 5 machines	10%
	6 - 12	15%
	13 - 25	39%
	26 - 35	16%
	36+	20%
MONTHLY COPY VOLUME: (average per machine)	1 - 7,200	17%
	7,201 - 16,000	32%
	16,001 - 28,000	22%
	28,001 - 54,000	11%
	54,001+	18%
WILLING TO PAY: (for machine meeting essential criteria)	\$3,000 - \$4,999	11%
	\$5,000 - \$7,999	51%
	\$8,000 - \$10,999	26%
	\$11,000 - \$14,999	11%
	\$15,000+	1%

Figure 5. Library copy services

The response rate was high (71 percent) with many respondents expressing an active interest in contributing to the design of a copier that can meet the demands of the library environment. "Please make a copier that is easy to operate and built like a tank" was typical of the remarks received. Figure 3 shows the ranking of copier features for public-use copiers, with the most essential features listed first. Figure 4 shows preferences in platen sizes and tray capacities.

These responses demonstrate that librarians are most concerned about service and durability, image quality, ease of instruction and operation, edge copying, and accessibility. They also indicate that many of the bells and whistles available on modern office copiers are not necessarily desirable features in a library copier. Basic, dependable service to library users is of greatest importance.

Many of the libraries responding were getting out of the business of purchasing/leasing copiers or of managing copy services by contracting with a vendor (18 percent). Other information describing library copy services is given in figure 5. The size of the operation and the degree of use may be factors in the movement toward contract services.

A number of copier manufacturers have begun to listen to the concerns of librarians. In the past year, three manufacturers or vendors have modified existing machines as edge copiers: Océ Library Copier, University Copy Service (formerly Dual) Selectec, and Xerox Book Saver. With a continued dialogue, it is possible for librarians to have an impact on newly designed copy machines.

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LRTS' Subsection

High-Tech Shopping for Serials Automation: Linking Public and Technical Services

Pamela Bluh and Will Hepfer, Editors

This is the fourth and last paper comprising this subsection of *LRTS*. The papers were originally presented at the RTSD Serials Section program on June 27, 1987, in San Francisco.

In keeping with the nature of its subject, "High-Tech Shopping for Serials Automation: Linking Public and Technical Services" was published serially; other papers appeared in April 1988, October 1988, and January 1989. We hope you found them as illuminating as their San Francisco audience did.

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Challenges for Serials Automation

Rian Miller-McIrvine

Serials are a powerful tool for information exchange and transfer. Adequate control of the literature as well as easy access are important goals for serials automation. While focusing primarily on functional design, this paper proposes the need for linkages between the bibliographic tools utilized for serials control as well as development of article-level control within library systems. Topics covered include capabilities desirable in a serials control application, common problems encountered during system implementation, and areas in which further development is necessary.

Serial publications play a key role in the process of information transfer. Serials offer a forum for the exchange of information and comment on a wide spectrum of topics. Creating an automated system that allows ready access to this rich and voluminous body of information is crucial in a post-industrial society.

GOALS FOR SERIALS AUTOMATION

Serial literature is controlled by two types of bibliographic tools: those produced by libraries (including public-access catalogs, serials lists, and accessions lists) and those produced by abstracting and indexing services. The principal difference between these tools is the level of bibliographic unit controlled. Tools generated by libraries to control serials focus on the title or, at best, the volume level. Abstracting and indexing services concentrate on control at the article, paper, or report level. Given the expanding use of online databases as a basic tool in the inquiry process, library patrons are increasingly approaching serial literature from the article-specific level.

The perspective from which the patron attempts to use serials should have important implications for the way libraries automate the serials control function. Patrons are rarely concerned with how a title has been cataloged or whether the library owns a particular volume or issue of a serial. Rather, they want to determine whether or not the library has a desired article. If not, can the library procure the item via interlibrary loan, telefacsimile, or a commercial document delivery service?

User studies referenced in this subsection's earlier article by Cippola¹ conclude that many people come to the catalog with a specific citation in hand. This fact, especially relevant in the case of inquiries related to serials, suggests two important conclusions: First, serials control systems should attempt to bridge the gap between the kind of bibliographic information users possess when beginning a search for a serial publication and the manner in which the library organizes and provides access to its collection; second, a correlative conclusion suggests that classification or even

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elaborate descriptive or subject cataloging of serials might be a superfluous effort.

Historically, serials automation has concentrated on the processes of check-in, claiming, and, perhaps, routing and binding. Throughout the 1970s, processing was typically a batch operation, using keypunch card input that generated printed list output. During the present decade, libraries began to implement interactive automated serials systems. While designed with varying degrees of sophistication, the provision of unmediated user access to the serial collection has only rarely been considered a primary goal of the library staff's work in ordering, procuring, organizing, and storing serial publications.

Management of serials will remain a key objective for libraries as the cost of acquiring and controlling them continues to rise, the volume of literature grows markedly each year, and an increasingly large portion of a library's budget is committed to serials. Serials automation efforts in the years ahead must adopt a strategy that balances the long-recognized importance of the library's inventory and organization functions with a renewed emphasis on user access and document delivery.

CHOOSING A SERIALS CONTROL SYSTEM

Vendors have not raced to develop serials control applications. Consequently, libraries planning for serials automation have had a limited number of choices in the systems marketplace. Serials present major challenges to system developers and there is a litany of problems associated with serials: published in many media; issued in a wide variety of sometimes changing frequencies; sometimes not issued at all; received via many methods—subscription, gift, exchange, or membership; numbered irregularly; sometimes not numbered at all; titles change—sometimes more than once. The list of complications could be extended even further to include separately issued indexes, special issues, supplements, and new series. It is no surprise that serials control may be one of the last library functions to be automated.

Serials librarians should be active participants in system selection to maximize future benefits and to avoid the need to "retrofit" the serials application to the system selected. Before evaluating available serials control applications, certain constraints should be considered. For example, does the serials application have to be integrated with other automated processes already operating or being implemented? If so, some possibilities may be eliminated immediately. The serials department may simply have to wait its turn in the system implementation cycle. Does the application only run on certain hardware or under a specific operating system? If so, other possibilities may be eliminated. How many titles and copies does the software have to be able to accommodate? Systems have upper limits imposed by the software and/or mass storage available. For those libraries considering a microcomputer-based solution to serials control, can the software support multiple terminals and peripherals? If so, how many? Does the number of terminals required affect network response time adversely? These fundamental compatibility and performance questions should be addressed before libraries begin to develop detailed system specifications.

For the purpose of evaluating serials control applications, functional capabilities can be divided into four broad categories: (1) database design, (2) technical functionality, (3) management capability, and (4) the user interface.

1. Database design is a key element in successfully implementing any automated system. To state the obvious, the database should be designed to import and export full MARC records. Meeting this requirement provides optimum flexibility in the event of future system upgrades or migration to a different system. Using the USMARC format as a standard for bibliographic data transfer requires that the system software accept variable-length records with variable-length fields. While not every field in the record must be indexed, libraries may discover needs for additional access points as the system is used. If mass storage is limited, the complete MARC record can be relegated to offline archival storage while an abbreviated version is retained and indexed in the online system. Clear trends of declining cost and increased capacity of storage devices should permit storage of a complete MARC record.

Sufficient access points must be provided. In the ideal application, indexing would include keyword searching, Boolean operators, proximity searching, term truncation (left, right, and internal), and stem matching. Powerful search features are especially critical for serials because of the generic and often nonunique nature of titles. The software should permit the library to designate which field or fields are searchable with a particular search key and allow for interim results to be reported while the search is in progress.

2. Most libraries will require that a serials application support at least the technical functions of check-in and claiming. Additional features might include fund accounting, physical preparation including bar coding, and electronic messaging. Holdings data, preferably at the detailed level, must be linked to bibliographic data. Access to the full bibliographic description should be available from most points (i.e., check-in module, public-access module) within the system. To facilitate work flow, the serials system should be able to interface with acquisitions or in-process order files and allow instantaneous updating of holdings—ideally, at the issue level—in the online catalog.

Database maintenance should be convenient and easily accomplished by trained library staff. Preferably, updating activities can take place in the local system and not necessitate interaction with an external bibliographic utility. Password control or some other mechanism designed to define user privilege levels is desirable.

A good software application will permit early and dependable backup and recovery of the database. In the event of system failure, a backup system providing uninterrupted processing is needed. System and database recovery procedures must be well documented and readily performable by library staff. In short, database design should provide flexibility, portability, searchability, and dependability.

With the increased reliance on resource sharing as a tool to satisfy user demands, union listing is an important function of automated

serials control. As early as 1955, Andrew Osborn noted that the creation and exploitation of union lists was a feature of the modern library economy.² In the 1980s there is growing recognition that access to materials is a realistic alternative to ownership. Comprehensive and up-to-date union lists enhance a library's ability to deliver information and thereby satisfy its users' needs.

3. Serials control management functions should include mechanisms for monitoring cost as well as allowing for collection management, analysis, and development. Statistical data and report generation should be available on demand. Of particular importance is the ability to prepare reports based on system defaults and also on parameters specified by the library on a case-by-case basis. In addition to management reports, the ability of generating title and holdings lists for use by bibliographers, selectors, and public service librarians is desirable. Of increasing importance is the ability to use automated applications to record information regarding preservation or "last issue held" status as part of regional collection development programs.
4. A user interface offering both novice and expert levels of interaction is needed. In addition, if the system will be accessible to library patrons, a public-access module is mandatory. Screen displays should present essential information in a clear and uncluttered format with context-sensitive help readily available throughout the system. Also desirable is the ability for librarians to edit or change help screens to accommodate local requirements. For example, if a search is unsuccessful or the desired issue is at the bindery, what should the user do? Unambiguous error messages are a must with error conditions generating a diagnosis of possible causes, possible solutions, and a clear indication of how to proceed.

The list of features desirable in a conventional serials control package is long. As in all automation projects, trade-offs will exist. Ranking the features a library requires and developing a strategy for determining when to reject a system because it fails to meet specifications and when to compromise on required capabilities is a valuable tool in system selection.

PITFALLS IN IMPLEMENTING A SERIALS CONTROL APPLICATION

Many of the pitfalls in implementing automated systems have been documented in the literature. The aphorisms outlined here are intended to demonstrate that as much as things may change, some remain the same.

Beware of the Buggy Whip Holder: In the early days of automobile design, many cars were equipped with a slot for a buggy whip holder, an anachronism from the days of the horse and carriage. This practice underscores a frequent flaw in system design—replicating an earlier system. Frequent assessment of system design should be undertaken to assure that the new application does not simply mirror an existing system with a few additional bells and whistles.

Observe the Power of the 80-20 Rule: This rule suggests that 80 percent of all cases can be accommodated by 20 percent of the total programming

in any application. Libraries have been known to devote a great deal of time and effort to resolving 20 percent of the cases with 80 percent of the available resources.

Beware the Sands of Time: Unrealistic timetables and pressures to implement applications "on the fly" cause many otherwise well-planned automation projects to fail. Serials control is inherently a data-sensitive function requiring frequent reuse of the same record for a variety of functions. While the old adage "garbage in, garbage out" may be dated, it is nevertheless true.

Haven't I Seen You Somewhere Before?: A maxim enjoying some currency in professional circles is that no library does its retrospective conversion only once. A system that imports data already in machine-readable form merits serious consideration.

WHEN YOU CHOOSE A SYSTEM, YOU CHOOSE A VENDOR

Many libraries approach evaluation of automation options by preparing a "wish list" of features, ranking them in order of importance, and then comparing available systems against these criteria. While evaluating functional specifications is a crucial component in system selection, when the system is chosen, so is the vendor. In the early phases of system implementation, libraries will rely heavily on the vendor for support. Therefore, when evaluating systems, libraries should prepare some criteria for evaluating the vendor as well. The following questions might be asked:

Is the company stable? Is it likely to be in business three to five years from now? Does the vendor have regional implementation, support, and training staff? Does the vendor's proposed timeline for system implementation appear to be realistic? Does the vendor have clear site-preparation guidelines? What provisions are made for on-site visits when problems arise? Who pays for them? Is a toll-free help line available? Does the vendor provide adequate training both in terms of time spent on-site and numbers of library staff trained? Is adequate documentation supplied? What is the cost of ongoing support and maintenance? Does the vendor have sufficient resources to maintain the software and eliminate "bugs" promptly? How often are software updates provided? What support can the vendor offer for data conversion and database preparation? Is ample time provided for a test period?

The quality of vendor installation, training, documentation, and ongoing support should be investigated carefully. Requesting a current customer list and making site visits to one or more of these clients is a must. While a system might not be eliminated from consideration based on evaluation of the vendor, prior knowledge of potential problems allows the library to prepare acceptable alternatives or solutions.

SYSTEMS OF THE FUTURE

One of the underlying strategies for any automation initiative should be delivering information to the user when, where, and how he or she needs it. Emphasis on this mode of thinking calls for the development of a new

model for evaluating automation needs and designing or identifying solutions.

Development of the ability to link many disparate sources of information will be crucial in advancing to the next generation of automated systems. Linkages among abstracting and indexing services, full-text databases, local serials control systems, online public-access catalogs, circulation systems, and regional or national union lists are the minimum connections necessary to make a one-stop-shopping approach to serials a reality. Greater emphasis by libraries on article-level control is needed. In addition, links between abstracting and indexing services and serials check-in modules should allow for the extension of cost-effective current awareness services to a larger group of users.

On a national level, the Linked System Project (LSP) is laying the groundwork for a standard network interface facilitating data exchange among disparate systems. Implementation of the International Standards Organization's Open Systems Interconnection (OSI) Reference Model is already under way by several vendors of integrated systems. The OSI provides a standard computer-to-computer protocol, eliminating concerns with the vagaries of screen formats and local data display formats. Strides made under the aegis of LSP demonstrate clearly that technical barriers to linking systems can be surmounted.

In conjunction with fostering intersystem gateways, librarians must be vigilant in protecting their rights to unimpeded sharing, transfer, and access to bibliographic and holdings data. With declining budgets and an identifiable migration to local systems, it is imperative that the channels of information delivery be explored, charted, claimed, and controlled by libraries, not by corporations with their own agendas.

Advances in electronic publishing promise new horizons and new problems for serials automation. The tasks of integrating electronic publications into library collections and providing easy access to the information are formidable.

Information delivery is accomplished in an increasingly fractured and heterogenous environment characterized by new modes of access and changing patterns of library use. This is a trend that begs for rapid development and deployment of new technologies. Serials librarians are in a position to chart future access channels to important segments of the published literature. Central to the success of this effort will be turning our attention from the control issues addressed by earlier automated systems to the access issues demanding resolution in state-of-the-art applications. The agenda is an ambitious one. And not unlike serials themselves, it promises to be continued indefinitely.

REFERENCES

1. Wilma Reid Cippola, "Finding a Way Out of the Serials Maze," *Library Resources & Technical Services* 32:151-58, (Apr. 1988).
2. Andrew D. Osborn, *Serial Publications: Their Place and Treatment in Libraries* (Chicago: American Library Assn. 1955), p.281.

1988 Annual Reports

Resources Section: Annual Report

Increased costs of journals and the decreased value of the dollar were the dual themes that echoed through many Resource Section meetings during the year. With programs, publications, discussions, and planning for institutes, Resources addressed these and other concerns of librarians in acquisitions and collection development.

Members of the 1988 Executive Committee were William Schenck, chair; Nora Rawlinson, vice-chair/chair-elect; Sharon Bonk, secretary; Gail Kennedy, past-chair; and Martin Faigel, Helen Reed, Carolyn Bucknall, Ross Atkinson, and Arnold Hirshon, members-at-large. Ex officio nonvoting members were Linda Pletzke, Policy and Research chair; John Whaley, Jr., *LRTS* assistant editor; and Karen Muller, RTSD Executive Director.

Resources had two very successful, topical programs: 175 librarians attended a preconference at New Orleans on "Collection Development in the Electronic Age." Organized by Sam Demas and John Whaley, the program brought together librarians, educators, and publishers to learn about current developments in the packaging of information in electronic formats. The Library Materials Price Index Committee, chaired by Rebecca Lenzini, presented the program "Trends and Tools, Managing the Crises in the Library Materials Budget." This timely look at journal prices and library budget problems attracted a standing-room-only crowd of over 300.

Planning progressed on four future regional institutes. The Collection Management and Development Committee is planning two: one in Chicago in 1989 and one in Florida in 1990. The Acquisitions Committee finalized plans for an acquisitions institute in northern California in the spring of 1989 and began planning for one in the Northeast.

Resources continued its tradition of practical publications. The *Guide for Writing a Bibliographer's Manual* was published, prepared by a subcommittee of the Collection Management and Development Committee chaired by Carolyn Bucknall. The *Guide to the Evaluation of Collections*, prepared by a subcommittee chaired by Barbara Lockett, was approved for publication by the RTSD Publications Committee. The Acquisitions Committee sponsored "A Selected Bibliography of Library Acquisitions" by James Deffenbaugh and Hope H. Yelich, which was published in the *RTSD Newsletter*. Hearings were held at Midwinter on the publication *Statistics for Managing Acquisitions Operations*, prepared by a subcommittee of the Acquisitions Committee chaired by Eileen Hardy. Subcommittees

of both the Acquisitions and the Collection Development and Management Committee worked on preparing other publications.

The Blackwell North America Scholarship Award was presented to Joe Hewitt and John Shipman for their article "Cooperative Collection Development Among Research Libraries in the Age of Networking." This appeared in volume 1 of *Advances in Library Automation and Networking*. The authors named the School of Information and Library Science at the University of North Carolina, Chapel Hill, as recipient of the \$1,000 scholarship.

The RS Board attempted to address the problem of overlap among various ALA divisions through the appointment of liaisons to other committees both within RTSD and in other divisions. The Executive Board also continued discussion on the feasibility of dividing into two new sections—one for acquisitions and one for collection development.—*William Schenck, Chair, 1987-88.*

Preservation of Library Materials

Section: Annual Report

Among the significant accomplishments of the Preservation of Library Materials Section in Fiscal Year 1987-88 were the completion of the "Final Report of the Task Force to Examine PLMS Committee Structure" and the acceptance of that report by the PLMS Executive Committee. Underlying the work of the Task Force, established in December 1985, was the assumption that organizational changes within PLMS might be warranted in light of the rapid changes taking place within the field of library preservation itself.

Several of the recommendations made by the Task Force are being implemented during the 1988-89 fiscal year: the Physical Quality of Library Materials Committee and the Library/Binders Relations Committee have merged to form the Physical Quality and Treatment Committee, which will deal with a broad range of issues related to commercial binding, conservation, and care of library materials; a Preservation Program Management Committee has been created with management of local and cooperative preservation programs as its focus; a Publications Subcommittee of the Education Committee has been established to review and advise on all Section publications and to work directly with the RTSD Publications Committee; and the Policy and Research Committee has been renamed the Policy and Planning Committee, and charged with monitoring the planning efforts and accomplishments of Section committees. Task forces and subcommittees with clearly articulated goals will be established within standing committees as necessary, but will be collapsed as work is concluded.

Other organizational changes include establishing an Education and Outreach Discussion Group and a Physical Quality and Treatment Discussion Group; adding to the PLMS Executive Committee, as ex officio mem-

ber, the PLMS representative to the RTSD Budget and Finance Committee; and assigning to the member-at-large responsibility for tracking relevant legislative activities within and without ALA.

The restructuring of PLMS will help to ensure that strategic planning becomes routine within the various components of the Section, that all committees and discussion groups are well focused, that projects of various kinds are steadily undertaken and brought to completion, that there are ample forums for discussion of preservation issues, and that the Section is well integrated within the Resources and Technical Services Division.

Planning for several conferences and institutes proceeded throughout the year, and a preconference, *Management Strategies for Disaster Preparedness*, was presented at the 1988 Annual Meeting in New Orleans. Two publications, *Preservation Education Directory* (Susan G. Swartzburg, compiler) and *A Core Collection in Preservation* (Lisa L. Fox, compiler) were published through RTSD, and considerable progress was made on other works. The report of the Task Force on Controlled Vocabulary for the MARC 583 Field was accepted by the PLMS Executive Committee, and the Document *Standard Terminology for Field 583* forwarded to RTSD for distribution to requesters.

Discussion groups were highly informative and well attended. Topics addressed in 1987-88 included: managing commercial binding programs in low-bid environments; expanded services and products provided by commercial binders; selection strategies for preservation; use of preservation management tools; the role of medium-sized research libraries in the national preservation effort; preservation activities outside North America; and the activities of the Image Permanence Institute, National Endowment for the Humanities Office of Preservation, Commission on Preservation and Access, and many other groups engaged in preservation activities.

The Preservation Section is becoming increasingly complex; more members are becoming actively involved in its work; and the Section is contributing, to a greater extent, to preservation efforts being mounted in North America. The number and variety of projects under way suggest we can expect more of the same in the future.—*Jan Merrill-Oldham, Chair, 1987-88.*

Resources & Technical Services News: Collection Development, Media Multiplication

Cecilia Piccolo

Today's library collection developer is inundated with new product announcements, many accompanied with descriptions of equipment necessary for the use of the product. A thorough and ever-expanding knowledge of diverse storage media and technologies is required to make even basic choices. The same item frequently is available in more than one medium. The selection process therefore extends beyond the identification of materials to add to the collection to include the evaluation of the various media in which the materials may be presented. This evaluation requires everything from an understanding of use patterns or an appreciation of the value of features such as enhanced indexing or friendly search interfaces, to consideration of financial factors or the impact that a given purchase will have on the collection as a whole.

The product descriptions assembled here are intended not only to demonstrate the range of formats available and the complexity of selection decisions to be made, but also to provide some information, drawn from announcements received at the *LRTS* office, useful for collection developers.

ONLINE DATABASES

DIALOG's up-to-the-minute news database, *McGraw-Hill News*, can be searched using a menu-based interface developed to assist the less-experienced searcher. The same degree of selectivity as command-driven searching is maintained, according to DIALOG. The database can be queried by industry, subject, company name, or ticker symbol, or any combination of these categories. Data is derived from major news wires.

The National Library of Medicine (NLM), together with the Environmental Protection Agency, has developed *TRI (Toxic chemical Release Inventory)*, a database containing information about toxic chemical releases into the environment. Mandated by SUPERFUND legislation, *TRI* is available on NLM's *TOXNET (Toxicology Data Network)*. Users of *TRI*

Cecilia Piccolo is Catalog Librarian at the University of Arizona, Tucson.

Note: this column is based on information from press releases furnished by product manufacturers and distributors. No attempt is made to be comprehensive, and mention is not an endorsement by *LRTS* or *RTSD*.

have access to all *TOXNET* files and through an interface can access *TOXLINE*, *MEDLINE*, and other NLM databases.

NLM also offers *AIDSLINE* as part of its MEDLARS online databases. *AIDSLINE* will combine relevant references from NLM's *MEDLINE*, *CANCERLIT*, and *Health Planning and Administration* databases.

DIRECTORIES

Graphic Arts Employees of America (GAE) offers an *Analysis of Top Printing Companies* in the U.S. and Canada. An alphabetic list of companies, it includes ranking by sales volume, highlights new companies, and explains reasons for companies' falling from "top printing company" status. It is available for \$150 plus shipping charges from GAE.

The International Communications Industries Association (ICIA) offers *The New Equipment Directory of Audio-Visual, Computer and Video Products* for \$40. The *Directory* includes equipment for video and audio recording and projection, computer graphics and multi-image production, as well as furniture and storage systems.

Gaylord also offers an *Audio-Visual Catalog*, which displays more than 400 AV products. Included are furniture and storage and display systems as well as cleaning and maintenance products.

From Marina del Rey, California, at no charge, comes Bennett Marine Video's *1989 Catalog* of 500 videos for boating, diving, and fishing enthusiasts. Topics include travelogs, fishing instruction, and boat maintenance and repair.

CD-ROM

Moody's Investors Service has produced *Moody's 5000*, a CD-ROM disc containing business and financial information from Moody's Manuals. Searching capabilities include a wide variety of data elements as well as database scanning to match text or numeric strings. *Moody's 5000* features online help and a customer service hotline, and costs between \$2,500 and \$5,000, with discounts available.

EBSCO is distributing (for EBook, Inc.) the *Electronic Art Anthology* series, volume 1, issue 1, on CD-ROM. The series is intended to cover eight or more art "categories" such as Ancient, Medieval, and Renaissance. Volume 1, issue 1, is devoted to European painting and includes more than 1,000 entries. Electronic photographs are accompanied by text describing the work, the artist, and the collection that houses the work. An IBM PS/2 or compatible with a VGA graphics card and CD-ROM drive are required equipment; an Apple Macintosh version is forthcoming.

DIALOG OnDisc *MEDLINE Clinical Collection* is a single CD-ROM disc containing citations from 1984 to 1988 on clinical medicine only. Citations are drawn from *Abridged Index Medicus*, the *Bulletin of the Medical Library Association*, the *Annals of Internal Medicine*, and other sources. Quarterly updates and annual revision to incorporate MeSH vocabulary changes are planned.

EBSCO's weekly abstracting and indexing service for general magazines, *Magazine Article Summaries*, is available on CD-ROM. The database contains summaries of articles from more than 200 magazines published from January 1984 to the present. The CD-ROM product offers

Boolean searching of the text of the abstracts, highlighting of articles included in the library's holdings, and a complementary print edition with weekly updates. Prices are \$399 for an annual subscription (one disc per year), \$799 for a quarterly subscription (four discs per year), \$1,199 for a school-year subscription (nine discs per year), and \$1,599 for monthly discs. Hardware is also available.

Auto-Graphics, Inc., producers of the *Government Documents Catalog Service (GDCS)* on CD-ROM announced enhancements to searching capabilities. Number field searching has been expanded to include SuDoc and Report Number fields, and browsing features are improved. *GDCS* includes GPO records from June 1976 to the present on a single disc. Prices are \$1,750 per year for monthly updates and \$1,100 for bimonthly.

Bowker Electronic Publishing announces that LC classification numbers and CODEN designations are searchable on *Ulrich's Plus*, the CD-ROM version of the serials bibliography. An index of online and CD-ROM vendors is also included. Publications available on CD-ROM and/or online are identified, and citations are expanded to include brief descriptions, searchable by keyword. The cost is \$395, including quarterly cumulative updates.

VENDOR LISTS

Auto-Graphics, Inc.
3201 Temple Ave.
Pomona, CA 91768
(714)595-7204

Contact: Joel M. Lee

Bennett Marine Video
730 Washington St.
Marina del Rey, CA 90292
(213)821-3291

Bowker Electronic
Publishing
245 W. 17th St.
New York, NY 10011
(212)337-6989

Contact: Nan Hudes
(212)337-7009

DIALOG Information
Services, Inc.
3460 Hillview Ave.
Palo Alto, CA 94304
(800)334-2564

EBSCO Subscription
Services

For EBook's
Electronic Art Anthology

(800)888-3272 or
Contact:
any EBSCO regional office

For *Magazine
Article Summaries*
P.O. Box 325
Topsfield, MA 01983
(800)221-1828 or
(508)887-6667

Gaylord Bros.
Box 4901
Syracuse, NY 13221-4901
(800)448-6160 or
(315)457-5070

Graphics Arts Employers
of America/PIA
Employer Resource Group
1730 N. Lynn St.
Arlington, VA 22209
(709)841-8150

International Communications
Industries Association
3150 Spring St.
Fairfax, VA 22031-2399
(703)273-7200

Moody's Investors Service
99 Church St.
New York, NY 10007
(800)342-5647 or
(212)553-0435
Contact: Jack Zwingli
(212)553-0870

National Library
of Medicine

Public Information Office
8600 Rockville Pike
Bethesda, MD 20894

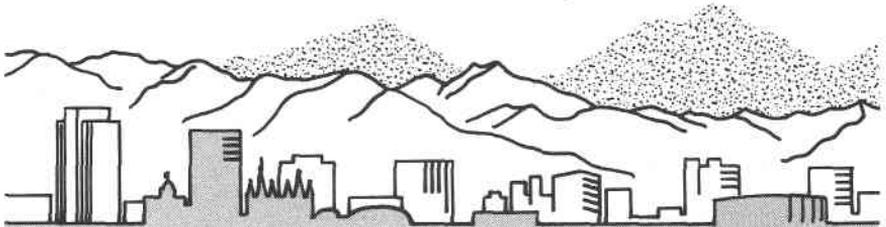
For *TRI/TOXNET*
Contact: Bruno M. Vasta or
Philip Wexler
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Book Reviews

Richard D. Johnson, Editor

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Anglo-American Cataloguing Rules.

2d ed, 1988 revision. Prepared under the direction of the Joint Steering Committee for Revision of AACR. Ed. by Michael Gorman and Paul W. Winkler. Ottawa: Canadian Library Assn.; London: Library Association Publishing Ltd.; Chicago: American Library Assn., 1988. 677p. \$29.50 (ISBN 0-8389-3346-7); paper, \$22.50 (ISBN 0-8389-3360-2);

looseleaf with binder, \$40 (ISBN 0-8789-3361-0). LC 88-19349.

Those of us old enough to remember the anguished howls and monumental upheaval that greeted the advent of the original AACR2 in 1978—howls that subsided over the next decade to under-the-breath muttering as the JSC and LC periodically had a go at revision and interpretation of the new rules—we veterans, both catalogers and teachers of

cataloging, awaited the long-heralded appearance of *AACR2*, 1988 revision, with more than casual interest. So now that the consolidated, updated *AACR2R* is here, what will it do for us? The most obvious improvement is that we can now retire our much-thumbed, much-annotated, much-pasted-over brown *AACR2* in favor of the new, forest green *AACR2R*, which integrates both published and unpublished revisions authorized by the Joint Steering Committee, 1982-88. Among the additions and emendations, we find a new chapter on computer files, together with new rules on materials for the visually impaired, subordinate corporate bodies, uniform titles for music, and additions to geographic names. However, these and other rules for the description of cartographic materials, digital sound recordings, and videorecordings will look perfectly familiar to catalogers and educators who have kept up with the JSC rule revisions; in fact, we have long since incorporated most of them into cataloging practice.

In addition, the editors of *AACR2R* have corrected obvious errors and made minor modifications in the wording of previously existing rules. Some new examples have been added to illustrate the rules; a few examples that were perceived as being confusing have been deleted.

Thus, for the most part, *AACR2R* will be gratefully received and easily integrated into our professional routines. However, for North American catalogers, the distinction between rules as specified in *AACR* and policy decisions and rule interpretations as set forth periodically by the Library of Congress in its *Cataloging Service Bulletins (CSBs)* as well as the looseleaf *Library of Congress Rule Interpretations (LCRIs)* is often blurred. Certainly those cataloging agencies that contribute to cooperative bibliographic databases are committed to following cataloging standards set by the Library of Congress as enunciated in *CSBs* and *LCRIs*. For example, for several years, catalogers in the United States have fol-

lowed the Library of Congress' lead in constructing a uniform title for each serial entered under title where the title proper is identical to the title proper of another serial in the catalog. This useful practice has not been adopted by the Joint Steering Committee and thus does not appear, as might have been hoped, in *AACR2R* Chapter 25. In addition, to cite another example, shortly after *AACR2* (1978) appeared, the Library of Congress decided not to follow *AACR2*'s somewhat complex practice of listing government agencies as well as kings and queens of the United Kingdom under the country's official name, which changed from England through Great Britain to the United Kingdom at various periods of British history. The Library of Congress, with American catalogers following suit, decided to continue to establish such headings using "England" through Elizabeth I and "Great Britain" from James I through the present. As is evident from examples in *AACR2R* Chapters 22 and 24, *AACR2R* continues to diverge from Library of Congress, and thus North American, practice in this regard. Cataloging agencies that follow LC practice will need to continue to refer for guidance to the Library of Congress' rule interpretations and decisions rather than following the rules in their entirety as they appear in *AACR2R*.

Although for the most part, rule numbers in *AACR2R*, as well as the general format and style, are identical to those of the 1978 code, catalogers will want to compare the two editions rather carefully to note differences. To cite only one example, *AACR2* 22.16A is now rearranged to appear after the rule for adding dates of birth and death to personal names, appearing as *AACR2R* 22.18.

When *AACR2* appeared in 1978 most libraries had card catalogs; the automated processing of bibliographic data was for most of us almost a futuristic idea. Nonetheless, *AACR2* was criticized by some cataloging experts as being "too traditional in its approach, too firmly rooted in the pre-machine pro-

cessing era of bibliographic control." As I commented in the first edition of my *Handbook for AACR2* (ALA, 1980), the 1978 code might have been "an interim code on the way to a truly revolutionary concept of computer-oriented bibliographical control" (p. 8). Perhaps code makers, remembering the bloodletting of a decade ago, have grown cautious, or perhaps with the advent in many libraries of online catalogs our time and interest have been diverted to more sophisticated methods of manipulating conventional cataloging data in an online environment rather than radically rethinking rules for access and control of bibliographic collections. Whatever the reason may be, as its title would indicate, the 1988 revision of *AACR2* is firmly in the mainstream of its predecessor. As Charles Ammi Cutter put it, "Still I can not help thinking that the golden age of cataloging is over, and that the difficulties and discussions which have furnished an innocent pleasure to so many will interest them no more. Another lost art. But it will be all the better for the pockets of the public, or rather it will be better for other parts of the service . . . the information desk, perhaps." (Cutter, *Rules for a Dictionary Catalog*, 4th ed., 1904, p.5)—Margaret F. Maxwell, *Graduate Library School, University of Arizona, Tucson*.

AACR2R: EDITOR'S PERSPECTIVE

The Anglo-American Cataloguing Rules, second edition, 1988 revision.

Legend has it that, once upon a time G. K. Chesterton, the voluminous author *par excellence*, was strolling in Piccadilly when he heard a little boy say to his mother, "What is that man for?" The portly GKC retired to a pub in a state of considerable existential distress.

The question that is springing to the lips of young and old when confronted with the recently published revision of

the second edition of the *Anglo-American Cataloguing Rules* (now officially initialized as *AACR2R*) is, What is this book for? This article is an attempt to answer that question.

Let us begin with what *AACR2R* is *not* for. It is not intended to embody the kind of revolution in thinking about descriptive cataloging that *AACR2* represented. In short, it is not *AACR3*. The rules have not been radically recast, nor do the changes found in *AACR2R* result from any basic rethinking such as, for example, that which resulted in the relationship between descriptions and access points delineated in *AACR2*. The facts are that the world changes (arguably more now than before), that documents that record that world change, and that bibliographic standards must be revised in order to accommodate those changes. It is the last that is the *raison d'être* for *AACR2R* and its successors (*AACR2R—AACR2Rn?*). On careful examination, *AACR2R* is revealed to be a tribute to the fundamental soundness of the internal structures of, and principles underlying, *AACR2* because it demonstrates that those structures and principles are hospitable to the often major changes in the nature of some library materials that have occurred in the last decade. As well as changes in library materials, *AACR2R* incorporates the results of some changes in descriptive cataloging theory and practice (usually in the direction of simplification of both). It also contains some changed and more modern examples; some rewriting of rules to achieve greater consistency and clarity of expression (see the appendixes in *AACR2R* for examples of the latter); and the elimination of errors, inconsistencies, and anomalies in the 1978 text.

In the early years of this decade, the Joint Steering Committee for the Revision of AACR (JSC)—the *fons et origo* of all decisions relating to The Text—issued three packets of revisions to *AACR2*. These were designed to be cut up and pasted over the sections that they replaced or in the general vicinity

of the rules to which they were additions. These revisions have been integrated into *AACR2R* and any changes consequent on their addition have also been made. The JSC has also decided since the publication of the revision packets on a number of revisions that were not published until they appeared in *AACR2R*. Then there is the question of the draft revision of Chapter 9—of which more later. At this point it *may* be useful to describe briefly the method of operation of the JSC. The JSC consists of representatives of the Australian, British, Canadian, and U.S. "authors" of *AACR2*. It and it alone can make revisions to The Text. The process by which JSC does that is as follows. It considers proposals for revisions from, and only from, the "author" bodies or their duly constituted committees (in the U.S., that committee is the Cataloging and Classification Section's Committee on Cataloging: Description and Access). If the JSC reaches agreement in principle on a particular revision, that revision is turned over to a harmless drudge (or "editor") who proceeds to draft a detailed revision. That revision is then criticized and returned for redrafting. This process is normally repeated several times. Eventually a final revision is agreed due to a meeting of minds or exhaustion or a combination of the two. (The last is the most common case.) In the course of the work involved in incorporating agreed-upon published and unpublished revisions, the JSC considered numerous nagging unresolved questions. The revision process detailed above was invoked, and the resulting revisions were also incorporated into *AACR2R*. Finally, the editorial work involved in incorporating all of these changes turned up a number of infelicities, inconsistencies, and rough edges. Not the least editorial effort was expended in attempting to remedy these.

Now to detail. Bibliographic standards (codes, classification schemes, and the like) are attempts to freeze time. In publishing such a thing, one is

defining a bibliographic universe as it is and hoping, always in vain, that that universe once defined will not change. The creators of bibliographic standards are always saying, in essence, "stop the world, we're getting off." And, of course, the weary old world keeps turning and the beautiful bibliographic butterfly refuses to stay pinned to the board of time. One of the most dramatic recent examples of this phenomenon is that of the descriptive cataloguing of computer files. When the 1978 *AACR2* was published, universally available inexpensive microcomputers and their commercially published software were the stuff of science fiction and the dreams of paperless-society soothsayers. By the early to mid-1980s, they were accomplished facts and the software was piling up uncataloged in libraries all over the country. The fact was that the chapter on "machine-readable data files" was plainly inadequate to deal with these new materials. A revision, retitled "computer files," was drafted and published in 1986. The numerous responses that the draft revision evoked were taken into account in writing *AACR2R*'s Chapter 9. This chapter redefines its scope; revises the sources of information; distinguishes between the treatment of software to which the cataloger has physical access and those to which he or she does not (including the hitherto undreamed of omission of Area 5 [Physical description] in the cases of "remote" software); provides for the use of Area 3 (File characteristics) to include data on the nature of the software ("data" or "program") and the number of records, statements, etc.; and provides for a *mandatory* system requirements note, which appears first in Area 7 (Notes). Other, less consequential changes from the Chapter 9 we had come to know and loathe are to be found in *AACR2R*.

The change in the nature of computer software collected by libraries is probably the most dramatic example of technology forcing a change in cataloging rules. It is, however, not the only ex-

ample. The most obvious other example in *AACR2R* is that of digital sound recordings. Area 5 (Physical description) in Chapter 6 has been revised to allow for an indication of whether a recording is digital or analog. Corresponding changes have been made in Area 7 (Notes). Recent changes in the nature of videodiscs have necessitated changes in Areas 5 and 7 of Chapter 7. At the time when the manuscript of *AACR2R* was handed over to its long-suffering publishers, the newest mass-market technological innovation—the digital audiotape (DAT)—was still banned in the United States. As with all such Canute-style measures, the DAT ban is bound to fail. Alas, industry standards have yet to gel and *AACR2R* contains only a vague reference to the cataloging of DATs. Its users will have to look to LC for guidance at the not-too-distant time when they are faced with the cataloging of these cunning little marvels.

Enough of technological wizardry. There are changes in *AACR2R* that arise not from changes in the physical objects with which we have to deal but from reconsiderations of existing cataloging policy. It is this type of change that is meat and drink to the true cataloging aficionado and bitter poison to the library administrator. Cataloging is a scientific art. As such, it is constantly subject to the assaults of inquiring minds and to the reassessments that thoughtful people will always give to the structure within which they work. Changes resulting from this process should be viewed as a healthy response to objective facts and not as irritating aberrations. The rules covering when a title proper is deemed to have changed are a prime example. The creation of a new entry for a serial will often hinge on a decision as to whether such a change has occurred. If the *Mussel Bottlers' Gazette* changes its title to *Moules and More*, there is no doubt as to the verdict. If, however, *The Quail Hunter's Journal* becomes *Quail Hunters' Journal*, the serial cataloger's brow becomes more furrowed. Essen-



"Hello Erica? Can you imagine? My father gave me a microfiche for my birthday! Isn't that *dumb!* I told him I wanted a *book!* He said, 'It is a book. Take it to the library.'

"So I did, and guess what! He was right. It is a book. But it's in *French!* Isn't that *dumb!* It's by *Diderot.*

"If you need any French books on microfiche, try calling my father. He's got thousands."

--Juliet Ross



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tially, *AACR2*'s ruling on this matter was that the title had changed if one or more of the first five words (other than an initial article) had changed, or if an important word (noun, adjective, etc.) was added or deleted, or if the order of the words changed. This ruling was not consonant with the *Guidelines* of the International Serials Data System—an important factor in the world of international bibliographic standardization. The *AACR2R* stipulation is now, in summary form, that a title is considered to have changed if any word other than an article, preposition, or conjunction is added, deleted, or changed or if the order of the first five words is changed. This simple rule is then qualified by a number of exclusions and further refined by an "in case of doubt" clause that tilts in favor of a change in title and, hence, a new entry. It is my earnest hope that the new rule will help to alleviate the wretchedness of the serial cataloger's working life.

The rules in Part I have been reviewed closely for instance of relevance to the cataloging of materials for the blind and otherwise visually impaired. There are numerous additions and refinements to the descriptive rules in *AACR2R* ranging from the addition of "braille" as a general material designation (GMD) and the license to add "(large print)" and "(tactile)" to GMDs when appropriate (e.g., "[map-tactile]") is now a permissible GMD), to specific provisions such as the option to specify that a particular raised-image item is a thermoform copy in Area 5 (Physical description).

The use of parallel statements in bibliographic description has been carried to new heights by *AACR2R*. Hitherto-undreamed-of examples of parallelism (in editions, places of publication, names of publishers, series titles, series statements of responsibility, etc.) are allowed and, in some cases, prescribed. Those countries and regions fortunate enough to be bi-, tri-, or quadrilingual can join the happy *AACR2* family without worrying.

On examination, it was revealed that

the rules in Area 5 (Physical description) dealing with the matter of accompanying material in each of the chapters of Part I were inconsistent both in their substance and expression. A basic new rule, appearing in rule 1.5E, was agreed to. The .5E rule in subsequent chapters merely refers to the Chapter 1 rule. The new rule on accompanying material reads: "Material issued with, and intended to be used with, the item being catalogued." This lapidary definition should clarify any doubts in the cataloger's mind. The main changes in the rule itself are that, when one is adding a designation of accompanying material to the physical description, the number of units is always given (e.g., "+1 set of teacher's notes" not "+ teacher's notes") and the cataloger is exhorted to use a specific material designation whenever possible. The cataloger is allowed, as an option, to add a physical description of the accompanying material to its designation.

In Part II (Access points), the most important changes concern pseudonyms, geographic names, headings for some subordinate corporate bodies, and music uniform titles.

In *AACR2*, when one is dealing with a person that uses a number of pseudonyms (or his or her real name and one or more pseudonyms), the emphasis is on the search for a "predominant" name. Only if such a name cannot be identified is the cataloger allowed to use two or more headings for the same person. Two theoretically and practically important changes in *AACR2R* reverse this policy. The first deals with separate bibliographic identities—the rare but theoretically important cases in which a single human being is two or more authors (Dodgson/Carroll being the paradigm). *AACR2R* prescribes that each bibliographic identity be assigned its own heading. The second concerns "contemporary authors"; in this case the heading for each work is the name that appears in manifestations of that work. This simplifies the cataloger's task and undoubtedly provides convenient access to the catalog user. The only

problem is in the use of “*contemporary author*.” This last includes, but is not limited to, living authors. LC and its ABACUS confederates will have to provide guidance on the contemporaneity or otherwise of individual authors. Such judgments are, in any case, subject to the devastation wrought by time. Today’s contemporary is tomorrow’s distant memory.

There has been a drastic simplification of the rules in Chapter 23 (Geographic names) that concern the additions made to distinguish between, or to identify, geographic names. The convoluted rules found in AACR2 have been replaced by some shorter, simpler instructions that, in essence, state that the addition for names in certain federal nations (Australia, Canada, Malaysia, United States, USSR, and Yugoslavia) is the name of the state, province, region, etc.; for all other places (*except* those in the British Isles) the addition is the name of the country. As for places in the British Isles, the addition has been changed from the name of the country to the name of one of the constituent parts of the two nations that occupy the British Isles. To John of Gaunt the British Isles may have been scepter’d and set in a silver sea; to the average North American cataloger they and their inhabitants appear to have been put on earth to upset and annoy. The only topic that is more obscure and irritating than the difference between “Snodgrass, *Lady Hortense*” and “Snodgrass, Hortense, *Lady*” (I *could* explain it but I won’t) to the average red-blooded North American cataloger is that of British geographic names. If you want to stir up trouble in the hallowed halls of LC, just ask why the addition to certain place names is “Isle of Man” or “Isle of Wight” and not “England” or inquire about the exact bibliographic status of the Channel Islands.

The rules on music uniform titles have been more or less completely rewritten. This rewriting is a response to the universal lack of satisfaction with the wording, content, and order of

those rules in AACR2. The first notable change is the introduction of the term “initial title element,” which is defined, by exclusion, as what is left of a music title when you have omitted the medium of performance; key; opus, etc., numbers; date of composition; initial articles; and adjectives, etc., added to the original title. This reformulation achieves the same results as were intended by AACR2, But with more clarity and ease of use. The rules then go on to specify, in considerable detail and length, the additions that are made to the initial title element in order to create a complete uniform title. The rules in AACR2R on this matter are easier to understand and more comprehensive. They should, therefore, produce more consistent results.

The rules on the form of heading for subordinate corporate bodies have, over the decades, been changed in the direction of fewer subordinate entries. It has long been felt that direct entry is more “user-friendly” not least because it produces more manageable files. AACR2R has taken this process a step further. Specifically, the “Type 3” instructions (this is for hard-core catalogers only) have been altered from AACR2’s vague and subjective “A name that has been, *or is likely to be* [emphasis added], used by another higher body for its subordinate or related bodies” to AACR2R’s more restrictive and objective “A name that is general in nature or does no more than indicate a geographic, chronological, or numbered or lettered subdivision. . . .” (The “Type 3” for government bodies is similar in wording and the same in intent.) This new rule only applies to bodies with names like “Library” or “Region 4” or “Class of 1941.” AACR2R prescribes subordinate entry for fewer corporate bodies than does any of its predecessors.

There are numerous changes in wording substance, and examples that are less important than those described above. In addition, there are numerous changes that have *not* been made (to take an example not entirely at random,

the abolition of main entry) that seem long overdue. However, this is *AACR2R* and not *AACR3*. It has improved on the virtues of *AACR2* and has retained many of its faults and anomalies. It is still, pound for pound, the best descriptive cataloging code there has been and still a never-failing source of bibliographic information and entertainment for catalogers and lapsed catalogers alike—*Michael Gorman, Editor, AACR2 and AACR2R and Dean of Library Services, California State University-Fresno.*

**DEWEY DECIMAL
CLASSIFICATION,
20TH EDITION:
A REVIEW ARTICLE**

Dewey Decimal Classification, 20th ed., ed. by John Comaromi. Albany: Forest Press-OCLC, 1989. 4v. \$200 (ISBN 0-910608-37-7). (Printed on permanent paper.)

The twentieth edition of the Dewey Decimal Classification (DDC 20), long heralded and impatiently awaited for quite some time, is available now and being received in thousands of libraries in the United States and abroad. Is this an update of which Melvil Dewey would approve? How has the balance been struck between maintaining the integrity of numbers and reflecting accurately the development of knowledge and subject relationships? Will librarians and library clients using the classification find it an improvement over the nineteenth edition and worth the time, cost, and energy to adopt and implement? This review article attempts to answer those questions as well as describe the contents of this new edition and departures from the previous one.

MAJOR CHANGES IN CONTENT

As users of DDC might expect, DDC 20 includes several kinds of changes: phoenixes, now called "complete revisions," the largest and most far-reaching changes involving the entire revision and, usually, relocation of a

schedule; other, less dramatic revisions; minor changes intended to tie up loose ends or achieve a desired symmetry of expression or subdivision; and expansions to accommodate new subtopics that have emerged or risen to importance in the literature of a subject. The description that follows is loosely organized into phoenixes, other revisions or expansions, and relocations.

Phoenixes: Two phoenix schedules already published as separates^{1,2} and widely publicized in the literature are included in DDC 20: Data processing/Computer science (both terms appear in the heading) at 004-006, previously 001.6+; and Music, still at 780-89, but with the completely new arrangement of topics and subtopics found in the 1980 draft schedule. This new arrangement is based on analyses of the literature of this field performed for the *British Catalogue of Music*. The two phoenixes should not surprise any classificationist who stays abreast of developments in DDC (e.g., the draft music phoenix was published more than eight years ago), but will require careful planning and commitments of staff time and money to implement in libraries where the draft revisions went undiscovered or, worse still, were ignored.

It is unfortunate that the principle of phoenixing elicits so much resentment and anger from classification managers, for these two phoenixes are enormous improvements over the previous schedules. The expansion of Data processing/Computer science to three full sections of its own addresses the previous lack of recognition and accommodation for the variety of subtopics and sub-subtopics in the hierarchy of this burgeoning field. It obviates starting general works in the field with a five-digit number—001.64—or imposing seven-digit numbers on simple subtopics, even with no subdivisions added for form, geography, or other special aspects. The findings, published in late 1988, of Schroeder³ and Rooke,⁴ who experimented with the application of 004-6 to existing library

collections, should encourage librarians who have yet to try it. Both found the new schedule easy to understand and apply as well as resulting in a more logical and usable collocation of materials on the shelves.

The new music schedule also generated a minor barrage of literature when it appeared,^{5,6} and it will undoubtedly elicit more now that it is incorporated into the full edition. The nature of contemporary music research and other literature searching in the field by performers and music lovers is better served by employing the special facetting it provides (see 780.1-.9) as well as changing the new structure from a division between compositional character and performance medium to a unified arrangement according to the type of performance medium alone (i.e., voice, ensembles, instruments). Reserving 789 as an optional section for composers and/or traditions of music (although 781-88 clearly is preferred for the latter) offers great flexibility in choosing arrangements for large collections of materials. I would opt to put musical biographies in 789 with cutter numbers for an alphabetic subarrangement rather than scatter them throughout the division.

Other Expansions and Revisions: Smaller expansions for computer-based communications, television and other mass media can be found at 384+ (combining the short schedule for general communications literature at 380.3) and 791.4+ as well as at 621.38+ and 621.39+ for related hardware and engineering (this last, the new number for computer hardware, replacing 621.38195) and electronic games at 794.8+. Newer communications media such as electronic mail, videotex, and the variety of free and pay TV options currently available are all listed at 384+. The listing here, too, of VCRs, rather than putting them exclusively in 621.388 with the rest of TV hardware (where "Video recorders and recordings" is used in place of the acronym), will confuse some library clients and classifiers. The eternal

struggle between the disciplines over fields such as these continues.

Other subject areas that have been expanded in DDC 20 include:

- Systems at 003, formerly an undeveloped and amorphous class, now is developed clearly, devoted to operations research, systems theory, and related topics;
- Civil rights is moved up the hierarchy from 323.4 to 323, while Political parties at 324.1-.23 is considerably expanded;
- Energy at 333.79 (called "Energy and energy resources" in DDC 19) now includes production (formerly 338) and financial aspects, renewable/alternative sources, and specific uses;
- Social problems and services at 362-3 now covers more specific developments for substance abuse at 362.29 (called "Addictions" in DDC 19) and waste disposal—one of society's growing problems—at 363.728+; Adult education at 374 now emphasizes government involvement instead of self-education and specifies more examples under schools and other topics;
- States of matter at 530.4 now is subdivided much more deeply—from four subtopics to twenty—and specifies important areas of current research;
- Weightlifting, gymnastics, and other track and field sports we view in prime time on "free" network TV broadcasts of Olympic events (although, in my opinion, the psychological cost of watching commercials is every bit as onerous as paying a monthly bill) as well as on pay TV sports channels are developed now at 796.4+;
- and, finally, there is a large expansion at 972.8+ furnishing historical periods for each of the Central American countries instead of a single chronological subdivision for all of them. These and other expansions at 968+ for Southern Africa, etc., exhibit the perspec-

tive that a country's history really begins with the arrival of Europeans. It is too bad that, for such highly sensitive areas, the revisers did not exercise the principle of organizing all knowledge that underlies DDC, and lend balance by revealing the non-European historic view. Instead, the principle of literary warrant seems to take priority, and is reflected in these schedules.

Generally, wherever we might see "Historical and geographical. . ." in DDC 19, we find "Historical, geographical, persons. . ." in DDC 20, emphasizing the practice of preferring biographies being grouped with their subject areas. Other language changes are more dramatic: Names in the index are consistent with the rules of *AACR2*, making it easier to match the language of the classification with headings established in the catalog. However, since the place names are given in the original language, it may shock some classifiers to see "Unterfranken Regierungsbezirk (Lower Franconia District)" in place of just "Lower Franconia District." As noted both above and below, small changes in terms make DDC 20 less archaic, judgmental, and biased than its predecessor.

Relocations: Keeping general and specific aspects of topics together at one number is an excellent principle, e.g., moving 380.3 to 384, and 380.5—general works on transportation—to 388 with the rest of transportation. Several more relocations serve to change the focus of interdisciplinary topics:

- Sociolinguistics, formerly with linguistics at 401.9, is now in Sociology at 306.44;
- Business arithmetic, formerly with Mathematics at 513.93, is now in Business at 650.01513;
- Time systems and Time instruments, formerly with Astronomy at 529.7+, are now, respectively, in Metrology and standardization at 389.65 and Precision instruments at 681.11;

- Dramatic music, formerly with Music at 782, is now "Stage presentation of dramatic music" in Drama at 792.5-.8; and,
- Athletic exercise, formerly with Recreation at 796.4, is now in Medical science (which I equate with Health) at 613.71.

Numbers for many geographic areas and peoples are changed and expanded. Generally, new place and period subdivision are for third-world areas and peoples, e.g., African countries, Chile, Melanesia, and native Americans, although expansions and revisions also include British Columbia, Germany, Belgium, Switzerland, and Japan. Table 2's treatment for South Africa records the geographic perspective of the ruling white minority, duly listing separate numbers for homelands, combining Soweto with Johannesburg, and so on. In table 5, Africans are neatly divided by language and/or ethnic origin so that Afrikaners are at -3936 with other Netherlanders while black Africans are at -96+. Classification might merely record what exists, but there are political implications in the numbers that will speak to those who are sensitive to their message.

The religion schedules include a large number of small relocations: Christian education moved from 207 to 268, and Christianity as an academic subject remains alone at the original number; the Second Coming moved from 232.6-.7 to 236.9, with other Last Judgment topics; the Salvation Army moved from 267.15 (Associations for religious work) to 287.96, with the Methodist subgroups; the Unitarian Church moved from its own section at 288 to the "other" category at 289 with the Universalists, Mormons, Seventh Day Adventists, etc.; and, finally, specific national churches that were separately listed in DDC 19 are combined with other area subdivisions in several places, e.g., from 281.93 to 281.94-.99, 283.3 to 283.4-.9, and 284.13 to 284.14-.19.

Language in this schedule was made more neutral, e.g., from "Primitive

and Oriental churches” to “Early church and Eastern churches.” It is a small but important improvement.

Demographic statistics, collocated in DDC 19 at 312 with all statistical topics, now are at 304.6021, appropriately, with Population or with the specific subject the statistics represent, by the addition of a mnemonic for Statistics, -021, from table 1 (i.e., T1-021).

Many topics in Architecture (720-724) are relocated and/or expanded, including Special topics at 720.4+, which now include Architecture and the environment and Multipurpose buildings, in addition to buildings for the “aged and infirm” (now called “late adulthood” and “ill”). Oriental architecture moved from 722+ to historic/geographic treatments at 720.9+, more appropriate to this general topic, instead of being placed with numbers reserved for specific schools and styles. Subdivisions for individual Oriental countries and periods are specified, too, furnishing better subarrangements for this rich literature.

In the numbers for Sculpture, the general instruction for geographical treatments of modern sculpture is replaced by two specific numbers for Asia (730.95) and the Indian subcontinent (730.954) although the use of the area subdivisions here has not changed. This confused me, because the omission of the instruction might be construed as intending to prohibit geographical subdivision. Numbers for schools and styles of sculpture (732-35) are expanded in definition as well as including some additional sub-subtopics.

FORMATTING CHANGES

The much-talked-about change to computer-driven printing has not changed the look of the pages dramatically, although the type fonts and sizes are slightly different. More important is the fact that easily manipulated machine-readable versions will be an alternative now to leafing through several thousands of pages in four fat volumes. The increase from three volumes

to four is the most visible formatting change. An additional volume enabled the print version to retain a generous page layout without crowding the data and with lots of white space to make both numbers and text stand out clearly.

Teachers of classification and novice classifiers will be much aided by the incorporation of a detailed manual within the body of the classification (in volume 4) instead of repeating the publication of a separate title as was done for edition 19.⁷ Adding this manual, not countless new numbers, caused the need for a fourth volume. Teachers, students, and practicing classifiers also will be glad of the numerous summaries found throughout the schedules; these provide overviews of topics covered at many levels of hierarchy, not only the first or most general ones, as well as many references to the manual.

Another welcome change is the elimination of *see* references from the Relative Index. More than a matter of the classifier's convenience, anything that eliminates additional look-ups is an economic boon over the long run, since less time need be spent flipping pages, resulting in lower searching costs.

One new notational device that causes me to stop to decipher slowly is the new referencing for the tables and numbers from the tables. An uppercase “T” precedes the table number, e.g., T2 is table 2 and T2-73 is the abbreviation for -73 from table 2. No doubt my eye and brain soon will cooperate in translating these instantaneously. (Students and librarians being introduced to DDC with this edition will never think about it twice.)

CONCLUSIONS

There are major changes in DDC 20—particularly the computer science and music phoenixes—but since they were published in draft and available for years, all of them could and should have been anticipated and their implementation planned and budgeted. Relocations that shift disciplinary focus for several interdisciplinary topics are

likely to annoy some users as much as they please others. The expansions, on the other hand, are welcome, since they accommodate finer subarrangements of literature already filling library shelves more or less randomly.

To conclude, here are this reviewer's answers to the three questions posed in the introduction:

Is this an update of which Melvil Dewey would approve? Answer: Perhaps. Dewey was a practical man much enamored of enabling things to go easily, quickly, and at low cost. DDC 20 seems to be more complex and ponderous than its predecessor, which may slow operations as well as add to overall costs. Despite good changes that reduce the number of digits for some topics and that incorporate manuals and other aids for classifiers, I suspect Dewey would dislike that there are many more choices to be made, many subdivisions that require consulting other schedules, and many numbers that clients and shelvees will judge overly long. Added to this is the fact of DDC 20's physical growth—four volumes to carry around instead of three—and the resulting costs in terms of psychological, if not actual, inefficiency.

How has the balance been struck between integrity of numbers and reflecting developments in knowledge and subject relationships? Answer: Fairly. There are certainly relocations that disturb the integrity of numbers; on the other hand, some dislocation is inevitable in the natural order of things, i.e., in the shifting boundaries between disciplines and in the unforeseeable paths that research takes. Changes that alter the focus of interdisciplinary subjects will satisfy classifiers who disliked the previous focus; but, since DDC is built on the principle of classification by discipline, it is ill-equipped to treat interdisciplinary subjects in ways that satisfy everyone.

Most of the changes in DDC 20 merely delve deeper into subject hierarchies without altering subject relationships. Small relocations outnumber large ones, and the computer science phoenix covers a subject in which hold-

ings are still relatively few in number, albeit growing rapidly. However, the music phoenix requires many internal shifts as well as external shifts to the 790s. Physical relocation problems will be exacerbated in the many libraries where music, music and art, and/or recreation collections are kept in special areas out of the normal sequence. Those librarians must know this is the price of customizing any standard tool and they should stand ready to bear the extra burden.

Will users find this an improvement and worth the time, cost, and energy to learn and implement? Answer: Probably. Computing, television, sports, religion, music, history, and art are much improved by the expansions and revisions. Libraries with large collections in any or all of these areas will be well served by the new edition. Small libraries or libraries whose holdings in these areas are of minor concern will not. I believe, however, that we would be hard pressed to find a library without sizable holdings in at least one of these areas, and most have numerous holdings in all of them. Library users have many benefits to reap from now until DDC 21.—Sheila S. Intner, *Simmons College, Boston*.

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The Complete Cataloguing Reference Set: Collected Manuals of the Minnesota AACR2 Trainers. 2v. Ed. by Nancy B. Olson and Edward Swanson. DeKalb, Ill.: Media Marketing Group/Minnesota Scholarly Pr., 1988. paper, \$285 (ISBN 0-933474-44-X).

This work is a compilation from the Minnesota trainers' manuals but with one significant difference. While the trainers' manuals used photocopied reproductions of the chief source of information, the examples here have been computer enhanced and are clear and easy to read. One of the best aspects of the book is the accurate portrayal of the item being cataloged.

The Complete Cataloguing Reference Set, which is in two volumes, contains 707 examples with descriptive cataloging and references to AACR2. Within each chapter, the examples are arranged in order of complexity. They were thoughtfully and carefully chosen to cover a wide range of topics. The volumes' dimensions, 22 by 27cm., allow two pages per sheet. The editors wanted to minimize page turning when studying the cataloging.

The introduction states that "many catalogers . . . dislike reading rules and rule interpretations." For this reason, text and bibliographical references are kept to a bare minimum. Most chapters have only a short introduction, and references are just to the Minnesota trainers' manuals, AACR2, and the *Cataloging Service Bulletin*. Many of the chapters include examples of MARC coding and tagging for OCLC input. There are no records for the other bibliographic utilities. The frequency of MARC tagging varies. For example, virtually all technical reports include tagging, but no early printed

materials or computer files include it.

The number of examples in each chapter varies greatly, with a high of 127 examples in the printed materials chapter to a low of 13 in the realia-kits chapter. There is no index. Scanning a chapter with 13 examples is acceptable, but scanning 127 examples is a bit daunting. Examples that apply to more than one chapter have been duplicated so that they appear in each appropriate chapter. I expect every chapter shares a few examples with other chapters. Of the 46 examples in the chapter "In" analytics, 29 are also in other chapters.

The cataloging should have been revised and updated rather than taken almost directly from the training manuals. For instance, the early printed materials chapter is based on AACR2 rules 2.12-2.18, whereas Library of Congress now uses *Bibliographic Description of Rare Books*. Some of the videocassette cataloging records omit type of cassette (e.g., VHS or BETA) or have unrevised 007 fields. The map chapter also needs revision. Some of the problems noticed were incomplete 007 fields, commas in 034 fields, no discussion of map series, and omission of statements of relief. In addition, the introduction to the map chapter should have cited *Cartographic Materials* (ALA, 1982), which most map catalogers use to augment chapter three of AACR2.

In the computer files chapter, fifty-eight of the sixty examples are about computer disks. I would have liked more examples for compact disks and some examples for remote access files. The sound recordings chapter contains no examples of compact discs.

Libraries that wish to have numerous examples of AACR2 cataloging might consider this set.—*Catherine Leonardi, Duke University, Durham, North Carolina.*

The Linked Systems Project: A Networking Tool for Libraries. Comp. and ed. by Judith G. Fenly and Beacher Wiggins. OCLC Library, Information, and Computer Science series, no.6. Dublin, Ohio: OCLC,

1988. 138p. paper, \$13.50 (ISBN 1-55653-039-0; 0-933418-35-3 [series]). LC 87-35004.

The Linked Systems Project (LSP) is a complex and far-reaching project with the objective of making it possible to link automated bibliographic services that use dissimilar computer systems. LSP represents the key element in meeting the goal of developing a national network by tying together information systems at all levels, as opposed to a monolithic nationwide network. The implications of LSP, while still indirect and in the future for most libraries, will eventually be direct and profound. This collection is an essential source for understanding the background and technology of LSP and for assessing possible future effects on the nation's libraries.

The Linked Systems Project: A Networking Tool for Libraries is a compilation of papers by leading authorities and experts who have been key players in the development of LSP. A number of papers are based on presentations at the highly successful LSP Preconference Institute, June 25-26, 1987, held prior to the ALA Annual Conference in San Francisco. These papers have been updated, expanded, and edited for publication. The volume attempts to be a full treatment of LSP in all its aspects—historical, organizational, technical, and bibliographical. It also provides different levels of treatment for technical and nonspecialist readers.

Introductory, background, and overview chapters are contributed by Henriette D. Avram, Beacher Wiggins, and Sally H. McCallum of the Library of Congress. Ray Denenberg, also from Library of Congress, describes "Standard Network Interconnection Protocols," and LC's Judith G. Fenly and John R. James contribute a nontechnical description of record transfer. Ed Glazier, RLG, describes file maintenance functions, and Kathleen Bales, RLG, discusses the functionality and structure of information retrieval. Other chapters cover

"Information Retrieval: User Interface," cataloging activities using LSP for both authority and bibliographic records, and LSP and local systems. An especially stimulating perspective is provided by David F. Bishop in his paper, "Linked Systems Project Costs." In an epilogue entitled "Future Uses of LSP Capabilities," Avram and Wiggins set the stage for "creative and imaginative" uses of LSP in the next decade. A useful LSP bibliography is appended.

This readable, informative collection should stand as the most convenient single source of information of LSP until it is outdated by future LSP development, at which time this work will become an essential historical document on this landmark project.—*Joe A. Hewitt, University of North Carolina, Chapel Hill.*

International Information: Documents, Publications, and Information Systems of International Governmental Organizations. Ed. by Peter I. Hajnal. Englewood, Colo.: Libraries Unlimited, 1988. 339p. \$27.50 U.S.; \$33 elsewhere (ISBN 0-87287-501-6). LC 88-2236.

The realm of international information is often a bewildering one, even to international documents librarians. Many times information produced and distributed by international governmental organizations (IGOs) lacks any usable knowledge on how to utilize the organizations' publications. *International Information* does an excellent job rectifying the situation.

This is an outstanding source for nearly every facet of international information, with chapters on collection development and arrangement, reference, bibliographic control, microform sources, and the systems and procedures of international governmental organizations. The editor brings together the topics with well-informed authors for each chapter.

In the preface, Hajnal states it is the purpose of the book "to aid researchers, librarians, documentalists, infor-

mation professionals, and other readers to understand, select, organize, and use efficiently" international information. In this, it succeeds admirably.

The first two chapters give an overview of IGOs, their purpose, and publishing framework. The next three chapters, "Bibliographic Control," "Collection Development," and "Arrangement of Collections," help library professionals to understand and choose options in maintaining their international collections. Bibliographic tools are explained and listed in chapter three, and the conclusions and recommendations given should help those librarians charged with the responsibility of developing an international collection.

In chapter six, "Reference and Information Work," Mary Fetzer begins by commenting that "[r]eference work and research involving documents and publications of international governmental organizations offer an exciting challenge"—a politely coined understatement of the frustrations often encountered in research with international information. This chapter and chapter ten, "The User's Perspective," give points of view from each side of the reference desk and help information professionals to be sensitive not only to their own perspective but also to that of their patrons.

The chapters "Citation Forms" and "Computerized Information Systems" address areas for which information is ordinarily difficult to find. Not only are different components of a citation explained but samples are given of a United Nations document, official record, and sales publication; an IGO publication; and journal article, among others, in various forms (LC, MLA, Turabian).

International information online is less accessible than information in general. IGOs have been slow in developing databases that are widely available. Chapter nine deals with computer databases, describing what is currently available and future developments. This chapter has the greatest potential

of becoming outdated.

A comprehensive listing of abbreviations and acronyms, an extensive bibliography, and an index round out the usefulness of this volume.

Any information professional working with international documentation can learn something new from *International Information*. It neither condescends to the neophyte nor uses lofty language that only the seasoned specialist could decipher. In other words, what Peter I. Hajnal has done is to compile a succinct yet comprehensive source of international information for every aspect of collection development, maintenance, and use.—*Michele A. Widera, University of Utah, Salt Lake City.*

Ethical Challenges in Librarianship.

By Robert Hauptman. Phoenix, Ariz.: Oryx. 1988. 110p. paper, \$22.50 (ISBN 0-89774-271-0). LC 88-1628.

Librarianship exists in a society that is searching for honesty, decency, quality, equality, and dependability on the part of its professionals—whether they be politicians, physicians, professors, preachers, or librarians. The crisis of confidence in government and public institutions is clearly evident in our professions as well. All too often the public sees the picture of the professional demanding certain rights and rewards with no reciprocal commitment to societal good.

In *Ethical Challenges in Librarianship*, Robert Hauptman focuses on surprisingly specific examples of the practice of librarianship where ethical implications are present. Hauptman has written skillfully and resolutely and, therefore, helps the reader see the "ethical challenges" involved in situations and services that might have otherwise been treated superficially. Add to this the author's statement that his stance is at times "diametrically opposed to general professional positions and ALA sanctioned principles" and the result is one of the most exciting publications in librarianship of the

1980s.

There are ten chapters in Hauptman's book. The first two deal with the general background for a study of professional ethics. Separate chapters are devoted to selection and technical services, access services, reference, ubiquitous computers, censorship, special problems, consulting, etc. Chapter ten is the conclusion. Each chapter, along with its one or two case studies, consumes about ten printed pages. Notes throughout the book refer to citations in the bibliography of more than 100 items, which in turn is a guide to further reading. There is also a helpful index.

At the outset, Hauptman identifies two diametrically opposed positions on the ethics of librarianship. One is that personal beliefs of the librarian must not under any circumstances influence his or her professional duties. The other is that the librarian must exercise specific and individual decision making and bear full responsibility for his or her actions in the provision of library services. The first position is said to be the traditional position of librarians and is identified with D. J. Foskett. The second position is that taken by Hauptman as an iconoclastic advocate. It may be preferable to think of the two positions as paradoxical rather than diametrically opposed. Hauptman also suggests that professional demands (ethics) may at times be in conflict with "ordinary ethics" (common sense or decency), in which case ordinary ethics must prevail.

LRTS readers are probably familiar with the ethical concerns identified in the chapter on selection and technical services, perhaps the least substantive chapter in the book. But the case studies deal with some real flesh-and-blood issues at work daily in all kinds of libraries. The chapters on reference and censorship contain most of the instances where Hauptman's view of ethical practice dissents from received wisdom (traditional and theoretical librarianship). He contends that principles, codes, etc., cannot control the social interactions of human beings in an

absolute way. In particular, Hauptman believes that point number five in ALA's code of ethics "perpetuates the myth that personal and professional ethical commitments are incompatible." He is also concerned that the code fails to insist upon individual responsibility for one's actions. According to Hauptman, "Protecting and advancing the free flow of information is commendable, but there may be times when it is ethically unacceptable."

The intellectual-freedom purist will not find some of Robert Hauptman's positions palatable. Nevertheless, his passionate advocacy of ethical practice needs to be heard, from the time of our professional education until the day of retirement.—*Don Lanier, Northern Illinois University, DeKalb.*

Current Technologies in the Library:

An Informal Overview. By Walt Crawford. Boston: Hall, 1988. 324p. \$38.50 (ISBN 0-8161-1886-8); paper, \$29.95 (ISBN 0-8161-1888-4).

This survey of presently available technologies of interest to libraries is, as the title indicates, an informal review of the field. The volume offers readable summaries of the scientific aspects and current applications of twenty specific developments, beginning, somewhat unexpectedly, with the printed page. Although potential readers might anticipate a focus on CD-ROM and computing for "current technologies," Crawford takes a broader view, putting the more recent developments in context.

The author makes a special effort to introduce the terminology, basic concepts, and some specific ways that major developments are apt to affect libraries at the present time or in the near future. As he states in the introduction, "This book is concerned with tools, techniques, and media rather than systems, solutions, and messages." It specifically does not address library automation systems as such. Following a brief history of printing techniques, the first half of the text discusses micro-

form, analog audio, digital audio, videocassettes, videodiscs, CD-ROM, digital publishing and optical storage, software for lending, and preservation considerations for the artifact, its image, and its information content.

Part 2 focuses on "Computers and Communications," with sections devoted to a historical overview and current applications of the various types of input and display devices, printers, graphics and speech related features, magnetic storage, telecommunications, teletext and videotex, electronic mail and telefacsimile, and local area networks. The volume is up to date as of early 1988 and includes indications of the likely continued success of each specific technological development. Crawford points out the dangers of assuming that a technology will succeed simply because it is feasible. Some announced features turn out to be "vaporware," and other promotions, such as teletext, find too limited an audience.

Although the sections devoted to each technology include more technical detail than many readers would want to try to absorb in a straight reading, the book will be useful for specific consultation, especially because of its excellent, extensive glossary (p. 283-309). Each chapter also ends with a brief, annotated bibliography of further reading sources. The sections are clearly organized for ready accessibility, and there is a full index (p. 311-324). This collection of basic information on the variety of active publishing media and computer and communications technologies is likely to be of particular interest to public libraries and library schools.—Karen L. Horny, *Northwestern University, Evanston, Illinois.*

Newspapers in the Library: New Approaches to Management and Reference Work. Ed. by Lois N. Upham. Monographic Supplement no.4 to *The Serials Librarian*. New York: Haworth, 1988. 167p. \$29.95 (ISBN 0-86656-688-0). LC 87-29866.

This collection is a sampler of sixteen articles intended to introduce the reader to a variety of topics related to newspapers. Published as a monographic supplement to *The Serials Librarian*, it closely approximates the style and content of a regular issue of that journal. The papers cover such diverse issues as bibliographic control, preservation, indexing, education, and even genealogical research. Upham has decided—no doubt wisely, given the proliferation of literature dealing with the topic—to concentrate on areas other than the United States Newspaper Program (USNP). Frequent reference to USNP is, however, unavoidable; and it is apparent that many of the authors were solicited through contacts made by the editor during her tenure with the Indiana Newspaper Project. The work strives to be a balanced introductory overview, but it ignores some important areas such as collection development. An introductory approach, also, could have benefited from a paper dealing with what constitutes a *newspaper* since at least three different definitions are presented by various authors.

The quality of the contributions is uneven. Some are quite good, notably Elaine Woods' overview article; the editor's own piece on uniform titles for newspapers, which should provoke much discussion in cataloging circles; and J. J. Hayden's introduction to new technologies in newspaper storage and retrieval. John Miller's piece on the Indiana Newspaper Bibliography Project should prove useful to individuals in states contemplating similar projects.

Not as successful is Robert Boots' treatment of military newspapers, which is much too sketchy and incomplete even for a self-described "brief overview." Hana Komorous' article attempts to cover both the activities of the IFLA Working Group on Newspaper as well as the Decentralized Program for Canadian Newspaper Preservation and Access. As a result neither is discussed adequately. A separate article on the Canadian project, perhaps comparing it with its U.S. counterpart,

would have been more interesting. Larry Murdock's contribution on genealogical research, while meant to provide a newspaper user's viewpoint, seems misplaced in this compilation. Its inclusion may be justifiable, however, solely on the basis of the author's description of librarians as a "special, saintly form of humankind." Several of the papers share a common flaw of much library literature, that of providing extensive institutional or project-specific detail without attempting to generalize on the basis of those experiences.

The intended audience varies from article to article, which is not surprising in a work of this nature. The work could have been improved by focusing on readers with similar levels of expertise, either introductory or specialist. Many of the papers are written at a fairly elementary level, providing little in the way of fresh insights for experienced practitioners, while others are quite technical and appeal to a specialized audience.

Since relatively little has been written on newspapers in the past few years, and most of what is available deals with USNP, this volume is a welcome addition to the literature. The book does not really deliver on the "new approaches" promised in the subtitle, but, despite its weaknesses, it does contain much useful information. Hopefully it will encourage additional research and publication on a long-neglected aspect of librarianship.—*Patrick F. Callahan, Ball State University, Muncie, Indiana.*

Advances in Serials Management: A Research Annual. Ed. by Marcia Tuttle and Jean G. Cook. V.2. Greenwich, Conn.: JAI, 1988. 212p. \$58.50 (ISBN 0-89232-672-7).

Serials librarians are the primary audience for this series. The editors' objectives—to cover all aspects of the serials chain, past, present, and future, and to encourage contributions from new librarians and the occasional

foreigner—are reflected accurately in this second volume. While the individual contributions vary in quality, several are quite good.

Deana Astle and Charles Hamaker make an excellent study of discriminatory serials pricing policies employed by German publishers between 1920 and 1934, examining the publishers' motivations as well as the effectiveness of the American response. Turning their attention to a similar crisis today—the pricing policies of the major European publishing houses—Astle and Hamaker diagnose the illness and prescribe the remedy that worked before: concerted action on the part of the American library community.

Jane Baldwin and Arlene Moore Sievers, both former subscription agents, offer brief advice on keeping/librarian agent relations cordial, or at least correct.

Carolyn Mueller gives a good treatment of AACR2 and serials, describing the code's history and its impact on the library catalog from day one to the present. Likewise, Sara Heitshu provides an effective overview of the history of serials automation, describing the changing roles of libraries, networks, and vendors in this increasingly complex game and ending with recommendations for libraries facing automation decisions today.

Marcia Tuttle, writing about serials control from an acquisitions perspective, provides a short textbook on serials librarianship.

Charlotta Hensley makes a strong argument for increased participation by serials librarians in collection development questions, especially given the increased bite that serials are taking out of acquisitions budgets. Her attempt to analyze the changing role of serials librarians since 1971 is less successful.

Attempting to define standards for serials retrocon projects, Christina Kottcamp focuses on the procedures and policies employed in a 1986 retrocon project at the University of North Carolina at Chapel Hill.

Edwin Shelock reviews learned soci-

ety publishing in Britain from 1660 to the present, concentrating on the transformation of the journal subscription base since 1945 from one of heavy reliance on member subscriptions to one of heavy reliance on library subscriptions.

Finally, October Ivins provides a very good critical survey of the literature relating to vendor evaluation, spare though that literature is. Although ALA is developing guidelines for such evaluation, Ivins argues rather for objective performance standards. With the increasingly sophisticated reporting capabilities of automated materials ordering systems, it is becoming much easier for libraries to undertake vendor performance evaluation; but in the absence of accepted performance standards, such evaluations are of limited use to the library community at large.

The question of standards brings me to a complaint about this and many similar publications: their failure to adhere to standards. ISO/R 215 (Presentation of Contributions to Periodicals) has existed since 1961, yet the contributions to this volume lack abstracts; and affiliations are given in a "list of contributors" rather than with each contribution. Perhaps most annoying in a serial authored and edited by serial librarians, this publication does not carry an ISSN!—*Ed Jones, Harvard University, Cambridge, Massachusetts.*

Library of Congress Rule Interpretations. 1st ed. 1v. Washington, D.C.: Cataloging Distribution Service, Library of Congress, 1988. (loose-leaf). \$80 (ISBN 0-8444-0594-9).

Library of Congress Rule Interpretations is designed to provide catalogers with direct access to the most recent LC interpretation of a particular cataloging rule. It contains the most current LCRIs arranged in AACR2 rule number order and, with the *First Update*, includes material through CSB no.40 (spring 1988). The volume also contains official rule revisions approved through 1985. In addition to the verba-

tim text of the interpretations and revisions, there is a brief introduction describing the various types of information that LCRIs cover. The content and format of this work is very similar to Sally Tseng's *LC Rule Interpretations of AACR2* (2d ed.; Metuchen, N.J.: Scarecrow, 1987).

To be most effective, it is essential for a tool of this nature to be up-to-date and easy to use. *Library of Congress Rule Interpretations* meets the first criterion very well. The *First Update* was published four months after the main volume and at the time of its release covered all material through the most recent CSB. With this rate of publication, little or no further research is required, which is certainly a great benefit to the user.

The second criterion is met also; however, Tseng added several features to her work, making it somewhat more accessible, particularly for the less-experienced practitioner.

This difference is especially evident in the introductory material to each volume. The LC work provides a brief description of how LCRIs are created and what they encompass, written in typical CSB prose. There is no indication in any of the preliminary pages regarding the CSB issues covered by the main volume and the update pages nor is there any discussion of the relationship between LCRIs and AACR2. Tseng's introduction, on the other hand, clearly states the purpose of the volume and how it is to be used in conjunction with the rules and with CSBs not covered. The CSB issues that are covered are noted on the title page, which has been replaced with both updates.

The format and organization of the volumes are similar. Both are loose-leaf and contain the complete text of the LCRIs. One advantage of the LC work is that the print is larger than it appears in the CSBs. Tseng has simply reproduced the original text.

For the cataloger seeking an interpretation of a particular rule in *Library of Congress Rule Interpretations*, the information is identified by the paging

system, which consists of the specific rule citation and a page sequence number. The user is further assisted by tab dividers that correspond to each AACR2 chapter. At present, there is no index, although one is intended. A topical index would be a real enhancement for the novice cataloger.

Tseng's volume does have an index. Although it is arranged by rule number, she has assigned keyword phrases to each LCRI, which appear in the index next to the rule number citation. This device is useful for identifying the appropriate rule and interpretation when it is not known.

The pages of the *First Update* to the LC work reflect the same numbering system as the main volume and include a cover sheet indicating the action to be taken by the updater. It also includes an explanation of the nature of each new or revised interpretation, enabling the cataloger to review quickly the latest additions and changes to the cataloging rules. In Tseng's work, there is a similar cover sheet with the update pages. The volume is numbered consecutively, making it easier for someone unfamiliar with AACR2 structure to perform the updating accurately.

Interpretations and revisions to AACR2 appendixes are covered in *Library of Congress Rule Interpretations*. Along with these changes, Tseng has included information that appears in the CSBs about various LC projects or cataloging policies that could affect local practice. The latter are reflected in the index under topical headings.

Both of these titles provide a major service to catalogers by consolidating current LCRIs in one volume. The LC work is more up-to-date than Tseng's, but for overall ease of use, the Tseng work is preferred.—*Melissa A. Laning, University of Louisville, Louisville, Kentucky.*

Acquisitions, Budgets and Material Costs: Issues and Approaches. Ed. by Sul H. Lee. Monographic Supplement no. 2 to *Journal of Library Administration*. New York: Haworth,

1988. 165p. \$29.95 (ISBN 0-86656-690-2). LC 87-29867.

Adding to a sparse field of monographic literature on acquisitions and collection development, *Acquisitions, Budgets and Material Costs* presents issues and approaches targeted for consideration by library administrators. Authored by academic librarians, the eight articles in this volume are papers and a bibliography contributed to a national conference on acquisitions processes, material costs, and library budgeting. The conference, sponsored in part by the University of Oklahoma Libraries, was held February 26-27, 1987.

Four of the authors discuss approval plans as appropriate and necessary vehicles for budget management and collection development in different types of academic libraries. Thomas W. Leonhardt advocates approval plans for libraries with lean budgets. Karen A. Schmidt examines the typical functions of approval plans in academic libraries and suggests a new approach for the publisher-based plan. Having surveyed the use of approval plans by twenty-eight ARL libraries, Jean L. Loup presents her results and conclusions. Representing the vendor perspective, Dana Alessi of Blackwell North America reviews approval plan inflation and its impact on libraries.

Continuing on the theme of budgeting and costs, Edna Laughrey reviews strategies for projecting materials costs. Frederick C. Lynden presents an action plan for planning, organizing, and controlling rising materials costs.

Covering CD-ROM, databases, and other new formats, Jennifer Cargill analyzes acquisitions considerations. Lenore Clark's selected bibliography on acquisitions, budgets, and materials costs concludes the volume.

While the articles included in this volume are the caliber of those found in professional journals, the strength of the book is in its collective unity. As conference papers, these articles would have been scattered to numerous journals or lost altogether had this volume

not been published. More importantly, they share a common theme of managing collection development and acquisitions during the economic stresses of the 1980s. The volume's management approach distinguishes it from handbooks and policy/procedure manuals, which constitute much of the acquisitions literature, and the data included are current and timely. Loup's study thus complements McCullough, Posey, and Pickett's *Approval Plans and Academic Libraries* (1977).

This title is appropriate for any academic library that maintains a working professional collection. The volume's only handicap is the poor print quality, atypical of Haworth publications.—*Laverna M. Saunders, University of Nevada, Las Vegas.*

The In-House Option: Professional Issues of Library Automation. By T. D. Webb. Haworth Library and Information Sciences Text series, no.1. New York: Haworth, 1987. 166p. \$34.95 (ISBN 0-86656-617-1). LC 87-127.

This treatise on library automation, as the subtitle indicates, addresses some important professional issues facing libraries as the trend toward the use of computer technology intensifies. Writing primarily for those in management (i.e., library directors and others at the decision-making level), the author, through the medium of two case studies, provides insight into the process of choosing an automated system and the location for its major hardware and software components. Some of the factors discussed in detail in the preface, introduction, and the first through third chapters and that affect the above-mentioned choices are "the level of computer literacy among professional librarians," as this will have an impact on "the role of the librarian in the system design" and its operation and "the role of the library within the larger governmental-political-economic environment." The second chapter contains an excellent description of the computer skills required of the staff

member designated the "System Supervisor."

The two case studies presented in the fourth and fifth chapters represent a public library that chose to locate its system at a remote site and an academic library whose host location is within the library building. The author was employed at both libraries used as case studies, so he is well qualified to comment on the decisions made, the relationships among those involved, and the consequences of those decisions. The sixth chapter provides an analysis of the two case studies with emphasis on the similarities between the libraries' automation projects from a management point of view.

The final chapter deals with the broader issue of the philosophy of library education and how it can best provide the technological skills that will be required in the future to allow librarians better control of their own organizations and their use of automated systems.

The author includes a bibliography, an index, and several appendixes containing material—such as objectives to attain in order to be considered computer literate and job descriptions for managers of automated systems—that support his contention that librarians as a whole must become more knowledgeable in all facets of computerization or face a decline in their professional status. This volume is recommended for library administrators interested in guidelines affecting computer host site location.—*Carol Lagasse, Russell Sage College Library, Troy, New York.*

Preserving the Word. The Library Association Conference Proceedings, Harrogate 1986. Ed. by R. E. Palmer. London: Library Association (dist. in the U.S. by the American Library Assn.), 1987. 147p. paper, \$27.50 (ISBN 0-85365-874-1).

These twenty papers address philosophical, technical, and historical aspects of library preservation. The book opens with Lord Quinton's provocative philosophical essay, in which he con-

siders what *should* be preserved. It closes with a look into the future, including Joseph W. Price's excursion into futuristic technology. He describes the LC Optical Disk Pilot Program and speculates on the possibility of interactive multi-media experiences. David Stam reviews current efforts at international cooperation, including IFLA's program, with suggestions for the future. Library administrators discuss preservation policies and describe programs in the British Library and national libraries of Scotland and Wales.

Other speakers present the perspectives of academic, special, and public libraries. Practical aspects of preservation, such as paper chemistry, environmental storage conditions, binding standards, the use of private rather than in-house conservators, fundraising, and education are also included. Peter Waters, from the Library of Congress, reviews the history of preservation during the last twenty years, since the Florence flood in 1966. Sandy Dolnick, of Friends of Libraries USA, describes American library fundraising projects, such as book and bake sales, to show how libraries might fund their preservation programs. Although filled with intriguing ideas, this paper is the least relevant to the preservation theme, because it contains only general fundraising advice that would apply to any library activity.

The papers were delivered at the 1986 (British) Library Association Conference. The speakers represent national, academic, special, and public libraries, and include library and university administrators, librarians, and conservators from throughout the United Kingdom and Ireland, as well as a few from the United States.

There is no overall bibliography, although some papers include references, and there is no index. The book consists solely of the papers and a list of the speakers and their backgrounds. There is no introductory material.

This is a well-written and absorbing book that gives the reader an overview of a variety of aspects of library preser-

vation. Although from a British perspective, the topics are of universal interest and applicability. It will be a useful complement to comprehensive preservation collections and interesting to anyone who wants to know more about international preservation work.—*Martha Hanscom, University of Wyoming, Laramie.*

Advances in Library Administration and Organization: A Research Annual. Volume 7, 1988. Ed. by Gerard B. McCabe and Bernard Kreissman. Greenwich, Conn.: JAI Press, 1988. 287p. \$58.50 (ISBN 0-89232-817-7).

It can truly be said that this book has something for nearly everyone in the library profession. However, this variety makes the book difficult to categorize, and its title only assists in the confusion. Even the reader familiar with the editors' previous volumes in the series may not be prepared for the diversity. Anyone seeking the information contained here will be dependent on outside indexing services.

For collection development librarians there are several chapters of particular note. The first is "Chinese Theories of Collection Development," by Priscilla C. Yu. The comparison with collection development practices in the United States not only informs the reader about Chinese practice but also allows the authors to reflect on the state of collection development, particularly coordinated collection development. Selectors interested in the quality and quantity of fiction reviews in *Booklist* and *Library Journal* will find much useful data in Judith L. Palmer's research covering these review sources from 1964 to 1984.

Those interested in women administrators in the profession will be pleased with Joy M. Greiner's study of management styles and career progression patterns in public library administrators. School media centers are represented in an overview article by P. Diane Snyder.

Librarians interested in academic

and research libraries will want to read "Librarians as Teachers: A Study of Compensation and Status Issues," by Barbara I. Dewey and J. Louise Malcomb, and "Academic Library Buildings: Their Evolution and Prospects," by David Kaser. Higher education concerns are also featured in Delmus E. Williams' chapter "Accreditation and Change." The chapter by Eugene R. Hanson, "College and University Libraries: Traditions, Trends, and Technology," is for librarians in higher education, but it is difficult to discern its real intent. The history of how libraries have secured cataloging copy, online databases, library personnel concerns, organization and financial support are all thrown together, liberally supported by footnotes. Readers would do better to turn to Hanson's original sources and draw their own conclusions.

The remainder of the book consists of articles about library practice in other countries and one annotated bibliography of interest to specialists in libraries supporting research in petroleum. The highly diverse contents leave the reviewer pondering yet again whether the editors ought to find (heaven forbid!) a new title for the series in order to indicate more clearly to readers what it is about.—*Sara Heitshu, University of Arizona, Tucson.*

Audiovisual Material Glossary. By Nancy B. Olson. OCLC Library, Information, and Computer Science Series, no.7. Dublin, Ohio: OCLC, Inc., 1988. 41p. paper, \$8.50 (ISBN 1-933418-35-3).

Nancy Olson is to be congratulated once again for providing catalogers with a useful tool. She has brought together in one work definitions for the audiovisual items found in library collections. The occasional illustrations aid in understanding particular definitions, a good idea that should be expanded if a second edition is ever published. The source of a definition has been identified when it has been taken from one of the many works examined

during the preparation of this booklet.

This work "does not include terms naming or describing the playback or other equipment needed for the use of the material" or "definitions of general cataloging terms (main entry, title proper), nor does it include general coding and tagging terms (subfield, indicator) used for machine-readable cataloging."

It is unfortunate that the publication of this work was not delayed until AACR2, 1988 Revision (AACR2R), was available because the advent of AACR2R makes some of the work incorrect. For example, many of the terms for cartographic materials labeled as special material designations in this work are not so designated in AACR2R.

Some definitions reflect Library of Congress rule interpretations (LCRIs), not AACR2. For example, the definition for "kit" seems to preclude the possibility that the dominant medium in a filmstrip/sound or slide/sound item could be the sound component. OCLC participants may follow LCRIs in this regard, but it is not correct for those adhering to AACR2 principles.

Some definitions could be more accurate with the addition of adverbs such as "generally," "usually," or "mostly." For example, double frame definition 2 could benefit from such an addition because there are a few filmstrips that have both horizontal and vertical frames.

These quibbles are meant as constructive criticism and should not discourage the purchase of this work. It would be useful in many library departments, including the public reference shelf.

A final note: It is interesting to me to see that the terms "nonbook," "nonprint," and "audiovisual" have become synonymous. In the 1960s, when we were struggling with the standardization of audiovisual terminology, these terms were given definite meanings, meanings that have been lost over the last twenty or so years. Our wasted energies and time should be a warning

to those who are now arguing over other fine points!—*Jean Weihs, Principal Consultant, Technical Services Group, Toronto, Ontario.*

If You Want to Evaluate Your Library . . . By F. W. Lancaster. Champaign, Ill.: Univ. of Illinois, Graduate School of Library and Information Science, 1988. 193p. \$34.50 plus \$2.50 postage and handling (ISBN 0-87845-078-5). LC 88-091099.

F. W. Lancaster states in the preface to this book that it is intended primarily as a text to support library and information science courses, and that it grew out of his almost twenty years of teaching experience. There are study questions at the end of each chapter as well as an extensive list of references that are considered to be particularly important studies or that illustrate ideas presented within the text. The author makes no pretense at comprehensiveness and thus presents this work as a complement to, rather than a replacement for, his earlier work, *The Measurement and Evaluation of Library Services* (Arlington, Va.: Information Resources Press, 1977).

Lancaster poses the argument that Ranganathan's Five Laws of Library Science are as relevant today as they were fifty years ago and that they provide a fundamental statement of the goals for which information services should strive. He then goes on to argue that evaluation is an essential element in managing the ways in which libraries work toward those goals. The thrust of his work is describing those evaluation techniques that address services, i.e., outputs and their more elusive outcomes. The evaluation of technical services is discussed only in terms of how they support the primary mission of serving the information needs of library users. In short, they are recognized as means to an end and not ends in themselves.

Fully two-thirds of the work discusses the evaluation of document delivery services. Pros and cons of vari-

ous evaluation methods dealing with the nature, size, availability, and use of a library collection are outlined. Two chapters focus on reference services. The first outlines evaluation techniques for traditional reference services, and the second looks at the evaluation of computerized literature search services. Finally, the author addresses the evaluation of resource sharing and cost-effectiveness of library operation.

The study questions at the end of each chapter are structured to require the student to work through hypothetical problems by utilizing the principles put forth in the chapter. Library practitioners and educators also will find this work exceedingly useful because, in effect, it evaluates the various evaluation methods. It succinctly describes the methods and discusses their advantages and disadvantages in terms of time limitations, cost factors, and effectiveness in addressing the questions at issue. Anybody planning to evaluate their library, or services in their library, would do well to spend some time perusing this book. It will certainly assist in identifying the most appropriate form of evaluation for any given situation. It is a very readable and useful text.—*Germaine C. Linkins, State University College, Potsdam, New York.*

Library Literature in the 1980s. Ed. by Patricia F. Stenstrom and Dale S. Montanelli. Issued as *Library Trends* 36, no.4 (Spring 1988). Champaign: University of Illinois, Graduate School of Library and Information Science, 1988. p.629-868. paper, \$15 + \$1 postage (ISSN 0024-2594).

Publishing in the library and information science field has increased in recent years with the literature sources in the profession proliferating. Stenstrom and Montanelli have collaborated to produce this *Library Trends* issue reviewing the current state of library literature. Some of the contributors are themselves among the most active contributors to our literature.

Chapters cover such topics as editing

trends, the impact of electronic publishing, the interlocking relationship of library publishing and library school curricula, and practitioners' use of our literature, and provide a discussion of our image as a profession and a review of *Library Trends* itself as a publication.

Atkins' analysis of subject trends reinforces what the popular issues have been in the past decade. It is clear from articles by other contributors that with nonprint publication sources also growing, the opportunities for librarian/authors to write on their topic of choice will continue to increase. The contribution by Stenstrom and Tegler indicates that even with this proliferation of publication sources a mere handful of periodicals are regularly read by librarians, with their choices dependent upon the type of library in which they work and their specialization. One identifiable gap in the literature of the profession is the absence of a true current-awareness service. *Library Currents* can meet this need on a topical basis, but nothing comparable to *Current Contents* exists.

The very readable, informative, and sometimes lively chapters are a valuable overview of publishing trends and future directions and should be carefully perused by potential authors. This issue complements other recent publications: Nora and Norman Stevens, eds., *Author's Guide to Journals in Library & Information Science* (New York: Haworth Press, 1982); Betty-Carol Sellen, ed., *Librarian/Author: A Practical Guide on How to Get Published* (New York: Neal-Schuman, 1985); Brian Alley and Jennifer Cargill, *Librarian in Search of a Publisher: How to Get Published* (Phoenix, Ariz.: Oryx Press, 1986); and John Budd, "Publication in Library and Information Science: The State of the Literature," *Library Journal* 113:125-31 (September 1, 1988).

This is one of the *Library Trends* of recent years that will prove most useful to the profession at large. It is of particular value to authors and potential au-

thors when used in conjunction with the other sources mentioned.—*Jennifer Cargill, Rice University, Houston, Texas.*

Libraries in the '90s: What the Leaders Expect. By Donald E. Riggs and Gordon A. Sabine. Phoenix, Ariz.: Oryx Press, 1988. 198p. paper, \$24.95 (ISBN 0-89774-532-9). LC 88-20521.

This is a collection of transcribed interviews of twenty-five individuals who represent a broad spectrum of library education and service activities. The transcriptions are arranged in sixteen thematic chapters, such as services, leadership, commercial competition, censorship, qualifications and education, followed by an essay on the future by Donald Riggs. The volume begins with photographs and biographical sketches of the contributors and concludes with name and subject indexes.

There is no indication about how these interviewees were selected from among the many possible candidates, although it is clear that they are all articulate representatives of various aspects of a profession they monitor closely. Most of the interviews took place at the summer 1988 ALA conference in New Orleans, when bibliothecal adrenalin was high, so they do bear a kind of crispness that might be lacking in another approach. Whatever is usually said about unevenness among chapters in collections, however, can be said for this one, whose interview format also takes its toll. In most cases, the contributions would have benefited considerably from more reflection and from the formulation and association that ordinarily accompanies the drafting of a text. In short, the approach followed in assembling this book does not elicit the best that these contributors have to offer, either substantively or linguistically. In a number of instances, the language is too casual to be quoted without causing embarrassment.

Readers may find fresh insights or perspectives throughout the book.

What this reader found of interest is that there is a great deal of fundamental agreement about the next decade in libraries, thereby suggesting that the profession has considerably greater confidence now about charting the future than it did just a half dozen years ago. That may be the most significant message in the book, and it is a most welcome one.—*Charles B. Osburn, The University of Alabama, Tuscaloosa.*

Abstracting and Indexing. 2d ed. By Jennifer E. Rowley. London: Clive Bingley (dist. in the U.S. by American Library Assn.), 1988. 181p. \$27.50 (ISBN 0-85157-411-4).

In this avowed introductory text the author has added to her first edition published in 1982 two new chapters on computers and on natural language indexing. Material included in the earlier volume is presented in chapters on abstracts, abstracting, bibliographic references, indexing, controlled indexing languages, post-coordinate indexing systems, pre-coordinate indexing systems, and the use of abstracting and indexing data. An appendix describes editing and proofreading; there is a good selective list of further reading; and the index following is complete and accurate. The bibliography of 105 items is quite current considering the paucity of material published on these subjects, with 39 entries published since the first edition of this work. The material from the earlier edition has been revised and updated "to take into account the increasing importance of computer-based information retrieval systems and full text databases and databanks."

The author's "in-depth but readable approach" is a definite plus, as is the opening of each chapter with a short statement of what is to be covered. Examples are provided, and for the most part, what they illustrate is clear; commentary is provided where needed in most cases. In one example nonmeaningful variations in spacing in four-digit subject identification numbers led to considerable puzzlement, as did a

misalignment in the text of another example. Additionally, a textual error in two examples and an inconsistent third example caused confusion. There are only seven other typographical errors in the entire text, three of which come from the fascinating use of "tems" for "terms"! References in the text to the real world tend to have a British or Canadian bias, but this does not seem a major drawback.

Since there are few such well-written—bordering on delightful—introductory texts written about abstracting and indexing, this volume is highly recommended for libraries serving students of information studies and information management. It also will be useful in libraries whose reference staff and readers would benefit from such a "reader-friendly" approach to these two basic subjects.—*Eldon W. Tambllyn, Portland State University, Oregon.*

New Horizons for the Information Profession: Meeting the Challenge of Change. Proceedings of the Annual Conference of Information Scientists, University of Warwick, 1987. Ed. by Hilary Dyer and Gwyneth Tseng. London: Taylor Graham, 1988. 225p. paper, £18 UK, \$34 U.S. (ISBN 0-947568-32-8).

This publication contains the papers presented at the annual conference of the Institute of Information Scientists, University of Warwick, England, in 1987. The Institute of Information Scientists is a British organization that closely resembles the American Society for Information Science. The organizational goals are similar: to lead the information profession in the search for new and better theories, techniques, and technologies that will improve access to and retrieval of information. Having put this publication in that context, it therefore follows that the word *library* is mentioned perhaps twice in 225 pages.

The subject matter of the papers includes corporate information systems, specific technological applications

within some British special libraries, and the social and professional implications of technology. One group of papers was presented by information science students, and there is also a transcription of the question-and-answer session on information technology.

The keynote speaker was Blaise Cronin, currently professor of information science and librarianship at the University of Strathclyde. It is interesting to note that at this institution, the Department of Information Science is located in the Business School. Thus, although Cronin's paper addresses the topic of the title, it is centered strictly in the world of business. He discusses the role of the CIO (Corporate Information Officer), the necessity for a bottom-line philosophy in determining the success of this position, and his own desire to see a trend away from the traditional concept of professionalism, which he considers to be a barrier to technological innovation.

These papers will be of interest mostly to special librarians, information scientists, and reference librarians seeking to implement nontraditional information retrieval methods. However, for any librarian who has not given any thought to the social and professional implications of the new directions we are moving in, the paper presented by Shirley Williams, president and cofounder of the Social Democratic Party and secretary of state for education and science under two governments, entitled "The Impact of Information Technology on the Wider Society," is an eloquent and moving exposition of the flaws in this "brave new world." She makes a plea to information scientists to assess where they are taking society before it is too late. She concludes her paper with a personal vision of democracy that could be "decentralised, powerful, giving real authority to individual citizens," and that "in the end we choose, and the moral and political issues thrown up by information technology are immense . . . if we think about it and talk about it,

we might just possibly choose right." The "double-edged sword" nature of technology is emphasized again in a paper by Trevor Howard from the Computing and Information Studies School at the Birmingham Polytechnic on how electronic information systems are limiting public access to information.

There is naturally some unfamiliar and confusing terminology, as in all publications from across the Atlantic. However this should not be a barrier to dipping into a set of papers that documents concerns transcending international boundaries.—*Gillian M. McCombs, State University of New York at Albany.*

Collection Development: Options for Effective Management. Proceedings of a Conference of the Library and Information Research Group, University of Sheffield, 1987. Ed. by Sheila Corral. London, Taylor Graham, 1988. 155p. paper, £18 UK, \$34 U.S. (ISBN 0-947568-25-5).

Editor Sheila Corral notes that most of the literature on collection development has come from North America. She gives as one purpose for the weekend conference that generated these papers the need to share British concerns and approaches. British libraries face many of the same problems confronting U.S. libraries: decreased funding, lack of space, proliferation of print and nonprint materials, and the rapid expansion of electronically available information. A recurrent theme in the papers is the need to address these issues and propose possible solutions in the British context.

This slender volume contains the keynote address by C. B. Bloomfield of the British Library, texts of ten presentations by academic, public, and special library managers; a presentation on assessing value by a management professor serving on the University Grants Committee; and a general summary. Papers are divided into three categories dealing with strategies, techniques, and national issues. Groups of related pa-

pers are followed by brief accounts of discussion periods.

Designed for oral presentation, these essays are necessarily lacking in depth. However, taken together, the collection does provide a general orientation to current British collection development concerns, combining theory and practice. Because some topics are covered more than once, an index would have been useful.

In spite of its limitations, this collection makes a worthwhile contribution to the literature. English and Scottish papers detailing cooperative efforts are interesting for their accounts of evolving collection development practices and their use of Conspectus methodology. Maureen E. Castens contributes a loan policy and an automated method of profiling circulation activity, while Cherry Horwill describes a method for increasing user input for serials management decisions in research libraries. Angela Haygarth Jackson's analysis of her firm's information needs and resources is outstanding. At least some topics covered, such as the use of the Conspectus at the British Library, and the serials management project described by Horwill, are available in more detail in other published sources to which readers are referred. Although not an essential purchase, *Collection Development: Options for Effective Management* should be of interest to library and information science teachers and students. Several articles will be of practical interest as well.—*Judith Lee Palmer, Irving Public Library System, Texas.*

The Twenty-First Century: Technology's Impact on Academic Research and Law Libraries. By Betty W. Taylor, Elizabeth B. Mann, and Robert J. Munro. Boston: Hall, 1988. 235p. \$37.50 (ISBN 0-8161-1882-5). LC 88-12667.

This book reports the results of a survey of 224 library and related professionals. The authors sought to gather a consensus of opinion on the impact of

technology in libraries in the next century.

The book opens with a survey of library forecasts made between 1980 and 1987. It then turns to a discussion of the issues covered in the survey: how information will be published (in book or electronic formats), library collections (proportion of printed materials to on-line information), budgeting (proportion allocated to printed versus online information), payment for access to on-line information, library personnel, and computer equipment provided by the library. Survey responses are reviewed. The authors outline two scenarios for libraries of the year 2000, one for academic research libraries, another for law libraries. The authors provide their own comments on the anticipated effects of technology on libraries of the future and conclude with a bibliography and statistical appendixes.

This book suffers from several basic problems. The first is methodological. Surveys are more suited to eliciting opinions than to forecasting the future. To use the survey results to outline opinions regarding expected technological changes in twenty-first century libraries is one thing; to derive scenarios from the responses is another.

A second is that the book focuses on several possible areas of technological change (full text databases, distributed databases on disk), but ignores others, e.g., expert systems. No room is given for respondents to suggest areas of possible technological change not mentioned in the survey.

A third is that some of the questions are poorly phrased. "The number of library-trained professionals working in the libraries' information science program will: A. Increase. . ." (What is an information science program?)

Many of the conclusions, as a result, seem not terribly useful: "Books will continue to be published," "More information will be available in electronic formats," "Student fees may or may not cover costs for access and

other related computer costs." Others appear to miss the mark: "Disk technology will provide information retrieval capability superior to on-line systems."

The value of a forecast lies not in its predictive accuracy, but in that it requires us to think about the future and make choices. This book, unfortunately, contributes little to that process.—*Thomas Lehman, University of Notre Dame, Indiana.*

The Future of the Public Library: Conference Proceedings. OCLC Online Computer Library Center, Inc., Dublin, Ohio, March 20–22, 1988. OCLC Library, Information, and Computer Science Series, no.8. Dublin, Ohio: OCLC, Inc., 1988. 150p. paper, \$13.50 (ISBN 1-55653-050-1).

In March 1988, OCLC sponsored a conference to discuss the future of the public library. Fifty-one invited library administrators and educators attended, and this volume is a summary of the proceedings. The book is loosely organized around three themes. Each includes an issue paper, reactions from two speakers, and representative statements from the small group discussions.

The themes are: (1) The role of the public library (paper by Thomas Ballard); (2) information services (paper by Linda Crismond); and (3) cooperative arrangements and resource sharing (paper by Kathryn Stephanoff).

In addition, this book contains consultant Robert Olson's keynote speech and closing remarks, a panel discussion, information about the speakers, and a bibliography.

Certain topics, such as library leadership, the role of technology, and fees for services, were mentioned often. Yet there was diversity. I like the fact that the speakers were not afraid to disagree. Each had a different, very personal vision of the future.

The book's structure (paper, reactions, discussion) gives the reader a

good sense of what the conference was like for the participants. The inclusion of a conference schedule and list of attendees adds to that impression. The quality of the writing and editing is uniformly high.

It is mentioned several times in the book that the conference was intended to raise questions and stimulate thought. There is no attempt to reach a consensus or to provide answers. I suspect that this approach is better suited to a face-to-face meeting than to the print medium. At a conference, the participants have the opportunity to respond and to contribute. A book which raises unanswered questions may be frustrating and unsatisfying to some readers.

However, for those interested in speculating on the future of the public library, this volume is a carefully written collection of diverse opinions and may prove to be a helpful starting point.—*Wendy Allex, Lee County Library System, Ft. Myers, Florida.*

Libraries and the Search for Academic Excellence. Ed. by Patricia Senn Breivik and Robert Wedgeworth. Metuchen, N.J.: Scarecrow, 1988. 213p. \$25 (ISBN 0-8108-2157-5). LC 88-15885.

Refreshingly free of platitudes, these papers were commissioned for the Symposium on Libraries and the Search for Academic Excellence, a joint effort of the University of Colorado and Columbia University. Clearly part of the educational reform movement engendered by *A Nation at Risk*, the symposium brought together "higher education faculty and administrators, librarians and library educators plus a scattering of representatives from business, government, and education institutions." The eclectic mix may explain the conciseness and the relative lack of professional jargon on all sides.

For librarians, "It's Academic: The Politics of the Curriculum in American Higher Education," by Spitzberg,

could serve as a twenty-page primer on academic politics. For nonlibrarians, Shaw gives a concise overview of computer technology in academic libraries while Fiscella and Ringel show their potential role in regional economic development. Several authors address the educational and library experiences of specialized groups: nontraditional students (Wagner), minority students (Hefner and Rhodes), and education majors (Carr and Zeichner). A common theme is the role of the library in imparting lifelong learning skills and in expanding education beyond classroom lectures, textbooks, and library reserves (Boyer, Owens, Gee and Breivik, and Newman). Morton and Rogers discuss the library's ability to foster research while Cullen describes the Newberry Library's support of the humanities. Summaries of panel discussions and an agenda for action round out the volume.

From a technical services vantage point, the volume pays little attention to user-friendly bibliographic records as a way to increase library effectiveness but instead focuses on bibliographic instruction as the key to solving the patron's bewilderment with library complexity. One small quibble: giving the authors' credentials at the beginning of each paper would have helped put their remarks in perspective.

Overall, the papers come together nicely to form more than the sum of the parts with only a few weak presentations. They constitute a realistic assessment of the problems of higher education and libraries without the standard rhetoric. While increased funding would help, the symposium identifies the essential problem as student, faculty, and librarian resistance to innovation.—*Robert P. Holley, Wayne State University, Detroit, Michigan.*



Non-Tax Sources of Revenue for Public Libraries

By Mary Jo Lynch, Director, ALA Office for Research

User charges; fines, contracts, and sales; and fundraising and financial development are potential sources of non-tax revenue for public libraries. In fall 1987 ALA surveyed a nationwide sample of public libraries of all sizes to find out if they received any revenue from these sources and how much money was involved.

Tables and figures show the percentage of respondents receiving revenue from specific sources, the dollar amount of revenue received, and the percentage of operating expenditures represented by non-tax revenue. The text comments on the findings and includes an annotated bibliography.

The survey was conducted by the Mary Jo Lynch, Director, ALA Office for Research, with help from an Advisory Committee from the Public Library Association and the Library Administration and Management Association. Financial support was provided by The H.W. Wilson Foundation.

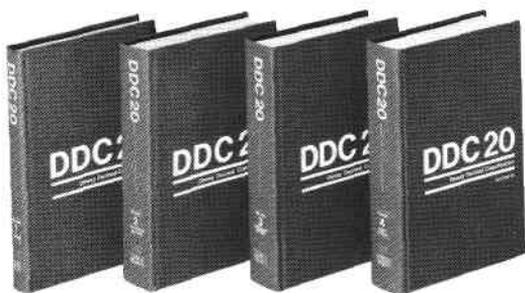
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