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Guest Editorial

Library Managers: Off the Bench and onto the Court

In recent years, increasing attention has been directed to the issue of advancing the library's role in the academic community. During his Association of College and Research Libraries (ACRL) presidency, William Moffett focused on the role and standing of the academic library on campus. ACRL's Professional Association Liaison Committee continues to advance this discussion, and ACRL members and staff continue to link up with higher education associations to strengthen the role of librarians on campus. Two articles in this issue of College & Research Libraries continue this dialogue.

Both the Larry Hardesty article and the Marcia J. Myers and Paula T. Kaufman article confront us with perceptions of librarianship that should give pause for thought about the library's role in the academic community. These articles remind us to look not only at formal links with our higher education colleagues, but also at the perception of academic library directors within their own institutions and whether that perception advances the library's standing.

In these times of extreme challenge for higher education, when resources are in short supply, the perceptions of academic administrators who are the key to library resource decisions take on a heightened level of importance. Thus, it is troubling to note that Hardesty's subjects (college deans) "did not consider the administrative skills of library directors directly applicable to larger college concerns" and that Myers and Kaufman found that "librarians are often perceived by universities to be inappropriate or unqualified for general administrative positions."

Unfortunately, the skills related to library management are not seen as transferable to the management of the larger academic enterprise. If one considers the size and scope of the academic library in comparison to other campus units, it would seem apparent that the library operation is as complex as that of these other units. In fact, running a library is every bit as demanding as the management of other campus operations, requiring essentially similar managerial skills and expertise to deal with resources, facilities, and personnel (although the applications may be different). In the words of one university chancellor, the library director's role is perhaps the most complex and all-encompassing of any on campus except the chancellor's itself!

While administrators may respect the professional and administrative skills of their library directors, their inability to see these individuals as generalist managers surely must hamper the opportunities for the library director to be a more central figure in the academic decision-making structure. While it is flattering to be respected as a competent professional with a specialized role, it is nevertheless also important to be considered an integral part of the management team.

The fiscal crises of the past six months and the enormous challenges of changing demographics have already demonstrated all too clearly that critical resource decisions will be required in many of our academic institutions in the next decade. It is absolutely necessary that academic library officers be players on the management team that makes fiscal and other strategic decisions. Also, the academic enterprise is a complex environment where a variety of talents are needed to move the higher education agenda forward. A narrow view of library directors' managerial expertise
denies institutions a valuable resource, particularly where information-related issues are at stake. Parenthetically, this view also hampers those directors who may wish to develop broader career aspirations in higher education administration.

In order to be a part of this management team (or, as Hardesty calls it, the “inner administrative circle”), library administrative officers need to enhance their roles as generalist managers. Management team members must not only bring their professional, disciplinary, and operational expertise to the table; they also must be knowledgeable about larger issues that confront the higher education community and about how those issues affect their particular institution.

How can the library director’s role be enhanced? First, library administrative officers must take the initiative in educating other campus administrators about library issues. For professionals who are close to these issues, the challenge of presenting them in nontechnical, concise, and direct ways is great, but it is a challenge that must be met.

Second, library managers must take another initiative to learn more about higher education issues, both national and local, and about particular concerns that confront their fellow administrators. This learning process will enhance informed choices that library officers will need to make as part of the management team. Moreover, because decision making is at least in part a political process, library officers must be willing to learn about, understand, and support nonlibrary issues in order to gain similar support for the library from other team members. If library managers can develop a broader view of the academic enterprise and can better understand the concerns of the individuals who manage it, they can also create better and more relevant arguments for library resources and better ways to integrate the library into larger campus concerns.

Third, library directors and other senior officers must search for ways to make informed contributions on nonlibrary issues, particularly where information access and resource management skills could enhance the strategic decisions of the management team.

Fourth, individuals from the academic library management community must increase their participation and visibility in local, regional, and national higher education arenas. Increased participation will not only help them to be better informed about higher education issues, but will also enhance the visibility of library issues at the same time.

Becoming a true member of the management team is absolutely critical in the next decade as the higher education agenda is reshaped to address twenty-first-century needs and challenges. The bad news is that this participation requires time-consuming effort. The good news, however, is that this enhancement of perception and participation by library administrative officers should allow the library a greater role in resource allocation for the future.

RUTH J. PERSON, ACE FELLOW, ARIZONA BOARD OF REGENTS

CORRECTIONS

In the January 1991 College & Research Libraries, the column headings in table 2, p. 10, should have read “1967–77,” “1977–87,” and “1967–87.” This correction restores the author’s version.

In the book reviews, the last two sentences of the first paragraph on page 98 should have read “Veaner’s focus is the process of administering, without much attention to the particulars of the environment that is being administered. It is a focus that is popular these days within academic librarianship.”
The Bottomless Pit Revisited
Larry Hardesty

A generation ago, Robert F. Munn wrote that academic administrators did not give much thought to libraries, regarding them as "bottomless pits." This paper examines the continued validity of Munn's observations across time and among selective liberal arts colleges. Interviews with thirty-nine chief academic officers reveal that most give considerable thought and support to the library. Recommendations offered promote improved relations between library directors and academic administrators.

What do academic administrators think about the library?1 Robert F. Munn, librarian-turned-university administrator at West Virginia University, posed this question more than twenty years ago in his classic article, "The Bottomless Pit, or the Academic Library as Viewed from the Administration Building." 2 The answer holds important implications for librarians because, as Munn observed:

It is the Administration which establishes the salaries and official status of the director and his staff, which sets at least the total library budget, which decides if and when a new library building shall be constructed and at what cost. In short, it is the Administration—not the faculty and still less the students—which determine the fate of the library and those who toil therein.3

Unfortunately, Munn found academic administrators neither well informed nor supportive of academic libraries. In answering his own question, he concluded, "They don't think very much about it at all."4 The characterization of academic administrators as unconcerned about libraries remains part of the conventional wisdom of academic library directors. Recently, College & Research Libraries reprinted Munn's article as a "classic"—thereby reinforcing for the current generation of librarians his perception of administrators.5

William A. Moffett, former director of libraries at Oberlin College, corroborated Munn's view in the early 1980s by asking library colleagues what they valued most and what proved most troublesome about traits, practices, attitudes, and procedures of administrators and teaching faculty. Although most respondents did not cite horror stories, Moffett commented, "Many of my fellow directors felt they had received considerably less support than they needed from their institutional colleagues."6 More specifically, he received "stories of administrators who tended to see the library budget as a kind of reserve fund for meeting emergencies . . . of changes in library services mandated by faculty and administrators unable or unwilling to provide funds to meet the financial impact; and of faculty members who chronically..."
gummed up reserves and browbeat the staff.”

Despite the importance of administrators to librarians, Munn and Moffett are virtually alone in their careful examination of administrative attitudes toward the library. Other librarians typically base their opinions about administrators on impressionistic and anecdotal information. It may be that stories of administrators who neglect and misuse libraries eclipse accounts of administrators who have a genuine understanding of libraries. During the more than two decades since Munn’s insightful observations, higher education and academic librarianship have changed in ways that necessitate a fresh evaluation of Munn’s conclusions.

THE STUDY

In re-examining Munn’s “bottomless pit,” this investigator posed the question, “Are his observations, based upon his position at a major university during the 1960s, valid at selective liberal arts colleges in the 1990s?” By presenting the answers to this question and analyzing them, the author seeks to encourage further understanding between academic administrators and librarians.

The author identified selective liberal arts colleges described as “competitive” to “most competitive,” using Barron’s Profiles of American Colleges. In general, they are institutions with small enrollments, strong libraries, and healthy endowments— institutions that could support active library involvement in the curriculum.

During the fall of 1988, the author wrote to the library directors of fifty of the ninety-three institutions that met his criteria. He explained the purpose of the project and requested help in arranging interviews with the chief academic officers of the institutions. Ultimately, the positive responses allowed him to select thirty-nine interviewees at thirty-six institutions from among a greater number of positive responses.

The author used personal interviews to explore systematically and thoroughly the attitudes of the administrators. He conducted the interviews from November 1988 through August 1989. They ranged between thirty and ninety minutes, with most of them between forty-five and sixty minutes. Thirty-eight of the thirty-nine interviews were taped.

RESULTS

Did the deans at these small liberal arts colleges think about the library? The answer was an emphatic Yes! Most spoke quite articulately about the role of the library in support of the institutional mission. Most deans regarded the library as active and vital to the collegiate enterprise. One dean expressed a sentiment typical of most of these administrators: “The library has a very integral role to play. The library is a symbol. It sets a tone for the college and for the students. The library not only provides the materials, but also, in the intangible sense, sets a tone and sends a message representing the highest aspirations of the college.” Others had specific ideas on the role of the library. For example, the dean of a prestigious institution declared, “I have trouble when people use the library simply as a depository or place to hold reserve readings because then it is an adjunct to content. When you think of independent learning and lifelong learning, . . . then the library becomes absolutely crucial, rather than simply filling a passive role and adjunct to content.” Expounding further, another explained, “I am very much taken by what Earlham [College] does. I would very much like to see the library woven into the fabric of the institution in a very different way where students are not just using the library, but getting the instruction and information technology that supports their particular discipline very early in the courses.” In fact, at a few colleges, the deans may be ahead of the librarians. Explained one dean, “I am not sure that the library itself has played an effective and proactive role . . . . I think there are some communications and some initiatives the library itself could be taking to encourage a more consistent pattern of both usage and acquisitions.” Most deans, however, spoke highly of both librarians and libraries.

Only rarely did the author find deans who were not articulate about the library. Less than a handful answered questions with such statements as: “There has not
been a lot of thought about the library’’; “That topic has not had a lot of discussion since I got here’’; or ‘‘I am not very well informed about that.’’

Did the deans at these colleges support the library? Yes—with some limitations. Most viewed their library support as coming primarily through the budgetary process. One dean, in explaining this emphasis, responded, “Obviously, the main way is to provide them with money. Almost everything else stems from that.” Do, in fact, the libraries get this monetary support? Almost unanimously, the deans said they did. The libraries of the colleges visited enjoy relatively good times. Many colleges have begun or have recently completed library building projects. At those colleges not involved in building projects, deans frequently pointed to other examples of support (e.g., additions to library personnel, automation projects, acquisitions budget increases), trends observed even at the lesser endowed institutions. The dean at one such institution affirmed, “The library, during the twelve years I have been here, has consistently gotten bigger increases than most of the general academic departments.”

Munn concluded that the library “has never managed to accumulate much in the way of pressure.” At these colleges, however, many deans regard libraries as having accumulated considerable pressure. One dean commented on this support: “The library is different only in [that] there is such a broad consensus that it is a central player that it would be very easy to give it an unfair share because nobody will ever criticize you for giving the library too much.” Much of this support comes from the faculty. For example, one dean explained, “[When] we get a request from the library director, our executive vice-president, who really handles the budget, and I try to work out a way to fund it. The faculty expects that.” Strong faculty support, however, is just one of many reasons why deans support the library.

Munn described as “library-minded” administrators who support the library because of their long-held article of faith that the library is a “good thing,” an attitude often corroborated by the author. More impassioned than most, one dean commented, “Jefferson was right when he said that we hold certain truths to be self-evident. The intellectual and educational health of the institution depends on sharing certain convictions at a level of belief and at a level of consensus that do not have to be exact. At this institution, the centrality of the library is one such truth.” Several deans referred to the symbolic role of the library, commenting, “It is a major symbol, and that is one reason we are proud of building a new library. It is something we will use from now on in [our own] publicity,” or “The president shares this attitude regarding the symbolic role of the library. We have put the library in a very central place in our planning for our next campaign.”

Only rarely did the author find deans who were not articulate about the library.

The need to support the library for symbolic reasons can go even beyond utilitarian purposes. One dean commented, “In selective liberal arts colleges, there is no question that there is a psychological need to have resources in the library to keep you high on some symbolic list by which the prestige of the institution is measured—regardless of whether they have value.” However, large expenditures to support the symbolic role of the library can be a source of frustration for some deans: “We just don’t have the resources to pay the outrageous prices in science and engineering periodicals—incredibly expensive stuff that is there for symbolic rather than utilitarian purposes. It is sort of driving us crazy.” Few, however, express strong dissatisfaction with supporting the library for symbolic purposes. The symbolic value of the library attracts students and faculty and supports the morale of the college community. Support of the library as a “good thing” may be a much more powerful motivator for deans in liberal arts colleges in the 1990s than Munn earlier. While the library may not “bring in a multi-million dollar grant,” most deans support the
library (and feel pressure from faculty to support it) for less tangible reasons.

Considerable support from a variety of sources results in the library's privileged budgetary status at many colleges, a status that applies most frequently to the budget for materials. Explained one dean, "It is privileged in that the books and periodical budgets are generally treated outside the established budget parameters. In our case, being outside means that the increases there are larger than are the increases allocated for most other areas of the budget." A few deans expressed reservations about what they considered the extraordinary effort needed to continue support for the library. The dean of a relatively wealthy institution remarked, "The question is to what extent should that privileged position be maintained." Most administrators, however, had few doubts about the need to provide strong financial support for the library. Several, in fact, responded with genuine concern at their ability to support the library as they would like. The dean of a college near the lower end of the financial spectrum lamented, "The library here is not nearly as privileged as it needs to be."

How do deans decide how much budgetary support the library needs? Munn wrote in 1968 that the future would be clearly in the hands of "zealous young men learned in such matters... as program budgeting, decision matrices, and cost-benefit analysis." He recommended, "It might be prudent for academic librarians to have some answers." Do college deans make use of these techniques? Occasionally, someone referred to them: "We function in a macrobudgeting process with a faculty committee that works very well. It starts meeting very early in the fall to think of macrobudget allocations for the next fall. Often they look more than one year ahead." Often, however, the budgetary process is much more subjective. Responding more typically, another dean admitted, "We know that the college budget is increasing across the board, and we try to put more than that into the library. Is that rational? No, it is simply an arbitrary decision, but we figure we can't go wrong if we do twice as much in the library as every place else." Echoing similar sentiments, another administrator acknowledged, "I get plenty of data. I still go by my instincts and emotions quite a bit." How then do chief academic officers decide how much budgetary support the library needs?

Most accepted the bottomless pit analogy as characterizing the library.

Most frequently, they gather information informally from the faculty and, to a lesser extent, from students. The deans described this process in many ways, for example, "I get a sense from talking with people and from watching what happens in the library and from eavesdropping on student comments and on faculty comments and just again from wandering around, and I factor that in a great deal. In the end, I make judgments based on my instincts." The danger in such informal information gathering lies in the fact that deans must be careful not to form opinions on inconsequential or atypical data.

To supplement information gathered informally, many deans referred to comparisons with other institutions, explaining, "I follow the Bowdoin [College] list, and I look at it quite carefully every year," or "I tend to lean very heavily on comparative statistics at virtually every area of the college. We have a set of sixteen colleges and sixteen universities with which we compete most directly for students." A large minority of the deans, however, paid little attention to such statistics. One expressed a common sentiment: "What faculty and students are saying is more important than comparative numbers."

The dean's personal relationship with the library director may have more influence than any statistic. Said one, "So much depends on the relationship between the dean and the director of the libraries that those things [statistics] are not... going to persuade somebody who does not trust
the person using them.” In fact, good relations between the dean and the library director may be the single most important factor in determining support for the library. One dean vigorously declared, “The first thing I have to do before making those decisions is figure out whether I have confidence in the person I am talking to or not. And whether I have confidence in that person’s values. . . . If I can’t figure out whose values are right . . . , then I will assume mine are.” He elaborated: “I have to view the librarian as [being] on the same side of the desk or we are in trouble. He can’t just be a money gruber who is trying to build a damn empire and drive the institution into the ground any more than the person who runs the E and G [Educational and General Budget] can have that attitude.”

Good relations between the dean and the library director may be the single most important factor in determining support for the library.

Institutions’ size may explain differences between Munn’s observations and the author’s. Munn wrote from the perspective of a librarian and provost at a major research university. Smaller institutions, such as those included in this study, may allow more dependence on interpersonal relations and less on quantitative management and assessment techniques than larger institutions. In addition, since the time of Munn’s article, administrators have tried many of these methods and are aware of their limitations. 19

Nevertheless, some regional accreditation agencies require administrators to use quantitative techniques in assessing their institutions. Several deans took exception to these requirements:

I am very hostile to assessment. . . . If you listen to our faculty, we drown them in a sea of paperwork to assure that they are doing excellent teaching and good scholarship.

I am quite skeptical of those sorts of things [quantitative assessments], but we will do it . . . . We have been avoiding it because most of the faculty and the administration are highly skeptical of those things versus the amount of time and resources it takes to do it.

Even those deans who accept the inevitability of quantitative assessments did not know how to apply the techniques to the library. One confessed, “I know that we are going to have to do whatever must be done to develop a sense of the quality of the use of the library. But in all candor, I do not have a sense of it at the moment. I really don’t.” In fact, how to assess the library’s quality and budgetary needs is a major concern for many deans. Several deans share the view of their colleague who admitted, “I have said to the president that the requests made in a library budget are the most difficult for me to either defend or refute.”

The question then remains, “How do deans decide the limits of support the library should have?” Twenty years ago, Munn responded to this question by claiming that academic administrators could not determine the limits of library needs: “They [academic administrators] have observed that increased appropriations one year invariably result in still larger requests the next. More important, there do not appear to be even any theoretical limits to the library needs. Certainly the library profession has been unable to define them.”20 Do college deans today consider the college library a bottomless pit? Some emphatically denied this view of the library. Responded one dean, “I do not think it is a valid perception at all. I cannot think of anybody who perceives the library in that way. It seems it is a vital resource that needs to be kept up to date.” Another administrator replied with particularly descriptive language in characterizing the relationship between library needs
and budgetary control: "'Bottomless pit' is not a phrase I would use, but rather a kind of 'river' of words and images, and of activities. It seems to me that you want to control the flow of that river and the depth of it at any given point, but it must keep moving."

How to assess the library's quality and budgetary needs are major concerns for many deans.

Most, however, accepted the bottomless pit analogy as characterizing the library. Unlike Munn, however, they viewed it as neither unique to the library nor necessarily pejorative:

All important academic enterprises are bottomless pits. Every department is a bottomless pit. Every department thinks it should have three times as many faculty as it does. If one were to respond [affirmatively] as a provost or dean to all such requests, one would be impossibly over budget all the time.

Yes, the libraries are bottomless pits. They share that with a great many parts of the college. Music is a bottomless pit. Science is a bottomless pit. The way pits are constructed is a little different, but everything is a bottomless pit.

The whole academic institution is a bottomless pit. I do not think [the library] is a bottomless pit, except in the sense that we all have needs that will never be completely met. We are always in positions where we follow needs with too few resources. It is always going to be that way.

Perhaps library directors have been too sensitive or apologetic about the characterization of the library as a bottomless pit. Some activities involving the human intellect should have no bounds; library directors should not apologize for seeking resources to support those activities.

Do deans believe that they support the library beyond the budget? The answer is yes. Most deans stated that they support the library in a variety of ways. For example, one characteristically replied, "There are many things we can promote very subtly, and I think most deans do that on a regular basis. It is an element that is always in the forefront, and it interacts in the decisions that are made in many ways. The library is not something that I have on the back burner." Much of this support, however, is unseen by library directors. Most deans agreed with their colleague who stated, "I have to be the advocate for the library with the rest of the college administration and with the board of trustees." Few library directors participate in such circles.

Deans lobby with the faculty for library support in ways that are indirect and informal, indicating, incidentally, how they function with the faculty generally. Several deans verified this mode as a standard of operation. One stated, "My role is indirect rather than direct. Only a foolish dean would jam new ideas down the throats of unwilling departments, but you can certainly suggest." Elaborating further, another dean speculated how he might support the library through the faculty: "If I wanted to draw the library more prominently into discussions ... it would have to be done on an ad hoc basis department by department rather than in the governance system." Most deans readily understand that faculty resist almost any semblance of institutional discipline.

Despite their support of the library, few deans discuss with individual faculty members such library details as collection development and the library's role in the teaching/learning process. Most, however, expressed interest in the library, in pedagogy, and in undergraduate education generally. Still, several deans lamented that only infrequently have they the opportunity to discuss such topics with faculty colleagues.

Perhaps deans are careful to avoid any appearance of meddling in areas that faculty members believe are protected by academic freedom. Most successful deans recognize the limits of their formal and informal authority, carefully husbanding their authority in order to remain effective among faculty members. This particular
circumstance may frustrate those library directors who prefer deans to lobby more directly with faculty members in support of the library.

A few deans, especially in the Midwest, reported talking with their peers about the difficulty of finding good library directors.

Not only do deans not talk much with their faculties about the library, they also do not talk to each other about the library. Munn found that "libraries are almost never discussed at the national meetings of presidents, provosts, deans, and other academic luminaries." The author found many deans who agreed with Munn, especially those from the more affluent institutions:

When we, deans from strong colleges, get together, we all tend to say we have good libraries. We have libraries that we do not have to worry about. It does not mean that we are not concerned. We have managed to hire good people and to have good people. To put it bluntly, ... our jobs are not on the line because of the library. Things like tenure, affirmative action, fiscal survival, and integrity ... tend to get our major attention.

Several deans reported that collegial discussion of the library is more common than it used to be.

Munn described the library budget as "remarkably consistent" from year to year. He contended that academic administrators tended to view the library as a fairly modest fixed cost requiring little attention. However, more recently, the library budget has become a potential problem. Several deans mentioned escalating computer investments in the library. They are concerned that computerization will make the library's budget less predictable. Instead of the library, many deans saw the computer center as the institution's bottomless pit. One dean responded as many others had: "I think it [the library] looks a lot less bottomless since computer services have come along. I think if you want a bottomless pit, it is computing." As college libraries become more computerized, however, they must be careful to avoid sharing the bottomless pit image with the computer center.

A few deans, especially in the Midwest, reported talking with their peers about the difficulty of finding good library directors. They observed "conservatism among head librarians" and expressed "the hope that a new generation will arrive that will at least convert people." These deans referred to some library directors' hesitancy to adopt new technologies and formats and to take on new responsibilities. Most deans, however, thought very highly of library directors at their own colleges. Several commented favorably on relationships with their library directors:

[The library director] probably has to play the most difficult public political role of anybody outside of the president and the chief academic officer in the administration.

The librarian reports to me. I am very lucky. I can let him do pretty much what he wants to do and not worry about it. He and I think the same way on most things, and he manages the library beautifully and deals with the personnel beautifully.

[The library director], in my judgment, is an excellent librarian, so he and I cover a lot of ground in our conversations. We meet often, and he is a member of my immediate staff.

I work much more with him [the library director] as a peer. He answers to me, but ... I trust him and rely on him for a whole range of issues that keeps me out of the nitty gritty of the library.

Many deans viewed the library, especially because it was well-managed, as one element of the college about which they did not have to worry. There remains, then, as Munn found twenty years ago, an element of "benign neglect" in the dean's relationship with the library. Benign neglect makes even the most astute library director uneasy. For example, when visiting the colleges covered in this research, the author usually first talked with the library directors, most of whom gave generously of their time, describing their accomplishments and the present status and future goals of the library. The author then interviewed
the dean, who frequently repeated what the library director had already told the author. Typically, the dean also expressed confidence in and respect for the library director and the library staff. After meeting with the dean, the author usually paid an exit call on the library director, relaying some of the positive remarks. Surprisingly, many library directors responded with statements such as “the dean has never told me that.”

The author frequently found library directors uneasy about their relationships with their deans.

At least in part, as a result of such failure to communicate, the author frequently found library directors uneasy about their relationships with their deans. Apparently, most deans, despite their confidence in the library director and the library staff, seldom express this to them directly. For most deans, the library operates rather smoothly; therefore, they meet with library directors only “when the need arises.”

Even the strongest relationships can deteriorate when individuals meet infrequently and then only to solve problems. A dean at a prestigious college aptly described the importance of regular and frequent meetings with the library director: “If you don’t meet with the librarian weekly, you forget that you have a library. [If] you wait [to meet] until you have a humongous crisis come up, . . . as soon as it goes away, you go back to sleep and forget that you have a library.” Satisfaction can lead to a neglect that is not entirely benign.

Despite a general absence of frequent communications, only a handful of institutions gave even a hint of serious problems between the library director and the dean. One dean described the library director as “too political.” Another characterized the library director as ahead of institutional priorities. Yet another reported that his library director “sometimes . . . comes after you driving a bulldozer when he might just come in quietly on a bike.” This dean added, “It is rather exciting.”

Despite the lack of regular and direct communications between librarians and deans, several deans appeared particularly sensitive to the difficulties of librarians:

I worry about librarians at times because I think as a group they have an inclination to feel underappreciated, overworked, not valued in the way academic faculty are valued, and feel somehow marginalized.

Librarians are easily isolated. They are in a building all by themselves from nine to five. It is very easy for them to get demoralized and to feel that they are not part of the faculty or part of the institution . . . . You really do have to watch out to keep up their morale and make sure they do not get isolated.

None of our librarians, including [the library director], has faculty rank, which is a constraint. The faculty does not think of them as peers; that has . . . potential for undermining morale of librarians.

As these statements indicate, many deans believe librarians require special attention to maintain their morale.

A few deans expressed frustrations about faculty status for librarians and the need for them to become more integrated into the academic community. In particular, one administrator complained, “Our librarians themselves have resisted getting academic credentials and doing the things which faculty recognize as being academic.” Another, discussing faculty status for librarians, added succinctly, “If an individual . . . has the manner and education and interest of faculty members, then the faculty will treat [that person] like a faculty member. If [the individual doesn’t], the faculty won’t.” Because the author did not raise questions about faculty status, it is particularly interesting that several deans mentioned the positive aspects of faculty status for librarians.

CONCLUSIONS

Librarians should be cautious in projecting negative views of college administrators. Most are from the classroom, and many plan to return. Their interest
in undergraduate education is reflected in what they think about the academic library. Most college deans are well informed about services, operations, and contributions of the academic library. Most gave strong verbal support to the library and the library staff and provided specific evidence of their support.

To them, the library is not a bottomless pit—at least not in the pejorative sense that Munn had perceived. Deans regard the library as important in undergraduate education and recognize that the library plays an important utilitarian and symbolic role in the life of the college. They know that most of their fellow administrators, faculty members, and students also support the library, and they respond (or lead) accordingly.

Nevertheless, the author also found support for some of Munn's observations. Deans, naturally, do not think about the library as much as do library directors. Frequently, the deans base their judgments of the library on casual observations and secondhand information. Did the library serve their own teaching and research needs? Was it a busy place when they last entered the building? What comments did trusted faculty members make about the library? Do the library directors speak the same "language" as the deans?

Benign neglect existed at some of the colleges. Satisfaction can lead to complacency. Most deans viewed their support of the library as limited to budgetary matters. Few have directly intervened to encourage individual faculty members to involve the library more in their teaching. Seldom did the deans provide specific details on how they encouraged students to use the library or faculty to develop library collections. Perhaps to some library directors, these attitudes and behaviors prove that deans don't think very much about the library.

Library directors, however, probably fail to understand deans just as much as the reverse. Library directors have not witnessed the support deans claim to give the library in the inner administrative circles or meetings of trustees. The library director, operating in the bureaucracy of the library, may not fully appreciate the limits of the dean's formal authority in dealing with faculty members. Library directors can be too myopic in their view of the library in relation to campus-wide problems. Given their wide range of responsibilities, it is unrealistic to expect deans to have the same command of library details that library directors should have.

**RECOMMENDATIONS**

The nature of the relationship between the dean and the library director is extremely important. Both college deans and library directors have campus-wide responsibilities and share many of the same clientele. They struggle with similar problems, such as the need to establish priorities in the face of increasing costs and finite budgets, to placate intractable faculty members, and to motivate inattentive students. To become more effective, library directors must further define these similarities and cultivate more assertively the natural affinities they have with their respective deans.

For example, most deans expressed considerable respect for the administrative skills of their library directors. Nevertheless, few library directors serve in the inner administrative circles of their institutions. Few serve on strategic or long-range planning committees. Without making specific statements, the deans apparently did not consider the administrative skills of library directors directly applicable to larger college concerns. As Munn reported, the library director still "does not often carry great weight in the academic power structure."23

Moffett found that most library directors were likely to confess that problems occurred when they had not educated their colleagues about the library.24 This education should extend to colleagues in the college's administrative offices. This study indicates that library directors should find deans receptive to learning about the library, but that library directors must take the initiative. Directors should begin with regularly scheduled meetings with the dean. While the directors can use these sessions to discuss immediate problems, intermediate and long-term library
concerns should be the topic of many of the meetings. Face-to-face discussions are invaluable to the regular flow of information to and from the dean. Most importantly, these meetings are probably the primary means through which the library director can develop an understanding for the "language" of the dean.

In addition, library directors can earn the dean’s confidence by taking an active and informed interest in larger college problems and general educational issues. Understanding a wide range of concerns enhances the directors’ abilities and opportunities to contribute effectively in inner administrative and faculty circles on a variety of subjects. Informed library directors can greatly assist in academic decision making. Librarian Patricia Breivik and university president E. Gordon Gee outlined in their major work *Information Literacy: Revolution in the Library* three important roles librarians can play in this area: "They can collect and organize relevant information (information management), instruct administrative staff in accessing and evaluating information (information literacy), and participate directly in campus planning teams." 25 Timely comments made in working with planning teams or with administrative staff by a library director with established credibility on a wide range of issues may serve the library much more effectively than hours spent compiling statistics.

Understanding the broader perspective will also aid library directors in appreciating how deans function in academia. Sensitivity to the often delicate position of deans will allow library directors to realize why deans often must take a circuitous route to a decision. Consensus seeking, informal persuasion, and indirect action are all instruments in an effective dean’s bag of tools. Paradoxically, impatient library directors who do not appreciate these tools may find that their increasingly shrill cries will fall on deaf ears.

"At most institutions," commented one dean, "the library is not the center of the institution. It only gets in the center of the institution if somebody is trying aggressively to put it there." While many individuals, including the dean, share this responsibility, most of the responsibility rightfully falls on the library director. To handle this responsibility, the library director must not only understand the library, but must also understand how to work aggressively within the framework of academia. In the college environment, if the dean does not think very much about the library, the library director must rise to the challenge of educating the dean.

**REFERENCES AND NOTES**

2. In 1968, Munn was acting provost and dean of the Graduate School at West Virginia University. At the time of his death in 1986, he was dean of University Libraries at West Virginia University.
4. Ibid., p.52.
Education, Inc., 1989); library book volumes ranged from 100,141 to 961,194, with an average of 298,219; current periodical subscriptions ranged from 646 to 2,656, with an average of 1,375; endowments ranged from $7.4 million to $273.5 million, with an average of $71.3 million, Voluntary Support of Education, 1987–1988. The National Center for Education Statistics classified all except two of the institutions as general baccalaureate institutions (IBs); the Center classified these two institutions as comprehensive institutions, “Mastering the Academic Marketplace: The Annual Report on the Economic Status of the Profession, 1987–88,” Academe 74:18 (March/April 1988).

10. The term “chief academic officer” refers to individuals who may hold a variety of titles at liberal arts colleges, including academic dean, dean of faculty, vice-president for academic affairs, and provost. Typically, it is the chief academic officer to whom the library director reports and from whom he or she seeks resources. For simplicity’s sake, the author will refer to these individuals as deans.

11. Because the interviews involved considerable travel within a limited amount of time, the author had to consider logistical problems in making the final selections. Time did not allow more interviews. At three institutions, the author also interviewed the associate dean.

12. The author organized the interview questions into a semistructured guide, ordering questions into a funneling sequence that began with broad, open-ended questions and proceeded to more focused questions. This technique allowed the interviewer to ask each interviewee similar questions. The interviewer, however, modified questions for specific situations, changed the order of topics, and probed further into the attitudes of some individuals. For additional information, the reader is referred to Delbert C. Miller, Handbook of Research Design and Social Measurement, 2nd ed. (New York: McKay, 1970), p.86–88; Charles J. Stewart and William B. Cash, Interviewing Principles and Practices (Dubuque, Iowa: Wm. C. Brown, 1974), p.64–65, 81–82; and Daniel Katz and Robert L. Kahn, Social Psychology of Organizations (New York: Wiley, 1966), p.66.


14. Ibid.

15. Ibid.

16. Ibid.

17. Ibid., p.54.

18. Arthur Monk, the library director at Bowdoin College, for many years has compiled comparative library information among a select group of liberal arts colleges.


23. Ibid., p.53.


## APPENDIX A

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<th>Institutions Included</th>
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## IN FORTHCOMING ISSUES OF COLLEGE & RESEARCH LIBRARIES

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Resolving the Acquisitions Dilemma: Into the Electronic Information Environment

Eldred Smith

Editor's note: This article is the second part of a series on scholarly communications and serials prices. This paper analyzes the present serials acquisitions crisis as the latest manifestation of the instability of the economic system supporting scholarly communication, which places an increasingly intolerable burden on the research library. It reviews various solutions that have been proposed to solve this crisis, arguing that none is achievable as long as the present economic system continues. It proposes a resolution to this dilemma, drawing upon the capabilities of new electronic technology, through which the economic burden on the research library will be reduced or even eliminated, and the system of scholarly communication improved.

Research librarians once again confront a serious acquisitions crisis. Their continuing, historic struggle to maintain the strength, quality, and effectiveness of their collections is jeopardized, as it has been periodically in the past, by their inability to meet expanding prices and proliferating publication with relatively stable budgets. The present crisis has been precipitated by recent, quite substantial increases in the cost of scientific, technical, and medical journals.

Various suggestions have been made for dealing with this crisis. They range from proposals to control the cost and proliferation of journals; to increased resource sharing; to changes in the practices of scholars and scholarly publishers. Unfortunately, each of these solutions presents its own difficulties. Moreover, none of them promises more than a short-term adjustment, a period of temporary equilibrium until the problem arises again. Consequently, the crisis precipitates a dilemma, a problem with no satisfactory solution. Indeed, it is simply the latest episode in the research librarian's long, heroic, but inevitably losing struggle to acquire, organize, and preserve the record of scholarship.

But is there no satisfactory solution? Can this struggle be brought to a successful conclusion? Yes, it can, through proper employment of new electronic information technology. Indeed, in this respect, the current serials crisis may, ironically, have a substantial value: not only does it demonstrate how serious the acquisitions dilemma has become, but it also shows how that dilemma may finally be resolved.

THE SERIALS CRISIS

The present research library serials crisis is now widely recognized. Identified initially by acquisitions and serials librarians, through their journals and meetings, it now has the attention of re-

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search library directors and their organizations. The American Library Association (ALA) established a blue-ribbon task force, chaired by a former executive director and including publishers and book trade representatives in ALA’s membership, to work on the problem. The Association of Research Libraries (ARL) has sponsored two major studies of serials acquisitions. ARL is pursuing a program of action to deal with the particular issues identified in these analyses. At its 1989 spring membership meeting, the ARL membership resoundingly approved a special dues assessment in order to finance an activist approach to deal with the serials crisis. This action is a sure indication of ARL’s seriousness.

Concern about this crisis is no longer restricted to librarians. Academic administrators have expressed apprehension and called for action. Scholarly publishers have convened special meetings involving scholars, librarians, and commercial publishers to discuss possible solutions. In spite of all this activity, however, few positive results are visible. The prices of serials, particularly scientific, medical, and technical serials issued by a handful of commercial publishers, continue to increase substantially beyond the average rate of inflation. New serials continue to appear at an alarming rate. Research library acquisitions budgets, despite special infusions of funds, are increasingly strained to maintain even past levels of coverage, leaving aside the need to purchase new titles.

A variety of causes has been identified for this crisis. The decline of the dollar has seriously damaged research libraries, a large percentage of whose acquisitions are published in Western Europe. The exponential growth of scholarly publication, which doubles every ten to fifteen years, exceeds research library acquisitions budget capabilities. Dual pricing places an increasingly heavy burden on research libraries. Finally, the increase in publication of scholarly materials by commercial houses has been pinpointed as an especially destabilizing influence.

All research libraries, even the wealthiest, have been affected by these developments. Long-established acquisitions programs are being distorted. Serial subscriptions are being cancelled. Monographic purchases are being reduced. Operations and services are being constrained as the funding for vacant staff positions is used for acquisitions. Research libraries are able to acquire fewer and fewer scholarly publications, to cover less and less of the record of scholarship. And as they seek to adjust to these pressures with cooperative programs, such as increased resource sharing, research librarians seem only to be compounding the crisis by stimulating further price increases.

WHO’S TO BLAME?

The tremors radiating out from this crisis have inspired a number of accusations. Every participant in the scholarly communication process has received a share of blame. For research librarians, the primary culprits are the large commercial publishers, whose aggressive pricing policies and undisguised profit motive have made them singular objects of attack. The research librarian has also pointed a finger at scholars, whose expanding publication is seen as stimulated perhaps as much by tenure and advancement pressures as by the value of research. Research librarians reproach scholarly publishers, particularly universities and societies, for yielding an increasing portion of their domain to the for-profit sector. Scholars and scholarly publishers blame research librarians for not securing the additional resources that researchers need to keep up with expanding publication. Commercial publishers have aggressively joined this attack as criticism of them has continued and mounted.

In fact, some critics observe that all participants in the scholarly communication system must bear some share of the blame. But should they? Is anyone really at fault? Aren’t the participants simply carrying out their assigned roles? The commercial publisher’s profit motive clearly drives up prices, but can or should a business be blamed for seeking to maximize its profits? The scholars’ interest in publications forces the exponential growth of the literature, but isn’t the scholars’ fundamental respon-
sibility to share the results of their research? Scholarly publishers' historic concern has been to monitor and distribute the product of scholarship. However, the business side of this—by definition, nonprofit—enterprise has not generally been attractive to scholarly publishers. Why should they be blamed for deferring an increasing share of their burden to the commercial sector, particularly as the integrity of peer review and the quality of editorial judgment are not threatened? Research librarians are expected to fulfill their responsibilities within the constraints of limited resources, competing aggressively but understandably within the context of the generally expanding needs and increasingly limited capacities of the research university. Can research librarians be faulted for not pursuing acquisitions funding increases more aggressively under such circumstances?

If the participants are not to blame, perhaps it is the system itself that is at fault. Perhaps the process of scholarly communication needs an overhaul. More and more, this view seems to be shared, at least among research librarians.2

IS THERE A REMEDY?

To assert simply that the system of scholarly communication needs to be changed or adjusted is of little practical value. The present system is centuries old, well established, and quite complex, and it includes a number of major participants. If change is to be achieved, it must be clearly and explicitly identified. Its dimension must be established. Is it, for example, to be a relatively minor adjustment, a correction, or a more substantial reworking? Whom will the change most affect? What are the prospects for success or failure? Finally, it is essential to determine who, among the various system participants, must be enlisted in the change effort.

Suggested Changes

Research librarians have recently proposed a number of specific changes. One cluster of suggestions focuses on the acquisitions process. These suggestions range from standard advice about knowledgeable consumerism, to refusing to purchase particularly high-cost items (or items whose cost has accelerated beyond the standard inflationary increase), to boycotting certain publishers. All of these proposals are directed to the same goal: controlling and stabilizing price increases so that present acquisitions programs can continue and present balances among disciplines can be maintained.

Other suggestions relate to securing additional acquisitions funds. Such an approach continues to receive substantial support, often including active lobbying by scholars at the local level. Publishers, both scholarly and commercial, encourage it. Expanding cooperative research library resource-sharing programs, which seemed to offer such promise during the 1970's funding crisis in higher education, is still being advocated and pursued.

Perhaps it is the system itself that is at fault. Perhaps the process of scholarly communication needs an overhaul.

Considerable interest is being shown in changing the scholarly communication process. In particular, research librarians seek to enlist the support of the higher education community in reversing the trend toward the increasing commercialization of scholarly publication. They wish to convince universities and scholarly societies to enlarge their publishing roles, to recapture journals that have been ceded to the commercial arena, and to expand their publishing programs to include desired new titles, rather than to have journals issued—by default—by commercial houses.

Beyond this, research librarians discuss ways of limiting the continued rapid growth of scholarly publication by seeking modifications in long-established practices and mechanisms. These mechanisms, such as tenure requirements or expectations, seem to encourage unnecessary and even redundant publishing activity. In undertaking such efforts, librarians hope to form alliances with scholars who find fault with the present system and to influence scholarly organizations and academic administrators.
There also exists renewed interest in expanding lobbying activity in order to stabilize and extend the gradually declining level of federal support for research library acquisitions programs. Some research librarians hope to recapture the priority support of the 1960s, perhaps as part of a once hoped for "peace dividend." Finally, technology is seen as a possible solution to this and other research library problems.

Mitigations

Yet even as research librarians develop their strategies and gather themselves for combat, they seem to display a significant lack of conviction about their prospects for success. They know that they do not occupy a strong market position. Talking about knowledgeable consumerism costs little; accomplishing it may be quite expensive. Certainly, automated systems make it easy to gather and analyze data. This, in turn, strengthens research librarians' ability to identify and compare options. However, it is not clear that, having done this, librarians will be in a position to exact savings that are any greater than the costs of the analysis.

Research librarians must continue to acquire as much as they can of the record of scholarship. It is their historic and enduring role. Their options are extremely limited. They may occasionally refuse to buy expensive items. They may cancel a few serials. However, they do not have the practical ability to make a major impact on their market.

Nothing illustrates this fundamental weakness better than research librarians' inability to mount an effective boycott. Certainly, an action of this kind would exert a significant and rather immediate influence on the commercial publisher. If North American research libraries successfully boycotted all of the publications of only one or two major publishers for even a brief period of time, those publishers and their colleagues would receive a very clear message. However, such a boycott is simply not possible. Not only would it be of highly questionable legality, but it would also seriously undermine research librarians' abilities to meet the needs of their primary clients—scholars. Under these circumstances, an attempted boycott would probably prove far more disastrous to research librarians than to the publishers against whom it was directed.

Securing funding increases is the research librarian's time-honored mechanism for maintaining acquisitions programs. Individual libraries and the research library community as a whole have been generally successful in obtaining additional funds in times of difficulty. This practice continues through the present crisis, even though many of these increases are being identified specifically as temporary or short term. While academic administrators and fiscal officers may grumble and object, additional acquisitions funding in time of need is an issue with strong faculty support. Such support is critical within the academic environment. Nevertheless, analysis indicates that research library purchasing power has been losing ground for some time in relation to scholarly publication growth and inflation. Furthermore, research librarians are scarcely a decade removed from the doldrums of the 1970s. Both the severity and the relative frequency of recent fiscal pressures present the specter of a continuing hand-to-mouth existence.

Nothing illustrates this fundamental weakness better than research librarians' inability to mount an effective boycott.

The bright promise of resource sharing has become quite dim in practice, at least among and between research libraries. Research librarians have been reluctant to rely heavily on each other's collections, particularly recognizing the weak infrastructure that exists for prompt and effective exchange of materials. In addition, evidence suggests that publishers, both scholarly and commercial, are prepared to compensate for reductions in research library sales volume.
by increasing their research library prices. Fewer copies may be purchased by libraries, but total library expenditure will probably continue at about the same rate of increase.

Research librarians are not likely to persuade scholarly and higher education institutions to recapture the portion of scholarly publication that has been shifted to commercial houses, or even to reduce this trend. There are good reasons for such transfer, after all. The transfer relieves universities and societies of the burden of subsidizing and marketing the product—obligations that have been unattractive and costly to academic enterprises—while enabling them to retain editorial control. It also relieves scholars of page charges and other direct costs connected with scholarly publication at a time when federal and other grant support is declining. And the transfer expands publication opportunities.

Humanities and many social sciences disciplines have not experienced the degree of commercialization that has occurred in the hard sciences and technology. These disciplines may express sympathy, particularly if they believe that their sales are likely to suffer in the reconfigured market. However, these scholarly publishers lack the influence to reverse or modify present trends in science and technology publishing.

The bright promise of resource sharing has become quite dim in practice, at least among and between research libraries.

Efforts on the part of research librarians to reduce the growth of scholarly publication by modifying tenure or promotion requirements or by other means are even less promising. All available analysis demonstrates that scholarly publication has been expanding at its present rate for more than two centuries with no evidence of slackening. It is a function of the continued exponential growth of research and scholarship. The emphasis on publication, as evidence of research, is an effect, not a cause. For research librarians to suggest otherwise is fundamentally insulting to scholars. The argument will marshall little support, but it will engender enmity. Unsurprisingly, scholars confronted with such suggestions react by telling librarians to concentrate their efforts on securing more acquisitions funds.

Sufficient federal funding will probably not be available to solve the research librarian's problem. The prospects of a peace dividend have disappeared in the face of war in the Persian Gulf and the enormity of the national debt. After the war bills are paid, a variety of urgent social needs will compete for the shrinking dollars available at both the federal and the state levels. Not only research libraries, but higher education in general, seems to be in an extended period of increasing fiscal difficulty.

Up to this point, technology generally has been discounted as a near-term solution to the research librarian's serials problem. Although electronic publication and communication are increasing, they seem only to add to, rather than diminish, the proliferation of materials that research libraries must acquire, including the added costs involved in maintaining and servicing electronic, as well as print, collections. Nevertheless, the new technology offers the opportunity to free research librarians from the enormous financial burdens of acquiring and maintaining large on-site collections. However, discussion of these solutions has generally been limited, vague, and wanting in practical specificity.

RESOLVING THE DILEMMA

Certainly, all of these factors contribute to research librarians' lack of conviction about their ability to cope effectively with the serials crisis. This lack of conviction, however, extends beyond serials and the present crisis. Research librarians are increasingly aware that they are losing ground in their historic struggle to acquire, preserve, and maintain the record of scholarship. Science serials produced by commercial publishers are certainly the focus of the present difficulty. However, this is only the tip—in fact, minuscule tip—of an enormous iceberg. Furthermore, the ap-
parent absence of viable means to deal with this still relatively small part of the problem suggests a dimension of intractability that transforms the crisis into a dilemma, without possible resolution. Research librarians increasingly feel that they are doomed to a continuing, losing struggle. They see their critical role in the system of scholarly communication declining, and they feel powerless to prevent it.

Research librarians can, however, resolve their dilemma. Furthermore, in doing so, they will not only solve the serials crisis once and for all, but they will also strengthen their role in the scholarly communication system and improve that system for the benefit of its other participants—scholars and scholarly publishers. They will do this by fundamentally reshaping the research library to take advantage of the capabilities and to respond to the requirements of the new electronic era. Electronic technology has many substantial advantages over print as a medium for scholarly communication. It is much faster, offering the capability of almost instant information delivery anywhere in the world. It is more flexible, providing correspondents with the opportunity to respond either immediately or at their leisure. It is interactive, allowing correspondents to change and adjust text as they converse electronically, and it provides convenient means for concurrent interchange among a number of different parties, who may be widely separated geographically. For these reasons, electronic technology is rapidly becoming the preferred means of informal communication among scholars.

For research librarians, however, the greatest advantage of electronic communication is certainly that a single electronic copy of any scholarly work serves the same function performed by hundreds of copies in hundreds of different research library collections. Indeed, it is this capability that provides research librarians with the means to resolve their long-standing acquisitions dilemma.

Rather than acquiring, organizing, and preserving copies of scholarly works in every research library, as is necessary in the print environment, research librarians can establish, organize, and maintain a single electronic collection. The collection can be immediately accessible to the entire scholarly community. Furthermore, such a collection can be fully cataloged and indexed at a level of detail and with a degree of exactness that are impracticable with a print collection.

Research libraries can, as a consequence, be transformed into information centers. Instead of investing the bulk of their energies and resources in acquiring, organizing, and preserving duplicative and incomplete collections, research librarians can intermediate between scholars and students on the one hand and the central electronic collection on the other to provide any information needed. Through this process, the long-anticipated, but substantially unfulfilled, transformation of the research library from an ownership institution to an access service can be accomplished.

OBS TACLES: REAL OR IMAGINED?

But is such a transformation possible? Or is there a host of problems in its way, a cluster of insurmountable obstacles that will prevent it from coming to pass? Perhaps, but before dismissing such a reconfiguration of the research library and its role, it is essential to look closely at these presumed obstacles to determine how serious they are and whether they can be overcome.

Technology

First, of course, is the matter of technology. Can present technology support a single widely accessible and conveniently usable electronic database of scholarship? Clearly, no fundamental technological barriers now stand in the way of such an accomplishment. Already-enormous data storage capacities continue to expand rapidly. Data manipulation is highly sophisticated and becoming ever more so. A network of efficient data communication systems is essentially in place and is constantly improving. Costs in all of these
areas are declining and should continue to do so. The text of most current scholarly publication presently exists in electronic form as a by-product of the contemporary printing process.

Of course, much would need to be done in order to create an effective and reliable data center. Hardware would have to be acquired and software designed. Arrangements would have to be worked out with scholarly publishers for the deposit of their electronic text. Conversion programs would have to be written to merge the text generated by different publishers, at least until standardization is completed. A communications network would have to be adopted. An electronic bibliographic apparatus would have to be implemented, and services would need to be organized.

None of these requirements, however, is beyond the capability and experience of research librarians working with scholarly publishers and systems designers, and certainly the requirements are not beyond the limits of presently available technology. Indeed, it would be much simpler and more economical to establish and maintain such a central electronic database of scholarly publication than to interact effectively with the decentralized electronic scholarly communication structures that are its only alternative.

**Economics**

"Even granting the technological feasibility of creating a central electronic database for scholarly publication, its economic viability is surely a matter of serious concern. How much would it cost? Who would pay for it? Might not such an arrangement, in the end, place an even heavier financial burden on the research library?"

The 119 largest North American research libraries presently invest approximately one-half billion dollars annually in acquiring and binding print copies of publications for their collections. This resource base should support both the operations of an electronic data center and the communications costs connected with its use. Indeed, even assuming that, for a considerable period of time, research libraries would continue to invest some portion of these funds in print publications not available from the center, sufficient funding should undoubtedly remain to support the center and its use.

Furthermore, as their print acquisitions programs declined, research libraries would generate savings far beyond direct acquisitions expenditure. Reliable, detailed economic data related to research library operations are still difficult to assemble. Yet the researcher can conservatively estimate that 80 percent or more of these North American research libraries' operating budgets, which now total over 1.2 billion dollars, is currently invested in handling printed materials.9 This figure includes acquisition, cataloging, circulation, and collection maintenance functions particularly. Although dependence on an electronic data center would not allow these expenditures to disappear all at once or even entirely, they would largely be eliminated over time.

The long-anticipated transformation of the research library from an ownership institution to an access service can be accomplished.

Of course, under such circumstances, research libraries would generate new costs. The services that they would be required to provide, as the information intermediary between the electronic record of scholarship and the scholar, would not be insignificant. However, these costs certainly could be covered by materials-handling savings as research libraries gradually are transformed into information centers.

But would such savings actually be realized by research libraries in an electronic information environment? Or would these libraries or their clientele be required to pay use charges for access to the electronic database of scholarly publication—charges that probably would equal or perhaps even exceed the present cost of print acquisitions? Well over one half of the cost of scholarly publishing presently derives from the production and distribution of print copies.10 Conversely, approximately one half of the income generated by scholarly publishing derives from research library purchases.11
If print distribution were eliminated, scholarly publishers could maintain their vital review and editorial functions without income from libraries, assuming that the publishers did not have to share in the costs of supporting the operations or use of the electronic data center. There would be no need to levy use charges on research libraries or on the scholarly community for access to that center.

Acceptance

Could scholarly publication effectively continue under such circumstances, without producing and distributing a print product? Would the scholarly community accept such a change? Recent developments suggest that scholars increasingly are making use of electronics for their informal communication. It seems far more likely that scholars will insist on electronic formal communication as well, rather than retain what will, in such an environment, be an increasingly cumbersome print system.\(^{12,13}\)

Will publishers wish to cooperate in such an endeavor? The answer to that question can be found only in an examination of the structure of scholarly publishing. The vast majority of such publishing, at least in North America, is still in the hands of non-commercial publishers—essentially universities and societies. The dominant objective for these publishers is not generating profit, but contributing to the advancement of scholarship. Indeed, the activities of scholarly publishers are essentially subsidized.\(^{14}\) As long as these publishers are able to continue their editorial and review functions, which would not be threatened, they would have no substantive reason not to shift from print to electronic distribution.

Indeed, electronic distribution would offer some significant advantages to the scholarly publisher. The publisher would not have to worry about marketing, reject manuscripts because of budget limitations, or delay the appearance of accepted manuscripts until they could be accommodated in a journal issue.\(^{15}\)

Of course, commercial publishers would not be willing to participate in an arrangement that would deny them profits. This would certainly pose a problem for an electronic-access system that did not include use charges or some other royalty provision. Although non-commercial publishers produce most North American scholarly publication, this situation does not necessarily obtain elsewhere—particularly in Western Europe. Furthermore, even in North America, commercial publishers produce material that research libraries regularly acquire and preserve.

Commercial publishers participating in an electronic data center should not, however, be an insurmountable problem. All commercial publications could be included in a use-charge system, and the royalties turned over to the appropriate publisher. Such a system could be affordable for libraries. Indeed, such an arrangement might be attractive to commercial publishers, who presently are concerned about controlling access in an electronic distribution environment.\(^{16}\) Alternatively, research libraries could continue to acquire and maintain collections of commercial publications in book form, making them available as they do now.

Over time, however, one of the consequences of developing a single electronic database of scholarship might be the gradual disappearance of the commercial scholarly publisher. Such publishers presently exist because universities and societies cannot absorb the full production-distribution responsibility for scholarly publication in a print environment. Absorption of this responsibility by the electronic database center would eliminate the commercial scholarly publisher’s function.

Copyright

Copyright has long—and increasingly—acted as a barrier to the kind of open-access system explicit in an electronic database of scholarship. Will that continue to be the case? Copyright is essential protection for the commercial author and publisher, who write and publish in order to make money. The situation is quite different for the scholar and scholarly publisher. The scholar writes and the scholarly publisher publishes in order to contribute to the advancement of knowledge. Both want recognition from their peers, and both know that additional rewards—
promotion, tenure, salary advancement, academic and professional honors—come as a by-product of such recognition.

Whereas the commercial author or publisher relies on copyright to restrict distribution without payment, the scholar and scholarly publisher are interested in maximizing distribution. Scholars simply wish to ensure that proper attribution is given whenever their work is copied, quoted, or otherwise used. Scholarly publishers share this interest. However, because they function in a free-market guise in the present print information environment, scholarly publishers also have assumed the commercial publisher's interest in preventing unauthorized copying. Indeed, in a print environment, scholarly publishers inevitably have something of a split personality: the merchant, or pseudomerchant, being at odds with the dispenser of knowledge.

With the establishment of an electronic database of scholarly information, which will relieve scholarly publishers of the need to print and distribute their product, these publishers will not require the protections and restrictions of copyright. Furthermore, if commercial publishers are able to secure revenue—in the form of use charges—through participation in the electronic access program, their copyright protection concerns should be fully met.

The lack of accepted standards for electronic publication is also seen as a major barrier to implementing convenient and reliable electronic access. This problem is not fundamental, but derivative. Continued employment of nonstandard hardware and software by scholarly publishers provides protection against unlicensed use of their products. Like copyright, nonstandard equipment ensures that payment is received for use. Because an electronic data center could be organized to eliminate such concerns, it would serve as a strong stimulus to standardization.

WHO LEADS?

Can the research librarian unilaterally effect such a fundamental change in the research library? Obviously not. The research librarian will require the full and active participation of the scholarly publisher in designing and implementing what also will, necessarily, involve an equally fundamental change in scholarly publishing. Furthermore, changes in both of these activities must be endorsed and supported by scholars. Such support is likely to be forthcoming because of the significant improvements that electronic publication and access would bring to both scholar and publisher and because the present print system is rapidly approaching collapse.

Finally, there is the question of time. How long will it take to move from the print system of scholarly publishing and research library organization to the very different electronic system described above? Even if a major effort were undertaken immediately, it would take a number of years—perhaps two or three decades, at best. First, there would have to be an extended period of negotiation as the scholarly community unites and establishes a direction. A period of extensive planning necessarily follows. Finally, considerable time will be required to carry out the fundamental institutional change. Indeed, the generation of research librarians who begin the process will probably be replaced before it is completed. This provides all the more reason to undertake the effort as quickly as possible.

Clearly, no unconquerable obstacle stands in the way of the changes that will resolve the research librarian's acquisitions dilemma, monumental though these changes will be. The serials crisis demonstrates the need to make such changes, and it indicates steps to be taken in order to carry them out. Research librarians, who understand better than anyone else the critical issues at stake, must provide the necessary leadership to effect this change. Indeed, for research librarians, this challenge is a primary one for the next millennium.
REFERENCES AND NOTES


2. Richard M. Dougherty, “Editorial,” Journal of Academic Librarianship 14:3 (Mar. 1988): “Thus it is possible we are currently struggling through a period of transition, waiting for a new system of scholarly communication to evolve.”


4. The classic analysis is: Derek J. De Solla Price, Little Science, Big Science . . . and Beyond (New York: Columbia Univ. Pr., 1986); and Science since Babylon (New Haven, Conn.: Yale Univ. Pr., 1975). This analysis is confirmed periodically, most recently by Griffiths and King in Okerson, Of Making Books, p.32.


8. Ibid.


13. Kolata, “In a Frenzy,” p.C1, C10. As described in this article, the time required for a group of mathematicians, located around the world and interacting via international electronic mail, to solve a major, long-standing mathematics problem, including preparation of a paper to share the results of their work, was less than the time required to publish it in a scholarly journal.


16. Robert Weber observed in “The Clouded Future of Electronic Publishing,” Publishers Weekly 235:80 (June 29, 1990), that “unless avoidance of copyright were universally detectable, a highly unlikely circumstance, the duplication and distribution of copyright materials seems unstoppable. If this view is correct, publishers would have a powerful disincentive to sell and distribute their wares in electronic form.”


ARL Directors: Two Decades of Changes
Marcia J. Myers and Paula T. Kaufman

This study examines a wide range of changes among ARL directors from 1970-1989 on such variables as gender, previous positions held, and volumes in the collections. In 1970, there were no female directors of ARL libraries; in 1989 there were 32 female directors. This increase has changed the demographic characteristics of ARL directors. As a group, female directors are younger, have fewer years of service, earn higher average salaries, and have received higher increases in their libraries' budgets when they assumed their jobs than male directors.

During the past two decades, higher education has been subject to many stresses and changes. In 1973, Arthur M. McAnally and Robert B. Downs published their classic article on the changing role of the university library director. McAnally and Downs expressed concern about the recent high turnover rate in this position and predicted that if the trend continued, the average span of service for directors might drop to only 5 or 6 years. As librarians enter the 1990s, it seems appropriate to reexamine the tenure and other characteristics of directors of large research libraries. Are many directors leaving their positions to retire early or to go into teaching or other fields, as Anne Woodsworth recently suggested? Have the reasons for leaving the directorship or the age and educational backgrounds of directors changed over the years? What changes, if any, have occurred in the characteristics of library directors in light of the increasing number of females assuming top positions? What, if any, new trends can be predicted for the 1990s?

LITERATURE REVIEW

There has been a fair amount of research about the characteristics of research library directors during the last half-century. William L. Cohn studied 254 U.S. Association of Research Library (ARL) directors covering the period 1933 to 1973. Of the 74 ARL libraries in 1973, 34 (46%) had named a new director in the previous 4 years. Although there had been a large increase in the number of library doctorates awarded, this trend was not reflected among the ARL directors, whose most common highest degree was the M.L.S. In the period 1933 to 1973, 54% of the directors died in office or retired; 14% went into teaching.

Jerry L. Parsons contrasted the characteristics of directors of U.S. ARL libraries for the years 1958 and 1973. He found that there was not a trend toward younger directors: the average age in 1953 was 51 years, while the average age in 1973 was 53 years. There were no women

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directors in 1953; in 1973, there were 4 female directors. The 1953 group held 26 doctorates; the 1973 group held 25 doctorates. In 1958, the majority of the directors had been promoted from within. In contrast, the majority of the 1973 directors were recruited from other institutions. Parsons also found that the tenure of ARL directors appeared to be developing into a short-term assignment. In 1958, the average tenure of a director was more than 8 years, with a median of 9 years. In 1973, the average tenure of the directors was less than 8 years with a median of only 5 years.

In a letter to the editor of *College & Research Libraries* Louis Kaplan provided historical data on ARL directors who withdrew from administration before age 65. The percentage of those who left administration increased from 10% to 20% in the 1926-1942 period to 26% in 1968-1975. Kaplan thought the reason that more directors left between 1968-1975 was because of the decline in fiscal support that began to be felt in 1967.

Janice Fennell, noting that librarianship is 84% female, studied 11 female directors of large academic libraries in 1978 to develop a composite career profile. She concluded that if a woman becomes director of a large academic library in the United States, she is likely to be middle-aged (an average age of 48), married with no children, and from a middle-class background. The profile indicated that the typical female director possesses no higher than a master's degree; however, she is interested in both formal and informal continuing education. The profile also indicated that the female director has held her current position for less than 10 years and entered the position directly from another administrative position.

Ronald Dale Karr studied directors of 90 U.S. ARL libraries in 1966 and 1981. He excluded libraries with vacancies, acting directors, or nonlibrarians serving as directors. One of the more notable differences between the directors in the two groups was gender: there was only 1 female library director in 1966 and 12 in 1981. Of the 1966 directors, 15% lacked the library degree, but by 1981, every director was a graduate of a certified graduate library program. The proportion of directors with doctorates fell from 44% in 1966 to 33% in 1981. Although the 1981 directors had taken longer to reach their present positions, they were younger (an average of 51.2 years) than the 1966 directors (53.6 years). The 1981 group had served an average of 6.7 years in their current positions, while the 1966 group had served an average of 11.4 years.

William S. Wong and David S. Zubatsky studied the tenure rates of 91 ARL and 80 non-ARL library directors in 1983. They excluded vacancies and acting directors from the study. Seventy-five of the ARL directors were male and 16 were female. Twenty-two directors of ARL libraries (19 males and 3 females) were promoted from within their institutions to the directorship. Results of the survey support previous findings that the number of individuals holding the doctorate has not increased despite the fact that there has been an increase in the number of individuals holding the doctorate in library science. Thirty-three ARL directors (32 males and 1 female), or 36% of the 91 respondents, had held their position for 9 or more years. Sixty-seven percent had held their positions for 5 or more years. These findings did not support McAnally and Downs' prediction of short tenures for library directors. Women were more likely than men (62.5% versus 46.7%) to hold their positions for 6 or less years, but this may be attributable to their more recent attainment of such positions as a group.

In 1989, Anne Woodsworth reexamined the McAnally and Downs article. She indicated that the situation regarding the tenure of library directors has not changed. In the past 3 or 4 years, more than half of the U.S. ARL libraries have seen a change in directors. The turnover predicted by McAnally and Downs seems to have become the norm. Woodsworth perceived that while some of the attrition is normal, human factors contribute to a search for career alternatives. These factors include boredom, reaching a structural plateau in jobs, lack of stability in the university
administration, and overwork. The current tempo and demands on the director's job will not change soon, Woodsworth asserted, and the onus is on the individual library director to develop alternative career paths and escape routes. Woodsworth's article and conclusions inspired us to examine trends in contemporary ARL university library directorships and to analyze the changes among the group over a 20-year period (1970 to 1989).

**Purpose and Methodology**

No attempt was made to analyze the directorship of an institution before the library became an ARL member; therefore, the population of this study ranged from 75 university libraries in 1970 to 107 in 1989. One library, which was an ARL member in 1970 but not 1989, was excluded from the study. Statistical data on the number of volumes, volumes added, materials expenditures, total expenditures, and number of staff for each library were extracted from the annual ARL Statistics.

Throughout this study, the title "director" is used to denote the top executive of an ARL library, regardless of the exact title. The latest ARL membership list was used to locate the name of the current director. Acting directors were excluded from this study; Canadian ARL library directors were included. Biographical directories were used to locate information about the date of appointment, previous position, and reason for leaving. Directors who stepped down at age 60 were classified as retired if no other reason could be located. In order to check the trends noted by previous researchers for directors in the beginning of 1970, the beginning of 1979, and the end of 1989, a further search was made in biographical directories to locate information on age and highest degree held. ARL's Newsletter and issues of College & Research Libraries News were examined for announcements of retirements, recent position changes, and months of appointment for newly hired directors. The American Library Directory was also used to verify the names of directors and years of service.

The gender of the director was considered the critical variable for analysis, and our personal knowledge was used to complete gender information not located elsewhere. Every effort was made to locate missing information for other variables. However, when we could not locate the director's age or other information in published sources, we did no personal follow-up to the individual or the director's library to supply the data. Uncollected data were treated as missing for all statistical analyses. The available data collected were coded, keyboarded, verified, and analyzed using the Statistical Package for the Social Sciences for personal computers (SPSS/PC+).

**FINDINGS: THE DIRECTORS**

**Gender and Area**

We began by looking at the distribution of directors by gender in seven geographical areas, as displayed in Table 1. Of the 1,798 cases we observed, 1,538 (85.5%) represented libraries with a male director, and 260 (14.5%) represented libraries with a female director. Table 1 shows that male and female directors were fairly evenly distributed by geographic areas, ranging from a high of 23.8% in the Midwest for male directors to a high of 27.7% in the East for female directors. Major findings will be presented by years and gender for ARL directors. Because the Canadian ARL directors proved to be not significantly different from other areas on the key variable of gender, data on Canadian ARL libraries were analyzed along with data from the U.S. ARL libraries. Interesting characteristics peculiar to Canadian directors are reported as appropriate.

**Position Titles**

Although we have considered each top executive to be a director, we also were interested in changes in official titles used, as these might provide clues about the changing role or perception of libraries and librarians on research university campuses. Although the use of the title "director" has declined from
TABLE 1

OBSERVATION BY GENDER AND AREA

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male Directors</th>
<th>Female Directors</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>East</td>
<td>198</td>
<td>12.9</td>
<td>72</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>272</td>
<td>17.7</td>
<td>52</td>
</tr>
<tr>
<td>South</td>
<td>310</td>
<td>20.2</td>
<td>28</td>
</tr>
<tr>
<td>Midwest</td>
<td>366</td>
<td>23.8</td>
<td>20</td>
</tr>
<tr>
<td>West (Mountain)</td>
<td>113</td>
<td>7.3</td>
<td>4</td>
</tr>
<tr>
<td>Pacific</td>
<td>167</td>
<td>10.9</td>
<td>30</td>
</tr>
<tr>
<td>Canada</td>
<td>112</td>
<td>7.3</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>1,538</td>
<td>100.0</td>
<td>260</td>
</tr>
</tbody>
</table>

65.3% of all directors in 1970 to 49.5% (51.4% of the males and 45.5% of the females) in 1989, “director” is still the most common title used. “Librarian,” with 29.9% in 1989 (28.3% of the males and 33.3% of the females), and “dean,” with 12.1% (13.5% of the males and 9.1% of the females), follow it.

These findings are consistent with those of Wong and Zubatsky in 1983 when 50.7% of the 75 male directors and 31.3% of the 16 female directors held the title “director”; 29.3% of the males and 18.8% of the females in 1983 used the title “librarian,” and 13.3% of the males and 12.5% of the females were called “dean.”

Gender Issues

No contemporary discussion of the characteristics of ARL directors can fail to focus on the changes resulting from an increased number of female top executives in many professions and industries. Our analysis reveals that there has, indeed, been a significant increase in the number of female ARL directors, from none in 1970 to 32 in 1989. Table 2 displays the gender of the newly hired director and the gender of the director replaced by the new hire, classified by time periods in 5-year intervals. The number of replacements has increased slightly over the past 20 years, from 45 in 1970–1974 to 50 in 1985–1989. Some may interpret these data to justify the contention that turnover is accelerating. However, we do not think that a growth from an average of 9 per year to 10 per year over a 20-year period represents a significant increase. Time will tell if this is the start of a general trend.

Table 2 shows interesting data about the genders of new hires and the incumbents they replaced. In the period 1970 to 1974, no males replaced female directors, but 4 females replaced males. By 1985 to 1989, 54% of all new hires were of a gender different from the incumbent they replaced. Of the 50 replacements in this period, 8 males replaced female directors, and 19 females replaced male
TABLE 2
NEW HIRES AND REPLACEMENTS BY PERIOD

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Male replacing female</td>
<td>0</td>
<td>0.0</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>Female replacing male</td>
<td>4</td>
<td>8.9</td>
<td>7</td>
<td>16.3</td>
</tr>
<tr>
<td>Male replacing male</td>
<td>41</td>
<td>91.1</td>
<td>33</td>
<td>76.7</td>
</tr>
<tr>
<td>Female replacing female</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

directors. The data tend to indicate that a female applicant has a better chance of being offered a position in an institution that previously had been directed by a male than by an institution that had a female director. Male applicants appear to have an equal chance of replacing a male or a female.

The data indicate that a female applicant has a better chance of being offered a position in an institution that had previously been directed by a male than one that had a female director.

Tenure. We also looked at the tenure of each individual who stepped down from the directorship. In the period 1970 to 1974, the average years of service for the male directors who left their positions were 12.8 years; there were no female directors replaced during that time period. From 1975 to 1979, the average years of service for male directors leaving their positions was 10.3 years; female directors being replaced had served an average of 4 years. During 1980 to 1984, the average years of service for replaced directors were as follows: male directors, 10.2 and female directors, 5.8. There continued to be a significant difference between the tenure of departing male and female directors in 1985 to 1989, when departing male directors averaged 11.7 years of service in contrast to replaced female directors, who averaged 6.5 years of service. The average tenure of the directors who left their positions has declined slightly for male directors over the last two decades, from 12.8 years in 1970 to 1974 to 11.7 years in 1985 to 1989. The average for all directors replaced was 10.3 in 1985 to 1989, compared with 12.8 in 1970 to 1974.

Table 3 details the tenure of incumbent directors for 1970 through 1989 in 5-year intervals. Three ARL libraries were under the leadership of the same male director for the entire 20-year period covered by this study. Because female directors are newer to directorships as a group, it was expected that they would average fewer years in their positions. The 11 female directors observed in 1979 had an average of 4 years in their positions. By 1989, the average number of years for 30 female directors had increased to 5.2 years. Male directors have shown a decline in the number of years in the position, from 10.3 years in 1970 to 8 years in 1989. The average tenure for all incumbents in 1989 was 7.1 years. The inclusion of Canadian directors in this study had little influence on the tenure variable. When Canadian librarians were excluded, the average tenure fell by only .01%. The results of this study show that the male directors, at least, exceed the average 5 or 6 years of service that McAnally and Downs predicted, although it must be noted that the trend appears to be toward shorter tenures. The difference between the average tenure of replaced directors and the tenure of the incumbents indicates that directors are staying in their positions for shorter lengths of time.

Turnover. In 1989, 10 positions, or 9.3% of the 107 directorships, were vacated. To put this into perspective, we looked at similar data in another profession. Turnover
TABLE 3
TENURE OF INCUMBENT DIRECTORS

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>Avg.</td>
<td>#</td>
</tr>
<tr>
<td>1970</td>
<td>72</td>
<td>10.3</td>
<td>0</td>
</tr>
<tr>
<td>1974</td>
<td>73</td>
<td>7.5</td>
<td>4</td>
</tr>
<tr>
<td>1979</td>
<td>78</td>
<td>7.2</td>
<td>11</td>
</tr>
<tr>
<td>1984</td>
<td>81</td>
<td>8.5</td>
<td>20</td>
</tr>
<tr>
<td>1989</td>
<td>71</td>
<td>8.0</td>
<td>30</td>
</tr>
</tbody>
</table>

rates among ARL directorships compare favorably with a recently reported study that showed the average turnover rate for the chief executive officers of Utah hospitals to be 16.6%.16 A fruitful area for future study is how the turnover rate and the reasons for turnover compare between library executives and executives in other fields. Richard B. Dwore and Bruce P. Murray found that a minority of turnovers were due to involuntary reasons.17 The highest percentage of turnovers (44%) were attributable to voluntary reasons, such as promotion. Glenn M. McEvoy and Wayne F. Cascio also found evidence that turnover is lower among good performers.18 Reasons for ARL directors leaving will be discussed below.

Reasons for Departing

Why do directors leave their posts? Has this changed over time? Do career patterns include movement from one ARL directorship to another? Table 4 shows the directors' reasons for leaving their positions. Throughout the four time periods shown, the most frequent reason for male directors' leaving was retirement. The percentage of male director retirements was fairly consistent, ranging from a low of 47.4% of all reasons for leaving in 1975-1979 to a high of 59.3% of all reasons for leaving in 1980-1984. The pattern is less clear for female directors because we could observe a reason for leaving for only 17 females during the entire 20 years under study. Across all time periods, 5 of the 17 female directors (29.4%) left for directorships in other ARL libraries, 4 (23.5%) retired, 4 (23.5%) went into teaching, 2 (11.8%) took positions in other academic libraries, and 2 (11.8%) left for jobs outside academia.

Another frequent reason for leaving was to assume a directorship at another ARL university library. The percentages of individuals choosing this course of action ranged from 23.7% of the male directors in 1975-1979 to 37.5% of the female directors in 1980-1984. These large percentages may reflect the fact that directors are looking for opportunities to direct libraries with greater resources or in different settings, or to revitalize themselves while staying within a directorship, or to compensate for the lack of alternative positions within their institutions. Although upward mobility beyond the directorship is uncommon, some individuals do find career opportunities in their own institutions. In 1970 to 1974, no director left to accept another position in the same institution or library, and only one accepted a nonlibrary, nonuniversity position elsewhere. By 1985 to 1989, 16% of the male directors who left during that period, in fact, accepted other positions in their own institutions. Also, the number who leave for nonlibrary, nonuniversity positions is increasing. These nonlibrary positions included such posts as the executive director of a government entity and the presidency of a private, nonprofit organization. In 1985-1989, 4% of the male directors and 28.6% of the female directors moved into nonlibrary positions.

In the period 1970-1974, the highest number of observations where a reason for leaving was known (44 male directors) was observed. No female director, for whom we could identify a reason for leaving, departed from a permanent directorship during this
period. In 1970 to 1974, 10 (22.7%) of the male directors leaving went into teaching; by 1985 to 1989 this reason had declined to 3 (12%) of the males and 1 (14.3%) of the females. Teaching has apparently become a less attractive alternative. Also, the large portion of the directors who do not have doctorates may not find this to be a viable option.

Cohn, in studying the ARL directors from 1933–1973, also found the most frequent reason for leaving to be retirement or death. His data revealed a decline from 78% in 1933, to 45% in 1934–1969 to 33% in 1970–1973. He found that the second most frequent reason for leaving was to go to another library, followed by entry into teaching. Cohn found that none left to go to another ARL library in 1933; 11% went to another ARL library in 1934–1969, and 8% in 1970–1973. Although the general results of our study are consistent with Cohn’s findings, more directors now seem to be leaving for positions in other ARL libraries than ever before. Obviously, current ARL directors of smaller institutions are likely candidates for directors of larger institutions; however, some of these changes may be perceived as lateral moves, which perhaps indicates the need of today’s directors for revitalization.

In looking at this component of the study, we realize that the official reasons given for leaving might not always tell the real story. However, our only other source of information about reasons for leaving is purely anecdotal. Because such information is highly inaccurate, unreliable, and not verifiable, we have chosen to analyze only the official reasons for leaving.

**Previous Position**

What route have ARL directors taken to reach their positions? Although examining this question in detail is much too complex for the scope of this study, we did consider the positions individuals held immediately before assuming the directorship (see table 5). Most new directors come from associate directorships of other ARL libraries, from directorships of other ARL libraries, or from other positions within the

---

### Table 4

<table>
<thead>
<tr>
<th>Period/Gender</th>
<th>Reason for Leaving Position by Five-Year Periods and Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Death/retirement</td>
</tr>
<tr>
<td>1970–74</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>#</td>
</tr>
<tr>
<td>1970–74</td>
<td>23</td>
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<td>1970–79</td>
<td>18</td>
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<tr>
<td>1980–84</td>
<td>16</td>
</tr>
<tr>
<td>1985–89</td>
<td>13</td>
</tr>
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</table>

ARL Directors 247
<table>
<thead>
<tr>
<th>Previous Position</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director at another ARL library</td>
<td>8</td>
<td>18.2</td>
<td>0</td>
<td>0.0</td>
<td>10</td>
<td>21.7</td>
<td>1</td>
<td>11.0</td>
</tr>
<tr>
<td>Director at a non-ARL library</td>
<td>8</td>
<td>18.2</td>
<td>0</td>
<td>0.0</td>
<td>10</td>
<td>21.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Acting director at another ARL library</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Position at the same ARL library</td>
<td>14</td>
<td>31.8</td>
<td>3</td>
<td>100.0</td>
<td>6</td>
<td>13.0</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>Associate director at another ARL library</td>
<td>8</td>
<td>18.2</td>
<td>0</td>
<td>0.0</td>
<td>9</td>
<td>19.6</td>
<td>5</td>
<td>55.6</td>
</tr>
<tr>
<td>Other position at another ARL library</td>
<td>1</td>
<td>2.3</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>10.9</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other position at a non-ARL library</td>
<td>1</td>
<td>2.3</td>
<td>0</td>
<td>0.0</td>
<td>3</td>
<td>6.5</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>From teaching</td>
<td>3</td>
<td>6.8</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>4.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Position in nonlibrary, nonuniversity</td>
<td>1</td>
<td>2.3</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>2.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td>3</td>
<td>100.0</td>
<td>46</td>
<td>100.0</td>
<td>9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**TABLE 5**
PREVIOUS POSITION BY FIVE-YEAR PERIOD AND GENDER
same institution. The pattern of previous positions is slightly different for male and female directors over time. The percentage of male directors coming from directorships at other ARL libraries declined from 18.2% in 1970-1974 to 10.7% in 1985-1989, but there has been an increase in new male directors coming from the ranks of associate directors at other ARL libraries, from 18.2% of all new directors in 1970-1974 to 32.1% in 1985-1989. There also has been a parallel decline in the percentage of males coming from the same institution and a slight increase in the number of new male directors coming from teaching. In 1985-1989, 21.4% of male directors came from directorships at non-ARL libraries.

In contrast, only 9.1% of the female directors held a directorship in a non-ARL library before their present positions. The most frequent sources of female directors appear to be positions at the same ARL institution and associate directorships at other ARL libraries. This is consistent with the recent emergence of female directors in the field. However, increasing numbers of them are changing positions, and 18.2% of the female directorships assumed in 1985-1989 were by persons already directing ARL libraries. This is much higher than the proportion of male directors moving among ARL directorships (10.7%). In 1985-1989, no male directors, but 13.6% of the new female directors, came from acting directorships of other ARL libraries. Three acting female directors in the East assumed permanent positions in the South. All three previously had been associate directors in the institutions that had acting directorships. Cohn indicated that despite the fact that mobility is often the key to success, females could reach the directorship only by "staying put and 'proving' their abilities to those making appointments." Fortunately, it appears that other career paths have opened up for female directors since Cohn made his observations in 1976.

Highest Degree

Many advertisements for library directors indicate a preference for doctoral-level training. Has this requirement resulted in the current directors holding higher degrees than previous directors? The doctoral degree in library science or a subject field was the highest degree held by 38.3% of the directors in 1989 (43.3% of the male directors and 25.9% of the female directors). The possession of a library science or subject doctorate has declined from 43.9% held by male directors in 1970. As this decline indicates, male directors are generally more likely than female directors to hold the doctorate. Over the past 20 years, males were also more likely to hold a second master's degree (see table 6). However, by 1989, the numbers for male and female directors were virtually the same (22%). There has been a decline in directors who hold only the bachelor of library science, from 6.1% of the male directors in 1970 to 3% in 1989.

Wong and Zubatsky studied degrees, but did not specify the highest degree.21 Karr, who studied highest degree held, but did not distinguish between the degrees held by male and female directors, found that most directors obtained additional academic degrees and that the proportion of doctorates fell from nearly half in 1966 to one-third in 1981.22 The second master's degree had apparently become an acceptable substitute for the doctorate. Those results are consistent with the results of our study. Karr also found that, in 1966, 15% of all directors lacked library degrees, but that by 1981 all directors were graduates of a library program.23 However, our data show that this trend has not continued. As indicated in table 6, in 1970, 6.1% of the directors had a Ph.D. and no M.L.S., and 3% had a subject master's degree and no library credentials. By 1989, the percentages had not changed appreciably. Of the male directors, one (1.5%) had the subject master's and no library education credentials; 7.5% had a subject Ph.D. and no M.L.S. Of the female directors in 1989, one (3.7%) had the subject master's degree and no M.L.S. Apparently, those making the appointments in ARL research university libraries still do not consider it imperative that candidates have library science educational credentials.

Age

The average age of male directors has remained fairly consistent: 54.1 years in 1970, 52.3 years in 1979, and 54.2 years
in 1989. Female directors as a group are younger than their male counterparts. There were none in 1970; in 1979, they had an average age of 47.9 years and in 1989, an average age of 50.9 years. The inclusion of Canadian directors had little influence on the average age. For example, when Canadian directors are excluded, the average age in 1989 for male directors was 54.7 and 51 for female directors. Previous studies have found that the director was generally in the early 50s.

It appears that other career paths have opened up for female directors since Cohn made his observations in 1976.

While the difference in ages between male and female directors was significant, the results should be viewed with some caution. Some current biographical directories do not list ages, and we could not locate the birth dates of many of the newer directors (both male and female). We think that the actual ages are probably somewhat younger than those found, even though the results of this study are consistent with the results of previous studies. For example, we could locate ages for only 86 of the 101 permanent directors in 1989. Of the remaining 15 directors, 6 were females and 3 were males, whom we believe are in their 40s.

FINDINGS: THE LIBRARIES

In 1970, the 75 ARL libraries included in this study contained a total of 136 million volumes, with an average of 1.8 million volumes and 242 staff per library. By 1989, the membership had grown to 107 libraries. The 106 libraries that completed the 1989 ARL statistics survey held 295 million volumes, with an average of 2.8 million volumes and 322 staff per library. During the tremendous growth of the past two decades, have changes in library size affected the relationship between library directors and libraries?

This study collected selected descriptive statistics about ARL libraries—statistics that might also relate to the characteristics
of the library directors. The statistics included the number of volumes in the collection, gross number of volumes added to the collection, materials and binding expenditures, and total operating expenditures. Two additional variables were calculated on materials and binding expenditures and on total operating expenditures. These variables showed the increase in expenditures from the previous year so that percentage increases in expenditures could be separately analyzed. We thought that these change variables were likely to be the descriptive variables first influenced by a change in directors.

For 1989 and the population as a whole, no significant differences were found for the various descriptive statistics analyzed by the geographic areas classified for this study. For example, in 1989, the average number of volumes in the libraries ranged as follows: 3.3 million, East; 2.9 million, Mid-Atlantic; 2.3 million, South; 3.2 million, Midwest; 3 million, Pacific Coast; 2.2 million, Canada; and 2.1 million, West (Mountain Standard Time).

While there were some differences among the descriptive variables and gender, these were slight. Table 7 shows the average descriptive statistics by gender for 1989. The 70 male directors controlled a slightly higher average number of volumes, volumes added, and total expenditures than the 30 female directors. Female directors in 1989 had control over a slightly higher average expenditure for materials and a larger average staff. In 1970, there were no female directors for comparison on the descriptive statistics. In 1979, there were 11 female directors and 78 male directors. In that year, the male directors controlled a slightly higher average number of all the descriptive statistics, from volumes (2.3 million versus 1.9 million) to staff (304 versus 289).

Female directors have increased their control over resources in the past two decades.

Although the male directors generally control larger resources than their female counterparts, the differences are slight, and female directors have increased their control over resources in the past two decades as indicated by the selected descriptive statistics. In fact, male and female directors were fairly well matched in 1989 on two important variables: volumes in the collection and total expenditures. Libraries with more than 3 million volumes in 1989 were controlled by 27.1% of the male directors and 23.3% of the female directors. Fifty percent of the male directors controlled libraries with more than $10 million in expenditures; 53.3% of the female directors' libraries had more than $10 million in expenditures. Those figures indicate that there has been considerable progress for female directors since 1970, when they were not even represented among ARL directors.

**Expenditures**

Table 8 details the percentage change in materials expenditures and total expenditures related to a change in directorship by gender. When the percentage expenditure variables were controlled by gender and analyzed for a change or no change in directorship, the male directors' averages on the two percentage increase variables were lower if a new hire had occurred than the female directors'. When controlled for gender and new hires, the average percentage of change in total expenditures was 8.5%
TABLE 8
AVERAGE PERCENTAGE INCREASE OF MATERIALS AND TOTAL EXPENDITURES BY GENDER AND CHANGE IN DIRECTORS

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male Directors</th>
<th>Female Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change</td>
<td>No Change</td>
</tr>
<tr>
<td>Expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td>132</td>
<td>8.8</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>8.5</td>
</tr>
</tbody>
</table>

For male directors and 10% for female directors. The materials expenditures percentage increase during change was 8.8% for male directors and 11.3% for female directors. In contrast to male directors, female directors apparently achieve a greater percentage increase in their budgets during their first year, as measured by percentage increase in materials expenditures and total expenditures. These increases might reflect part of the recruitment packages used to attract female directors, who apparently are in demand more than ever. In fact, as documented by the ARL Annual Salary Survey for the past three years, female directors earned an average salary higher than the average salary of male directors. However, we are reluctant to draw conclusions from this observation because the factors relating to budget changes are complex.

Tenure and the Descriptive Variables

To investigate further the relationship between tenure and the descriptive variables, we used stepwise multiple regression analysis. Tenure was the dependent variable, and the independent variables included gender of the directors, volumes, volumes added, materials expenditures, total expenditures, percentage change in materials expenditures, and percentage change in total expenditures. For 1970 and 1979, no variables entered the equation using the .05 level of significance. For 1989, gender entered the equation first (Multiple R = .23), followed by percentage change in materials expenditures (Multiple R = .31). No other variable entered the equation at the .05 level of significance. Gender of the director and percentage change in materials expenditures account for very little of the variation in tenure (R Squared = .09).

While there is some relationship between gender, materials expenditures, and tenure, other factors outside the scope of this study apparently account for the length of tenure of library directors.

CONCLUSIONS

In examining the data about ARL directors over the past two decades, it is apparent that the most significant change has been the large increase in the number of female directors. Their ranks have grown from a handful in the 1970s to nearly 30% of the total number of library directors in the late 1980s. Female directors are younger, have fewer years of service, and are not quite as educated as their male counterparts. Although there were no female ARL directors in 1970—and, in fact, very few during much of that decade—today, the resources controlled by both genders are fairly evenly matched. We find it most interesting that the average salary of female ARL directors now exceeds that of male ARL directors, and we also find it interesting that this fact has gone largely unnoticed. Therefore, even though there are still many fewer female than male directors, the data indicate that females have, by and large, achieved parity with their male counterparts, at least in terms of salaries and average resources controlled.

It is tempting to speculate about the apparently faster rise of females to ARL directorships and whether it has resulted from the influence of the women’s movement, affirmative action pressures, qualitative differences in capabilities, or intense mentoring, to name only a few possible reasons. However, any conclusions we could draw at this point would be purely speculative and without basis in any solid research. We leave it to other researchers.
to investigate this complex yet important subject.

In the last five years, more than 50% of all new positions were filled by male directors replacing females or female directors replacing males. This interesting trend has implications for job hunters. We would expect this phenomenon to decrease and eventually disappear as more females are recognized to be viable candidates for directorships. We think it fair to predict that, judging from the last two decades, we will enter the twenty-first century with more female directors than ever before.

Another important measure of parity will be that of average tenure. Our study is necessarily inconclusive on that point, primarily because female directors are still relatively new to their positions. Data in the future will be most interesting. Earlier studies, as well as at least one recent commentator, predicted that the average tenure of all directors would fall to about 5 or 6 years. Our study showed that, overall, the average tenure was 7.1 years in 1989. From 1985 to 1989, departing male directors logged an average of 11.7 years of service in contrast to departing female directors, who averaged 6.5 years of service. Turnover rates (i.e., the number of directorships vacated) during the four 5-year periods under study remained fairly constant.

Research libraries are growing ever more complex, and it appears as if they will be under increasingly strong financial pressures in the 1990s, as higher education tries to deal with declining enrollments and skyrocketing costs. Previous authors, however, have pointed to similar factors in the past as the basis for both their observations about shortened tenure and their predictions of even shorter terms of service. Putting this all in perspective, we expect that studies done toward the end of the next decade will not show a significant drop in the length of service of the average ARL director, male or female.

This study confirmed many findings of previous studies of ARL directors. A typical director is still male, in his 50s, and with a doctorate degree. Before assuming his current directorship, he was likely an associate director at another ARL library. He probably will stay in an ARL directorship until he retires. But, among the emerging trends we identified is the growing tendency for ARL directors to move from one ARL directorship to another; therefore, the future typical director may end his career after stints as director of more than one ARL library.

We live in a society in which retirement ages are either increasing or becoming purely voluntary, and given that fact, we would ordinarily expect to see ARL directors retiring at later ages or after longer tenures. In much of the professional academic work force, administrators move among levels of responsibility for widely varying operations and frequently return to teaching positions well before the official end of their professional working lives, without stigmas of failure. Directors of ARL libraries, as Woodsworth pointed out, have very few and limited career options. Teaching is usually limited to persons with doctorates, and returning to such positions as reference librarian or cataloger is often impossible without a considerable amount of retraining and loss of face. Librarians are often perceived by universities to be inappropriate or unqualified for general administrative positions, and the number of nonprofit or nonlibrary institutions for which librarians are seen to be qualified is also very small. We frequently hear of directors who are burned out or who have become ineffective within their institutions. Yet, their options are indeed limited. Until the profession finds alternative career paths for ARL directors, we will continue to see them hanging on in their current positions (with average tenure rates remaining fairly stable or even increasing) or leaving the profession entirely. The first alternative leaves us with little opportunity to bring vitality and creativity to the leadership of our institutions. The second represents a major loss of talent and contributions to our libraries.
REFERENCES AND NOTES


10. Association of Research Libraries, Minutes (Washington, D.C.: ARL, 1969-1988). The membership list (including the name of the director) is given as an appendix in the minutes and also issued as a separate mailing to each member library.


12. The people/profile section of issues of College & Research Libraries News was examined from January 1969 to February 1990 for major items on people in the news; because they are just lists of announcements, the long lists of appointments were not examined in detail.

13. The states were classified into the following areas: East—Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, Rhode Island, Washington, D.C.; Mid-Atlantic—New Jersey, New York, Ohio, Pennsylvania; South—Alabama, Florida, Georgia, Kentucky, Louisiana, North Carolina, South Carolina, Tennessee, Texas, Virginia; Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Oklahoma, Wisconsin; West (Mountain Standard Time)—Arizona, Colorado, New Mexico, Utah; Pacific Coast—California, Hawaii, Oregon, Washington; Canada.


17. Ibid.


20. Ibid., p.143-44.


23. Ibid., p.283.

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Subject Cataloging of Personality Tests
Robert P. Jordan

Many large universities maintain personality test collections. Often, a librarian is in charge of both the tests' acquisition and their organization. If a collection contains many personality tests and if the clientele utilizing these tests comes from various academic backgrounds, the librarian must cope with requests to find instruments by variable tested. The development and use of an arrangement of subject subheadings as retrieval points for personality tests becomes essential.

The need for subject headings for personality tests increases as the collection grows. Psychologists or counselors who are familiar with the tests located in one or two file drawers do not need an extensive number of retrieval points for their collections. But when hundreds of tests comprise such a collection, the person in charge, often a librarian who is not a subject specialist utilizing the collection on a regular basis, needs some form of subject cataloging.

The librarian may physically arrange the instruments by the variable of subject area tested instead of alphabetically by title or author. For example, the librarian could file mathematics tests after intelligence tests and before personality tests. The librarian may then develop a sub-arrangement by title, author, or age group. The grouping by subject is actually a form of classification. Again, for a handful of tests, such an arrangement may be sufficient. But as library personnel add more tests to the collection or as the variables being tested become narrower in scope, the librarian must develop a system of assigning subheadings, which would ordinarily be designated by broad categories such as "Mathematics," "Reading," or "Personality."

REVIEW OF RELATED RESEARCH

Several other librarians and one subject specialist have attempted to address the problem of developing some system whereby tests can be retrieved by subject. In Organizing and Servicing a Collection of Standardized Tests, Robert M. Simmons wrote that "heavily used collections will be a constant plague to the responsible librarian unless a sophisticated retrieval system is developed." He called both the Library of Congress subject headings and the subject index in the Mental Measurements Yearbook series inadequate. Yet Simmons does not describe a means by which such systems can be expanded to facilitate better retrieval of tests, especially personality tests, by subject.

In 1985, the Ad Hoc Subcommittee on Test Collections of the Education and Behavioral Sciences Section of the Association of College and Research Libraries published, through ACRL, the Guide for the Development and Management of Test Collections with Special Emphasis on Academic Settings. It contains a chapter on bibliographic control and access. The au-
thors suggest “an expansion or modification of the Buros’ Mental Measurements Yearbook system” when that system’s categories become unworkable.5 The subcommittee indicated that the Thesaurus of ERIC Descriptors might be a possible “basis of a subject authority file.”6 The Thesaurus of Psychological Index Terms might, however, be more appropriate for an expansion of Buros’ category of “Personality” if librarians were to consult an already existing list of indexing terms.7

In “Selected Test Collections in the United States: A Survey of Organization,” Nancy O’Brien and David Ginn noted that among the test collections surveyed, almost “all of these collections utilized a system of classification that incorporated aspects of the Buros system with expanded or modified classifications.”8 James V. Mitchell, Jr., in his article “A Potent Triumvirate: Librarian, Buros Institute, and Test User,” instructed his readers in the use of the Score Index and the Classified Subject Index.9,10 He suggested these indexes as two possible avenues for librarians to retrieve tests by subject. When searching for a particular personality test variable, the Classified Subject Index is useless because all personality tests are together subarranged only by title.11 However, the Score Index has indeed been a boon to test librarians even though it does not contain information on all tests held at the Buros Institute of Mental Measurements or in a local test library. The Score Index’s limitations will be discussed more fully below.

USE OF COMPUTER DATABASES

In his monograph, Simmons wrote that a computerized retrieval system would be needed to index a test collection adequately. He stated that “equipment to perform [that] type of search.. . . will not be available at many institutions.”12 But with the advent of personal computers and software programs for word processing, that statement is no longer true. In any event, a system of subject subheadings must be introduced to a local collection of personality tests. According to Susan Klingberg, Bibliographic and Reference Services installed two online databases that deal with tests.13 One database, the Mental Measurements Yearbook (MMYD), has a familiar coverage. The other database is based on Educational Testing Service’s Test Collection (ETSF). MMYD can be searched using the score paragraphs from which Mitchell and the Buros Institute staff derived the Score Index for the print versions of the ninth and tenth Yearbooks.14 Thus, the user of MMYD has essentially the same tool. MMYD, of course, gives the searcher more current information in one source.

A system of subject headings must be introduced to a local collection of personality tests.

ETSF utilized the Thesaurus of ERIC Descriptors for its subject headings. Klingberg shows that successful search strategies often entail several steps.15 Because the purpose of an online search is to find all pertinent tests on a patron’s topic, such searches would be worth the cost. But for a patron who wants to know what personality tests are available locally on depression, anxiety, self-esteem, and so on, searching outside databases is inefficient. Searching a subject catalog of the local test collection is more efficient than searching large databases and then cross-checking against local author or title files. If patrons find nothing appropriate, they can either reformulate their requests, knowing the extent of the local collection, or search outside databases.

REQUISITE CONDITIONS TO DEVELOP LOCAL SUBHEADINGS

Three conditions should trigger the development and utilization of a list of subject subheadings for a local collection of personality tests. First, bibliographic control is essential. Simmons outlined several options including a simple author/title card file and a computer listing.16 Second, collections need subject subheadings. Because patrons often are not sure about which specific tests they
Figure 1. Title main entry for the RADS

want, the librarian must conduct a reference interview. In some cases, patrons have initial expectations of finding instruments to measure exactly what they want. If such instruments are not available, the patrons may have to adjust their expectations to what is available locally.

Searching a subject catalog of the local test collection is more efficient than searching large databases and then cross-checking against local author or title files.

For instance, at the library of the Iowa Testing Programs (ITP library), a patron wanted to find an instrument to measure attitudes toward the importance of vocational education for the educable mentally handicapped. Such an instrument may exist somewhere, but not in the ITP library. The librarian did find an instrument that claimed to measure parental attitudes toward the mentally handicapped in several settings including school. It was a start. The test librarian needed a subject grouping of tests with stable vocabulary control to locate the material.

The third condition is that the existing subject groupings are not adequate for a particular library and its mission. Examples of existing bibliographies are Tests in Print III, Tests, third edition, ETS Test Collection Catalog, ETS Complete List of Bibliographies, and The Mental Measurements Yearbooks with Score Index. In 1975, the staff at the ITP library organized and cataloged several hundred out-of-print tests into the archival historical test file. The staff decided to use subject headings from Buros’ Tests in Print II (TIP II). In spite of some idiosyncrasies, Buros’ array of headings worked well with added cross-referencing. In a 1977 visit, Buros was surprised and pleased to discover the library’s adaptation of his system. A separate current test file contains in-print test specimen sets and kits maintained for study by faculty and graduate students in the College of Education at the University of Iowa. Fifteen years later, the system has been expanded only slightly. A librarian catalogs new tests with a minimum description. Because author, editor, and publisher roles blur, main entries are under title, with added entries for subjects and other responsible parties. Staff members file cards into a separate catalog (see figure 1; further samples and discussion are available from the author.)

The T0 number is the test’s accession number. The ITP library’s staff does not assign classification numbers to tests. ITP personnel retrieve the tests from a locked file cabinet after patrons identify them in the catalog. This practice follows that of the Standards for Educational and Psychological Testing, prepared by the Committee to
Develop Standards for Educational and Psychological Testing.

In 1980, the main part of the University of Iowa’s College of Education moved into its current building attached to the one housing the Iowa Testing Programs. With various component departments of the college came their needs in the testing field. Instead of supporting only the Iowa Testing Programs, the ITP library (since renamed the Paul Blommers Measurement Resources Laboratory) became a de facto resource for the divisions of Counselor Education and of Psychological and Quantitative Foundations. Over the years, growing numbers of faculty, staff, and students from the colleges of nursing, business administration, and medicine have used the ITP library. The number of specimen sets and kits of tests utilized by these patrons has doubled the size of the current test file since 1980. The ITP library staff retired older editions of tests to the historical test file as new editions appeared. Added to that were the 800 plus instruments in the ongoing Tests in Microfiche series, most of which do not assess academic achievement.

By 1982, the library staff realized that an expansion of subheadings for personality tests was needed. At that time, personality tests were subdivided into “Projective” and “Nonprojective,” both in TIP II and the ITP library. Because of the growing numbers of patrons with diverse interests in measurement, the staff began to shift test acquisitions not only from the cognitive domain, but also to those measuring variables in the affective domain. Because most of these affective domain variables were already considered “Personality” measures in TIP II and later in Tests in Print III (TIP III), the staff decided to retain that term as the major subject heading, with “Projective” as a subheading. Because the overwhelming majority of personality tests in the ITP library were “Nonprojective,” the staff decided to discontinue the use of that term. Staff consulted several sources on personality testing to discover possible subheadings.

Test Variables as Subject Subheadings

A system of personality test subheadings still had to be more specific than what the measurement authorities had done. For more than fifteen years, the experience of the ITP library staff has been that most patrons come in looking for a test that assesses a particular variable or set of variables, whether in the cognitive or affective domains. Technique of assessment was a secondary consideration.

A cataloger should catalog a book or other medium of several specific topics into the narrowest subject heading under which all topics could fit.

The ITP library staff decided that the hundreds of tests in the current test file with the subject heading “Personality—Nonprojective” should be canvassed for the variables tested. The staff searched the tests’ manuals as well as the various descriptive bibliographies mentioned above to see what authors and other subject specialists had indicated the variables of those tests were. In the case of the Minnesota Multiphasic Personality Inventory (MMPI), the 16PF Questionnaire, and other multi-trait instruments, the staff decided to use only “Personality” as the subject heading. This decision was in keeping with the basic tenet in librarianship that a cataloger should catalog a book or other medium of several specific topics into the narrowest subject heading under which all topics could fit. Otherwise, a cataloger might assign up to sixteen subheadings to the 16PF Questionnaire. But in the case of a test where only one, two, or three variables are tested, the cataloger would assign subject subheadings for each distinct variable. (A copy of these subheadings is available from the author.)

When the staff completed the canvas of tests, the number of variables tested for could easily be handled. Some argument could be made that terms such as “Hostility” and “Aggression” are the same or could be combined. And there are other groupings or terms that might make behavioral scientists cringe because of choice of words or their own biases in training or thinking. Three sources of authority, however, supported the inclusion of these sub-
headings. TIP II and TIP III as well as the Mental Measurements Yearbooks series placed many diverse tests into "Personality." For example, when the staff decided three years ago to add the subheading "Eating Disorders" to the list at the ITP library, they did it knowing that tests such as the Eating Disorder Inventory were still considered personality tests in The Ninth Mental Measurements Yearbook. Physicians, psychologists, and nutritionists could argue that bulimia or anorexia nervosa might have genetic or hormonal bases. But the tests are designed only to measure occurrences of or susceptibilities to certain eating behavior disorders. Therefore, if there existed any doubt as to whether a test were actually a personality test, the staff checked its status in appropriate references. 29

FUTURE OPTIONS

Perhaps in later editions of the Mental Measurements Yearbook, the editors will decide to arrange personality tests in its Classified Subject Index using subheadings. From a past study by Ginn and O'Brien, test libraries may adapt such a change in the Mental Measurements Yearbook arrangement. 30 Another option might be available in the fifth volume of The ETS Test Collection Catalog. That volume is scheduled to be published in 1991 and should contain information on personality tests held in ETSF. Its index may provide an adaptable system of subheadings. Until either of these options is developed, however, the list of personality subheadings developed at the ITP library exists and works.

CONCLUSIONS

This study explains the rationale behind a list of subject subheadings for personality tests. The list is as much practical as it is theoretical. Though subject specialists were consulted at the list's inception, the demands of patrons and the ITP library staff's experience forged the current product. As test authors publish new personality instruments that may be added to the ITP library's collection, the staff will, no doubt, be required to make additions, consolidations, and deletions.

REFERENCES AND NOTES

2. Ibid., p.7.
5. Ibid., p.12.
10. James V. Mitchell, Jr., ed. The Ninth Mental Measurements Yearbook, (Lincoln, NE: Buros Inst. of Mental Measurements, 1986); distributed by the Univ. of Nebraska Pr.
11. Jane Close Conoley and Jack J. Kramer, eds., The Tenth Mental Measurements Yearbook. (Lincoln, NE: Buros Inst. of Mental Measurements, 1989); distributed by the Univ. of Nebraska Pr.
12. Simmons, Organizing and Servicing a Collection of Standardized Tests, p.11.
19. James V. Mitchell, Jr., ed. Tests in Print III: An Index to Tests, Test Reviews, and the Literature on Specific Test (Lincoln, NE.: Buros Inst. of Mental Measurements, 1983); distributed by the University of Nebraska Pr. This index does not group tests except insofar as the terminology of the scores, or variables, is similar. This terminology, much like a keyword index, is determined exactly by the test authors' choice of wording. These terms can sometimes be unwieldy. "Holistic and primary-trait scores for narration" and "identification of colors and shapes and copying shapes" are two such cumber-some variables as entered into the Score Index of the The Ninth Mental Measurements Yearbook (p.1971). In the latter example, most researchers would look under "shapes," "colors," or "copying" instead of "identification," but the test in question is indexed only under "identification." Another example of a score for a personality test is "incongruence between present and ideal sex-role behavior"(p.1972). Again, most researchers would look under "sex-role" for such instruments, not under "incongruence." This instrument is not indexed under "sex-role." Thus, a researcher might not find this particular instrument unless searching online with MMYD. Patrons should be able to locate all instruments in a test library, or a test bibliography in book format, on a topic as succinct as "sex-role."
27. The staff consulted several sources on personality testing to discover if subject specialists in psychology had done anything in the way of categorizing personality instruments. Anne Anastasi made distinctions among them by technique of assessment: self-report inventories; measuring interests, values, and attitudes; projective techniques, and "other" techniques. See Anne Anastasi, Psychological Testing, 5th ed. (New York: Macmillan, 1982), passim. Anastasi initially categorized by how the assessment was done, not by what variables were assessed. Cliff W. Wing also divided tests of personality into techniques used. In this case, they were projective techniques, self-evaluating techniques, and observations of behavior. See Cliff W. Wing, Jr., "Measurement of Personality," in Handbook of Measurement and Assessment in Behavioral Sciences, ed. Dean K. Whitla (Reading, MA: Addison-Wesley, 1968), passim. Anastasi included this latter technique among her "other" techniques. But because Wing thought it important enough, the ITP library staff decided to use "Behavior Observation" along with "Projective" as the first two subheadings used with personality tests in the library. Lee J. Cronbach also divided personality tests into self-reports, observation instruments, performance tests, and assessment of personality dynamics. See Lee J. Cronbach, Essentials of Psychological Testing, 3rd ed. (New York: Harper & Row, 1970), passim. However, within these divisions by technique, Cronbach categorized perceptions and reactions—in other words, the variables that can be tested. Two of Cronbach's
variables, for example, were self-concept and attitude toward authority. Robert L. Thorndike and Elizabeth P. Hagen, in their measurement textbook's chapter on questionnaires and inventories for self-appraisal, outlined five aspects of personality: temperament, character, adjustment, interests, and attitudes. See Robert L. Thorndike and Elizabeth P. Hagen, *Measurement and Evaluation in Psychology and Education*, 4th ed. (New York: Wiley, 1977), passim. Thorndike and Hagen indicated that these aspects of personality could be evaluated by 1) what individuals say about themselves, 2) what others say about the individuals, or 3) how the individuals behave as recorded by observers.


29. The third edition of the American Psychological Association's *Thesaurus of Psychological Index Terms* was published about the time the ITP library staff completed the expansion of the "Personality" subject heading. See *Thesaurus of Psychological Index Terms*, 3rd ed. (Washington, D.C.: American Psychological Assn., 1982), passim. Though this work was not used in the initial development of the ITP library's list of subheadings, the staff has consulted it and its later editions for appropriateness of new terms considered for addition to the list. In some cases, the staff has decided to use a more familiar term than the one indicated in the *Thesaurus of Psychological Index Terms*. An example is "Personality-Eating Disorders." According to the latest edition of the *Thesaurus of Psychological Index Terms*, the term to use is "Appetite Disorders." See American Psychological Association., *Thesaurus of Psychological Index Terms* 5th ed., p.16. Yet not one patron in the last fifteen years has come into the ITP library and inquired about tests using that phrase. Patrons use "Eating Disorders" when looking for such tests. Test and book authors use "Eating Disorders" to describe these syndromes. The *Encyclopedia of Psychology* has entries under both terms, but the one under "Eating Disorders" is much more extensive even though the scope of both entries is similar. See Raymond J. Corsini, ed., *Encyclopedia of Psychology*, 4 v. (New York: Wiley, 1984), passim. Therefore, the ITP library staff decided to retain that term in lieu of "Appetite Disorders." The *Thesaurus of Psychological Index Terms*, then, is only a guide when test variables are vaguely defined by the authors or defined with multiple cognates.

Nineteenth-Century Periodicals: Preservation Decision Making at College Libraries
Donna Jacobs

Although the problem of deteriorating library materials has been the subject of numerous investigations at many of the nation's large research libraries in recent years, less attention has been given to the impact of the problem at small college libraries. This study investigates, by means of a survey, the preservation activities at the Oberlin Group of college libraries, specifically with respect to their nineteenth-century American and British periodicals collections. The information gathered by the survey and through an extensive review of the literature was used to develop a model for preservation decision making that takes into account the contextual elements of a small college library, the characteristics of the periodicals themselves, and the preservation options available. It was found that the decision-making process at a small college library is complex and multifaceted. Although there is no one answer that will meet the needs of every library, the questions that need to be asked are the same, and examination of those relevant questions will assist librarians in developing a decision-making strategy.

The crisis of deteriorating library materials that librarians are facing today was predicted centuries ago. As early as the twelfth century, the emperor of the Occident, Frederick I, Barbarossa, prohibited the use of paper in deeds and charters because he feared the medium too perishable. In 1823, John Murray warned readers of Gentlemen's Magazine of the state of "that wretched compound called Paper," saying that "a century more will not witness the volumes printed within the last twenty years."1 Awareness of the problem and commitment to action grew so gradually that in 1946, Pelham Barr commented "Silence, rarely broken, seems to surround the subject of book conservation."2 Today libraries face a crisis of major proportions. The extent of the problem can be seen in an inventory of the 13.5 million volumes at the Library of Congress, which revealed that three million volumes are too brittle to handle, and 70,000 volumes are added to that group each year.3 The results of a survey of the Yale University collections showed that over 37% of their 7,725,000 volumes had brittle paper, 82.6% had acidic paper, and 8% had broken bindings.4

In 1970, Edwin Williams summarized the discussion of the deterioration of library materials in one sentence: "Everything in library collections is deteriorating today, was deteriorating yesterday, and will continue to deteriorate tomorrow.

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although we ought to retard the process."5 Unfortunately, when one moves from discussion of the topic to action, the problem cannot be so neatly summarized, and the solutions are often unknown, debatable, or unattainable for a variety of reasons.

The physical condition of the volumes brings the question of their fate to a library staff's attention. While questions about the causes of deterioration and the availability of appropriate alternatives to halt or reverse the process must be addressed, an equally important consideration is the works themselves. Such factors as the intellectual content of the works, their intrinsic value, and their availability in original and alternative formats must also be investigated. In addition, such contextual elements as the mission and priorities of the library in question, and its policies and resources, are important factors in preservation decision making. The complexity of the problem seems to require a model to assist in the decision-making process. The objective of this project, which was prompted by an assessment of the nineteenth-century American and British periodicals collection at the author's library, was to develop a logical and efficient model for making preservation decisions with respect to nineteenth-century periodicals collections at college libraries.

LITERATURE REVIEW

The central focus of this study is the question of how preservation decisions should be made. This question has been addressed in recent years by Dan Hazen, Ross Atkinson, and Margaret Child, among others. In a 1982 article, Hazen described the preservation selection process in terms of collection development. He saw the primary responsibility of collection development in the preservation process as one of making item-by-item preservation selection decisions on the basis of criteria similar (but not identical) to the criteria used for the selection of current materials. Collection development involves librarians deciding which documents to acquire, while selection for preservation involves determining which documents least deserve destruction.5 Hazen listed academic activity, traditional collecting strengths, availability and cost, alternatives (to purchasing or to local preservation), and discipline-specific models of access to information as the fives distinct, interrelated factors to which both collection development and preservation respond within a given resource base and allocation structure.7

Atkinson pointed out that some of the values involved in selecting for preservation are at odds with those of collection development and that a negative preservation decision represents a reversal of a series of positive decisions made throughout the history of the text.8 He identified two decisions that must be made in selecting for preservation, with each consisting of both technical and critical components. The first decision is the identification for preservation—technically, what needs to be preserved, and critically, what should be preserved. The second decision is the determination of the mode of preservation—technically, which modes are possible, and critically, which modes should be used.

In answer to the fundamental question, from the standpoint of collection development, of why certain items should survive while others should not, Atkinson suggested a typology of preservation based on three different categories of library materials which should be preserved.9 His Class 1 preservation aims at preserving materials or groups of materials that have a high economic value, as well as level-five collections, as defined by the RLG Conspectus,10 the value of which lies in the comprehensiveness of the materials rather than in any single item's individual intrinsic value. Child expanded this definition somewhat to include "several nonmone-
tary but important research values deriv-
ing from artifactual characteristics which compel preservation in the original format."11 Class 2 preservation focuses on higher-use items that are currently in demand for classwork and research purposes, the need for preservation arising mainly from overuse. Class 3 preservation maintains for posterity lower-use research materials. Atkinson saw these materials as the source for cooperative preservation, with microfilm as the primary mode of
preservation. He pointed out that selection criteria for Class 3 preservation are less easily defined than for Classes 1 or 2 because "we are all products of an age, a nation, and a profession that has [sic] become increasingly unwilling to accept or to apply absolutes." According to Child, two factors complicate selection for preservation. First, the extraordinary expansion of American research since World War II has increased the subject matter and sources considered appropriate for study. And second, the technological possibility of saving everything forces difficult choices with respect to what will be saved and what will be allowed to deteriorate. Atkinson brought home the importance of this situation by pointing out that, in making preservation decisions today, libraries control the future because "the future will only be able to understand and define itself in relation to what [libraries] give it." The technological possibility of saving everything forces difficult choices with respect to what will be saved and what will be allowed to deteriorate.

In recent years, various research libraries have conducted preservation studies of their collections, many based on Pamela Darling's manual Preservation Planning Program. Preservation surveys, and special programs implemented at different types and sizes of libraries are discussed in Gay Walker, et. al. (Yale); L. Nainis and L. A. Bedard (Georgetown University Law Library); Charlotte Brown, and Brown and Janet Gertz (Franklin and Marshall); and Jan Merrill-Oldham (University of Connecticut). In addition, preservation studies at Yale, Stanford, Berkeley, and the Library of Congress are discussed in the proceedings of an April 1983 conference, edited by Jan Merrill-Oldham and Merrily Smith. Of particular interest was the study conducted by Brown and Gertz at the Shadek-Fackenthal Library of Franklin and Marshall College, the purpose of which was to test the applicability of the Atkinson model for smaller academic libraries. The results of the study suggested that the Atkinson typology is indeed workable at smaller institutions, and that small college libraries may have significant amounts of materials that fall into Class 3 and that may be of substantial research value to the scholarly community.

METHOD

Most of the preservation studies that have been conducted to date have focused on research collections at large universities. Because the mission of college libraries places more emphasis on current teaching and research, and proportionally less on archival functions, one would expect different priorities to motivate the preservation activities at these smaller institutions. In order to collect information about the preservation activities of smaller college libraries, a questionnaire was sent to the libraries that make up the Oberlin Group, an informal association of directors of more than 60 college libraries across the country with similar characteristics and needs. These libraries serve campuses with enrollments ranging from around 500 to 3,400 students, although most fall between 1,000 and 2,000. The six-part questionnaire sought to determine the extent to which concern for the preservation needs of nineteenth-century American and British periodicals influence collection management policies, and which preservation measures are used. The survey also asked for information regarding the availability of preservation resources, such as trained personnel, facilities, and specific budget allocations, at Oberlin Group institutions, as well as the extent to which a decision-making structure exists at these libraries. Finally, the questionnaire sought to determine the use of nineteenth-century American and British periodicals in support of course work and faculty and student research, the condition of these volumes, and how widely they are held—in both paper and microformat—at the Oberlin Group libraries. The information obtained by the survey was tabulated and analyzed using...
TABLE 1
CRITERIA FOR DETERMINING
CIRCULATION POLICY FOR NINETEENTH-CENTURY PERIODICALS

<table>
<thead>
<tr>
<th>Criteria</th>
<th>First or Second</th>
<th>Third, Fourth, or Fifth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R%</td>
<td>N</td>
<td>C%</td>
</tr>
<tr>
<td>Age</td>
<td>21</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Physical condition</td>
<td>71</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>Intrinsic value</td>
<td>94</td>
<td>15</td>
<td>41</td>
</tr>
<tr>
<td>Use</td>
<td>38</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Space</td>
<td>22</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td></td>
<td>69</td>
</tr>
</tbody>
</table>

Chi-square=22.93; p<0.001; Cramer's Phi=0.58

N is the number of responses in a given category, R% is the row percent, and C% is the column percent.

the spreadsheet program EXCEL, as described in the next section. Using this information and the information obtained in the literature review, a model was developed that describes the elements involved in preservation decision making at small liberal arts colleges, especially with respect to nineteenth-century American and British periodicals.

RESULTS AND ANALYSIS

The high return rate of questionnaires (85%) is an indication that most of the libraries in the Oberlin Group recognize the problem of the deterioration of nineteenth-century periodicals and are interested in what other college libraries are doing about preservation of these journals. Clearly, the condition of the collections reflected a need to increase preservation activities. Fully 75% of the libraries described the condition of their paper volumes as fair or poor. Given this fact, the data provide revealing information on the preservation policies and activities of the member libraries.

Circulation of Nineteenth-Century Periodicals

In analyzing the circulation policies of the Oberlin Group libraries, it was found that, of the 56 libraries that responded to the survey, 7 (13%) allow all of their nineteenth-century periodicals to circulate, 12 (21%) allow some to circulate, and 37 (66%) allow none to circulate. While 61% of the respondents reported a blanket circulation policy for all journals, 37% ranked their criteria for determining circulation policy for nineteenth-century periodicals. The responses are summarized in table 1. It was necessary to group the rankings ("first or second," and "third, fourth, or fifth") due to small cell sizes.

A glance at each of the criteria individually reveals that those ranking intrinsic value ranked it either first or second in importance 94% of the time. Physical condition was ranked either first or second 71% of the time. These two characteristics were clearly the most important criteria for determining circulation policy for nineteenth-century periodicals. Use, age, and space were less important. Comparing all variables, intrinsic value and physical condition were ranked first or second 41% and 32% of the time, respectively. On the other hand, age, use, and space were less important. Comparing all variables, intrinsic value and physical condition were ranked first or second 41% and 32% of the time, respectively. On the other hand, age, use, and space were less important. Comparing all variables, intrinsic value and physical condition were ranked first or second 41% and 32% of the time, respectively. Based on $\chi^2$ analysis, there is a statistically significant association between high rank and both intrinsic value and physical condition. The Cramer's phi value of .58 indicates that the strength of the relationship is moderate.

Shelving Nineteenth-Century Periodicals

Of the 64 responses recorded, 73% shelved nineteenth-century periodicals either with
TABLE 2
CRITERIA FOR DETERMINING SHELVING POLICY FOR NINETEENTH-CENTURY PERIODICALS

<table>
<thead>
<tr>
<th>Criteria</th>
<th>First or Second</th>
<th>Third, Fourth or Fifth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R%</td>
<td>N</td>
<td>C%</td>
</tr>
<tr>
<td>Age</td>
<td>40</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Physical condition</td>
<td>59</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>Intrinsic value</td>
<td>72</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>Use</td>
<td>48</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Space</td>
<td>48</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>57</td>
<td>123</td>
</tr>
</tbody>
</table>

Chi-square=6.17; p<0.2; Cramer’s Phi=0.22

N is the number of responses in a given category, R% is the row percent, and C% is the column percent.

other bound periodicals or interfiled with the general collection, while 10% shelved them in a storage area, either remote or in-house. Only 16% reported shelving all or most of their nineteenth-century periodicals in a restricted special collection, although others reported having a few selected titles in a special collection or in the rare books room. Responses to this question indicate that few of the libraries surveyed have a special storage location for nineteenth-century periodicals.

Table 2 summarizes rankings of criteria for determining shelving policy for nineteenth-century periodicals. Again, it was necessary to group rankings due to small cell sizes. Considering each of the criteria individually, when intrinsic value and physical condition were chosen, they tended to be ranked slightly higher than other criteria. Intrinsic value was ranked first or second 72% of the time, and physical condition was ranked first or second 59% of the time. Space and use were ranked first or second slightly less than half of the time. Age tended to be ranked lower, ranking first or second only 40% of the time.

Comparing all variables revealed that physical condition and intrinsic value were the most important criteria for determining shelving policy for nineteenth-century periodicals. Physical condition, chosen in 52% of the surveys, accounted for 26% of the first or second rankings.

Intrinsic value, chosen in 45% of the surveys, accounted for 27%. Use was ranked first or second in 17% of the surveys that ranked criteria, and age and space each accounted for 15%. Although, as with circulation policy, physical condition and intrinsic value seem to be more important factors in determining shelving policy, the relationships were not statistically significant.

Preservation Resources

Preservation resources, including trained personnel, facilities, and funding, are essential elements in any preservation decision-making model. Generally speaking, preservation efforts at many of the surveyed libraries seem to be hampered in varying degrees by a lack of trained personnel and preservation facilities and by budgetary constraints. In analyzing the personnel resources of the Oberlin Group libraries, 18% were found to have no professional librarians performing preservation duties, 65% had one or two librarians responsible for performing preservation tasks as part of their jobs, and only 17% had three or more librarians responsible for performing preservation tasks. Fifty-five percent of the responding libraries reported that, of those individuals whose jobs actually involve preservation and conservation activities, one person had some preservation training. Only 23% had more than one person trained, and 22% reported that
TABLE 3
RELATIONSHIP BETWEEN ABSENCE OF PRESERVATION FACILITIES AND PREFERRED PRESERVATION MEASURES

<table>
<thead>
<tr>
<th>Preservation Measures</th>
<th>Yes R%</th>
<th>N</th>
<th>C%</th>
<th>No R%</th>
<th>N</th>
<th>C%</th>
<th>Total N</th>
<th>C%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted access</td>
<td>27</td>
<td>4</td>
<td>18</td>
<td>73</td>
<td>11</td>
<td>46</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>In-house mending</td>
<td>73</td>
<td>11</td>
<td>50</td>
<td>27</td>
<td>4</td>
<td>17</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>Commercial rebinding</td>
<td>57</td>
<td>4</td>
<td>18</td>
<td>43</td>
<td>3</td>
<td>13</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Protective enclosures</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>80</td>
<td>4</td>
<td>17</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Microfilm</td>
<td>50</td>
<td>2</td>
<td>9</td>
<td>50</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22</td>
<td></td>
<td>24</td>
<td></td>
<td>9</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

Chi-square=8.41; p<0.1; Cramer's Phi=0.43

N is the number of responses in a given category, R% is the row percent, and C% is the column percent

none of the personnel performing preservation tasks had training.

Forty-six percent of the respondents felt that the absence of preservation facilities or equipment had actually been a factor in preservation decision making. They cited limitations in trained staff, a lack of preservation labs and environmentally controlled stack areas, and a lack of time and funds. Those that said that resources were not a factor in decision making either have such preservation facilities or do not see preservation as a priority. A few reported that new buildings are planned or are under construction that will include preservation facilities. Only 36% of the libraries reported having portions of their budgets specifically allocated for preservation, and some of those indicated that the amounts were not sufficient. Several noted that preservation costs were taken from the binding allocations in their budgets.

Preservation Measures

When asked to identify the preservation measures used for nineteenth-century periodicals, the four most commonly chosen were in-house mending, commercial rebinding, restricted access, and protective enclosures. Of the preservation measures most often used, in-house mending and restricted access together accounted for 62% of the responses, while commercial rebinding and protective enclosures accounted for 24%.

An analysis of the relationships between the available resources and the preferred methods of preservation revealed that the absence of adequate facilities has some relationship to the preservation measures most often chosen. This is evident particularly in the choice between restricted access and in-house mending, each of which was chosen in 15 of the 48 surveys used in this analysis. As shown in table 3, of those libraries that chose in-house mending as their most often used preservation measure, 73% also responded that the absence of adequate facilities was a factor in their preservation decision making.

Preservation efforts at many of the surveyed libraries seem to be hampered in varying degrees by a lack of trained personnel and preservation facilities and by budgetary constraints.

On the other hand, of those that chose restricted access, 73% seemed to feel that they had adequate facilities. Neither the number of trained staff nor a specific budget allocation for preservation was a significant factor, overall, in the choice of one preservation measure over another.

Preservation Decision Making

With respect to preservation decision making, 20% of the libraries had conducted studies of the collection preserva-
tion needs in the last 5 years, but only 12% had assessed the preservation needs of their nineteenth-century periodicals collection. Only one of the 56 libraries has a written policy to guide preservation decision making, although two others are in the process of developing such a policy.

In response to questions regarding who makes preservation decisions, 13 (24%) of the libraries reported having an individual whose major responsibility is to evaluate and select materials for preservation. Forty-six respondents (62%) reported having an individual (or an individual job) who is responsible for making preservation decisions, though not as a major part of his or her responsibilities, and 37% reported that preservation decision making was shared among two or more individuals (or individual job titles). Many more individuals are involved in preservation decision making than were anticipated when the questionnaire was designed, and responsibility is often shared. Individuals named as being involved in decision making included the reference librarian, technical services librarian, collection development officer, bibliographer, director, serials staff (which handles mending), college archivist, special collections librarian, circulation head, and collection management librarian.

Two variables were found to be weakly associated with libraries that have conducted studies of their preservation needs. Table 4 shows a weak association between having a person whose primary responsibility is making preservation decisions and whether or not a study of preservation needs has been conducted. The data indicate that those libraries that have a person responsible for making preservation decisions are more likely to have conducted such a study than those that do not. Also, of those libraries that have not conducted a study, more than 80% do not have a person responsible for making preservation decisions. It is difficult to tell from this data what the cause and effect relationship might be; that is, does having a person responsible for

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**TABLE 4**

RELATIONSHIP BETWEEN PRESERVATION NEEDS STUDY AND INDIVIDUAL RESPONSIBLE FOR PRESERVATION DECISIONS

<table>
<thead>
<tr>
<th>Person Responsible?</th>
<th>Preservation Study</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R%</td>
<td>N</td>
<td>C%</td>
<td>R%</td>
</tr>
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<td>Yes</td>
<td>38</td>
<td>5</td>
<td>42</td>
<td>62</td>
</tr>
<tr>
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<td>17</td>
<td>7</td>
<td>58</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>43</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

Chi-square=2.76; p<0.1; Cramer’s Phi=0.22

N is the number of responses in a given category, R% is the row percent, and C% is the column percent.

**TABLE 5**

RELATIONSHIP BETWEEN PRESERVATION NEEDS STUDY AND BUDGET ALLOCATION

<table>
<thead>
<tr>
<th>Person Responsible?</th>
<th>Preservation Study</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
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<td>C%</td>
<td>R%</td>
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<td>Total</td>
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<td>55</td>
<td></td>
</tr>
</tbody>
</table>

Chi-square=7.86; p<0.01; Cramer’s Phi=0.2

N is the number of responses in a given category, R% is the row percent, and C% is the column percent.
preservation motivate a preservation study, or do the results of a study reveal the need for such a person? A more significant relationship was found to exist between a preservation needs study and a specific budget allocation for preservation. The data in table 5 show that 73% of those libraries that have conducted a study of their preservation needs have budget allocations for preservation, and that 73% of those who have not conducted such a study do not have preservation budgets. Further, while 40% of those that have budgets have conducted a study, 91% of those who do not have budgets have not conducted a study. Again, it is difficult to tell whether conducting a study motivates the allocation of funds for preservation or is dependent on it.

Summary

The data obtained in the survey give valuable information about the policies, procedures, and resources currently being used for preservation at the Oberlin Group libraries, particularly with respect to nineteenth-century periodicals. The participating libraries, in general, demonstrate a concern for the materials' intrinsic value and physical condition in their circulation policies and, to a lesser extent, in their shelving policies. Most of the libraries are hampered in their efforts to deal with the situation by limitations in funding, facilities, or trained personnel. The preservation measures used most often are in-house mending and restricted access, along with commercial rebinding and protective enclosures.

It is especially revealing that there is very little identifiable structure for decision making reported by the libraries. Only 20% have conducted a study of the their collection's preservation needs within the last 5 years, and only one of the 56 libraries responding has a written preservation policy, although two others are in the process of drafting one. Further, the responsibility for preservation decision making is not well defined. Within each library, decision making may be shared among several individuals or job titles, including those involved in bibliographic, technical service, collection management, administrative, preservation, and archival functions. Likewise, among the different libraries, job titles of those involved in preservation decision making vary widely.

The results of this survey indicate the need for a model describing the elements of preservation decision making to help college libraries choose appropriate alternatives for the preservation of their collections, in general, and their nineteenth-century periodicals, in particular.

THE MODEL

The question posed in this study is, "How does a college library, with preservation options severely limited by available resources, make preservation selections with respect to nineteenth-century periodicals?" Using Atkinson's typology, one would tend to place nineteenth-century periodicals primarily in Class 3—lower use research materials—with some titles or some individual volumes fitting into Class 1—high economic value materials—because of artificial characteristics. This would suggest that blanket decisions be made for all nineteenth-century periodicals, as opposed to the item-by-item decisions necessary in Class 2—higher use items. Furthermore, in considering Class 3 preservation, both Atkinson and Child focus on a national cooperative microfilming project as the preferred mode of preservation. But is the preservation decision-making model that is used in a national cooperative project appropriate for a college library considering preservation options for nineteenth-century periodicals? Can all or most of these titles be placed in one class? Can a given periodical title be placed in a particular class that is appropriate for all libraries? Are the solutions used in one college library appropriate for all college libraries? If the Atkinson model, helpful as it is, is not sufficient for answering these questions in the context of a small college library, what factors need to be considered in making preservation decisions for nineteenth-century periodicals?

College libraries face difficult decisions in determining which preservation options are appropriate for nineteenth-century periodicals. The results of the Oberlin Group survey show that the periodicals are widely held, especially in older collections, and are in fair to poor condition. The
data revealed that nineteenth-century periodicals are used infrequently for either teaching or research. These materials face the same physical preservation problems as they do in large research libraries, but in the context of a small college, they represent a proportionally larger commitment of time and resources, while possibly falling outside the major mission of the institution to support current teaching and research. 18

The factors involved in the selection of nineteenth-century periodicals for preservation fall into three broad, overlapping categories. The first category concerns details of the context in which the decisions are to be made—in this case, the context of the small liberal arts college library. The second category deals with the characteristics of the documents being considered for preservation—the nineteenth-century American and British periodicals. Finally, it is necessary to know of the various preservation options that are available. These factors are diagrammed in figure 1.

Solutions to the problems posed by preservation will differ from one college library to another, based on its assessment of its needs and priorities. The Oberlin Group survey revealed, however, that very little identifiable structure for decision making exists in college libraries. Most have not studied their preservation needs, and only one of the 56 respondents has a written preservation policy. Responsibility for decision making does not appear to be clearly defined, and most of the libraries are hampered in their preservation efforts by a lack of funds, facilities, and trained personnel.

One important element, then, in developing a decision-making structure must be to assess the institutional context within which preservation decisions are to be made.

- What programs does the library support?
- What is the relative importance of its different programs?
- What are the institution's priorities with respect to course work support, and faculty and student research?
- Does the library have a role in serving as a repository for low-use, long-term research materials, in addition to supporting current sources and activities?
- Are these priorities clearly defined in written collection development and preservation policies?
- Are the priorities supported by collection management policies regarding circulation, shelving, and maintenance of delicate materials?
- Can the preservation priorities be supported by the available resources including funding, facilities, and trained personnel?

By examining these contextual elements, one can begin to develop a decision-making structure. Categories of materials that should be preserved start to emerge from the programmatic priorities as expressed in the collection development and preservation policies. The collection management structure will determine who will be responsible for preservation decision making. The available resources will suggest limitations on the possible preservation options.

It is within this contextual framework that the nineteenth-century periodicals are evaluated for value, availability, and physical condition, the second element in the decision-making structure.

- Does the periodical have economic or research value that would dictate preservation in its original format?
- Does it support current programs or research projects at the institution?
- Is it part of, or does it support, a special collection or an area of traditional strength in the collection?
- What is the periodical's scope?
- What is its publication history, including title changes and merges?
- Who were its editors, publishers, and major contributors?
- Are there special features, such as illustrations or first appearances of classic works?
- Where is the periodical indexed?
- What are the local holdings?
- Is it readily available through interlibrary loan?
- Are reprints of articles available commercially?
- Is the journal available in microform?
- What is the physical condition of the paper and bindings?

Evaluation of the periodicals themselves—their value, availability, and physical condition—further defines which
Figure 1: A model for preservation decision making. Selection for preservation must take into account the institutional context, the characteristics of the documents in question, and the preservation options that are available.
items should be preserved, the extent of the preservation need, and the preservation methods appropriate for a given journal.

The final decision regarding the most appropriate methods of preservation is based on the techniques available and a comparison of their merits within the context of the institution and the documents being preserved.

• Which of the available techniques meets the needs of the periodicals?
• What is the cost of the appropriate technique(s)?
• What is the quality of the end product?
• Which alternative offers the most protection to the document and its contents, while interfering least with patron access?
• Which alternative is easiest to use?
• Which alternative(s) is (are) possible within the limitations of the available resources?

CONCLUSION

This study was motivated by a specific concern for the preservation of nineteenth-century American and British periodicals at a small liberal arts college. Initially, it was hoped that a model could be developed that would provide a formula for preservation decision making. Not surprisingly, the process of making preservation decisions for nineteenth-century periodicals at small college libraries, with preservation options limited by available resources, was found to present a complex, multifaceted problem.

The model proposed here does not provide such a formula. The data suggest that no fixed formula can be devised that would apply in every case to resolve conflicts between, for example, the institutional context and the characteristics of the documents, although common important considerations emerge. Indeed, it is sometimes difficult to separate institutional context and document characteristics. One institution from the Oberlin Group reported having an extensive collection of Norwegian-American periodicals in need of preservation. The primary mission of this small college normally would preclude investing heavily in preservation of documents that get little use by the faculty and students of that institution. However, the fact that these items are not widely held and are of historical significance in the area might justify a preservation effort that would be more commonly undertaken by a research library.

The questions to be considered in each category of the model—institutional context, document characteristics, and preservation options—apply to any library, large or small, or to any group of documents. The answers to the questions posed, however, will differ depending on the primary mission of the library and the institution it serves, the characteristics of the documents being considered, and the preservation options available. While no library can afford to preserve everything, large research libraries may find that materials such as nineteenth-century periodicals are used heavily enough to warrant some measure of preservation. Or, if judged to fit into Atkinson's Class 1 or Class 3, they may be preserved as part of that library's mission to serve as a repository for lower-use research materials.

This repository function falls outside the primary mission of most college libraries. A number of the respondents to the Oberlin Group survey commented that they felt that, except in special cases, preservation is more appropriately a concern of research libraries. The survey showed that many librarians in the Oberlin Group were hampered in their preservation efforts by a lack of resources and decision-making structure. One librarian, who reported that space was the major criterion in setting shelving and circulation policies for nineteenth-century periodicals, expressed concern that the lack of space, rather than the needs of the documents, motivated the library's decision making. Those libraries that were able to take some active preservation measures for these journals seemed to be making item-by-item decisions about which titles to preserve and how, rather than making the blanket decisions implied by the Atkinson model.

Although the model proposed here does not provide a formula for making preservation decisions that will meet the needs of every college library, it does illustrate...
the three overlapping areas of concern that must be addressed. While the answers to the questions posed in each of these categories will be different for each institution, the questions themselves will be similar. Hopefully, an examination of the relevant questions will help college librarians develop goals and a practical, systematic strategy for preservation decision making appropriate for the institutions they serve.

A copy of the survey can be obtained from Donna Jacobs, Science/Reference Librarian at Andrews Library, The College of Wooster, Wooster, Ohio 44691.

REFERENCES AND NOTES

7. Ibid., p.7.
9. Ibid., p.344.
A questionnaire surveying institutional tenure and promotion criteria sent to 469 academic libraries yielded 304 usable responses. Findings show that job performance continues to be the most widely recognized factor for evaluating academic librarians' performances, examined in virtually every institution. Research, publication, and service play significant roles, particularly at institutions where librarians hold faculty status. Graduate degrees in addition to the M.L.S. are frequently necessary for promotion in academic rank. Approximately half of the responding institutions judge academic librarians by the same tenure and promotion criteria as other faculty.

The tenure and promotion processes are unique aspects of the professorate in American higher education. Tenure is a historical practice that protects the academic freedom of a faculty member in an institution of higher education and prevents the faculty member's dismissal without adequate cause and due process. When an institution grants individuals tenure, it presumes their professional excellence as scholars and teachers, as well as the promise of their long-term contribution to the institution's mission and programs. Tenure is "the most reliable means of assuring faculty quality and educational excellence, as well as the best guarantee of academic freedom."¹

Similarly, the process of appointment and promotion through the academic ranks is basic to the professional lives of American academics. Promotion in rank is an aspect of recognition of past achievement, as well as recognition of promise, and a signal of institutional confidence that the faculty member is capable of accepting and discharging greater responsibilities.

Academic librarians have been concerned with faculty status and its concomitant right to tenure and promotion for more than 100 years. Suggestions that librarians should have academic rank date from 1911.² While tenure has been an academic issue since Harvard's President Charles Eliot's 1873 statement that job security would provide dignity to the teaching profession, tenure was not officially endorsed for librarians until 1946.³ The movement toward faculty status for librarians gained acceptance and accelerated during the 1970s and 1980s. However, debate continues on

Betsy Park is Assistant Head of the Reference Department and Robert Riggs is Regents Professor of Higher Education at Memphis State University, Memphis, Tennessee 38152. This study was supported by the Memphis State University Center for the Study of Higher Education. The authors thank Barbara Reason, Graduate Assistant, for help with the tables, and George Relyea, MSU Computer Services, for assistance with the statistics.
whether the faculty model is appropriate for academic librarians. Gemma DeVinney and Mary Reichel summarize the issues involved:

The literature reveals continuing controversy as to the appropriateness of librarians being designated faculty on their campuses. Some librarians are philosophically opposed to adopting the identity of another profession. Others take issue with granting librarians faculty rank on more pragmatic grounds. For example, it is difficult for librarians to demonstrate national visibility as well as evidence of scholarly research and publication in tenure dossiers, when they generally have calendar year appointments and little free time to undertake research projects in their highly-scheduled work weeks.

When academic librarians apply for tenure or promotion, they are judged as faculty, not as librarians. Surveys of the literature of the faculty status movement conclude that academic librarians remain ambivalent in their support for full faculty status. Some advantages exist in faculty status, but writers also recognize that faculty status may involve additional performance expectations (such as publication), often without appropriate adjustments in current responsibilities. Librarians should consider looking to a career model that is different than that of teaching faculty.

The principal professional organization for academic librarians, the Association of College and Research Libraries (ACRL), has monitored and responded to concerns throughout the evolution of the status issue. In particular, the ACRL Academic Status Committee developed the “Standards for Faculty Status for College and University Librarians” (adopted 1971, revised 1990) and the “Model Statement of Criteria and Procedures for Appointment, Promotion in Academic Rank, and Tenure for College and University Librarians” (1987) as statements of principles against which librarians may review and assess procedures at their own institutions. The ACRL documents are based on the 1940 statement on principles on academic freedom and tenure, developed jointly by the American Association of University Professors and the Association of American Colleges. The 1940 statement serves as a baseline for virtually every tenure policy in the United States.

This study responds to concerns and issues identified from the literature. Do academic librarians have faculty status? On what criteria are they judged in tenure and promotion decisions? Are standards for academic librarians similar to or different than those for teaching faculty? Can generalizations be made about academic librarians at institutions where librarians have faculty status as opposed to those at institutions where they are without faculty status?

REVIEW OF RELEVANT LITERATURE

Recently, several excellent articles have reviewed the faculty status literature. Therefore, the authors will not attempt a comprehensive literature review and will focus more narrowly on issues addressed in this study. ACRL’s “Standards for Faculty Status” states that librarians should have the same rights and responsibilities as teaching faculty, including the rights of self-determination, peer review, membership in the academic senate and university committees, equal salary scale, opportunity or tenure, promotion, research funds, and sabbatical leave. Estimates of the percentages of academic librarians who have faculty status vary considerably. John DePew found that 78.8% have some degree of faculty status, while other estimates range from 35% to 59%. Even with faculty status, academic librarians do not necessarily have the same rights and privileges as teaching faculty. Librarians are rarely paid on the same salary scale; they may not be eligible for tenure and promotion through the academic ranks, or for sabbatical leave and research funds; and they routinely work 35 to 40 hours per week with 12- rather than 9-month contracts.

According to ACRL’s “Model Statement of Criteria and Procedures for Appointment, Promotion in Academic Rank, and Tenure for College and University Librarians,” the library faculty member “who is a candidate for tenure shall be reviewed according to procedures set forth in estab-
lished institutional regulations as applied to other faculty on the campus." Areas of evaluation for faculty generally are anchored in effectiveness of teaching, scholarship, and service. For librarian faculty, evaluation is based on librarianship, scholarship, and service.

Librarianship or job performance appears to have top priority in the evaluation process and usually is defined to include such activities as reference duties, cataloging, or acquisition. In a weighted scale, job performance may count as 70% of a total evaluation score. Karen Smith, Tamara Frost, Amy Lyons, and Mary Reichel state that job performance is the "single most important criterion in awarding of tenure." Much of the literature concentrates on research and publication requirements. "Publish or perish" challenges and threatens both academic librarians and teaching faculty. Ernest Boyer of the Carnegie Foundation for the Advancement of Teaching asserts that it is a myth that all professors are researchers and, notes that professors "often felt trapped in a system where the work load and the reward system were disconnected." Do librarians also suffer from an emphasis on research and publication? Smith and her colleagues found that research and publication are gaining increasing importance for tenure decisions. Paula De Simone Watson theorized that publication requirements may hinder academic librarians in achieving tenure. Research and publication appear to be important factors in the review process. In researching publication requirements and tenure approval rates for academic librarians, W. Bede Mitchell and L. Stanislava Swieszkowski found that inadequate research/publication was the most frequently cited reason that tenure was denied. However, lack of publication disqualified only 35 of the 329 librarians who had applied for tenure in the last 5 years, and these authors reject the premise that publication unduly hinders academic librarians in the tenure process. The study questions the ultimate role of research and publication, and the importance of this activity remains unclear.

Studies on whether research and publication are actually required for tenure and promotion add to the confusion. Estimates of the percentage of institutions with publication requirements vary greatly. Whereas Jack Pontius reported that 97% of Association of Research Libraries (ARL) institutions with faculty status required research and publication, Ronald Rayman and Frank Goudy found this requirement in only 42% of these same libraries. When Joyce Payne and Janet Wagner repeated this study with librarians at large non-ARL universities, they found that 7% required publication, while 84% encouraged it. Publication does not appear to play a pivotal role in the tenure and promotion process. It is one factor, but its importance is not clearly defined.

Publication does not appear to play a pivotal role in the tenure and promotion process.

Service is traditionally a third factor considered. Higher education's involvement in public service dates from the 1862 Morrill Act, which founded land-grant colleges with a commitment to education and public service. For librarians, public service most often means working outside the academic community with users such as high school students, business people, and other researchers. Professional service applies to active participation in university and professional associations and learned societies. Although service is frequently mentioned as a criterion for tenure, the literature does not discuss it extensively, probably because, as Smith and her colleagues have found, service occupies a netherland, being neither the most nor the least important of the criteria. This factor is frequently mentioned, but its impact as a criterion is not clear.

An additional concern is the necessity of a graduate degree beyond the Master of Library Science (M.L.S.). University faculty traditionally acquire a doctorate before their initial appointment or are required to do so before they advance in rank. For academic librarians, as for faculty in disciplines such as nursing or the studio arts, the terminal degree is not so clearly defined. At the 1975 Midwinter meeting of the American Library Associ-
The master's degree in library science from a library school accredited by the American Library Association is the appropriate terminal professional degree for academic librarians. This policy was reaffirmed in the 1987 "Model Statement of Criteria and Procedures for Appointment, Promotion in Academic Rank, and Tenure for College and University Librarians." 

Like their teaching counterparts, academic librarians are judged on job performance, research and scholarship, and service.

John Olsgaard found that 91.9% of his sample of successful librarians had an M.L.S., while 34.6% had the M.L.S. plus a second master's, and only 7.5% had the M.L.S. plus a doctorate. According to the study, the additional graduate degree does not indicate success, and the M.L.S. may be the appropriate degree. Job announcements, particularly for positions above entry level, frequently recommend or give preference to the additional graduate degree, and, in practice, the M.L.S. is not universally recognized as the terminal degree by many college and university administrators. While the additional subject master's appears to be gaining recognition, and possibly wide acceptance, it is required for tenure in few institutions. Further graduate work, as evidenced by the second subject master’s, does not of itself ensure equality with other faculty. As one librarian stated, "We have a critical problem with the University administration in that they will not accept the MLS plus master's as terminal degrees—thus our staff is frozen at assistant professor rank." 

A review of the literature indicates a continuing need for research on criteria and procedures for tenure and promotion. Kee DeBoer and Wendy Culotta write, "If librarians are to be evaluated on the same basis as are teaching faculty, we need to know more about what will be expected of us." The present study gathers information on tenure and promotion policies and procedures for academic librarians across the United States. A picture of where librarians are now can provide a base for future decisions and stimulate ideas for future research.

**METHODOLOGY**

The authors developed a questionnaire regarding policies for appointment, tenure, and promotion of academic librarians. The questionnaire was based on an extensive review of the literature—in particular, the 1987 ACRL "Model Statement of Criteria and Procedures for Appointment, Promotion in Academic Rank, and Tenure for College and University Librarians." The survey instrument contained 29 questions. The first section requested information about the institution itself: Carnegie classification, enrollment, number of volumes in the library, and rank and status of library faculty. For the purposes of this study, faculty status was restricted to those institutions at which librarians had eligibility both for tenure and for promotion through the academic ranks. The term "professional" was used to categorize professional librarians with administrative, academic, or another status. A second section concerned appointment issues, including degree requirements and the role of peer review in the initial appointment process. The major portion of the survey concerned tenure and promotion criteria and procedures. Questions asked if job performance, teaching, research and scholarly activity, and service were evaluated in the tenure or promotion review process. Additional questions further investigated how each area, such as research and scholarly activity, was defined and evaluated. The survey also contained questions regarding review levels for tenure and promotion, educational degrees, similarity of criteria for librarians. A panel of academic librarians and institutional chief academic officers reviewed and critiqued the questionnaire to clarify language and to ensure its comprehensiveness. The authors made the recommended changes.

In the spring of 1989, the authors mailed the questionnaire to the directors of 469 academic libraries selected from
the 1987 Carnegie Foundation's *A Classification of Institutions of Higher Education*. The authors selected the study population by drawing a systematic random sample of institutions listed in the classification. Questionnaires were sent to one-third of the institutions in the categories of research universities, doctoral-granting institutions, comprehensive universities and colleges, and liberal arts colleges. The total number of institutions in these classifications is 1,379. The sample size was 469 institutions, or one-third of the total population. A follow-up mailing three weeks after the initial communication urged non-respondents to complete and return the study questionnaire.

Three hundred twenty institutions responded; 304 responses were usable, yielding a 64.8% response rate. About 50 of the 304 respondents provided information only about their institution. For the most part, these were smaller libraries, with respondents indicating that tenure and promotion were not issues at the institution. Not all respondents answered every question. Institutions without faculty status answered questions primarily in terms of promotion through rank, although some respondents equated tenure with continuing appointment. Many of these respondents reflected the comment of one, which stated that "the rules for tenure and promotion are not just informal, they are positively vague, particularly where librarians are concerned."

Data gathered from the survey were analyzed using the Statistical Package for the Social Sciences (SPSS). Two-way contingency tables, using procedure crosstabs, further analyzed the data. This article reports results only on the questions related to tenure and promotion criteria. For this paper, data are analyzed in terms of faculty status versus professional status.

**DESCRIPTION OF THE SAMPLE**

The sample included 35 institutions (11.5%) in the Carnegie classification of research universities, 30 (9.9%) in doctoral-granting universities, 95 (31.3%) in comprehensive colleges and universities, and 144 (47.7%) in liberal arts colleges. Public institutions accounted for 125 (41%) of the responses and private institutions, for 179 (58.9%). Academic librarians at somewhat less than half (41.1%) of these institutions have faculty status. Libraries in the survey serve institutions with enrollments of fewer than 5,000 to more than 20,000, have collections ranging from 25,000 to more than one million volumes, and have professional staffs of one to 87 (with 90% in the 1-to-30 range) (see table 1).

**FINDINGS**

Of the 304 respondents, 125 (41.1%) indicated that professional librarians at their institutions have faculty rank and status. This percentage closely parallels other reports by Thomas English (46.1%), Rayman and Goudy (35%), Payne and Wagner (59.2%), Judy Horn (48%), ACRL (44%), and Mitchell and Swieszkowski (36.2%), indicating that faculty status, with its privileges and responsibilities, affects the professional lives of about half the academic librarians in the United States.

Like their teaching counterparts, academic librarians are judged on job performance, research and scholarship, and service (see table 2). Activity in each area is considered at almost every institution; however, research and scholarship are not included as criteria at one-fourth of the institutions surveyed. Each evaluation area is discussed separately below.

**Job Performance**

Librarianship or job performance is clearly an important factor in staff evaluation at all academic libraries. Of the 256 responses to this question, 243 (94.9%) indicated that job performance is evaluated for tenure or promotion or both. Analysis by status shows that 123 (98.4%) of those institutions with faculty status consider this factor in evaluation, as do 131 (91.6%) of those with professional status (see table 3). Job performance is most frequently a component of the review process for promoting of librarians with professional status and for both tenure and promotion for those...
TABLE 1
INSTITUTIONAL CHARACTERISTICS
(N=304)

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<tr>
<td>Fewer than 5,000</td>
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<td>25,000 to 49,999</td>
<td></td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td></td>
<td>43</td>
<td>14.1</td>
</tr>
<tr>
<td>100,000 to 249,999</td>
<td></td>
<td>122</td>
<td>40.1</td>
</tr>
<tr>
<td>250,000 to 499,999</td>
<td></td>
<td>70</td>
<td>23.0</td>
</tr>
<tr>
<td>500,000 to 749,999</td>
<td></td>
<td>10</td>
<td>3.3</td>
</tr>
<tr>
<td>750,000 to 1,000,000</td>
<td></td>
<td>9</td>
<td>3.0</td>
</tr>
<tr>
<td>More than 1,000,000</td>
<td></td>
<td>44</td>
<td>14.5</td>
</tr>
<tr>
<td><strong>Librarian Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty rank and status</td>
<td>125</td>
<td></td>
<td>41.1</td>
</tr>
<tr>
<td>Professional status</td>
<td>179</td>
<td></td>
<td>58.9</td>
</tr>
</tbody>
</table>

Librarians with faculty status. Chi-square analysis (.05 level of significance) indicates that the number of institutions with professional status at which job performance was not reviewed is significantly greater than predicted by chance. Those with faculty status marked this option significantly less than predicted by chance. The authors had expected that librarians at institutions without faculty status would be more likely to be evaluated on job performance than librarians at those with faculty status, but this does not appear to be the case. These results may be subject to a variety of interpretations. Librarians who do not hold faculty status may have less clearly defined criteria for promotion, there may be no written evaluation process, or tenure or promotion may not be an option at the institution.

The centrality of job performance is evident in that it is considered at more institutions than any other single factor.

Smith, Frost, Lyons, and Reichel have also stressed the importance of librarianship as a factor in evaluation, and published library faculty evaluation documents assign a 70% weight to job
TABLE 2
TENURE OR PROMOTION EVALUATION CRITERIA

<table>
<thead>
<tr>
<th></th>
<th>Not Reviewed</th>
<th>For Tenure Only</th>
<th>For Promotion Only</th>
<th>For Tenure and Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Job Performance (N=256)</td>
<td>13</td>
<td>5.1</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Research and Scholarly Activity (N=254)</td>
<td>65</td>
<td>25.6</td>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>Service (N=253)</td>
<td>32</td>
<td>12.6</td>
<td>6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

TABLE 3
JOB PERFORMANCE (N=256)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Faculty Status</th>
<th>Professional Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Not reviewed</td>
<td>13</td>
<td>5.1</td>
<td>2</td>
</tr>
<tr>
<td>For tenure only</td>
<td>6</td>
<td>2.3</td>
<td>0</td>
</tr>
<tr>
<td>For promotion only</td>
<td>87</td>
<td>34.0</td>
<td>1</td>
</tr>
<tr>
<td>For tenure and promotion</td>
<td>150</td>
<td>58.6</td>
<td>122</td>
</tr>
</tbody>
</table>

performance. It is tempting to equate job performance with the teaching function of other faculty and to note that what many librarians, like other teaching faculty, consider to be their primary role is only one of many factors reviewed in the evaluation process. Although the present study did not attempt to weigh the importance of the various factors involved, the centrality of job performance is evident in that it is considered at more institutions than any other single factor.

Research and Publication

Several items on the questionnaire addressed research and publication requirements. An initial question asked whether librarians were evaluated on research and scholarly activities. Of the 254 respondents, 189 (74.4%) indicated that these activities were considered in the process. About half (122 responses, or 48%) had faculty status, and half (132 responses, or 52%) had professional status. One hundred three (almost 85%) of those institutions with faculty status reviewed research and scholarship, while 86 (65%) of those in the professional category did so. In addition to asking if this activity was evaluated, questions in the survey asked if publication was required or encouraged. It is required by 38 (30.4%) of the respondents with faculty status, but by a significantly lower number (16 responses or 11.7%) of those with professional status. About one-third of the faculty status institutions require that librarians publish for tenure or promotion. Publication is more likely to be encouraged than required in all institutions. One hundred fifty institutions (58.6%) reported that publication is encouraged. Again, a significant difference exists between institutions with and without faculty status. Publication is encouraged at 88 (70.4%) of the responding institutions with faculty status, but at 62 (47.3%) of those without faculty status. Research and publication play a prominent and defined role in faculty status institutions (see table 4). The data do, however, indicate that research and publication are not universally required, even at faculty status institutions. Nineteen (15.6%) of the responding faculty status institutions did not consider research or publication in the tenure and promotion process. Only one institution reported requiring or encouraging a specified number of publications.
Respondents were asked to mark the types of publications accepted for use in the promotion and tenure process at their institutions. Virtually all types of publications are recognized. Publications that remain in-house are less widely accepted at both faculty and professional status institutions. For this question, respondents were instructed to circle the types of publications accepted. Respondents that did not circle a response may have been indicating that publication was not a consideration at their particular institutions, rather than commenting on the acceptability of the publication. Not all librarians at faculty status institutions are evaluated on the basis of research and publication. For example, 92 (73.6%) of the faculty status institutions accept publications in refereed journals. The remaining 33 (26.4%) that did not choose this answer may be indicating that publication was not important, rather than expressing dissatisfaction with refereed journals.

Rayman and Goudy found publication to be required in 14.7% of the institutions, encouraged in 60%, and neither required nor encouraged in 25%.

32 In Payne and Wagner’s replication of the study, 7% required publication, 84% encouraged it, and 9% neither required nor encouraged it.

33 Mitchell and Swieszkowski correlated publication with tenure approval rates. Of the 81 institutions where librarians were eligible for tenure, 46.9% required evidence of research and publication for tenure, but 53.1% required no such evidence.

34 While the present study supports other investigations indicating that research and publication are factors in the tenure and promotion process, it points more emphatically to the problems encountered by academic librarians looking for guidance in this process. Research and publication generally are

### TABLE 4

**RESEARCH AND PUBLICATION ACTIVITY**

<table>
<thead>
<tr>
<th>Research and Publication</th>
<th>Total</th>
<th>Faculty Status</th>
<th>Prof. Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No.</strong></td>
<td><strong>%</strong></td>
<td><strong>No.</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>Reviewed (N=254)</td>
<td>189</td>
<td>74.4</td>
<td>103</td>
</tr>
<tr>
<td>Not reviewed</td>
<td>65</td>
<td>25.6</td>
<td>19</td>
</tr>
<tr>
<td>Publication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required (N=262)</td>
<td>54</td>
<td>20.6</td>
<td>38</td>
</tr>
<tr>
<td>Not required</td>
<td>208</td>
<td>79.4</td>
<td>87</td>
</tr>
<tr>
<td>Encouraged (N=256)</td>
<td>150</td>
<td>58.6</td>
<td>88</td>
</tr>
<tr>
<td>Not encouraged</td>
<td>106</td>
<td>41.4</td>
<td>37</td>
</tr>
<tr>
<td>Type of publication*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-house (N=303)</td>
<td>100</td>
<td>0.33</td>
<td>52</td>
</tr>
<tr>
<td>Book reviews (N=304)</td>
<td>143</td>
<td>47.0</td>
<td>80</td>
</tr>
<tr>
<td>Book chapters (N=304)</td>
<td>154</td>
<td>50.7</td>
<td>89</td>
</tr>
<tr>
<td>Monographs (N=304)</td>
<td>155</td>
<td>51.0</td>
<td>88</td>
</tr>
<tr>
<td>Local regional journals (N=304)</td>
<td>157</td>
<td>51.6</td>
<td>90</td>
</tr>
<tr>
<td>National journals (N=304)</td>
<td>161</td>
<td>53.0</td>
<td>91</td>
</tr>
<tr>
<td>Refereed journals (N=304)</td>
<td>157</td>
<td>51.6</td>
<td>92</td>
</tr>
<tr>
<td>Nonrefereed journals (N=304)</td>
<td>137</td>
<td>45.1</td>
<td>79</td>
</tr>
<tr>
<td>Library science only (N=246)</td>
<td>14</td>
<td>5.7</td>
<td>5</td>
</tr>
<tr>
<td>All disciplines (N=246)</td>
<td>138</td>
<td>56.1</td>
<td>83</td>
</tr>
</tbody>
</table>

*Totals add up to more than 100% (respondents checked more than one response).
TABLE 5
SERVICE ACTIVITY
(N=304)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total No.</th>
<th>Total %</th>
<th>Faculty Status No.</th>
<th>Faculty Status %</th>
<th>Prof. Status No.</th>
<th>Prof. Status %</th>
</tr>
</thead>
<tbody>
<tr>
<td>University CMTE</td>
<td>193</td>
<td>63.5</td>
<td>106</td>
<td>84.8</td>
<td>87</td>
<td>48.6</td>
</tr>
<tr>
<td>Reg./Natl. CMTE</td>
<td>173</td>
<td>56.9</td>
<td>91</td>
<td>72.8</td>
<td>82</td>
<td>45.8</td>
</tr>
<tr>
<td>Elected office</td>
<td>158</td>
<td>52.0</td>
<td>85</td>
<td>68.0</td>
<td>73</td>
<td>40.8</td>
</tr>
<tr>
<td>Consultation</td>
<td>125</td>
<td>41.4</td>
<td>69</td>
<td>55.2</td>
<td>56</td>
<td>31.3</td>
</tr>
<tr>
<td>Other</td>
<td>52</td>
<td>17.1</td>
<td>27</td>
<td>21.6</td>
<td>25</td>
<td>14.0</td>
</tr>
</tbody>
</table>

considered in the evaluation process, but in practice, the expectation may not be explicitly defined.

Service

Public or professional service is service to the academic or professional community. Of the 253 responses, 221 (87.4%) evaluated public or professional service. Of the 125 institutions with faculty status, 121 (96.8%) indicated that service was evaluated for tenure and promotion, while 100 (78.1%) of the professional status institutions included this criterion. Only 32 institutions (12.6%; 4 or 0.16% with faculty status, 29, or 11.5%, with professional status) indicated that service was not reviewed. Of the entire sample (304 institutions), "service" included university committees in 193 (63.5%), participation on regional or national committees in 173 (56.9%), holding an elected office in 158 (52%), and consultation in 125 (41.4%). Other service categories mentioned by respondents included advising, community service, and related activities. A breakdown of these figures (see table 5) indicates that this criterion, like that of research and scholarship, is more prominent in faculty status institutions.

Smith, Frost, Lyons, and Reichel recognized and discussed the service component in tenure decisions. Their respondents were somewhat inconclusive about the importance this factor played, ranking it as neither the least nor the most important of the criteria. 35

In examining institutional use of the traditional evaluation triad for tenure and promotion decisions—librarianship, research and publication, and service—a hierarchy emerges. Currently, librarianship and service appear to be more fully integrated into the tenure and promotion evaluation process. Librarianship, or job performance, is at the top, evaluated at almost 95% of the institutions surveyed. Service is evaluated at 87% of the institutions. Research and publication occupy a lower status, being a factor at 74% of the institutions.

Educational Requirements

An additional factor often considered is graduate degrees beyond the M.L.S. Three survey questions addressed this issue. One asked if the M.L.S. was sufficient for tenure and for promotion to assistant professor, associate professor, or full professor. Two other questions asked if a second master's or a doctorate was required for tenure or promotion. Respondents were requested to mark all options that applied.

More than half of the institutions surveyed do not require a second master’s to meet tenure and promotion criteria.

For the total population, the M.L.S. was sufficient for tenure at 144 institutions (37.7), for promotion to assistant professor at 143 (47.2%), to associate professor at 103 (34%), and to full professor at 27 (8.9%). One hundred eighty-one (59.5%) of the respondents reported that a second master’s was not required. Significantly, more than half of the institutions surveyed do not require a second
master's to meet tenure and promotion criteria, although the second master's becomes more important as a criterion at the higher academic ranks.

The question of whether a doctorate was required yielded similar results. Only 4 institutions (1.3%) reported that a doctorate was required for tenure, 3 (1%) for assistant professor, 15 (4.9%) for associate professor, and 45 (14.8%) for full professor. Again, a majority (195, or 64%) of the respondents stated that a doctorate was not required at any level. Table 6 breaks down these figures for faculty status institutions. These figures indicate a slight trend toward requiring of additional graduate degrees in the promotion process, a trend more marked for librarians with faculty status. Many respondents noted that if a particular degree was not specifically required, it was encouraged and would strengthen the faculty member's application for tenure or promotion. Additional graduate work appears to be helpful to, rather than required for, candidates' applications for tenure or promotion.

**Similarity of Criteria with Teaching Faculty**

Are criteria for library faculty the same as those for other teaching faculty? There were 246 responses to this question. Of this group, 118 (47.9%) said that criteria were the same for tenure, promotion, or both, while 128 (52.3%) indicated that they were different in some respect. The percentages were greater for institutions with faculty status. Seventy-three percent (89) of the 122 responses indicated that criteria for librarians were the same as those for teaching faculty, while only 20% (24 institutions) relayed that they were somehow different (see table 7). In contrast, 23.4% (29) of the institutions where librarians had professional status indicated that the criteria were the same, and more than two-thirds (84 responses, or 67.7%) stated that they were different.

Previous research on this subject yields widely different conclusions. On the one hand, Davidson, Thornson, and Stine surveyed libraries in the Rocky Mountain region and found identical tenure requirements in 70% of their sample. On the other hand, English's study yielded similarities in 16.9% of the ARL libraries, with further analysis indicating a mix of professional and faculty criteria. English concluded that criteria are never the same and that there are "two distinct sets of criteria: one set designed to measure performance as librarians, and the other set designed to measure performance as faculty." The reader should note that this is certainly true for all faculty in any institution of higher education and might be reworded to recognize differences among faculty members in various disciplines. It is interesting to speculate on the variations in evaluation criteria attributable to different disciplines. For example, chemistry faculty may be judged against slightly different criteria than are faculty
in English, art, or the allied health fields. A number of respondents in this study recognized these differences.

SUMMARY AND CONCLUSIONS

The present study reports the findings of a 1989 survey sent to library directors randomly selected from colleges and universities across the United States. The purpose of the study was to elicit information regarding policies and practices for tenure and promotion in the academic ranks for librarians. In summary, the results of the study confirm significant differences in institutional policies and practices for tenure and promotion between faculty status and nonfaculty status institutions. Nonfaculty status institutions responded primarily in terms of practices for promotion of librarians, although a number of respondents equated continuing appointment with tenure.

In virtually every institution evaluated on the basis of job performance. Institutions at which librarians hold faculty status, however, are more likely to review candidates on the basis of research and publication, professional or academic service, and graduate work beyond the M.L.S., in addition to job performance. Librarians at almost 85% (103) of the faculty status institutions are evaluated on research and scholarship. In contrast, only 65% (86) of the professional status institutions evaluate librarians by these criteria. Most respondents (208, almost 80%) indicated that while scholarship may be considered, it is not actually required. Service is a component at 97% (121) of the faculty status institutions, and at 78% (100) of the professional status institutions. It is interesting to note that at both types of institutions, service is more frequently a factor than research and publication. Librarians, as members of a service-oriented profession, may more readily accept service as a component in the review process.

Faculty status is associated with stricter, more clearly articulated and defined criteria for promotion and tenure. However, even with these clearer requirements, many areas are still fuzzy. Publication, for example, is encouraged rather than required and virtually any type of publication may be acceptable. Service activity is similarly vague and encompasses a variety of activities on the university, local, regional, and national levels. While there should not be a checklist of tenure or promotion criteria, guidelines should be developed. These guidelines must be accepted by the individuals responsible for decisions, by the profession, and by the institution. Librarians entering the profession or changing employment should examine institutional practices to decide whether these practices inhibit or promote their own professional development.

The data reveal some interesting findings with regard to research and publication. Several survey respondents expressed concern about publication requirements. Indeed, research and publication has been hotly debated at conferences and in the library literature. The "publish or perish" trap is often directly associated with faculty status. Data gathered in this study suggest that this concern may be somewhat exaggerated, and earlier studies indicating that librarians have trouble achieving tenure or promotion because of an overemphasis on research and publication may overstate the

### TABLE 7

<table>
<thead>
<tr>
<th></th>
<th>Total (N=246)</th>
<th>Faculty Status (N=122)</th>
<th>Prof. Status (N=124)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Same for tenure</td>
<td>4</td>
<td>1.6</td>
<td>1</td>
</tr>
<tr>
<td>Same for promotion</td>
<td>19</td>
<td>7.7</td>
<td>3</td>
</tr>
<tr>
<td>Same for both</td>
<td>95</td>
<td>38.6</td>
<td>85</td>
</tr>
<tr>
<td>Different</td>
<td>108</td>
<td>43.9</td>
<td>24</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>8.1</td>
<td>9</td>
</tr>
</tbody>
</table>

...
It is true that librarians at faculty status institutions are evaluated on research and publication, but there is nothing to indicate that there is an undue emphasis on this activity. More than two-thirds (87, or 70%) of institutions with faculty status do not require that librarians publish, and a small number of these (19, or 16%) do not review publication activity. Librarians are encouraged to publish (according to 88, or 70%, of the faculty status institutions) and it is considered in the evaluation process, but publication is only one among several factors. In addition, although publication may be associated with faculty status, many librarians who do not have faculty status are also expected to publish. A majority (86, or 65%) of the professional status institutions evaluate research and publication, although only a few (16, or 11.7%) actually require it. These data do not indicate that publication requirements represent major impediments to academic librarians seeking tenure or promotion. Furthermore, publication activity is not reserved for faculty status institutions. Publication appears to be gaining acceptance among librarians at all types of institutions, but it is not universally recognized. The concern expressed by many librarians that research and publication are over-emphasized and are attributes of faculty status is not completely supported by the current research.

Future research should move beyond the faculty/nonfaculty issue to examine other factors influencing tenure and promotion decisions. Not all faculty are the same, and their diversity may be attributed to the institutions and academic disciplines to which they belong. In an important study, Burton Clark notes that the 50 state systems of higher education and the 1,500 private institutions are not coordinated, with the result that “the evolution of the professorate’s institutional setting has an unplanned logic born of the system itself.” This “unplanned logic” is reflected in institutional policies and procedures. Data gathered in the present study can, and should, be analyzed by type of control (public versus private) and by Carnegie classification to examine differences that might be attributable to the institutional level. Evaluation criteria are different in large research universities than in small liberal arts colleges. Public and private institutions differ in their missions, which are reflected in institutional policies and practices. These differences should be as apparent in the evaluation of librarians as they are in the evaluation of other faculty.

Studies indicating that librarians have trouble achieving tenure or promotion because of an over-emphasis on research and publication may overstate the problem.

Even at a given institution, differences among faculty may be associated with their subject or discipline affiliations. For example, differences between faculty in the humanities and the sciences exist. On the one hand, a chemist at one university shares a professional identity with all chemists, whether associated with an academic institution or the industry. On the other hand, the chemist identifies with individuals in a specialty such as organic chemistry or biochemistry. Expectations and requirements in organic chemistry may be slightly different than those in biochemistry and are certainly different than those in sociology, English, or librarianship. Clark notes that “with the growth of specialization in the last century, the discipline has become everywhere an imposing, if not dominating, force in the working lives of the vast majority of academics.” Librarians function in academic, public, school, and special library settings. Each group has its own expectations of excellence and success. Academic librarians are still in the process of defining these professional expectations. How are academic librarians different from or similar to other librarians or other faculty? Criteria outlined in the ACRL Academic Status Committee’s “Model Statement of Criteria and Procedures” and “Standards for Faculty Status” provide excellent general guidelines for librarians to establish their own criteria and to adapt these criteria to their particular institutions. Academic librarians need to acknowledge that they
are different than other faculty, just as history professors are different than engineering faculty. Almost half (118, or 48%) of the respondents to the question regarding similarity of criteria for librarians and other faculty stated that criteria were the same for both groups. Respondents with faculty status were even more positive, with almost three-fourths (89, or 73%) indicating that criteria were the same. One respondent wrote that the criteria differed in "the same sense as those [policies and procedures] applicable to faculty in Arts/Sciences, Law, Engineering, etc. differ. Each academic unit has specific requirements which amplify/expand general University guidelines." In any academic institution the broad criteria are the same for all faculty members, but the application of these criteria will differ somewhat for history faculty, chemistry faculty, and library faculty. Academic librarians are challenged to acknowledge and clarify these differences.

The results of the present study indicate that there are differences in evaluation practices between faculty status and non-faculty status institutions. Recognition of differences, however, does not imply a causal relationship, and further study should be performed to examine and identify other factors influencing this process. The role, function, and responsibilities of academic librarians have changed and will continue to change. With these changes comes the challenge to librarians to define their positions in the academic community and to develop guidelines for their profession. Librarians will be evaluated, and if the criteria are not defined by librarians, they will be defined by others.

REFERENCES AND NOTES


9. The 78.8% estimate is found in John N. DePew, "The ACRL Standards for Faculty Status: Panacea or Placebo?" College & Research Libraries 44:125 (Nov. 1983); 35% in Ronald Rayman and Frank W. Goudy, "Research and Publication Requirements in University Libraries," College & Research Libraries 41:43-48 (Jan.1980); 59.2% in Joyce


25. Payne and Wagner, "Librarians, Publication, and Tenure," p.135, found the M.L.S. to be sufficient for tenure in 24 of 30 libraries, with two requiring the M.L.S. plus a second master's, two requiring the M.L.S. plus credits, and one requiring an undefined "other," and none requiring a doctorate; Smith and others, "Tenured Librarians," p.92-93, identified the largest proportion of tenured librarians in large university libraries as having a bachelor's or master's degree in library science, and one-third as having a second master's or doctorate.


28. A precedent for the faculty and professional status distinction may be found in English, "Librarian Status," p.200.


32. Rayman and Goudy, "Research and Publication Requirements," p.45.
40. Ibid, p.25.

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The Literature of Academic Libraries: An Analysis

John M. Budd

Like all literature, the literature of academic libraries exhibits certain characteristics with regard to source journals and related subjects. Citations within this literature are distributed according to format of material, age, journals and individuals cited. The present study uses the ERIC database on compact disc to investigate these characteristics. Among the findings is the realization that the citations are primarily to journals and that both authorship of articles and citations to individuals are quite dispersed. Also, while there is some evidence of interdisciplinarity, this aspect of the literature is not very well developed.

The literature related to academic libraries is diverse. It is as varied as the work of the libraries, their collections, their personnel, their technology, and the communities they service. As economic challenges, organizational complexity, and computer applications (designed to enhance access, use, and analysis) complicate the world of academic libraries, it might be expected that the literature reflects the related difficulties and opportunities. The sizable literature illustrates both interest in the subject and possible idiosyncrasies of access to it.

The present study examines that portion of the literature that can be accessed through ERIC on compact disc. ERIC is selected because it indexes many of the major library and information science journals, but also because its coverage is broader and includes such areas as higher education. Through use of ERIC, a researcher can construct a database of the literature of academic libraries and study the characteristics of the literature. Database users can identify titles of source journals, authors of articles, and related descriptors. They can also examine citation characteristics, including format and age dispersion of cited works and most frequently cited authors and titles. Such an examination can determine the scope of the literature, the elements that recur in written communication, and the individuals actively contributing to the literature.

The creation and use of such a database permit unobtrusive study of the concerns of any one area of academic librarianship as reflected in its literature. This assumes that the literature discusses or debates...
major issues, and that the questions and problems identified by those interested in the field appear in the literature.

THE STUDY

This article's investigation begins with a set of questions regarding the published literature and citations in it:

- What journals can be identified as having articles relevant to academic librarianship?
- What are the most frequently occurring subjects of articles in this segment of the field?
- What formats of materials are cited in the literature?
- What is the age dispersion of cited materials?
- What specific titles are most frequently cited in the literature of academic libraries?
- Which individuals are most frequently cited in this literature?

An examination of the literature must first establish a set of parameters defining the subject area and time frame. The use of compact disc products such as ERIC-CD, made available through Silverplatter, facilitates this task. "Academic libraries" is an operative descriptor in ERIC, employable as the central access point to answer the above questions. The relevant time frame as a search parameter was the five-year period of 1984 through 1988. Of course, materials included in ERIC are assigned descriptors by a variety of indexers, so some unevenness may be evident. ERIC also has levels of indexing, with articles assigned some major descriptors. Descriptors attached to articles indicate a connection, not necessarily strong, with regard to the content of academic librarianship. Major descriptors are intended to indicate a relatively strong connection between the descriptor used and the content of a given item.

Another parameter of this study is the limitation of output to journal articles, the most formal means of communication in most disciplines. From 1984 through 1988, 1,165 articles were assigned the descriptor "academic libraries." However, with ERIC's indexing policy, an indexed article need only make some mention of academic libraries to be assigned this descriptor. "Academic libraries" as a major descriptor was attached to 328 articles. This set of papers forms the basis of the present study.

The 328 articles can be analyzed in a number of ways, but potential idiosyncrasies of this set need to be stated. Some characteristics are alluded to above; the assignment of descriptors is at the discretion of an indexer. Recognition of the subject of academic libraries may or may not be consistent. The extent of coverage (journals indexed and the degree of coverage of each title) is also at the discretion of ERIC. Margaret F. Stieg and Joan L. Atkinson point out discrepancies in the level of coverage of specific titles among the compact disc products of ERIC, Library and Information Science Abstracts (LISA), and Library Literature. For instance, the percentage of coverage of articles in 1984 in College & Research Libraries was 74% for ERIC, 72% for LISA, and 95% for Library Literature; in the Journal of Academic Librarianship, coverage was 77% for ERIC, 92% for LISA, and 100% for Library Literature. On the other hand, the coverage of Library Quarterly was more complete for ERIC (91%) than for LISA (81%) or Library Literature (75%). Of course, coverage of specific titles over time is subject to change, as Stieg and Atkinson note. Because ERIC is a widely held and widely used tool and is multidisciplinary, it is the source for the list used here.

Analysis focuses on the characteristics outlined in the introduction and set of questions above. In part, this entails analysis of the citations included in the source papers. Sixty of the 328 articles contained no references, and 6 more were not available for analysis; therefore, citations in 262 papers are studied.

FINDINGS

The first question considered relates to those journals that have published articles relevant to academic libraries. The 328 articles are dispersed over 50 separate journals. Forty of these are library- or information science-related titles; 10 are from other disciplines—5 from higher education, 4 from computing technology,
and 1 from journalism. As might be expected, the 2 top-ranked journals are College & Research Libraries and Journal of Academic Librarianship. This fact is consistent with the findings of Mary K. Sellen in a more limited citation analysis. The most heavily represented journals are presented in Table 1.

The authors of these papers are even more widely dispersed. Three hundred different individuals are represented—282 by a single article each. Of the 18 authors responsible for multiple contributions, only 4 have written more than two articles each. Because of the somewhat less than exhaustive coverage of some journals by ERIC and the limitation to major descriptors, the researcher cannot necessarily infer that there are only 18 multiple contributors to this subfield. It is likely that some of the authors have written articles that are at least tangentially related to academic libraries and are not included in this study population.

The second basic question of this study focuses on additional subjects of articles dealing with academic libraries. The major descriptor "academic libraries" is certainly not the only one assigned to these articles. In fact, a total of 406 different descriptors is attached as index terms. While some of these other descriptors are outside of the library and information science realm (such as "developing nations," "futures of society," and "college faculty"), most are in the library mainstream. The 10 most frequently occurring descriptors reflect this trend; they are presented in Table 2.

TABLE 3
FORMATS OF MATERIALS CITED

<table>
<thead>
<tr>
<th>Format</th>
<th>No.</th>
<th>%</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journals</td>
<td>2,088</td>
<td>56.3</td>
<td>56.3</td>
</tr>
<tr>
<td>Books</td>
<td>1,064</td>
<td>28.7</td>
<td>85.0</td>
</tr>
<tr>
<td>Reports</td>
<td>179</td>
<td>4.8</td>
<td>89.8</td>
</tr>
<tr>
<td>Theses and Dissertations</td>
<td>69</td>
<td>1.9</td>
<td>91.7</td>
</tr>
<tr>
<td>Proceedings</td>
<td>59</td>
<td>1.6</td>
<td>93.3</td>
</tr>
<tr>
<td>ERIC</td>
<td>47</td>
<td>1.3</td>
<td>94.6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>202</td>
<td>5.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As stated above, 262 articles can be examined with regard to their citations. Specifically, the 262 articles include 3,708 citations, or an average of 14.2 citations per article. The third question addresses the formats of these cited items; the intent is to discover the kinds of materials that are incorporated into formal communication in the field. The journal article is the most common format of cited material, with books a distant second. Other formats, such as reports, theses, and proceedings, appear, but not in great numbers. The dispersion by type of material appears in Table 3.

TABLE 2
MOST FREQUENTLY OCCURRING DESCRIPTORS

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library services</td>
<td>52</td>
</tr>
<tr>
<td>Librarians</td>
<td>49</td>
</tr>
<tr>
<td>Library role</td>
<td>42</td>
</tr>
<tr>
<td>Library administration</td>
<td>38</td>
</tr>
<tr>
<td>Library instruction</td>
<td>37</td>
</tr>
<tr>
<td>Library collections</td>
<td>34</td>
</tr>
<tr>
<td>Public libraries</td>
<td>28</td>
</tr>
<tr>
<td>Research libraries</td>
<td>24</td>
</tr>
<tr>
<td>Reference services</td>
<td>22</td>
</tr>
<tr>
<td>Library collection development</td>
<td>20</td>
</tr>
</tbody>
</table>
These results agree with those of Sellen. She found that 56% of the references in *College & Research Libraries* and 54% of those in *Journal of Academic Librarianship* were to journals (for an overall percentage of 56%). She also reported that 39% of *College & Research Libraries* references and 36% of those in *Journal of Academic Librarianship* (38% overall) were to monographs. This percentage is higher than that for books in the present study, but the difference may be due, at least in part, to collapsing categories. For instance, Sellen may have considered proceedings or reports as monographs.

The journal article is the most common format of cited material, with books a distant second.

The dispersion by format of these citations is a bit different from that in other social science or humanities fields. For instance, in American studies, sociology, American literature, and English literature there is greater reliance on books than on periodicals. In the sciences, though, there is a much higher proportion of periodical literature among cited works. This does not imply that writings on academic libraries are more scientific than those on sociology, but it does indicate the formats likely to find their way into formal communication channels in the area under scrutiny here.

### Table 4

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>No.</th>
<th>%</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>1900</td>
<td>51.6</td>
<td>51.6</td>
</tr>
<tr>
<td>6-10</td>
<td>935</td>
<td>25.4</td>
<td>77.0</td>
</tr>
<tr>
<td>11-15</td>
<td>359</td>
<td>9.8</td>
<td>86.8</td>
</tr>
<tr>
<td>16-20</td>
<td>189</td>
<td>5.1</td>
<td>91.9</td>
</tr>
<tr>
<td>21-25</td>
<td>77</td>
<td>2.1</td>
<td>94.0</td>
</tr>
<tr>
<td>26-30</td>
<td>48</td>
<td>1.3</td>
<td>95.3</td>
</tr>
<tr>
<td>31-35</td>
<td>33</td>
<td>0.9</td>
<td>96.2</td>
</tr>
<tr>
<td>36-40</td>
<td>19</td>
<td>0.5</td>
<td>96.7</td>
</tr>
<tr>
<td>41-45</td>
<td>15</td>
<td>0.4</td>
<td>97.1</td>
</tr>
<tr>
<td>46-50</td>
<td>26</td>
<td>0.7</td>
<td>97.8</td>
</tr>
<tr>
<td>51+</td>
<td>81</td>
<td>2.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Examination of the age dispersion of these cited works, the focus of the fourth question, also helps define the kinds of materials incorporated by authors. The majority of citations are to recent materials. Seventy-seven percent (2,835) of them are to works 10 years old or less. Table 4 illustrates the dependence on recent, as opposed to older, materials.

The dependence on recent materials is slightly more pronounced within citations to journals. A total of 54.9% of the citations are to journal issues 0 to 5 years old. Thereafter, there is little diversion from the overall age dispersion. Data gathered by Sellen also demonstrate reliance on recently published materials. With regard to age dispersion, the literature on academic libraries is somewhat
similar to that on sociology (where nearly 70% of the citations are to items 10 years old or less) and to that on microbiology (where just over 82% of the citations are to items 15 years old or less). 7

Which titles are most frequently cited? Not surprisingly, College & Research Libraries and Journal of Academic Libraryship receive substantial numbers of citations. These titles rank first and third, respectively, with Library Journal ranking second. The most frequently cited journals appear in table 5.

The results of this analysis can be compared to a previous study by Robert Swisher and Peggy C. Smith. 8 They surveyed ACRL members in 1978 and derived a list of the 26 most frequently read journals. Fourteen titles are common to both lists, including 13 of the top 15 identified by Swisher and Smith.

<table>
<thead>
<tr>
<th>Name</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patricia Battin</td>
<td>19</td>
</tr>
<tr>
<td>F. W. Lancaster</td>
<td>16</td>
</tr>
<tr>
<td>William E. McGrath</td>
<td>15</td>
</tr>
<tr>
<td>Barbara B. Moran</td>
<td>14</td>
</tr>
<tr>
<td>Evan Ira Farber</td>
<td>13</td>
</tr>
<tr>
<td>Kathleen M. Heim</td>
<td>13</td>
</tr>
<tr>
<td>Maurice P. Marchant</td>
<td>13</td>
</tr>
<tr>
<td>Charles R. McClure</td>
<td>13</td>
</tr>
<tr>
<td>Herbert S. White</td>
<td>13</td>
</tr>
<tr>
<td>Maurice B. Line</td>
<td>12</td>
</tr>
<tr>
<td>Anita R. Schiller</td>
<td>12</td>
</tr>
<tr>
<td>Richard DeGennaro</td>
<td>11</td>
</tr>
<tr>
<td>Peter Hernon</td>
<td>10</td>
</tr>
<tr>
<td>Edward G. Holley</td>
<td>10</td>
</tr>
<tr>
<td>Ching-Chih Cheng</td>
<td>9</td>
</tr>
<tr>
<td>Elizabeth Frick</td>
<td>9</td>
</tr>
<tr>
<td>Allen Kent</td>
<td>9</td>
</tr>
<tr>
<td>Anne K. Beaubien</td>
<td>8</td>
</tr>
<tr>
<td>Richard M. Dougherty</td>
<td>8</td>
</tr>
<tr>
<td>Mary Jo Lynch</td>
<td>8</td>
</tr>
<tr>
<td>John Naisbitt</td>
<td>8</td>
</tr>
<tr>
<td>John N. Olsgaard</td>
<td>8</td>
</tr>
</tbody>
</table>

The list in table 5 exhibits a preference on the part of authors for citations to journals in library and information science. Only two titles, American Archivist and Chronicle of Higher Education, can be considered outside the field, but their subjects are related to librarianship, especially academic librarianship. While the most frequently cited titles tend to be within the field, some journals in other disciplines receive citations. In fact, of the 401 different journals cited, 220 (54%) lie outside of library and information science. The most frequently represented subjects are general education, management, social science research, and higher education. Although a number of titles are cited, these nonlibrary journals account for only 22% (471) of the total number of citations to journals. The degree of interdisciplinarity in the literature of academic libraries can be interpreted as broad, but not necessarily deep.

One other area for analysis is that of most frequently cited authors. Because the most frequently cited journals are primarily in the field of library and information science, it might be expected that the most frequently cited individuals work in this field as well. The list of such individuals in table 6 reveals that only trend analyst John Naisbitt works outside the field.

The data set is too narrowly focused and the coverage of journals on the part of ERIC not extensive enough to allow exhaustive analysis, such as adherence to Lotka’s law.

**SUMMARY**

The analysis presented here illustrates certain characteristics of the literature pertaining to academic libraries and of the materials incorporated into the literature by the author. For instance, the dispersion of authorship of articles on the subject is very broad, with few individuals making multiple contributions. The related descriptors point out that subjects of the published works are solidly in the field of library and information science. Citation analysis reveals the
the heaviest use of the periodical literature for documentary support and a reliance on the internal literature of the field. Authors draw predominantly from recently published materials, with 77% of cited works being 10 years old or less. This brings up two questions for further investigation: Is the literature of this field cumulative? Is the bulk of the body of knowledge in the discipline incorporated into the current literature? The most frequently cited journal titles also show a dependency on the literature of librarianship.

While the interests of academic librarians may, perforce, be broad, analysis of the literature exhibits a vision that is less interdisciplinary than might be expected. This is not to imply that the literature is failing the profession, but discussions of inter- or multidisciplinarity are not reflected to any great extent in the cited works in the literature of academic libraries. Such areas as systems and computer science, organization theory, sociology, and even information science are not heavily represented. The question remains: Should they be? A more pertinent question may be: To what extent should they be represented? Seeking an answer to that question could be fertile ground for future research.

REFERENCES AND NOTES

3. Ibid., p. 129.
Letters

To the Editor:

Cliff Glaviano and R. Errol Lam ("Academic Libraries and Affirmative Action" [C&RL, Nov. 1990]) have developed a compelling presentation of current failures to develop a broad pool of culturally diverse academic librarians. However, their assertion that the literature has been barren ignores two important recent contributions: Ann Knight Randall, "Minority Recruitment in Librarianship," in Librarians for the New Millennium, p. 11-25 (edited by William E. Moen and Kathleen M. Heim, Chicago: ALA, 1988) and the chapter, "Ethnicity" in Occupational Entry, by Kathleen M. Heim and William E. Moen, p. 115-139 (Chicago, ALA, 1989). These two contributions, supported by an ALA Goal Award, were intended to address personnel shortages—shortages of minority personnel.

The Millennium volume also delineates the substance of hearings and forums sponsored by the ALA Office for Library Personnel Resources from 1987-1989 to address issues relating to the need for diversity in the library workforce. While the profession has experienced dismal success in changing the overall ethnic composition of library staff, the ALA OLPR initiatives under the direction of Margaret Myers devoted much time and commitment to addressing issues and presenting data and strategies. Those who require data and analysis are directed to the OLPR publications mentioned above, which are available from the OLPR office.

KATHLEEN M. HEIM
Professor, School of Library and Information Science
Dean, Graduate School, Louisiana State University

To the Editor:

Randall R. Butler's pH investigation of acquisitions at Brigham Young University (C&RL, Nov. 1990) is a model of clarity that merits replication. His inclusion, however, omits one essential source of oversight and control, namely the media that report and review new titles. Many of these, working from proofs or perhaps beholding to publishers, fail to inform their audience of the acidity issue, much less test and report pH.


Sure some publishers don't like it (to the point of refusing us review copies on those grounds!), but what's right is right. Now if Choice and others serving a library audience would just take note.

ROBERT COHEN
Associate Editor
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This award is given for a library's total annual coordinated public relations program, including publicity, programs, advertising, publications, exhibits, special events, promotions, and audio-visual presentations.

The Special Award
The Special Award is given in recognition of a part of your public relations program—a fund-raising campaign, a series of adult or children's programs, or any other special project.

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Entries for the 1992 John Cotton Dana Library Public Relations Awards Contest can reflect any one of the following time frames:
- Calendar year 1991 (January-December)
- School Year 1990/91 (Fall-Spring)
- Special Project which ends in 1991.

The Deadline for entries is February 3, 1992.

Awards Ceremony
Official award citations will be presented to contest winners at the 1992 annual conference of the American Library Association, at a reception hosted by The H.W. Wilson Company.

Sponsorship
The John Cotton Dana Library Public Relations Awards Contest is sponsored jointly by The H.W. Wilson Company and the Public Relations Section of the Library Administration and Management Association, a division of the American Library Association.

To Enter
To request an Information Packet containing contest entry forms, rules and regulations, questions and answers about the awards, a sample of the judges' evaluation form, names of the contest judges, and a list of previous winners, please write to: John Cotton Dana PR Awards Contest, The H.W. Wilson Company, 950 University Avenue, Bronx, New York 10452.
Book Reviews


The American community college is one of the success stories of modern higher education. From their start in the early twentieth century, community colleges now number more than 900 and enroll more than 50 percent of all first-time entering freshmen—more than four million students per year. Most of the literature on the history of the movement has been from those sympathetic to the colleges, highlighting their virtues and glossing over their faults. The authors of this volume are self-acknowledged critics of the community college and swing the pendulum in the opposite direction. Although their bias is evident throughout the text, particularly concerning the vocational-technical mission of community colleges, their work is well researched and important. Calling into question more than just the present institutional mission of the community college, they portray the American educational system itself as designed to limit opportunities for much of the population. The egalitarian system of higher education in the United States is presented as a sham; in fact, say the authors, it perpetuates the "transmission of inequality from generation to generation."

The book is based on the premise that higher education has been, for millions of Americans without social standing or wealth, the gateway to the American dream. Because the best jobs are increasingly available only to those with higher education, access to college education has become an essential key to upward mobility. When community colleges began, their primary purpose was to prepare their students for transfer to a four-year college. The authors argue that community-college leaders began a "vocationalization project" to establish a distinctive market niche in higher education, a field dominated by colleges and universities. The success of that strategy since the late 1960s, the authors claim, has produced students who are motivated to seek only the mid-level career path of vocational-technical jobs and are not given the encouragement or the opportunity to matriculate for a bachelor's degree, the "most visible mark of a college education." The impact of this outcome is not only effectively to deny students upward mobility, but to deprive the nation of "an active and informed citizenry that is the sine qua non of a truly democratic society."

According to the authors, the American educational system ostensibly offers unlimited opportunity for individual self-improvement, but builds in class socialization through "management of ambition" and "cooling-out periods." Community colleges are viewed as important in enforcing these control factors on populations that otherwise would be clamoring for entrance to four-year institutions of higher education and for the limited number of "professional and managerial occupations to which these institutions have historically provided access."

The authors admit that success in the educational system is partly due to personal qualities; furthermore, community colleges have played a critical role in granting "workers, immigrants, minorities, and women" access to education. Yet, as the authors look through their "prism" of vocationalization, they succumb to a logical fallacy in generalizing from the specific (vocational-technical program success) to the universe of an American educational
system that systematically and intentionally denies equality of access to the American dream. To suspect that a grand conspiracy is denying millions of Americans the opportunity for a baccalaureate degree is far-fetched. In fact, vocational-technical programs, while far from perfect, are often overenrolled and in great demand by students. True, some colleges do not include enough "democratic citizenry" courses in their curricula, but this is a recognized problem and is being addressed.

Unfortunately, students often drop out of the degree program after learning a skill and becoming employed. The fact that this happens is more a societal problem, rooted in the profit motives of American culture, than a problem of higher education. Furthermore, the claim that transfer programs have suffered is true of only some institutions. Evidence shows that students who attend the first two years at a community college make higher grades and have a higher completion rate in baccalaureate programs than students who begin their college career at a four-year school.

The value of the work is in its unique viewpoint on the development of the community college movement and its analysis of how that development brings to light weaknesses in the higher educational system in general. The text demands the reader's attention for its consideration of the larger issues of class, society, and equality in American culture. However, the book ends its analysis with 1985, and many of its sources are at least ten years old. No reader should use this volume to determine the current state of community colleges.


The "mode of information" is the phrase Mark Poster has coined to designate the massive cultural changes that he sees occurring in postindustrial societies under the impact of electronically mediated communications. Technologies like digital recording, television, databases, and computer writing do more, he argues, than merely facilitate our ability to produce, store, manipulate, and transmit data. These tools also drastically alter our relation to language and thereby transform the ways in which we constitute ourselves and connect with others. This vision of the human universe revolutionized by electronic media recalls Marshall McLuhan's 1960's prophecy of a postprint "global village," but Poster's "mode of information" is different—distinguished both by its focus on language as the crucial site of change and by his emphatic politicization of the process.

Four basic premises organize Poster's book. First, electronic communications radically destabilize the traditional bond between linguistic signs and their referents. Second, this disruption of language's representational logic subverts the self as a rational, autonomous subject capable of knowing and controlling the objective world. Third, this rational self, regarded historically, was the dominant form of consciousness during the West's capitalist, imperialist past and can unambiguously be equated with "the adult, white, male subject" and its "associated forms of patriarchy and ethnocentrism." And finally, poststructuralist theory, specifically the thought of its leading French exponents, offers a uniquely appropriate vocabulary for describing both the linguistic changes caused by electronic communications and their political impact on the ties "between the state and the individual, between the individual and the community, between authority and law, between family members, between consumer and retailer."

Poster's opening chapters promote his poststructuralist methodology by attacking the failure of modern political theory—both liberal and Marxist—to recognize "the qualitative transformation of social relations" that stems from the electronic media's assault on linguistic representation. Poster ascribes this failure to the inability of social scientists to free themselves from the totalizing logic of ref-
ential language—an inability that leaves them blind to the role language itself plays in the organization of reality. In contrast, poststructuralists presuppose the primacy of language in the formation of consciousness, and it is their concepts that Poster subsequently employs to analyze the cultural significance of different types of electronic communications.

These later chapters concentrate, in fact, on rather routine elements of postindustrial life and are the book's most engaging. Particularly provocative is Poster's treatment of TV ads, which uses Jean Baudrillard's political economy of the sign to argue that television commercials establish "a new linguistic and communications reality." Emphasizing their imaginative splicing of different semantic and visual codes, Poster shows how ads sever words from conventional associations to create a hyperreality of free-floating signifiers that "promises a new level of self-constitution, one beyond the rigidities and restraints of fixed identity." But while boldly proclaiming the liberational dimension of TV ads, Poster also acknowledges their enhanced power of social control, which "makes possible the subordination of the individual to manipulative communications practices."

A similar ambivalence governs Poster's discussion of databases, which proceeds under the rubric of Michel Foucault's twin concepts of surveillance and discipline. On the one hand, because databases are free from the spatio-temporal coordinates of speech and writing, they constitute a new language formation that undermines traditional modes of cultural discipline. On the other hand, the "structure or grammar" of digital computers is so rigidly nonambiguous that it produces "an impoverished, limited language that uses the norm to constitute individuals and define deviants." From this latter perspective, databases appear not as the avant-garde of a utopian democracy of free and abundant information, but as a sinister tool of reactionary surveillance. This dual perspective is also present in the two concluding chapters, which invoke Jacques Derrida on computer writing (including both word processing and electronic mail) and Jean Lyotard on computer science.

For librarians, Poster's book is especially valuable for the reflection it encourages about the electronic instruments so important to our professional lives. Most often, we regard computers as passive tools of our ambitions to serve patrons more efficiently and effectively. Poster enables us to understand that these machines are also active forces in our cultural environment, which are subtly but profoundly reshaping us in their own image. Sensitivity to this fundamental fact of cybernetic reality is, perhaps, no less urgent than mastering a new set of commands for the latest database.—William McPherson, Stanford University, Stanford, California.


Like so many facets of black history, black bibliography and book collecting have been neglected areas in American intellectual history. Black Bibliophiles and Collectors: Preservers of Black History is one of the recently published books that attempts to remedy this deficiency.

This collection of essays and commentaries was originally presented at Black Bibliophiles and Collectors: A National Symposium, a 1983 conference held at Howard University. Grouped under nine topics treating various aspects of collecting and organizing black materials, the fifteen essays and commentaries by established black scholars, bibliophiles, and librarians are uneven in quality. Many present little new information to anyone familiar with black collections and black scholarship. Some essays, however, will reward even the seasoned practitioner. Together, they provide a useful introduction for the novice to the subject, making the book an essential purchase for library school libraries.

The venerable Dorothy Porter Wesley's encyclopedic contribution "Black Antiquarians and Bibliophiles Revisited, with a Glance at Today's Lovers of Books," is a fascinating and informative discussion of black collectors from the early nineteenth century to the present. In this peripatetic
excursion into the history of collecting black materials, Porter unearths the collecting activities of such unlikely individuals as antebellum black Philadelphia janitor Joseph Cathcart and Assistant Librarian of Congress Daniel Alexander Murray, as well as today's younger black collectors.

Collector and curator Charles L. Blockson's "Black Giants in Bindings" is an intriguing autobiographical commentary on his quest as a collector. Likewise, fellow book collector Clarence Holte recounts his experiences in "Incidental Adventures in Collecting Books." The book's contributors should be urged to expand their essays into full-length books.

"The Robeson Collections: Windows on Black History," by Paul Robeson, Jr., is one of the most significant essays in the collection. The richness and breadth of this important archive are critically assessed in Robeson's astute description of its varied contents. Housed in Howard University's Moorland-Spingarn Research Center, this collection "marks one of the most significant milestones in the historical documentation of black Americans."

Black Bibliophiles and Collectors is an important addition to Afro-American bibliography and history and American intellectual history. It is unfortunate, however, that this work focuses primarily on collectors and collections in the eastern section of the United States. Among the important black collections hardly mentioned are Tuskegee University's Historical Collection, Chicago Public Library's Vivian G. Harsh Collection of Afro-American History and Literature, and Detroit Public Library's Azalia Hackley Collection. Also regrettable is the omission of such collectors as Monroe Work, Vivian G. Harsh, Era Bell Thompson, and Claude Barnett.

Donald Franklin Joyce, Austin Peay State University, Clarksville, Tennessee.


These nine essays—first published in Paris in 1987 as Les Usages de l'imprimé, in the series Nouvelles études historiques—originated in seminars at the École des Hautes Études en Sciences Sociales. Chief responsibility for the collective work lies with Roger Chartier, director of studies at the EHESS, who contributed two of the essays in addition to serving as editor and providing a general introduction to "print culture."

Traditionally, print culture—beginning with Gutenberg's invention of printing from movable type—has been characterized by the mass production of single texts, often to be read in private by literate individuals. Here, the six essayists expand this culture's boundaries to include printed objects that had public uses in early modern Europe and, through combination with visual images, brought print culture even to those who could not read. As Chartier explains in his introduction, their method is to favor items that are not books or tracts, to stress "particularity over preconceived generalization" by intensive study of single items or well-defined small groups of items, and to investigate thoroughly "the precise, local, specific context that alone gave them meaning."

Nine case studies cover text-plus-image in such disparate subjects as Perrault fairy tales, Books of Hours in the later Middle Ages, heretical writings in eighteenth-century Bohemia, and various genres from sixteenth- and seventeenth-century France (including political handbills, religious pamphlets, contemporary events, marriage charters, and emblem books). These studies achieve unity through their analytical method: the provision of a wealth of evidence as to how texts were tailored for particular publics, how texts were read or otherwise received, and how they relate to the oral traditions out of which many grew. Emphasizing the graphic image as a way into the text, each essay explores the popularization of printed materials and argues that print culture in the fifteenth to early nineteenth centuries was more complex and pervasive—with multiple audiences and multiple uses—than had previously been supposed.
The Culture of Print may most readily appeal to literary and cultural historians, philosophers, and sociologists—those conversant with the revolution in thinking about the transmission of texts that began in 1958 with the publication of Febvre and Martin's L'Apparition du livre. Those less familiar with the topic might wish first to seek out editor Chartier's synthesis and explication of its evolution in his "Frenchness in the History of the Book: From the History of Publishing to the History of Reading," delivered as the 1987 Wiggins lecture at the American Antiquarian Society and published in the Society's Proceedings 97: 299-329 (1987).

Chartier's prolific and provocative scholarship will soon be encountered even more often in the citation indexes—thanks to its being made accessible in English by translator Lydia G. Cochrane and by Princeton University Press in this and in Charter's 1987 collection, The Cultural Uses of Print in Early Modern France. A well-designed volume, The Culture of Print includes the twenty-four plates from the French original, although much reduced in size. The subtle arguments and linguistic nuances typical of contemporary French scholarship suggest that careful scholars may wish to consult the original text.—Elizabeth Swaim, Wesleyan University, Middletown, Connecticut.


There have been a number of recent changes in the focus of studies on the impact of science on society. The field has moved away from an emphasis on internal aspects of science, in which studies have dealt with the processes of research and the relationships among scientists. There is also a lessening of interest in specialized studies of small scientific groups and individual disciplines. Currently, the field is taking a social constructivist turn and looks at the methods by which knowledge is being produced, leading to an analysis of the social nature of scientific knowledge.

This collection of essays by a group of established scholars in the sociology of science deals with a number of theoretical questions about the role of science in society. It is aimed at specialists in the sociology of science; at sociologists with interests other than science and technology; and at readers concerned about the interrelationships among science, technology, society, and government.

Cozzens, on the faculty at Rensselaer Polytechnic Institute, and Gieryn, who teaches at Indiana University, had originally intended that there would be a discussion of the papers and the development of a set of common issues and differences in the various theoretical agendas of the participants. While this never materialized, a set of common issues emerges, although there are clearly many disagreements in approach and in the use of core concepts.

In their introduction, the editors identify and comment on several sets of convergences and divergences in the papers. Although no one has attempted to define where science ends and society begins, most of the papers reveal a concern with the boundaries of science. There are questions of borders between science and politics, between pure science and applied science, between social science and natural science, between good and bad science, and between science and its popularization. Another common theme is the relationship among power, patronage, and autonomy. Several authors discuss the "uncheckability" of scientific performance, which means that patronage relationships are sustained by presumptions of trust between sponsor and scientist. Among the divergent aspects of the several papers are questions about the appropriate level of abstraction for theories in the sociology of science; the place of the investigating subject—the author—in inquiry into science and technology (invisible and detached or vocal and involved?); the problem of whether to view science as structure or action; and, finally, the relationship between the technical content of science and social structure and behavior patterns.
All of the papers are provocative and complex. They all require careful reading and presuppose some background in sociology and science. Academic and research librarians may be particularly interested in "Ingredients for a Theory of Science in Society: O-rings, Ice Water, C-Clamp, Richard Feynman and the Press," a paper by Gieryn and Anne E. Figert (Indiana University). This paper uses the 1986 Challenger disaster as its context. "Scientific Malpractice and the Contemporary Politics of Knowledge," by Daryl E. Chubin (Office of Technology Assessment, United States Congress), covers not only scientific fraud, but also "pork barreling" as a means of funding scientific research and capital construction.

The essays are well written, and an excellent introduction ties them together. The references that accompany each paper together serve as a thorough bibliography of current research in the sociology of science.—Jay K. Lucker, Massachusetts Institute of Technology, Cambridge, Massachusetts.


This essay addresses a wide range of concerns of academic research librarians in its argument for "a complete, unified electronic record of scholarship." Smith contends that maintenance of such a record and its means of access, which he calls bibliographic apparatus, will respond both to the scholar's requirements of convenience and reliability and to the librarian's need to preserve and control. He doubts the success of attempts to promote self-sufficiency on the part of the scholar, essentially because those skills are not the natural province of scholars; he doubts the success of microform as a vehicle for preservation, essentially because it constitutes a regression to a format that is less controllable than the electronic format; and he doubts the success of library cooperation, understood in its traditional sense, essentially because it is almost antithetical to some of the librarian's driving principles. The author devotes several pages of this brief book to an interesting analysis of the debate about the once-proposed National Periodicals Center.

Smith envisions the successful research library service of the future as functioning with a central, complete, electronic scholarly record as its nucleus. Its major activities will be "gathering, organizing, and maintaining the record as well as the bibliographic apparatus." The clientele of this center will be research librarians from other institutions, thereby ensuring a high quality of communication pertinent to maintenance of and access to the record and its bibliographic apparatus, while the role of these research librarians at local sites will be to mediate between local scholars and the information structure of the scholarly record.

Smith's book presents a stimulating vision of how things should and could be at some unspecified time in the future. He advances his argument with a rigid logic that is bolstered, however, by bold statements that are as debatable and unsupported as they are quotable. In discussing traditional media of scholarly communication (books and journals), he claims that "electronic copy is now produced for all of this material, as part of the printing process." Surely, this is not true of Third World publication or even of some pockets of technologically more advanced nations. The book does not incorporate documentary notes, but includes, instead, a concluding "Bibliographic Essay." This unconventional practice has the advantage of allowing the author to intermingle impression and fact without notes that might distract from the tight logic of his argument. This practice also has the disadvantage of leaving the reader a little insecure, a condition that is aggravated by the fact that the "Bibliographic Essay" is not a review of the literature on the book's topics in general, but, instead, an essay describing only sources that support aspects of the preceding arguments. These are not minor quibbles, for this unconventional style may mean that the fruits of Smith's excel-
lent thinking are safely consumable by only more seasoned research librarians.

Smith's thoughtful observations and analyses of academic research librarianship in a changing context are drawn from experience, knowledge, and reason in an effort to illuminate a successful likely future for research librarianship. Naive and overly optimistic in some instances, realistic and highly rational in most others, Smith's book offers critical insights into the current status of research librarianship and a carefully designed matrix through which to contemplate the future.—Charles B. Osburn, University of Alabama, Tuscaloosa, Alabama.


Karen Schmidt's compilation of eighteen essays on the business aspects of acquisitions seems ideally suited for academic librarians with acquisitions responsibilities for North American and Western European imprints in a large research collection. For one thing, all or all but one of the fourteen contributors who are librarians are in academic or research libraries, and the publishers and vendors who are represented supply that market.

There is consequently more here on different kinds of materials than on different kinds of libraries: the focus is on materials and First-World sources for academic libraries. One does not find a discussion of lease/purchase as a means of acquiring bestsellers or an analysis of the cost effectiveness of library bindings for children's literature. The only treatment government publications receive is devoted to Western European documents.

Acquisitions, as treated in this anthology, is narrowly conceived. The editor's introduction seems to exclude such allegedly peripheral aspects as relations with collection development in budget formation. Nor is there extended discussion of relevant aspects of automated acquisitions systems (though there is more than the index would indicate).

Such a discussion would perhaps require so much detail as to exceed the bounds of this or any monograph.

What we do have is a division of the field into five parts: "The Publishing Industry, Domestic and Foreign" ("foreign" here meaning Western Europe), "Vendors," "Out-of-Print and Second-hand Markets, Domestic and Foreign" (not only are exchanges sandwiched in here, but also current imprints from Australia, New Zealand and Oceania, perhaps because they stay in print so briefly), "Nonprint Publications," and finally "Methods of Accounting and Business Practices." "Business," here, means first—and last—money. The initial contributions from publishers' and vendors' representatives start out defensively on the question of ever-rising costs, while the final part ends with a discussion of "Payment Ethics."

The contributions are of several different types. The for-profit world of publishers and vendors contributes articles that are fairly free of any reference to the literature. Some, such as "The Business of Publishing," by Kathy Flanagan (director of marketing and sales for what is now known as a publishing group), read like good textbooks. The article is complete with tables and charts (some unnecessary), which, as she herself indicates, raise printing costs. A scientific publisher's library sales manager supplies a general essay with the usual hopeful conclusion about "fostering better understanding" among the "triangle" of publishers, vendors, and libraries. But one feels one's teeth grind on reading her cheery affirmation that "when a direct mail piece or telephone sales call comes just at the right moment, that is, when the product offered and the price quoted are agreeable to the librarian, a sale can be made ...."

Many of the pieces from librarians serve more as practical handbooks, usually with lists of basic references and sources at the end. Such are Joan Grant's contribution on approval plans; Joan Mancell Hayes' quick guide to acquiring special formats (though not CD-ROMs); the essay by William Schenck on accounting and auditing; Corrie Marsh's treatment of payment ethics; and...
the worthwhile contributions to Part Three on out-of-print material, gifts and exchange, and the Australian-New Zealand book trade, by Margaret Landesman, Mae Clark, and Juliet Flesch, respectively.

Marion Reid offers a survey of the literature on vendor evaluation, and Jana Stevens performs a similar literature survey on the pricing systems prevalent in Europe. The chapter by James Campbell on the Western European book trade is a useful, informative hybrid of literature survey and handbook. At the core of Gay Dannelly's rambling essay on vendor selection is a series of hard-nosed questions that should be posed and, if possible, answered in choosing a vendor. But before getting to this useful guidance, one has to wade through misplaced library humor and such high school debating techniques as a dictionary definition of selling and the use of quotations to bolster the authority of common sense observations. In the only piece of original research in the volume, Donna Goehner reports the results of a survey on vendor relations.

Some of the essays go into detail that is not strictly necessary for acquisitions purposes. Such is the case with the interesting pieces by Campbell and Charles Forrest; the latter mentions libraries only in passing and acts primarily as background for the contribution by Hayes.

Conversely, there are intrachapter repetitions and some overlap between pairs of contributions on certain topics. Presumably, library acquisitions is not a subject like Renaissance art, where diverging paradigms need to be taken into account; and much of the repetition here is of the non-dialectical sort. Thus, some of the detail, particularly the helpful summary table in Stevens' chapter on European book pricing, could have been folded into Campbell's discussion of the same subject. Betsy Kruger's clear presentation of accounting methods and the following contribution by Schenck cover much the same material, with a slight difference in emphasis; they could well have been merged and abridged. In short, greater editorial economy could have been exercised in putting the book together.

I have recommended this book to European vendors, not so much for what it might tell them about their own trade, but for what they can learn from it about North American librarians' expectations. Many of the chapters have excellent references and can serve as introductions or refreshers to beleaguered part- and full-time acquisitions librarians, whether so titled or not.—Jeffry Larson, Yale University Library, New Haven, Connecticut.


The concept of burnout was born in the early 1970s, its heritage embedded in the ideas and efforts of Herbert Freudenberger in New York and Christina Maslach and Ayala Pines in California. Today, while there is some doubt regarding the true extent of the burnout syndrome, there can be no doubt regarding the ubiquity of the word itself. The term is both widely used and used in an extraordinarily wide variety of contexts.

Over the years, burnout has often been discussed and written about in relation to librarianship and librarians. Indeed, librarian burnout has been the focus of numerous journal articles as well as conference programs. Nauratil's book continues to advance the proposition that librarian burnout can be seen from a variety of perspectives because the problem is experienced and interpreted in many ways. Nauratil joins others who have posed questions about the nature of and relationship between job satisfaction and burnout, both in terms of their causal and consequential elements, and librarianship. The book offers a comprehensive perspective on the phenomena of burnout, work, and alienation, as well as a critical perspective on these phenomena as they pertain to librarianship.

Nauratil provides an overview of burnout theory and symptomatology. She explores the meaning of work in Western society and traces the history of burnout among blue- and white-collar workers. The emergence of burnout
among semiprofessionals is also traced. Nauratil makes a case for conceptualizing burnout as a manifestation of work alienation rather than as a problem of individuals and particular work settings. Within this context she examines the prevalence of librarian burnout and its consequences for individual librarians, for the library, and for users.

Nauratil's conceptualization of burnout as a manifestation of work alienation broadens our understanding of the phenomenon in general and its application to libraries. Nauratil explores a number of factors specific to the development of the library profession (especially to public librarianship). These factors have increased librarians' susceptibility to professional alienation and burnout. They include the bureaucratic organization of libraries, the feminization of the profession, elitism, technical orientation, and role ambiguity (our failure to establish an autonomous professional purpose). Nauratil traces some major trends in librarianship and their consequences for public librarians, including fiscal crises and austerity management, automation, nonlibrarian managers, and marketing orientation.

Nauratil's conceptualization of burnout as a manifestation of work alienation also provides a sound theoretical basis for assessing potential solutions. She evaluates various strategies for coping and offers solutions consistent with the paradigm of burnout as alienation. These include individual and collegial coping, organizational change, and profession-level efforts.

This book will be a valuable resource for professionals and preprofessionals who wish to gain an understanding of the multitude of issues involved in the burnout phenomenon, who wish to compare the views of many of the major contributors to the field, and who wish to learn what they can do to increase fulfillment in their work. This book will also be useful to library educators and for its specific contexts, to students and researchers in other fields.

Unfortunately, the book does not suggest the diversity and robustness of current thinking in the field, nor does it offer new slants on theory and symptomatology nor new insights or perspectives on treatment. The bibliography only minimally represents the articles and studies that have contributed specifically to our understanding of burnout and librarianship over the last two decades.

The strength of Nauratil's book lies in her examination of the determinants and manifestations of burnout, stress, and alienation in librarianship. The book reminds us that burnout is a serious issue that affects the welfare not only of librarians, but also of their clients—library patrons. Her insights into the phenomenon warrant attention.—Sarah Watstein, Hunter College, New York, N.Y.
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