

COLLEGE & RESEARCH LIBRARIES

MAY 1977

VOLUME 38

NUMBER 3

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College & Research Libraries is the official journal of the Association of College and Research Libraries, a division of the **American Library Association**. It is published seventeen times per year—six bimonthly journal issues and eleven monthly (combining July-August) News issues—at 1201-05 Bluff St., Fulton, MO 65251.

Manuscripts of articles and copies of books submitted for review should be sent to the Editor: Richard D. Johnson, James M. Milne Library, State University College, Oneonta, NY 13820.

Instructions for authors: Manuscripts should be in two copies and typed in double space. The title, name and affiliation of the author, and an abstract of 75 to 100 words should precede the article. Notes are to be consecutively numbered throughout the manuscript and typed in double space on separate sheets at the end. The journal follows **A Manual of Style**, 12th ed., rev. (Chicago: University of Chicago Press, 1969) in matters of bibliographic style; and recent issues of this journal may be consulted as well.

Material for the **News** issues should be sent to the News Editor: John V. Crowley, James M. Milne Library, State University College, Oneonta, NY 13820.

Production and Circulation office: 50 E. Huron St., Chicago, IL 60611. Advertising office: Leona Swiech, Advertising Traffic Co-

ordinator, 50 E. Huron St., Chicago, IL 60611. Change of address and subscription orders should be addressed to **College & Research Libraries**, for receipt at the above address, at least two months before the publication date of the effective issue.

Annual subscription price: to members of ACRL, \$7.50, included in membership dues; to nonmembers, \$15. Retroactive subscriptions not accepted. Single copies and back issues: journal issues, \$1.50 each; News issues, \$1 each.

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A partial list of the services indexing or abstracting the contents of **C&RL** includes: **Current Contents: Social & Behavioral Sciences; Current Index to Journals in Education; Information Science Abstracts; Library & Information Science Abstracts; Library Literature; and Social Sciences Citation Index**. Book reviews are included in **Book Review Digest, Book Review Index, and Current Book Review Citations**.

Second-class postage paid at Fulton, Mo.

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Quasi-Departmental Libraries

All 167 heads of academic units at the University of Minnesota Twin Cities campus were surveyed regarding department-sponsored libraries that are independent of the university library system, i.e., quasi-departmental libraries. A tripartite questionnaire was used to test two hypotheses and to gather operational data on these libraries. Some of these findings are presented, along with a description of the typical quasi-departmental library and some recommendations.

UNOFFICIAL "QUASI-DEPARTMENTAL LIBRARIES" sponsored by academic departments are a common phenomenon at most universities, yet they are seldom discussed in the literature of academic librarianship. Although there is adequate coverage of the broader issues of departmental libraries and centralization and decentralization, only a few studies were found that relate directly to quasi-departmental libraries.¹ University library administration principles note that decentralized departmental libraries are usually less efficient and more costly.² Few investigations into their origins have been conducted.

How and why do quasi-departmental libraries originate? What functions do they serve? What, if any, relationship is there between quasi-departmental libraries and the university library system? Answers to these questions would aid library administrators in assessing these libraries and the problems they present in long-term university library planning.

THE PRESENT STUDY

For purposes of this investigation the

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term "quasi-departmental library" is defined as "a collection or library initiated by and for faculty and students of a given department or combination of departments and *not* supported with university library funds or operated by university library staff," hereafter collectively referred to as "QD libraries." The term "academic unit" is used to distinguish teaching and research units from administrative units, such as the personnel department, the bursar's office, and plant services.

It was hypothesized that the emergence and/or maintenance of quasi-departmental libraries are related to the awareness, use of, and attitudes toward the services provided by the university library system. A second hypothesis stated that quasi-departmental libraries emerge out of a need, real or believed, for services not provided in the university library system.

In order to test the above hypotheses and to discover commonalities in origin, function, and the relationship of quasi-departmental libraries to the university library system at one institution, a tripartite questionnaire was sent to the 167 heads of academic—research and teaching—units at the University of Minnesota Twin Cities campus. The University of Minnesota was chosen as a case study because it exemplifies conditions common to most large universities: wide

geographical distribution of diversified colleges and numerous interdisciplinary studies.

The first part of the questionnaire was designed to determine the respondent's awareness of services currently offered by the university library system and was related to the first hypothesis regarding awareness of, use of, and attitudes toward university library services. Are department heads aware of the "gifts and exchange" section of the university library and its operation? How frequently do department chairpersons use the various services of the library and with what success ratio? How do they characterize the official library they use most frequently in terms of space, collection adequacy, environment, proximity, and courtesy of the staff?

The second part of the questionnaire elicited opinions regarding services not currently available in the university library system that might affect the rise of such independent libraries. This section tested the second hypothesis that such libraries emerge out of a need, real or believed, for services not provided in the university library system, necessitating supplemental holdings in departmental quarters under departmental control. What are the respondent's attitudes toward a possible document delivery system, photoduplication service, and an on-line computer terminal for bibliographic and location inquiry?

In the last part of the survey instrument, specific etiological and operational data regarding quasi-departmental libraries were obtained, such as age, holdings, and expenditures.

The respondents were divided into two groups: the WITHQD group (those *with* quasi-departmental libraries) and the NONQD group (those *without* quasi-departmental libraries). The differences in response patterns were compared. There were 108 usable returns: sixty-seven in the WITHQD group and

forty-one in the NONQD group. (From 167 departments originally solicited for information, a 74 percent response was received with eighteen responses unusable.) All tabulations were made on the university's Cyber 74 computer using the "Statistical Package for the Social Sciences" and its programs: codebook, condescriptive, and crosstabs.³

In the interest of brevity only a portion of the complete findings of the study are presented here, and the constraints and qualifications of the complete study have been omitted. The findings of this research might not be completely applicable to other institutions, although the University of Minnesota does seem to typify library conditions commonly found in most large universities.

The findings are presented in three parts, corresponding to the three sections of the study instrument. Two sections discuss the findings in relation to the first two hypotheses. The third section will include a profile of a typical QD library as derived from the responses regarding the operational data of QD libraries.

HYPOTHESIS I. AWARENESS OF, USE OF, AND ATTITUDES TOWARD UNIVERSITY LIBRARY SERVICES

Awareness of Library Services

The response patterns of heads of academic units did not support the hypothesis that QD libraries emerge because of unawareness of services provided by the university library system. The awareness of the "gifts and exchange" section could contribute, as a causal factor, to the origin of QD libraries. If departmental faculty were unaware of this channel, they might donate their books directly to their departments where they would be initially housed. The WITHQD group of respondents, however, was actually *more* aware of the library's gifts and exchange service

(84 percent indicated knowledge of the service compared to 64 percent of the NONQD group).

Use of Library Services

There was some support for the hypothesis that a relationship exists between use of university library services and the emergence and/or maintenance of QD libraries. Of the four time periods offered as choices, the modal response of the WITHQD group regarding frequency of use of the university libraries was only "once a month," while the modal response of the NONQD group was "once a week." The WITHQD group used the official library and its services less frequently than the NONQD group and also participated less frequently in the book selection process. It is difficult to judge which is the cause and which is the effect, i.e., does existence of a QD library in a department foster less use of library services or are department heads likely to maintain a QD library because they are dissatisfied with their experiences at the official library?

The latter explanation was supported by the response to a question regarding library search attempts and actual document retrievals. Only 67 percent of the WITHQD group found documents sought after in the official library more than 50 percent of the time, while 83 percent of the NONQD group had the same (50 percent) success ratio.

Attitudes toward Present Library Services

The strongest support for the first hypothesis is in the area of attitudes toward university library services. A greater percent of the WITHQD group indicated a less favorable attitude toward the official library they use most frequently in terms of space, environment, and proximity, but not with respect to collection adequacy or staff courtesy. Thirty-four percent of the

WITHQD group considered the official library they used most frequently small and crowded, while only 27 percent of the NONQD group indicated the same response. Thirteen percent of the WITHQD group viewed the official library quarters as unattractive, compared to 5 percent for the NONQD group.

Twenty-two, or 33 percent, of the WITHQD group indicated that the official library they use most frequently was "too far" from their office. Of these twenty-two, nearly half indicated (in response to another question) that their QD library was "in the same or adjacent building" or "less than a block away" from the official library they use most frequently! Only 24 percent of the NONQD group felt that it was too far. The official library collection was rated adequate by both responding groups. More than 90 percent of each group rated the library staff courteous and helpful.

In evaluating the above responses it should be noted that attitudes of the present department head may or may not reflect the prevailing attitudes at the earlier point in time when the QD library was begun, possibly many years before his or her arrival on campus. However, such libraries are usually currently maintained at least with the acceptance and support of the department head.

HYPOTHESIS II. NEED FOR LIBRARY SERVICES NOT PROVIDED

Attitudes toward Potential Library Services

A majority of both groups responded favorably to possible new or additional services in part two of the questionnaire. This suggests that the expansion of university library services in these areas might help obviate the need for future QD libraries. Seventy-nine percent of the WITHQD group and 66 percent of the NONQD group thought that

a document delivery system would be "helpful," and 15 percent and 17 percent of each group respectively rated such a service as "essential."⁴

Eighty-eight percent of both groups indicated that an on-line terminal for interface with the official library system would be either "helpful" or "essential." Thirty-one percent of the WITHQD group, compared to 20 percent of the NONQD group, rated it as "essential." Both a document delivery system and on-line computer search terminals could help transcend the distance factor by bringing library services closer to faculty offices. Attitudes toward these (for the most part, presently nonexistent) services might be related to the establishment of QD libraries.

The strong indication by one or both groups that such services were considered "helpful" or "essential," if they could be provided, would suggest that the availability of such service might help obviate the need for future libraries. The fact that a slightly greater percent of the WITHQD group felt that such services would be helpful supports the "need for services not presently available" hypothesis.

QD LIBRARY DATA

The following section summarizes the factual data on the origins, functions, characteristics, and relationship of these libraries to the University of Minnesota library system.

Origins

There was a wide range in the dates of origin of the QD libraries, extending from 1935 to 1974, when the present survey was undertaken. In 1964 the university had issued a policy statement requiring central approval for the establishment of departmental libraries,⁵ but it is difficult to determine if this policy had any effect on the formation of new libraries: fifty-four percent of the libraries were established prior to 1964, and 42 per-

cent were founded since that date. (Four percent of the libraries studied gave no response to this question.)

The most important factors in origin, in order of frequency stated, included the following: gifts, consciously "planned," grant funds, and memorial endowments. If "planned," the most frequently cited reasons were the need for unique materials, more hours of accessibility (presumably by faculty keys since the university library system hours were actually longer than those of the QD libraries), distance from the nearest official library, increased availability of space, and delay in processing time in the university library system. Incidentally, 50 percent of the QD libraries were believed by heads of departments in which they are located to contain 25 percent or more unique material (not elsewhere available in the university library system). Although librarians might speculate that so called "unique materials" may actually exist in one of the official libraries, this study confirmed there are several types of "publications" the official library does not contain and might not want to (such as mimeographed reports, departmental staff or working papers, periodical article reprints, and student and faculty research).

Functions

The primary function of QD libraries most frequently indicated was the retrieval of information or research and reference. "Reference" should not be confused with the broader function of collection *interpretation* provided by most academic libraries and found to be virtually nonexistent in quasi-departmental libraries. With varying degrees of thoroughness, QD libraries also provide the normal functions of acquisitions, processing, and circulation.

One very important function provided by quasi-departmental libraries should not be overlooked. Both by definition and by practice, they *do* supple-

ment the university library collections by providing not only additional copies of publications in heavy demand but also in many cases unique material not acquired by the library system. They provide such materials *without* university library funds and *without* university library staff. In most cases, the funds used for these libraries would not in any event be readily available or transferable to the university library budget.

The acquisition function of QD libraries was performed mostly through faculty members who selected materials for inclusion from such sources as other faculty, publishers, and government agencies. Materials were arranged for use mostly by various locally devised broad topic or classification schemes with few author, title, or subject catalogs or indexes. Few QD libraries have a complete, systematic processing system as is found in the university's official libraries. Processing time was believed to be slightly shorter in QD libraries than the department heads judged it to be in the main library system. These libraries were, however, comparatively weak in the organization and staffing functions. Their circulation policies followed no uniform pattern and were relatively informal. One-third had a noncirculating policy for all their materials. In the others, items usually circulated for an indefinite period of time or a very short period, with few "in between" times.

The reference function found in most academic libraries is by and large nonexistent in quasi-departmental libraries, because very few of them have professional or even paraprofessional staff, and few have even one person who devotes full time to the library. Most are staffed, if at all, with part-time secretarial help. The hours of accessibility are generally much less than those of the official library system, but this is frequently compensated for by keys issued to faculty or students for after-hours use. The most frequently cited advan-

tages were convenience of location and unique materials.

With minor exceptions as noted above, their functions are not significantly different in kind from those of the university library system. Although the quality of processing and indexing is generally less detailed or complete than that of the university library system, it was believed to be slightly faster. The willingness to sacrifice quality for speed might support the second hypothesis, namely, faster service in getting new publications to the shelves.

Characteristics

Approximately 50 percent of the libraries studied have an annual budget under \$500. Only 12 percent had operating expenditures of \$5,000 or more. Forty-three percent contain 1,000 volumes or more, but nearly 30 percent have collections of 500 or fewer items. The collections consist of books, periodicals, and government documents in that order. In 51 percent of the cases, a quarter or more of the collection is alleged to consist of unique materials. Most QD libraries were housed in departmental offices. Further characteristics of QD libraries could best be summarized in a modal or typical quasi-departmental library as follows.

Profile of a Typical Quasi-Departmental Library

As derived from the responses to the questionnaires, the following is a typical quasi-departmental library at the University of Minnesota. In most cases the mode (most frequent) response was used to determine the characteristic.

It is at least sixteen years old and located in the same building with an official library or at least less than a block away from one. It was founded partly because of a gift of library materials from a faculty member and partly "planned" because the department needed special materials not provided by the

library system. The primary function is informational, i.e., the retrieval of specific information and research and reference. It is not very influential as a departmental asset in the recruitment of faculty and students. It is likely to be increasing presently both in size and in use. It is growing because more funds are available or because it is becoming better organized. Its greatest period of growth was within the last five years.

"In room use" is available to all university students and faculty, but admission after hours is by key only for eligible faculty and students. A combination or mixed circulation policy (some circulating and some noncirculating) is followed, with most items being checked out for an indefinite period of time. Occasional losses may occur as the result of an unsupervised or minimally supervised check-out system.

The largest portion of its budget is derived from departmental "supply and expense" monies, with some additional research grant or contract funds (federal, state, or other public). It is most likely to have a reported budget of less than \$500 but may have considerably more through absorbed (unreported) overhead expenditures. Most of its acquisitions are related directly to the curriculum or to faculty research interests. The head of the department is the chief administrator and approves expenditures, but additions to the collection generally are selected by faculty and/or students.

Staffed on a part-time basis by secretarial help devoting ten to twenty hours a week to the library, it may have occasional supplemental help from a librarian (professionally trained with a master's degree in library science) or paraprofessional (undergraduate degree with some courses in library science) paid by the department. The librarian may be a part-time student on hourly rate or a salaried staff member variously called "research specialist" or

"research associate."

It is open forty-eight hours a week. Half of the collection consists of books, a third periodicals, and the rest distributed among government publications, microforms, and audiovisual materials. Most likely the library holdings include 1,000 or more volumes, with up to 25 percent of the collection being unique, i.e., not available in the official university library system. Classified by broad topic only and indexed by author and title but not subject, the collection was developed mostly through faculty gifts, publishers, friends, and the government, in that order.

Housed in the departmental office area, its chief advantages to the department are its location and its unique materials, but it offers few special services not provided by the university library system. The availability of "free" photocopy service within the department may constitute a hidden advantage faculty enjoy by having their own QD library within their department.

Relationship to the University Library System

By virtue of their physical location on campus, all of these libraries are essentially a part of the university, even though they are not a part of the university library system. Given the unique materials that many of them seem to contain, these libraries do serve to supplement the holdings of the university library system. They do so with funds and personnel that are not generally available to the university library system. The majority of them allow "in library use" by all persons in the university, and only a few are exclusive, although in practice they are used primarily by members of the department and their students. Items purchased for the collection are generally related to specialized interests of the department. Forty-six percent of the department heads indicated that they felt

that these libraries actually encouraged greater use of the main library system. A majority of the respondents believed their QD library essential to the teaching and research function of the department. Very few of the respondents admitted to doubts about justifying expenditures for these libraries.

CONCLUSIONS

This study seems to indicate that more research should be conducted in other institutions regarding the causes for the development of QD libraries. They do constitute the fringe areas of demands for library services and often are the beginnings of what later become official departmental libraries. Many of the official libraries at the University of Minnesota Twin Cities campus had their origins in QD libraries. Given the above findings, one might ask what kinds of services university libraries ought to provide. Instead of surveying librarians to determine potentials for improved services, perhaps the needs of official library users should be explored through applied research. This investigation was one of few studies relating to university library administration that solicited large-scale cooperation from the heads of *academic* units or consumers of library information and services.

The problems presented by QD libraries could be approached in two ways. First, there could be application of "first aid" or short-range planning. These libraries do exist, some of them providing a notable service without direct cost to the university library. Notable examples at the University of Minnesota are the Journalism Library, Industrial Relations Center, Economics Research Library, and the Waite Memorial Library (agricultural and applied economics). Ignoring them officially does not make them go away; nor indeed should they. In what ways can existing QD libraries and the university library system be of mutual benefit?

MINITEX, the University of Minnesota's Interlibrary Teletype Exchange service (a cooperative statewide system for making all state resources available to citizens throughout the state),⁶ has compiled a list of campus-wide library periodical holdings and regularly uses these QD libraries' unique periodical files to supplement university library resources for providing single photocopies of requested articles to the academic and public library community throughout the state.⁷

Some assistance in organization and technical services, the area in which these libraries are weakest and the university is strongest, might be provided. In return the university library might receive copies of the index tools thus generated. This would also allow for greater campus-wide standardization of bibliographic information in the eventuality that the university library might someday become more closely involved in QD library operations.

These QD libraries might possibly be coordinated through a loose federation or consortium for better service. This could perhaps further eventual integration into the official library system. Such cooperation could be expected to lead to more awareness by the heads of departments of the costs and problems of such libraries, and it could encourage a closer relationship between departmental faculties and the university library administration.

The cooperation of the department heads in this Minnesota study evidenced a high degree of interest in campus library service. The WITHQD group not only favored a centralized library system more than the NONQD group, but it also expressed a clear preference for centrality of location (one or two main buildings with few satellite libraries), a central catalog, and a more flexible circulation policy.

In other words, it appears that they would prefer to have a closely integrat-

ed library system if it could more adequately meet their needs. With the data obtained in this survey and other future surveys, improvements can perhaps be made in some official library services, such as the space and environmental aspects and the processing delay.

A second, more long-range approach could examine more closely perceived needs for future libraries. If the need is only believed, maybe better library faculty communications would solve the problem. If the need is real, perhaps user modes of inquiry and information transfer should be studied to assist the library in adapting its services to meet patron needs more effectively.

Surveys to determine users' true modes of inquiry ought to be conducted to explore viable alternatives to imposing the library mode of inquiry on patrons. How do scholars and students actually search for information? Why,

as most user studies report, is it that the library is frequently the last place searched? Is it because the material that is needed is too often not available until months after it is requested? Libraries should have these materials when the patron needs them.

Planning of library services should take account of the differing competencies of researchers—faculty, graduate student, or undergraduate—to accommodate differences in approach by level as well as by discipline. Can the official library system make provisions for ephemeral but important current research materials such as pamphlets, research progress reports, and staff papers? Studies of user needs and search methodology, coupled with this study's findings regarding the origin, function, and relationship of QD libraries, might be useful in long-range planning for more responsive academic library service.

REFERENCES

1. The most helpful and relevant publications are those by Broberg, Dougherty, Legg, and Cooper listed below: Broberg and Dougherty for their systematic methods; Legg for her directory and more accurate approach to history and funding; Cooper for her effort to identify these libraries and explore their bases. The first two studies are not comprehensive enough in scope to bear directly on this present study, and the last two are concerned primarily with identification rather than commonalities in origin, function, etc.
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6. Alice E. Wilcox and Nancy H. Marshall, "MINITEX and WILS: Responses to Access Needs," *RQ* 13:299-307 (Summer 1974). (MINITEX is Minnesota Interlibrary Teletype Exchange. WILS is Wisconsin Interlibrary Loan Service.)
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Using a Sample Technique to Describe Characteristics of a Collection

A sampling procedure is presented which may be employed to identify characteristics of a collection and which then can be used in an evaluative statement and in the description of the scope of the collection. The main results obtained by applying this sampling technique to the Jewish history collections in each of seven university libraries are described in detail. Comparisons among these seven collections relate to the percentage distribution of titles by language and by publication date.

LIBRARIANS WHO ARE INVOLVED in collection building are regularly called upon to make statements about the quality of their collections. Subject librarians seek ways to identify and describe subject strengths. The traditional ways of collection evaluation have included both quantitative and qualitative descriptions of the holdings in subject fields.

The quantitative statement is generally based on one of the following methods of measuring library holdings: (1) measuring linear feet of library materials on shelves, (2) a physical volume count, or (3) use of shelflist measurements, i.e., converting cardholdings in inches or centimeters into number of titles.

For a qualitative evaluation, the librarian attempts to support the quantitative statement by (1) the checking of appropriate bibliographies, (2) the consideration of the levels of programs the collection supports, and (3) the size

of student body and faculty that uses it.

Sometimes by the use of formulas¹ a quantitative expression of the quality of the collection is arrived at based on the number of books, periodicals, and documents a specific subject field should have. The results of bibliographic checking are expressed in number or percentage of titles held out of the number of titles in the list. The problem of providing a qualitative evaluation is aptly expressed in the statement that "no easily applicable criteria have been developed for measuring quality in library collections, and this is a subject which should be vigorously pursued."²

In this paper we present a technique to identify collection characteristics that can be used in an evaluative statement and in the description of the scope of the collection. Characteristics of books, such as (1) their publication dates; (2) their countries of origin; (3) the languages in which they are written; (4) their publishers (whether private, commercial, or academic); (5) their formats (i.e., book, nonbook, serial, document); and (6) the editions (original,

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reprint, facsimile, etc.) tell the subject specialist something about the nature of the collection. For example, students of history and the humanities generally rely on the availability of library materials with more varied imprint dates than students in the social sciences or natural sciences. In the sciences, recency of publications is usually critical; in history, philosophy, and the humanities, research more often depends on the availability of primary sources for the period or topic under investigation.

The characteristics to be identified are available for each title on the shelflist copy of the catalog card. The catalog card gives in addition to the author and title: the edition, imprint (place, publisher, and date), collation, illustration, the subject tracings (headings), and, often, the format. If the book has been translated this is also indicated.

What characteristics a librarian wishes to identify, using the sample technique presented in this paper, is a decision based on the specific characteristics which enhance that subject area and which, when identified in the particular collection, can lend weight to an evaluative statement. Determination of the number of characteristics to be recorded is based on the size of the sample, the size of the collection, and the total staff time available to record and analyze the information.

What follows is a description of the sample design and estimation methods used in selecting and analyzing a sample of titles from the Jewish history collection in each of seven university libraries. The seven libraries are those at Cornell University, University of Rochester, Syracuse University, and the four university centers of the State University of New York (SUNY)—Albany, Binghamton, Buffalo, and Stony Brook. The sample taken was limited to the shelflist for Library of Congress classification numbers DS 101-151. It did not attempt to include all titles in the col-

lections which deal with the history of the Jewish people (e.g., exclusions include Jews in the U.S. under E184.J4; or World War, 1939-1945—Jews under D810.J4; or Bibliography under Z). Statistics are available for titles held in these areas of Jewish history.³

The project was part of a survey conducted in the fall of 1974 to evaluate the Judaic Studies resources of the seven university libraries. While the survey also concerned itself with resources in Jewish literature, Bible studies, and Jewish philosophy and religion, the Jewish history collections were chosen for the example. Because of time limitations, the characteristics sought in the sample were limited to age of publication and language. The original date of publication was used when the book was a reprint.

A systematic sample design was employed in each university's Jewish history collection:

- a. The total number of cards in the collection was measured in inches (X).
- b. Using the relationship, 100 cards = 1 inch, there are estimated to be $N = 100 X$ titles in the desired category. For example, if $X = 14$ inches, $N = 1,400$.
- c. The sampling interval, i , for the selection of sample cards is defined by

$$i = N/n$$

where n is the desired sample size. That is, after a random start, every i -th card is sampled. For each sampled title, the date and country of publication, language, format, etc., are recorded. For example, if we wish to have $n = 200$, then $i = 1400/200 = 7$, and we would select every seventh card. If we desire $n = 300$, $i = 1400/300 = 4.67$, and we would select every fourth card to ensure that our sample size is at least 300.

The recording procedure is as follows: Once the size of sample is determined, a lined sheet is numbered from 1 to n . A column is drawn for each characteristic to be recorded and given a heading. A sample sheet is shown as Figure 1:

Title	Call No. (optional)	Country	Language	Date	Format	Scope, Treatment
1	DS-	U.S.A.	English	1920	Book	History
2	DS-	Germany	German	1910	Serial	Bibliography

Fig. 1
Sample Sheet for Recording Characteristics

When all the titles in the sample have been recorded, a count is taken of each characteristic (e.g., book with date prior to 1900) of interest. For the given collection the proportion, P , of titles in the entire collection having a specified characteristic is estimated using \hat{P} where \hat{P} equals the proportion of titles in the sample having the specified characteristic. The values of \hat{P} are the primary analytical tool and are presented in Tables 1, 2, and 3. Additional information can be obtained by forming a $100(1-\beta)$ percent confidence interval for P , which is a range of values likely to contain the true, but unknown, value of P . Methods to form a confidence interval for P are presented by Cochran.⁴

The number of cards to be sampled from a given collection is a function of the time available to carry out the sampling (and recording) and the desired precision of estimation of population characteristics. Because the time available to carry out the sampling was unknown initially, the sample size n was arbitrarily set at about 150 for the first two universities visited (Cornell and SUNY at Binghamton). However, after the experience of the trips to Cornell and Binghamton, we were able to determine sample sizes that are feasible in terms of time available to complete the task and which would yield a desired level of precision.

As described above, the proportion,

P , of titles with a specified characteristic is estimated using \hat{P} . It is desired to select a large enough sample that with high probability the difference between \hat{P} and P will be sufficiently small. More precisely, the investigator specifies two numbers $1 - \alpha$ and d . Although the value

of P is unknown, the investigator may specify the maximum deviation, d (e.g., $d = .06$) between the sample estimate, \hat{P} , and P that one would "like" to have. While it cannot be guaranteed in advance of sampling that \hat{P} and P will differ by no more than d units, the investigator may specify the value, $1 - \alpha$ (e.g., $1 - \alpha = .95$), representing the probability that the maximum deviation will be d units. Then, given values for d and $1 - \alpha$, one may find the value of the sample size n required to insure that, with probability $1 - \alpha$, \hat{P} and P will differ by no more than d units.

In the Appendix the formulas to determine the required sample sizes are given. In addition, the derivation of the sample sizes used in this investigation is described.

The three tables that follow give the percentages, \hat{P} , for the collections for the characteristics outlined above. Comments are provided for each table.

COMMENTS ON TABLE 1

The following percentages represent the largest and smallest sample percentages held in the various languages in the Jewish history collections of the seven university libraries.

	<i>Largest percentage</i>	
In English:	Albany	85%
In German:	Stony Brook	21%
In French:	Buffalo	9%
In Hebrew:	Binghamton	42%

TABLE 1
DS 101-151 JEWISH HISTORY (LANGUAGE DISTRIBUTION)
Percentage of Collection in English and Other Languages

University	N	n	English	German	French	Hebrew	Others	Distribution
Albany	1,489	355	85%	6%	4%	2%	3%	S, R, P, Pol
Binghamton	2,525	151	45	9	3	42	1	A
Buffalo	1,455	269	77	9	9	1	4	S, L, A
Cornell	4,760	158	49	10	4	26	11	.03 R, L; also S, A
Rochester	1,180	264	83	8	5	1	3	R, S, L, I
Stony Brook	1,237	284	70	21	3	1	5	.03 S; also P, R
Syracuse	1,438	214	81	9	1	3	6	A, P, Y, R, L

Abbreviations:

N = Total number of titles

A = Arabic

I = Italian

L = Latin

P = Portuguese

n = number of titles in sample

Pol = Polish

R = Russian

S = Spanish

Y = Serbo-Croatian

Smallest percentage

In English:	Binghamton	45%
In German:	Albany	6%
In French:	Syracuse	1%
In Hebrew:	several	1%

Among the seven universities studied, Binghamton and Cornell have the largest percentages of their titles in Hebrew as would be expected since they were both participants in the Israel PL-480 Program.⁵ The percentages of holdings of English-language titles in the Jewish history collections seem larger where there have been no other influencing factors in collection building, i.e., in the Albany, Buffalo, Rochester, Stony Brook, and Syracuse libraries.

Stony Brook reflects to a noticeable extent the impact of faculty and research interests in German Judaica. With the exception of Stony Brook, the

percentages of titles in German held in the university libraries are similar enough to suggest the holdings of many German titles in common.⁶ In each collection the sample percentage of French titles is no larger than that of German titles. From Table 1, it may be seen that Albany, Buffalo, and Rochester have similar distributions of titles among the various languages, offset only by Buffalo's larger percentage of French and German titles.

COMMENTS ON TABLE 2

Pre-1900

Cornell, Rochester, and Syracuse have significant special collections and, generally, each has acquired more pre-1900 publications than the other universities. In particular, Syracuse has acquired the collection of the nineteenth-century

TABLE 2
DS 101-151 JEWISH HISTORY (CHRONOLOGIC DISTRIBUTION)
Percentage of Collection in Publication Periods Given

University	N	n	Pre-1900	1901-1950	1951-1960	1961-1974
Albany	1,489	355	6%	26%	15%	53%
Binghamton	2,525	151	2	17	9	72
Buffalo	1,455	269	6	24	16	54
Cornell	4,760	158	11	18	11	60
Rochester	1,180	264	9	36	15	40
Stony Brook	1,237	284	7	22	10	61
Syracuse	1,438	214	8	27	17	48

See Table 1 for explanation of abbreviations.

German historian Leopold von Ranke.

1901-1950

Rochester with 36 percent of its collection dated 1901-50 has the largest percentage in this publication period.

1951-1960

The holdings of titles with 1951-60 publication dates range from 9 to 17 percent. These percentages are substantially less than those for the 1961-74 period.

1961-1974

Each library has the largest percentage of its imprints in this period, accounting for 40 percent or more of the titles in each library's Jewish history collection. Binghamton, Stony Brook, and Cornell have at least 60 percent of their titles bearing 1961-74 publication dates, indicating sizeable acquisitions in these years. The reasons for this are: (1) the general publication explosion, (2) relative affluency, (3) similar patterns of acquisitions, e.g., approval plans, (4) impact of the Israel PL-480 Program in the cases of Cornell and Binghamton.

Similarities

From Table 2 it is seen that Cornell and Stony Brook have similar percentage distributions (over the four time periods). The similarity with Cornell may reflect Stony Brook's apparently successful acquisition of a balanced

collection for the study of Jewish history. This is surprising, considering the recent development of Stony Brook's collection.

While Albany, Buffalo, and Syracuse may be seen to have similar percentage distributions, they differ from Cornell and Stony Brook in their pattern of acquisition.

Dissimilarities

From Table 2 it is clear that Binghamton and Rochester have quite dissimilar percentage distributions. Binghamton has an unusually high percentage (72 percent) of 1961-74 publications, and Rochester has an unusually low percentage (40 percent) of 1961-74 publications. Further, Rochester has a significantly higher percentage of 1901-60 publications (51 percent total) when compared with the other six university libraries. Rochester's distribution suggests a selective acquisition policy and the acquisition of titles with pre-1961 imprints through gifts or special collections. Binghamton experienced very little growth until 1961-74.

COMMENTS ON TABLE 3

For the years 1961-74 publications in English make up the largest part of each collection (except for Binghamton). In particular, Albany and Stony Brook have the largest percentages corresponding to English titles. German

TABLE 3
DS101-151 JEWISH HISTORY
Percentage of Collection in Various Languages in Years 1961-1974

University	N	n	English	German	French	Hebrew	Others Dist.	Total Percentage
Albany	1,489	355	46%	3%	2%	1%	1%-S	53%
Binghamton	2,525	151	33	1	1	36	1 -	72
Buffalo	1,455	269	37	7	7	1	2 -A, I, S	54
Cornell	4,760	158	27	3	3	21	6 -A, R, S	60
Rochester	1,180	264	33	3	2	1	1 -R	40
Stony Brook	1,237	284	43	12	2	1	3 -P, R, S	61
Syracuse	1,438	214	37	3	1	1	6 -A, I, L, S, R, Y	48

See Table 1 for explanation of abbreviations.

and French titles are approximately equal in number, except at Stony Brook which shows strength in German Judaica. Buffalo's relatively large percentages of German and French titles reflect an acquisition policy based on recognized research interests. At both Binghamton and Cornell there are large percentages of titles in Hebrew. These reflect the impact of participation in the Israel Public Law-480 Program. Note that Cornell has a more widespread distribution of titles in various languages than does Binghamton which has concentrated primarily on English and Hebrew titles.

To compare the distribution of titles by language for two periods, pre-1961 and post-1961, two new tables may be constructed. For example, a table for Albany for the post-1961 period would show the following:

English	87 percent
German	5
French	4
Hebrew	2
Others	2
TOTAL	100

This information is derived from Table 3, where 87 percent (= $.46/.53$) is the percentage of titles in English in the post-1961 period among all titles in that period.

We have constructed the aforementioned tables but include only the following comparisons of holdings with pre-1961 and post-1961 publication dates: Albany, Rochester, and Stony Brook show very little alteration in distribution. Binghamton's distribution has changed from (pre-1961) one having extensive representation for both English and German titles to (post-1961) one with about equal percentages of English and Hebrew titles. Cornell exhibits a similar shift from English and German to English and Hebrew, but at Cornell there is, in each period, a moderate representation of titles in the "other" languages.

For Buffalo the sample percentage of titles in each of German and French changes substantially from 5 percent of the collection in pre-1961 publications to 12 percent in post-1961. As a corollary of this, the percentage of titles in English is 86 percent in pre-1961 and 70 percent in post-1961. At Syracuse there are some changes in distribution; a smaller representation for English and a larger representation for "other" languages in the post-1961 period.

CONCLUSIONS

In the university libraries at Albany, Buffalo, Rochester, Stony Brook, and Syracuse the preponderance of titles is in English with German and French titles ranking second and third. By contrast, both Binghamton and Cornell have substantial percentages of titles in both English and Hebrew. Of particular note at Stony Brook is the high percentage of German titles in relation to its rather small collection. This indicates specialized interest concerning the history of German Jewry in the nineteenth and twentieth centuries.

The percentage distributions of titles by language are quite similar for Albany, Buffalo, and Rochester. However, each of these distributions is substantially different from those at Cornell and Binghamton where there are large percentages of titles in Hebrew.

Books with pre-1900 imprints are found more extensively at Cornell, Rochester, and Syracuse. It is likely that many of these holdings were acquired by gift or by purchase of scholarly collections. In addition, Rochester has a larger relative percentage of titles with 1901-60 imprints than the other six libraries. Thus, Rochester's distribution suggests a more gradual acquisition of selected titles over a considerable time period.

One may note Stony Brook's similarity to Cornell in the percentage distribu-

tion of titles over the time periods shown, this despite the fact that Stony Brook is the youngest of the university libraries. Strong similarities in distribution of titles by publication date appear for Albany, Buffalo, and Syracuse. Distinct dissimilarities in distribution are observed between Rochester and Binghamton, which are not surprising since most of Binghamton's growth has occurred since 1950. Binghamton's pre-1961 holdings are relatively weak.

The heaviest acquisition period for all seven university libraries was 1961-74. Except at Binghamton and Cornell, English titles were acquired primarily, with German- and French-language titles ranking next in the number of acquisitions. The relatively large percentage of German-language titles acquired at Stony Brook in relation to its small collection is unusual. At Binghamton, Hebrew titles predominate with English second, while at Cornell, English and Hebrew rank first and second respectively. The importance of Hebrew titles at Cornell and Binghamton is, of course, the result of participation in the Israel PL-480 Program which operated between 1964 and 1973.

Finally, the study indicates that strengths of collections, special interests, periods of heavy acquisitions and/or publishing, and book selection policies can be identified by sampling a library's collections. The sample technique used in this study would be particularly useful in a comparative evaluation of the holdings in one subject area at a number of similar libraries.

APPENDIX

Sample Size Determination

It is assumed that it is desired to use \hat{P}

to estimate P so that, with probability $(1 - \alpha)$, the difference between \hat{P} and P will be less than d units. The formulas⁷ for the required sample size n are shown as formulas A and B:

$$A. \quad n_o = \left\{ z^2_{(1 - \frac{\alpha}{2})} \right\} P(1 - P)/d^2$$

$$B. \quad n = \frac{n_o}{(1 + \frac{n_o}{N})}$$

In these formulas, P is the proportion of titles in the given collection with the specified characteristic; d is the margin of error (specified by the investigator), N is the number of titles in the entire collection, and $z_{(1 - \frac{\alpha}{2})}$ is a number completely determined by a specification of the value of the probability, $(1 - \alpha)$. The value of $z_{(1 - \frac{\alpha}{2})}$ can be read from tables of the normal probability distribution. For example, for $\alpha = 0.05$, $z_{(1 - \frac{\alpha}{2})} = 1.96$ while for $\alpha = 0.10$, $z_{(1 - \frac{\alpha}{2})} = 1.65$.

The sample size n given by formula B will never be larger than n_o . Thus, if the sample size n is chosen as

$$n = n_o = \left\{ z^2_{(1 - \frac{\alpha}{2})} \right\} P(1 - P)/d^2$$

the selected sample will certainly be large enough to achieve, with probability $1 - \alpha$, the specified margin of error, d . When planning a study, this is often a useful procedure since use of *both* formulas A and B to determine n requires knowledge of N , the total number of titles in the collection.

Suppose that it is desired to have $\alpha = 0.05$ and $d = 0.06$. Then,

$$n_o = \frac{(1.96)^2 P(1 - P)}{(.06)^2} .$$

Now note the relationship of $P(1 - P)$ with P , as shown in Figure 2.

P	.1	.2	.3	.4	.5	.6	.7	.8	.9
P(1 - P)	.09	.16	.21	.24	.25	.24	.21	.16	.09

Fig. 2
Relationship of $P(1 - P)$ with P

Thus, $P(1 - P)$ assumes its largest value when $P = 0.5$. Taking $P(1 - P) = (0.5)(0.5) = 0.25$, the sample size

$$n = n_0 = \frac{(1.96)^2 (0.25)}{(0.06)^2} = 267$$

will be sufficient to ensure with probability 0.95 a margin of error not larger than 0.06 irrespective of the proportion, P , being estimated.

The sample size calculated in this manner may, however, be *larger* than necessary because the proportion, P , for the characteristic of interest may differ from 0.5; and because formula B has not been used to determine n . To illustrate the latter point assume $\alpha = 0.05$, $d = 0.06$, $P = 0.5$, and $N = 1400$. Then $n_0 = 267$ and, using B, $n = 224$. Thus, if it were known prior to sampling that $N = 1400$ for a specific collection, a sample of size 224 rather than one

of size 267 would be selected. Since a sample of size 224 is all that is needed, there is a reduction in sample size of $267 - 224 = 43$ titles because of knowing the value of N ($N = 1400$, here).

Calculations such as those made above indicated that, for most collections, and for $d = 0.06$, $\alpha = 0.05$, a sample of about 250 titles would be adequate. The actual sample sizes differ from 250 because (1) there were differential amounts of time available for sampling and (2) there was rounding error. The latter point can easily be demonstrated by considering a collection with $N = 1400$ titles and a desired sample size $n = 250$. Then i (the sampling interval) = $1400/250 = 5.6$. If $i = 5$, the actual sample size will be $1400/5 = 280$ titles, while if $i = 6$, the actual sample size will be $1400/6 = 233$ titles.

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4. W. G. Cochran, *Sampling Techniques*, 2d ed. (New York: Wiley, 1963), Section 3.6.
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6. In the sampling process, books in German on Jewish history listed in major bibliographies were recognized. The *Survey* mentioned above in reference 3 also included some bibliographic checking in Jewish history bibliographies. Moreover, most libraries had some approval plan arrangements with the German book firm, Harrassowitz.
7. Note that formulas A and B presume the use of simple random sampling. While we have used systematic sampling, the two sampling methods should be essentially the same for the populations being sampled. (See Cochran, *Sampling Techniques*, Section 8.5, p.214.) Further, the "normal approximation" used to derive formulas A and B should be appropriate for most cases since the sample sizes are large.

An Experiment in Bibliographic Instruction at Wabash College

This article, condensed from a five-year report to the Council on Library Resources, presents content analysis and survey results of a program designed for bibliographic instruction at Wabash College. The project employed specially trained student assistants as the primary agents for information transfer. The program was beneficial to freshmen and sophomores aided by student assistants who were knowledgeable in many facets of academic life and who worked in closely structured courses that demanded regular library use.

IN 1970 THE COUNCIL ON LIBRARY RESOURCES initiated its College Library Program designed to experiment with methods of strengthening the role of academic libraries in the educational process. Wabash College, Crawfordsville, Indiana, was one of the first four schools to be awarded a grant under the program. Initially, the project focused on freshman seminars led by a professor with the assistance of specially trained upperclassmen, which pursued topics chosen because of their interest to the participants. The upper division student assistants were, in turn, to respond to the information needs of students in the seminars.

The freshman seminars (later termed tutorials) were planned with the idea that students should move as rapidly as

possible into the intellectual life of the college. Faculty were encouraged to participate in that they could teach a topic of their own choosing, as broad, as narrow, or as unorthodox as their interests. Incoming students were offered the advantages of a small, informal classroom situation in which they could express their views and begin to feel "at home." Library-trained reference assistants were selected by several tutorial faculty to help in course preparation, class discussion, and bibliographic instruction.

During the period covered by the grant, twenty-five different faculty members employed a reference assistant, though not all did so simultaneously. This meant that in a given semester, six or seven teachers were involved in seminar settings, teaching with the aid of a bibliographic assistant. The assistants helped tutorial students select term paper and report topics and introduced them to LC subject headings and such resources as periodical indexes or guides to government documents.

The experiment was constantly changing, demanding redefinition and evaluation based on student and faculty input. There was a shift in target

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groups from students in freshman tutorials to students in beginning speech. This arrangement engaged two members of the speech faculty, four student assistants, and approximately 100 students each semester. There were regular adaptations in training sessions for student assistants based, of course, on their recommendations. For instance, early in the project, assistants were trained in workshops lasting two or three days; later, weekly seminars were substituted.

From the project's inception, participants sought to clarify the meaning of the grant's aims as well as its potential for improving the learning environment. It is characteristic of the Wabash community that students, faculty, and library personnel developed a variety of opinions regarding what the objectives and activities of the project actually ought to be. The wide range of faculty attitudes regarding a college library in its institutional context was noted in the report of a 1974 library evaluation team headed by Robert Wedgeworth.¹ Some teachers conceive the library to be a group of colleagues actively engaged in teaching students the "ins and outs" of vital resources and research techniques; others view it simply as a book storage closet. In embracing such divergent viewpoints, Wabash is surely not unlike many other institutions of higher learning.

Although a few articles have already appeared, they deal primarily with the earlier years of the program, detailing its structure and articulating its philosophical bases.² This paper reports on the Wabash College Library Project, telling, in practical terms, the story of what happened, presenting the results of recent evaluation measures, and assessing the project's impact during the 1970-76 period.

PROFILE OF WABASH COLLEGE

More than any other factor, the real

character of a college defines what librarians can do for students, especially if what is attempted is to merit faculty support and if it is to have a meaningful interface with curricular objectives. Wabash has been an appropriate place to attempt a program of bibliographic instruction. As indicated in the North Central Association report in 1973, this undergraduate men's college strives for excellence, and one cannot be on the campus "for long without developing a deep respect for its history and present program."³ The college takes pride in a curricular emphasis which firmly stamps the institution as one which offers a traditional liberal arts education.

The teaching and learning environment poses two notable difficulties. One is that while faculty rightly place a premium on the liberal arts, they are generally disinterested in "how to" course content with which they tend to categorize bibliographic instruction. A second issue is that, due to their academic backgrounds and experience with university libraries, faculty are often unable to see the pedagogical value of teaching undergraduates how to use the college library intelligently and independently.⁴ These two factors are endemic to many small colleges but are not so pervasive as to render ineffectual the faculty-library cooperation that has occurred at Wabash and elsewhere.

Those faculty who expressed interest in the project were readily able to observe the connection it could have with the curriculum. While members of the library staff saw the same connection, they also saw the project in the context of bibliographic instruction and orientation efforts being undertaken by colleges and universities nationwide.⁵

In addition to these views of the project, it can be said that the philosophy underlying the grant bespeaks more than bibliographic instruction or the curriculum connection. It also suggests

greater visibility for the Lilly Library throughout the Wabash community, more observable activity within the building's walls, and a noticeable increase in the quality and diversity of demands made on the library by its patrons.

PROGRAM STRUCTURE AND STUDENT INVOLVEMENT

Selected upper division students continue as focal points in the project. They began as assistants in seminars which have evolved into small tutorials featuring written and oral expression as a primary purpose, with subject matter being secondary. The kind of verbal give-and-take which faculty seek to foster in these classes grew to have only minimal connection with the depth of bibliographic instruction needed by the independent learner. Thus, as the program progressed, tutorial faculty tended to use student assistants less frequently.

The idea for another facet of the project, the "in-house program," originated with the faculty and was an effort to capitalize on the easy familiarity existing among fraternity brothers. (Approximately 70 percent of Wabash students are members of Greek letter fraternities.) We had hoped that student assistants would discuss research problems in informal situations. It could have been that participants' expectations were unduly high, but the in-house component was discontinued because assistants were uniformly dissatisfied with the frequency of these informal occasions. There was, however, the noticeable advantage that students who personally knew a reference assistant working in the library would feel freer to approach him for help than to approach a person they did not know, and for this reason we continue to recruit assistants from as many fraternities as possible. Most student assistants, in addition to tutorial or in-house responsi-

bilities, opted for regular part-time duty at the reference desk.⁶

Since the success of the tutorial and in-house programs was not long-lived, we examined other areas, choosing students in a beginning speech course as the target group. Speech I is a course which "presents the fundamentals of speech composition and delivery" and in which "basic problems in speech are considered and analysis made of video tape recordings."⁷ It has a high enrollment, necessitating four or five sections in a given semester and involving a majority of the students in either their freshman or sophomore year. Four mature students, selected by the faculty of the speech department, attend an eight-week seminar with the reference librarian in which they gain a familiarity with fundamental learning resources.

These students are teaching assistants. They work regularly with freshmen and sophomores in selecting topics, suggesting methods of research and types of sources, and in offering critiques of student speeches. They have helped students prepare better outlines, improve the quality of research, and develop greater clarity of thought. Thus, they have in many cases experienced productive personal and working relationships. Through dealing with problems such as a speaker's nervousness, poorly organized thinking, and student inertia, library assistants have also arrived at a new appreciation for the responsibilities of teaching.

The idea that students can play a semi-independent role in the education of both themselves and their peers is entirely consistent with the college's self-perception—that it lives by an ethic of rugged independence and individualism.

From its very beginning the college has steered an independent course. No fact of its history has been more important to the present character of the

institution, for *independence* has always been an article of faith at Wabash. Because Wabash accepts no government funds, it enjoys a rare independence in determining its own affairs. Respect for independence, in individuals and institutions, is fundamental to the philosophy of Wabash today.⁸

Without attempting to assess the extent to which the college has been able to live up to this philosophy, it should be sufficient to say that it makes an honest attempt to do so. Therefore, the significant role of student assistants is emblematic of what is characteristically Wabash, that students can help to educate themselves.

SURVEY REPORT

The most ambitious of our evaluations was implemented in April and May 1975 as faculty concurred with librarians in survey design and interpretation. The purpose of the three-part survey was to gauge opinions about the library generally and the project specifically. The staff believed that general attitudes about the library directly related to the overall impact of the project and to possibilities for similar efforts in the future.

Questionnaires went to the twenty-five faculty who had used a student assistant either in freshman tutorials, Speech I, or other courses in which they thought an assistant could be profitably employed. Respondents must be described as a volunteer group because they freely chose a "library reference assistant." The rate of return in the faculty survey was 84 percent and, in general, respondents tended to be positive in their attitudes about the project. They viewed their work with student assistants as worthwhile though not overwhelmingly satisfactory. Sixteen of nineteen faculty members either "agreed" or "strongly agreed" that student assistants were "adequately trained in the use of library resources."

A second questionnaire was mailed to 446 undergraduates who had access to a student assistant in a freshman tutorial, other class, or both. The return rate was 51 percent, including a number who had dropped out, transferred, or graduated. Students generally agreed that library assistants were familiar with resources, were willing to help, and should be made available in other courses. But they were not uniform in endorsing the notion that they would actually consult an assistant for help in using the library. While 49 percent responded that they had "sought help from the student assistant," at least 20 percent did not, an unusually high number of negative responses. Sixty-six percent of the respondents concluded that student assistants were knowledgeable about resources, 6 percent disagreed, and 28 percent were either neutral or did not respond to the question.

The third portion of the April-May survey was distributed to library reference assistants who had participated in tutorial, in-house, or Speech I facets of the project at any time during the grant period. The questionnaire did not try to differentiate between assistants for speech and for other courses but sought to determine the overall five-year impact. On a percentage basis there were more out-of-town residents in this group than the other two. Forty-six of seventy-five questionnaires were returned for a rate of 61 percent.

The library assistants felt that, in one way or another, training in the library project had valuable derivative effects. Assisting a faculty member was the most valued derivative of their experiences. Respondents were dissatisfied with the extent to which students sought their help at the reference desk and were slightly less dissatisfied with the frequency with which tutorial students approached them. These results should be viewed in the context of the regular student questionnaire in which 49 per-

cent of the respondents reported having consulted a reference assistant.

THE PROGRAM'S IMPACT ON THE COLLEGE

Are the college and the library different due to the CLR grant? One quite encouraging change is that the library was allowed to increase its staff which for many years was staffed by only one professional, although he was supported by a group that was capable but quite small. On one previous occasion, the years 1963-67, there was an additional professional position, but, by the spring of 1970, before the CLR program began, there was again only one professional. Today's larger full-time staff of three professionals and six assistants, due partially to the grant, was given a first-time opportunity—to arrange for a physically visible reference desk, staffed for an average of sixty hours per week, designed to be the focal point of patron service and in-depth as well as point-of-use instruction. This was something new to the college and has been received well enough that administrative financial support continues.

Further, we observe in the library staff more responsiveness to student needs, a commitment to help, a sense of pride in sensitive and effective reference service, and an interest in acquiring the knowledge necessary to strengthen such service. An atmosphere which has been prevalent among us is one of self-examination and, as indicated by Charlotte Millis in "Developing Awareness," one of personal, on-the-job accountability.⁹ There has been closer attention to workflow, space allocations, job descriptions, staff development, and faculty-staff relationships. Besides being more service-oriented, technical processing staff members have conceptualized a broader and better integrated view of their positions.

Impact on faculty and students has been generally positive as demonstrated by questionnaire results. The wide range

of faculty attitudes about the library's role in the college has already been mentioned; there were, however, twenty-five teachers who felt strongly enough about the program to employ an assistant one or more times. Several continue to examine newer methods of bibliographic instruction. These are people who were already strong library supporters and who helped us articulate our goals to their teaching colleagues.

Where students, and particularly student assistants, are concerned, the program was considered more than helpful. This observation has been supported by responses to the April-May survey and is also the conclusion of Richard Strawn, professor of French and director of the library project for the first two years.¹⁰ More importantly, we are now more careful listeners when students make suggestions about improving library service as a whole or aspects of the project in particular. Indeed, a number of our more valuable changes have been based on student evaluation and criticism.

We see evidence that more guided study and independent research are taking place. As Dr. Strawn has said, reference questions are increasingly particular.¹¹ Further, interlibrary loan requests have increased significantly. Although records for 1970-72 are incomplete, we know that in 1973 we placed ninety-eight requests for books and photocopies combined. In 1974 that figure had jumped to 392, and for 1975 it rose to 524. Believing independent study vital to the aims of the project and necessary for intelligent research, we purchased in 1974 an associate membership in the ACM Periodical Bank which is designed to provide undergraduates with access to periodical articles not in collections at their own institutions.¹² The dramatic increase in requests indicates the accuracy of our perception that many student research needs were not being satisfied. Two factors which

have kept loan requests from rising faster are (1) that student familiarity with interlibrary loan is in the developing stages, therefore, some have not allowed sufficient lead time for us to place a request, and (2) a number of students take weekend and evening trips to large universities to supplement Lilly's resources.

The program for students of speech works well for several reasons, one of which was suggested by Richard Strawn, who wrote that the problem with freshman seminars was that they unfolded rather than being "well-built ahead of time."¹³ Speech I can be described as well-built ahead of time. Dr. James Barnes, associate professor of history, is convinced that "the library assistant format works best when the topic for the course clearly lends itself to heavy library utilization."¹⁴ This happens in speech: students must use library resources on a regular basis.

Speech courses provide appropriate channels for general bibliographic instruction because they encompass a variety of subjects. Access to supporting evidence often demands familiarity with basic multi-subject resources: examples are *Social Sciences Index*, *Statistical Abstract*, *New York Times Index*, and *Congressional Information Service Index*.

Further, the assistant in speech actually serves as an upper division counselor, usually knowledgeable on a fundamental basis with a wide range of student interests. Naturally, the assistant's commitment is necessary to cement this relationship, but the key to meaningful interaction (that was not present in freshman tutorials) is that assistants

were able to be of service in a broad range of areas. This observation has been borne out by students and assistants alike and is probably the result of personal relationships which may be seen as by-products of critique sessions. The fact that speech assistants could help in a number of areas made them more believable when they talked to students about library resources. Thus, for many students, bibliographic instruction has become a more practical and integral part of the teaching and learning environment.

SUMMARY

The college's proposal to the Council on Library Resources intoned the need to concentrate on making the library interweave with learning so that the one would be unthinkable without the other. When one recognizes the idealism and the rhetoric of such a goal, it is appropriate to conclude that in a limited but practical fashion, the potential of the library has been moved closer to the needs of the curriculum.

The movement began with freshman seminars which themselves were in such a state of ferment that they could not be depended upon to be the focal point of bibliographic instruction from year to year. Therefore, in trying to draw the classroom and the library closer together, we were encouraged to work with students in beginning speech courses, allowing us to introduce the use of multi-subject resources to a group of students who needed them on a regular basis. In so doing, we discovered the value of teaching about learning resources within the framework of what is traditional and what is acceptable in the intellectual life of the college.

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Trends Affecting Community College Library Administrators

A national survey of chief administrators in the library-learning resource centers of public comprehensive community colleges reveals they are assuming a new expanded role in a total program. With new titles, indicating affiliation with a unit broader than a library, they are becoming educational technologists for individual and curricular instruction, assisting in teaching strategies, and becoming involved in new areas, such as design and production, graphics, and electronics.

COMMUNITY COLLEGE library-learning resource directors are assuming a new role, not only for the administration of library material in all forms, but in providing a learning environment and assisting instructors with multiple teaching strategies. They are becoming more than librarians; their positions have taken on new dimensions.

To probe those individuals in this new role, a national survey was designed in 1972 to elicit information concerning certain characteristics of the library-learning resource directors and to identify their positions in the administrative hierarchy. The study was limited to the chief administrators of the centers, or programs, in public comprehensive community colleges. It was restricted to community colleges with transfer, occupational, and continuing education programs; therefore, two-year colleges with only one program, whether transfer or occupational, were omitted. Private colleges were also omitted, as were technical schools and military schools.

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Many two-year branches of state universities did not fulfill the criteria of typical public comprehensive community colleges, and so all junior colleges controlled by universities were eliminated as well. A questionnaire, as the data gathering instrument, was sent to the population of 586 institutions meeting the criteria. Responses were received from 465 libraries (79.4 percent), and of the total population 75.9 percent furnished usable data for analysis.

TITLE OF THE ADMINISTRATOR

The concept of the library-learning resource center is so new that no uniform terminology has been adopted. Terms describing the chief administrator indicate affiliation of the library with instruction, learning centers, or audiovisual programs. Embryonic terminology leans toward identification with instruction, including often the designation "learning" or "instruction." The word used to describe the person in charge of the center, or program, shows that the individual is a "director" or a "coordinator" rather than merely a librarian. Administrative function is implicit, and in some cases campus-wide involvement is recognized.

Those with the actual title "director

of learning resources" accounted for 20.8 percent of the population; deans and coordinators of learning resources contributed the small percentages of 3.8 and 2.1 respectively. Slightly more than 14 percent had other learning resource titles. A total of 41.2 percent had titles that indicated association with a library-learning resource center or a facility with a similar designation. Although there is uncertainty in the adaptation of any one new title, some dissatisfaction with the term "library" is implicit in the frequent rejection of that terminology in favor of new designations.

These titles indicate a struggle with the nomenclature itself. The debatable terms were so changeable that they differed between the issuance of the new AAJC-ACRL "Guidelines" in January 1972 and the revision of those "Guidelines" accepted in June of that same year, from library-learning resource center to learning resource center.^{1,2} The American Association of Junior Colleges³ and the Association of College and Research Libraries had collaborated on the first draft. The later revision included contributions from the Association for Educational Communications and Technology, in addition to those from the other two organizations.

In the shift toward description of the unit as something broader than a library, the title "director of library services" accounted for nearly a third (31.1 percent) of the respondents. This title, including the words "library services," implied more than a traditional library—there is a slight bending of the more rigid term. Although directors of the newly emerging centers have diverse titles, traditional libraries do remain, with librarians as chief administrators. The title "library director" or "librarian" was reported by 27.7 percent, although some of those had integrated centers.

In Fritz Veit's contribution to a 1964

study, there was no doubt that the title "librarian" remained the most popular professional designation, as there were but few other designations, almost all including the term "library."⁴ The same author in his 1975 volume, *The Community College Library*, however, emphasized the present lack of uniformity.⁵ A survey of junior colleges in the 1960s indicated that the trend is toward a combined media department and library, thus creating a learning resource center or an instructional materials center;⁶ and another study described an integrated complex, a new academic phenomenon, called a "learning center" with library and nonbook resources operating together under centralized administration.⁷

EXPERIENCE AND CHARACTERISTICS

Of those in charge of these library-learning resource programs, described as new phenomena, almost half (47.9 percent) have been in their positions from two to five years, while slightly more than 10 percent were new to the position, having served one year or less. About a fourth (25.5 percent) had from six to ten years of experience in current positions. Sixteen percent were veterans of more than ten years, although only 5 percent had been in their positions twenty years or more.

A contributing factor to the finding that more than half had been in their positions five years or less could be that the public community colleges developed and expanded at a very rapid rate during the decade of the 1960s and into the 1970s. With fifty or more new institutions chartered during some years, staff members had been recruited only recently.

The current directors have had previous experience as librarians. The shift to integrated centers with instructional involvement suggests that these former librarians have had to adapt to the expanded concept of library service. Prior

to taking their present positions, 69.7 percent had been librarians, with 3 percent of those indicating that they had audiovisual responsibility as well. A small percentage (7.9 percent) had been employed in a learning resource center previously. Five percent had been audiovisual specialists or media specialists. Fewer than 10 percent had been teachers; and other prior positions (primarily in education) accounted for only 8 percent, including academic administrators, professors of educational administration, curriculum specialists, superintendents of schools, and specialists in learning laboratories and in communications. Very few came from outside the educational sphere, such as business, industry, or the military. Other studies also have shown the predominance of the field of education for prior experience, particularly that of teaching.^{8, 9}

The early association of the public junior colleges with secondary education would lead one to believe that prior experience might actually have been on the secondary school level.¹⁰ However, previous experience was gained in the secondary school by less than a third (29.5 percent) of the population. Higher education was the level of experience for 47.4 percent of the respondents. Those already in the junior college area accounted for 23.7 percent; 11.1 percent came from four-year colleges; and 12.6 percent had prior experience in universities.

Although the area of vocational and technical education is emphasized in the junior college, less than 1 percent had come from technical schools. Slightly more than 22 percent had prior experience in elementary schools, public and special libraries, and other areas. In an earlier study the prediction was made that, as the junior college becomes more distinct, it is probable that previous experience will be college library experience rather than school library experience.¹¹ The current trend would tend

to support this forecast. With the chief administrator of the library being college or university oriented, the junior college becomes more closely allied with higher education.

To determine the personal characteristics of the current administrators directing these centers, data were sought concerning sex and age. Of the chief library-learning resource administrators, 62.6 percent were male, and 37.4 percent were female. In other studies of academic librarians, women predominate in staff positions; however, men are frequently found in the administrative positions.

In a 1970 study of academic library administrators, including but not limited to those in two-year institutions, approximately nine-tenths were male, as opposed to slightly more than one-tenth female.¹² A study of personal characteristics of academic librarians indicated that very nearly two-thirds of the academic librarians were women; relatively more of the men, 21.6 percent versus 11.8 percent of the women, were chief librarians.¹³ Findings in the present investigation agree with the trends expressed in prior studies in which there is male predominance in administrative positions. A 1973 study of community college librarians, most of whom were in staff positions, reported a reverse ratio of 61.7 percent females and 38.3 percent males.¹⁴

In the present investigation, directors in these positions are shown to be middle-aged. The modal age bracket of respondents was 40-49. It might have been expected that young men with knowledge of new techniques would have been sought for innovative programs in new institutions; however, mature men with prior experience are directors of library-learning resource centers.

An overwhelming majority find job satisfaction in these positions. While 94.3 percent agreed that the position was satisfying, less than 6 percent ex-

pressed dissatisfaction. This is a smaller percentage than that of Schiller's study, in which 11 percent of the academic librarians reported that they were disappointed in their work.¹⁵

Current directors accept the integrated concept of library-learning resource programs, with 95.9 percent agreeing with the concept. On an adaptation of the Likert scale, 66.6 percent, or two-thirds, expressed strong agreement. A very low percentage (4.1) indicated some degree of disillusionment with integration. Present-day emphasis is on the centralized administration of all types of material.

The 1972 "Guidelines" used the terminology "center" until the revision of those "Guidelines" six months later, at which time "program" replaced the former term in the document. The most noticeable change since the 1960 Standards, shown in the new "Guidelines" (including the revision), was the increased emphasis on the administrative unification of print and audiovisual services.

In the present study a number of respondents indicated that, although administered as an integrated unit, library and audiovisual services were not in the same location. In the single organizational function, three-fourths (75.5 percent) replied in the affirmative that the department consists of library and audiovisual services administered as an integrated unit. During 1972 a survey of community college construction revealed that various combinations of library, audiovisual, learning laboratory, reprographics, and skills centers formed learning resource centers in the new architectural arrangements.¹⁶

DUTIES

In programs with the expanded, integrated concept, administrators face problems broader than usual library management problems. They estimate that a higher percentage of time is

spent in administrative duties than in other areas. More than half of their time (59.6 percent) is devoted to administration, with 11 percent reporting that all of their time was so allocated. Administrative duties require a broad range of competence in decision-making, directing, fiscal planning, budgeting, staffing, coordinating, and communicating, as well as personnel management.

As staff expands, administrative responsibility grows. While few supervise large numbers of people, most have some supervisory responsibility. The revised "Guidelines" state that all personnel should be considered for employment on the recommendation of the director, with the advice of the center staff or unit head. The current directors do have primary responsibility for selecting new staff members in 86.2 percent of the centers. In the area of budgeting, 91.3 percent have primary responsibility for the library budget, while 71.4 percent have responsibility for the audiovisual budget.

Audiovisual Services

The trend toward integrated centers with provision for audiovisual services has necessitated involvement of directors in the supervision of routines not heretofore considered a part of library service. There are new functions in graphics sections, electronics sections, photographic laboratories, and production design centers. Nevertheless, little time is estimated as being spent on audiovisual services, with only 6.5 percent so allocated. Of the centers polled, more than 90 percent have holdings in slides, records, filmstrips, audio tape, and microforms; 74.2 percent own films; 83.2 percent have transparencies; and 69.5 percent have acquired videotape. Self-instructional carrels with media outlets were available in 64.6 percent of the institutions.

Other respondents volunteered information that carrels were in the process

of being built or were on the drawing board. Wet carrels are equipped in many institutions with dial access, audio, and visual capabilities. Here the library-learning resource staff, under the direction of the administrator, provides a place for learners to proceed at their own rates, allowing for differences in intelligence, motivation, and persistence.

Teaching

When consideration is given to the role of the library-learning resource director in providing the learning environment, it can be assumed that the librarian, instead of actually teaching, is involved in expanding instructional techniques as an instructional technologist. By their own declaration, respondents consider that 6.7 percent of their time is devoted to teaching, with 4.5 percent devoted to informal instruction and 2.2 percent to formal course work.

They do not indicate a preference for increasing their teaching duties measurably. Seventy-eight percent do not wish to devote any time to formal teaching, and 95 percent would prefer to spend less than 10 percent of their time on course work. In an earlier study, it was shown that librarians feared that their teaching role might actually become submerged in the administrative aspects of their jobs.¹⁷ If it is assumed that the small percentage of time reported in teaching is accurate, then the concern expressed may, in fact, have been realized.

Library-learning resource directors, rather than imparting knowledge, arrange an educational setting and provide motivation so that learning can take place. Major current trends in instruction include self-instruction and individualization of instruction, supporting the philosophy of individual differences. To the extent that the college makes use of the library-learning resource center as an integral part of

the curricular program, the learning center becomes a teaching instrument.

Design and Production

The new concept of the library-learning resources program allows for the production of materials for curricular and individual needs. The revised "Guidelines" state that materials are selected, acquired, designed, or produced on the basis of institutional and instructional objectives. They state, further, that materials may be acquired and made available from a variety of sources, among which are listed the facility for design and production of materials not readily available. Production activities may include graphics, photography, cinematography, audio and video recording, and preparation of printed materials.

These are new concepts for library-oriented personnel; however, 72.1 percent indicated that production is provided, at least to some degree. While some reported that design and production were on a limited scale, many were encouraging this new involvement with materials.

Technical Processes

In addition to the time spent on administrative duties, audiovisual, teaching, and production, the directors spend 12 percent of their time on technical processes, which would include acquiring and organizing the collection. Time spent in processing is lessened in 23 percent of the institutions which reported that their materials were received pre-processed by a commercial or other agency. The current trend is in direct opposition to direct involvement with cataloging. A decade earlier, nearly three-quarters of the junior college head librarians did the actual cataloging in addition to other duties.¹⁸ As early as 1935 a report on junior college trends suggested that technical processes be

scanned for possible curtailment.¹⁹

Current directors indicated that they would prefer to spend less time than they actually spend on technical services. A number of directors indicated that they were in the process of changing from Dewey to Library of Congress classification. With 56.4 percent organizing according to Library of Congress and 42.9 percent under Dewey Decimal, classification is changing in the direction of Library of Congress. This is a new trend since the study which reported that Dewey was almost overwhelmingly preferred.²⁰

The present study determined that many local schemes with accession numbers were used for audiovisual materials, although 21.5 percent classified nonprint under Dewey and 22.5 percent according to Library of Congress. A few used the indexes of the National Information Center for Educational Media as guides to arrangement. Books and audiovisual materials were recorded in a central coordinated or union catalog in more than two-thirds (67.2 percent) of the institutions.

Public Services

The amount of time estimated as spent in public services is 11.1 percent, and the directors would prefer to increase that amount slightly. Additional time is devoted to work with the public in faculty liaison, curriculum development and planning, committee work, public relations, and meetings. Time spent in curricular development indicates that the library-learning resource director is taking on the responsibility of keeping informed concerning curricular matters and being alert to support through materials.

Directors were represented, either personally or by staff, on the curriculum committee in 71.6 percent of the institutions. This is an increase in the percentage of directors represented on the com-

mittee when compared with Wheeler's study which reported approximately one-third serving on the curriculum committee.²¹ This new frequency of service on the committee points further to the role of directors regarding instructional involvement. Knapp's study had revealed comments from teaching faculty that did not identify the librarian as a fellow curriculum builder, but rather as one who merely reported holdings.²²

REPORTING AND LEVEL OF RESPONSIBILITY

There is recognition of the teaching-learning instructional function of the library-learning resource center by fact of the line of reporting. The changing trend in the administrative hierarchy is that of direct reporting to the dean of instruction. More than half (58.7 percent) of the directors indicated that they report to the dean of instruction, and another 10 percent report to other deans, with 11.5 percent reporting to the president and 13.3 percent to the vice-president. An unusual line of reporting is noted by a small group (2.4 percent) who report to the president and the dean; 4.1 percent report to "others."

This information reveals a change in the administrative hierarchy since Wheeler's study in which more than half of the community college library directors in the sample described themselves as responsible to their college presidents, with just over one-fourth reporting to deans.²³ Moore, in a recent study, found 64 percent of the library directors reporting to the academic dean.²⁴ He pointed out that the position of the head librarian stands relatively high in the structure of the American public community college.²⁵

Veit has expressed concern that learning resource programs might not achieve the necessary close contact with the instructional program unless the director

of the library reports to the college officer in charge of academic affairs.²⁶ Findings of the present study show the director of library-learning resources in a position of direct reporting to the dean of instruction, thereby linking the learning resource program with instruction.

These library-learning resource chief administrators should have rank and titles identical to those of the teaching staff, according to the 1960 Standards. The 1972 "Guidelines" expanded this statement into a standard expressing the fact that the chief administrator of the center should have the same administrative rank and status as others with similar institution-wide responsibilities. More than 80 percent of the current directors are accorded faculty status; rank was not surveyed. The "Guidelines" stress the obligation to meet professional requirements, such as advanced study, research, and committee work. An actual poll of two-year college learning resource centers in one state showed that the responsibility for advanced study, research, and publication was required in very few cases.²⁷

CONCLUSION

The chief administrator of the library-learning resource center or program has had to adjust to a new philosophy, a new role, from that of a keeper of materials to a dispenser of curriculum materials, to analyst and designer of instructional systems with a concern for planning a learning environment. The role of the director has assumed broader dimensions than heretofore in expanded libraries with new names, viewed now as omni-media centers, with audiovisual responsibilities in a total program supporting new methods of teaching, different types of students, and diverse curricula.

Although the director's time spent in actual teaching is minimal, his or her role is closely allied to that of instruction in providing the learning environment with appropriate materials of all types for the individualization of instruction. The majority of the directors agree with the integrated media concept and derive satisfaction in their positions. They have reached a new level of professionalism directly involved with individual and classroom learning.

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RONALD F. DOW

Academic Librarians: A Survey of Benefits and Responsibilities

This article summarizes a survey of 166 librarian positions in forty-one colleges and universities which offer faculty status to librarians. The survey records the various benefits received by librarians as well as their responsibilities in campus governance.

AS PART OF A PLAN OF ACTION to acquire faculty status for the librarians at Hamilton and Kirkland Colleges, Clinton, New York, the local chapter of the American Association of University Professors (AAUP) designed and conducted a survey. The chapter reasoned that the most effective means of presenting the case for librarians to other faculty and administrators on campus would be to reinforce each position concerning a faculty right or responsibility with evidence for the stance in the form of data gathered from institutions claiming faculty status for librarians.

A questionnaire was designed and mailed to fifty-three libraries across the country. The libraries chosen for the survey were libraries which had advertised faculty status for librarians at their institutions, either in job advertisements or in articles which had appeared in various professional journals since the 1940s. When a state system was queried, only one library in that system was approached; thus, in reality, the survey results represented many more libraries than would appear to be the case.

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One questionnaire only was sent to a library, and in general the response was prepared by either the head librarian or an assistant. A return rate of 77.4 percent represented nineteen state colleges and universities, eighteen private colleges, and four private universities.

The questionnaire was arranged to solicit responses by position within the library. From the forty-one responding institutions, information was collected for 166 positions labelled head librarian, associate librarian, assistant librarian, department head, or other professional title. Only one response per position per library was used.

The local AAUP chapter had developed a list of rights and responsibilities that faculty members believed existed for them but did not exist for the librarians at the two colleges. The survey then was to determine if the concept "faculty status" for librarians did indeed reflect the sentiment of the 1972 "Joint Statement" issued by the American Association of University Professors and the Association of College and Research Libraries. The statement reads in part that "faculty status entails for librarians the same rights and responsibilities as for other members of the faculty."¹

If indeed this were the case, the chapter reasoned, the survey results would

support the "Joint Statement's" position of faculty status for librarians. The survey was not intended to affix the percentage of schools which offer faculty status to their librarians.

BENEFITS

A look at the survey results and what had been labelled by the local AAUP chapter as the benefits of faculty status is provided in Table 1. Although such benefits as tenure and academic rank do exist for a majority of the librarians at the surveyed institutions, only 3.6 percent of the surveyed positions are staffed by librarians who possess nine-month contracts. It is evident from this table that not all benefits are available across-the-board to librarians with faculty status. (The survey was not concerned with such benefits as holidays or evening and weekend work. These were considered to be administrative matters rather than ones of status.)

TABLE 1
BENEFITS OF FACULTY STATUS FOR 166
POSITIONS AT FORTY-ONE INSTITUTIONS

Benefit	Positions with the Benefit	
	Number	Percent (n = 166)
Can offer courses for academic credit	127	76.5
Are eligible for tenure	104	62.7
Are reimbursed for attendance at professional meetings	166	100.0
Are eligible for paid leaves	154	92.8
Have nine-month contracts	6	3.6
Possess academic or equivalent ranks	103	62.0
Are eligible for school research funds	161	96.9

RESPONSIBILITIES

The AAUP chapter was also interested in the librarians' exercise of responsibility in the overall governance of the academic community. This takes the form of voting rights in the faculty forum and eligibility for service on faculty committees. In this instance the results were more interesting when

viewed in terms of staff positions.

As Table 2 indicates, no position guarantees basic faculty governance responsibilities, although there is a general trend supporting the point of view that the higher the position in the library administration, the more likely there is the opportunity to participate in campus governance.

Further, we may conclude from Tables 1 and 2 that, in the case of the surveyed libraries, librarians with faculty status are more likely to enjoy the benefits of the "teaching" faculty than the "teaching" faculty's responsibility for campus governance.

BENEFITS AND RESPONSIBILITIES

A cross-tabulation was employed to view the relationships of responsibility for faculty governance with benefits received by librarians. It was shown that librarians who have the opportunity to exercise greater governance responsibility also receive a greater percentage of the benefits associated with the "teaching" faculty's status. Tables 3 through 5 present these results.

For instance, as is illustrated by Table 3, 83.3 percent of the total assistant librarian positions surveyed possessed academic rank or its equivalent. But among assistant librarian positions where the governance responsibility was inherent, 94.8 percent of the positions carried

TABLE 2
RESPONSIBILITIES OF FACULTY STATUS

Position	Possesses Governance Responsibility (Faculty Voting Rights and Committee Eligibility)	
	Number	Percent
Head Librarian (n = 40)	35	87.5
Associate Librarian (n = 23)	18	78.3
Assistant Librarian (n = 24)	18	75.0
Department Head (n = 38)	30	78.9
Other Professional (n = 41)	28	68.3

TABLE 3
ACADEMIC RANK AND ITS RELATION
TO GOVERNANCE RESPONSIBILITY
(FACULTY VOTING RIGHTS
AND COMMITTEE ELIGIBILITY)

Position	Positions with Academic Rank Total of Surveyed Positions		Positions with Governance Responsibilities	
	Number	Percent	Number	Percent
Head Librarian	32	80	30	85.7
Associate Librarian	15	65.2	14	77.3
Assistant Librarian	20	83.3	17	94.8
Department Head	33	86.8	26	86.6
Other Professional	27	65.9	24	85.7

TABLE 4
TENURE AND ITS RELATION
TO GOVERNANCE RESPONSIBILITY
(FACULTY VOTING RIGHTS
AND COMMITTEE ELIGIBILITY)

Position	Positions with Tenure Total of Surveyed Positions		Positions with Governance Responsibilities	
	Number	Percent	Number	Percent
Head Librarian	25	62.5	24	68.6
Associate Librarian	13	56.5	12	66.7
Assistant Librarian	18	75.0	16	89.5
Department Head	24	63.2	25	83.3
Other Professional	24	58.5	23	82.1

TABLE 5
THE NINE-MONTH CONTRACT AND ITS
RELATION TO GOVERNANCE RESPONSIBILITY
(FACULTY VOTING RIGHTS
AND COMMITTEE ELIGIBILITY)

Position	Position with Nine-Month Contract Total of Surveyed Positions		Positions with Governance Responsibilities	
	Number	Percent	Number	Percent
Head Librarian	2	5	2	5.7
Associate Librarian	0	0	0	0
Assistant Librarian	0	0	0	0
Department Head	2	5.3	2	6.6
Other Professional	2	4.9	2	7.1

rank. Likewise, from Table 4, we can see that although 75 percent of the assistant librarians with faculty status are eligible for tenure, 89.5 percent of the assistant librarians with governance responsibility associated with their faculty status qualify for tenure consideration.

As is shown in Table 3, we can see there continues to be a downward trend

by position for librarians with academic rank; however, librarians with voting rights and committee responsibilities appear much closer to equality with the "teaching" faculty.

The case was true as well for paid leaves, academic rank, and most of the other benefits identified by the local AAUP chapter. Even the nine-month contract for librarians, illustrated in Table 5, seems related to this gauge of librarian responsibility outside the library.

It is interesting to observe that, in the case of both tenure and rank, the assistant librarian is more likely to enjoy these benefits than is either the head or the associate librarian. This phenomenon probably results from senior library administrators in large universities holding administrative rather than faculty ranks.

As commentary on this study and the picture it paints of librarians, it would seem fair to conclude that even those who fill the highest positions in the surveyed libraries cannot, as a group, claim the same status on the faculty as those faculty who appear regularly in the classroom. Though some institutions do provide their librarians with the total range of faculty rights and responsibilities, this simply is not the case for the majority of the surveyed librarians.

One positive point can be made, however, and that is that as librarians become more active in the academic community, working with faculty in setting the academic tone of the institution through participation in college and university governance, they do achieve a status more comparable to the status enjoyed by the "teaching" faculty.

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Secondary Publications in Education: A Study of Duplication

Duplication of coverage is examined to give librarians a closer acquaintance with three indexes found in education-psychology libraries. Two educational indexes' overlap of coverage is studied in terms of editorial policy, growth and size of coverage, cover-to-cover vs. selective indexing, and the subject orientation of the periodicals concerned in order to compare two approaches to the same discipline. One index in psychology is contrasted to the two in education, but the main focus is on the mutual interests of these two disciplines.

TO WHAT EXTENT do these indexes duplicate each other? I seem to see the same articles listed." In an education-psychology library the user was referring to *Education Index*, ERIC's *Current Index to Journals in Education*, and *Psychological Abstracts*. Naturally, the two educational indexes would duplicate each other but to what degree and how do they differ? Are the mutual interests of education and psychology centered solely on educational psychology, or do they coincide in other areas? And what are those "other areas"? That is, what are the periodicals and what are the fields supporting these two disciplines that they represent.

To answer these questions this study examines duplication of coverage and interests between these indexing services and sketches a profile of the subject orientation of the periodicals within each service. Hopefully, the resulting picture will provide librarians with a better "feel" for the indexes which will prove useful when guiding the user.

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METHODOLOGY

Data organization required a master list of those periodicals indexed, noting (a) which index covered a title, (b) whether the indexing was cover-to-cover or selective, and (c) the subject orientation of the publication according to periodical and serial directories,¹⁻³ or estimation based on the title. Totals were simply extracted from this list.

The data are based on one point in time, December 1974. But the indexes had grown considerably in the five preceding years. This growth should be kept in mind when users are scanning more than the latest issues. Figure 1 shows that *CIJE* (*Current Index to Journals in Education*) had doubled its coverage since its inception in 1969, and *PA* (*Psychological Abstracts*) had expanded half again as much in the same period. The time up to 1971-72 was one of rapid growth for both but has since tapered off. In contrast, the coverage of *EI* (*Education Index*) was one of relative non-growth, and, therefore, its data can be better extended over time.

EDUCATION

There are five supporting elements in

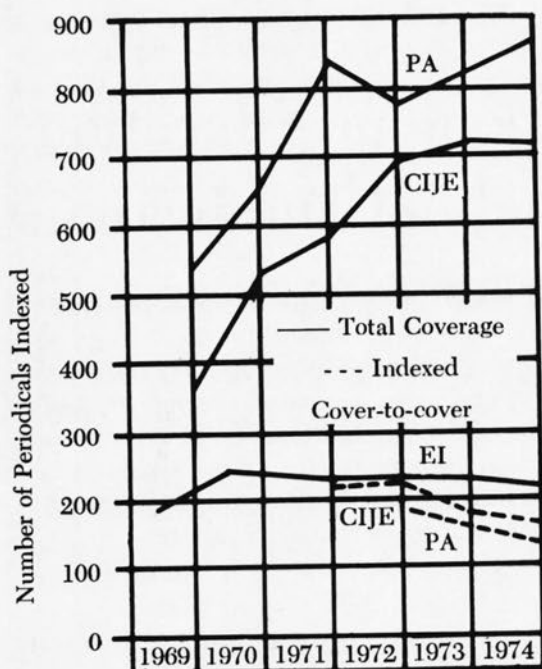


Figure 1

Growth of Coverage by Three Bibliographic Services: *Education Index* (EI), *Current Index to Journals in Education* (CIJE), and *Psychological Abstracts* (PA)

this study—namely, (1) editorial policy, (2) the overlap and non-overlap of coverage, (3) several indicators of the core titles, (4) the size of coverage, and (5) the subject nature of the above. All five are utilized in studying education where two indexes handling the same subject area can be compared.

Editorial Policy

A brief history can be helpful to identify those editorial decisions that have formed each index's particular characteristics.

Education Index (EI) of the Wilson Company has been the index in education from its inception in 1929 up to the appearance of *CIJE* in 1969. *EI*'s selection policy is suggested by the Wilson Indexes Committee (ALA's Reference and Adult Services Division) which has combined periodic in-depth studies with subscriber vote since 1951.^{4, 5} If

this monitored-feedback system has been effective, the titles should represent a carefully tailored list of the most important journals in the field. However, it has responded only modestly to requests for greater coverage. And when doing so, it deleted personal author entries and certain types of materials from 1961 to 1969.⁶

Because of this limited coverage in *EI* and the overall picture of secondary publications in education, the need was more forcefully stated for a new index that could provide better access to the vast amount of literature in the field, provide author entries, and supply some type of abstracting.⁷ As a result the *Current Index to Journals in Education* (*CIJE*) appeared in 1969 as part of the ERIC system. It, too, gathered subscriber information and appointed a panel, but this time the goals were less restricted resulting in the following comparisons.

Overlap in Education

When two independent services index the same literature, it could be expected that both would include the same titles. Actually, *CIJE* does duplicate 180 (83 percent) of *EI*'s 218 periodicals, indicating substantial agreement on the most useful titles. One difference then lies beyond this overlap of 180. *CIJE*'s coverage of 702 periodicals is more than three times that of *EI*, further illustrating its policy to assure "access to important articles published in periodicals which fall outside the scope of education-oriented literature."⁸ In contrast, *EI* prefers a non-growth coverage.

However, while *CIJE* expands deeply into noneducation-oriented literature, it bypasses thirty-eight periodicals or 17 percent of what *EI* considers relevant to education. Of these, twenty-eight are in education and, therefore, not merely alternatives for peripheral choices. (See Schorr for a list of the thirty-eight periodicals.)⁹

Core Periodicals

Since both services want to include the major periodicals of the field, the core should exist in those chosen by both. However, since the peripheral literature can also overlap, a stronger indicator is whether a journal is fully indexed (cover-to-cover) or not. Full-indexing in this study is viewed as an editorial choice that infers total relevancy to the subject field. Full-indexing by several services is the ultimate indicator of the major journals.

EI treats its entire coverage as a core collection. It indexes all 218 periodicals cover-to-cover, inferring that these choices are so relevant to education that every article in them should be accessible.

CIJE fully indexes 159 (23 percent), 101 of which overlap with *EI*. It is these 101 that we can call the hard core, since they are fully indexed by both services. Beyond this level of 101 lies the difference of treatment. *CIJE* continues with alternative choices for total indexing while preferring partial scanning for titles that *EI* considers worthy of full accessibility.

As noted before, *CIJE* overlaps 83 percent of *EI*. But the 101 figure of full-indexing overlap reduces that figure to 46 percent of *EI*. Therefore, while *CIJE* does duplicate most of *EI*'s coverage, the type of indexing differs on half of the titles. *EI* includes those thirty-eight titles totally bypassed by *CIJE*.

These last features should be kept in mind if *CIJE* appears to subsume *EI*'s coverage and usefulness. It should also be noted that numerous in-volume cross-references, the use of subheadings/sub-subheadings, and a time lag of only one to two months compared to *CIJE*'s four to five months are some of the features that make *EI* an easier index to use manually and preferable to certain users.¹⁰

On the other hand, Schorr has cast a doubt over the quality and depth of indexing in *EI* as compared to that of *CIJE*. In his two examples, *EI* used only one and no subject descriptors while *CIJE* used close to its customary average of six per title. His article should be referred to for some additional comparisons including costs.¹¹

PSYCHOLOGY

Compared to education, *Psychological Abstracts (PA)* fully indexes a smaller portion of its coverage, 138 or 16 percent of its 866. As with *CIJE*, *PA* relies heavily on an extensive periphery of 84 percent and Figure 1 reviews the somewhat similar pattern of rapid growth that expanded each coverage.

Of the total overlap, seventy (8 percent of *PA*) are surveyed by all three services, six of which are the fully-indexed hard core. If one considers any overlap with one or both of the other indexes, the total overlap increases to 160 (18 percent of *PA*), nineteen of which are fully indexed. Therefore, an ample number of periodicals are relevant to both disciplines. However, there is the possibility that one discipline borrowed totally from the other rather than there being a mutual interest in each other's field. This question reveals the weakness of pure overlap data alone. The following section tries to offset this factor by identifying the subject orientation of the periodicals involved.

SUBJECT ORIENTATION

Tables 1 and 2 are based on the subject assignments in periodical directories. Of the 1,436 periodicals in this study, 84 percent were listed in *Ulrich's International Periodicals Directory, Irregular Serials and Annuals*, or *New Serial Titles*; 13 percent had subjects added to those titles that seemed representative; and 3 percent were left without subject designations. Of those with subjects, 65 percent had single descrip-

tors while each title averaged 1.4 descriptors.

There are pitfalls in reading the data because many titles belong to several subject categories. The categories cannot be added together without distortion. But in a very general way, one can scan the table and sense the emphases and balance of coverage within each index.

Education

The "Total" columns of Table 1 represent the total profile for each index in terms of the number of journals in that category and its percentage of the total journals covered in that index. One cannot add categories together, but one may judge a category's strength in relation to the whole and to that of other categories. An examination of Table 2 will give a picture of the number of periodicals that are unique to that index ("a" columns) and those that overlap others (columns b,c).

Comparison of the two^a education indexes shows somewhat parallel emphases and representation in each category. There is slightly more stress in *CIJE* on the periodicals in the social sciences, communication, linguistics, business, and the natural/physical sciences. These represent the major areas contributing to its peripheral growth. They are only minimally altered when education journals are removed as in the "T-Ed" columns, indicating those journals outside the field of education. *EI* consists mostly of educationally oriented titles but does have representation in almost every category.

Psychology and Education

Comparison of *CIJE* and *PA* reveals the wide range of interests shared by education and psychology. *CIJE* scans the periodicals more intensely in linguistics, communication, business, and the humanities, and *PA* depends heavily on

TABLE 1
TOTAL PROFILE FOR EACH INDEX BY SUBJECT
ORIENTATION OF THE PERIODICALS

Subject	Total	EI % ³	T-Ed ¹	Total	CIJE % ⁴	T-Ed ¹	Total	PA % ⁵	T-Ps ²
Education	195	89	—	422	60	—	161	20	120
(Education & Psychology) ⁶	(13)	(6)		(18)	(3)		(41)	(5)	
Psychology	23	10	10	71	10	53	334	39	—
Psychiatry & Neurology	2	1	—	10	1	—	164	19	—
Business, Mgt, Economics	14	6	4	77	11	64	46	5	44
Children	9	4	2	23	3	14	22	3	12
Communication	7	3	3	64	9	44	8	1	5
Crime & Law	—	—	—	10	1	7	21	2	21
Ethnic Concerns	3	1	1	15	2	10	4	0	4
Humanities	21	10	6	65	9	43	26	3	21
Linguistics	12	6	—	82	12	41	8	1	7
Sciences:									
—General & Technology	10	5	—	32	5	11	22	3	18
—Health Sciences	13	6	8	30	4	21	142	16	124
—Math & Statistics	5	2	1	14	2	4	10	1	7
—Natural & Physical Sci's	4	2	1	40	6	33	53	6	32
—Social Sciences	8	4	1	78	11	57	94	11	65
Social Services	7	3	7	13	2	11	21	2	18
Other	2	1	1	5	1	3	10	1	6

1) Total minus "Education" category.

2) Total minus "Psychology" category.

3) Percent of the 218 periodicals indexed by *EI*.

4) Percent of the 702 periodicals indexed by *CIJE*.

5) Percent of the 866 periodicals indexed by *PA*.

6) Figures also included in "Education" and "Psychology" categories.

TABLE 2
THE NUMBER OF OVERLAPPING AND NON-OVERLAPPING
PERIODICALS BY THEIR SUBJECT ORIENTATION

Subject	a EI	b ¹ EI/CIJE	a CIJE	b ¹ CIJE/PA	a PA	b ¹ PA/EI	c EI/CIJE/PA
Education	26	166	226	91	67	64	61
(Education & Psychology) ²	—	(13)	(1)	(17)	(24)	(13)	(13)
Psychology	—	21	6	66	266	23	21
Psychiatry & Neurology	1	1	2	8	156	1	1
Business, Mgt, Economics	2	12	51	16	31	2	2
Children	—	9	9	11	11	6	6
Communication (Libraries) ³	—	7	57 (26)	5	2	5	5
Crime & Law	—	—	10	—	21	—	—
Ethnic Concerns	—	3	12	4	2	2	2
Humanities (Literature) ³	7 (2)	13 (1)	51 (18)	3	22 (3)	3	2
Linguistics	—	12	67	6	2	3	3
Sciences:							
—General & Technology	—	10	20	4	18	2	2
—Health Sciences	—	12	8	19	122	10	9
—Math & Statistics	—	5	7	2	8	—	—
—Natural & Physical Sci's (Consvr/Envir) ³	—	4	35 (21)	3	50 (1)	2	2
—Social Sciences (Sociology) ³	1	8 (3)	54 (24)	19 (14)	75 (44)	3 (3)	3 (3)
Social Services	—	1	6	6	15	—	—
Other	—	2	3	—	10	—	—

1) Includes Column c.

2) Also counted in "Education" and "Psychology" categories.

3) Also counted in above category.

the health sciences. But beyond these areas, both indexes show an interest in every category.

Within the format of the data, educational psychology can only be narrowed to those titles classified by both "education" and "psychology" subject headings. According to Table 1, more of these can be found in *PA*, while Table 2 shows that all but one periodical can be found in *PA* (Table 2, *CIJE* "a" column). Therefore, without considering full or partial indexing as a factor, *PA* should give access to virtually every educational psychology journal covered in these indexes.

The tables show that a mutual interest in each other's discipline does exist. However, by more than a two-to-one ratio (Table 1), *PA* appears to scan more periodicals in education than do *EI* and *CIJE* for psychology. This includes an oddity in *PA*'s unique cover-

age (Table 2, *PA* "a" column) where sixty-seven educational journals are indexed by *PA* and ignored by the educational indexes. Of these, twenty-six also concern psychology, but that still leaves forty-one. *PA*'s international orientation accounts for twenty-nine foreign language journals, but again that leaves thirty-eight unique educational titles in psychology. Consequently, to scan all of the educational journals in these indexes, one must use all three in order to have access to those sixty-seven unique to *PA* and the twenty-six found solely in *EI*. On the other hand, one must use *CIJE* for only six to eight unique titles in psychology and *EI* for one more in psychiatry.

SUMMARY AND CONCLUSIONS

The intent of this study is to provide data that would give librarians a closer acquaintance with these indexes. The

data are reduced to figures and tables which can be scanned according to specific interests. In sum, the overlap provides a series of comparisons which consider full and partial indexing, the growth and size of coverage, and the subject nature of the periodicals concerned. Comparison of the educational indexes reveals that the *CIJE* scans three times as many journals as does *EI*. However, it does not subsume *EI* completely, and the two differ on choices for full

indexing. Each still has advantages for particular users.

In fact, for access to all of the educational periodicals covered, each of the indexes must be used. On the other hand, almost all psychology and psychiatry titles of the three are accessible through *PA* alone. While *PA* scans more periodicals in education than do *EI* and *CIJE* in psychology, the two have a somewhat similar breadth of interests beyond educational psychology.

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Drafting a Reference Collection Policy

A reference collection policy can be useful in setting guidelines for the establishment and maintenance of an effective reference collection. It can also serve to facilitate reference service and to train new reference librarians by clarifying some reference department goals. This article indicates important elements to include in a reference collection policy. It also describes procedures followed by the Reference Collection Committee at San Diego State University in drafting its policy and includes the text of the policy currently in effect in the San Diego State University Library.

MANY ACADEMIC LIBRARIES have written collection policies which set criteria for depth of coverage, selection, and retirement (weeding or storage) of the library's collection. In recent years a number of academic library reference departments have recognized the need for additional guidelines in order to maintain an effective reference collection.

A reference collection policy is a useful tool for several reasons. First, it sets uniform guidelines for the collection, including subject scope, depth of coverage, and types of material to be included. Second, it provides an opportunity for coordinating the reference collection with reference service. Since the reference collection is a working collection, materials should be chosen, located, and, if necessary, duplicated, to serve the needs of reference librarians and users. Third, the reference collection policy is an effective orientation device for training new staff in making reference decisions. Finally, the policy spells out the cooperation and division

of labor which takes place between public service departments or, in very large institutions, between libraries, so that duplication is planned rather than unintentional.

Elements to Include in a Reference Collection Policy

To be an effective document, the reference collection policy should include the following elements:

1. A statement of objectives, indicating the purposes of the policy.
2. Information about the subject scope of the collection, preferably within the framework of the curriculum and other needs of the academic institution as a whole.
3. The optimum size of the reference collection, if set by the department.
4. Criteria for including or excluding publications within each of the major categories of reference materials. (Are all foreign language dictionaries kept in the reference department or only those for languages taught at the institution? How comprehensive must a bibliography be in order to be considered a reference book?)
5. Responsibility for selection, as

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well as procedures followed.

6. Priorities followed in selection, such as needs of the institution, favorable reviews, recency, and language of publication.
7. Procedures for updating and weeding the reference collection.

Preparation of a Reference Collection Policy for San Diego State University Library

In June 1974 the chairperson of the Department of Reference and Instructional Services, San Diego State University Library, appointed a four-member Reference Collection Committee to coordinate the acquisition of new reference materials and to draft a reference collection policy. After performing a nearly fruitless literature search on the subject of reference collection policies, the committee decided to survey other university libraries for ideas and requested reference collection policies

from sixty American and Canadian universities which, like San Diego State University, have an enrollment in excess of 20,000 students. Many libraries replied that they had no policy as yet but intended to write one in the near future. Fourteen policies of various types were received including selection policies for the entire library and reference service policies, as well as guidelines for the reference collection. The documents from University of Alberta, McGill University, University of Toronto, University of Nebraska, and University of Massachusetts were especially helpful in drafting a policy at San Diego.

The reference collection policy, now ratified by the department, is divided into seven parts: policy objectives, subject scope of the collection, collection size, types of material included, acquisition of new materials, weeding the collection, and inventory. The text follows:

REFERENCE COLLECTION POLICY OF THE RESEARCH AND REFERENCE SECTION, REFERENCE AND INSTRUCTIONAL SERVICES DEPARTMENT, SAN DIEGO STATE UNIVERSITY LIBRARY

I. Objectives of the Reference Collection Policy

- A. To establish guidelines, as concrete and definite as possible, for both the subject scope of the reference collection and the materials included in it.
- B. To set procedures for acquiring new materials and for weeding the collection which will ensure the development and maintenance of a complete, current, and convenient reference collection.

II. Subject Scope of the Collection

- A. The Research and Reference Section provides basic and in-depth information sources in the social sciences and humanities, including education. The section also provides selective coverage of

subjects of current interest not directly within these academic disciplines.

- B. In addition, Research and Reference collects some other materials which have call numbers Q-V, usually within the scope of the Sciences and Engineering Library. These materials are needed to supplement service in the areas named above, and include:
 1. Directories of manufacturers.
 2. Test manuals in scientific fields.
 3. Biographical dictionaries in scientific fields.
 4. Guides to travel accommodations.
- C. Research and Reference excludes the following subjects and cate-

gories of materials, except for items very directly related to the social sciences and humanities:

1. Computer technology (included in the Sciences and Engineering Library).
2. Environment and ecology (included in the Sciences and Engineering Library).
3. Recreation materials on subjects such as bicycling, backpacking, and camping (kept in the Sciences and Engineering Library).
4. Coin and stamp catalogs.
5. Genealogy, except for works pertaining to general history studies.
6. Children's literature (kept in the Education Resource Center).
7. California, United States, and United Nations publications (kept in the Department of Government Publications), except for duplicate copies of such frequently-used sources as *Statistical Abstract of the United States*.
8. Pure and applied sciences (included in the Sciences and Engineering Library).

III. Size of the Reference Collection

The Research and Reference Section does not designate an absolute limit on the size of the reference collection. However, prevailing demand, changes in the curriculum, and student enrollment figures in various disciplines serve as guidelines to the relative growth rates of subject areas within the collection.

IV. Types of Materials Included in the Collection

- A. *Almanacs and yearbooks*. Research and Reference collects current editions of major publications for the United States and foreign countries.
- B. *Annual reviews*. The collection includes those for major disciplines.
- C. *Bibliographies*. Those with narrow subject scope, such as single author bibliographies, are normally kept in the stacks. More general

bibliographies on broad topics are included in the reference collection. Exceptions are made for topics in great demand or of considerable current interest. Research and Reference collects the national bibliographies of major countries. For trade bibliographies, the policy is as follows:

1. The entire collection of *Cumulative Book Index* is kept in Research and Reference.
 2. The last two years of *Books in Print* and its foreign equivalents are considered reference materials; earlier editions are sent to the stacks.
- D. *Biography*. Research and Reference collects comprehensive works dealing with professional, national, and international biography, including both retrospective and current biography.
 - E. *Concordances*. Only concordances for very important authors and works are included in the reference collection; others are housed in the stacks. (Examples of works collected are concordances for Shakespeare and the Bible.)
 - F. *Dictionaries*. Research and Reference provides unilingual, bilingual, and polyglot dictionaries in major languages, as well as bilingual dictionaries for as many languages as possible, including minor ones. The section also provides specialized dictionaries (for example, covering slang, idiomatic expressions, and historical aspects of language) for major languages. Dictionaries with very limited use are not retained on reference.
 - G. *Directories*. The reference collection includes the current edition of major directories in all fields within the social sciences and the humanities. Research and Reference has city directories for San Diego only.
 - H. *Encyclopedias*. The reference collection includes all the major general encyclopedias, both single volume and multivolume. Re-

search and Reference also collects important foreign language encyclopedias. The section will attempt to acquire revised editions of *Encyclopaedia Britannica*, *Encyclopedia Americana*, and *Collier's Encyclopedia*, one per year, on a rotating basis, as funds permit. In addition to the general encyclopedias, Research and Reference collects authoritative encyclopedias in specialized subject areas to support research in the social sciences and the humanities.

- I. *Geographical sources*. Research and Reference provides authoritative atlases, maps, and gazetteers covering all areas of the world. The section does not collect topographical or geological maps, which are provided by the Sciences and Engineering Library.
- J. *Handbooks*. Research and Reference attempts to collect current and authoritative handbooks in all fields of the social sciences and the humanities.
- K. *Indexes*. The section provides as many indexing and abstracting services as possible in the social sciences and the humanities, within budgetary limitations.
- L. *Legal materials*. Reference materials—legal encyclopedias, dictionaries, digests, citators, etc.—are kept in Research and Reference. Some of the most often used case reporters, such as the *Supreme Court Reporter*, are kept in the reference collection, but the less frequently used ones are sent to the stacks. The *Federal Reporter* is shelved in the stacks rather than in Research and Reference because of its large physical volume and rapid growth rate.
- M. *Library catalogs*. Research and Reference acquires catalogs for important collections of major libraries, emphasizing subject fields not well controlled by indexes and bibliographies.
- N. *Plot summaries*. The section provides major, comprehensive col-

lections of plot summaries. Less comprehensive works, such as *Monarch Notes*, are kept in Limited Loan.

- O. *Sacred books*. Research and Reference maintains a small collection of major translations of the Bible in English, as well as English translations of sacred works significant to major world religions.
 - P. *Style manuals*. The reference collection includes all major style manuals, excluding those in scientific fields.
 - Q. *Telephone books*. Research and Reference has telephone directories for major U.S. cities and a selected group of large foreign cities. There are also directories for most California cities.
 - R. *Theses*. The section provides bibliographic information about academic theses and dissertations with *Dissertation Abstracts International* and other sources, including some in specific subject areas.
 - S. *Uncataloged material*. The collection includes some materials not listed in the card catalog: the Advertising Resources Center (materials related to advertising); the vertical file (pamphlets and clippings on all subjects in the social sciences and humanities); and film distributors' catalogs.
- V. *Acquisition of New Reference Materials*
- A. A four-member Reference Collection Committee has the primary responsibility for pursuing a systematic and continuous acquisition program for Research and Reference. The members are appointed by the department chairperson for a two-year term, two members being appointed each year. Two members of the committee have social science backgrounds and two have humanities backgrounds.
 - B. The following principles, not in order of importance, serve as guidelines for the Reference Col-

lection Committee in deciding which titles will be ordered:

1. Judged usefulness of the publication, considering the existing collection.
 2. Strengths and weaknesses of the existing collection related to current needs of the university.
 3. Favorable reviews or inclusion in basic reference collection guides.
 4. Reputation of the author.
 5. Currency of the topic.
 6. Date of publication.
 7. Price of the publication.
 8. Language of the publication.
- C. The Reference Collection Committee searches relevant professional literature to ensure that important reference works within the subject scope of Research and Reference are in the collection. This literature searching consists primarily of:
1. Scanning review sections of these journals regularly:
 - Booklist*
 - Choice*
 - College & Research Libraries*
 - Journal of Academic Librarianship*
 - Library Journal*
 - RQ*
 - RSR*
 - Wilson Library Bulletin*
 2. Examining publishers' leaflets and catalogs.
 3. Reviewing annual lists of reference books, such as *American Reference Books Annual*.
 4. Checking Winchell's *Guide to Reference Books* and Walford's *Guide to Reference Material* against the library's holdings in the main card catalog. The committee will do this in order to evaluate the reference collection and determine locations of titles not in the reference collection.
- D. Subject bibliographers are responsible for checking approval form slips and reviews in their respective areas for titles to be or-

dered on reference funds. Subject bibliographers and teaching faculty should justify all titles requested on reference funds to ensure that the publications will be expeditiously ordered. Order cards for titles rejected by the Reference Collection Committee are returned to the recommending party with reasons for the rejection.

E. The Reference Collection Committee follows these procedures in ordering new materials:

1. The committee maintains a desiderata file of order cards received from subject bibliographers, teaching faculty, and committee members and brochures on newly published materials. The file is organized in broad subject categories. The committee meets often, once a week if possible, to review the file and make final decisions on materials to order. Each committee member reviews the file and indicates his/her recommendations. Order cards for recommended publications are sent to the Department of Bibliographic Preparation for processing.

2. The Reference Collection Committee maintains a file of photocopies of order cards submitted to the Department of Bibliographic Preparation. Like the desiderata file, this file is organized in broad subject categories. Each photocopy is stamped with the submission date to enable the committee to control orders which have been held up in Bibliographic Preparation.

3. The committee completed a count of the cards in each Library of Congress classification in the reference collection shelflist, in order to determine the subject strengths and weaknesses of the collection.

F. The budget year extends from July 1 to April 1. The reference

fund is divided into nine monthly allocations and encumbered accordingly, as much as possible. Hopefully, this timetable will allow the committee to be both equitable and flexible in allocating the fund.

VI. *Weeding the Reference Collection*

A. Periodic evaluation of the works already in the reference collection is as important as acquisition of new materials, since the reference collection is a working collection of important, frequently consulted publications. Careful, regular, and systematic weeding removes older, less desirable works from the reference collection.

B. Reference librarians follow the same principles and guidelines in weeding as in acquisition of new materials. Since each discipline covered by the reference collection requires different types of materials, it is impossible to establish absolute standards to be followed in weeding. For some disciplines the reference collection should provide current material only; for others it must also provide retrospective and historical works. However, some general criteria which should be considered in weeding are:

1. Significance of the publication.
2. Age and currency of the publication.
3. Availability of later editions.
4. Physical condition of the publication.
5. Duplication of the contents in more recent works.
6. Language of the publication.

C. The reference collection is weeded in two important ways: automatic weeding of older editions of a work and periodic weeding by librarians.

1. Older volumes of many publications, particularly continuations such as directories and yearbooks, are automatically weeded from the reference collection because the designa-

tion "Last Volume Reference" (LVR) appears on the official shelflist card.

2. The reference collection is weeded systematically each year. Each librarian in the Reference and Instructional Services Department is responsible for weeding one or more areas in the reference collection. Reference librarians who are subject bibliographers are responsible for their areas of specialization. If the subject bibliographer for an area is not a member of the Reference and Instructional Services Department, a reference librarian is assigned primary responsibility for weeding in the area. Reference librarians may seek the opinions of subject bibliographers and of appropriate members of the teaching faculty as needed in making weeding decisions.

D. Weeding is carried out in this way:

1. The chairperson of the Reference and Instructional Services Department is responsible for assigning subject areas to individual librarians. The chairperson will revise the weeding assignments if necessary each year.
2. Weeding activity is staggered throughout the year to minimize work-flow problems for the support staff in the Reference and Instructional Services Department and in the Department of Bibliographic Preparation. The major part of the weeding activity should ideally be carried out before June 30 of each year.
3. Each librarian, after gathering together materials to be considered for weeding, takes them to the Reference and Instructional Services office. The staff places decision slips in the publications to get the opinions of all librarians in the depart-

ment on the proposed weeding. The librarian in charge of weeding the particular subject area notifies the subject bibliographer and/or appropriate teaching faculty members that the materials are available for review.

4. The support staff in the Reference and Instructional Services Department collects statistics of weeding and prepares a report for the department each year.

VII. *Inventory of the Reference Collection*

The Reference and Instructional Services Department takes a periodic inventory of the reference collection. The Reference Collection Committee is responsible for ordering replacements for missing volumes.

CHECKLIST OF CRITERIA FOR ACQUISITION OF NEW MATERIALS

1. What are the strengths and weaknesses of the existing reference collection in the subject area in question?
2. Is this topic an important one in the university curriculum?
3. Is this topic a current or popular one? Is it likely to be a passing fad or to be of continued importance?
4. Is this topic likely to be important in the future?
5. Has the work received favorable reviews?
6. Is the work included in one or more basic reference collection guides?
7. What are the author's qualifications and reputation?
8. What is the date of publication? (In general, order works with recent publication dates if possible. Exceptions are made if the publication is a standard reference work in its subject or if the older material is of current value to the collection.)
9. How much does the publication cost? (Titles costing more than \$50 are screened carefully. When a very expensive title is

under consideration, the Reference Collection Committee consults other area libraries to determine whether or not they intend to purchase the title.)

10. Does the work duplicate material in titles already in the collection?
11. What is the language of publication? (Works in English and major foreign languages will be purchased in preference to those in minor languages.)

CHECKLIST OF WEEDING CRITERIA

1. How important is this publication?
 - a. Is it included in a general guide to reference works, such as Walford or Winchell?
 - b. Is it listed in a subject bibliography, produced either here or elsewhere?
 - c. How do teaching faculty members and/or the subject bibliographers rate it?
2. How comprehensive is this publication? Are its scope and depth such that it belongs in the reference collection?
3. Is the discipline one which requires a large group of reference works? If not, is this work truly essential, or is it a marginal one which could be sent to the general collection?
4. What is the language of the publication? If it is not English, will its use be very light?
5. How frequently is this publication likely to be used in the future?
6. Is there a later edition which supersedes this publication?
7. How old is the publication? If it is an older work, is the subject matter such that current information is required by the vast majority of patrons?
8. Is the work a continuation? If so, should some or all of the older volumes be sent to the stacks?
9. Is the material in this work largely or entirely duplicated in other reference works? If so, does demand justify the duplication?
10. Are there multiple copies of this title in the reference area? If so, are they justified by heavy demand on the publication?
11. Is the book badly worn, defaced, or otherwise in poor condition? If so, can it (or should it) be replaced?

Current Trends in Periodical Collections

In the spring of 1975 a survey of moderate-sized United States academic libraries was conducted to determine current trends in the development and control of periodical collections. Topics covered by the survey include selection of new subscriptions, claim procedures, obtaining replacement copies, use of microforms, open vs. closed stacks, shelf arrangement, circulation policy, and theft prevention. Results of the survey are presented and analyzed.

WHEN PREPARING TO MOVE to a new library building, it is not unusual for librarians to reevaluate present procedures and policies.

Such was the case at Youngstown State University Library prior to a recent move to new quarters. Whether or not to maintain the shelf arrangement presently used for bound periodicals and whether or not to "sensitize" all periodicals for use in the new electronic detection system were among the questions which came up for consideration. In order to determine how similar libraries deal with such questions, the serials librarian surveyed United States academic libraries of moderate size (those indicating holdings of 120,000 to 500,000 volumes in the 1972-73 *American Library Directory*). For the purposes of this survey, a periodical was defined as

a serial publication appearing or intended to appear indefinitely at regular intervals, generally more frequently than annually, each issue of which contains separate articles. (Annuals and numbered monographic series are excluded; newspapers are included.)

Two hundred questionnaires were sent, and 147 responses (74 percent) were received. Libraries were asked to indicate the number of bound volumes of periodicals in their collections as well as the number of periodical subscriptions received. The results showed medians of 37,000 bound volumes and 2,181 periodical subscriptions.

The topics covered by the survey include selection of new subscriptions, claim procedures, obtaining replacement copies, use of microforms, open vs. closed stacks, shelf arrangement, circulation policy, and theft prevention.

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DEVELOPMENT OF PERIODICAL COLLECTIONS

The Selection of New Subscriptions

Libraries were asked to identify the status of the individuals responsible for the selection and/or approval of new periodical subscriptions. The resulting data indicate that faculty participate in

the selection process in 95 percent of the libraries; students, on the other hand, play an active role in only 9 percent of the libraries; serials librarians select new titles in 58 percent of the libraries; finally, other librarians (such as collection development librarians) make selections in 48 percent of the institutions.

The library administrator is responsible for final approval of selections in 49 percent of the libraries. In only 29 percent of the libraries does the serials librarian have this responsibility. In those seventeen cases (12 percent) where the "faculty" are responsible for final approval, the department chairperson, dean, or department's library committee member is generally the person with this responsibility.

It should be noted that in some libraries several groups of persons (e.g., faculty, students) are involved in the selection and/or approval process.

Claim Procedures

Libraries were asked to describe their methods for claiming issues of titles ordered through a subscription agency. Seventy-seven libraries (52 percent) noted that the first claim and all subsequent claims are sent to the agency; twenty libraries (14 percent) stated that the first claim and all subsequent claims are sent to the publisher; eighteen libraries (12 percent) noted that the first claim is sent to the publisher and all subsequent claims to the agency; twelve libraries (8 percent) answered that the first claim is sent to the subscription agency with all subsequent claims to the publisher; sixteen libraries (11 percent) noted some "other" procedure was employed.

These data indicate that, when claiming issues, some libraries (34 percent) do not rely solely on their subscription agencies. In fact, 14 percent are not relying on their agencies for any help at

all in claiming issues. Since subscription agencies generally offer some type of assistance with claims, these data may imply some libraries' dissatisfaction with the claiming services of their subscription agencies. Frank Clasquin has provided a recent discussion of the library, agency, and publisher positions concerning claims.¹

Obtaining Replacement Copies

Serials librarians often face the problem of missing issues or volumes and the question arises: How soon should a replacement copy be ordered? How often has the serials librarian reordered an item only to find the missing original!

In view of this problem, the questionnaire asked: If a current issue of a title which you bind has been received but is now missing, how long do you wait before ordering a replacement? The same question was asked about bound volumes. The following results are based on the eighty-nine libraries responding to these questions.

Missing current issues are reordered much sooner than missing bound volumes. For example, thirty-nine libraries (43.8 percent) noted that they reorder current issues less than one month after they are reported missing; whereas, only nineteen libraries (21.3 percent) answered that they reorder bound volumes that soon. Forty-five libraries (50.4 percent) responded that they wait six months or longer (many wait longer than one year) before reordering a missing bound volume; but only thirteen libraries (14.6 percent) noted that they wait that long before reordering a current issue.

These data are not surprising. Librarians are very much aware that publishers' supplies of current issues may diminish rapidly and the sooner a missing current issue is reordered, the better. On the other hand, back volumes often

are difficult or impossible to obtain, whether they are ordered immediately or several months later. Furthermore, they are much more expensive than current issues, so one may wish to be absolutely certain that the missing volume is permanently lost (and not just temporarily misplaced) before a replacement volume is purchased.

The Use of Microforms

Libraries were asked whether or not they subscribe to any periodical titles in microform instead of binding. To this question, 128 libraries (87 percent) responded positively, and they were asked to indicate the number of titles subscribed to in microform and what criteria were used in selecting those titles.

Some of the criteria cited were frequently mutilated titles, infrequently used titles, bulky size of bound volumes, newspapers. Also, some libraries mentioned having both bound volumes and microform subscriptions for popular titles such as *Time*.

As far as the actual number of periodical subscriptions in microform are concerned, the data gathered show that 53 percent of the 147 libraries have twenty-five or fewer microform subscriptions, and only 21 percent have more than 100 subscriptions. Although some articles advocate the purchase of microforms instead of binding,² the above data indicate that many libraries still prefer binding.

On the other hand, microforms seem to be used quite frequently for filling in "gaps" in the bound volume collection. For example, 45 percent of the 147 libraries indicated they would purchase microforms to fill in a "gap"; 26 percent indicated they would purchase paper copy; 29 percent stated they might do either depending upon such variables as the number of volumes needed, whether or not the needed volumes were recent, and the cost.

Libraries were queried as to the location of their periodicals in microform.

In 126 libraries (86 percent) microforms are stored in a separate area; in eleven libraries (7 percent) bound volumes and microforms are shelved together; in five libraries (3 percent) some other arrangement is used.

Finally, of those libraries which do not shelve their microforms with their bound volumes, forty-four (30 percent) indicated they placed "dummies" (or similar indicators) on the bound volume shelves to indicate the availability of certain volumes in microform.

CONTROL OF PERIODICAL COLLECTIONS

Open vs. Closed Stacks

For their current issue stacks, 118 libraries (80 percent) indicated that their stacks are open, sixteen libraries (11 percent) indicated their stacks are closed, and thirteen libraries (9 percent) stated some "other" arrangement (often a combination of open and closed). For their bound volume stacks, 139 libraries (95 percent) noted open stacks, five libraries (3 percent) indicated closed stacks, and one library stated another arrangement was used.

Shelf Arrangement

Whether to arrange periodicals in alphabetical or classified order is an interesting question which has been discussed infrequently in the library literature.³⁻⁵ The survey asked libraries about their shelf arrangements with the following results.

On the question of shelf arrangement for current issues, 111 libraries (76 percent) arrange their issues alphabetically by title, 14 percent arrange their issues in call number order, 8 percent arrange their issues by subject (e.g., sciences, social sciences), and 1 percent arrange their issues by some other method.

The respondents were also asked if, in the past few years, their current issues had been arranged in some other way. Of the 111 libraries which presently

use the alphabetical arrangement, seven libraries (6 percent) answered yes. Of these seven libraries, four had used subject divisions, two had shelved current issues by call number, and one had separated government document periodicals from other periodicals. Of the twenty-one libraries which presently arrange their current issues by call number, ten libraries (48 percent) indicated they previously had used some other arrangement. Of these ten libraries, all but one indicated the prior use of an alphabetical arrangement.

No correlation was observed between the number of current subscriptions and the type of shelf arrangement used for current issues.

On the question of shelf arrangement for bound volumes, ninety-two libraries (63 percent) arrange bound volumes alphabetically by title, 33 percent arrange them in call number order, and 3 percent arrange them in some "other" way.

The survey asked if, in the past few years, bound volumes had been arranged any other way. Of the ninety-two libraries who presently shelve bound volumes alphabetically, six libraries (7 percent) responded positively. Four of these libraries indicated that their bound volumes were previously arranged in call number order. (Unfortunately, there was no distinction made between the Library of Congress Classification and the Dewey Decimal Classification.)

Of the forty-eight libraries which presently arrange their bound volumes in call number order, sixteen (33 percent) indicated that their bound volumes were previously arranged another way, with all but one indicating that this previous way was an alphabetical arrangement.

The above data would seem to indicate a greater likelihood of a library's changing its bound volume arrangement from alphabetical to call number, than

from call number to alphabetical.

Furthermore, the data collected seem to indicate a positive correlation between the size of a library and the likelihood of a library's arranging its bound volumes in call number order. For example, of the ninety-nine libraries reporting 70,000 or fewer bound volumes, 75 percent arrange their volumes alphabetically by title, 22 percent arrange them in call number order, and 3 percent arrange them in some "other" order. Of the eighteen libraries having more than 70,000 bound volumes, 72 percent arrange their bound volumes in call number order, and the remaining 28 percent arrange their bound volumes alphabetically by title.

Thirty-three libraries stated they shelve bound volumes and current issues together, and of this group nineteen libraries use an alphabetical arrangement and eleven libraries employ call number order.

Sixty-nine libraries (47 percent) indicated that two or more floors of their library building contain bound volumes of periodicals. Of these libraries, 33 percent stated that their bound volumes are interfiled with their books; 25 percent indicated that their bound volumes are in one collection spread among the floors but not interfiled with the book collection; 17 percent indicated that the more recent years of all titles (e.g., the most recent ten years) are on one floor and previous years are on another floor; 7 percent stated that all volumes of frequently used titles are on one floor, and all volumes of less frequently used titles are on another floor; 9 percent indicated that each floor is assigned a particular subject or subjects; and another 9 percent noted that some "other" criteria are used to determine the location of a bound volume.

Circulation Policy

Whether or not to circulate bound volumes and/or current issues of peri-

odicals is a question almost every periodicals librarian eventually confronts. When asked if they circulate current issues of periodicals, 44 percent answered yes, and 53 percent answered no.

To the question, "Do you circulate bound volumes?" 53 percent answered yes, and 44 percent answered no. It is interesting to note that the percentages for "yes" and "no" responses here are just the reverse of those for "yes" and "no" responses to the same question regarding current issues.

The data, as shown in Tables 1 and 2, indicate that libraries which circulate current issues and bound volumes are more apt to loan to faculty than to students. Furthermore, the loan period granted faculty tends to exceed that granted students. For example, seventeen libraries circulate current issues to faculty for a loan period of one week or longer; only two libraries provide this loan period for students.

Of the sixty-five libraries which circulate their current issues, 57 percent indicated that they experience problems

with their loan policy, the primary problem being the users' failure to return material on time (or sometimes, at all). Likewise, of the seventy-seven libraries which circulate their bound volumes, 48 percent indicated that they experience difficulties with their loan policy.

In reading Tables 1 and 2, one should be aware of the following: In general, the category "students" includes all students, both undergraduate and (where applicable) graduate. Furthermore, "other" implies a member of the community, etc. However, in cases where the responding library indicated two different loan policies for students, the undergraduate students are included in the "Student" category and the graduate students are included in the "Other" category. The net effect of this is as follows: "Other" refers to graduate students in two of the six cases noted in Table 1 and in seven of the eleven cases noted in Table 2.

As can be seen from the data gathered, academic libraries of moderate size appear to be equally divided on the

TABLE 1
USERS' STATUS AND LOAN PERIOD AT THE SIXTY-FIVE LIBRARIES
WHICH CIRCULATE CURRENT ISSUES

Users' Status	Less than 1 Day		1-3 Days		Loan Period				Period Not Specified		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Faculty	24	37	18	28	1	1	17	26	4	6	64	98
Students	28	43	8	12	0	0	2	3	0	0	38	58
Staff	10	15	2	3	0	0	4	6	3	5	19	29
Other	5	8	0	0	0	0	1	1	0	0	6	9

TABLE 2
USERS' STATUS AND LOAN PERIOD AT THE SEVENTY-SEVEN LIBRARIES
WHICH CIRCULATE BOUND VOLUMES

Users' Status	Less than 1 Day		1-3 Days		Loan Period				Period Not Specified		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Faculty	14	18	22	29	1	1	34	44	5	6	76	99
Students	24	31	7	9	0	0	5	6	0	0	36	47
Staff	9	12	3	4	0	0	7	9	4	5	23	30
Other	4	5	5	6	0	0	2	3	0	0	11	14

question of whether or not to circulate periodicals. Indeed, one library noted that circulating periodicals decreases mutilation; whereas, another library noted that several years ago it had circulated periodicals but had lost many of them. Several libraries mentioned faculty pressure as a determining factor in the establishment of loan policy.

Theft Prevention

Thirty-six libraries (24 percent) stated they had installed an electronic detection system for preventing theft of library material, and an additional ten libraries (7 percent) replied that they would install such a system in the near future.

Of the thirty-six libraries with a detection system, 14 percent sensitize current issues of all periodicals, 53 percent sensitize current issues of frequently used periodicals, 58 percent sensitize bound volumes of all periodicals, 22 percent sensitize bound volumes of frequently used periodicals, and 6 percent sensitize no current issues and no bound volumes. One library noted that it sensitizes current issues of all periodical titles which are "kept" (i.e., it does not sensitize those titles for which older issues are discarded), and another library noted that it sensitizes its more recent bound volumes, 1972 to date.

The survey asked libraries if they have any method to discourage mutilation of periodicals. Several libraries indicated that they post signs warning users not to rip out pages. The availability of inexpensive photocopies was cited by many libraries as a deterrent. Circulation of periodicals, closed stacks, and exhibiting mutilated material were other methods occasionally mentioned.

A study by Hendrick and Murfin suggests a publicity campaign designed to make users aware of the high replacement costs.⁶ The data gathered by this survey indicated no sure answer to this problem, except in the case of one li-

brary which noted "there is a public hanging, drawing, and quartering of one detected offender each semester!"

SUMMARY

The results of the nationwide survey of moderate-sized academic libraries are summarized by the following eight points:

1. Faculty play a major role in the selection of new periodical subscriptions, and the library administrator is frequently responsible for the final approval of selections.
2. When claiming issues of titles ordered through a subscription agency, a sizeable group of libraries (34 percent) do not rely solely on the agency for these claims.
3. Libraries tend to order replacement copies for missing current issues much sooner than for missing bound volumes.
4. Although 87 percent of the libraries indicated having some microform subscriptions of periodicals, 53 percent of the libraries indicated having only twenty-five or fewer microform subscriptions. However, libraries indicated that they often use microforms for filling in "gaps" in the bound volume collection. Periodicals in microform usually are stored in a separate microform area, rather than being shelved with bound volumes of periodicals.
5. Open stacks seem to be preferred over closed stacks for both current issues and bound volumes of periodicals.
6. The most common shelf arrangement for both current issues and bound volumes is alphabetically by title. However, there appears to be a positive correlation between the size of a bound periodical collection and the likelihood of its being arranged in call number order. Furthermore, there seems to be a

greater likelihood of a library changing its bound volume arrangement from alphabetical to call number than vice-versa.

7. Libraries appear to be equally divided on the question of whether or not periodicals should circulate.
8. Approximately one quarter of the libraries report having an electronic detection system to prevent the

theft of library materials. Sensitizing all bound volumes of periodicals and some current issues (e.g., issues of the most frequently used titles) seems to be the trend. Finally, none of the libraries reported having a fool-proof method for discouraging the mutilation of periodicals.

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Toward a Structural Approach to Collection Development

A method for developing acquisition priorities based upon scholarly need is discussed, using some of the newer techniques in the area of information science. The structuralist approach requires a method interpreted through the study of behavior and properties of subject literatures. Behavior refers to temporal conditions while properties relate to the organizing principles of class and order. Subject literature behavior and properties are described in this paper through the techniques of citation counting, Bradford's law, and Goffman's indirect method.

ONE OF THE MOST SERIOUS PROBLEMS that exists today in the library is collection development. During the past several decades while money flowed relatively freely, librarians concentrated on building larger facilities, acquiring materials at an exponential rate, and expanding staffs to control the information explosion. The 1960s stand as a testimonial to this approach. During this period, the prevailing slogan "the bigger, the better" led one to believe that excellence relates directly to the quantity of volumes that a library holds. Ironically, this slogan has forged the librarian's action into the kiva of materials administration rather than meaningful collection development—

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the *raison d'être* of the library.

Librarians are now beginning to realize that they cannot continue to operate under the assumption that there is no limit to the amount of material that can be acquired, organized, and stored. The production rate of documents is too great and fiscal pressures too acute to allow librarians to retain their former *modus operandi*. It is time that librarians also realize that it is possible to acquire core quality collections without reaching astronomical figures.¹ Quality is a relative concept related to relevance, which in the library environment is determined by a measure of effective contact between the collection of knowledge records and the user—not by size. Comprehensiveness in the nineteenth century gave way to the "ideal" of completeness; quantity in the average library in the twentieth century must give way to the "ideal" of quality.

While knowledge records need to be acquired on a continual basis, the important question is: Can they be acquired effectively in terms of *knowledge and use*? This is the socially relevant question for librarians, and it can be

answered only through the use of objectively verifiable data based on the premise that acquisitions can be controlled, priorities for collection development established, and funding sought and justified.

Progressing toward the 1980s, librarians will need to experiment with new methods for collection development, including the structuralist approach. The structural approach is discussed and illustrated here as one way to address the collection development problem. The structural approach seeks to find a pattern of relationships, since effective collection building is assumed to rest on identifying a structure. Once the structure is determined, a plan for collection development will quickly emerge.

A FRAMEWORK FOR DISCUSSION ON COLLECTION DEVELOPMENT

Major Constructs in Collection Development

Figure 1 graphically illustrates the relationships among the major constructs integral to collection development. These constructs are: (1) use—cluster of demands; (2) knowledge—cluster of disciplines, subjects, topics, and areas of study; and (3) librarianship—cluster of subject literature relationships. Collection development is represented in Segment D of the diagram; it is the intertwining of the concepts of planning, implementation, and evaluation. *Collection planning* is a design for accumulating documents that belong together as determined by the needs, goals, objectives, and priorities of the library. *Collection implementation* refers to the process of making documents accessible for use. *Collection evaluation* involves examining and judging with respect to goals and objectives.

Thus, collection development is a plan which can be implemented and evaluated and may be represented as follows:

$$\begin{array}{rcl} \text{Collection} & + & \text{Collection} \\ \text{planning} & & \text{implementation} \\ + & & \\ \text{Collection} & = & \text{COLLECTION} \\ \text{evaluation} & & \text{DEVELOPMENT} \end{array}$$

The enlacing of these concepts into collection development policy leads to a system that is complementary, cyclical, and self-improving.

Use Versus Use Potential

Librarianship, as a professional, purposeful, goal-directed activity in the area of collection development, means responsibility of decision-making with reference to *use* and *knowledge*. (See Figure 1.) In the operational sense, use relates to demands and knowledge relates to needs, or use potential, considering that documents are acquired on a subject basis for use.

There is a difference between demand and need. A user may demand one document when in fact another might better meet his or her need. The need factor is closely associated with the concept of use potential; for if this user were to be introduced to a document which truly met the need, he or she would in fact use that document. The primary constraint here is the document (content) in relation to the user's need. The interplay is among object, content, and use.²

The demands that users make on a library collection represent flow from the user to the knowledge base and may be evaluated by user studies. The user study is valuable as a technique for determining use patterns and should be employed as a base for decision-making in the "use" area of collection development. However, user studies have several built-in limitations, two of which are: (1) they establish so-called user groups whose behavior tends to be personal, introspective, and variant; and (2) they measure only the materials currently held in a given library whose subject collections may range from poor to excellent.

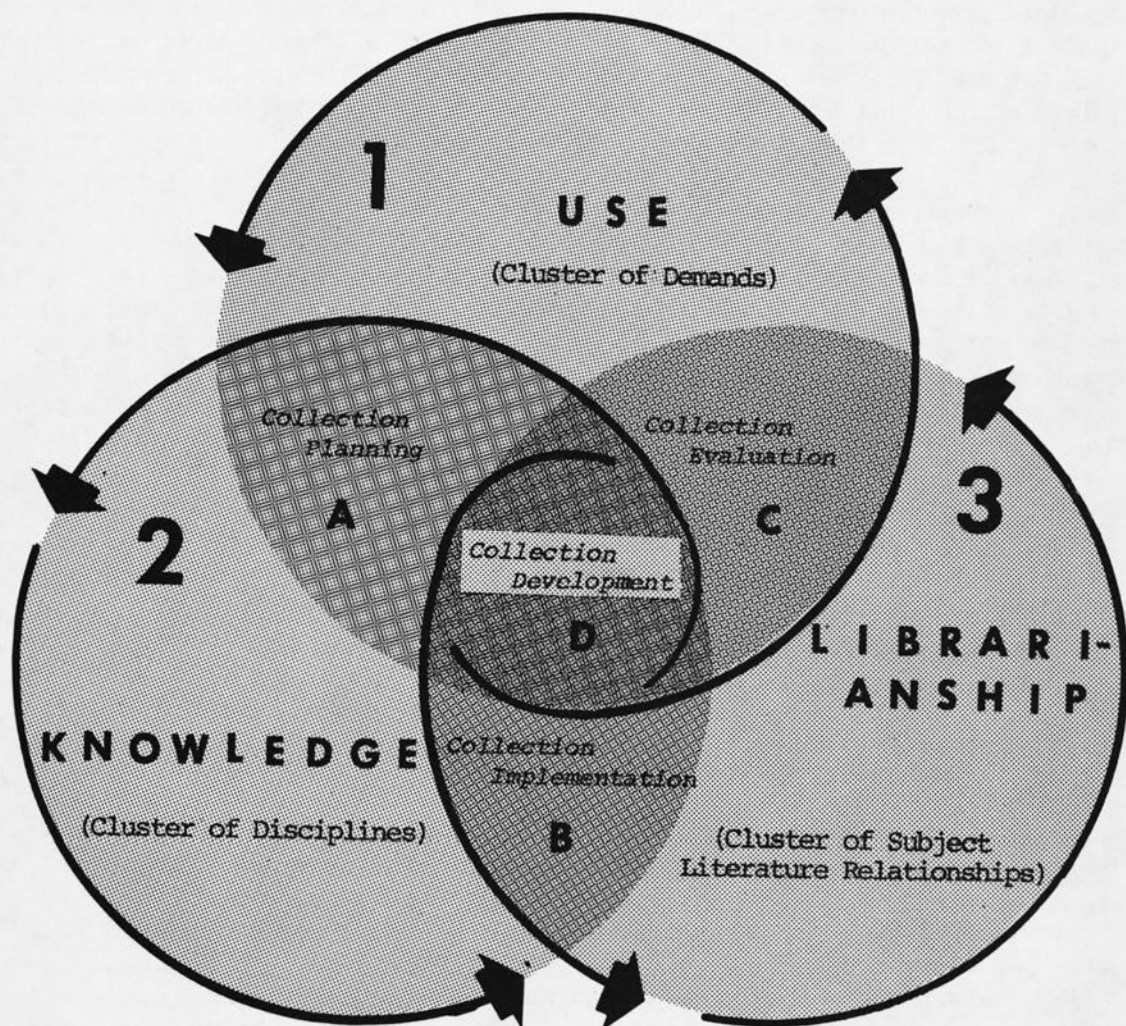


Fig. 1
Collection Development: A Structural Approach

This self-limiting method of determining collection development policy does reveal special interests singular to the clientele of an individual library, but it fails to improve the quality of a collection in terms of new acquisitions of value. Depending solely upon the user study for collection development, decision-making usually places the librarian behind the eight ball, since demands are observable only after-the-fact. One can run to catch up, but it might be better to be running to keep ahead!

When library collection policy is for-

mulated with an eye to the structure of subject literatures, the librarian may be in a better position to cope with the voluminous production of knowledge records from which he or she must isolate and secure those documents that have use potential. The librarian has the responsibility of building collections that include items with inherent value, representing a potential need for library users. Here the flow is from the knowledge base to the user. How often has the librarian heard the patron say: "I had this in mind, but can you recommend something better?" Patrons in this

situation know that they need information but are not quite sure of their information needs.

The interplay between demand and need must receive thoughtful attention for effective collection development. The question is: How far in each direction should acquisition policy go in order to build the "best" library collection for users? The proper balance between use and use potential is not precise, nor can it realistically be. The relationship, never having been clearly defined, represents an existential dilemma for the librarian. This is why it is important for the librarian to be aware of the cluster of demands and the cluster of disciplines within the framework of collection development.

THE STRUCTURE OF SUBJECT LITERATURES

Since librarians build library collections for use and use potential (need), their decision-making should take into account the structure of subject literatures. In collection development the subject (discipline) is the superordinate constraint, since users use documents in terms of a subject and its literature.

Rational inquiry into problem areas produces a body of knowledge that is organized into a subject field. This subject matter is publicly shared through a literature, which records, displays, stores, and transmits pertinent states of knowledge at a given point in time. From this rationale one can make the assumption that a state of knowledge is reflected in its literature. This relationship is established through logical inference, i.e., if one ascertains the structure of a literature, then it may be assumed that a structure has been determined on an indirect basis for a knowledge area, since the literature contains pertinent states of knowledge.³

The overriding viewpoint here is that subject literature structure, a way of seeking relationships, will provide un-

derstanding of the literature's behavior and properties—not its intellectual content per se. Thus, the structural approach to subject literatures involves the study of the behavior and properties of a subject literature.

The "behavior," i.e., a characteristic way of acting, may be interpreted with reference to "literature statics" (a point in time) and "literature dynamics" (a period of time). Literature statics may be investigated through several of the newer information science techniques, now referred to as bibliometrics (the measurement of bibliography) in their specific instance of use. One of these techniques is Bradford's law,⁴ the application of which is discussed under "Core Publishers" below.

The "properties" of a subject literature refer to (1) class and (2) order. To understand knowledge it must be organized (class) and sequenced (order). To be useful, knowledge must be organized. Of course, no system of organization can be absolutely successful, but without it no system can approach success. An innovative method for organizing and sequencing knowledge is suggested by Goffman.⁵ The organizational aspect (class) of this method is discussed under "Associated Subjects" below.

Investigation into the behavior and properties of a subject literature may be facilitated by dividing the literature situation into parameters. This study is a continuation of the author's previous work in sociology. The parameters of time and language in relation to sociology literature are discussed in a previous study.⁶ This paper presents further discussion of the parameters of (1) associated subjects and (2) form (objects) and introduces (3) publishers.

Associated Subjects—Establishing Subject Relationships

The grist of the librarian's mill is the subject; thus, a major concern should

be to determine the inter- and multi-relationships among subject areas.

Although the interdependence among the various disciplines within the social sciences has long been recognized as a condition necessary to their progress, each discipline has traditionally been treated as a separate entity. In the past several decades, there has been a shift in emphasis in the social sciences from one of isolation to one of merging information to produce patterns of knowledge that overlap. More and more academic programs are reorganizing their course offerings along new inter- and multidisciplinary lines. Such curricula changes will need to be reflected in the library collection.

The beginning point should be the identification of subject relationships. Identifying overlapping subject areas indicates which subject areas are in communication. This communication needs to be determined since empirical relationships among associated subjects lay the foundation for present-day library collection development. Without an understanding of subject relationships, the librarian is lost in a sea of disjoint documents representing content from which selections must be made. Determining subject relationships is important, not only for the physical organization of materials, but also for the intellectual organization of knowledge for collection development purposes.

Subject relationships may be determined on a *macro* or *micro* level—macro referring to general areas and micro to specific topics. In approaching both the macro and micro levels, the procedure used in this study to establish subject relationships follows Goffman's indirect method. The Goffman method differentiates between the relevant and the not-so-relevant subject areas by investigating the overlap of subject coverage in individual journals.

For the author's investigation into subject relationships in the social sci-

ences on the *macro* level, the data base, used in connection with the Goffman model, was Volume I (1974-75) of the *Social Sciences Index (SSI)*.⁷

In volume I of *SSI* there were 4,995 subject headings with 30,673 entries. Since the concern here is with macro relationships, only the most productive subject areas—those headings with eleven or more unique entries—were included for this part of the study. The 309 subject headings with eleven or more unique entries were grouped into sixty-one Library of Congress classification areas in order to condense the subject headings into systematized groupings that could be studied for interrelationships on the macro level.

Goffman's indirect method was then applied to the sixty-one subject groupings. The results of this procedure indicate that there is one major class consisting of eleven strongly interrelated subjects. By further applying the LC classification system, the eleven subject areas may be condensed into six social science disciplines. These disciplines, presented in Figure 2, may be said to be interrelated since there are strong communication links among them as determined by the Goffman model.

The significance of the macro subject relationships is that with these findings librarians may be alerted to the spectrum of subjects that need to be considered together in building library collections. The findings suggest that building strong central collections in the social sciences may be more advisable than departmentalizing, since developing departmental libraries would require extensive duplication of informational materials with resulting higher expenditures.

The librarian needs to consider subject relationships not only on the macro but also on the *micro* level. If a user is interested in a specific topic (micro level), such as "human ecology," he or she may be expected to become interest-

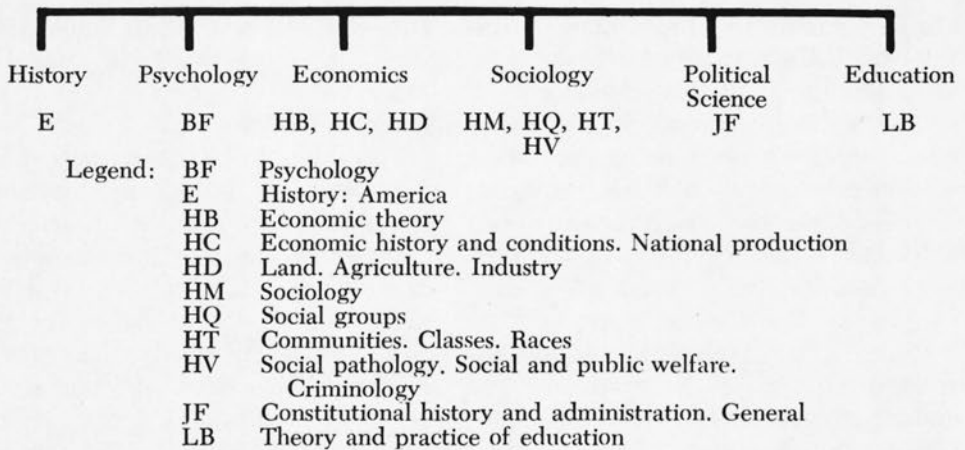


Fig. 2

Social Science Disciplines in Communication

ed in related topics within the content structure of the general subject of sociology. The question then becomes: "If a user is studying 'human ecology,' what other topics would most likely be of interest because of their close alliance with the topic 'human ecology'?"

To search for solutions in this problem area, the author conducted an investigation into the interrelationships of subject headings on the micro level within the discipline of sociology. In this case, all subject headings (including "see also" references) under the general heading "Sociology" in Volume 1 of *SSI* (1974-75) constituted the data base. It was not necessary to group these subject headings since the interest here is in micro relationships. Therefore, all eighty subject headings were related, without interpolation, by Goffman's model. Eleven distinct classes emerged. One of these classes, for example, shows the topic "human ecology" (primarily concerned with a population's collective interaction with its environment) to be in communication with (1) cities and youth, (2) population, (3) urban sociology, and (4) urbanization.

Form

The study of subject literatures can impart information through the parameter of form. The acquisitions officer

needs to know whether to concentrate more heavily on journals or on books in a given subject area. In order to determine if there is a reliance on serial or nonserial materials in the social sciences in general, a study of five selected major social science journals was conducted. All citations from the complete issues of these journals for the year 1974 were tabulated by percentage of serial and nonserial citations. The results are presented in Table 1.

TABLE 1
 FORM OF THE LITERATURE CITATIONS
 FROM SELECTED MAJOR
 SOCIAL SCIENCE JOURNALS

Journal	Serial Percent	Nonserial Percent
American Anthropologist	42.93	57.07
American Economic Review	59.02	40.97
American Historical Review	23.3	77.6
American Political Science Review	34.59	65.36
American Sociological Review	44.41	55.59

Note: The author acknowledges the helpfulness of several of his students in preparing the data for this table.

This information clearly illustrates that current social science scholars rely, as depicted in the citation patterns of these major disciplinary journals, upon nonserial literature for a major portion of their support material. It may be conjectured that within the parameter of form the literature of the social sci-

ences may behave differently from the literature of the natural sciences. The natural science literature consists almost exclusively of papers published in journals.⁸ This would seem to have significance in that it may be more necessary to build stronger monographic collections in the social sciences than in the natural sciences.

Core Publishers

Librarians have long sensed the need to follow selected publishers' catalogs in subject areas of interest to the library's users. This procedure is automatic and is considered fundamental to successful collection development. The operating assumption here is that a selected group of publishers accounts for a large percentage of the books being published on a given subject. This everyday logic-in-use may be examined on a formal basis by using Bradford's law.⁹ Originally formulated with respect to journal literature, this law, in general, states that a small percentage of journals accounts for a large percentage of significant articles in a specific subject area.

Worthen investigated the Bradford law with respect to monographs in a specific medical subject area and determined that it applied.¹⁰ Since the social science literature relies more heavily on nonserial literature than does the natural science literature, it is important to determine the applicability of the Bradford law to social science monographic literature.

To test Bradford's law in relation to nonserial literature in the social sciences, the discipline of sociology was specifically investigated. The data base for this experimental test was a random sample of 495 monographs representing 10 percent of the 4,954 independent bibliographic units isolated through a citation count of 446 journal articles from 71 different journals in the discipline of sociology.¹¹ The Bradford law

was applied to the random sample of monographs, the results reported in Table 2.

TABLE 2
MAXIMAL DIVISIONS OF MONOGRAPHS
PUBLISHERS

Zone	Number of Monographs	Number of Publishers	Bradford Multiplier (<i>b</i>)
1	46	2	...
2	48	3	1.5
3	57	4	1.3
4	53	5	1.3
5	46	7	1.4
6	48	10	1.4
7	48	16	1.6
8	46	23	1.4
9	49	42	1.8
10	54	54	1.3
Total	495	166	1.5*

* Average

The Bradford multiplier (*b*) in Table 2 is an empirical rendition of the Bradford series ($I : n : n^2 \dots$) where the ratio (*n*) is the Bradford multiplier (*b*). This indicates that approximately the same number of documents is produced by a number of publishers which increases from zone to zone such that the ratio between the number of publishers in the second and first zones is the same as between the third and second, fourth and third, etc.

The minimal nucleus of publishers (Zone 1) consists of two publishers representing forty-six monographs, followed by three publishers representing forty-eight titles (Zone 2), four publishers with fifty-seven titles (Zone 3), etc. Successive zones of publishers publishing about the same number of monographs form the approximate geometric series $1 : (1.5) : (1.5)^2 : \dots : (1.5)^9$. The results also show that half of the monographs were accounted for by only twenty-one publishers or 12.6 percent of the total number of publishers in the sample.

Thus, it may be stated that the literature of sociology exhibits a Bradfordian distribution when the publishers are ranked by the productivity of cited

monographs. The most productive publishers on the subject tend also to publish the monographs that are most frequently cited. The commonsense notion of using *core* selected publishers' catalogs to assist in building collections is empirically verified.

CONCLUSION

The basic underlying assumption of this study is that the structure of subject literatures will provide the librarian with a fruitful guide to collection development. Collection development consists of: (1) collection planning (assessing needs, setting goals, and establishing priorities); (2) collection implementation (action, communication, scheduling, disseminating, etc.); and (3) collection evaluation (assessing and judging with respect to goals and objectives).

The structure of subjects, as well as the structure of subject literatures, is determined by concepts and generalizations intertwining to form the foundation for reflective inquiry. The concepts employed in this investigation center on the behavior and properties of subject literatures. Thus, the structuralist in the subject literature situation seeks out patterns and relationships without explicit reference to the intellectual content of

the literature units per se; i.e., the structuralist's overriding concern is with the understanding of literature forms and processes, rather than the literature's scholarly content.

Some of the major conclusions that may be drawn from this study are as follows:

1. Subject relationships, which are fundamental to the intellectual organization of knowledge for collection development, may be determined by studying the communication links that exist among associated subjects.

2. Communication links may be determined on a macro (disciplinary) and a micro (subject, topics, etc.) level.

3. Social science scholars cite non-serial literature more frequently than serial literature; thus, collection development officers need to consider, in particular, monographic literature units in social science collections.

4. The behavior of literature units in publishing, as determined by the citations of scholars in journal articles, conforms to the Bradford law, which means that a few publishers account for the bulk of the cited monographs. Half the cited books were accounted for by only 12.6 percent of the publishers.

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Letters

Library Growth Rates

To the Editor:

The article on growth rates of major academic libraries by Steven Leach in the November 1976 issue of *C&RL* provides some interesting and useful information, but the conclusions are not very profound. The main generalization:

As higher levels of collection size are approached, it becomes increasingly likely that the rate of collection growth will begin to decelerate (p.539)

could be further generalized into a law, such as

the bigger things become the more likely it is that their rate of growth will slow down

or stated more concisely:

Things cannot grow at an exponential rate indefinitely.

Obviously this law would apply to the production of information too, which would eventually have its effect upon libraries, but as long as library collections grow at a rate faster than their buildings, librarians will have big problems regardless of Fremont Rider's exponentiality or Leach's Law of Deceleration.—*R. Dean Galloway, Library Director, California State College, Stanislaus.*

Response

To the Editor:

I will attest that Leach's Law of Deceleration does have an alliterative ring, but that is as far as I will dare to go in its defense. I happen to agree with Mr. Galloway that my conclusions are hardly profound. As for myself, when I seek profundities, I go to G. B. Shaw.

I would like to comment on Mr. Galloway's final remark. While we may acknowl-

edge that "things cannot grow at an exponential rate indefinitely," we also are discomfited by that realization because it contradicts the widely held value that bigger is inevitable (or better). Even I am not so provincial to suppose that that value is peculiar only to us Americans, but it must be admitted that by our actions we Americans—librarians included—consistently have demonstrated our belief in that value.

For most university libraries the traditional solution to the problem of collection growth has been to build a new library or library addition every ten to twenty years. That solution was consistent with the "bigger is inevitable" value and, at least until quite recently, probably represented the most economical and, perhaps, only solution to the problem. However, certain trends, e.g., declining student enrollments, lowered expectations about the personal economic benefits to be derived from a college education, and higher priorities for resources being accorded to other social needs, may combine to force university libraries to find other solutions to the problem of collection growth.

Fremont Rider predicted that eventually it would become impossible to build ever-larger libraries for their ever-expanding collections. I suggest that Rider's prediction may be realized—but as the consequence of contingencies far different from those he envisioned.—*Steven Leach, Information Services Librarian, Technological Institute Library, Northwestern University, Evanston, Illinois.*

User Frustration

To the Editor:

The article in the January 1977 *C&RL* by Saracevic et al. is a useful study, correlating circulation and access, and this letter is not intended as a criticism of the research reported but rather a plea for more re-

search. In the article there is a brief discussion of in-house use, stating that "44 percent of books used . . . were through loan and 56 percent were used in-house. For every book borrowed, another was used in the library." There is no indication of how this ratio was obtained, but, most likely, since the ratio is similar to those of other studies, it represents books left on tables or return shelves and does not include books used and replaced on regular stack shelves by users.

Unfortunately, because of the difficulty of obtaining accurate data, there have been no well-designed studies of the much larger in-house use represented by books used and replaced in spite of signs in some libraries asking that books not be replaced. Most observers believe that, in open-shelf research libraries, total use is on the order of ten times circulation. Total use appears to be divided approximately 10 percent, circulation; 10 to 20 percent, books left on tables or marked return shelves (so-called "sweep-

ings"); and 70 to 80 percent, books taken from and returned to shelves by the user. Without considering this major factor in research library use, studies of user frustration (or satisfaction) present only a partial picture.

Those using libraries for research will generally agree that a considerable part of the use of materials on the shelves results from following chains of references while working in the stacks of a library, a procedure that is effective only when it can be carried out with very little interruption, i.e., without use of recall or interlibrary loan. As the authors of this article point out, "the option of recall is relatively unused," as is the option of interlibrary loan, which represents only a small percentage of circulation and can never be more than a tiny fraction of total use. (Serendipity is a much-talked-about factor in in-house use but is probably considerably less important.)

With reduced acquisition rates in many research libraries and plans for cooperation dependent on access through interlibrary loan, research studies of the extent of user frustration that will result are long overdue. It would appear from interlibrary loan and recall statistics, and allowing for better access from interlibrary loan through easily used computerized bibliographical and holdings data, that actual use of books that are available only at a distance, or are not easily accessible on the shelves of a research library, will probably be no more than 2 to 4 percent of the use they would have if directly accessible to the user.

Thus, if the total use of a book on the shelves would be five times a year, if it is made accessible only through a delivery system, its probable use will, at most, be only once every five years. Put another way, if, over a number of years, one million volumes that are selected as pertinent and important to the fields of research of a university are either not acquired or are removed to another location, and even if the average use of these books would be only once per year (equal to one circulation every ten years), at least 960,000 uses per year are lost (1,000,000 minus 4 percent of 1,000,000).

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research studies that will accurately measure total library use and, not only all of the factors that result in user frustration, but also the disastrous effects on research in American universities of over-dependence on cooperation as a substitute for adequate research collections.—*Melvin J. Voigt, Co-Editor, Progress in Communication Sciences, La Jolla, California.*

Response

To the Editor:

We would like to make a few comments on Mr. Voigt's letter. The most important has to do with the basic direction of our research. Unlike earlier studies, which have indeed sought to correlate book availability with circulation, our study places "circulation" in perspective as one of *four nearly coequal* factors which generate user frustration. These factors are acquisition policy, "circulation," library operations, and user skills. Our work shows, for example, that even "perfect circulation" would leave many users frustrated.¹ We must also point out that, operationally, the category of "circulation" was explicitly defined to include all cases where the desired books were in the hands of other users, including those being used in-house as well as those checked out.

Mr. Voigt raises an interesting question about the effect of the in-house use of books. The relative importance of this effect can be estimated from available data. The crucial concept is that of "total use." This phrase may be interpreted in two distinct ways: (1) the total number of use events and (2) the cumulative duration of use events. (It is clear that the second may be computed from the first if the average duration of the use events is known.) It is the latter interpretation, and not the former, which is significant with regard to estimating user frustration.

Let us compare the "total use" associated with circulation to that associated with in-house use. It is known that, independent of loan policy, borrowed books remain out for about three-quarters of the stated maximum loan period.² Hamburg has reported the results of a study of a library system in

which 5.2 million circulations were observed over a one-year period.³ If the loan period for the libraries investigated is, on the average, two weeks (a conservative estimate), the circulations resulted in 5.2×1.5 (¼ of two weeks) million book weeks of unavailability, or 546 million hours of unavailability (assuming seventy hours of operation per week). During that same period, 1.3 million hours of in-house use occurred. Consequently, the in-house use is the smaller effect by a factor of 420 (546/1.3). Our own unpublished studies at Sears Library indicate a ratio of about 300 to 1.⁴

This does not mean that in-house use is an unimportant service, but it underlines the fact that it contributes relatively little interference to other users. There was some discussion of the effect of networking on availability at the Pittsburgh conference.⁵

We hope that librarians will adopt the analytic technique presented in our paper to evaluate the significance of the four principal causes of user frustration and to monitor changes produced by both internal management decisions and the growth of networking.—*Paul B. Kantor, William M. Shaw, Jr., Tefko Saracevic, Case Western Reserve University, Cleveland, Ohio.*

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Book Reviews in History

To the Editor:

I have just noticed the review of *Index to Book Reviews in Historical Periodicals 1972*, compiled by Brewster and McLeod, in the January 1977 issue of *C&RL* (p.53). It is stated that this work covers many "publications of state and local history societies not indexed in existing book review reference works." Evidently you are not aware of our publication, *America: History and Life, Part B, Index to Book Reviews*. This specialized history tool, first published in 1975, is an index to reviews of books on U.S. and Canadian history, culture, and society from 113 journals (130 journals beginning in 1976). From the list of periodicals, you can see that we cover the state and local history journals. Comparing the *AHL* list of periodicals to the Brewster-McLeod 1974 list, you will see that only

six titles—*American Heritage*, *American Journal of Archaeology*, *American Antiquity*, *East Texas Historical Journal*, *The Georgia Review*, and *The Indian Historian*—not covered by *AHL* can be considered U.S. history journals (plus possibly parts of *Current History*, *History and Theory*, and *Commentary*).

The *AHL* list of periodicals was developed in consultation with numerous historians and librarians and was further refined in 1976 after two years of experience indexing the journals.

Furthermore, you will notice that whereas we cover 113 (now 130) journals on U.S. and Canadian history alone, the Brewster-McLeod work indexes only some ninety journals for world history.—*Yvonne Turner, Assistant Editor, America: History and Life, Part B, American Bibliographical Center-Clio Press, Santa Barbara, California.*

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BOOK REVIEWS

Downs, Robert B. *Books That Changed the South*. Chapel Hill: Univ. of North Carolina Pr., 1977. 292p. \$10.95. LC 76-13181. ISBN 0-8078-1286-2.

Bob Downs is a believer in books—in books and libraries. In *Books That Changed the South* he continues to bring the message of the book in the same pattern he has in five earlier volumes, *Books That Changed the World*, *Famous American Books*, *Molders of the Modern Mind*, and so on. The geographical scope of the new book is more limited than before, but there is still plenty of room for Downs to illustrate that the cultural history of a society is demonstrated in its books.

In *Books That Changed the South* Downs discusses in thoroughly researched essays twenty-five important works ranging

from John Smith's *The Generall Historie of Virginia, New England, and the Summer Isles* (1624) to C. Vann Woodward's *Origins of the New South, 1877-1913* (1951). His criteria for inclusion in his work rule out the last quarter-century. The works between 1624 and 1951 include such diverse items as Mason Locke Weems' *The Life of Washington the Great* (1800?), Augustus B. Longstreet's *Georgia Scenes* (1835), George W. Cable's *Old Creole Days* (1879), and W. J. Cash's *The Mind of the South* (1941).

Downs seems to have made a special effort for a full and fair representation of blacks among the authors he covers. His list includes Frederick Douglass' *Narrative of the Life of Frederick Douglass* (1845), Booker T. Washington's *Up from Slavery* (1901), and W. E. B. DuBois' *The Souls of Black Folk* (1903). Two other books,

Hinton Rowan Helper's *The Impending Crisis of the South* (1857) and Frances Anne Kemble's *Journal of a Residence on a Georgian Plantation in 1838-1839* (1863), are forceful anti-slavery documents, and blacks and their progress figure strongly in at least half a dozen of the other works.

Downs attacks his work head-on. There is no beating about the bush, no essay-inspired-by sort of criticism. He tells succinctly what a book is about and then relates the reactions of the readers, critics, and historians to it. There is seldom any critical estimate of the work that is expressed as Downs' own. This is a perfectly legitimate technique, but a reader—this reader, at any rate—wishes that Downs would draw more from his wide experience as a historian of books in stating his personal opinions.

The compiler of a list of books sets up his own criteria, stakes out his own boundaries, writes his own ground rules. To argue with Downs' selections is to do a sort of

second-hand tilting with windmills. But it is not impossible to dream of a few changes in the list. Additions are easy to suggest: Mary Boykin Chesnut's *A Diary from Dixie* first and foremost; if not Erskine Caldwell's *Tobacco Road* or *God's Little Acre*, then the superb *You Have Seen Their Faces* that he did with Margaret Bourke-White; John Wesley's journal while in America; Will Alexander Percy's *Lanterns on the Levee*; Beverly N. Tucker's *The Partisan Leader*; Douglas Southall Freeman's *R. E. Lee*; Frances Peyre Porcher's *Resources of the Southern Fields and Forests*; *The Case of the Cherokee Nation Against the State of Georgia . . . 1831*; John Esten Cooke's *The Wearing of the Gray*; Margaret Mitchell's *Gone With the Wind*; Charles Colcock Jones's *Religious Instruction of the Negroes*, and on and on.

Not all of these are books that "changed" the South, but neither are all in Downs' list. "Change" is a word that sounds fine in the title, but Mr. Downs wavers in insisting on change as a criterion. Fair enough. The



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books he treats are interesting and important. That's the main thing. But I would certainly make room for Mrs. Chesnut and for Margaret Mitchell in the list (and thereby, incidentally, give Fanny Kemble some female companionship). If any single Southern book reflects an era as fully and as delightfully as Mrs. Chesnut's diary, I do not know what it is. And if Mr. Downs thinks *In Ole Virginia* and *Gone With the Wind* belong directly in the same tradition, I can only conclude that he has never read them.

To make room for other titles in the list obviously something must come out. The reviewer would shirk half his duty to suggest only additions. Deletions might legitimately be Weems' *Washington*, Edward King's *The Great South*, Mark Twain's *Life on the Mississippi*, Page's *In Ole Virginia*, and C. Vann Woodward's *Origins of the New South*. One suspects that Mr. Downs was a bit too anxious for chronological coverage.

This is a good book, a book that is fun to argue with. And that is one of the things books are for.—Richard Harwell, *University of Georgia, Athens*.

National and International Library Planning. Key Papers Presented at the 40th Session of the IFLA General Council, Washington, D.C., 1974. Edited by Robert Vosper and Leone I. Newkirk. IFLA Publications, 4. München: Verlag Dokumentation, 1976. 162p. DM 38. ISBN 3-7940-4424-X.

Although it is most unfortunate that the many papers presented at the 1974 General Council of the International Federation of Library Associations have not been published, at least twelve of the papers, singled out as key papers, appear in this new volume. The publication of these papers two years after the session again points out the serious time lag that exists between a conference and the publication of its proceedings. In this particular case, however, five of the contributions in this volume have also appeared in the 1975 *Bowker Annual*.

The editors indicate that the papers selected for inclusion were intended to heighten awareness and to suggest the variety of national experiences in differing

cultural situations and at different levels of library experience.

This collection deals with five aspects of national and international library planning: objectives; developments in selected countries; academic and research libraries and national planning; planning of national libraries; and, finally, some aspects of library education and manpower planning. The editors acknowledge that there are many gaps in the collection. There are no papers on public libraries and national planning or on such important topics as statistics, planning methodologies, and curricular reform.

The first two papers by Robert Vosper and C. R. Zaher deal primarily with trends in interdependence, the essential tools required for planning, programs for multi-national cooperation such as UBS, IFLA's program for universal bibliographic control, and NATIS, Unesco's National Information Systems.

Papers dealing with state-of-the-art surveys of national planning in selected countries are presented by Frederick Burkhardt (U.S.), H. T. Hookway (Great Britain), N. M. Sikorsky (Soviet Union), George Kaltwasser (Federal Republic of Germany), and Joyce I. Robinson (Jamaica). The strength and credibility of these papers lie in their authorship; their weakness lies in the lack of documentation.

These papers provide a striking contrast between the comprehensive and sophisticated plans for the nationwide integration of libraries and documentation in the developed nations and the frustrations encountered by planners in a developing nation where librarianship is a barely recognized profession and the relevance of libraries is yet to be established.

Of the remaining papers dealing with specific problems that require attention at the national level, those presented by F. A. Ogunsheye and Hedwig Anuar are particularly noteworthy. Ogunsheye provides an excellent summary on the development of library schools, the structure of the library profession, and the distribution of library manpower in African nations. Anuar discusses concepts, functions, and implementation of plans for national libraries in several countries in Southeast Asia and the Philippines.

The last two papers in the collection are possibly the weakest. Esko Häkli presents a broad-brush summary of national planning and research libraries in Denmark, Norway, Sweden, and Finland; and John McDonald contributes a slight essay on national planning and academic libraries in the United States. This weakness may, in fact, be the result of McDonald's observation that until very recently there has been an absence of any planning that deserves to be called "national" in scale.

The papers in this collection generate reflection, they indicate gaps in our experience in national and international planning, and they should stimulate librarians to give conscious attention to this very important phase of library development.—*Sylvia G. Faibisoff, Associate Professor, Graduate Library School, University of Arizona.*

SCONUL Seminar on Practical MARC Cataloguing, 2d, University of Southampton, 1975. *Practical MARC Cataloguing. Proceedings of the Second SCONUL Seminar on Practical MARC Cataloguing, Organized by the Universities of Southampton and Birmingham and Held at the University of Southampton, 5th-7th September 1975.* Edited by Ruth Irvine. London: Standing Conference of National and University Libraries, 1976. 82p. £3.60. ISBN 0-90021004-4 (Available from: SCONUL Secretariat, c/o The Library, School of Oriental and African Studies, Malet Street, London, WC1E 7HP.)

MARC Users' Group. *Proceedings of a Conference Held in Plymouth on 16 and 17 April, 1975.* Edited by F. A. Clements. London: LLRS Publications, 1976. 36p. £1.00. \$2.50 overseas. (Make check payable to MARC Users' Group and send order to LLRS Publications, Calcutta House Precinct, Old Castle Street, London, E1 7NT.)

It is heartening to note from the discussion in these two publications that our British friends have been sedulously grappling with machine-readable cataloging and that there are others of us who have leapt into the unknown. The results of an open exposition of these experiences are refreshing to one who has lived through similar events.

The SCONUL Seminar consists of presentations by two British university-level processing cooperatives—Birmingham and Southampton. It deals with the experiences growing out of their alignment with MARC and their commitment to AACR (British edition). The purpose of the seminar was to demonstrate MARC's use from a cataloger's viewpoint and to share the problems of functioning with MARC in real contexts. Both systems use off-line access for search, input, correction, and output.

The eleven papers (illustrated with processing forms) generally progress topically in parallel to the actual processing flow, i.e., inputting, computer manipulations, output, etc. Southampton's contributions deal more with particulars, while Birmingham is concerned with the effects of a heterogeneous group of participants—perhaps due to the fact Southampton initially handled medical records, whereas the Birmingham complex embraces libraries of five universities, four polytechnic colleges, and four public libraries.

Many of the presentations are welcome nontechnical and frank delineations of developmental problems, exposing pitfalls of unforeseen complications. The use of unfamiliar abbreviations is disconcerting, especially when some have to be divined by induction. Two articles are worth noting: A. B. Long's "Personal Experiences with MARC and Southampton's Conversion Routines," a revealing, sympathetic, and honest appraisal of the kind of setbacks and advances encountered in such an endeavor, and P. J. D. Bramall's "The Present National and International State of MARC," a strong argument for a MARC-type international system, international standards in bibliographic exchange, interchangeable data bases and software, and centralized dissemination and correction centers.

It is interesting to note that there was little difficulty for experienced catalogers to apply the MARC format to normal cataloging, but that only confusion resulted when trainees were taught to catalog and to use MARC at the same time. In spite of an extensive diagnostic process (signalling gross format errors) which produces an error list, nevertheless listings of machine-acceptable records are still visually inspected to some degree by all members of the cooperatives.

Errors not thus caught are trusted to be found by "relying on library users to tell them later if the cataloguing content is faulty."

The second conference, at which time a British "MARC Users' Group" was officially established, concerned itself—in the context of MARC use—with the relationship of the using libraries to book dealers, to the national library, and to future developments of automation. The seven papers—from a book dealer, the British Library, public libraries, a college library, and the Birmingham cooperative—are of interest insofar as they document current automation uses and plans in Great Britain. Whereas one public library (ca. 13,000 orders per year) found that only an expensive on-line CRT configuration could better its manual system, the book dealer enthusiastically reported highly satisfactory flexibility with a complete on-line random access facility which has allowed him to realize "multiple output from single input."

The magnitude of the users of the British Library's BRIMARC tape service (twenty-six subscribers of which ten are outside the United Kingdom) is dwarfed by the number using LC's program, yet the library has some grand intentions (e.g., convert all BNB (1950 on) to MARC; begin CIP in 1976). The college library described receiving shelf-ready books while using MARC for the cataloguing copy but complained of the quality of LC's use of DC 18, of the invariable use of record type "am" (printed monograph) for all forms of material, and of confusion and error in usage and appearance of the ISBN.

The approaches to technical services automation may be new, although the problems discussed are not; however, these reports only underline the urgency for implementation of international standards.—*Robert H. Breyfogle, Stanford University Libraries, Stanford, California.*

Continuing Library Education Network and Exchange (CLENE). *Proceedings, First CLENE Assembly, Palmer House, Chicago, Illinois, January 23-24, 1976.* Washington, D.C.: Continuing Library Education Network and Exchange, 1976. 165p. \$5.00.

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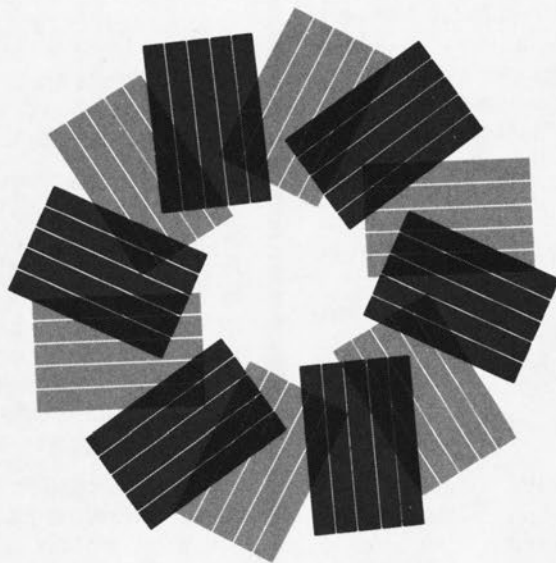
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January 1, 1976–December 31, 1976.
Washington, D.C.: Continuing Library Education Network and Exchange, 1976. 208p. \$25.00.

The tone of the *Proceedings* of this first CLENE Assembly is sharp and clean: If libraries are to survive as agencies of information amid a jungle of other fiercely competing institutions clawing to usurp their place, then librarians need to reassess both the organizational goals of their libraries and their own career goals and shift quickly into high gear, which would direct them away from the concept that the one-year MLS degree is educationally sufficient for survival to the concept that their education must be lifelong.

The first assembly of the Continuing Library Education Network and Exchange was held in Chicago little more than a year ago (January 23–24, 1976). Its purpose was to mark an occasion for an "idea whose time has come" in dynamic fashion. Thus the proverbial wisdom that was certain to come out of that conference, together with a recognition of the hard work that still lay ahead, with all of the problems and headaches inherent in a work of such magnitude, could not easily be forgotten or ignored.

The *Proceedings* reflect the excitement of the assembly. They are roughly divided into four major content areas: (1) a keynote address by Richard Dougherty and Janice Powell in which the authors pose the question: "Is librarianship one of the endangered professions?" and in which they look to both library administration and staff to orchestrate and correlate the goals of the individual with and to the goals of the library; (2) self-assessment presentations in which continuing education biggies, such as James Liesener, Ruth Patrick, Mary Ellen Michael, Duane Webster, and Grover Andrews, present various models for continuing education programs, career planning, and self-development strategies, complete with the suggestion that the library's role in the educational program of the institution and the community might well become the point of focus for a non-traditional self-study; (3) a "Model for Assessing Continuing Education Needs of a Profession," by Malcolm Knowles, in which the author views the impending obsoles-

cence of man as the next century's greatest threat to civilization; and (4) summaries of small discussion groups that capture the essence of all of the topics included above, in addition to such pragmatic concerns as developing the criteria for evaluating continuing education programs and financing CLENE.

The companion volume, *Continuing Education Opportunities for Library, Information, and Media Personnel*, which covers the year January 1, 1976–December 31, 1976, includes 178 programs offered by fifty-one institutions which would certainly have facilitated the planning of an institution's or individual's self-development programs throughout the year. It is described as a "first listing"; this reviewer for one would enthusiastically welcome this source as an aid and a boon for all those who are committed to taking the sure road for professional self-survival.—Mary B. Cassata, Department of Communication, State University of New York at Buffalo.

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Borchardt, D. H., and Horacek, J. I. *Librarianship in Australia, New Zealand and Oceania: A Brief Survey*. Potts Point, NSW, Australia: Pergamon Press (Australia), 1975. 80p. \$6.50. ISBN 0-08-019920-8. ISBN 0-08-019752-3 paper.

The impetus for this slender monograph surveying librarianship in the South Pacific was provided by a commission soliciting a chapter for a comparative study of librarianship throughout the world.

Preceding the text are simple, uncluttered maps of Australia and New Zealand. On them are marked, by a variety of dots, population densities of five to twenty thousand and twenty to one hundred thousand plus. Cities with populations in excess of one hundred thousand are listed down the side of the maps. Those unfamiliar with these countries will need to have an atlas on hand in order to identify the locations of the cities. The end papers are maps illustrating the area of the Pacific Ocean under discussion.

The book opens with a rudimentary account of the history and geography of this diverse region, which lays the foundation for the reader. From there it moves into an overview of the field. Types of libraries are discussed along with library education, professional status, including salary structures, and the literature. Several interesting tables of public and university library statistics for Australia and New Zealand are included in the chapter on "Types of Libraries." In an epilogue the authors identify the future course of librarianship down under and enumerate ways in which this can be achieved. The compactness and continuity found elsewhere in the book are somewhat lacking in the final chapter on "Bibliography and the Literature of Librarianship."

At the outset the authors express hope that this brief survey will serve as a text for library school students who wish to gain insight into the function of librarianship in their society—a topic, by and large, neglected by library schools. The book also will be invaluable to librarians who are interested in working in this part of the world. Concise, factual, and interestingly written, it presents, in a nutshell, the growth and current status of librarianship in the South Pacific.—*Judith P. Cannan, Deputy Chief Instructor, Cataloging In-*

struction Office, Processing Department, Library of Congress, Washington, D.C.

Chen, Ching-chih. *Biomedical, Scientific & Technical Book Reviewing*. Metuchen, N.J.: Scarecrow, 1976. 186p. \$8.00. LC 76-20480. ISBN 0-8108-0939-7.

The basic premise undergirding the various studies described in this book is about as controversial as apple pie and motherhood. Few science librarians would deny the repeated assertions that book reviews are a valuable means of keeping abreast of current research and of evaluating and selecting new acquisitions. Nor is the identification of those scientific journals which best supply reliable, timely reviews too difficult, although precise information on the adequacy of various aspects of that coverage is more difficult to locate.

The interesting data supplied in this collection of quantitative surveys of scientific review sources are from counts made in the early 1970s from journals held by the Countway Library of Medicine at Harvard and the science and engineering libraries at M.I.T. Insight on such variables as extent of coverage, time lag, duplication patterns, length of review, subject orientation, and the relative emphasis on U.S. and British imprints is furnished in successive chapters for general biomedical books, books on clinical medicine, general scientific books, and publications in the special disciplines of mathematics, astronomy, physics, chemistry, geology, and engineering. An additional chapter gives supplementary data on major publishers in each of the areas surveyed.

There is much solid information here, although most of it is fragmented by the format, which not only confines the analysis of each study to a separate section but follows no uniform pattern in assessing the recurrent variables. These difficulties stem partly from a constant slight shift of parameters for each data base. Most chapters report both a pilot study and an update study made some two or three years later. Frequently a periodical which met the criteria for one study proved to be insignificant for the companion study. Some titles too useful to be ignored were not held in the two base collections. For different reasons the spans of data collection varied from six months

to one year. Still the author concludes that "the overall reviewing pattern in all disciplines has seemed to remain relatively constant over the past couple of decades" (p.123). We can possibly infer that the minor inconsistencies in data gathering did not materially affect the results.

More useful and impressive than a rigid pattern of data gathering would have been a technique developed for easy, direct comparison of the analogous findings from each study with the other and with a composite profile. In spite of the numerous tables within the text, plus appendixes at the close, readers are forced to search out and compare for themselves (no easy task in view of the constantly changing presentations of both text and tables).

The final chapter of general conclusions does give a composite time-lag table, although none of the other summaries of findings is similarly documented. This volume adds evidence to the impressions of many observers that, while the burden of book reviewing is carried by a comparatively small percentage of sci-tech journals, reliable book reviews for most significant general biomedical and general science books do appear in a year or less, frequently in more than one source. The situation in special disciplines, we are told, is less reliable, with astronomy and engineering titles being the most poorly reviewed.—*Jeanne Osborn, School of Library Science, The University of Iowa.*

Computer-Readable Bibliographic Data Bases: A Directory and Data Sourcebook.

Compiled and edited by Martha E. Williams and Sandra H. Rouse, Information Retrieval Research Laboratory, Coordinated Science Laboratory, University of Illinois. Washington, D.C.: American Society for Information Science, 1976—Loose-leaf. \$68.00 per year. LC 76-46249. ISBN 0-87715-114-8.

The rapid integration and growth of on-line bibliographic services in all types of libraries during the past four years has demanded a single reference source of the available machine-readable data bases. Librarians and end users alike have required an up-to-date compilation of the publicly available data bases outlining their subject scope, format, acronym, full name, produc-

er, and accessibility. This ambitious and urgently needed task has been accomplished by Martha E. Williams and Sandra H. Rouse in their massive work, *Computer-Readable Bibliographic Data Bases: A Directory and Data Sourcebook*. Compared with the 1973 ASIS publication, *Survey of Commercially Available Computer-Readable Bibliographic Data Bases*, which provided information on eighty-one data bases, the new directory expands coverage to 301 data bases and includes more pertinent details about the files.

Anticipating the dynamic nature of data bases which frequently change their name, format, ownership, or availability on various systems, the directory appears in a loose-leaf binder with update pages being promised at six-month intervals. Ranging from ABIPC (the *Abstract Bulletin of the Institute of Paper Chemistry*) to *Zoological Record*, the data base outlines follow a consistent format, the definition and methodology of which are well described in the "Introduction." Approximately 58 percent of the data bases are produced by U.S. organizations and about 41 percent by foreign organizations. Although some of the minimal data base descriptions are not fully detailed, the majority of the file entries include a great deal of information: acronym and complete name, issuance, correspondence with printed source, producer, distributor and/or generator, subject matter and scope, indexing, tape specifications, data base services, and user aids if offered by the producer. Of particular assistance is the name, address, and telephone number of the person to contact for further information about the data base. Included in the data base services category are the centers which process the file in either the on-line or batch mode; deliberately excluded are centers which provide in-house service only or brokers which provide search services by remotely accessing other computer facilities. The directory is augmented by four indexes—broad subject categories, data base name, producer, and processor.

In order to retain its usefulness, rigorous updating will be necessary. Having been published in October 1976 before the January 1977 availability of the Bibliographic Retrieval Services, Inc., BRS system and before the actual loading of several pre-

viously announced files of System Development Corporation's ORBIT and Lockheed Information System's DIALOG systems, the directory already needs several update modifications reflecting vendor additions.

Overall, this work is recommended for any library which provides an active search service capability. To ensure its viability, it is urged that after the original one-year purchase, updated and additional pages be provided by ASIS at a nominal fee to the original subscribers.—*Patricia E. Vaughan, Coordinator, NASIC, New England Board of Higher Education, Wellesley, Massachusetts.*

Pitkin, Gary M. *Serials Automation in the United States: A Bibliographic History*. Metuchen, N.J.: Scarecrow, 1976. 148p. \$6.00. LC 76-18116. ISBN 0-8108-0955-9.

According to the introduction, "the purpose of this book is to provide, in one place, access to all information published on the automation of serials control functions in the United States and cited in *Library Literature*." The book is an annotated, bibliographic history, covering the period from 1949 to 1974. Each entry, numbered and in chronological order, is annotated and contains complete bibliographic information. In addition, each entry briefly notes the major automation application, such as ordering, claiming, binding, etc., and the type of library, including the categories of academic, government, industry, medical, military, public, and secondary schools.

The annotations are well-written and informative, varying in length from one to four paragraphs, with ample quotes from the original item. The appendixes contain an index of the articles by serials control function (binding, claiming, holdings information, etc.), and there is also a complete author index.

This book will help anyone considering serials automation by providing concise information on the way in which other libraries faced the challenges of serials automation and by locating specific articles relevant to the library's particular automation needs. Its usefulness is diminished by its 1974 closing date for entries and the limitation to the United States.

Admittedly, most libraries contemplating

the automation of their serials control functions will have *Library Literature* at their disposal. However, this book, reasonably priced at \$6.00, provides a reliable, annotated literature survey and is highly recommended for any library or organization involved with serials automation.—*Jean Hawks, Director of Public Services, Northern Arizona University Libraries, Flagstaff.*

Sheehy, Eugene P. *Guide to Reference Books*. Compiled by Eugene P. Sheehy, with the assistance of Rita G. Keckeissen and Eileen McIlvaine. 9th ed. Chicago: American Library Assn., 1976. 1015p. \$30.00. LC 76-11751. ISBN 0-8389-0205-7.

It is difficult to consider doing a review of Kroeger/Mudge/Winchell/Sheehy without a feeling of reverence. Memories of the earlier editions from library school days on through years in the library profession bring proud recognition that the *Guide* has been a work of consistent excellence by librarians for the entire learning world. As one reads through the pages of this latest edition, there is the pleasure of recalling massive sets of volumes on shelves and of remembering authors whose careful work is always within reach and students whose puzzling questions have been answered.

As noted in the preface, very little has been dropped from the previous edition and much has been added. This fact was confirmed by checking sections throughout the cumulated index of Supplement 3 of the eighth edition with the index of the ninth. The omission of reference works on individual authors appears to be the major deletion. One can sympathize with compromises because of space requirements, but the omissions seem not to be done as consistently as would be desirable.

Inclusions are said to be classical writers and "a few indisputably major authors" (Pref. p.x). This decision results in no listing for American authors (there were twelve in the eighth), and only Goethe is left for German writers—Hegel, Heine, Kafka, Mann, Schiller having been dropped. Corneille, Moliere, and Racine remain of fourteen French authors in the eighth. There is a satisfactory explanatory note as to the treatment of this type of reference work in the English literature section; a

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similar explanation should have been added in the other sections, because otherwise the impression is left that no other individual author materials exist in a given national literature.

Even though some books on associations are classed in the Library of Congress social science class, HS, it was an unhappy decision to place the general listings in the social sciences section in the *Guide* and scattered elsewhere. It had been very useful and logical to find general academies and societies in a general section. Another unhappy result of the reorganization is the renumbering of the *Guide's* own class numbers in AC-AH. Even though one may not have committed these numbers to memory as the preface puts it, it has been convenient to refer from section to section in supplements and editions without consulting several indexes.

Addition of L.C. classification numbers in the entries is a fine idea, and the use of *Guide* numbers in the index instead of page numbers seems to work reasonably well, as in the three supplements to the eighth. Prices and citations of reviews which were

in the three supplements are not in the ninth. Their omission is reasonable, but the usefulness of those bits of information remains and should be one of the bases for reference departments to retain the three supplements as well as both the eighth and ninth editions. Also it is hoped that even the briefer inclusion of review citations and prices will be incorporated again into the supplements to the ninth.

Although 1,000 pages are compressed into a volume almost the same size as the previous edition of some 700 pages, the type is clear and the page appearance is pleasing, except for some shadows through the thinner paper. The binding is good looking but unfortunately perhaps not as strong as needed; the front cover on our library copy came loose at the hinge after about two weeks.

Every library school student should own a personal copy of the *Guide*; the cost of this edition does seem to be a deterrent for such personal purchases. Perhaps ALA could consider granting a special student's discount to encourage ownership of such basic professional property.

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The library profession owes Mr. Sheehy and his colleagues and predecessors at the Columbia University Library its enduring gratitude for the various editions of the *Guide*. The latest is not an exception to the high quality of the earlier ones, and no library or information center should be without it.—Christine R. Longstreet, *Head Reference Librarian, University of Chicago*.

Ray, Gordon N. *The Illustrator and the Book in England from 1790 to 1914*. New York: Pierpont Morgan Library and Oxford Univ. Pr., 1976. xxxiii, 336p. \$55.00. LC 76-10042. ISBN 0-19-519883-2.

William Morris and the Art of the Book. With Essays on William Morris as Book Collector by Paul Needham, as Calligrapher by Joseph Dunlap, and as Typographer by John Dreyfus. New York: Pierpont Morgan Library and Oxford Univ. Pr., 1976. 140p., CXIV plates. \$55.00. LC 76-29207. ISBN 0-19-519910-3.

The Pierpont Morgan Library in New York is justly renowned for the excellent exhibitions it regularly mounts. Since the Morgan's treasures and those of its friends range from the earliest illuminated medieval manuscripts to fine printed books of all eras, literary and musical manuscripts, and virtuoso drawings, there is always something on display of great aesthetic appeal and intellectual interest. In recent years the fine catalogs published to accompany temporary exhibitions have grown increasingly important in their own right: many are the standard monograph in a given field, and all must be consulted by anyone with a serious interest in the subjects they cover.

For many years these catalogs have been handsomely printed by the Stinehour Press (typesetting) and the Meriden Gravure Company (illustrations and printing) under a variety of publishing arrangements between the library and commercial distributors. The two books reviewed here represent the first in a new arrangement with the Oxford University Press, which will distribute all hardcover copies of the exhibition catalogs. This is an arrangement to be applauded, despite the steep prices, for these catalogs deserve a wider audience than can be reached from within the library

itself or by a specialist "fine book" publisher.

Gordon Ray's private collection of English illustrated books was the source of the greatest share of the items exhibited last spring as *The Illustrator and the Book in England from 1790 to 1914*, and it is also Mr. Ray (president of the Guggenheim Foundation) who has written the catalog of the exhibition. Despite the wealth of source material available for this period, there is no comprehensive study of English illustration of the time, arguably the greatest period of fine book production in England. Specialist studies on some individual illustrators, specific techniques of illustration, and a few schools of illustration have appeared, but hitherto there has been no adequate survey of the field. This catalog admirably fills the gap.

The heart of the book is the description of the 333 numbered entries and a number of collateral items (mostly manuscript material). Formal bibliographic description has been most ably supplied by Thomas Lange, assistant curator of printed books at the Morgan Library, and for that alone the book would be an invaluable tool for libraries (although fuller descriptions of many of the books are to be found in R. V. Tooley's *English Books with Coloured Plates* and the catalogs of the color-plate book collection of J. R. Abbey, to which reference is made).

In addition, however, Mr. Ray has supplied, for each book, descriptive text which places it in a historical and artistic context. The entries are arranged in sections dealing with particular artists (e.g., Blake or Rossetti) or illustrative techniques (e.g., aquatint or wood engraving), each of which is prefaced with a useful summary of the place of that artist or technique in the history of English illustration. All told, then, the text provides a good overview of the subject. This is not to imply that coverage is by any means complete: the books exhibited at the Morgan Library represent only a small fraction of the output of English illustrated books of these eras, one man's personal choice of the best of that output. The selection shows a bias for narrative image, overlooking advances in purely decorative illustration and in design, but the outlines drawn are accurate.

One minor criticism relates to the printing of the illustrations. For some reason, a decision was made to print in two colors, black and gray, with the result that what should be white background has come out gray, obliterating many of the finer graphic distinctions visible in the originals. In addition to the one hundred plates at the back of the book and additional illustrations interspersed with the text, there are a comprehensive bibliography and indexes of artists, authors, and titles.

John Crawford is another long-time friend of the Morgan Library who exhibited his private collection there. In his case, the exhibition also marked the gift of his William Morris materials to the library, already a major repository of books owned and printed by Morris.

William Morris and the Art of the Book explores three different activities the versatile Morris pursued with distinction: book collecting, calligraphy, and printing and book design. The materials cataloged offer a fascinating view of these activities. Included are documentation in the form of letters and other manuscripts by Morris and his associates, discussing his many projects, as well as the fruits of his work—sumptuous medieval manuscripts and illustrated incunabula, Morris's own illuminations of his writings and those of earlier (mostly medieval) poets, and the exquisite productions of the Kelmscott Press. Of special interest are pencil drawings by Edward Burne-Jones for the illustrations to the Kelmscott Chaucer.

Catalog entries for the 101 exhibited items have been written by Paul Needham, curator of books and bindings at the Morgan Library, who has woven them into a coherent narrative of Morris's book-arts activities. Needham has also written the first of three essays which preface the volume, a history of Morris as book collector. It is a fascinating, original study of a hitherto unexamined aspect of Morris's life. Also of great interest are Joseph Dunlap's contribution on Morris's calligraphy and John Dreyfus's essay on Morris's progress in typography.

All three essays present much original material, hence it is a pity that they are not well-documented. In many cases the information they offer derives from the cata-

loged items, but nowhere are references to catalog entries provided; nor is any of the abundant literature on Morris cited, though the authors surely had recourse to much of it. This failure seriously impairs the usefulness of the volume as a research tool. This is exacerbated by the absence of a bibliography or index.

The physical production of *William Morris and the Art of the Book* would not have been a disappointment to the proprietor of the Kelmscott Press. The text has been printed letterpress, with ornaments and section headings in color; the 114 plates suffer from none of the graying found in Ray's volume.

Both these volumes contain much information unavailable elsewhere, presented here in an interesting, beautiful, and, for the most part, useful format. Both are indispensable for any collection interested in the history of English art or letters in the nineteenth century. The exacting printing requirements for reproducing fine illustrations result in what may seem high prices, but these books are value for money. Individuals, however, may opt for the less expensive softcover versions available only from the library.—*Joan M. Friedman, Curator of Rare Books, Yale Center for British Art, New Haven, Connecticut.*

Anders, Mary Edna. *Libraries and Library Services in the Southeast. A Report of the Southeastern States Cooperative Survey, 1972-1974.* Prepared for the Southeastern Library Association. University, Ala.: Univ. of Alabama Pr., 1976. 263p. \$10.00. LC 75-44140. ISBN 0-8173-9705-1.

"As the 1970s began, an optimist viewing the Southeast with the rosier of glasses would have had to admit to the relative nature of its progress and to the continued existence of serious problems in the region. At the same time, the gloomiest pessimist would have had to agree that abundant signs of change and progress can be identified in the Southeast" (p.8). This book, itself one of the promising signs, should provide an admirable basis for further progress.

Commissioned by the Southeastern Library Association (SELA), the survey reported by Dr. Anders was cosponsored by

the Tennessee Valley Authority and was supported by the state library agencies and state library associations of the nine-state region—Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. It updates a similar survey conducted in 1946-47 under the aegis of the Tennessee Valley Library Council.

Since its primary intention, as stated in the preface, was "to provide a data base for regional planning for library development and for cooperative action," one might expect somewhat more emphasis on the implications for cooperation in the course of the presentation of data gathered. Several references are made, for example, to limitations which placed time constraints on the scope of the study, among them the decision not to collect data on academic consortia.

As it stands, however, the volume offers valuable information on almost every kind of library resource in the area, and we are told that a supplementary volume of statistical data has also been issued (see M. E. Anders, *The Southeastern States Cooperative Library Survey, 1972-74: Tables* [Atlanta: Industrial Development Division, Engineering Experiment Station, Georgia Institute of Technology, 1975]).

The report is simply organized and easy to approach. In successive chapters, the author describes the region, the major agencies responsible for leadership, the types of institutions providing library services, and general characteristics of library personnel with a cursory look at library users. The services offered by the various types of agencies and libraries are analyzed according to the geographical area served, financial support received, materials held, personnel employed, personnel practices observed, types of people served, and physical quarters and equipment maintained. Except for state library agencies and supreme court libraries, findings are not broken down by individual institution. Specific recommendations for achieving greater effectiveness are offered for each type.

A final interpretive chapter gives an overview of the survey, assesses current conditions in terms of the goals set in the 1946-47 study, and outlines eight overall recommendations for regional action. Addressed

to the sponsoring association, these specify the hiring of a full-time SELA director with responsibility for exercising leadership in regional plans involving all types of libraries, agencies, and organizations concerned with library services. The ensuing programs would link library resources more closely with user needs, develop new networks compatible with the national program, encourage more financial support for public library service, and strengthen research collections cooperatively. Dr. Anders also suggests the strengthening of standards for school library/media centers and the provision of a regionwide continuing education program.

In deciding the future direction of their regional efforts, Southeastern leaders should perhaps give special attention, not simply to the survey director's final recommendations for SELA, but more basically to her recommendations for state library agencies and to other observations she makes along the way. Dr. Anders mentions variously the existence of legislation in eight of the nine states authorizing interstate compacts, the responsibility of state library agencies to create and support programs uniting the types of libraries, and the hazards of expecting library associations to sustain continuity in long-range planning and development.

Put together and carried to their logical conclusion, these points might suggest the solution which is currently being tried in New England. In the early 1970s the New England Library Association, seeking a focus for regionwide cooperative efforts, initiated the creation of a separate legal entity, representative of all types of libraries but directed by the state agencies under the Interstate Library Compact. SELA may wish to consider the New England experience as it seeks ways to implement the survey recommendations for regional cooperative action in the Southeast.—*Mary A. McKenzie, Executive Director, New England Library Board, Hartford, Connecticut.*

Sullivan, Peggy. *Carl H. Milam and the American Library Association*. New York: H. W. Wilson, 1976. 390p. \$17.50. LC 76-3686. ISBN 0-8242-0592-8.

Milam, Carl H. *Carl H. Milam and the United Nations Library*. Edited and with

an introduction by Doris Cruger Dale. Metuchen, N.J.: Scarecrow, 1976. 132p. \$6.00. LC 76-14866. ISBN 0-8108-0941-9.

From 1920 to 1948, the name of Carl Hastings Milam was synonymous with the American Library Association and, to some extent, with American librarianship itself. As spokesman, administrator, consultant, and friend, he shaped the course of libraries in the United States and their relationship to librarianship around the world. Those who remember this hearty, gregarious, and effective man are startled to discover that many now do not even recognize his name. Fortunately—for his career explains much about our present situation—scholars are beginning to study this key figure of twentieth-century American librarianship.

Born in Kansas in 1884, Milam began his work in libraries as a student assistant at the University of Oklahoma under the direction of Milton J. Ferguson, later the respected public librarian of Brooklyn. The experience prompted Milam to go on to the Albany library school after completing his college studies. Beginning work as cataloger at Purdue University, he became secretary and library organizer for the Indiana Public Library Commission in 1909, moving in 1913 to become director of the Birmingham, Alabama, Public Library. When the Library War Service was established in 1917, Milam became a principal assistant to Herbert Putnam, the Librarian of Congress, who directed the work of providing libraries for the servicemen in France and in camps in the United States. Although nominally on leave from Birmingham, Milam soon turned most of his attention to the national enterprise.

When American librarians, inspired by their success in the war effort, determined to seek support for a widened and deepened postwar library service, Milam soon became a leading figure in the so-called Enlarged Program. For a time he jointly administered the closing days of the Library War Service and the beginnings of the fund drive for the postwar effort. Then, in 1920, he was appointed executive secretary of ALA, bringing together his previous responsibilities with new duties. Although the grandiose plans for the Enlarged Program were never realized, Milam was at the

center of the efforts during the 1920s to carry out reform and expansion.

Supported primarily by the Carnegie Corporation, which had ceased to subsidize buildings in favor of improvement of library programs, American librarianship undertook new activities, particularly in adult education, library extension, and library education. During the depression years of the 1930s, Milam led the association in seeking to protect library services and librarians' positions from budget cuts. Programs supported by the New Deal were harnessed for the benefit of libraries, and the new fashion for planning was reflected in the activities of ALA under Milam's leadership. Then, with the onset of World War II, ALA was again involved both with the encouragement of wartime library services and with postwar planning. During all of these twenty-eight years of change, adjustment, and growth, Milam, as Sullivan says, "showed a remarkable capacity to grow" (p.95).

Concurrently with all of his activities at home, Milam was often a leading library spokesman for the United States in other countries. It was natural that he was one of the group selected to survey the library needs of the newly organized United Nations and that he was then asked to undertake the responsibility of setting the new library on its feet. In 1948, aged sixty-three, he anticipated his impending retirement by taking on this new challenge for the last two years of his career.

During those same years, he was nominated as ALA's president by an influential inner circle of the association whose members thought he had earned the honor. To Milam's embarrassment, a group of members chose that occasion to overturn the tradition of a single nominee for the office, nominating by petition a rival candidate who was elected. Although the outcome seems to have been primarily a result of the movement toward democracy rather than personal opposition to Milam, it was an unfortunate episode in his association career. All the evidence suggests that he took the defeat in good grace and without bitterness.

For his last thirteen years he retired to his home outside Chicago, enduring the sadness of his wife's difficult final illness

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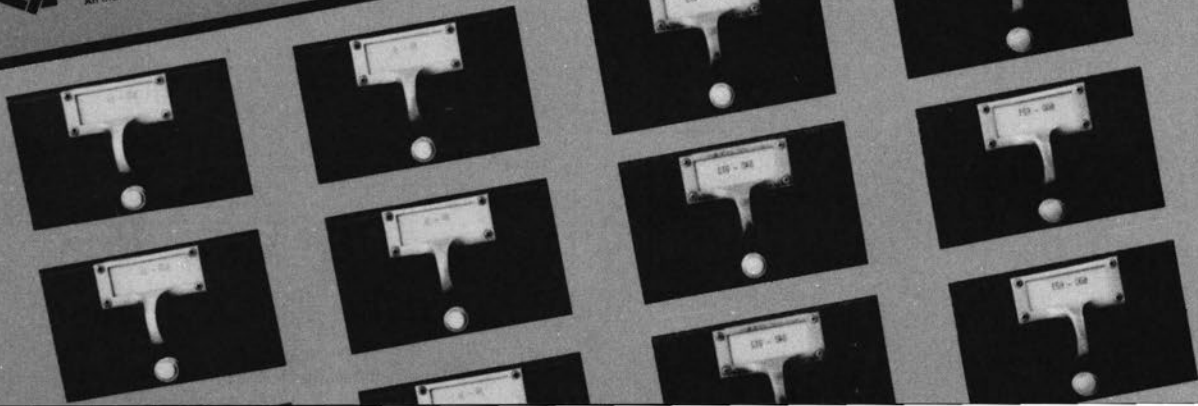
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and making a life for himself with continued participation in library affairs and with work on a manuscript that unfortunately was not completed before his death in 1963, aged seventy-eight.

Sullivan's biography is a lively and competent recounting of Milam's life and professional career. Carried out as a dissertation at the University of Chicago, the work brings Milam to life as a person and summarizes his career well. In the process, Sullivan tells us a great deal about the progress of both the association and the profession. It is a useful and informative book. It has an unfortunate flaw that makes it difficult to read as a single sequence. Faced with the multiplicity and complexity of Milam's life and career, Sullivan chose to divide her work into topics rather than to adhere strictly to chronology.

She begins with two chapters that bring first the association's history and then Milam's life up to 1920. A third chapter seeks to summarize the work of the association broadly during Milam's tenure. The succeeding chapters deal with his relations with outside organizations such as foundations and the federal government, his international involvements, his position and activities as spokesman of the association and of the profession, his personality at work and in his private life, and his final years. The consequence is a fragmentation that prevents the reader from following the story from beginning to end.

Sullivan's choice is, of course, a response to the classic dilemma of the historian seeking to reconcile chronology with integrated treatment of subject matter; to an extent, one or the other inevitably suffers. In this

instance, however, the fragmentation is more than simply a matter of choice and taste. Particular matters, being treated in a number of places piecemeal, are never completely explained. Just as one example, the nature of the Enlarged Program is never detailed with the fullness that this important and revealing dream warrants, though it is mentioned on numerous occasions.

In another instance of unfortunately meager coverage, Sullivan leaves the reader dependent for detailed knowledge of Milam's work at the United Nations upon Doris Cruger Dale's *The United Nations Library; Its Origins and Development* (ALA, 1970). Surely the reader of Milam's major biography is entitled to a comprehensive summary of the nature of the problems and Milam's responses to them. Despite its flaws, however, Sullivan's *Milam* is an interesting and well-done study that fills an important void. It can be heartily recommended as one of a growing group of studies that will enlighten us about the crucial half-century or so that is immediately behind us.

As a by-product of her work on the UN library, Dale has edited Milam's diary of his United Nations years together with an introduction and six appendixes related to the library or Milam's work with it. The study is competently done. Library school libraries and comprehensive research libraries will doubtless wish to have the book in their collections, though it is difficult to think of many other people who would be likely to need it at hand.—W. L. Williamson, Professor, Library School, University of Wisconsin-Madison.

ABSTRACTS

The following abstracts are based on those prepared by the ERIC Clearinghouse on Information Resources, Stanford Center for Research and Development in Teaching, School of Education, Stanford University.

Documents with an ED number here may be ordered in either microfiche (MF) or paper copy (HC) from the ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210. Orders should include ED number, specify format desired, and include payment for document and postage.

Further information on ordering documents and current postage charges may be obtained from a recent issue of Resources in Education.

Analysis of Errors in the University of California Union Catalog Supplement. By Charles P. Bourne and others. Inst. of Library Research, Univ. of California, Berkeley. 1976. 81p. ED 127 922. MF—\$0.83; HC—\$4.67.

A study examined the error rate of the *University of California Union Catalog Supplement*, a forty-seven-volume, computer produced book catalog of the materials cataloged by the nine University of California campuses during the years 1963-67. The study attempted not only to determine the rate and nature of errors, but also to develop a methodology for studying large bibliographic files. A stratified sample of ninety-four pages was examined, types and rates of errors were identified, and errors were categorized according to degree of seriousness. This report describes the methodology and provides tabular summaries and explanations of the results.

Library Resources, Staff and Operating Expenditures at Pennsylvania Institutions of Higher Education, 1974-75. By Roger G. Hummel. Bureau of Information Systems, Pennsylvania State Dept. of Education, Harrisburg. 1976. 56p. ED 127 981. MF—\$0.83; HC—\$3.50.

Data are tabulated for Pennsylvania academic libraries in three main categories: collections (1974-75), staff salaries (1975-76), and operating expenditures (1974-75). Data on library collections cover number of volumes, microforms, and audiovisual titles. Information on library staff includes number of professional

and support staff and staff status and salaries. Expenditures are tabulated by institutional category and by type of expenditure and institution.

A Report on the Moffitt Undergraduate Library Book Theft Study. By Neal K. Kaske and Donald D. Thompson. Univ. Libraries, Univ. of California, Berkeley. 1975. 20p. ED 129 234. MF—\$0.83; HC—\$1.67.

A study was conducted at the Moffitt Undergraduate Library of the University of California at Berkeley to determine the extent and the cost of book losses due to theft and to determine the cost-effectiveness of book security systems. A sample inventory was taken, and the theft rate (13.7 percent) was statistically derived. The rate of loss was translated into a cost figure, projected over time, and compared with the cost of book security systems. It was shown that the cost of installing and operating a security system was far less than the projected cost of book thefts.

[Report of Staffing Recommendations for Virginia Institutions of Higher Education.] By C. Edward Huber and others. Virginia State Council of Higher Education, Richmond. 1976. 31p. ED 129 248. MC—\$0.83; HC—\$2.06.

The current formula for staffing libraries and resource centers in Virginia public institutions of higher learning was examined by a subcommittee of library directors. Questionnaires were mailed to relevant institutions to collect information regarding: (1) input variables, (2) staffing needs as perceived by the directors of the institutions, and (3) current staffing data. Pearson product moment correlations were used to aggregate the data. A modified version of a staff formula previously used by the State University of New York was recommended to the State Council of Higher Education for Virginia.

Feasibility of Indicating the Location of Reference Materials in the Card Catalog in the Wayne State University Library System. By Louise Bugg. Technical Paper No. 9. Univ. Libraries, Wayne State Univ., Detroit, Michigan. 1976. 13p. ED 129 286. MF—\$0.83; HC—\$1.67.

Six university libraries were visited and observations were made on their procedures for indicating locations of reference books in card catalogs. Comparisons were made between other libraries and Wayne State University libraries in the following areas: (1) the decision

to classify books as reference, (2) the labeling of reference books, (3) the reference catalog, and (4) ways of indicating reference locations on catalog cards. Recommendations for the Wayne State system were made.

Emergency Manual, Cornell University Libraries. By Margaret Carey and others. Cornell Univ. Libraries, Ithaca, New York, 1976. 35p. ED 129 290. MF—\$0.83; HC—\$2.06.

The Committee on Safety and Emergencies of Cornell University Libraries compiled this loose-leaf guide to handling emergency situations within the libraries. The first section lists emergency situations in alphabetical order and provides step-by-step procedures intended to minimize danger to life and property. The remaining sections deal with organization of the committee, emergency planning coordinators in each building, methods of prevention and preparation for emergencies, and organizations outside the libraries that may become involved when emergency situations occur. Blank spaces are provided for names and phone numbers of persons trained in emergency procedures. A safety inspection checklist also is included.

Automation of Technical Services in Booth Library: A Feasibility Study. By Paladugu V. Rao. Booth Library, Eastern Illinois Univ., Charleston, Illinois, 1976. 15p. ED 129 309. MF—\$0.83; HC—\$1.67.

A study was conducted to determine: (1) whether technical processes at the Booth Library, Eastern Illinois University, should be automated; and (2) if automation were required, which system would be economically and technically feasible. Data from 323 technical service transactions were selected on a random basis between July 1971 and June 1973, and the data analysis revealed sluggish movement of books through technical processing. Automation of specific processes was recommended, and appropriate technology was identified. The proposed system called for use of Library of Congress MARC tapes to generate new book notices, book orders, and catalog cards. It was estimated that the new system would save more than \$30,000 within five years of the implementation.

Methods of Library Use: Handbook for Bibliography I. By Bruce L. Johnson and others. School of Librarianship, Univ. of California, Berkeley, 1976. 153p. ED 129 340. MF—\$0.83; HC—\$8.69.

Written for an undergraduate course at the

University of California at Berkeley, this handbook also serves as a general text on library use. Detailed instruction is given on the use of card catalogs, reference materials, periodicals, newspapers, microforms, government documents, and other library collections. Major general reference works are described, and representative specialized works are listed. A model search strategy for researching a subject is outlined, and suggestions are given for bibliographic citation formats, note taking, and using unfamiliar libraries. A guide to twenty-seven libraries on the Berkeley campus and a glossary of library terminology are included.

OTHER PUBLICATIONS OF INTEREST TO ACADEMIC LIBRARIANS

Akers, Susan Grey. *Akers' Simple Library Cataloging*. 6th ed. Completely revised and rewritten by Arthur Curley and Jane Varlejs. Metuchen, N.J.: Scarecrow, 1977. 338p. \$8.50. LC 76-26897. ISBN 0-8108-0978-8.

The American Bibliography of Slavic and East European Studies for 1974. Editor: David H. Kraus. Associate editor: Anita R. Navon. Prepared at the Library of Congress for the American Association for the Advancement of Slavic Studies. Columbus, Ohio: American Association for the Advancement of Slavic Studies, 1976. 225p. \$12.00 (\$10.00 for AAASS members).

Ash, Brian. *Who's Who in Science Fiction*. New York: Taplinger, 1976. 219p. \$8.95. LC 76-11667. ISBN 0-8008-8274-1.

Includes entries for more than 400 SF writers, editors, and artists.

Baade, Patricia. *Directory of International Energy Statistics*. Washington: IES Publishing Co., 1976. 96p. \$12.50. LC 76-47083.

Based on the author's *International Energy Statistics* (1975).

Bloomberg, Marty. *Introduction to Public Services for Library Technicians*. 2d ed. Littleton, Colo.: Libraries Unlimited, 1977. 278p. \$11.50 U.S. and Canada; \$13.50 elsewhere. LC 76-45779. ISBN 0-87287-126-6.

Books in Series in the United States 1966-1975; Original, Reprinted, In-Print, and Out-of-Print Books, Published or Distributed in the U.S. in Popular, Scholarly, and Professional Series. New York: Bowker, 1977. 2,504p. \$50.00. LC 76-41665. ISBN 0-8352-0902-4.

Caplan, H. H. *The Classified Directory of Artists Signatures, Symbols & Monograms*. Detroit: Gale, 1976. 738p. \$75.00 ISBN 0-8103-0985-8.

Contains more than 6,000 entries so arranged that correct name of artist may be located

- from an example of the signature, monogram, or symbol.
- Cohen, Jacob. *Special Bibliography in Monetary Economics and Finance*. New York: Gordon and Breach, 1976. 200p. \$40.00. LC 75-16833. ISBN 0-677-00690-X.
- A subject classified bibliography of 1,163 English-language titles issued through June 1972, with an addendum listing works through September 1973. An outgrowth of bibliographies in the journal *Economics Selections: An International Bibliography*.
- Copyright Revision Act of 1976. (P.L. 94-553 as Signed by the President, October 19, 1976.) *Law, Explanation, Committee Reports*. Chicago: Commerce Clearing House, 1976. 279p. \$12.50.
- Cordasco, Francesco. *A Bibliography of Vocational Education: An Annotated Guide*. New York: AMS, 1977. 245p. \$25.00. ISBN 0-404-10125-9.
- Directory of Research Grants, 1976-77*. Comp. by William K. Wilson; ed. by Betty L. Wilson. Phoenix, Ariz.: Oryx Pr., 1976. 235p. LC 76-47074. ISBN 0-912700-41-6.
- Dupuy, R. Ernest, and Dupuy, Trevor N. *Encyclopedia of Military History from 3500 B.C. to the Present*. Rev. ed. New York: Harper, 1977. 1,464p. \$25.00. LC 74-81871. ISBN: 0-06-011139-9.
- EDV—Einsatz im Bibliotheks- und Informationswesen in der Bundesrepublik; Planung, Vorbereitung, Durchführung. ABT-Information, 20. Berlin: Arbeitsstelle für Bibliothekstechnik bei der Staatsbibliothek Preussischer Kulturbesitz, 1976. 102p. free of charge.
- A general survey of current library automation projects in West Germany.
- Ehresmann, Donald L. *Applied and Decorative Arts. A Bibliographic Guide to Basic Reference Works, Histories, and Handbooks*. Littleton, Colo.: Libraries Unlimited, 1977. 232p. \$15.00 U.S. and Canada; \$18.00 elsewhere. LC 76-55416. ISBN 0-87287-136-3.
- Includes books in Western European languages between 1875 and 1975 in such arts as ceramics, enamels, furniture, glass, ivory, leatherwork, and textiles and the more applied mixed media of arms and armor, clocks and watches, costume, jewelry, lacquer, medals and seals, musical instruments, and toys.
- Eichman, Barbara. *A Selective Bibliography of Audio-Visual Materials Reflecting a Civil Liberties Theme*. New York: American Civil Liberties Union, 1976. 76p.
- The Far East and Australasia 1976-77; A Survey and Directory of Asia and the Pacific*. 8th ed. Detroit: Gale, 1976. 1,331p. \$66.00. LC 74-417170.
- Federal Information Sources and Systems: A Directory for the Congress*. Compiled and published by the Office of Program Analysis, U.S. General Accounting Office (OPA-76-23). 1976 Congressional Sourcebook Series. Washington: U.S. Govt. Print. Off., 1976. 459p. LC 76-10018.
- Describes 1,000 federal information sources and systems maintained by 63 executive agencies. Microfiche copies available free to certain categories of users (including college libraries) from U.S. General Accounting Office, Distribution Section, Room 4522, 441 G Street, N.W., Washington, DC 20548.
- Federal Program Evaluations: A Directory for the Congress*. Compiled and published by the Office of Program Analysis, U.S. General Accounting Office (PAD-77-5). 1976 Congressional Sourcebook Series. Washington: U.S. Govt. Print. Off., 1976. 876p. \$9.45. LC 76-10017.
- Describes nearly 1,700 evaluation reports produced by and for 18 selected federal agencies. For availability of microfiche copies see entry for *Federal Information Sources and Systems*.
- Gates, Norman Timmins. *A Checklist of the Letters of Richard Aldington*. Carbondale: Southern Illinois Univ. Pr., 1977. 171p. \$9.85. LC 76-21638. ISBN 0-8093-0781-2.
- Georgi, Charlotte. *The Arts and the World of Business; A Selected Bibliography*. Supplement II. Research Paper, no. 33. Los Angeles: Graduate School of Management, Univ. of California, 1976. 98p. \$5.00.
- Supplements the author's bibliography, same title (Scarecrow Press, 1973) and a first supplement issued as Research Paper no. 23 (1974).
- Georgi, Charlotte. *Foundations, Grants & Fund-Raising: A Selected Bibliography*. Los Angeles: Graduate School of Management, Univ. of California, 1976. 67p. \$5.00.
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- The Health Sciences Video Directory, 1977*. Edited by Lawrence Eidelberg. New York: Shelter Books, 1977. 270p. \$27.50. LC 76-29480. ISBN 0-917226-00-3.
- A new annual reference work providing annotated listings of more than 4,400 individual video programs and series and including a directory of the 120 producers and distributors whose materials are listed.
- Interlibrary Users Association. *Journal Holdings in the Washington-Baltimore Area, 1977*. 2d ed. Rockville, Md.: Sigma Data Computing Corp., 1977. 660p. \$135.00. LC 76-52599.
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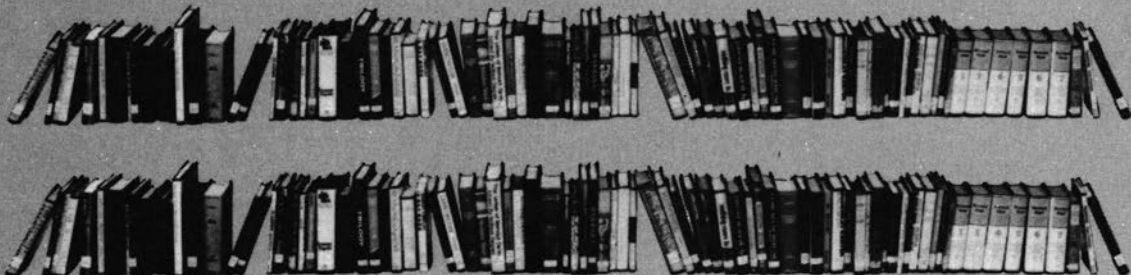
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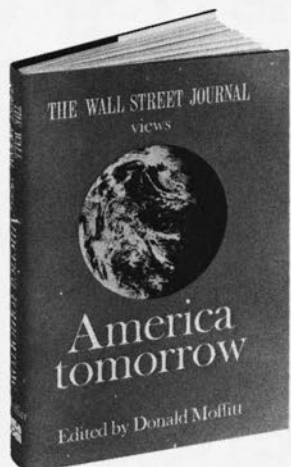
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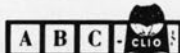
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Includes relevant publications from 1973-75 as well as material from 1969-73 which formed the basis for the 10th edition.
- Jones, Cornelia, and Way, Olivia R. *British Children's Authors: Interviews at Home*. Chicago: American Library Assn., 1976. 192p. \$10.00. LC 76-44494. ISBN 0-8389-0224-3.
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- Kahane, Libby. *The United States of America: An Annotated Bibliography of Publications in Hebrew*. Jerusalem: Center for Public Libraries in Israel; American Studies Department, Hebrew Univ. of Jerusalem, 1976. 121p. \$12.50, incl. postage. (Available from Center for Public Libraries, P.O.B. 242, Jerusalem.)
- Knox, Alan B. *Helping Adults to Learn*. CLENE Concept Paper #1. Washington, D.C.: Continuing Library Education Network and Exchange, 1976. 64p. \$4.25 CLENE members; \$5.00 nonmembers.
- Krepel, Wayne L., and DuVall, Charles R. *Education and Education-Related Serials: A Directory*. Littleton, Colo.: Libraries Unlimited, 1977. 255p. \$15.00 U.S. and Canada; \$18.00 elsewhere. LC 76-47040. ISBN 0-87287-131-2.
Includes descriptions of 501 journals and newsletters, all related in some way to field of education.
- Kunkle, Hannah Josephine. *Bibliography of the History of Libraries in California*. Journal of Library History Bibliography no. 13. Tallahassee, Fla.: School of Library Science, Florida State Univ., 1976. 182p. \$10.00.
- Lathem, Edward Connery, ed. *76 United Statesiana: Seventy-Six Works of American Scholarship Relating to America as Published During Two Centuries from the Revolutionary Era of the United States Through the Nation's Bicentennial Year*. Washington: Association of Research Libraries, 1976. Unpaged. \$7.50 cloth; \$5.75 paper.
A catalog recording the Bicentennial exhibition prepared for the October 1976 ARL meeting and including facsimiles of title pages of the seventy-six works displayed. Catalog prepared in effort to encourage libraries to reproduce the exhibition; books chosen are primarily standard titles.
- Laurence, Dan H. *Shaw, Books, and Libraries*. Bibliographical Monograph Series, no. 9. Austin: Humanities Research Center, Univ. of Texas, 1976. 28p. \$5.95. LC 76-620048. ISBN 0-87959-022-X.
- Law Librarians' Society of Washington, D.C. Union List of Legal Periodicals Subcommittee. *Union List of Legal Periodicals*. 3d ed. Rockville, Md.: Sigma Data Computing Corp., 1977. 242p. \$87.50. LC 76-57864.
- Lee, Joel M., ed. *Libraries and Information Centers in the Chicago Metropolitan Area*. Hillis L. Griffin, production editor. 2d ed., rev. and enl. Chicago: Illinois Regional Library Council, 1976. 592p. \$15.00. LC 76-8351. ISBN 0-917060-01-6.
- Link, Frederick M. *English Drama, 1666-1800: A Guide to Information Sources*. American Literature, English Literature, and World Literatures in English Information Guide Series, v.9. Detroit: Gale, 1976. 374p. \$18.00. LC 73-16984. ISBN 0-8103-1224-7.
- Littlefield, David W. *The Islamic Near East and North Africa: An Annotated Guide to Books in English for Non-Specialists*. Littleton, Colo.: Libraries Unlimited, 1977. 375p. \$19.50 U.S. and Canada; \$23.00 elsewhere. LC 76-218. ISBN 0-87287-159-2.
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- Murdock, Mary-Elizabeth. *Catalog of the Sophia Smith Collection, Women's History Archive, Smith College, Northampton, Massachusetts*. 2d ed. Northampton, Mass.: Smith College, 1976. 78p. \$3.00.
- Murphy, Marcy. *Networking Practices and Priorities of Special and Academic Librarians: A Comparison*. University of Illinois Graduate School of Library Science Occasional Paper, no. 126. Champaign, Ill.: Graduate School of Library Science, Univ. of Illinois, 1976. 23p. \$2.00.
- Proceedings of the Personnel Evaluation Institute*. Held at Eastern Illinois University, Charleston, Illinois, October 24-26, 1975.

- Edited by Frances M. Pollard. Charleston, Ill.: Dept. of Library Science, Eastern Illinois Univ., 1976. 161p.
Conference on the evaluation of the performance of library personnel and designed to serve libraries of all sizes and types.
- Pugh, Eric. *Third Dictionary of Acronyms & Abbreviations; More Abbreviations in Management, Technology and Information Science*. London: Clive Bingley; Hamden, Conn.: Archon Books, 1977. 208p. \$12.00. ISBN 0-85157-224-3 Bingley; ISBN 0-208-01535-3 Archon.
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- Recurring Reports to the Congress: A Directory*. Compiled and published by the Office of Program Analysis, U.S. General Accounting Office (OPA-76-21). 1976 Congressional Sourcebook Series. Washington: U.S. Govt. Print. Off., 1976. 520p. LC 76-10011.
Describes nearly 800 recurring reports required of 89 executive branch agencies by the Congress. For availability of microfiche copies see entry for *Federal Information Sources and Systems*.
- Richmond, Mary L. *Shaker Literature: A Bibliography*. Hancock, Mass.: Shaker Community, 1977. 2v. \$45.00. LC 75-41908. ISBN 0-87451-117-8.
Distributed by the University Press of New England, Box 979, Hanover, NH 03755. Contains more than 4,000 entries. Vol. 1 includes publications written or published by the Shakers. Vol. 2 includes entries for books, parts of books, pamphlets, and periodical articles about the Shakers, written by non-Shakers. A supplement in vol. 2 lists works from 1973-74.
- A Role for Marketing in College Admissions; Papers Presented at the Colloquium on College Admissions, May 16-18, 1976, at the Abbey on Lake Geneva, Fontana, Wisconsin*. New York: College Entrance Examination Board, 1976. 113p. \$5.00.
- Ruokonen, Kyllikki. *Directory of Economic Libraries in Scandinavia*. Helsinki: Helsinki School of Economics, Kirjasto Library, 1976. 105p. \$7.00.
- A directory of forty-two libraries with holdings in economics and business (excluding university libraries and those serving only employees of their own organizations), based on returns from a questionnaire in winter 1975-76.
- Schorr, Alan Edward, comp. *Government Reference Books 74/75: A Biennial Guide to U.S. Government Publications*. 4th biennial vol. Littleton, Colo.: Libraries Unlimited, 1976. 263p. \$11.50 U.S. and Canada; \$13.50 elsewhere. LC 76-146307. ISBN 0-87287-168-1.
- Shulman, Frank J., comp. *Doctoral Dissertations on Japan and Korea, 1969-1974; A Classified Bibliographical Listing of International Research*. Ann Arbor, Mich.: University Microfilms International, 1976. 78p. LC 76-43554. ISBN 0-8357-0128-X.
Published as a supplement to the compiler's *Japan and Korea: An Annotated Bibliography of Doctoral Dissertations in Western Languages, 1877-1969* (1970).
- Thompson, Lawrence S., comp. *A Bibliography of Dissertations in Classical Studies; American, 1964-1972; British, 1950-1972; With a Cumulative Index, 1861-1971*. Hamden, Conn.: Shoe String, 1976. 296p. \$22.50. LC 76-41178. ISBN 0-208-10457-8.
Supplements the compiler's *American Doctoral Dissertations in Classical Studies and Related Fields* (1968).
- Toward a New World Outlook: A Documentary History of Education in the People's Republic of China, 1949-1976*. Edited by Shi Ming Hu and Eli Seifman. New York: AMS, 1976. 335p. \$21.50 cloth; \$9.95 paper. LC 76-23977. ISBN 0-404-15401-8.
- Weiner, Richard, ed. *News Bureaus in the U.S.* 4th ed. New York: Richard Weiner, 1977. 145p. \$20.00. LC 76-48021. ISBN 0-913046-01-9.
- Wennrich, Peter, comp. *Anglo-American and German Abbreviations in Science and Technology*. New York: Bowker, 1977- . v. 1, \$24.00. ISBN 3-7940-1024-8.
This first volume of a three-volume set (v.2 and 3 to appear later in 1977) covers letters A-E and defines approximately 50,000 abbreviations culled from more than 800 scientific and technical periodicals.
- Whalon, Marion K. *Performing Arts Research: A Guide to Information Sources*. Performing Arts Information Guide Series, v.1. Detroit: Gale, 1976. 280p. \$18.00. LC 75-13828. ISBN 0-8103-1364-2.
- Winch, Kenneth L. *International Maps and Atlases in Print*. 2d ed. New York: Bowker, 1976. 866p. \$55.00. LC 73-13336. ISBN 0-85935-036-3.

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