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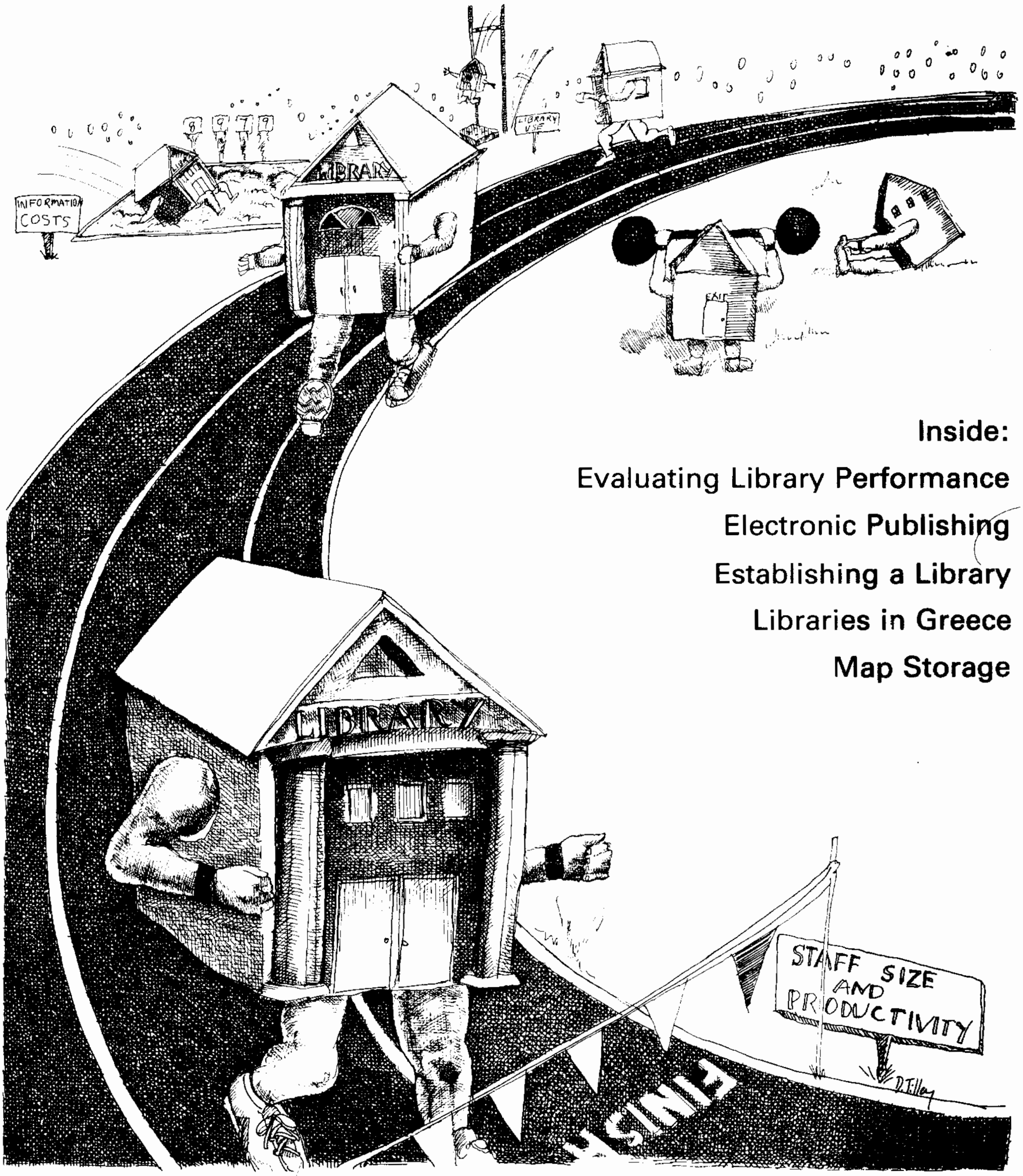
Special Libraries, July 1982

Special Libraries Association

special libraries

July 1982, vol. 73, no. 3



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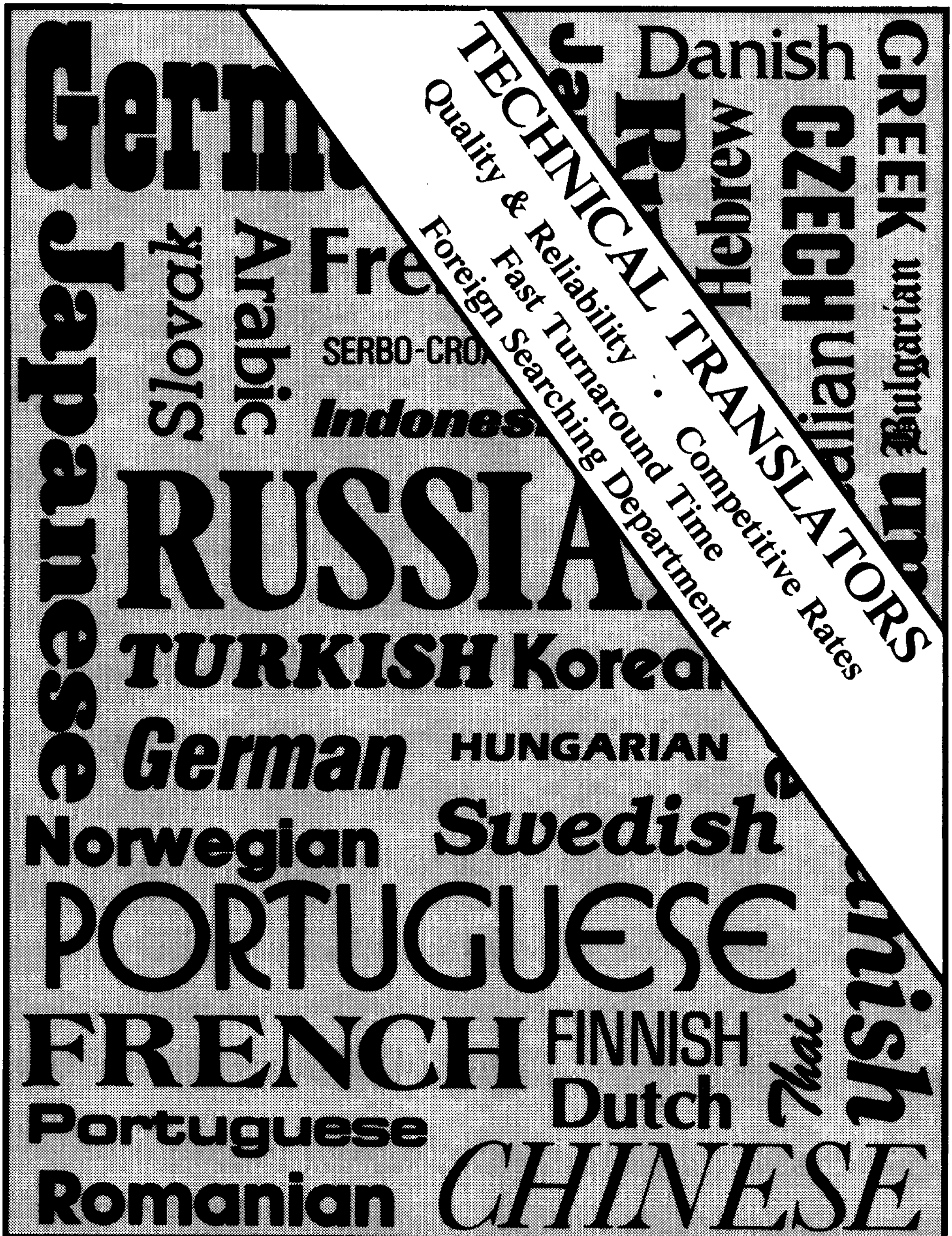
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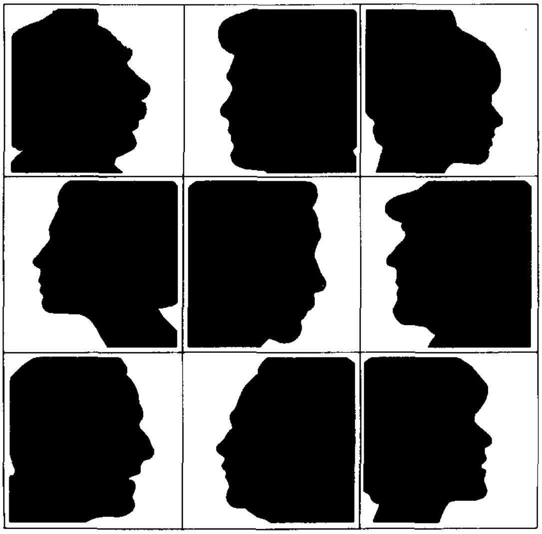

special libraries®

JULY 1982 VOLUME 73, NUMBER 3 ISSN 0038-6723 SPLBAN

Publisher: DAVID R. BENDER
Editor: NANCY M. VIGGIANO
Assistant Editor: DORIS YOUDELMAN
Circulation: FREDERICK BAUM

Special Libraries is published by Special Libraries Association, 235 Park Avenue South, New York, N.Y. 10003 (212/477-9250). Quarterly: January, April, July, October. Annual index in October issue.

Second class postage paid at New York, N.Y., and at additional offices. POSTMASTER: Send address changes to Special Libraries Association, 235 Park Avenue South, New York, New York 10003.

Subscription Rates: Nonmembers, USA $36.00 per calendar year includes the quarterly journal, *Special Libraries*, and the monthly newsletter, the *SpeciaList*; add $5.00 postage for other countries including Canada. *Special Libraries* is $12.00 to members, the *SpeciaList* is $3.00 to members, included in member dues. Single copies of *Special Libraries* (1981-) $9.00; single copies of *SpeciaList* $1.00. Membership Directory (not a part of a subscription) is $20.00.

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Indexed in: *Book Review Index, Business Periodicals Index, Historical Abstracts, Hospital Literature Index, International Bibliography of Book Reviews, International Bibliography of Periodical Literature, Library Literature, Management Index,* and *Science Citation Index.*

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LETTERS

What's My Line?

If the name of Special Libraries Association is changed to a name containing the word information, such as Information Management Society, membership could easily expand to include people with varied occupations. Just think of the people who use, process, and communicate information daily. A list of such people from A to Z could include: accountants, biologists, chemists, database administrators, geologists, hospital administrators, librarians, marketing researchers, purchasing agents, statisticians, toxicologists, zoologists, etc.

When meeting someone who belongs to Special Libraries Association, you can usually assume that the person currently or previously worked for a library with resources covering a special subject or group of subjects. In contrast, when meeting or hearing about someone who is a member of an Information Management Society (IMS), you can't assume very much about that person. He or she could be an accountant concerned about databases for storing information on revenues and expenses of various profit centers; a chemist who prepares household products and correlates chemical structures with physical properties; or a marketing manager interested in information on sales in department stores at certain shopping centers.

A member of Special Libraries Association may get the impression that the organization is not very homogenous, especially after attending a national meeting. However, by changing the focus from libraries to information, the Association will become more, not less, diverse and splintered.

If the name of the Association is changed and becomes IMS, then a group concerned with accounting information could call its division AIMS. People interested in electronics information could call their division ELIMS. Those concerned with speech and linguistics could name their division SLIMS. Finally, scientists doing toxicological research could have a division called TRIMS. Don't worry about this. ELIMS spelled backwards is SMILE.

James H. Schwartz
Bank of America Library
San Francisco, Calif.

Double Trouble

Why is it impossible to stop publishers from sending duplicates, triplicates or more of their catalogs, brochures, advertisements, etc? In the past, I have sent duplicate address labels to Pergamon Press, Academic Press, and others in order to bring the duplication to their attention. Usually this has no effect, or else I receive a third collection of their material. Most recently I requested that Plenum Publishing Corporation stop sending me two of everything, especially as this is a small library. The result—I am now getting three of their bulletins!

Is there any hope for us poor librarians who are being deluged with unwanted material?

Doris A. Standing
Ontario Ministry of Health
Laboratory Services Branch
Toronto, Ont.

Pergamon Press Replies

Miss Standing's plea concerns a constant irritant not only to "us poor librarians" but even more so to "us poor publishers"! *Our* interest in eliminating wasteful duplication should be self-evident: it has a direct adverse effect on our bottom line while managing to antagonize our customers.

Yet, aside from the obvious need to ensure that requests to stop duplicates are not misread by our staff as new requests, there is no ideal solution to the problem. To the extent any publisher uses its in-house mailing lists, proper merge/purge procedures *should* eliminate duplications. For example, we frequently mail new publication announcements to all subscribers to all our journals in any particular field but only after elimination of duplications with a computerized merge/purge routine. I regretfully must use the word "should" for if the name and address lines are substantially dissimilar, the merge/purge often does not work. When we use purchased mailing lists, often from several sources for the same mailing, the chances of duplication increase significantly—and if we use our own list and augment it with purchased lists, we redouble the chances of duplications! The use of purchased lists, by the way, explains the apparent disregard of pleas such as Miss Standing's. We may have a perfect non-duplicating in-house list but the next time we purchase one, the same duplication may occur.

The only remedies we, and all publishers, must seek as a matter of self-interest are:

1. Constantly search for refinement of internal merge/purge programs to catch the largest possible number of duplications;

2. Exercise the greatest care possible in the selection of purchased lists, with the aim not only to eliminate duplications among those lists but also to reduce the chances of duplication among internally produced and externally procured lists.

The only near-ideal solution—manual/visual comparison of different lists—is, alas, an economic impossibility. Labor costs of such an exercise simply outweigh the direct costs of producing and mailing promotion material. Thus, I am afraid we shall continue to suffer the slings and arrows of outraged librarians who think we are both wasteful and indifferent to their entreaties; with due apologies, we can only promise to try to minimize the deluge!

L. Straka, President
Pergamon Press, Inc.
Elmsford, N.Y.

Reply from Plenum

Miss Standing's complaint is a common one and one that, as mailers, does not make us happy. With postage charges rising rapidly, we do not like to see our efforts duplicated. However, it is unavoidable at times. In order to improve our own mailings, we rent lists from other organizations to cover a particular market more fully. It is expected that, in using more than one list, there will be some duplication among them. It is more cost efficient to pay the extra postage for small mailings than to unduplicate the lists.

Miss Standing has been getting two Plenum Bulletins because she is on our mailing (only once) and on the outside list we rent for many mailings. On occasion we have added a third list, and, it seems, she is on that one, too. In the future, Plenum will be using its own library mailing list for most mailings, and this should eliminate duplications.

I hope this explanation adds a little logic to what, I admit, appears to be a silly and wasteful practice. However in many cases, our only choice is between missing some people entirely or duplicating our efforts in a few cases.

Theresa Demoret, Adv. Mgr.
Plenum Publishing Corp.
New York, N.Y.

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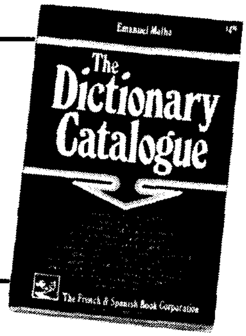

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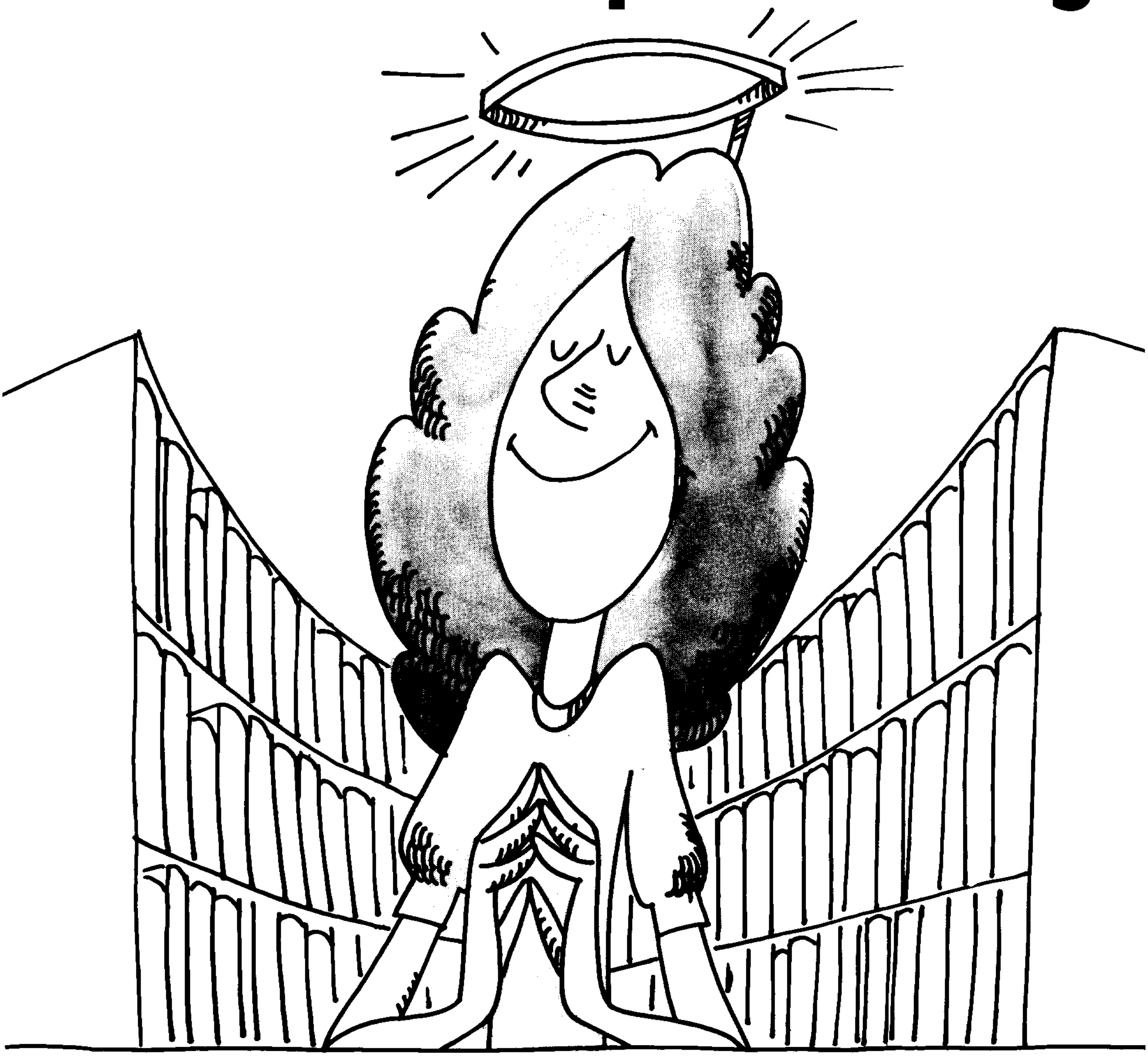

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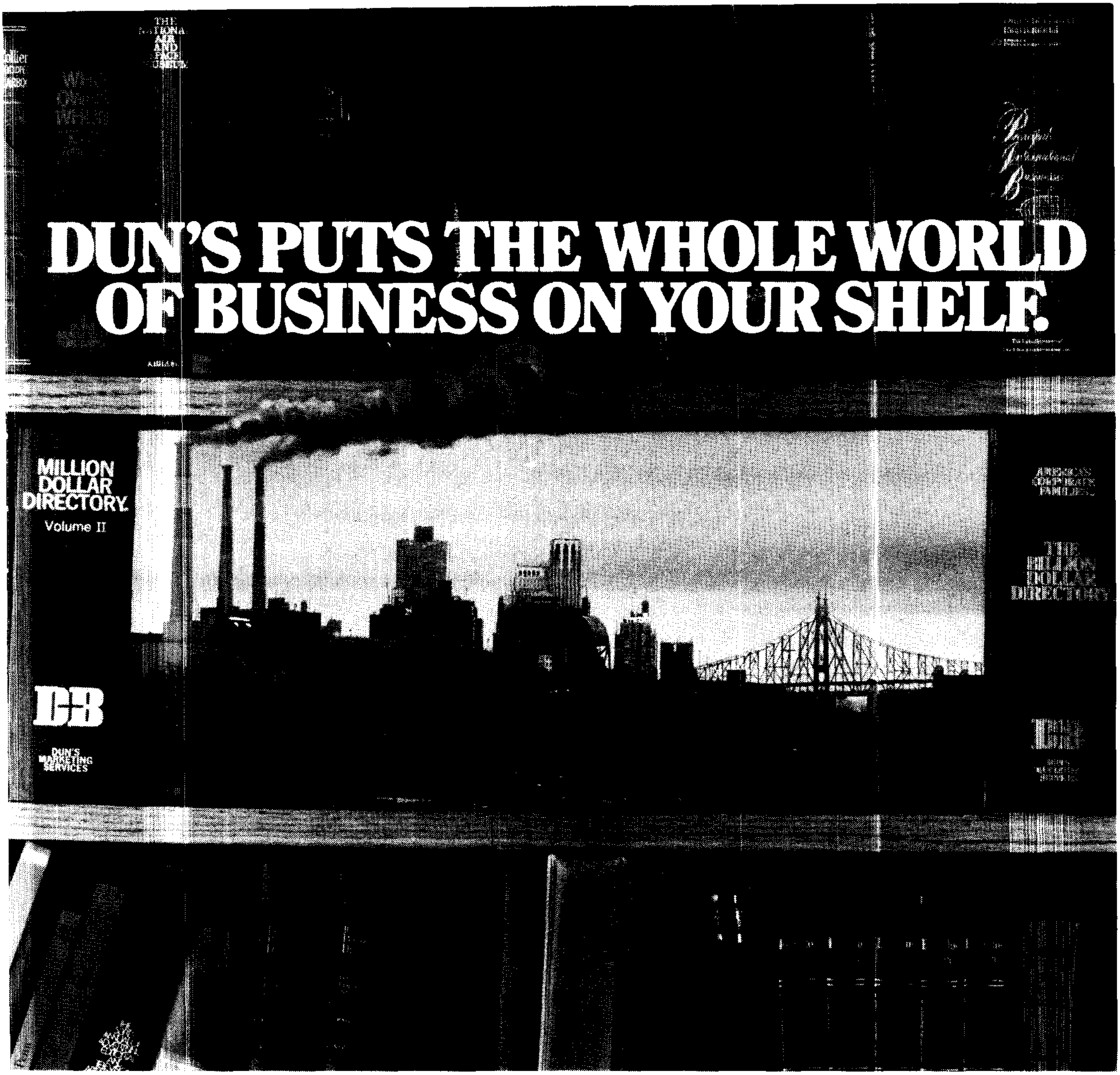

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Evaluation by the Numbers

Paula M. Strain

MITRE Corporation, McLean, Va. 22102

■ Although a recognized body of statistics against which to measure special library performance is lacking, library managers can collect demand and use statistics from their own libraries on a regular basis to create data that answers a number of management questions. Examples of statistical records that aid in evaluating a library's operations are given, as are recommendations on how to produce the records and advice about potential difficulties in producing and using them.

MOST LIBRARIANS are compulsive counters. We count because library managers need quantitative records by which to measure library performance. Unfortunately, our counting seldom reaches print, except in some directory as evidence of the size of our collections.

There are several reasons for the failure. The library profession has only recently agreed on definitions or standards for collecting statistics.* Not all library managers may accept, or perhaps even know about, these definitions. There are so many kinds of special libraries that comparing raw statistics from dissimilar libraries produces results unreliable at best, unusable at worst. Many special libraries are units within larger organizations whose higher management feels that the public release of specific financial or other data might offer advantage to competitors.

Whatever reasons apply, there is no body of statistics to measure performance. Some library managers have attempted to develop data that measure the performance of their libraries. Although they may have discussed their attempts with colleagues, only one manager in recent years has had enough confidence in the validity of his attempts to report them in print. From data supplied by a dozen or so International Business Machines Corporation libraries, Gordon Randall developed some ratios of acquisitions, circulation, and total collection size that offer helpful pointers to managers in the area of spending and collection growth.**

* Lynch, Mary Jo, and Helen Eckard/*Library Data Collection Handbook*. Chicago, American Library Association, 1981.

** Randall, Gordon E./"Randall's Rationalized Ratios." *Special Libraries* 66 (no. 1): 6-11 (Jan 1975).

Recently, in manipulating the MITRE Corporation library's* raw statistics to demonstrate more clearly the trends that have developed over the past several years, the library manager found that the tables that resulted also gave some quantitative and consistent evidence on the effectiveness of library operations. The processed data has other virtues: information the corporation might consider sensitive is no longer obvious. While the data may be comparable with that from other libraries, it is also meaningful alone. The following report of the methods used to derive demand and use statistics is offered in the hope that other managers will try something similar and report their results to make a start toward creating the needed body of statistical information.

Compiling Statistical Records

Reasonably reliable answers have been obtained to half a dozen questions managers ask themselves:

- How much does the organization spend for information?
- How much do the potential users actually use the library?
- How productive is the library staff?
- Is the staff the right size for the service it has to provide?
- Are all potential users served equally? Do some get more service than others?
- What information will statistics give on a particular activity or problem?

The answers are derived by working over the data from monthly library operations cumulated into annual totals, with additional data from corporate personnel and financial records.

No one staff member reports all the data that appears on the MITRE library's monthly statistical record; in fact, almost every member of the staff has his or her own shorter reporting form that collects a numerical record of what the job accomplishes. Data from the individual sheets are cumulated into monthly records of collection growth (acquisitions), use of information material (circulation), and demand for information (reference requests). These, in turn, are cumulated annually. Originally, the cumulation was a calendar year totalling; more recently, a fiscal year total has been prepared, as well. The five months' difference between the calendar year (January-December 1981) and our fiscal year (August 1980-July 1981) produces quite different totals on the statistical record of library operations. The months counted for each cumulation are not the same. There is also variability in use patterns and in the number of people served.

Although statistics on the growth of the collection are kept, they are of little value in answering management questions. Demand and use statistics, that is, circulation and information request statistics, are more valuable. Circulation or materials statistics include totals of circulation from the library collections, interlibrary loans, and information material given to the requester. (Most material that is inexpensive to procure is given to the requester, rather than loaned, on the assumption that reordering is less expensive than maintaining retrieval records.) Information requests include reference and search requests, requests for procuring material outside the library collections, and the verification of citations from these requests.

Facility-wide employment figures are obtained from the regular reports issued by the personnel department. Personnel also furnishes the man/year labor

*The MITRE Corporation is a Federal Contract Research and Development Center which conducts systems engineering studies and produces reports on its results. Its Washington Center library is a unit in the Information Services department and, during January 1982, served a staff of 1450. Its own staff at that date consisted of four full-time and one part-time professional librarians and six library technicians.

total which represents the official labor data used in compiling other corporate reports. Financial data, when it is required, is derived from the budget of the department, from the monthly reports of expenditures the fiscal office and the library staff prepare, and from records kept by the library staff of orders that obligated funds from other departments' budgets.

All libraries may not collect identical data, but if the aim in collecting data is similar—to have a numerical record of the *greater part of the library staff's activities*—that will serve as well for self-evaluation purposes. One never gets a complete account of any operation, people being fallible and statistics unexciting. If regular reporting is insisted on and maintained, enough data will be collected to develop a reliable picture.

Information Costs

What does information cost the organization? The answer is the bottom line of a balance sheet that tells the library manager whether the library is useful and economical enough to survive in the corporate milieu. It may also provide the manager with a strong argument for budgetary support when it is reported on a per-employee basis.

Table 1, based on statistics collected by the MITRE staff, will not provide a standard that can be applied to any other library, but it is useful to the library's manager because it so closely reflects other events in the library's corporate life. The cost per man/year range is narrow enough that the data can serve as a guide for future budgets.

The data in the table was obtained by adding total expenditures of library funds of the year with expenditures from other funds for library materials and dividing the total, for one column, by the total number of employees and, for the other column, by the man/year total, which is our official labor figure. Under some circumstances, a third figure is also used as a divisor: the total number of technical staff, another term having special meaning in company records. It should be noted that Table 1 is not given in terms of a constant dollar; the true level of budgetary support in times of inflation is not shown.

Library Use

How much do the potential users of the library actually use it? An answer to this question is of first importance to the library manager because any library that costs an organization more than the value it supplies in services for long is in trouble. While circulation figures are the conventional measure of library use, they are not particularly meaningful in the special library situation because they represent so small a portion of the total services provided. All library use

Table 1. Information Costs.

FY	Per Man/Year	Per Employee
1970	$352	
1971	336	
1972	330	
1973	369	
1974	404	
1975	404	
1976	432	$245
1977	452	260
1978	443	234
1979	317	182
1980	450	251
1981	393	219

Table 2. Use of the Library—Five-Year Tabulation.

	Material Requests	Information Requests	Total Service Requests
Per Employee			
FY 1977	12	6	18
1978	10	5	14*
1979	10	5	15
1980	12	7	19
1981	12	4	17
Per Technical Staff Member			
FY 1977	21	10	32*
1978	17	9	26
1979	17	8	25
1980	21	12	33
1981	22	8	30

*Note: Discrepancies are caused by rounding off.

and demand needs to be considered and must be related to the population served to provide a meaningful answer to the question.

The raw data can be worked up in a number of different ways. One method divides the service requests total by the population of labor total. Table 2 shows this and breaks down the use totals into types of use: requests for material (including circulation from the collections and requests for procurement of information materials not in the collection), and requests for information (such as reference queries, searches, and verifications).

Variations in use resulting from the changing nature of the work being done in the corporation, change in distance from the library as staffs are moved, and other influences, are reflected in Table 2. The reasons for these variations can be identified in other department records. Similar variations appear in the calendar year tables which have been maintained for ten years. Both sets of data provide a baseline for measurement of library use, and a starting place for an estimate of probable workloads in the future. The calendar year tables are most reliable because of the greater length of time they have been kept.

The second method is to work out the annual percentage of increase or decrease in total plant population and in service requests, and to plot the two percentages on the same chart. The graphic presentation raises more questions than it answers, even though the close relationship of library use and change in size of user populations is apparent.

Staff Size & Productivity

How busy is the library staff? Is the staff the right size for the service it has to provide? These are closely related questions. One is a question of productivity; the other of staffing size. Answering either question will often involve answers to both, and answers that contain numbers are more convincing to the special library manager's management than ones that seem to be based on opinions or gut reactions.

The productivity data in Table 3 are derived by dividing the total service requests by the number of people on the library staff that year. Sometimes it is more startling to present such data as a percentage increase or decrease over the preceding year (see Table 4). The effect

Table 3. Service Requests Handled per Library Staff Member.

FY	Request
1976	1980
1977	2160
1978	2159
1979	1947
1980	2754
1981	2428

Table 4. Change in Productivity per Library Staff Member.

FY	%
1977	+ 9
1978	0
1979	− 9
1980	+41
1981	−11

Table 5. Requests Handled by a Library Staff Member per Hour.

FY	Number of Requests
1979	.97
1980	1.37
1981	1.20

is even stronger if the change in productivity is combined on a chart with a percentage showing some change in staff—either in the total population served or in the number of library staff.

When used outside the library manager's office, any productivity figures of this nature need to be accompanied by a careful explanation that there is probably as much "behind the scenes" support work for each staff member as the amount of service requests he or she handles. It is too easy for people outside the library to forget the support work which has to be done but which is difficult to document. Be especially careful in disseminating your results without an explanation if you have gone a step farther and converted down to a per employee hour basis (see Table 5). Such results give management a poor impression of staff productivity.

A table showing the ratio of library staff to total population, or to the official labor rate over several years, can be a convincing argument for increasing or decreasing the library staff. Studied in conjunction with other facts known to a manager, it can also identify trouble coming. Table 6 shows library staff size in relation to technical staff size.

On the basis of these figures alone, MITRE's library manager knows that the workload is large. No special projects should be initiated without considering what regular work can be postponed. In the past, when the staffing ratio stood between 1:50-1:75, our workload was sufficient to keep everyone busy but not so great that an extra project, such as conducting a book collection inventory, or reorganizing the report collection, could not be worked in. With a staffing ratio over 1:75, pressure builds. However, since nearly the same ratio has been maintained for three years without burn-out, it is likely that the staff's productive range has expanded.

Levels of Service

While a special library usually has a limited clientele, its services are expected to be available to the entire population of the defined clientele. It is the manager's responsibility to know if some part of the clientele gets more service than others. Is the difference in level of service important?

Getting the data with which to create statistics on levels of service is easier at the MITRE library than it may be in other special libraries. First, all employees are required to wear badges that bear their names; therefore, it is usually possible to identify a client making an inquiry in person. Second, all requests for procurement, and many for information, use special request forms which give the client's name, department and other data, including the project for which the information or material is wanted. The library staff re-

Table 6. Ratio of Library Staff to Technical Staff.

FY	Ratio
1977	1:67
1978	1:70
1979	1:80
1980	1:82
1981	1:81

ports monthly both the total of information or material requests handled and how the total was divided among the major divisions of the facility. There are always a certain number of unidentified requests, but the number is never large enough to invalidate the trends in usage shown. Thus, in calendar year 1980, usage by Division 5 was highest followed by two of the small Divisions, nos. 2 and 8 (see Table 7).

The low usage of the administrative departments is to be expected, just as it is for Division 7 whose work is security-classified. Location affects the use of Division 4, housed almost two miles away; its staff is the heaviest user of current announcement lists, ordering 22% of all requests received from the lists; Division 5, located next to the library, only orders 7%. Sometimes, use statistics raise more questions in a manager's mind than they answer. The questions, however, often are ones that might not have been asked at all without the stimulus of the statistics.

When time or the size of the data to be processed allows, analyzing the individual activity totals that make up information or material request totals can reveal some interesting facts. Because of the manager's long, continued interest in cooperation between libraries, the numerical data collected on interlibrary loans at the MITRE Library has been more detailed and have been used to furnish more statistics than some of the other data. It illustrates some other possibilities in library statistics.

Statistics show that the MITRE library borrows 8 items for every item lent. They also indicate that in 1980 it took about 2 requests to find a desired book: whereas a desired periodical only required 1.5 requests. In the first six months of 1981, after OCLC became available, books were located with 1.75 requests and journal article retrieval required only 1.25 requests. The dozen special libraries wthin five miles of MITRE are its chief borrowers, whereas the library's own borrowing is from larger governmental or research libraries at a greater distance. I have been arguing that the acquisitions budget is not large enough; the fiscal year statistics on interlibrary loan requests in relation to other material requests do not confirm this (see Table 8).

Another statistic created from a line of raw data on a different subject provides a partial explanation of the FY 1980 increase in productivity per staff member noted in Tables 4 and 5. Priority or rush requests, which stop the normal workflow, always take more time for the library staff than do normal

Table 7. Use of Library—Calender Year 1980.

	Percent of Total		No. of Requests
	Staff	Use of Library	Per Employee
Administrative, Fiscal and Support Services*	15%	8%	9
Division 2	10	15	24
Division 3	19	14	12
Division 4	19	10	9
Division 5	11	28	35
Division 7	10	11	17
Division 8	9	14	25

*Includes Divisions 1 and 6, as well as corporate officers.

Table 8. ILL as a Percentage of Total Material Requests.

FY	%
1979	35
1980	27
1981	21

Table 9. Priority Requests as Percentage of Total Material Requests.

FY	%
1978	38
1979	35
1980	23
1981	19

requests. Priority requests also dropped a little in fiscal year 1980 (see Table 9). The staff devoted a greater amount of time to getting all, not just priority, work through. But why did priority requests drop—better planning on the part of the users? projects with longer lead times? lack of satisfaction or confidence in library service? And why was the FY 1981 additional drop in priority requests not accompanied by a rise in productivity? These are questions whose answers must be sought, but probably not in our statistical record.

Statistics Collection and Use

Several elements are important to remember in producing and using statistics. Consistency is essential. The entire library staff must understand what the manager is attempting in the collection of raw data and how it will be used; the terms on the reporting sheets must mean the same to each staff member. What is the difference between a reference question and a search, a search and a verification, a referral and a recall? No matter if your local definition is not quite the same as that used by the library in the next block; it does matter if the definitions of your reference librarian and circulation staff differ.

There must be agreement as to who counts a request when it passes through several hands in processing, and whether some of the steps are important enough to count as separate activities. A great many details need to be discussed and agreed on when reporting data is initiated or changes made in the existing reports. The manager needs to review occasionally with the entire staff the definitions and steps agreed on, and must always do so whenever a new employee joins to ensure that thinking and practice remain consistent.

When something unusual appears on a reporting sheet, the person cumulating the various reports on the monthly sheet of totals must inquire about it while the reporter's memory is fresh.

Care with the raw data is important, first in selecting what is counted, and then in converting the raw data into statistics. As I suggested earlier, different libraries may count different things. At MITRE every activity that directly affects a client or his requests is counted. Each step, beginning with a request to procure an item (a service request), the item's addition to the collection (this collection growth datum is not used to provide any of the statistics discussed here), and the item's later delivery to the client (another service request) is counted. But the various steps in processing the item after its receipt or the preparation of retrieval records for it are not counted. These normal operating routines of library work do not directly help the client. With recording data on patron service as a goal, new activities to be counted are added every two or three years as services change or expand; occasionally two sets of data are combined into one line, or an activity that no longer serves the user may be dropped from the counting procedure.

Care in converting the raw data is necessary because handling figures does not always come naturally to the librarian. The methods of conversion described involve simple arithmetic not much above the junior high level; however, these figures are checked carefully and a record is kept of how each of the tables was produced; next year's data and that of the year after are added on as they become available.

Continuity of data markedly increases its value. Managers will gain insight into operations they would not have obtained otherwise from studying the statistics for as short a time as one year, but they will not be able to tell whether the figures reflect normal activity or an aberration. Lacking a standard against which to compare the statistics, a manager will have to wait until at least three years' of the same statistics have been collected to see what trends there may be. With statistics from even longer periods, the evaluation of present activity against the past becomes that much more reliable.

Since there are almost no statistics available on special library operations against which to compare one's own library performance, managers must either depend on their own data collected over several years, or encourage other librarians to create similar statistical data and make them available for comparison. Even such unsophisticated statistics as these described here should be useful to other library managers. Producing them does take a certain amount of time, mostly in the monthly collection process, but not as much as one expects. The time spent in collecting the data and preparing the statistics is a small price to pay for the resulting information. How much more valuable it would be to have similar data from all the special libraries of a metropolitan area, or from libraries of a particular type!

The user of library statistics, whether of his own library or a number of libraries, needs to be cautious. Inconsistency and inaccuracy in the collection of raw data affect their validity; even the assumptions made in developing the data may prove erroneous. Competent managers will know and report to higher management the data that level needs to function properly; however, managers will also recognize the possible limitations of their own statistics and keep much entirely within their own offices to guide their own planning. One's own statistics are very useful for this; they also provide convincing arguments for particular needs. But there is more than a modicum of truth in two familiar sayings—the folk wisdom which holds that "Figures don't lie but liars figure," and Mark Twain's comment, "There are lies, damn lies, and statistics."

Use library statistics but use them with restraint, and be sure you're going the right way when you use them as guideposts.

Received for review Dec 7, 1981. Revised manuscript accepted for publication Mar 16, 1982.

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Organizational Behavior and Information Seeking

Lessons for Librarians

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■ **The area of organizational behavior and the area of information seeking are separate fields that have produced literatures relevant to librarians. Neither of these two fields, however, is concerned with librarians as their primary focus. Nor does the literature of librarianship generally take into account the findings from these disciplines. This paper presents a brief review of both areas and comments on their relevance for librarians.**

AT FIRST GLANCE, the relationship between organizational behavior and information seeking among librarians would appear to be a deceptively simple and seductive topic. For, upon reflection, do not most of us work in some sort of organization, and do we not spend a significant part of our professional lives searching for information? We probably feel instinctively that there is a significant relationship between the two areas and, if pressed, we would probably venture a guess that the literature of librarianship would treat the topic at some length. These would all be commonsensical assumptions, but if we made them, we would be wrong. In reality, the area of organizational behavior and the area of information seeking are two separate fields, neither of which is concerned with librarians as a primary focus.

Defining Organizational Behavior

According to one definition "organizational behavior is concerned with the study of the behavior, attitudes, and performance of workers in an organizational setting; the organization's and informal group's effect on the worker's perceptions, feelings, and actions; the environment's effect on the organization and its human resources and goals;

and the effect of the workers on the organization and its effectiveness" (1).

According to another group of scholars (2) all organizations have three elements in common: behavior, structure, and processes. While structure is concerned with job design, and process with performance evaluation, communications, and decision making, organizational behavior treats individual and group characteristics, motivation, and leadership. Organizational behavior is based upon an interdisciplinary foundation that borrows concepts, theories, and models from the behavioral sciences, notably psychology (including social, clinical, industrial), sociology, and anthropology. The levels of analysis include the individual, the group, and the organization.

Clearly, it is not feasible to examine all of organizational behavior here. However, those aspects which recent texts in library administration have considered important are leadership and motivation (3,4,5).

Leadership Behavior

Leadership has been defined as "a set of interpersonal behaviors designed to influence employees to cooperate in the achievement of objectives" (6). Leadership may be exercised through formal or informal means, i.e., through the authority of the position held in the organization or by virtue of having been chosen by the group.

Attempts were made to correlate personal traits and characteristics—physical size, intelligence, self-confidence, ambition—with leadership style, but since leaders come in all shapes and sizes the trait theory failed. Eventually it was recognized that leadership is a function of the leader, the work group, and the situation.

Tannenbaum and Schmidt outlined the forces in leaders influencing their styles (7). In addition to their background, knowledge, and experience were their value systems, their confidence in subordinates, their own

Figure 1. Continuum of Leader Behavior.*

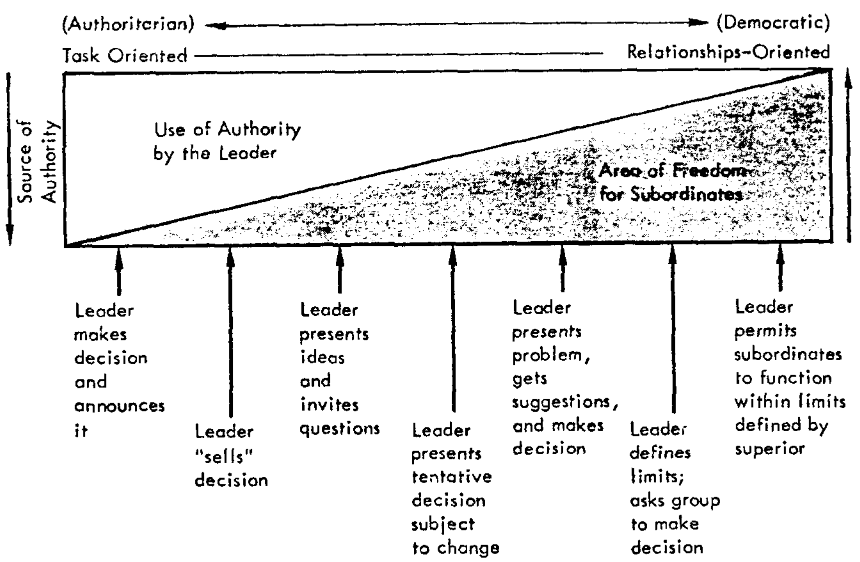


*Figure 1 reprinted from *Management of Organizational Behavior: Utilizing Human Resources*, 3rd ed., by Paul Hersey and Kenneth H. Blanchard. N.J., Prentice-Hall, Inc., 1977, p. 92. Used with the permission of Prentice Hall, Inc., the Center for Leadership Studies, and *Harvard Business Review*.

leadership inclinations, and their sense of security in uncertain situations. Factors in the subordinates to be considered were their need for independence, tolerance of ambiguity, level of expertise, interest in the problem at hand, understanding of the goals of the organization, and expectations about sharing in decision making. Among the forces at work in the situation were the values and traditions of the organization, the effectiveness of the group, the nature of the problem itself, and the pressure of time. In their classic article, Tannenbaum and Schmidt construct a continuum along which they place a set of seven leadership behaviors going from the autocratic to the permissive. The Hersey/Blanchard adaptation of the continuum (*8*) is presented in Figure 1.

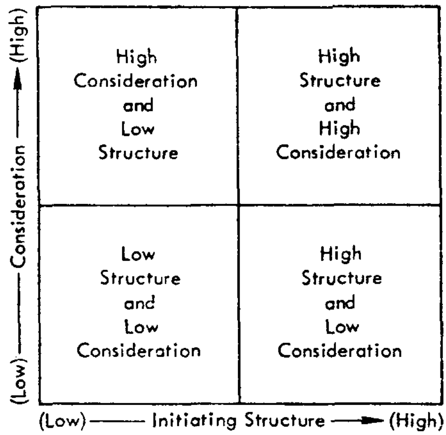
The Ohio State studies* describe leader behavior along two dimensions: initiating structure and consideration. Initiating structure refers to "the leader's behavior in delineating the relationship between himself and members of the work-group and in endeavoring to establish well-defined patterns of organization, channels of communication, and methods of procedure"; consideration refers to "behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of his staff" (*8*, p. 94). Four quadrants (see Figure 2) show the various combinations of the two dimensions (*8*, p. 95).

Another framework was developed by Robert R. Blake and Jane S. Mouton (*9*). In their Managerial Grid® (see Figure 3), they developed five different types of leadership.

Leadership and Productivity

Subsequent researchers have tried to make the connection between leadership style and work productivity. As early as the Hawthorne Studies conducted at Western Electric between 1927 and 1932, Elton Mayo concluded that singling out a group of people for special attention, giving them authority over how they carry out their jobs will result in increased productivity.[†] Stueart and Eastlick (*4*, p. 128) attribute significance to the Hawthorne studies because they showed that: 1) employees respond to managerial efforts to improve the working environment; 2) they respond to being capable of making decisions that affect their work patterns and job behavior; 3) the informal group can be a positive unit helping management to achieve its goals; 4) the informal group needs to develop a sense of dignity and responsibility and to

Figure 2. The Ohio State Leadership Quadrants.*

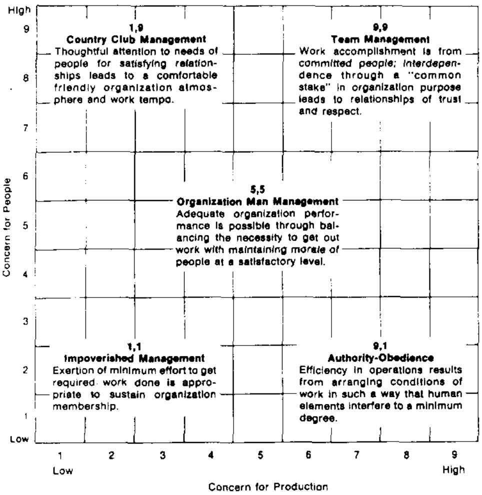


*Initiated in 1945 by the Bureau of Business Research of Ohio State University, these studies investigated the determinants of leader behavior and the effects of leadership style on the performance and satisfaction of workers. See: Stogdill, Roger M., and Alvin E. Coons, eds., *Leader Behavior: Its Description and Measurement.* Columbus, Ohio, Bureau of Business Research, The Ohio State University, 1957.

**Figure 2 reprinted from *Management of Organizational Behavior,* 3rd. ed., by Paul Hersey and Kenneth H. Blanchard. N.J. Prentice-Hall, Inc., 1977, p. 95. Used with the permission of Prentice-Hall, Inc., and the Center for Leadership Studies.

†Mayo, Elton/*The Human Problems of an Industrial Civilization,* 2nd ed. Cambridge, Harvard University Press, 1946.

Figure 3. The Managerial Grid Leadership Styles.*



be recognized as a constructive force in the organization; 5) the worker must feel needed and welcomed by management.

Rensis Likert also endorses a human relations approach to leadership not out of sentimentality but from a research base that shows that strongly centralized control of employees does not lead to optimal efficiency or productivity (*10*). The leader's style must be attuned to the needs of the employee and the job that needs to be done. While the application of pressure, threats, and close supervision may affect the level of productivity, it will also eventually result in lowered morale and higher employee turnover.

Motivation Theories

Several theories of motivation are closely related to the leadership theories mentioned and, like them, provide insight into the kinds of factors that contribute to a positive working environment and affect how employees—librarians included—will approach their jobs.

Abraham Maslow views human beings as having a hierarchy of needs (*11*). These needs he identifies as physiological, safety, social, esteem, and self-actualization. Physiological needs refer to basic requirements for shelter, food, sleep; safety to the need for personal security; social to needs for friendship, belonging, love; esteem to respect, status, prestige; and self-actualization to the opportunity to achieve one's maximum potential. Each lower order need has to be satisfied to some degree before higher level needs can become motivators. Few ever satisfy all needs completely.

Closely allied to Maslow's theory is Frederick Herzberg's (*12*) who feels that people are not only motivated by internal needs but by certain motivating factors intrinsic to the job. His Two Factor Theory proposes that there are certain aspects of a job that act as motivators—growth, advancement, responsibility, work itself, recognition, achievement—and that these lead to satisfaction. Hygiene factors such as salary, working conditions, policies, and supervisory styles are the main causes of dissatisfaction on the job (*12*, p. 66). Thus, he suggests that designing more responsible, varied jobs that allow positive feedback will result in better-motivated employees.

Others have drawn upon, extended, or modified these views or proposed different ones: Alderfer (*13*) condensed Maslow's hierarchy into three need categories—existence, relatedness, and growth; McClelland (*14*) suggests that individuals have basic needs for achievement, affiliation, and power; Vroom (*15*) feels that individuals evaluate various strategies of behavior before choosing the particular strategy they believe will lead to those work-related rewards that they value.

Yet, perhaps the most widely known theory pertinent to this review is that of Douglas McGregor (*16*). Traditional

* The Managerial Grid® figure from *The New Managerial Grid,* by Robert R. Blake and Jane Srygley Mouton. Houston, Gulf Publishing Company, Copyright © 1978, page 11. Reproduced by permission.

organizations run on centralized decision making, close supervision, and hierarchical structures based, according to McGregor, on certain assumptions about human nature and motivation. These assumptions, which he terms Theory X, are that work is distasteful to most people, that people lack ambition, like to be directed, must be coerced to achieve organizational objectives, and want security above all else.

The management philosophy that flows from these assumptions calls for highly controlled measures to deal with staff who are unreliable, irresponsible, lazy, and motivated by money, benefits and threats. McGregor aruges that these beliefs and practices are not effective with highly educated workers whose needs are not so much for physiological and safety requirements but fall into the social, esteem, and self-actualization areas. He posits an alternate set of assumptions about human nature: In Theory Y he proposes that under favorable conditions work is as natural as play to human beings, that people will exercise self-control and direction to achieve goals to which they are committed, and that people seek responsibility and are motivated by higher order needs. The implications for creating a positive working environment are obvious: the worker must have challenging work that is inherently satisfying and will allow for increasing responsibility, self-direction, and the achievement of personal needs in conjunction with organizational goals.

Organizational Development

Many Theory Y assumptions have been used in organizational development (OD), a technique described by Bennis as "a response to change, a complex educational strategy intended to change the beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself" (*17*).

Beckhard defines OD as an effort that is "(1) planned, (2) organization-wide, and (3) managed from the top, to (4) increase organization effectiveness and health through (5) planned interventions in the 'organization's processes,' using behavioral-science knowledge" (*18*). French and Bell view it as "a long-range effort to improve an organization's problem-solving and renewal processes, particularly through a more effective and collaborative management of organization culture—with special emphasis on the culture of formal work teams—with the assistance of a change agent, or catalyst, and the use of the theory and technology of applied behavioral science, including action research" (*19*).

Though the objectives of OD programs will vary with the problems of the individual organization, generally they aim to raise the level of trust among members of the organization, to facilitate more open communication, to develop more effective work teams, and to improve problem-solving capabilities. Frequently, OD proceeds through a series of phases characterized by Glueck as initial diagnosis, data collection, feedback and confrontation, planned problem-solving, team building, intergroup development, follow-up, and evaluation (*20*). A consultant usually acts as a facilitator or catalyst. OD interventions stress experiential learning though varieties of laboratory training, team-building exercises, confrontation meetings, process consultation, and so on. The assumptions are that people are capable of change and can work effectively together in mutual trust and confidence, sharing responsibility and solving problems while meeting group and organizational objectives.

Reported uses of organizational development in libraries are few, however. In this review of organizational development in library management, Wilson identified only three projects in the United States that "have, at least a suspicion of OD thinking behind them" (*21*). Of these, the Association of Research Libraries Management Review and Analysis Programme (MRAP) has been the most extensively documented. Johnson and Mann report that in the opinion of participants interviewed, "MRAP had a significant impact on attitude, resulting in a more open feeling on the part of the staff and heightened general awareness of the need to communicate" (*22*).

Information-Seeking Behavior

Having reviewed briefly the leadership and motivation aspects of organizational behavior, let us now turn to the other field of our enquiry, information-seeking behavior. Broadly defined, the field is composed of studies that are concerned with who needs what kind of information and for what reason; how information is found, evaluated, and used; and how these needs can be identified and satisfied.

The development of the field has been outlined in detail by the sections on information needs and uses in *Annual Review of Information Science and Technology* written by Menzel (*23*), the Herners (*24*), Paisley (*25*), Lipetz (*26*), Crane (*27*), Lin and Garvey (*28*), Martyn (*29*), and Crawford (*30*). Repeatedly, however, these scholars point to the problems of the user studies they summarize: Saul and Mary herner list the following shortcomings (*24*, p. 2):

- The relatively few techniques that are used.
- The diversity of corpora of users to which these few techniques have been applied.
- The diversity and ambiguity of language used to discuss the techniques and their results.
- The lack of innovation.
- The failure to build on past gains.
- The failure to profit from past mistakes.
- The frequent absence of rigorous experimental designs.

Paisley extends the list by criticizing users studies for not reflecting an awareness of the complex nature of information flow. Such shallowness of conceptualization does not consider the following factors (*25*, p. 2):

- The full array of information sources that are available.
- The uses to which information will be put.
- The background, motivation, professional orientation, and other characteristics of the user.
- The social, political, economic, and other systems that powerfully affect the user and his work.
- The consequences of information use—e.g. productivity.

Paisley suggests a conceptual framework that places the information user, specifically the scientist/technologist, within a set of systems that might be visualized as almost-concentric circles going from the broadest to the most specific influence. These systems, within which the scientist operates, are: his/her culture, a political system, a membership group, a reference group, an invisible college, a formal organization, a work team, his/her own head, a legal/economic system, and a formal information system.

Variables Influencing Information-Seeking Behavior

Maurice Line, in his studies of information needs of social scientists, suggests that classifying information needs by function and environment would help to cut across the barriers imposed by the separate subject disciplines (*31*). Functional variables would include such areas of endeavor as research, teaching and training, management, social work and administration, the press and broadcasting, politics, business and commerce, study and learning. By "environment" is meant whether the social scientist is employed in academic institutions, research organizations, industry, government, professional associations, trade unions and political parties, the press, or broadcasting. Line also takes into account an extensive set of individual characteristics:

not only the usual demographic variables but such factors as persistence, thoroughness, independence, and ability to take in information.

Crawford assures us that progress in conceptualizing the field continues to be made (*30*). She cites as especially notable the work done by Caplan *et al* (*32*) in considering environments variables, differentiating between information use in the physical and social sciences, and showing the overriding importance of political considerations in determining the ultimate use of research findings.

Perhaps the most recent consideration of the variables influencing information seeking behavior is that of Mick, Lindsey, and Callahan (*33*). Their examination of variables affecting information behavior—individual, work environment, and task attributes—led them to believe that environment and situational constraints largely determine information behavior: "Perceptions of management attitudes toward information work have a significant impact on individual information behavior. They determine how much time individuals spend on information work, the values and attitudes individuals bring to work, and even individual information behavior" (*33*, p. 349). They go on to suggest that individual information behaviors are the result of ". . . complex interactions involving personal attitudes, background, role, function, specific task situation, environment, etc., . . . [therefore] management interventions to change information behavior must be tailored to specific situations; they require a detailed understanding of the dynamics of the organization and of the perceptions of both staff and management" (*33*, p. 354). Perhaps the organizational development interventions described earlier might prove beneficial.

Though much has been done in the area of user studies, concentrated first on the information needs and uses of scientists and engineers and, more recently, on those of social scientists (*34–36*), relatively few user studies have been done on librarians. It would seem reasonable to assume that those whose primary occupation is the seeking of information would merit some attention by scholars, yet this does not appear to be the case. The focus for studying information-seeking behavior among librarians has been limited to identifying those behaviors that constitute the reference process (*37*), involve problems in librarian/client interactions (*38*), or that concern developing skills to conduct effective reference interviews (*39, 40*).

Though it might be said that in recent studies the organizational behavior tradition seems to be informing the information seeking research tradition in that the environment, management perceptions, and role and function of the user seem to be recognized as influences, neither of these fields has yet been directly applied to an analysis of the information-seeking behavior of librarians in the performance of their jobs. Research resulting from such a synthesis might investigate such issues as the relationship between selected organizational variables like leadership styles, climate, or structure on information seeking-behavior of librarians in

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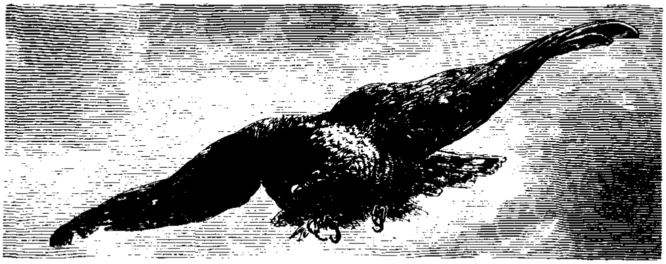

different library settings, i.e., academic, special, or school. Could a change in any of these or other organizational variables bring about an improvement in information-seeking behavior in librarians?

The reasons that such research has not been undertaken, though speculative, might be worth noting. Librarians form a small proportion of the total number of information seekers; their need for information is not thought to be of such strategic importance as that of scientists, social scientists, policy makers, or the newly important elderly; funding sources to underwrite such work are scarce; few within the profession are trained or interested in doing such studies; organizational supports (time, resources, expertise) are lacking; and finally, research is viewed with some skepticism by the practitioner. Perhaps the framework developed so painstakingly and at such cost by others can be adapted to develop more effective information-seeking behavior among librarians.

This lack of empirical evidence should not prevent the implementation of organizational policies that benefit from research in related fields. Leadership and motivation theories suggest that such policies consider both the personal and professional needs of the employee, create a beneficial working environment, provide staff with the authority and responsibility to carry out its work, encourage staff to develop to its highest potential. These policies are based on the assumption that people are naturally reliable, hard-working, and self-directed, and, therefore, expect, recognize, and reward creativity and achievement. Examples of putting such policies into practice might include support for professional staff development and attendance at professional meetings through payment of fees for courses and flexible scheduling; the creation of temporary or exchange appointments; encouraging staff contacts with outside consultants and membership on boards and committees; expected contributions to the professional or scholarly literature; and appropriate evaluation, merit pay, and promotion criteria. While it may be pointed out by some that the times are not propitious for such actions, we must not allow economic constraints to sap our initiative or to become excuses for doing nothing. For at issue are not so much budgets as beliefs, values, and philosophies about how we view ourselves, our staffs, our tasks, and our obligations to our users.

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Received for review Sep 8, 1981. Revised manuscript accepted for publication Apr 5, 1982.

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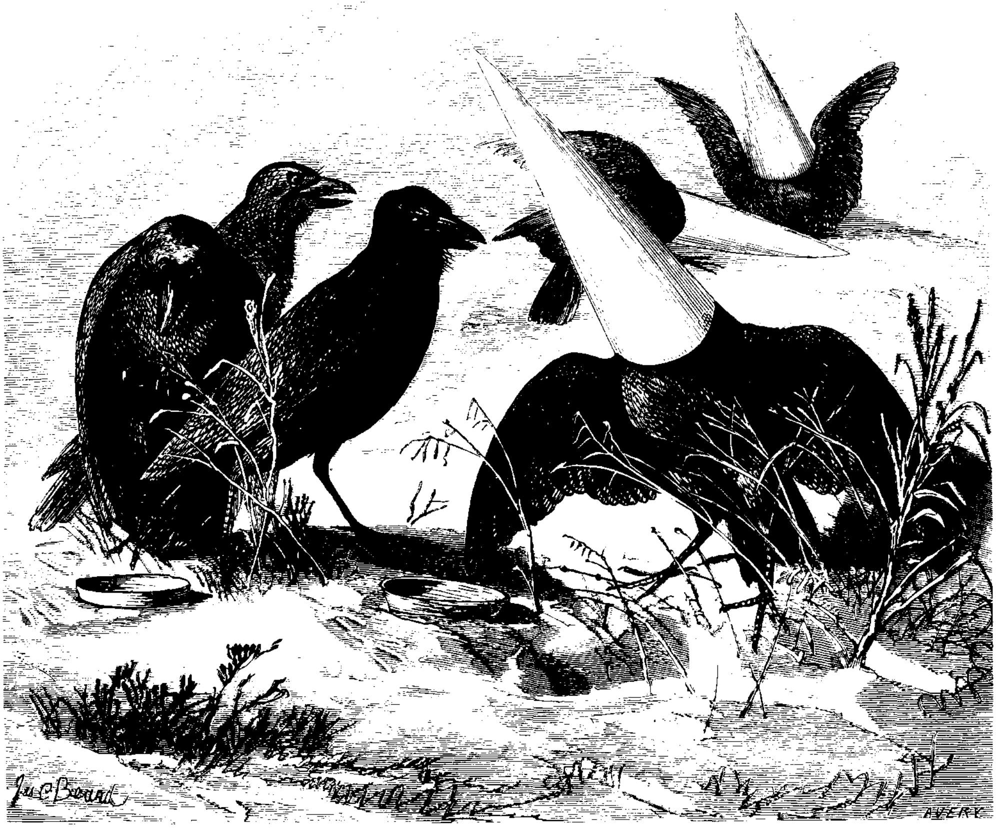

Establishing a Special Library
The First Year

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■ The development of a new library/information center is traced from the original idea to establish such a facility through the first year's activities and accomplishments. Included is a discussion of the realities vs. the plan; the new special library is contrasted with established professional standards, as well as the norms for new special libraries. Topics addressed include setting priorities, resource availability, establishing online search and awareness services, and selection of a minicomputer-based data management system.

THE Aluminum Association, Inc., founded in 1933, is a trade association for the aluminum industry whose membership is comprised of all U.S. companies producing primary aluminum ingot and most firms manufacturing aluminum mill products. One objective of the Association has been to make available to its membership information related to industry issues and concerns, and to inform the public regarding the use of aluminum. Frequently, this information has taken the form of publications of a technical and statistical nature, as well as general interest publications. Since 1968, for example, the Committee on Technical Information of the Association has sponsored *World Aluminum Abstracts*, a monthly abstract journal of the world's literature in the area of aluminum technology.

In 1978, the Committee on Technical Information expressed an interest in establishing a special library/information center at the Association to centralize, coordinate, and improve the access to information. Librarians in several aluminum companies were consulted, and they concluded that such a center would be able to assist Association staff, provide valuable information service to member company librarians and other personnel, and would be able to respond to public inquiries.

During 1979, Association members and staff sought to determine the best course of action. After meeting with

SLA's consultant service, a decision was made to contract with an outside special library consultant to develop a proposal for an information center.

The Plan

In the spring of 1980, having met with Association staff, as well as with member company librarians and information managers, the consultant presented a proposal which incorporated a plan for the first 18 months of operation. The proposal summarized the need for the information center, discussed goals and objectives, and recommended the staffing levels and budget requirements. Many of the activities set out in the proposal were accomplished, while others were not, due to a reassignment of priorities during the first year.

Organizational Placement

The proposal for the information center specified the need for a library/information science professional as manager. The requirements for the position included 8–10 years of experience, and a knowledge of automated techniques in a business setting.

The manager, who was hired during the summer of 1980, reports to the vice president/corporate secretary. For the first 18 months, regular meetings were held with the staff information center team, comprised of individuals from each department and chaired by the vice president for the technical department. This arrangement assured that priorities for the information center's activities were set in response to the needs of each functional area.

Realizing that a new facility cannot immediately take on all desirable activities, the team tried to consider those activities most important to the entire Association. Placing the center in the administration department helped to assure that the information center would be equally responsive to all departments. In addition to consultation with the staff information team, the manager interviewed each member of the executive staff to determine areas of interest and need.

After the first 18 months, the advisory team was disbanded. While the information center remains in the administration department reporting to the same officer, the scope of the entire department was widened to include management of computer and word processing resources. The information center plays an important role in the coordination and integration of the information resources in the organization. The reorganization has also served to clarify lines of communication. Since these changes were made by the newly appointed president for the Association, they can be viewed as a strong commitment by top management to strengthen the information area.

Areas of Responsibility

Although the areas of responsibility are still evolving, the initial tasks were the establishment of a special library with the potential for expansion into broader areas of information management. The overall goal of the center is to access and transmit information in a timely and efficient way.

The center provides organization to the existing collection scattered through the Association and helps staff to identify outside sources of information, thus providing traditional library services. Current awareness and online literature searching has been a major activity of the center. Its responsibilities also include collection development, periodicals control, and cataloging.

In most cases, member companies are indirect users since the information center provides information resources to staff executives who, in turn, work with Association committees. Upon request, however, the information center responds directly to member company inquiries, as well as to those from the general public, concerning the aluminum industry.

The manager of the information center also participates in some activities of the Association's Committee on Technical Information which sponsors the *World Aluminum Abstracts* program. She also serves as a liaison to other aluminum industry librarians and information specialists. This liaison activity may include assisting industry librarians in establishing new collections; helping them to access Washington information resources; and keeping aware of new techniques to improve the dissemination of information related to aluminum.

The extent of involvement in the abstracts program, as well as the liaison activity, has been significantly greater than specified in the proposal, but both activities logically belong in the information center's area of expertise. Initially, *World Aluminum Abstracts* subscriptions were handled by the information center; however, this activity was later assumed by the publications department so that the information center could focus more on library functions.

In addition to direct responsibilities, the manager is a resource to other Association departments on activities related to information management. These areas may include computer usage, word processing, and the establishment of special data files. It seems likely that the involvement in automation activities will increase.

Space

The information center currently occupies approximately 250 square feet with 312 linear feet of shelving. While many items are shelved in various offices in the Association, there is still inadequate space to accommodate desks for the manager and assistant, two computer terminals, microfiche reader/printer, file cabinets, a work table, and reading space for users. A part-time catalog librarian works in a separate, temporary office. Though space problems need to be addressed in the near future, space will be conserved as much as possible through the use of microforms and computerized files.

Ideally, the information center would provide private office space for the manager; adequate work space for preparation of materials and data entry for the assistant; space for the catalog librarian or other specialist; seating space and convenient access to the video terminals used for accessing the internal databases and to the teletype terminal used for interactive searching of publicly available databases.

Given the space limitations, the collection is necessarily dispersed. This decreases equal access to resources by all staff. The availability of a printed catalog of holdings provides a partial solution to the problem, but staff still must locate resource materials in various locations.

Having a concrete proposal for the establishment and activities of a new information center proved to be an essential ingredient to the success of the center. It clearly set out goals, priorities, resource requirements, and a suggested timetable. The plan provided a baseline from which to work and made the organization sensitive to the complexities of establishing an information center, thus permitting the new information center manager to concentrate on making appropriate modifications to the plan.

Personnel

The original proposal called for operating the center with one full-time professional, one half-time clerical assistant, the typing services of the receptionist, and occasional services of other support staff. From a logistical point of view, it was difficult to use fully the services of the receptionist whose work station is located on a different floor from the information center.

In retrospect, it probably would have been preferable to allocate funds for one full-time support position in the first year. This situation was corrected during the second year of operation when a full-time assistant was hired. A part-time professional catalog librarian was also hired during the second year for retrospective cataloging. This staffing level should be adequate as long as the activity level of the facility remains constant; however, it does not allow increased responsibilities.

Budget

In the original proposal, specific budget recommendations were made for the first 18 months of operation. Funds for operation of the information center had been recommended above and beyond the existing expenditures made by the various departments. However, due to budgetary constraints this was not the case.

Budgets for the Association are determined a year head. When the information center began, it was already too late to specify funds for that purpose for 1980, and operating funds were made available out of several department budgets. Beginning with the new calendar year, funds for the purchase of books and other materials were to come from the department requesting the purchase. A subscription budget, which had provided funds for periodical subscriptions, continued to be used for that purpose, with an unspecified amount remaining from that account available for other purchases.

Departments requesting services are required to pay for these services. This procedure works well only for certain types of expenditures, such as computerized literature searches to support the department's activities, or the purchase of library materials necessary for a particular project. However, many library activities are carried out which benefit the whole, rather than an easily identified part of the organization. General reference materials, including new editions, subscriptions to journals with overlapping subject areas, cataloging and maintenance functions, demonstration searches, and so on, all require some planned operating funds. In this case, the budget specified in the proposal was not feasible and affected the degree to which some functions could be undertaken.

It should be stressed that the organization was responsive to requests for funds to support other basic activities, such as the purchase of database management software, computer peripheral equipment, and microform equipment. For these purposes, each department contributed a portion of its operating funds.

During the second year of operation, specific funds were allocated, combining basic operating costs with specific requests coming from individual department budgets or committees. Expenditures are readily identifiable by accounting code to provide greater management control and historical information which can be used for planning purposes.

Collection Development

During the first six months of operation a basic, general reference collection was acquired. Materials of a technical or specialized nature were acquired over many years by staff executives for use in carrying out their responsibilities; many of these items are located in staff offices. Presently, the intent is not to create a comprehensive collection of materials on aluminum since the cost involved and space required would be considerable.

The collection is comprised of some technical materials, especially applications—oriented materials; business sources; historical materials; and general issue-related publications pertaining to industry areas of interest such as the environment, energy resources, health and safety, and competitive materials. Highly technical research publications are infrequently requested, and the demand is met through interlibrary loan or use of the extensive research facilities available in Washington, D.C.

There is a need to keep the collection current to anticipate staff information needs that can be met through pertinent reference books. As the Association staff responds to new issues of importance to the membership, the information center must back up this activity with appropriate sources. Funds for such activities need to be allocated to allow responsible collection development, while specialized publications might be funded by specific committee activities.

Database Management System

In the original proposal the need to catalog the Association's resources was set out as a major goal, but no specific recommendations for the type of system or timetable for accomplishment was indicated. One of the major activities during the first year was the research and decision to obtain a database management system which could be used for storage and retrieval of bibliographic records. At no time was a card catalog considered as a means of bibliographic control. The information team felt that computerizing records would permit more effective use of staff time, and since no bibliographic records were available in any form, there was no problem of conversion from manual records.

The Association already had an IBM System / 34 computer, a medium-size, interactive, general purpose computer with 96K bytes of memory and 64 megabytes of disk storage, which can be expanded to 256K bytes and 256 megabytes, respectively. It was primarily being used for accounting, mailing list maintenance, statistical activities, and other business applications. The system still had some additional capacity available which could be allocated to a data management system.

In view of this situation, it seemed reasonable to attempt to find data management software suitable for bibliographic use which could run on the IBM System / 34. Warner-Eddison Associates' INMAGIC Data Management Software was selected.

An in-house computerized system, while initially requiring a significant commitment in time, affords more flexibility and convenience in the long run. Furthermore, the software package has the facility for creating multiple files with different user-defined criteria. This would provide the potential for other automated information management activities in the future, such as the establishment of special interest files, membership information, meeting minutes, regulatory files, product catalogs, Association publications, and so on. In addition to online storage and retrieval, printed catalogs, bibliographies, and other reports can be generated according to the Association's specific needs.

Cataloging

Retrospective cataloging activity began in the second year when a part-time catalog librarian was hired. It is estimated that 3,000–5,000 items may initially need to be cataloged. The figure is uncertain, since not all items currently held will necessarily be candidates for cataloging, and some duplication is anticipated. The Library of Congress classification system will be used, with enriched subject headings derived from the *Thesaurus of Aluminum Technology* which is currently used for *World Aluminum Abstracts*.

Because of the relatively small size of the collection, the modest acquisitions activity anticipated, and the need for specialized cataloging, membership in a shared cataloging network was ruled out. Instead, the facility relies on local cataloging resources, and uses cataloging data available through the major online database vendors, in addition to original cataloging. The information center assistant provides data entry support by entering the cataloging information into the online system.

Periodicals

One of the first tasks of the information center was to bring control to the periodicals area. Over 200 subscriptions were received by various requestors, but there was no central means of record-keeping for renewals or listing of holdings. This resulted in some unnecessary duplication. Furthermore, there was no responsibility for retention or collection maintenance.

During the first year, renewals were placed with a periodical subscription agency to reduce the number of invoices. Staff members now send renewal notices to the information center for placement. Complete conversion to the subscription agency required more than a year since existing subscriptions had to expire. A classified list was compiled, a check-in system was devised, and systematic retention of periodicals after routing was implemented. Periodical subscriptions are coded by requestor for management control. It is anticipated that the periodicals operation will be automated in the future, using available computer resources.

Reference Services

At the time the proposal was written, it was not evident that online searching or SDI services would be a priority activity. However, when the library was actually started it was apparent that the Association's current priorities were such that a considerable demand did exist for these services. The Association staff was aware that it needed assistance in accessing outside information, both traditional printed sources and newer computerized data banks. Reference service has consisted of responses to inquiries for factual information, interlibrary loan, and literature searching.

Online searchng has primarily been done to provide background references for staff faced with an unfamiliar information request or when beginning work in a new area of responsibility. Another major activity is the searching of general news and business databases to identify current issue-related articles. Regular searches of the New York Times Information Services are performed to keep aware of articles in the press related to aluminum and the aluminum industry.

Research topics, which are tracked over a period of time, are run through a literature search service organization. This service requires little staff time to monitor. When the basic service agreement is used to the fullest, it provides SDI service at a low cost per search topic. These searches primarily use technical and business databases. For monitoring the literature concerned with aluminum and health, SDI searches of MEDLINE are done through a local university health sciences library. This search complements an annual comprehensive literature review on aluminum and health sponsored by the Association's Health Committee and performed by the Kettering Laboratory at the University of Cincinnati.

Acceptance

The staff's acceptance of the information center and the contribution it can make to the Association's activities has been good, but there is a need to encourage greater use of the services available. As is typical in a well-established organization, over the years staff developed its own means of obtaining information, ranging from informal, personal contacts to individual collections.

Thus, it is a question of changing habits and proving that use of the information center's services will save valuable time. Potential users must also be encouraged to submit publication requests to the information center rather than attempt to obtain them individually, permitting centralized control that will benefit the organization by reducing unnecessary duplication and making materials available to all.

Every department within the organization uses the information center's services, although certain departments have used them more than others. Users come from all staff levels—from top management to support staff. This use has involved literature searching, current awareness SDI's, periodical subscription requests, and quick reference. Some individuals seem to be unclear regarding the potential benefits to be gained; they do not always recognize that expertise previously sought elsewhere is now available in-house.

Orientation to the services available has included presentations at general staff meetings, individual department seminars, and online demonstrations. A guide to the use of the information center was written and incorporated into the staff manual. Periodic announcements of new materials and services are circulated. While no formal evaluation or survey has yet been done, users seem to value most the automated literature search services, reference assistance, and quick document delivery.

Current Status

A number of concrete achievements were realized during the first year:

- there is a large degree of control over periodical subscriptions and the acquisition of other publications;
- a basic reference collection is available to answer general reference questions;
- staff has used the services of the center to obtain information on a variety of topics;
- interlibrary loan is a regular activity;
- online searching and current awareness searches have been generally accepted as worthwhile services;
- a database management system is in place and cataloging of the collection has begun, providing the base for further information management activities;
- the information center is responding to inquiries from the public and member companies.

The Future

Plans for future operations are currently being developed. Possible areas of activity include increased information service to members and the public; specialized database searching for outside requestors; information analysis; construction of specialized resource files; microfilming; records management and maintenance of the Association archives; compilation of bibliographies in support of Association seminars; and great involvement in information management activities of the Association.

Expansion into these areas would, of course, require the commitment of additional resources for the information center consisting of personnel, funding, and space. It is anticipated that even without additional responsibilities use of existing services will continue to increase, thus necessitating increased resources.

Comparison with New Special Library Standards

In order to provide some perspective regarding the establishment of a new library/information center at the Aluminum Association, it may be useful to compare this experience with two significant documents on special libraries.

The first, *Objectives for Special Libraries,** may be seen as professional standards, and as such, present the minimum requirements for a special library. To some extent the *Objectives* present an ideal situation. *New Special Libraries*†, based on research done by the Illinois Chapter of SLA, on the other hand, presents the results of a survey of new facilities as they actually exist.

In relation to the *Objectives,* the Aluminum Association's facility measures up quite well in most respects. The staffing now meets the minimum recommendation of one professional and one clerical worker. In line with recommendations concerning expanded activities, a part-time professional librarian also provides cataloging services. Other criteria are also met, such as a basic collection to address immediate needs, use of outside resources as necessary, provision of reference services including literature searches, periodical collection management, cataloging the collection for ease of use, publicizing services, and acting as a resource to other staff on related information management issues.

Three areas can be identified where the new facility falls short of the SLA standards. One of these is the idea of centralizing the collection to improve access to resources. This has not been feasible due to space constraints—the second deficiency. Whether added space in the future will lead to collection centralization remains to be seen, as well-established patterns of use have created dispersed office collections. This problem is being met to some degree by providing a catalog of all Association resources indicating their location.

While the shortage of physical space has made it difficult to provide comfortably for services, storage, technical processing, and equipment, this situation has not prevented the effective execution of essential tasks; however, it could be a limiting factor to further growth.

The third weak area, that of budget, has shown some improvement, but prior commitments by other staff members have reduced the extent to which the library can exercise responsibility and authority over library expenditures. However, the proportion of salaries to overall budget is 65%, which falls into the normal range indicated in the *Objectives,* and there are adequate funds for most essential activities.

Compared with the survey results published in *New Special Libraries,* the development of the Aluminum Association facility has been similar to that of other new libraries. In several areas there seem to be interesting similarities and differences: The experience confirms the study's findings that new special libraries begin in organizations where management realizes that it needs better access to information. However, unlike 80.4% of the libraries in the study, there was no "trigger" event; rather, the idea for the information center evolved over several years, with input from members and staff.

Another interesting difference is the Association's use of established library channels in getting started. At the suggestion of member company librarians, the SLA Consultation Service was contacted. After a one-half day consultation, SLA recommended that a paid consultant be hired and provided a list of qualified library consultants. The librarian position was also advertised through library channels: specifically, SLA placement at the 1980 SLA Annual Conference held in Washington, D.C. and the Metropolitan Washington Library Council Jobline.

Joint establishment of goals with management—a factor seen as an element in successful libraries—was also a key element, using the basic planning document and responding to the organization's needs. Many areas of effort were suggested, but there was a clear

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* Special Libraries Association/*Objectives for Special Libraries.* New York, Special Libraries Association, 1964.

† Special Libraries Association, Illinois Chapter/*New Special Libraries.* New York, Special Libraries Association, 1980.

perception that some had to be deferred as lower priority.

From the beginning, management knew it wanted information services, as well as organization of resources. While there were "friends at the top" and a strong management commitment, there was also wide support throughout the organization for the library. The organization hired an experienced librarian who was given the title of manager of the information center, which clearly established professional status for the position. While there were some organizational changes, these were in the nature of strengthening the line of command rather than altering it. User groups were clearly defined. All these factors are shown to be highly important in the Illinois study.

The study also deals with the economic factors of adequate staff, budget and space, and rates these as highly important. As mentioned earlier, staff was increased within 18 months and the budget, while not as clear cut as it could be, is adequate to carry out the major functions of the special library. Although space continues to be a problem, it is likely that this remaining constraint will be relieved in the near future.

One important resource which neither document mentions is the access to computer facilities and other information technology. The use of the computer and word processing resources was not only available but encouraged. This is certain to play a major role in the success of the facility in that it improves library operations, provides the opportunity to increase the level of participation in the organization's activities, and enhances the image of the librarian as a manager of information.

Having a concrete proposal for the establishment and activities of a new information center proved to be an essential ingredient to the success of the center. It clearly set out goals, priorities, resource requirements, and a suggested timetable. While actual development deviated in some ways from the plan, changes were in response to organizational needs and constraints.

The plan provided a baseline from which to work and made the organization sensitive to the complexities of establishing an information center, thus permitting the new information center manager to concentrate on making appropriate modifications to the plan. Because the organization viewed the proposal as a starting point and a general framework, the manager, working with the staff information team, felt free to alter the plan to be as responsive as possible to the changing needs of the organization. Based on the comparisons with the two documents referenced, the Aluminum Association's Information Center seems to contain the factors needed for continued success.

Received for review Apr 16, 1981. Revised manuscript accepted for publication Apr 20, 1982.

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Visiting Special Libraries in Greece

A Few Surprises for the Western Librarian

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■ Through personal visits to selected libraries in Greece, an attempt was made to learn something of Greek attitudes about libraries and librarianship. By describing some of the libraries visited, the author gives his impressions of certain aspects of Greek librarianship.

THE PROSPECT of touring Greece with an eye to some professional visits is an attractive one, and when I discovered that I was going to be in Greece for several weeks, giving me time for serious meetings with a number of Greek librarians, I determined to take advantage of the situation. However, as I tried to learn more about libraries in Greece, I began to wonder what I would find when I got there, for the literature is sadly lacking in references to Greek librarians.

Although there are some few works which describe the libraries of ancient Greece, and two articles were published in *Leads*, the newsletter of the American Library Association's International Relations Roundtable, no major library publication has printed any articles on Greek librarianship. Even UNESCO's *Statistical Yearbook* contains no listings for Greek libraries since, according to the staff, no library statistics for Greece are reported to the compilers. The only reliable source appears to be *The World of Learning*, which lists libraries, addresses, and other useful information for the prospective visitor. Thus, it appears that for professional librarians who want to learn something about libraries in Greece, there is little they can do other than to go there. I decided to try to find the time and the energy to search out some Greek libraries, to see if I could discover something about the way the Greeks look at libraries and librarianship.

I chose to do this by visiting libraries which we would identify as special libraries—those in museums, technical societies, private schools, agencies (or cultural institutions) of foreign governments, and organizations which keep and protect valuable rare book and archival collections. These libraries adhere most successfully to the concept of service *as we know it*. Since there are some libraries in Greece that do not hold such a purpose, those that do are worth a visit. In these libraries, the guiding rule would seem to be that the user must be matched up with the material he needs, no matter how obscure his request or how infrequently requests are made. The user's need to obtain the requested information is considered to be more important than the simple preservation of the collection. If it is a private school library, such as the one at Athens College, a conscious decision has been made to get the books to the students, quickly and in whatever form possible, to ensure that the students learn. Likewise, if it is a collection in a monastery miles (by sea or land) from Athens, a decision has been made to allow serious scholars—men and women alike—to come in, upon written application, and study at their leisure precious manuscripts and other historic treasures.

One fact which soon becomes apparent when visiting libraries in Greece is a cultural difference between the Greeks and those of us who live in other Western countries and the important role this cultural difference plays in our perceptions of Greek libraries and librarianship. Because so much of what we call "Western" civilization originated in ancient Greece, the visitor from the West (assuming that he is not a specialist in modern Greek studies) is often surprised to find things so different. Certainly I was surprised, and conversations with fellow travellers revealed that they, too, had begun their trips to Greece with preconceived ideas about similarities between our two cultures. But we are not alike, and the differences show up especially in the fields of education and librarianship. Our approaches to service, our methodologies, indeed, even our systems of support, are quite dissimilar.

The concept of service is different from ours because, for most Greeks, library service is a privilege, not a right to be automatically expected. This attitude is derived, in part, from a cultural tradition, much different from ours, in which books and the accouterments of learning were not the commonplace, disposable things they are for many of us. For most Greeks, living in a society not too many generations removed from an almost totally agrarian culture and one in which education and reading itself were often restricted to a small minority, books are still very precious things. In such a culture, as in some other European countries, a system of accountability developed in which the librarian, not the user, was made responsible for each specific book. The librarian, fellow colleagues, and the governing body worked together to protect the books; only those who were specifically approved or recommended, or who had some other valid reason, would be allowed to use the materials. I had not been aware of this practice, but it was described by several colleagues I visited. In Greece, one doesn't assume that one can just walk into a library and find the kind of service one expects in America or England or other Western countries.

Technical Chamber of Greece

There are, happily, libraries which no longer follow this tradition, and I visited several of these. One of the most striking is the Technical Chamber of Greece—also known, as is frequently the case in Greece, by its French name, Chambre Technique de Grèce. The library has approximately 17,000 volumes, specializing in architecture, city planning, mechanics, engineering, and similar technical subjects. Located in an office building at 23-25 Lekka in Athens (in a space separate from the Chamber itself), the periodicals (the bulk of the collection) and books are shelved in an easily accessed arrangement, and the emphasis is on up-to-date materials.

As a technical library, there is little interest in retaining an historical collection, and since most of the collection consists of periodical literature, it is the more current literature which is consulted. There is a small reading room, and while users are encouraged to use the materials at the library, some items circulate. Security is not a major concern, and if a journal occasionally disappears the librarians have a curious and particularly Greek way of looking at it: They regret the loss but, instead of being upset, they shrug it off because, in a technical library, the journal would have become out-dated anyway. Obviously, only a technical library can afford the luxury of such a refreshing attitude!

The staff at the library of the Technical Chamber is extremely courteous and efficient, even during a busy period when, among other users, several architectural students may arrive seeking great quantities of material. The collection is easy to use. The library publishes its periodical holdings in a handsome annual volume, and though the library is private (as part of the Technical Chamber), it is open to any serious user who needs its special resources. Like other such private institutions, the library of the Technical Chamber serves a clientele that, in another country, would more probably be served by a public or university library. In Greece, such special service to nonmember users is common, and the administrators of private institutions, in most cases, are genuinely pleased to open their collections to nonmembers.

British Council Library

Another example of a special library serving as a quasi public library is the British Council Library (17 Plateia Philikis Etairias, Athens), in the beautiful neighborhood surrounding Kolonaki Square. According to the librarian, Julie Carpenter, "The Athens library, though small (approximately 20,000 volumes) holds an important position in librarianship in Greece, where public libraries are not well-developed." It aims to be an "example of good British librarianship practice within the constraints of space and available funding."

The library is heavily used by Athenians—5% of the city's residents are members. The selection of English-language materials available for use and loan is comprehensive; all materials are by English authors or about England. The library serves as the primary public library for English-speaking Athenians; one has to be a member to borrow books, but anyone may come into the busy reference library on a separate floor and seek information. In fact, anyone may enter the building almost at will, although security has been tight since the recent bombing of the Council's branch library in Thessaloniki (the result of tensions in Northern Ireland, some 1,900 miles away!).

Because the British Council Library strives to be exemplary, the standards of service are extremely high. There are space problems, but in all other respects the library succeeds in meeting the Council's mandate and is one of the most attractive and pleasant libraries in the country.

Gennadius Library

For the professional visitor who wants to see a well-run, scholarly library specializing in rare books attractively displayed, as well as a fine collection of watercolors, paintings, and other art works, the place to go is the Gennadius Library attached to the American School of Classical Studies (Odos Souidias 61, Athens). The main entrance of the library, a handsome classical building set back in an attractive garden, opens directly into a main reading area where scholars and other users sit quietly at tables studying the rare books and research materials. The library's 70,000 volumes cover primarily Greek art and history, including many early travel accounts. Memorabilia of the poet George Seferis, including the Nobel Prize he was awarded in 1963, is on display, as well as memorabilia of other poets and writers, including Lord Byron.

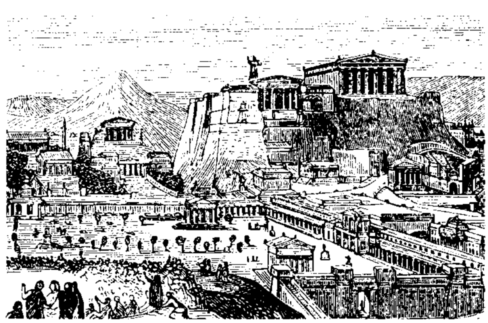
Athens College Library

It may seem somewhat inappropriate to describe a school library in a discussion of special libraries, but one such library is an important part of Greek librarianship and should be known: the 45,000-volume library at Athens College in the suburb of Psychico. Despite its name, Athens College is not a college in our sense of the word but a private school for Greek students, beginning with the first grade and continuing one year beyond the secondary level. It was founded in 1925 by a small group of public-spirited Athenians, soon joined in their efforts by a distinguished group of American philhellenes. The school's purpose, according to President John Summerskill, is "to provide the finest possible academic training and at the same time build character and effective citizenship."

The curriculum is demanding, and the high level of academic standards is reflected in the success of the school's alumni. They are known for the high scores they earn in the competitive entrance examinations for Greek, American, and British universities. The College's alumni consistently make up the majority of the nation's political and business leaders (including the Prime Minister, Andreas Papandreou).

The library, with branches at the elementary school near the main campus at Psychico and at the College's Kantza campus, is a gift of the government and the people of the United States. It is a well-run facility in an attractive modern building. The library's administrative structure, primarily the creation of George Cacouris, former librarian and now the College's Director of Administrative Services, utilizes American techniques to serve the College's faculty and students. The collection is broad, reflecting the College's concern with blending the ideal of liberal education with, in Summerskill's words, "the kind of specialized knowledge demanded of students as they seek admission to institutions of higher learning."

The emphasis on service to its users is immediately evident as one walks into the Athens College Library. The large, well-lit room is open to the beautiful campus by windows on all sides, and the collection is shelved on open, labelled shelves which students and staff can browse at will (closed stacks and storage areas are on other floors). The card catalog, in Greek and English, reflects the bicultural approach of the College. It is accessible, and there is some thought about a computerized catalogue in the future. The College's 2,600 students and 200 faculty are served by enthusiastic and interested librarians. The special ambiance of the library is one of excitement and energy.



Technical processing is geared toward prompt delivery and speed and service. While short cuts are taken which might not suit some librarians' ways of thinking—for example, many European books are published unbound, and the library processes them through quickly to students and faculty, delaying the binding work until it is convenient for the users—the primary aim of delivering the materials to the users as quickly as possible is obviously paying off in satisfaction on all sides.

Cacouris admits that, occasionally, the library staff has to prod the faculty to turn to the library with some of its requests, but this situation is resolved without friction because the service has built up a mutual respect between the library and its users. Obviously Cacouris, who is one of the leaders in Greek librarianship and has worked hard to establish relationships between professional librarians in the Athens area, must be credited with the vision and foresight that has resulted in this unique library situation. When Americans and Greeks alike refer to Athens College as having "the best library of its kind in Greece," the accolade is founded on good, solid service to the College and its community.

Theological Libraries

Any discussion of special libraries in Greece is not complete without reference to what might be called theological libraries, the treasure houses of rare books and manuscripts in the monasteries at Mt. Athos, Meteora, and Patmos. These libraries are open to serious scholars upon written application. While the monasteries are most famous for the Byzantine art, frescoes, ecclesiastical jewelry and vestments and similar works, practically all have libraries.

One of the most carefully organized collections is at the Monastery of St. John the Theologian, in the town of Chora on the island of Patmos. Not to be confused with the Library and Treasury, a display gallery where many of the monastery's valuable art works are on view, the library proper is housed deep inside the monastery, complete with proper atmospheric and security controls. There are usually two or three scholars working at the study tables, and the atmosphere is one of quiet, serious work. The surroundings are pleasant, and the furniture and equipment are modern and attractive. A photography laboratory produces slides, photographs, and microfilms which the library provides to scholars all over the world

One is also impressed with the friendliness of the librarian in charge and the pride with which he shows the professional visitor through the facility (tourists are not received in the library). The monastery was founded in 1088, and some of the fascinating and valuable materials to be seen there include a codex of *The Gospel of St. Mark,* dating from the 6th century, composed of 33 very thin, porphyry pages in parchment with the copying in large, round silver letters; a *Book of Job* from the 8th century; printed books dating back to 1494; documents connected with the Byzantine period (1073-1453); and, of special interest to visiting librarians, catalogs of the library, including one dating back to 1200.

One can see a concept of service in operation in some Greek libraries, particularly those special libraries that were created to serve a clientele which is not served by a public or governmental institution. Other libraries offer more limited services than the special libraries described. In many parts of the country there are small libraries, such as those in Ithaki, Zakinthos, or other outlying provinces, that are usually the result of bequests of private collections to the province or town by earlier citizens.

The picture of librarianship in Greece at the present time is much different than ours. Because our culture is so unlike that of the Greeks, library service is also different. Greece is a poor country, and as yet there has been no major governmental mandate to develop or support libraries. In addition, there is little philanthropy in Greece directed specifically toward libraries and librarianship. Consequently, librarians are frequently left to their own devices; some succeed and others don't. If service to the public does exist in some pockets of organized library service, it is to these libraries that serious users must turn.

Received for review Nov 12, 1981. Revised manuscript accepted for publication Mar 23, 1982.

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Vertical Map Storage

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■ The traditional storage method for maps has been placement in horizontal drawers. Examination of library literature indicates that other methods of storage are available but that drawer storage is preferred. Contrary to general assumptions, vertical filing of maps in compressor-style vertical units is superior to horizontal filing in terms of physical protection of the collection, ease of filing and retrieval, and efficient use of space.

ONE OF THE MOST perplexing problems associated with map collections is that of storage. The ultimate storage method is one which protects the maps from physical and chemical damage and provides easy access to any given item. The search for a better storage method has led to the development of a number of ways to file maps but the most common way is to file them flat in large drawers. An alternative to filing maps horizontally is to file them vertically, and there are a number of different vertical methods that may be used. One excellent method, that of compressor-style vertical filing, receives scant mention in the literature. As a result, many librarians are unaware of how a vertical unit looks or functions.

Compressor-style vertical units resemble freezer chests (opening from the top) and contain a system of springs, steel belts, and folders. Sixty folders hold the maps, and the springs and belts support the folders in an upright position. Maps stored in these units do not need holes punched in them or material strips attached to them for hanging as in suspension vertical filing.

Compared to traditional storage methods, compressor-style vertical filing offers a number of advantages, in this author's experience. Vertically filing in a compressor-style unit, such as the Ulrich Planfile, reduces physical damage to the maps, protects against fire and water damage, keeps the maps neat, improves user access, and shortens the filing time. Additionally, storage space is increased, and the units are mobile even when fully loaded.

Damage to Maps

Damage can occur at any time in the life of a map, sometimes accidently and sometimes deliberately. The simple act of stacking and moving maps raises the danger of ripping and tearing since anyone can over-estimate the number of maps that can be safely moved at one time. Folding maps to fit into drawers or portfolios weakens the paper, predisposing it to tearing at a later date. Cross-folding maps encourages holes to form where the folds intersect and makes the extraction of maps even more difficult than usual. The tendency for maps to creep to the back of a drawer leads to wrinkling, creasing, and curling. Edge damage, a major problem, is caused when maps catch on the interior of the map drawers or onto each other during extraction, or when maps are held by their edges while searching a drawer. The folding of maps during processing may be necessary, but it is damaging nonetheless and leads inevitably to more damage. Much of the damage to maps caused by using traditional drawer storage can be eliminated by changing to vertical storage in a Planfile unit (see Fig. 1).

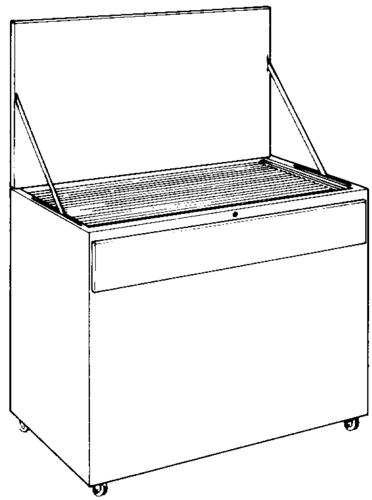
Advantages of Vertical Filing Methods

The primary reasons for preferring vertical storage in a Planfile are: reduction of physical damage to the maps, increased ease of access to the collection, reduction of time needed for filing, and increased storage capacity.

Reduction of Physical Damage

The damage caused by map drawers as a result of necessary folding of maps, by shifting of maps within the drawers, or by improper filing or retrieval methods is unavoidable. In Planfiles this damage is less likely to occur. Maps cannot creep to the back of a drawer, since there are no drawers, and they do not creep to the bottom of the folders to

Figure 1. Ulrich Planfile.



become crushed unless the folder is completely extracted from the Planfile. Crushing can be deliberately caused but it is not a normal hazard since springs and belts provide support to the folders adequate to prevent its occurrence.

The amount of folding necessary for storage, if it is necessary, depends upon the size of the map and the size of the drawer into which it must be placed. Lyon's drawers are used at Oregon State University. These 5-drawer units have an interior drawer measurement of 32"h × 43"w (81 cm × 109 cm) which results in the folding of a large percentage of maps due to inadequate drawer space. There are other manufacturers of map drawers in the United States which provide units with larger dimension drawers, such as the Hamilton and the Mayline companies. The Ulrich Planfiles are available in a number of sizes and may be equipped with full, half, or custom size folders. Table 1 contains a selective list of drawer and Planfile dimensions for comparison.

Fire and Flood Protection

Although they are not common occurrences, fires and floods do happen, and protection against them should be considered. The Ulrich Planfile is of double-walled steel construction with air and insulation between its walls. The manufacturer states that the combination of 3/8" fiberglass insulation and dead air protects the contents for at least sixty (60) minutes at 550°F (minimum wood burning temperature). The case also has a lip which extends into the lid when it is closed. This lip prevents water from seeping into the case as water runs off the lid. Since the lip of the Ulrich Planfile no. 4836 is 43" from the floor, flooding would have to be severe to allow water into a case. As long as the map cases are closed, they are protected from fire and water damage. Map drawers of steel construction cannot make this claim.

Filing and Retrieval

Filing and removal of maps stored in drawers is awkward. Maps must be supported by one hand and filed or removed with the other, or the drawers must be partially emptied each time the item is removed or returned to file. If the maps are folded there is the additional danger that they may catch onto other maps and tear them or be torn themselves. Filing and retrieving maps in a Planfile is much faster and easier. To remove a map, the appropriate storage folder is located and extracted three-quarters of the way out of the case. The folder is opened and the desired map is located and removed. The folder is closed and returned to its storage position. To file a map the same procedure is followed. Each time it is necessary to handle only one map—a savings in time and effort every time a map is consulted. An additional benefit is that maps may be examined without being removed from the case at all because when the folder is partially extracted a majority of the map is visible.

Space Savings

Map collections usually suffer from lack of storage space; therefore, a useful storage method must be space efficient. Drawers have always seemed to be the best storage method because they can be stacked on top of each other. Although Planfiles cannot be stacked because they open from the top, they

Table 1. Comparative Drawer and Planfile Cabinet Dimensions.

	Number	Description	Outside cabinet			Inside drawer or folder		
Hamilton			w	d	h	w	d	h
	1J15	5-drawer	43"	32"	15"	39"	29"	2"
	1J100	10-drawer	43"	32"	15"	37"	25-29"	3/4"
	2J15	5-drawer	49"	38"	15"	45"	35"	2"
	2J100	10-drawer	49"	38"	15"	43"	30-35"	3/4"
	3J15	5-drawer	55"	44"	15"	51"	41"	2"
	3J100	10-drawer	55"	44"	15"	49"	34-41"	3/4"
	4J15	5-drawer	79"	50"	15"	75"	47"	1 1/2"
Mayline								
	7767C	5-drawer	41"	28"	15"	37"	26"	2"
	7768C	5-drawer	47"	35"	15"	43"	33"	2"
	7769C	5-drawer	54"	41"	15"	50"	39"	2"
Ulrich Planfiles			w	h	deep	w	h	
	3624	Planfile	43"	35"	31"	38"	28"	
	4230	Planfile	49"	41"	31"	44"	34"	
	4836	Planfile	55"	45"	31"	50"	38"	
	5624	Planfile	63"	35"	31"	58"	28"	
	5636	Planfile	63"	45"	31"	58"	38"	

Note: Some dimensions have been rounded out. For exact measurements, check with manufacturers.

require less floor space, which means more units can be placed in the same square footage, and Planfiles do not need wide aisles. Since no drawers have to be pulled out into the aisle, 40" is more than sufficient as an aisle allowance. At Oregon State University the drawer units are 72" apart to allow facing drawers to be opened at the same time.

Libraries occasionally move, and it is usually a terrible experience. It is especially awkward if the map collection is housed in drawers. Drawers are heavy, bulky, and subject to binding when moved.

Ulrich Planfiles are on wheels and are meant to be mobile, especially when fully loaded. They are large and move slowly over carpeting. It requires two individuals to handle an Ulrich Planfile, but it can be moved without additional moving equipment.

When the Ulrich Planfiles were received at Oregon State University they were left on the loading dock near the Map Room. After removing the protective cartons, the files were moved off the wooden pallets and rolled into the reference room in less than five minutes. Later, as shelving was shifted, they were moved around the Map Room by staff without having to call maintenance for assistance.

Disadvantages of Vertical Filing Methods

The disadvantages of filing vertically are more imagined than real if the equipment is properly used, but the same old criticisms are often repeated. Vertical filing is said to be physically exhausting to use, the maps become damaged by slumping to the bottom of the folders, the tops of the cases are always messy or cannot be used for workspace, and the vertical units are too expensive to use because they cannot store as many maps as drawers. The library literature is full of reasons not to change from horizontal to vertical storage.

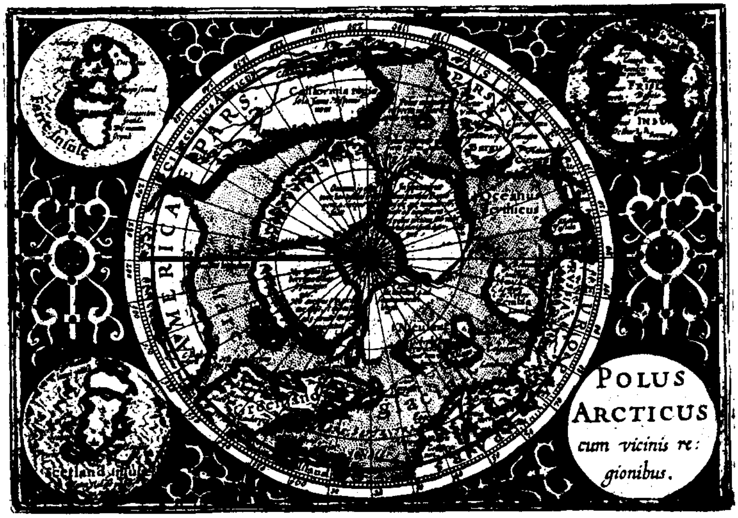
Amount of Effort Needed

One myth regarding Planfiles is that it takes a great deal of effort to extract or replace folders, especially those at the back of the case. This might be true if the folders are overpacked or if the person accessing them is extremely short or weak. It is also true that considerable effort is involved in handling overpacked map drawers. If care is taken not to overpack the folders, raising or lowering them is not difficult and there is no need to refrain from filing in all the folders. Map folders should not be jerked out. A slow, steady pull is usually sufficient, although sometimes a slight rocking motion of the folder is required. Flexing (or bowing) the folders helps to return them to their storage position if gravity is not sufficient. The Planfiles may be purchased with an optional foot step that folds up when not in use. This step does make access to the rear folders easier but its purchase is not essential, especially on the smaller units.

Map Damage

A major criticism is that removing a folder from the case causes the maps to slump to the bottom in a heap, thus damaging the maps. If used correctly, folders are never removed from the case, thereby eliminating this type of damage. The interior system of springs and belts within the case supports the folders and the maps. The folders need only be extracted three-quarters of the way from the case, and all of the maps may be viewed by flipping them forward one at a time.

There is no need to remove 50 to 100 maps each time you want one or two. Again, the criticism includes the idea that small maps will fall to the bottom and cause a bulge, thus making the folder difficult to extract. Tiny maps should be mounted so they are visible when the folder is three-quarters extracted from the case. This would be done for maps placed into drawers, as



Public Archives Canada

well. As long as the folders are not totally extracted from the case there will be no problem of maps slumping and causing the folders to bulge.

Workspace

Another criticism is that the tops of Planfiles cannot be used for workspace and that they are always cluttered with maps which have to be moved for the collection to be accessed. The exact height of the top of a Planfile depends upon which model is discussed. For instance, the top of model 4836 is 45″ above the floor (its reference shelf is 43″ above the floor). This height is adequate for map consultation while standing. The tops of the Planfiles are not meant for permanent map storage nor should they be used as a refiling area. Separate refiling areas should be provided rather than using closed Planfiles or the tops of map drawer units. This should not be considered a big problem since maps should be refiled as soon as possible, no matter what storage system is in use.

Filing Maps of Varying Sizes

It is often stated that Planfile units are only useful for filing map series of the same size. This is not the case. The University of Arizona has its entire collection stored in Ulrich Planfiles, using the Library of Congress Classification System. Maps are filed without regard to their size. The 7.5′ and 15′ USGS topographic sheets are filed separately, but this is because they are filed by state and then alphabetically by quadrangle name, not because of any size constraint. Size is not a determining factor in Planfiles vertical storage.

Space and Cost Constraints

The two most quoted criticisms are that vertical storage is more expensive than drawer storage and does not offer as much potential storage space because the units cannot be stacked. It is true that Planfiles cannot be stacked on top of each other. This is not a disadvantage; it is a difference. As to the exact number of maps that can be stored in Planfiles versus drawers, this depends upon the thickness and weight of the maps. Maps which are mounted on chartex, encapsulated, or folded take up more space and/or weigh more than maps which are single pieces of paper. These physical characteristics determine the number of maps which may be stored in any piece of equipment.

An Ulrich Planfile comes with 60 folders— 120 folders if they are the half-size variety. It is suggested that 50 to 100 maps be filed in each folder, depending upon weight and whether the cases are to be used for active or dead storage. At Oregon State University, there are 120 folders per case and approximately 45 to 50 maps per folder. This results in storage of 5,400 to 6,000 USGS topographic maps in 42 cubic feet of space (the exterior of Planfile model 4836 is 42″H × 55″W × 31″D).

Comparing storage potential and actual cost must be done on an individual basis. Ulrich Planfiles are not inexpensive but they come ready to be used with their folders in place. Drawer units do not come with kraft paper folders. It takes staff time and additional money to assemble folders, and the units may have to be assembled on-site.

Recommendations

Compressor-style vertical filing of maps is an improvement over horizontal filing. Tradition has encouraged map librarians to use drawers too long. The literature critical of compressor-style vertical filing could not have been written by persons who used the cases properly. Do not hesitate to contact a librarian who is using this method of filing—get the word from a primary source. If you have the older predecessor of the Planfile, the Art Metal case, turn it into a pseudo-Planfile by buying new folders with the handholds and by not overpacking. The maps can become easily accessible when the equipment is properly used. Vertical filing is not the same as horizontal filing—it has its idiosyncrasies—but it is better for your maps, your back, and your temper.

Information concerning exact specifications of the equipment mentioned may be obtained by writing:

American Hamilton, Division of American Hospital Supply Company, 1316 18 St., Two Rivers, WI 54241.

Mayline Company, Inc., Sheboygan, WI 53081

Ulrich Planfiling Equipment Corporation, 2120 Fourth Avenue, Lakewood, NY 14750.

Received for review Sep 8, 1981. Revised manuscript accepted for publication Mar 30, 1982.

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STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCES
YEAR ENDED DECEMBER 31, 1981

	Total All Funds	General Fund	Nonserial Publications Fund	Scholarship Fund	Special Programs Fund	Research Grants-In-Aid Fund (Note 5)
Revenues						
Dues and fees	$ 585,837	$585,837				
Subscriptions and advertising	151,363	151,363				
Net receipts from conference, less allocation below	124,900	122,503		$ 2,397		
Net receipts from education program	31,471	31,471				
Net receipts from mailing list service program	29,697	29,697				
Interest, dividends and net gain on sales of investments	73,314	61,975	$ 1,730	8,949	$ 433	$ 227
Sales of nonserial publications	46,166		46,166			
Gifts	16,638	3,500		12,353	785	
Miscellaneous	3,394	1,680		1,595		
Unrealized loss in short-term marketable securities	(12,944)	(8,544)		(4,400)		
	1,049,836	979,482	47,896	20,894	1,218	346
Costs and expenses						
Allotment of funds to subunits	135,718	135,718				
Salaries, wages and benefits (Note 1)	369,351	368,381		970		
Office services and occupancy costs	140,048	140,048				
Professional fees and services	28,545	28,545				
Travel and entertainment	37,522	37,522				
Member services and promotion	94,436	94,436				
Costs of periodical publications sold, including allocation below	213,091	213,091				
Costs of nonserial publications	29,272		29,272			
Scholarships and stipends	15,000			15,000		
Miscellaneous	8,233	4,907		1,222		2,104
Depreciation	12,391	12,391				
Allocation of above expenses to						
Costs of periodical publications	(69,906)	(69,906)				
Conference	(35,884)	(35,884)				
Other funds and programs	(27,627)	(58,901)	30,005	1,269		
	950,190	870,348	59,277	18,461		2,104
Excess (deficiency) of revenue over expenses before income taxes	**99,646**	**109,134**	**(11,381)**	**2,433**	**1,218**	**(1,758)**
Provision for income taxes (Note 1)	**8,619**	**8,619**				
Excess (deficiency) of revenue over expenses	**91,027**	**100,515**	**(11,381)**	**2,433**	**1,218**	**(1,758)**
Fund balances—beginning	**539,574**	**345,634**	**73,912**	**111,381**	**4,440**	**4,207**
Fund transfers		**(15,000)**			**17,449**	**(2,449)**
Fund balances—end	**$ 630,601**	**$431,149**	**$62,531**	**$113,814**	**$23,107**	**$ -0-**

See accompanying notes to financial statements.

STATEMENT OF ASSETS, LIABILITIES AND FUND BALANCES
DECEMBER 31, 1981

ASSETS	Total All Funds	General Fund	Nonserial Publications Fund	Scholarship Fund	Special Programs Fund
Current assets					
Cash (Note 2)	$ 483,208	$414,800	$ 18,026	$ 27,264	$ 23,118
Marketable securities, at market (Notes 1 and 3)	187,698	123,879		63,819	
Accounts receivable, net of provision for doubtful accounts of $4,100 in General Fund, $1,000 in Nonserial Publications Fund and $39 in Scholarship Fund	32,179	24,421	6,825	933	
Interfund receivable (payable)		63,426	(64,653)	1,204	23
Inventory of nonserial publications and insignia (Notes 1)	100,967		100,893	74	
Prepaid expenses	41,455	37,715	3,740		
Total current assets	845,507	664,241	64,831	93,294	23,141
Marketable securities, at cost (Note 1 and 3)	59,200	38,010		21,190	
Furniture and fixtures, at cost, net of accumulated depreciation of $28,177 (Note 1)	63,701	63,701			
Other assets	25,438	25,438			
	$ 993,846	$791,390	$ 64,831	$114,484	$ 23,141
LIABILITIES AND FUND BALANCES					
Current liabilities					
Subscriptions, dues, fees and contributions received *in advance* (Note 1)	$ 298,430	$297,726		$ 670	$ 34
Accounts payable—trade	46,021	46,021			
Withheld taxes and accrued expenses payable	9,894	7,594	$ 2,300		
Income taxes payable (Note 1)	8,900	8,900			
Total current liabilities	363,245	360,241	2,300	670	34
Lease commitment (Note 4)					
Fund balances	630,601	431,149	62,531	113,814	23,107
	$ 993,846	$791,390	$ 64,831	$114,484	$ 23,141

See accompanying notes to financial statements.

STATEMENT OF CHANGES IN FINANCIAL POSITION
YEAR ENDED DECEMBER 31, 1981

	Total All Funds	General Fund	Nonserial Publications Fund	Scholarship Fund	Special Programs Fund	Research Grants-In-Aid Fund
Funds provided						
Operations						
Excess (deficiency) of revenue over expenses	$ 91,027	$100,515	$(11,381)	$ 2,433	$ 1,218	$(1,758)
Charges not affecting working capital:						
Depreciation	15,925	15,925				
Funds provided by (applied to) operations	106,952	116,440	(11,381)	2,433	1,218	(1,758)
Decrease in marketable securities	9,957	7,634		2,323		
Transfers to Special Programs Fund		(15,000)			17,449	(2,449)
	116,909	109,074	(11,381)	4,756	18,667	(4,207)
Funds applied						
Purchases of furniture and fixtures	44,881	44,881				
Increase in other assets	2,048	2,048				
	46,929	46,929				
Increase (decrease) in working capital	$ 69,980	$ 62,145	$(11,381)	$ 4,756	$18,667	$(4,207)
The changes in working capital were represented by an increase (decrease) in:						
Current assets						
Cash	$ 89,744	$ 87,743	$(11,745)	$ (750)	$18,703	$(4,207)
Marketable securities, at market	15,598	11,789		3,809		
Accounts receivable	(13,716)	(16,919)	3,989	(786)		
Interfund receivable (payable)		45,579	(46,948)	1,399	(30)	
Inventory of nonserial publications and insignia	39,047		39,122	(75)		
Prepaid expenses	13,129	9,628	3,501			
	143,802	137,820	(12,081)	3,597	18,673	(4,207)
Current liabilities						
Subscriptions, dues, fees and contributions received in advance	89,417	89,070		341	6	
Accounts payable—trade	(14,250)	(14,250)				
Withheld taxes and accrued expenses payable	(1,688)	512	(700)	(1,500)		
Income taxes payable	343	343				
	73,822	75,675	(700)	(1,159)	6	
Increase (decrease) in working capital	$ 69,980	$ 62,145	$(11,381)	$ 4,756	$18,667	$(4,207)

See accompanying notes to financial statements.

Notes to Financial Statements

1. Summary of Significant Accounting Policies

The accounting policies that affect the significant elements of the Association's financial statements are summarized below.

Operations
The Association encourages and promotes the utilization of knowledge through the collection, organization and dissemination of information. It is an association of individuals and organizations with educational, scientific and technical interests in library and information science and technology.

Marketable Securities
The marketable securities of the General and Scholarship Funds are combined and managed as one fund for investment purposes, with participating percentages in income and gains and losses based on respective participation accounts at the end of the year. Marketable securities reflected as current assets are valued at the lower of cost or market and those reflected as noncurrent assets are valued at cost. It is the Association's intention not to utilize the noncurrent portion of these assets in the normal course of operations.

Inventory
Inventory of nonserial publications and insignia is stated at the lower of average cost of market.

Depreciation
Depreciation of furniture and fixtures is provided on the straight-line and accelerated basis at various rates calculated to extinguish the book values of the respective assets over their estimated useful lives.

Subscriptions, Dues and Fees
Except for subscriptions to the periodicals *Specialist* and *Special Libraries*, membership in the Association is based on either a December 31 or June 30 year. Dues, fees and subscriptions are credited to income as earned.

Pensions
The Association has a contributory group annuity defined contribution retirement program with an insurance company covering substantially all qualified employees. There is no unfunded past service cost to be paid by the Association. Pension expense for the year was approximately $16,700.

Donated Services
A significant amount of the Association's functions are conducted by unpaid volunteer officers and committees. The value of this contributed time is not reflected in the accompanying financial statements because it is not susceptible to objective measurement or valuation.

Income Taxes
The provision for income taxes is based on unrelated business income, which consists of net advertising income and net mailing list service income. The Association's remaining activities are exempt from Federal income taxes under Section 501 of the Internal Revenue Code.

2. Cash

The Association's total cash assets include $385,897 in savings accounts, of which $251,959 is in time deposit accounts which have maturity dates ranging from April 1985 through July 1988 and are subject to interest penalties upon early withdrawal.

3. Marketable Securities

See Table 1 on next page.

4. Lease Commitment

The Association occupies offices under a noncancellable operating lease which expires in 1987. The lease provides for minimum annual rentals $24,000, plus certain taxes and maintenance costs.

5. Research Grants-in-Aid Fund

In October 1981, the Board of Directors of the Association authorized the abolishment of the Research Grants-In-Aid Fund and the transfer of its remaining assets to the Special Program Fund.

Financing Online Search Services in Publicly Supported Libraries, by Mary Jo Lynch. Chicago, ALA, 1981. $2.00 (pbk.) ISBN 0-83893-270-3

This report does not attempt to champion either side of the "free or fee" controversy; it does seek to provide information on the current status of financing online search services in publicly supported or nonprofit libraries. It is meant to provide information to those interested in starting, improving, or expanding their online search service.

Although the survey distribution methodology was not scientific, the resultant 985 responses create an interesting picture of how a large number of publicly supported libraries finance their online search services. Some specifics: Over 70% of responding libraries charge fees; libraries charge users primarily for the direct costs of the online search services (e.g., communication, connect time, printing) while absorbing costs of overhead, general operating, start-up, and staff time. When asked whether they have collected data regarding the effect of the fee on the volume of use, only 20 of the 985 libraries responded positively. Additionally, only 18% of the respondents affirmed that they have analyzed the characteristics of online users. Yet ironically, when asked, "In your opinion, how do users, searchers, and library administration feel about the method of financing library online services", respondents of both persuasions (fee and free) overwhelmingly believe that users, searchers, and administrators feel positive about their financing methods.

When asked about factors which played a major role in the decision regarding financing of online services, both libraries charging fees and those not charging fees mention "level of funding available" as their primary consideration. The second highest factor, again in both types of libraries, is "need for a simple system."

The *Report* is a worthwhile investment for those presently involved in online services financing. It is brief enough to be read in one sitting, yet gives a good indication of how the issue is handled today by libraries throughout the United States. Tables are included to show detailed analyses of returns. A "Supplemental Report on Fee Structures" examines 383 fee schedules submitted by respondents. An excellent essay review of the literature and a list of 37 citations completes the *Report*.

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Advances in Library Administration and Organization, Volume 1, Gerard B. McCabe, Bernard Kreissman, and W. Carl Jackson, eds. Greenwich, Conn. and London, JAI Press, 1982. $34.50 cloth. 148 p. ISBN 0-89232-213-6.

The subjects within the scope of this new series are as diverse as the interests of the profession. An unstated emphasis, evidenced by the affiliations of the editors and authors, is to present topics from the perspective of academic librarians. The "Introduction" is a well-written summary of the state-of-the-art of published library research.

The series, however, lacks a stated focus or direction. It seems that each volume is simply to be an accumulation of essays without a thematic focus. The contents of Volume 1 are more comparable to those of a number of journals which publish library research than to other book series.

Included are six essays covering personnel, library growth and development, automation, microforms, cataloging, and faculty status in academic libraries. The lengths of the essays vary from 12 to 58 pages, depending on the purposes and styles of the authors. Only one essay has an abstract. The longest essay, "RLIN and OCLC—Side by Side: Two Comparison Studies," by K. M. Dailey, G. Jaroff and D. Gray, reports findings in the Health Sciences Library and in the General Library of the University of California at Davis. It is the most detailed and analytical of the six essays, with charts and graphs to illustrate the findings.

Biographical sketches of the contributors are provided. An "Author Index" lists the biographical sketches and people mentioned in the essays in some significant manner (but not necessarily footnoted). One entry indexes the subject of an essay, Archibald Cary Coolidge. A "Subject Index" provides sketchy coverage of the contents of the essays. It does not list personal names unless they are attributed to some study or institution, such as the Golda Meir Library.

Special librarians and library managers in academic institutions should be aware of this volume and the series it initiates. Library schools should purcha: benefit from it for special interests, snouia be able to find references to it through standard library indexes. There are no instructions given for those who might be interested in submitting manuscripts for future volumes.

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Applications of Packaged Computer Programs. Michael Halperin, issue editor. *Drexel Library Quarterly* 17 (no. 1) Winter 1981. School of Library and Information Science, Drexel University. 119 p., Single issue price $6.00. LC 65-9911; ISSN 0012-6106. Coden DRLQBK.

This issue of the *Drexel Library Quarterly* contains six well-written, referenced, and edited articles addressing the use of packaged software for statistical or numeric manipulation and for text preparation and processing, particularly for producing collection guides.

The articles are all well-illustrated with screens or printouts showing input or output. After a brief introduction by the issue editor, the papers in order of inclusion are: "Measurement at the Reference Desk," by Howard D. White; "Use of Computer Programs to Produce Collection Guides," by Jack Pontius; "TPL (Table Producing Language) for Library Reports," by Michael Halperin; "Online Collection Statistics: A Comparison of BASIC and SAS," by Jack Slater; "A Library Application of the Apple VisiCalc Program," by Maureen E. Strazdon; "Using SPSS to Analyze Book Collection Data," by Charles T. Townley.

Although most of the papers presume no prior statistical or computer knowledge, users with introductory statistical backgrounds will find these papers easier to understand. However, any librarian possessed of a desire to learn and having the appropriate user reference manuals for the programs, along with some oral interaction with experienced users or those who are charged with helping users, can learn to use these or similar software packages for library applications.

The Pontius' article discusses the use of INTERACT, Cullinane Corporation's version of the WYLBUR text editor/job control system, and SCRIPT, an output text formatting program originated by the University of Waterloo. Although there are similar programs available on many computer systems, these illustrate well how complex software packages can be learned by a nonprogrammer and nonstatistically oriented user to produce either simple or complex products. Both packages are user friendly and are good examples of the kind of package first-time users may wish to learn before tackling statistical or file maintenance/application generator type software resources available in their computer environment.

Each of these papers has something to offer the special librarian, but perhaps of most interest to the smaller, specialized library will be the paper by Strazdon using Apple's VisiCalc for library statistics and budget analysis. Similar kinds of spread sheet programs exist for virtually all micros and also for minis. Since many companies and educational institutions have APPLE II systems, it only requires an expenditure of $150 to equip most of these machines to run the software, given the micro already has floppy disk and 32K or 48K memory.

This issue is highly recommended for any library with a basic professional collection or for addition, as a separately cataloged item, in libraries which do not already receive the journal on subscription, as a continuing item for their collections. Library educators will also want to use this as a reading and course material for management or automation courses.

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