1-1-1972

Special Libraries, January 1972

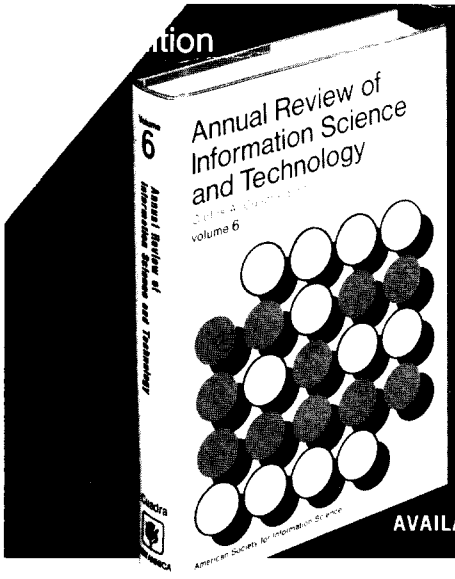
Special Libraries Association

special librarie.

January 1972, vol. 63, no. 1

- ☐ Automation and Economics
- ☐ Graphic Statistics
- ☐ Picture Tools
- ☐ Theatre Materials
- ☐ Library Education Today

SPLBA 63 (1) 1–46 (1972)



Your Annual Report of the Library and Information Science Field

A HIGH-YIELD, CURRENT AWARENESS AND REFERENCE TOOL FOR

- **Special Libraries and Information Centers**
- **College and University Libraries**
- **Virtually everyone concerned with the generation, processing, dissemination, and use of information . . . and in the continuing evolution of related systems and technology.**

AVAILABLE NOW AT 15% DISCOUNT

The purpose of this book

In almost every profession, one or two key publications usually lead the way in providing the most useful and comprehensive coverage of a given field. For the Library and Information Science field, such a source of information, ideas, and reference is the *Annual Review of Information Science and Technology*.

The purpose of the *Annual Review* is to describe and appraise the developments and trends in the field of information science during the past year. The appraisals stem from careful research by a team of authoritative specialists of significant reports, journal articles, laboratory studies, "pilot" programs, and other sources . . . and the essence of this activity is reported in concise, usable form.

In this way the *Annual Review* enables you to survey the broad panorama of information systems at various levels and in a variety of circumstances . . . and to a degree that would be next to impossible through individual research alone. Certainly, the ever increasing flood of published literature each year in all its forms underscores the importance of such a periodic "state of the profession" report.

Not only is the *Annual Review* valuable as a self-contained current awareness tool—with its well documented reports on virtually every aspect of the information science field—but its comprehensive index and bibliography make it especially useful for research. These references permit the reader to quickly identify the source of relevant information on a variety of special applications or other topics of interest.

Those already familiar with the *Annual Review* look forward each year to its appearance. If you personally haven't had the opportunity to examine this significant volume, we urge you to send for your free-examination copy today.

Published in cooperation with ASIS (The American Society for Information Science)

15% Discount Certificate

CHECK HERE TO ORDER BACK ISSUES

In addition to Volume 6, please send me the earlier edition(s) checked below. Same 10-Day Free Examination applies.

- ☐ Vol. 1 (1966)—$15.00
- ☐ Vol. 2 (1967)— 15.00
- ☐ Vol. 3 (1968)— 15.00
- ☐ Vol. 4 (1969)— 16.00
- ☐ Vol. 5 (1970)— 17.50
- ☐ COMPLETE SET (Vols. 1-5)—$64.50, plus shipping. Individual volumes available at 15% discount from prices shown above.

Gentlemen: Please send me a copy of Volume 6 of the *Annual Review*. I understand I may examine the book for ten days, and if not entirely pleased I may return the book at the end of that time and owe nothing for it. Otherwise, I will remit the reduced price of $14.87 per copy, plus shipping (instead of the $17.50 bookstore price), as full payment.

☐ STANDING ORDER OPTION—Check here if you want to receive the *Annual Review* automatically each year as it is published . . . also at same discount.

Name_____

Company/Institution_____

Address_____

City_____ State_____ Zip_____

Please Indicate Society Membership

- ☐ ASIS
- ☐ ACL
- ☐ ACM
- ☐ AIAA
- ☐ AICPA
- ☐ ALA (IS
- ☐ ASA
- ☐ IEEE
- ☐ ISA
- ☐ SCI
- ☐ SIAM
- ☐ SID
- ☐ SLA

special libraries

JANUARY 1972
VOLUME 63, NUMBER 1

SPLBA

Editor: JANET D. BAILEY

Special Libraries is published by Special Libraries Association, 235 Park Avenue South, New York, N.Y. 10003.

Monthly except double issues for May/Jun and Jul/Aug. Annual index in December issue.

Second class postage paid at New York, N.Y. and at additional mailing offices. POSTMASTER: Send Form 3579 to Special Libraries Association, 235 Park Avenue South, New York, N.Y. 10003.

Special Libraries Association
1971/72

Subscription Rates. Free to SLA members. Nonmembers, USA and Canada, $22.50 per calendar year; add $2.00 postage for other countries. Single copies (recent years) $2.75.

Back Issues & Hard Cover Reprints: Inquire Kraus Reprint Corp., 16 East 46th St., New York, N. Y.

Microfilm & Microfiche Editions (1909 to date): Inquire University Microfilms, Ann Arbor, Michigan.

Changes of Address. Allow six weeks for all changes to become effective. All communications should include both old and new addresses (with ZIP Codes) and should be accompanied by a mailing label from a recent issue. *Members* should send their communications to the SLA Membership Department, 235 Park Avenue South, New York, N. Y. 10003. *Nonmember Subscribers* should send their communications to the SLA Subscription Department, 235 Park Avenue South, New York, N. Y. 10003.

Claims for missing numbers will not be allowed if received more than 90 days from date of mailing plus the time normally required for postal delivery of the issue and the claim. No claims are allowed because of failure to notify the Membership Department or the Subscription Department (see above) of a change of address, or because copy is "missing from files."

Special Libraries Association assumes no responsibility for the statements and opinions advanced by the contributors to the Association's publications. Editorial views do not necessarily represent the official position of Special Libraries Association.

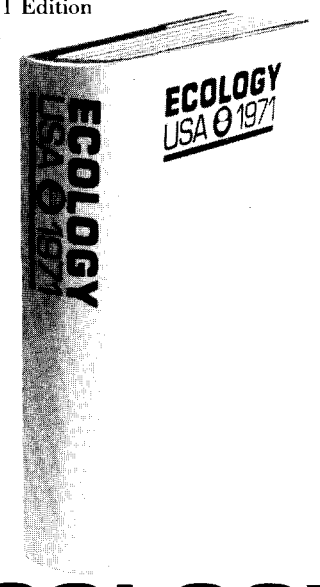
Indexed in: *Business Periodicals Index, Information Science Abstracts, Historical Abstracts, Hospital Literature Index, Library Literature, Library & Information Science Abstracts, Management Index, Public Affairs Information Service* and *Science Citation Index.*

Membership

DUES. Member or Associate Member $30; Student $5; Retired $10; Sustaining $100. The one-time payment for Member (Paid for Life) is $350.

Just off the press

8½ x 11 Edition
Bound



ECOLOGY USA 1971

The *complete* authoritative ecology news annual

Over 600 edition-bound pages about:
Air Pollution, Water Pollution, Conservation, Recycling, Pesticides, Noise Pollution, Radiation, Population, Agriculture, Public Health, Housing, Energy, Solid Waste Disposal, the SST, Alaska Pipeline, Detergents, Amchitka.

This volume contains every newsworthy environmental event that took place in 1971 reported chronologically.

Biographical sketches of:
David R. Brower, Sen. Frank Church, Edward P. Cliff, Rene Dubos, Jerome Kretchmer, Rogers C. B. Morton, Sen. Edmund S. Muskie, John N. Nassikas, Sen. Gaylord Nelson, Sen. William Proxmire, Elliot L. Richardson, George W. Romney, William D. Ruckelshaus, Ernest S. Starkman, Russell E. Train, John Volpe, Ralph R. Widner and others.

Highlights of:
President Nixon's State of the Union Message and Fiscal 1972 Budget dealing with the environment, Second Annual Report of the Council on Environmental Quality, National Science Board Report to the President, Report of the National Industrial Pollution Control Council.

Excerpts from environmental speeches by:
President Nixon, William D. Ruckelshaus, Dr. Glenn T. Seaborg, Dr. Barry Commoner, Dr. Bentley Glass, Stewart Udall, Dr. James R. Schlesinger, Dr. Edward Teller, John H. Chafee, John Lindsay, and many others.

Book Reviews
of almost 100 new ecologically-oriented books published in 1971.

Complete text of such important laws as:
National Environmental Policy Act, Environmental Quality Improvement Act, Federal Water Pollution Control Act, Solid Waste Disposal Act, Clean Air Act, National Emission Standards Act, Refuse Act of 1899, Fish and Wildlife Coordination Act, and amendments.

Ecology meetings & seminars:
The most important in 1971 and a preview of 1972.

Complete names & subjects index

Directory of companies
manufacturing products or supplying services for environmental improvement; listing of federal and state agencies concerned with environmental problems and programs.

Please mail to
SPECIAL REPORTS INC 280 Madison Avenue New York, NY 10016

Please accept our order
for _____ copies of
ECOLOGY USA 1971
at $125.00 each.

☐ Payment enclosed
☐ Bill us

name _____
address _____
city/state/zip _____
authorized signature _____

LETTERS

All Things Must Pass

Susan Kamm's letter in your October 1971 issue dealt with priorities. Since I am not a special librarian or a member of the Special Libraries Association, I will not comment on the internal matters she discussed although they are remarkably similar to problems being discussed within the American Library Association of which I am a member.

I do want to comment on her implied position concerning the whereabouts of SLA during the SST and Lockheed issues. It should be abundantly clear that national priorities have changed and when this happens people are affected. Hopefully this change will benefit a great many Americans who have been "have-nots" all of these years.

It is perfectly appropriate for any library association, whether it be SLA, ALA, or ACRL to defend members' jobs when these members are unfairly removed from them. However, I doubt the proprietary of association attempts to preserve members' jobs in the face of changing national priorities. The DOD and its subsidiaries Boeing, Lockheed, etc., having been the fair hair children of our national budget for at least two decades, they cannot expect to remain so forever.

Joseph F. Boykin, Jr.
The University of North Carolina
Charlotte, N.C. 28213

The Case of the Thin Directory

Perhaps this letter should be addressed to the SLA, but I prefer to air my views in *Special Libraries* in the hope that fellow librarians will share my thoughts.

The *Special Libraries Association Directory 1971/72* came as a shock and disappointment! Instead of improving its coverage by giving the organizational affiliation of members, it reduced its coverage to the bare minimum. Since when is an organization directory stripped of its membership listing!? What is an organization without the supporting members? It is these members who pay their dues and publicize SLA in all their own activities and who deserve to have an annual *Directory* to use as a reference tool throughout the year.

As a reference librarian, I know the value of directories and make good use of all, including the membership directories of organizations. In library systems these directories lead us to individuals in special areas and facilitate inter-librarian cooperation. Will it now be necessary for every Division to bring out its own directory and for Divisions to exchange or sell these?

May I offer an alternative? If it is too costly to issue a special *Directory*, why not reserve one issue of *Special Libraries* for this purpose? The American Physical Society has one *Bulletin* each year for its Constitution and membership list. Such an issue would serve a double purpose and last throughout the year and longer.

Mrs. Raphaella Kingsbury
University of California
Lawrence Berkeley Laboratory
Berkeley, Calif. 94720

ED. NOTE—*The 1969/70 and 1970/71 Directories of SLA have been the only two ever distributed to all the members without charge. Before 1969, Directories were issued at approximately three year intervals and sold for a nominal amount. (The 1966 Directory was sold at $2.50 to members, and $10.00 to nonmembers. There were never more than 1,500 copies purchased. This sales income did not cover the production expenses.) The roster of Association Chapter and Division officers and Committees had never been made available to the members as a whole before 1969. This information in mimeographed format was distributed only to the persons whose names appeared in the roster. This year the roster had been mailed to all members.*

To issue the Directory as an issue of Special Libraries *would save money only by eliminating many pages of text. The number of pages of the Directory are approximately equal to two issues of* Special Libraries. *Whether the Directory is a separate publication or an issue of a journal, the production costs will remain the same. Unfortunately, if there are competing needs for the available money, there can only be a Board decision in favor of one of the competing purposes.*

FILE INTEGRITY ASSURED.

OLD WAY

CHECKLIST

- ☐ title page and index
- ☐ missing issues
- ☐ damaged or missing pages
- ☐ replacing damaged or missing pages
- ☐ collating issues with title page and index

Instructing the Binder

- ☐ (a) whether to cut out advertising pages
- ☐ (b) as to color of cloth
- ☐ (c) as to stamping on spine
- ☐ following up on delivery from binder
- ☐ checking on binder's work
- ☐ processing and shelving volumes

NEW WAY

CHECKLIST

- ☐ Order MICROFILM copy of complete volume from MAXWELL INTERNATIONAL MICROFORMS CORPORATION
- ☐ MICROFILM – check-in and use

Replace your 1971 Volumes of Pergamon Journals with Open Reels or Cartridges to be supplied early in 1972.

Please ask for our special price list covering MICROFICHE SUBSCRIPTION SERVICES. This service will airmail the microfiche of each issue as released in 1972/73. U.S. subscribers will be in receipt of the microfiche edition many weeks in advance of the conventional copy.

1971 Subscription Price List for Open Reels and Cartridges will be mailed on request. To inquire about or order 1971 MICROFILM write to:

MAXWELL INTERNATIONAL MICROFORMS CORPORATION

Fairview Park
Elmsford
New York 10523
Tel: 914-592-9141

4 Midland Road
Olney, Bucks
England
Tel: Olney 529

. . . more letters

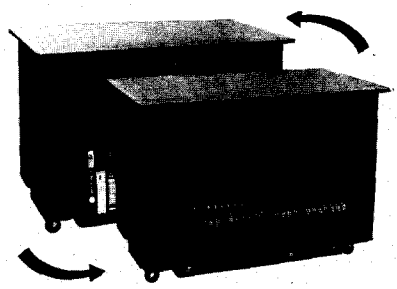
Hail the Book?

I am surprised at Eugene Ruskin's reaction (*Special Libraries*, Oct 1971, p.11A) to fellow librarian Landau's recommendation that special librarians become data base managers. Mr. Ruskin seems to attribute to information scientists the use of computers as a primary information tool, while he distinguishes librarians because of their reliance on books. It has been my experience as a special librarian that this is an invalid generalization. Special libraries handle information in whatever format is most expeditious and convenient, and there is no ideological difference between keeping that information in a book, a technical report, a newspaper clipping, a map, a microfiche, a slide, or a magnetic tape. To state that special libraries are primarily or exclusively collections of books is to enshrine the temporary fact that after Gutenberg the printed book became a more convenient method for library storage than illuminated manuscripts, papyrus scrolls, or stone tablets. For many applications the printed book is still supreme. For others the use of technical reports, microchips or magnetic tapes may be more efficient. Each situation must obviously be considered on its own merits, but the technique for storage is not what makes or denies the special library. There are special libraries which consist almost exclusively of books, and I have managed one special library which contained no books at all, although it did have its own IBM 360/40 computer.

I think that the motto of the Special Libraries Association: "Putting Knowledge to Work" is magnificent and timeless in the fact that it stresses the objective and not the technique. When Dr. Lapp first postulated it in 1916 there were neither computers nor microfiche, but this has in no way invalidated the motto. I hope that it will be as valid in another 55 years, regardless of the way we store our information in the year 2026.

If Mr. Ruskin is correct and our concern is with books rather than with knowledge, then perhaps the motto should be changed to the somewhat less stirring "Putting Books on Shelves."

Herbert S. White
Institute for Scientific Information
Philadelphia, Pa. 19106



The Automation of Libraries

Some Economic Considerations

I. A. Warheit

International Business Machines Corporation, San Jose, California

■ The rapidly rising costs of library operations with little or no improvement in productivity are forcing the librarian to search for new tools and systems. Data processing is the primary means available for solving this cost squeeze. The librarian, however, has difficulty in analyzing his costs and getting support for the necessary capital investment. Some details are given explaining start up and conversion costs when library mechanization is undertaken. Cost trends for labor and computer equipment are briefly described which underscore the economics to be expected with the application of data processing in the library.

THE HISTORY of library automation is over thirty years old. Automation is used here, in a rather loose way, to describe the application of data processing, both EDP (computers) and ADP (punch cards), to library operations. The emphasis is entirely on the clerical and housekeeping functions of the library and not on the intellectual and professional aspects of librarianship. Although Ralph Parker first started using punch cards and ADP equipment for library operations at the University of Texas in 1936, little was done until after the Airlie House Conference in 1963. At first the movement towards library automation was very slow. In the last few years, however, it has accelerated very rapidly. The reasons for the long neglect and the current rush are based on a number of technological, educational, psychological, and above all, economic factors.

It would be extremely useful to examine the past experiences of librarians and those in other similar or related industries in their acceptance or rejection of data processing. However, experience has shown that we are still so intimately involved in this technological revolution that any analysis carries with it emotional overtones. However, it should be possible to take a dispassionate look at the economic forces which seem to form the major impetus for the application of data processing.

Economic Pressures

The librarian is coming under tremendous economic pressures. He is being forced to look at his operations in ways that are different from those to which he has been accustomed. Since he is inadequately prepared to fight these new economic battles, he finds it very difficult not only to adopt an intelligent strategy,

but even to understand fully the basic problems involved.

He is being offered automation as a means of solving his economic problems; yet when he turns to machine systems, he finds he must spend more money. He must change many of his procedures. The products he gets from the machines often do not meet his standards. The wonderful new services that automation will give him are, for the present at least, often just promises. He is being asked to surrender many of his controls and prerogatives to the computer technicians who too often have a very simplistic concept of the library and its problems but who, too often, act as if the librarian really does not understand modern technology and what it can do for the library.

The economic plight of libraries is pointed up very sharply by the studies of the President's National Advisory Commission on Libraries. The Commission had Professor W.J. Baumol, an economist at Princeton University, prepare a report *On the Economics of Library Operation*. This report and the other studies prepared for the Commission were published and should have become very significant factors in the thinking and planning of thoughtful librarians. Unfortunately, the report was, in general, ignored. In the report, Baumol analyzes library cost trends, the implications that these trends have for library financing, and a number of other topics on the basic economics of libraries. The major implications that are drawn are rather frightening. Certainly the immediate prospects for libraries are gloomy. There are many economic topics covered in the study, but the one of special significance for library automation is on the productivity of librarians.

Librarian Productivity

The study shows that library outlays have trebled in a decade. Library operating expenditures have grown much more rapidly than student enrollment or number of volumes added. The productivity per man-hour of the librarian has risen much more slowly than it has in manufacturing. As salaries rise and there is no offsetting improvement in productivity, library costs compound. As productivity increases in other occupations, the cost pressures on libraries increase. Of course, many aspects of librarianship, similar to some other occupations such as teaching, nursing and the like, by the very nature of its work, cannot reduce librarian time and so improve productivity. Also, librarians have tried to reduce costs by a variety of methods which include a number of cooperative efforts, forcing the patron to provide more self-service, eliminating "frills" and reducing niceties in cataloging, having vendors assume more responsibility for selection and acquisition, and so on. Although such methods have not been fully exploited, nevertheless their potential for really reducing library operating costs is quite small. The basic problem of improving librarian productivity still remains the only real approach for slowing down the accelerating rise in library operating costs.

Professor Baumol recognizes the possibility that automation might be a means of improving the librarian's productivity, but he is not very optimistic in view of the apparent high costs encountered in some of the early automation applications in libraries. Like Professor Baumol, many librarians feel that the economic justification for library automation is lacking.

Cost Analysis Difficult

In trying to make a meaningful cost analysis of library operations in order to compare present costs and the costs of an automated system, the librarian is faced with some very difficult problems. He does not seem to be able to make a good economic analysis of his library's operations. Libraries are not operated as profit and loss enterprises. Librarians do not measure their work in terms of profit earned. They do not devote much time to improving performance rates. For the most part, they are not really interested in their operating costs, nor do they expend much effort to really determine

The basic problem of improving librarian productivity still remains the only real approach for slowing down the accelerating rise in library operating costs.

them. When on a rare occasion an attempt is made to analyze operating costs, the attempt is usually amateurish, the test sample is too small, and the problems presented are very difficult and discouraging. A major difficulty in breaking out the costs of specific tasks is caused by the fact that each library staff member, as a rule, performs a variety of tasks. It is usually almost impossible to determine how much time is spent on each, or how frequently each is performed. Tasks overlap. Work has to be expedited. Emergencies met. Professionals frequently do clerical chores and clericals occasionally step in the breach and do what should be a professional responsibility. For these and many other reasons, there are no reliable figures and very few good estimates of the present costs of individual tasks. The only really reliable figures are those available for material costs and total salary costs. Under such circumstances, it becomes quite impossible to determine displaceable costs.

Even where a data processing system is installed in a library and very detailed cost figures are maintained (one of the virtues of the machines is that, as a pure byproduct, they keep excellent records of the system performance) the figures, or really, the meaning of the figures can be disputed. This is due to the fact that there are no so-called "total" or integrated library systems in operation as yet. Only single applications such as a part of the ordering or circulation control are "on the machine." Thus the great virtue of the machine system—the multiple use of the machine components for a variety of tasks, and the multiple use of the same record for a number of applications and outputs—is not realized as yet. In other words, the present costs for a single operation will in time be spread over a number of operations and it will only be then that an honest cost figure can be determined. Furthermore, since the operation is still very new, it is still on the learning curve. There are, therefore, a number of inefficiencies which will be overcome. In addition, the conversion has not been completed as yet. A number of parallel manual operations are being continued and the machine system has to produce a number of printouts to support these manual operations. Often these printouts are the most expensive part of the operation.

In addition to the normal operating costs of an automatic system, the librarian must also add the conversion costs. These include the usual capital investment in equipment, system design and program development. Conversion of the older bibliographic records into machine

Is the investment worth it?

readable form is also necessary. Parallel operation of the old and the new systems is sometimes required, thus creating double costs. There is a learning period which contributes to inefficient operation of the new system, etc. All these represent additional costs beyond the actual operation of the system. Such hurdles frighten many librarians. From their point of view, they cannot afford to get involved with data processing until the new systems are fully developed, tested and operational and all development costs have been absorbed. The question is, "can they afford to wait?" Obviously some can and some cannot. Or better, some think they can and some think they cannot.

Some librarians very much want to improve their services, save their patrons' time, prevent unnecessary duplication, and have greater utilization of their collection. But none of these added services lend themselves to economic measure-

ments which might justify the special costs involved in installing a new system.

All these factors—and there are many more—make it quite impossible to compare the costs of a library data processing system with the manual system it is to replace. The only thing the librarian knows for sure is that he must expend additional funds to install and operate the new system. Is the investment worth it?

From the Baumol study it is quite clear that the present library systems have a built-in inexorable cost rise with essentially no improvement in productivity. The performance ratio thus becomes worse and worse. This is not true of most industries because, as costs rise, they improve their productivity. In many instances their products actually become cheaper. Any industry where costs rise continually without any compensating improvement in productivity in time will price itself out of existence and be replaced.

What assurance is there, however, that applying data processing to libraries can reverse this cost rise trend, especially in view of the fact that to start a new system involves some special costs over and above the costs of the present manual systems?

Automation Costs Decreasing

The two basic costs for library automation involve storage costs and processing costs. Later, as library networks or consortia enter the picture, communication costs will also become a major factor. Leaving the last aside, let us examine storage and processing costs.

At first, knowledgeable librarians rejected the early computers because they were linear devices that depended on magnetic tape for the storage of information. They argued that tape storage, which meant linear processing, made it quite impossible to handle the very large files typical of libraries. Sarcastic comments that the computer was still in the age of the scroll were heard. When the RAMAC, the first direct access storage device, appeared in 1956 and, interestingly enough, in order to demonstrate the hardware, one of the first tests was to store a library catalog in it, librarians essentially refused even to look at it, even though it showed that the computer need not be tied to tape. The reason, of course, was that the direct access storage mechanism was just at the beginning of its development and was, therefore, too small and too expensive for the library.

Any industry where costs rise continually without any compensating improvement in productivity in time will price itself out of existence and be replaced.

After all, its total capacity was only some 20,000 highly compressed book records and the cost of storage was about $1.00 per character per year. From a capacity and cost viewpoint it was not a practical device for libraries.

The same laboratory that in 1956 produced the RAMAC, whose storage capacity could barely contain 20,000 titles and whose costs were $1.00 per character, delivered in 1968 a descendant of RAMAC, whose capacity is over twice the size of the *National Union Catalog,* which has some 16 million records, and the cost of storage in this device is less than $.008 per character, which is really not much more than photocopying. It is also interesting to note that just a year before this large storage file was announced, the Library of Congress estimated that such a file, to store the *National Union Catalog,* would cost five times as much. Machines do improve in productivity. They always have.

Computer performance has had a similar spectacular increase in productivity. From 1950 through 1962 scientific computation, *holding cost constant,* improved 81% per year. From 1963 through 1966 the annual improvement was 115%. For commercial computation, in which category most library processing would

fall, the yearly improvement from 1950 through 1962 was 87% and from 1963 through 1966 computer performance improved *per year* a fantastic 160%. Normally, industry is quite satisfied to show an annual increase in efficiency of some 4%. This generally takes care of all cost rises in our inflationary and competitive commercial society.

Just how long this rate of productivity improvement of storage and processing will continue it is impossible to say. It is safe to assume, however, that as long as man can improve his machines there will be improvement in their productivity. Data processing costs thus have been decreasing and seemingly this trend will continue. In fact, although it has been pointed out above, one cannot really compare the costs of automated library systems with manual systems, some of the new library data processing applications are already proving more economical than the systems they replaced.

Conversion Costs

There still remains, nevertheless, the big hurdle of conversion costs. Here the library bears a special burden. Compared to most industries, very few resources have gone into any technological advances which would benefit library operations.

Libraries are, with very few exceptions, not independent operations, but part of a host organization. The libraries are primarily considered as overhead and not really part of the primary mission of the host organization. As a result, they may be provided the necessary operational funds, but certainly no developmental funds.

The library schools at universities have almost entirely been teaching and training institutions. Until very recently they had no research activities worthy of the name, and the graduate programs have produced practically no research which can affect the operation of libraries. The few librarians who wanted to do developmental work in the data and information processing areas in cooperation with programmers, systems people, engineers, linguists and the like, had to call themselves documentalists and set up their own organizations and journals in order to communicate.

. . . as long as man can improve his machines there will be improvement in their productivity.

With minor exceptions, industry has not been attracted to the library market. The library market has looked too small to attract any industry development investment. Whatever library benefits came from industry were generally fall-outs from other applications. The long, sad history of microforms is a case in point. Industry did little or nothing for libraries in this area. It was not until government, business and engineering discovered the potential utility of microforms that industry really become active in developing equipment and standards which many librarians had been requesting for a long time. And, it is only in the last few years that the federal government and private foundations like the Council on Library Resources have made any real contributions to support library research and development.

For all these reasons, libraries and notably library operations have, compared to other technologies, been starved for development funds. This meager investment in research and development is putting a strain on librarians when they attempt to convert to data processing. Actually the picture is not quite that black, for libraries can and are benefiting from the experience of others in converting to data processing. Nevertheless, one cannot avoid the various changeover costs mentioned previously. How to minimize these is the real question. The basic problem is not, "should data processing be applied to the library?" From all evidence it is inevitable. The problem is, "when should the change be initiated?" Obviously this is a decision that must be made for each individual case.

When to Convert?

One can get some insights here by studying the experiences of other technologies which have preceded librarianship in adopting data processing. The histories of these have not been written as yet, but even the most cursory examination provides important clues. Two things stand out. First, the lead time necessary to convert is longer than expected and delay in starting can be very damaging. Second, once automation is started, one enters into a dynamic environment which calls for continuous growth, change and evolution.

It may not be fair to compare libraries with competitive commercial institutions but, in industry after industry, those units that started early to use data processing got the competitive advantage. Many of the old giants who deferred converting until what they considered adequate systems and equipment were available found themselves overtaken by some of their smaller competitors who had moved into data processing very early. Of course, there are many who claim that these little firms won out because of imaginative and progressive management, and the adoption of data processing was merely an example of this bold and more intelligent management. Nevertheless, they made effective use of data processing, and the laggards also had to turn to data processing, but, having lost the lead time to competition, could not catch up or had difficulty catching up.

Translated into the library environment, this means that the longer the library defers capturing the record of new acquisitions in machine readable form, the greater will be the problem of conversion and implementation when the library is ready to establish a new system.

The second point concerns dynamic change. Once a technology starts using machines, it finds itself swept along by the whole scientific and technical development of mechanical and electrical and electronic devices. Procedures and processes keep changing and evolving as new and improved devices provide ever new opportunities.

An even stronger influence than just being on the machine development escalator comes from the effects of scientific research. As long as knowledge about a discipline is based almost entirely on pragmatic experience, the applications and processes of that discipline will develop very slowly. When, however, systematic research is applied and theoretical foundations are postulated and worked out, then, based on these new insights, new techniques are developed. The practice and application of that discipline which had formerly been a craft or a trade now becomes a true profession.

Library processing systems in the past have evolved from practical experience. Library processing has changed very little over the years. As a result, librarians, unfortunately, have earned a reputation for complacency and conservatism.

Machines do improve in productivity. They always have.

Even now, the present movement to data processing in libraries involves primarily the conversion of current manual procedures to machine methods with little change in actual processes and products. In spite of all the "blue sky" talk, there is really little awareness of just how data processing will change librarianship. All crystal balls are very opaque. One thing, though, seems certain: Change will be continuous. As the new tools are applied and as research provides new insights, new applications and new procedures will be developed. If one waits for the stable "perfect" system, one will probably wait forever. This is a disturbing, uncomfortable and yet exhilarating thought. It is not comfortable to contemplate continuous flux. Yet it would be extremely naive to wait for this changeover to data processing to be "completed" before adopting any of the new techniques. It is also very naive to

. . . there is really little awareness of just how data processing will change librarianship.

think one can escape the major changeover and conversion costs if only one waits long enough. For a long time to come, there is not going to be a standstill in technical development. In fact, the rate of change will probably continue to accelerate. Realization of this is having a profound effect on education for librarianship. In other words, although no one wants to be the first upon whom the new is tried, one cannot indefinitely suspend his decision to adopt the new in the expectation that things will settle down soon and no major changes will occur for a long time thereafter.

Conclusion

Basically then, the librarian considering automation faces some one-time start-up and changeover costs. He also has an added expense in that, for a time, he must support his manual system with a number of printouts until the automated system can take over and he has confidence in it. On the other hand, he realizes that the costs for his present manual system are rising and there is no compensating improvement in productivity. In addition, the demands on his system are growing and so his work loads are increasing. The supply of technical skills is becoming increasingly inadequate and he must find ways to compensate for this loss. He is aware that many of the library's functions can be accomplished by data processing. Furthermore, data processing costs are decreasing very rapidly while productivity is increasing. Also the machine capacity far exceeds present needs and so there is a large growth potential that can absorb future additional work and provide services not feasible with his present resources.

Library automation is not a panacea. It does not solve all the problems faced by librarians. But one thing is certain: automation, in the form of data processing, offers the only opportunity to stop the present rise in costs, absorb growing work loads and provide additional services.

Received for review Jul 2, 1971. Manuscript accepted for publication Oct 29, 1971. Presented at a meeting of the Canadian Association for Information Science, in Ottawa, in May 1971.

I. A. Warheit is program administrator for information retrieval in the Data Processing Division, IBM Corp., San Jose, Calif. He is presently engaged in working with IBM laboratory personnel in developing total, integrated, time-share library systems and assisting users in implementing information retrieval systems.

Information/Library Statistics as a Management Aid

A Graphic Presentation

P. O'N. Hoey

J. Lyons & Company Ltd., 149 Hammersmith Road, London W14 OQU, England

■ Graphic treatment of simple statistics is being developed to help evaluate library and information functions by comparing the usage of individual operations over defined periods, while simultaneously holding the total function in view. The effect on existing services of newly introduced departmental systems can be shown and used as an aid during resource budgeting. In a large company the changes in divisional usage of the library/information function can be demonstrated in like manner. The technique is explained and some illustrations from the author's experience given.

THE PROBLEM which confronts me regularly in my work, as head of a technical information and library service, is how to demonstrate unequivocally to my manager the need for continuing to fund the service. Increasingly, the presentation of statistics in the form of a column of figures showing how many loans have been made, or how many questions have been answered in a period, are met with the remark "So what?". To be able to answer the question, "In what tangible ways does our group of companies benefit from your information/library service?" it is ultimately necessary to get the users of the service to place a dollar value on the information they get from it. This is a costly business, and one which I believe should be carried out only at infrequent intervals in a large industrial company. Many of the user needs and company benefits which emerge from such expensive user cross examinations can be interpolated at a much smaller cost from regularly collected measurements of the usage of the service. The most important thing is at all times to be able to perceive the global or overall usage of a service, and while a manager of that service will "feel" this, his manager in turn, when asked to authorize a new budget, is unlikely to have the same feeling. He may say things like "Why don't you eliminate thus and such, no one is using it?" without being able to see that several other things are dependent on that "thus and such." The importance of the global view having full regard to the dynamic nature of an effective information/library service is increasingly being written about, a good example being given by Salverson *(1)*.

Ultimately we shall have moved from the simple records referred to above to comprehensive mathematical formulae which cover fully, with statistical validity, all library and information situations.

The Graphic Method

Meanwhile the gap between overly simple and overly complex statistics needs to be filled and, for many, statistical mathematics is not yet the answer. Recently I have been experimenting with a graphic presentation of statistics which is a hybrid between a "cumulative-curve chart" and a "multiple-time-scale chart" *(2)*. I have not found it recorded as being in use in information/library work. The method is simple for a non-mathematician both to set up and to interpret. Individual characteristics are compared against one another over a similar period of time and simultaneously cumulated to make a total. It depends on the availability of an adequate quantity of measurements, and for that reason the work is still in its infancy. Following are some examples.

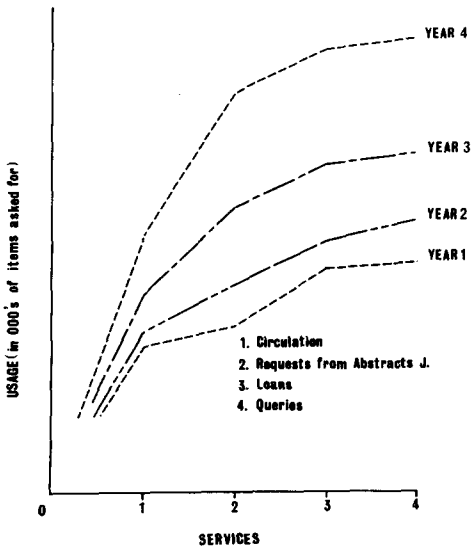


Figure 1

Services for Users

Figure 1 shows notional curves for a period of four years. Notional curves are those drawn as an example to describe a situation which could possibly exist but is, in fact, imaginary. The end point of each curve indicates the total number of items provided to users from an information and library service in that year, from a defined (in this case, arbitrary) list of services. Placing the services on the abscissa is entirely arbitrary. Now, looking at the curve for year 4, say, it can be seen that it is built up in segments. The slope of each segment is directly proportional to the number of items of a particular service given out. Therefore, if the slope of a particular segment is steeper in one year than in another, then the usage of that service has increased, and vice versa. Looking along one year's curve it can be seen quickly that some services are used more than before and some less in comparison with another year. The dependence of one service on another, or the effect of introducing and removing services can be readily inferred, with a much better chance of the inference being correct than from studying columns of figures.

• •

I quite regularly find that one section of my staff is overloaded and is pressing me to recruit more staff. Examination of the facts usually shows that there is no single obvious reason for the overload but that several or many jobs have "grown" slightly with the net result of an overload. Looking at another section of the department may show that here the jobs have "shrunk" slightly, resulting in spare capacity. It is very difficult, however, to quantify these "growths" and "shrinkages."

Drawing curves like Figure 1 will take both these upward and downward changes in work load into account and make it easier for a manager to make a right decision. A real situation such as has occurred in my own department is shown in Figure 2. This is more complicated than the notional Figure 1 and practice in ordering the items represented is needed to limit cross-overs of the curves.

Journal Circulation

Figure 2 is a good example of another gain from this kind of graph. It demonstrates vividly the large extent of our journal circulation work. The fact

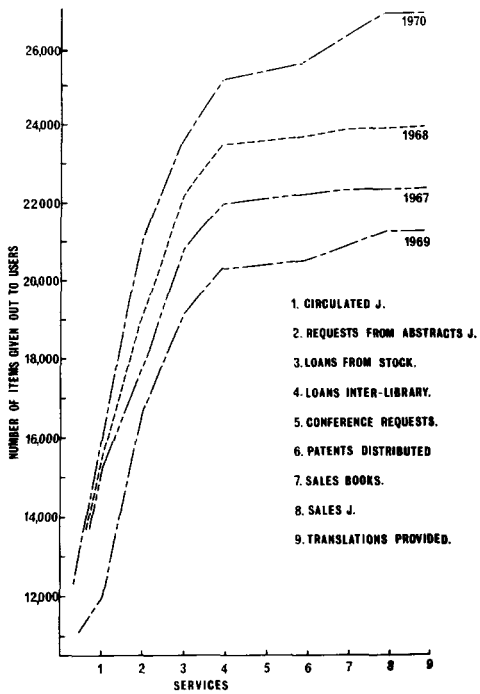


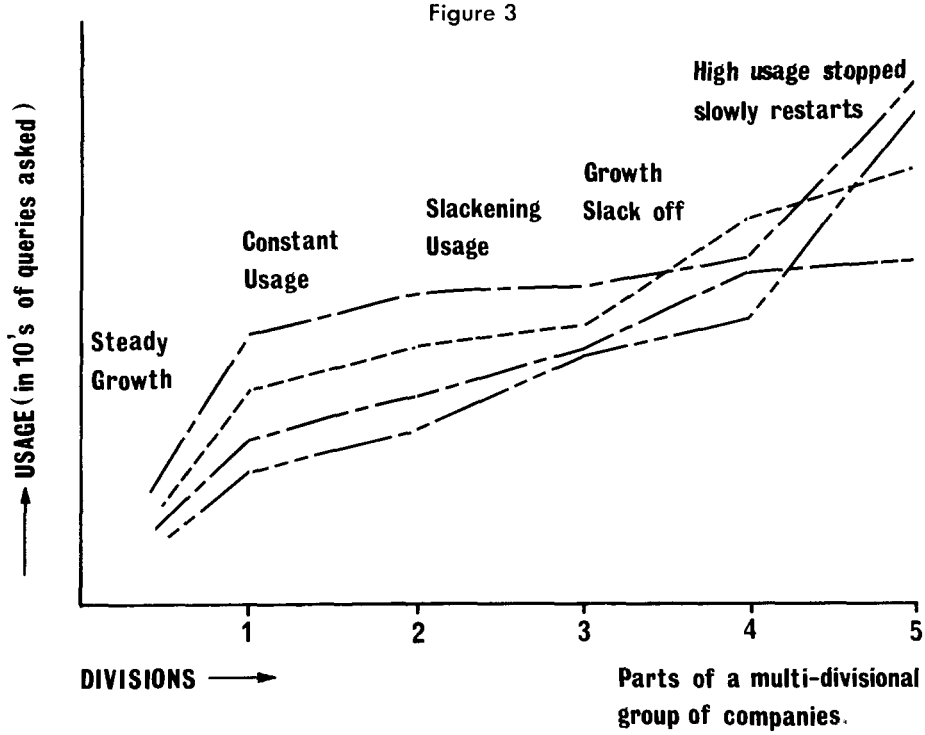
Figure 2

that the units of circulation dropped greatly in 1969 caused concern because it was not possible to relate it easily to any other change in our services. However in 1970 circulation units rose again. The cause of the drop in 1969 might be related, retrospectively, to the fact that the department was without a library section supervisor for several months, or to cutbacks in divisional R&D manpower which occurred, but this cannot be substantiated. The Figure also illustrates that it is possible to use mixed measures on the ordinate scale. On this curve I have "stacked" sales figures in £ sterling onto the end of ordinary requests in numbers. Note that, overall, traditional library services are becoming less used and newer services more used.

Divisional Usage

Figure 3 shows the same stacking-up effect used to build a picture of the usage of an information/library service by the various divisions of a multi-divisional

Figure 3



company. The end point of each curve here again gives the total usage but the slope of each segment is directly proportional to one particular division's usage. Gradual cutbacks in the usage of information/library facilities can be tracked and, if appropriate, changes made in those facilities in order to accommodate the changing divisional needs. For example, the subject range of document acquisitions may need changing, or the coverage of the information/library staff's qualifications may need to be amended when the opportunity next arises, in order to make contacts with users easier. Drastic changes in a division's resources are quickly reflected in a levelling of a segment's slope. These drastic changes are usually known by the information/library staff and to the senior management, but management may not appreciate to what extent there is interaction.

User Queries

Figure 4 shows how the number of major queries asked of my Service has fluctuated over the past years, with an overall downward trend. The effect of a cutback in R&D effort in Division 4 in late 1968, Division 2 in early 1969 and Division 1 in early 1970 can be seen by the levelling out of the curve segments concerned. Detailed knowledge of planned time-scales of technical projects would enable this graphic technique to be used in a predictive manner.

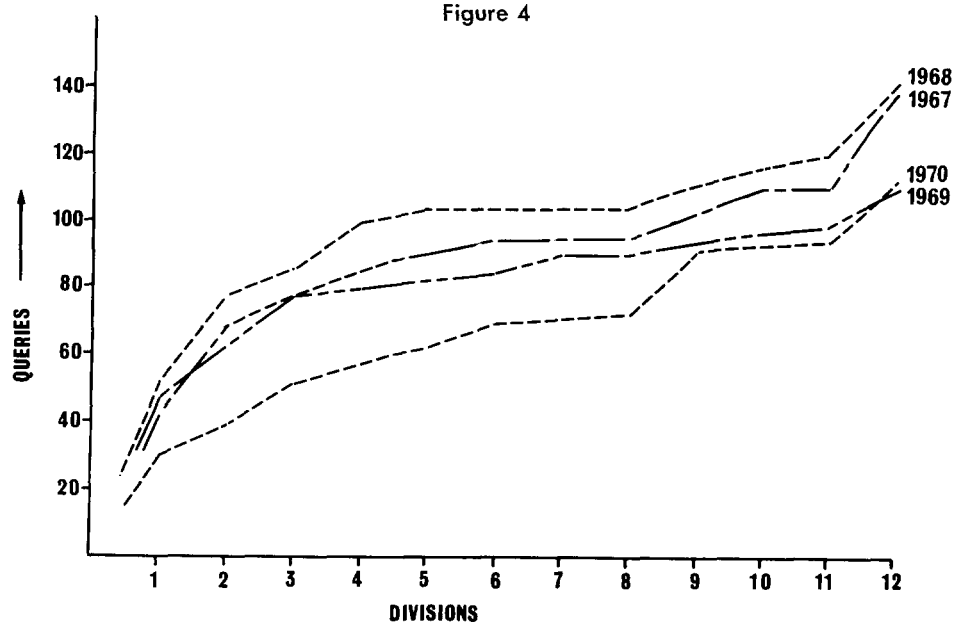
Disregarding these "external" reasons a possible departmental cause is that the expertise of the staff dealing with queries has increased, and that the question-answering tools at their disposal have improved in quality. The net result of either, or both, of these changes is that major enquiries cease to be major and become minor. So now one must look more closely at minor queries.

Another effect of increasing in-house skills is that remote users will be loaned fewer documents so it becomes necessary to draw another graph showing documents examined in-house and relate these to documents loaned.

Options Available

As one constructs curves like these, items not included begin to stick out like sore thumbs. Thus another benefit from

Figure 4



using this graphic technique is that one more than ever positively notes the options which one's service makes available to potential users. This remark may seem superfluous but since I started using the technique I have begun to measure the use of several services which I had not measured before.

How to measure and record statistics is not the subject of this paper, but it is relevant to say that I believe in arranging things so that statistics are, whenever possible, as nearly self-accumulating as can be.

It is also important to note that whereas in a small or medium sized information/library service such as mine, the time scales may have to be quite large in order to arrive at meaningful slopes, in a larger service the time scales may need to be quite short to avoid undue confusion or to bring out seasonal trends.

There remain, inevitably, those effects which cannot be related to obvious events in the life of the service. These should prompt an early investigation, in depth, of the services in question because there surely will be a reason somewhere.

I believe that there are considerable benefits to be gained from using this graphic technique for the study of budget breakdown, the purchase of journals over a group of companies and the purchase of a range of documents for one part of a company. At the time of writing I have not done this.

It remains only to emphasize that my work on this graphic technique is so far very limited and needs development and, perhaps most important, that even at its best it is a very simplified illustration of the facts and should be interpreted as such.

Literature Cited

1. Salverson, C. A. / *College & Research Libraries 30* (no.4): p.352–361 (Jul 1969)
2. Lutz, R. R. / *Graphic Presentation Simplified,* New York, Funk & Wagnalls Co. with *Modern Industry Magazine,* 1949. p.29–30.

Received for review Jun 14, 1971. Manuscript accepted for publication Oct 20, 1971. Presented at the Third General Session on Jun 7, 1971, during SLA's 62nd Annual Conference in San Francisco.

P. O'N. Hoey is manager, Group Scientific Information Service, J. Lyons & Co. Ltd., London, England.

Picture Searching

2. Tools

Renata V. Shaw

The Library of Congress, Washington, D.C. 20540

■ Tools with which a picture researcher must be familiar in order to adequately search for various types of pictures are described.

PICTURES are needed to fulfill specific requirements and subjects. Necessarily, pictures therefore fall into several easily discernible categories.

Portraits

The most frequently requested picture in general collections is a portrait or an action picture of a personality. There are numerous portrait compilations to guide searchers to specific periods, nationalities, trades or media. In addition to these publications the searcher should consult directories of professional groups, historical societies, and foreign portrait collections. A basic source of information is the depository of the papers of the man under study. The location may be ascertained by consulting the *National Union Catalog of Manuscript Collections,* and by familiarity with the holdings of the major manuscript libraries.

The Museums Directory of the United States and Canada also includes a subject index with references to special collections devoted to one person, e.g., Edgar Allan Poe. As a frequently neglected answer to the problem, published biographies of the individual should be checked carefully because these usually include a frontispiece portrait of the person and a description of the location of original source material consulted by the author. There are many recently published scholarly publications devoted to life portraits of a famous individual, e.g., Thomas Jefferson, Kaiser Franz Joseph I, or Benjamin Franklin. Frequently searchers forget to check these monographs and spend time in research which has already been done for them.

One should also know the strengths and weaknesses of great collections that are often used. For example, the unique portrait file in the Library of Congress is particularly rich in material of the Civil War period and on to the 1920's. But in 1922 copyright laws were changed to acknowledge the sitter as employer of the photographer. The "model" saw no need to copyright his own portrait and thus the portrait collection, which had been steadily increasing by copyright entries, slowly dwindled and, as a result, more recent portraits have had to come from less universal sources than copyright.

Life portraits of Mrs. Thomas Jefferson, and of Pierre l'Enfant have never

This is the second of a two-part article by Renata Shaw. The first, "Picture Searching: 1. Techniques," appeared in *Special Libraries* 62 (no.12): p.524–528 (Dec 1971).

References for figures appear in Index to Illustrations on p.24. Letters in parentheses in captions indicate appropriate reference.

Example of Daguerreotype Portrait (a)

* *

been found. This is mentioned to assure searchers that there actually are well-known personalities whose portraits either were never made or have been lost.

The Frick Art Reference Library has pioneered in the United States in collecting photographs of portraits in American private and public collections for a reference file, which is an invaluable aid in portrait research. The National Portrait Gallery in Washington, D.C., is building its resources in order to develop into a central repository of portrait information on well-known Americans.

A good background knowledge of the general sources of biographical information is a basic requirement for portrait work. Often a picture searcher must spend hours establishing the exact name, title, century and profession of a person before he can continue his picture search. Thus, the seemingly simple task of locating a portrait of one person can mushroom into a complicated reference task.

The medium and location of the original portrait is not of primary concern to the searcher unless he needs a color transparency based on an oil portrait, a color lithograph, or an original color photograph. Often he can use with equal success all the different processes of the graphic media, original photographs or pencil drawings. He may even have to resort to sculpture or medallic portraits and coins to find a good likeness of a historic personage.

Also, it is often possible to get publicity photographs of authors, performing artists, or public figures at no cost by simply writing to the individual's agent.

Topography

Topographical questions fall into two major groups: questions about man-made structures and about nature and scenic views.

There are several government sponsored programs of great significance which should become well known to picture searchers who frequently work on American architecture, archaeology, and engineering subjects.

The Architectural Records Project located in the Smithsonian Institution will eventually grow into a national union catalog of information on the location of the original drawings of individual American architects. This information is particularly important in locating the work of architects who are not famous enough to warrant a monograph.

The Historic American Buildings Survey (HABS), housed in the Library of Congress is a compilation of photographs, architectural drawings and data pages which document significant buildings in all the states, as well as in Puerto Rico and the Virgin Islands. Although an early catalog and its supplement exist, a complete printed catalog is not yet available; each state now publishes its catalog separately to this collection.

The recently established Historic American Engineering Record, similar to HABS described above, will concentrate on bridges, canals, dams, and similar engineering landmarks, and will also be housed in the Library of Congress.

The National Park Service publishes a *Historical Handbook Series,* which de-

scribes battlefields, forts, and birthplaces and homes of famous men. These handbooks are a good source of picture information for American themes.

The National Park Service Archeological Program has custody of the American Indian archaeological sites in the West and South. Pictures of excavations and areas should be requested from the National Park Service.

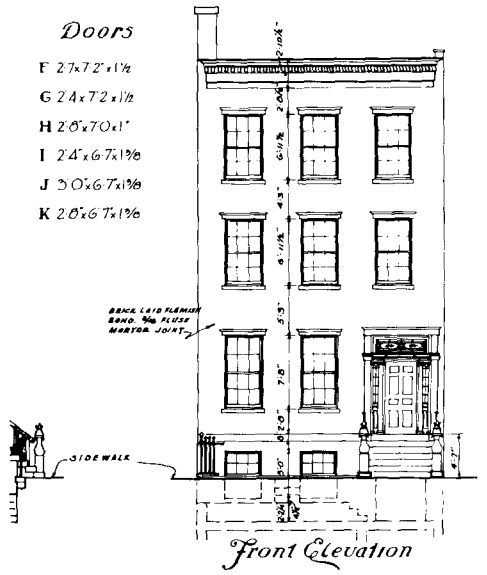
Topographic material on a smaller geographic region is usually located within the area. Thus a searcher working on the development and growth of the Washington, D.C., area should visit the Washingtoniana Room of the District of Columbia Public Library, The Columbia Historical Society, as well as The Library of Congress and the Audio-Visual Records Branch of the National Archives. Other geographic areas will have similar institutions devoted to the preservation of both the written and the visual documentation of the region. The searcher should always start by writing to the specific region first for the most authentic material.

In tackling foreign countries and earlier periods, searchers have to proceed by following the same principles of searching. Modern travel guides can be very useful in establishing geographic names which often create confusion.

International Directory of Arts (1) lists picture collections for every medium and period as well as names of curators or specialists. Many foreign countries have collections similar to our Historic American Buildings Survey which offer thorough documentation on their national treasures.

For up-to-date photographs of buildings in the United States, the Chamber of Commerce in each city will often supply good quality photographs.

Many foreign countries maintain picture files in New York offices devoted to making their countries known to Americans. If all efforts at finding geographical pictures of a remote region fail, the searcher may have to consult the *Diplomatic List (2)* and ask the press attaché of the foreign country to help him with his search.



Typical Townhouse in New York, 1829 (Historic American Buildings Survey, Library of Congress) (b)

* *

Topographic questions present complex problems in geographic areas inhabited by many different successive civilizations. The city of Athens of the classical period, or the Byzantine period contrasts sharply with modern Athens, yet all three are one and the same city with many of the structures standing side by side. For this reason picture searchers have to clearly define which of the periods they are trying to document and what phase of development of the city they are discussing when looking for pictures.

Sometimes the period of the picture is of primary importance, because structures so often disappear and are replaced by other buildings on the same site.

City planning and urban development have become very important fields of research in the past ten years. Old photographs have helped establish the gradual rise or deterioration of certain city areas, thus helping modern planners in restoration projects.

Architects and city planners have been forced to become picture researchers in

their quest for authentic documentation of past structures.

The early nineteenth century produced many pictorial works devoted to the description of faraway places because only lavishly hand illustrated books could tell the readers of the wonders of the world before the discovery of photography. Many of the earliest accounts of travelers to the American West as well as government surveys were accompanied by illustrations based on life drawings of Western scenery by topographical artists, who were important members of the research team.

During the latter half of the 19th century stereographic view cards supplied information on foreign cities and scenic views. Today these stereographic views have become a historic treasury of information on buildings and scenery of a century ago. They cover most areas of the world and supply information on specific locations in great detail. Many historical societies have collections of stereographs describing their own region.

Pictures of natural catastrophes such as floods, earthquakes, and volcanic eruptions were always of greater interest than illustrations lacking this added dramatic content. It is therefore easier to find documentary pictures of these calamities than general scenic views. There exists an illustrated tract from 1607 describing a flood in Wales. This may be the first news picture known to us, since it exemplifies all the elements desired in modern journalism: timeliness, human interest, and dramatic impact.

Great Events and Special Subjects

Today we accept unequivocally the idea that ancient periods and foreign cultures can be opened to us through the universal language of the visual arts. We seldom stop to think that our systematic knowledge of archaeology and art history is quite recent and only goes back to Johann Winckelmann's first art history *(3)* of 1764. Franz Kugler *(4)* was the first European to try to write an art history which encompassed the world beyond Europe. This was done as late as 1842!

A Secular Subject from a Mediaeval Manuscript (c)

* *

The above mentioned dates are important to us in discussing the pictorial recording of great events in the ancient world. It is only through modern, scientific archaeology founded in the 19th century that we have gained our present knowledge of the visual aspects of ancient cultures. We have to rely entirely on the artistic record of architecture, painting, sculpture and the graphic arts for visual documentation until the invention of photography in 1839.

A typical example of a "great event" in any historical period is a war scene with the ruler of a country leading his men into battle. This iconographic theme can be found in many cultures expressed in different artistic media. The earliest example of this theme is a sculptured slab in the Louvre Museum from the third millennium B.C. showing King Eanatoum leading his army. This Sumerian "documentary" work gives us detailed information on the soldiers' uniforms, the battle formation, the king's armor and even the different phases of the battle, because events are depicted in pictorial strips similar to our modern serial drawings.

No book illustrations survive from the Sumerian civilization. This does not prevent us from knowing what things looked like then, because we have collections of cylinder seals, sculptured and painted mural decorations, portrait sculpture, bronze vases, pottery and household objects as well as precious artifacts. All of these diverse things are original sources for the searcher, who must be imaginative enough to use any pictorial material available regardless of its original purpose. This basic principle has to be followed in pursuing any picture search dealing with ancient civilizations.

Even the late antique period has left us relatively few pictures expressly made to illustrate contemporary great events.

Medieval illuminations have survived in amazingly good condition because they were always scarce and precious. They received good care first in monasteries and royal collections and then in large European libraries where they can be seen today. Although many of the illuminated manuscripts deal with religious themes, picture searchers can find many unpublished secular subjects in them also.

Three important keys to this period are the following collections housed in the Dumbarton Oaks Collection and Library in Washington, D.C., which belong to Harvard University.

A duplicate of the Princeton Index of Christian Art is a finding aid for iconographic themes, religious and profane. Here a searcher can locate pictures of medieval buildings, jousting tournaments, or famous individuals.

The *Census of Byzantine Objects in American and Canadian Collections (5)* is an indispensable tool for locating Byzantine artifacts.

The Byzantine Photograph Collection includes nearly 40,000 photographs divided under subject headings from "Architecture" to "Wallpaper." This is an obvious source of pictorial material of specific historic sites and objects of interest to archaeology.

The *Census of Medieval and Renaissance Manuscripts in the United States and Canada* will answer questions on the location and ownership of manuscripts. If a certain manuscript is in the United States, a photograph or transparency is easier to obtain than if one had to write to a European manuscript depository.

The inventions of movable type and of oil painting in the 15th century change the modern picture searcher's approach to his job. In 1462 Albrecht Pfister published the first printed book illustrated by woodcuts. Popular scientific works now start appearing on the market. These include the military arts, medicine, astronomy, agriculture, and music. All of these subjects were represented in medieval manuscripts but little personal observation was brought to the art of scientific illumination. The illuminator copied and recopied earlier works until many illustrations became incomprehensible and no longer illustrated the subject under discussion. The Renaissance period with its emphasis on technical innovation slowly led to more precision and closer observation of nature in illustration.

The woodcuts illustrating popular tales of chivalry reveal the daily life of town and castle in spite of the schematic rendering imposed by the technique of the woodcut.

Books on history transform ancient Greek history into images of 15th century Europe. This naive view satisfied the public of the day. Biblical illustrations were similarly transposed to the contemporary period during these early years of the printed book.

Illustrated encyclopedic compendia such as *Caxton's Mirrour of the World (6)* attempted to explain scientifically everything known to man in a clear and precise manner. Pictures in works on meteorology, surgery, views of cities, and pilgrimages to the Holy Land all expanded the narrow world of man's experience.

The Schreiber Collection in the Library of Congress includes over 20,000 woodcuts and wood engravings from incunabula and later books arranged by subject.

A picture searcher whose task includes

any period after 1500 may find his assignment difficult. He has, however, a tremendous storehouse of images available to him. With a knowledge of the history of art, he can locate paintings of a limitless number of subjects. These paintings furnish him with historical documentation which in the form of technically perfected color transparencies can be reproduced either in a cropped form to illustrate a specific point or as complete pictures showing the artist's whole composition.

Pictures are not always needed simply to illustrate an event or a thing. They are also needed to evoke a mood, a place, a period or an idea. Without a sensitivity to color and style a searcher cannot transpose his editor's ideas into pictorial form.

Special Formats

Picture searchers deal with images in many different formats because modern books use every type of illustration limited only by their budget and the audience they wish to reach.

There are many finding aids and indices which provide the starting point for special searches. By knowing the available literature a searcher can save himself time and expense in locating such items as caricatures and cartoons, broadsides and posters, photographs, historical prints, scientific illustrations, and fine prints.

CARICATURES AND CARTOONS. Caricatures and cartoons have been important in the field of social commentary since the invention of printing but their greatest use has been in the last two hundred years.

How can a picture searcher find his way around this ephemeral material hidden in newspapers, magazines and only occasionally in books?

First he should check the card catalog of his library for a possible catalogue raisonné of the artist's work. Each year new monographs on artist are being published. Then he should check compilations of cartoons devoted to one country, or one period, such as Jean Duché's work on French political cartoons: *Deux siècles d'histoire de France par la caricature (7).* There are other cartoon publications devoted to such well-known cartoon sources as *The New Yorker* and *Punch.* Still another type of grouping is a set of cartoons on a popular topic analyzed from different points of view.

A problem arises when the searcher needs caricatures on topical concepts such as "student unrest" without knowing a specific cartoon. As long as cartoons are not analyzed in indices, the searcher is forced to search microfilms of newspapers which cover the specific period of his study. Existing bibliographic compilations on caricatures produced in the United States are mainly helpful in locating older material; modern cartoons can only be found through checklists available in large cartoon collections.

BROADSIDES AND POSTERS. Broadsides are information sheets with printing on one side only. They are at times illustrated. Posters have in most instances a definite promotional goal. They became increasingly popular in the middle of the 19th century when the invention of lithography and speedy presses made their printing and distribution relatively easy.

Modern picture books rely heavily on broadsides and posters as illustrations because they are colorful, they reveal the political and social ideas of an era in an exaggerated form, and they have a direct appeal to the senses. An outstanding example of the use of this medium is a publication which reveals the history of Austria in broadsides and posters. This is Albert Massiczek's *Zeit an der Wand (8).* There are no similarly comprehensive, well documented publications using only posters for other countries.

With the revival of interest in the art nouveau period there has been a resurgence of literature on the artistic poster. Again the picture searcher has to check the availability of a catalogue raisonné of the artist's work, a general treatise on poster art in the country and period he

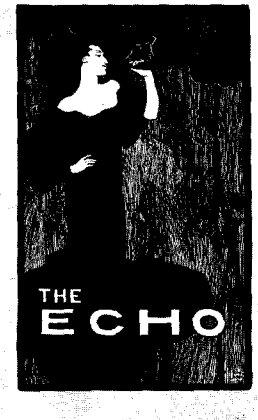
attempts to cover as well as indices to art periodicals which frequently publish studies on the production of individual commercial artists.

Political posters and commercial posters are two distinct categories, often collected by different types of institutions. Government collections are more likely to deal with patriotic subjects which are a part of a nation's history. Many institutions have unpublished lists of their holdings of great help to picture searchers if they think ahead and write to these organizations. Some large industries have collections of poster art sponsored by the company. These institutions are flattered to have their artistic posters reproduced with their permission.

PHOTOGRAPHS AS DOCUMENTS OF CONTEMPORARY LIFE. After the invention of photography in 1839 photographers produced mainly portraits, scenic landscapes, still lifes and architectural views, because technical limitations forced them to use long exposures. The Crimean War and the Civil War mark the beginning of the documentary photograph and revolutionized not only the subject matter of photography but also the picture use of the press. Although photographs had to be translated into the medium of wood engravings until the 1880's, the invention of the halftone at this time enabled even daily papers to make their pages more lively by using photographic illustrations.

Commercial picture agencies appeared in New York at the turn of the century. These supplied current stock pictures of celebrities, sports events, inventions,

* *



FOR SALE HERE.

Political Cartoon (d)

Art Nouveau Poster (e)

Photography Used for Social Protest (f)

presidential activities, and political upheavals around the world. Photography was now also used for the first time for social protest, because it could record truthfully the desperate life of the immigrant (Jacob Riis) or the degradation of child labor (Lewis Hine). Our modern commercial picture agencies follow the lead of these early agencies. They are able to furnish needed pictures instantaneously without a wait for copying of the print. As the majority of American agencies are in New York, searchers from other cities can order pictures "on approval" and return unused photographs. Commercial agencies do not pose the same kind of challenge to searchers as private or government collections, because the client's wants have frequently been anticipated by the owner.

Photographic literature provides many different tools for the modern picture searcher. When the photographer is known, the searcher should establish if there are monographs, partial oeuvre catalogs, checklists of holdings in special collections or illustrated exhibit catalogs of his work. The periodical *Aperture* publishes four monographs a year devoted to the work of famous photographers. Other photography magazines also present the work of individuals. Searchers have discovered many unpublished collections by following the lead of a credit line to a file of negatives or positives in a historical society or private collection. Photo-essays are becoming more and more popular as expensive gift books. These are valuable sources of up-to-date information on photographs as well as their subject matter.

Searching suitable photographs by subject to illustrate a vast topic such as "the beginning of industrialization in the United States" demands a background in photographic history and in photographic techniques. The searcher has to peruse files of daguerreotypes, stereographs and still pictures of geographic regions where mining, textile industries or manufacture of small goods took place. No adequate tools cover these varied topics. Several compilations have been gathered to lead searchers to useful sources. One of these is the Library of Congress's *Image of America.*

HISTORICAL AND DOCUMENTARY PRINTS. Historical and documentary prints designate graphic art produced to inform about, or illustrate, a subject rather than give a personal interpretation of it.

Historical prints cover an inexhaustible array of subjects and range from fashion plates to hunting, from marine prints to trade and industry, from views of cities to daily life and sentimental subjects. Modes of transportation are recorded as well as exotic scenes and peoples in places known only to early travelers.

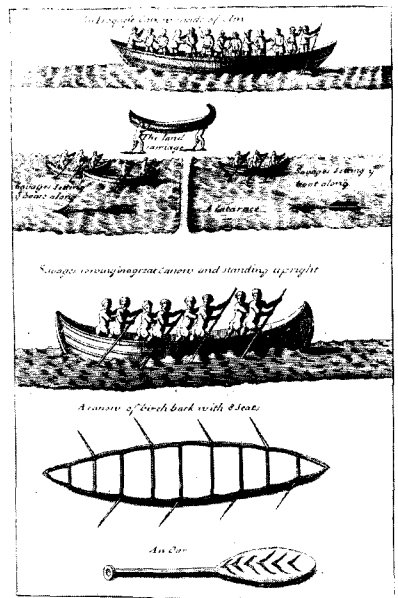
Many 16th and 17th century prints were issued in series and bound in books, which can be located through library card catalogs. It is a much harder task to find individually published prints on specific subjects.

Only with the encyclopedia of Diderot of 1751 can we properly talk about prints as specifically produced to educate and enlighten the general public. Diderot's work represents the democratization of systematic learning. Therefore it is a cornerstone of Western visual education.

There are many special subject fields among historical prints such as the theatre, fêtes and entertainments, or prints documenting music and dance. Also popular are marine and naval prints of many nations.

Many systematic catalogs to these subjects have been published. The picture searcher will learn from experience where the best special collections of his particular subject are today.

Natural history forms a less amorphous subdivision of historical prints. There are reference works devoted to bird or fish illustrators, and general zoological illustrations. Thus a picture searcher has bibliographies as a preliminary guide. This applies also to medical illustration, a separate field for centuries. The earliest medical illustrations are not based on scientific observation. When the dissection of corpses was first allowed in the 15th century, more precise information about the human body



Early Transportation Shown in a Historical Print (g)

* *

Fine Print Used as Documentary Illustration of Franco-Prussian War of 1871 (h)

became available to the medical illustrator.

All of the technical knowledge needed by man in his daily endeavors before photography was disseminated by historical prints. Without these multiple originals knowledge about new styles of architecture, furniture, and decorative styles would not have traveled so exactly and quickly across Europe and the rest of the Western world. New inventions used by trades and industries would not have spread throughout Europe and America inspiring simultaneous development and progress in these fields.

Historical prints, the domain of the learned gentleman before the 18th century, very soon penetrated the world of the common man. Every country had its own centers for the production of popular images with a predilection for moralistic themes. There were series of pictures symbolizing the Four Seasons, special mourning pictures in memory of national heroes, and companion pictures of the stages of man's (and woman's) life from the cradle to the grave. These popular prints mirror the folk heroes of the day and plainly show the naive preferences of the unsophisticated man.

News of famous easel paintings and murals, or works of architecture and sculpture could only travel from one center of learning to another through reproductive engravings. These can still today provide us with information on lost works of art although we prefer to use modern photographs whenever these are available.

FINE PRINTS. Museums, libraries and universities collect fine prints. These can also be studied in print galleries, second-hand print shops, sales catalogs, and private collections.

The scholarly apparatus of monographs, catalogues raisonnés and lists of holdings in institutions throughout the world is readily accessible to the researcher who is pursuing the work of an artist or a period. The subject approach to fine prints is a more difficult matter because even when a partial subject approach is available, the indexing is not

uniform or consistent. There may be a national or regional bias or a special field of interest which has received more thorough treatment than the rest. Only preliminary inquiry will determine if the searcher can find the needed subject coverage in a certain collection.

Original drawings present still greater problems than prints, because they are not accessible in multiple originals around the world. To remedy this situation, the *Corpus Photographicum*, a collection of ca. 56,000 photographs of master drawings, was founded by Dr. Walter Gernsheim. This collection is available at the *Photographic Archive of the Institute of Fine Arts*, New York University, and in ten additional locations in America and Europe.

In searching for photographs of works of art, be these paintings, sculpture, textiles, jewelry or any of the applied arts, searchers should consult printed indices to reproductions in books and to periodical illustrations as well as photograph collections assembled to illustrate certain specific aspects of art. Many of the most ambitious photographic copying projects are international in scope, because only by selling multiple subscriptions can these be brought to completion. An example of this type of undertaking is the *Census of Antique Works of Art Known to Renaissance Artists (9)*, which was started by the Warburg Institute in London and continued by The Institute of Fine Arts, New York University.

Special Approaches to Visual Communication

When searching for portraits, places, events and things, the picture researcher uses a subject approach and many different formats which may prove satisfactory to him. If, again, he is working in a special format such as caricatures, posters, or historical prints, he is limited by the material to a certain pictorial language, e.g., poster design which sets very definite restrictions upon him. But he may have to use an entirely different approach more challenging to him than either subject or format.

Allegorical Figure (i)

* *

This is the iconographic approach which may send him on a search for such elusive pictures as emblems, seals, symbols, heraldic devices, allegories, and mythological figures.

The Rijksbureau voor Kunsthistorische Documentatie in The Hague maintains a decimal index of the art of the Low Countries, which provides searchers a unique iconographic tool. This ambitious project includes 30,000 subject entries. The mounted photographs can also be consulted at the New York University Institute of Fine Arts, a subscriber to this series.

The literature on Christian iconography and liturgical symbolism is so extensive that most religious images can be located through literature searching. Although Christian iconography was a universally understood Western language for centuries, there are specific subjects such as local saints, which occasionally may be hard to identify. These, the searcher will have to find in hagiographies of religious denominations.

When a searcher is faced with a question of heraldry pertaining to a country, a city, or a royal family, he can often find the answer by consulting the national encyclopedia of the country in question. When a more specific coat-of-arms is

required, the basic bibliography on heraldry comes to his aid.

Local history and genealogy collections occasionally include indexed collections of coats-of-arms.

Official seals used by different branches of the United States government often prove impossible to obtain for reproduction. The reason for the refusal is the fact that seals legalize a document and therefore cannot be used for decoration or illustration.

When photographs of figures from Greek mythology, standards carried by the crusaders, or allegorical figures in Baroque paintings are needed, the searcher will have to consult directories of collections which specialize in a certain period in history or a certain school of art. He can get a lead from reference books and then continue by visiting the institution or writing his request. Iconographic problems tend to be specific. Therefore there are very few compilations of previously chosen picture materials to choose from.

Maps have not been discussed among the special approaches, because map librarianship is a special field beyond the scope of this article, but they should not be overlooked as pictorial sources. Vignettes, scenes in the borders, and other decorative elements in maps may prove a treasure trove for picture searchers in pursuit of certain subjects.

Legal Aspects of Picture Use

When a picture searcher has located a fine print, illustration or photograph in an open file, he usually wants an 8″ × 10″ glossy photograph, color transparency, or slide for his use.

If the material is in the public domain, no copyright problems arise to hamper his work. But very often the ownership of the picture is not known and a special search is needed to determine if the picture can be used.

If the picture is an original work of art produced by an artist living today, his written consent must be obtained before the picture can be photographed or published. The same holds true for contemporary photographs. Government sponsored art work and photography is generally free of restrictions.

Historical and documentary illustrations of anonymous origin pose the greatest difficulty to the searcher if no date of their first publication exists. In 1971 we consider each picture published in the United States before September 1906 in public domain. All non-dated pictures have to be checked with the Copyright Office by using publisher, artist, sponsor, or any other possible identification. The first term of copyright is 28 years; it can be renewed for a second term of 28 years. Unpublished works provide a very much more difficult problem, as the rights of the creator and his heirs do not necessarily expire after a fixed time.

Illustrations published in books cannot be photographed from publications without the consent of the publisher or copyright owner. Picture searchers often ask the agency given credit for the picture for the right to re-photograph an illustration from the book without understanding that the copyright in a reproduction belongs to the book publisher rather than the person who furnished the original picture.

Today we expect credit lines in books which purport to strive for accuracy and honesty. Our expectations in this respect are not always fulfilled, however, because there still are publishers who do not give the same attention to illustrations as they do to text quoted from the work of an earlier author.

Accuracy in captions is another desirable feature which is often violated by publishing firms, who substitute a picture for one which is unattainable. Pictures also appear cropped, tinted, or in the form of photomontage, which is a dishonest practice unless the changes are explicitly pointed out to the reader.

Summary

The basic techniques and tools used by a generalist in picture searching have been discussed in this two-part article which began in the December 1971 issue

of *Special Libraries*. Every picture researcher will develop his own selection of additional reference techniques and tools to aid him in searching specific subject areas not covered in this presentation.

Literature Cited

1. Internationales Kunst-Adressbuch / *International Directory of Arts.* Annuaire international des beaux arts. 1952/53– . Berlin, Kaupertverlag, N50.I6
2. U.S. Department of State / Diplomatic List. Washington, D.C., quarterly, 1929– . JX1705.A22
3. Winckelmann, Johann Joachim, 1717–1768 / *History of Ancient Art.* New York, F. Ungar Pub. Co. [1969, © 1968] 4v. in 2 Translated from the original German Geschichte der Kunst des Altertums (1764). N5330.W743 1969
4. Kugler, Franz Theodor, 1808–1858 / *Handbuch der Kunstgeschichte.* Stuttgart, Ebner & Seubert, 1842. N5300.K95
5. Dumbarton Oaks, Washington, D.C. Dumbarton Oaks Center for Byzantine Studies / *Census of Byzantine Objects in American and Canadian Collections.* This collection consists of mounted photographs and description sheets.
6. Image du monde / *Caxton's Mirrour of the World,* edited by Oliver H. Prior. London, New York (etc.) published for the Early English Text Society by Oxford Univ. Pr. 1966. PR 1119.E5 No. 110 1966
7. Duché, Jean / *Deux siècles d'histoire de France par la caricature,* 1760–1960. Paris, Editions du Pont royal [1961] NC1490.D8
8. Massiczek, Albert, compiler / *Zeit an der Wand.* Österreichs Vergangenheit, 1848–1965, in den wichtigsten Anschlagen und Plakaten. Wien, Europa-Verlag (1967). NC 1807.A8M3
9. New York University. Institute of Fine Arts / *Census of Antique Works of Art Known to Renaissance Artists.* This collection consists of photographs and documentary information.

Index to Illustrations

a. Jenny Lind, seated ¾ length portrait. Daguerreotype circa 1850. LC-USZ62-8963

b. *John V. Gridley house,* 37 Charlton Street, New York City, N.Y. built in 1829. N.Y. 31-NEYO 31 HABS NY-441. Historic American Buildings Survey Architectural drawing.

c. Illumination showing *Louis the Pious, Holy Roman Emperor between the envoys of Leo V of the Eastern Roman Empire.* Bibliothèque Nationale, Man. Lat. 5927. folio 157, XI Century.

d. *Without a Friend.* Lithograph from *Puck,* May 5, 1895 after J. S. Pughe. Political cartoon of the income tax. LC-USZ62-16874

e. *The Echo,* poster by John Sloan advertising the periodical Echo. (Chicago), 1896. LC-USZ62-15023

f. *Mother and Child.* Interior of Italian rag collector's home, Jersey Street, New York, about 1889. Photograph by Jacob Riis. LC-USZ62-24986

g. Monreal, June 20, 1684. Being an *ample description of the Canows made of Birch-bark,* in which the Canadans perform all their Voyages; with an account of the manner in which they are made and manag'd. Book illustration from: Lahontan, Louis Armand de Lom d'Arce, baron de, *New Voyages to North America,* Volume I, facing page 26. London, printed for H. Bonwicke, T. Goodwin, M. Wotton, B. Tooke, and S. Manship, 1703. LC-USZ62-34016

h. Manet, Edouard. *La Barricade,* 1871, Lithograph. LC-USZ62-43286

i. *Liberty in the form of the Goddess of Youth giving support to the bald eagle.* Painted, engraved and published by E. Savage, 1796. Stipple engraving. LC-USZ62-15369

All illustrations except (c) are reproduced from the collections of The Library of Congress.

Care and Preservation of Theatre Library Materials

Louis A. Rachow

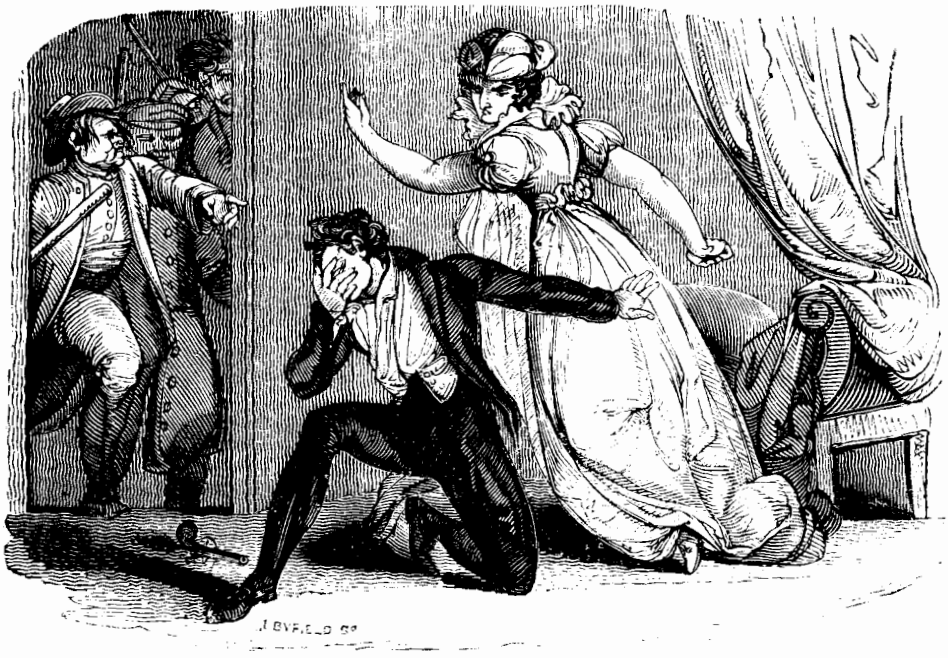
The Walter Hampden Memorial Library, New York 10003

■ Developing techniques for the preservation of theatre library materials has always been a major problem confronting librarians and museum curators. The methods used are dependent to a large degree upon the purpose of the collection and, for that reason, should be analyzed in accordance with the varied aspects of its handling and research use. These methods are based primarily on the late George Freedley's remarks and writings on the organization, care, and preservation of fugitive material.

THE ESSENTIAL PART of any theatre collection in a library or museum consists of books on theatrical subjects, drama as literature, marionettes, models, and allied materials. The handling of books and bound periodicals offers no difficulties in a well-organized library beyond those with which the trained librarian is accustomed. The care of engravings, paintings, sculpture, and masks on permanent exhibit are commonplace to the curator of a museum. But when these library and museum resources are combined in one place or a subject collection is made up in either type of institution, problems arise which must be newly solved. And when to these is added a mass of fugitive material, currently collected, of indefinite value, irregular size, and often not originally intended for permanent use, the problems multiply. The general outline of preparation for use must follow that of the entire library or museum, but departures from general procedure are required to make these heterogeneous records available to the student and theatre worker.

The Fugitive Material

For the director of a theatre collection the chief problem is to develop a technique for housing and cataloging the fugitive material, which may be divided roughly into four main groups: clippings, photographs, playbills and programmes, and originals. These, in turn, must be analyzed in accordance with the varied aspects of their handling and use; that is, they must be considered separately as problems for the librarian, the curator, and the reader. The care of these objects is undertaken variously in libraries and museums throughout the world, the method depending upon such factors as the form of the general catalog of the institution, the time of its organization, and the purpose it is intended to serve.

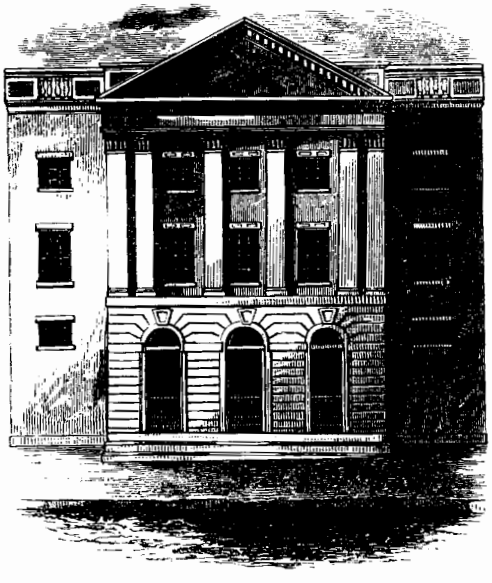


Engraving of Act IV, Scene 2 from *George Barnwell: A Tragedy in Five Acts* by George Lillo.

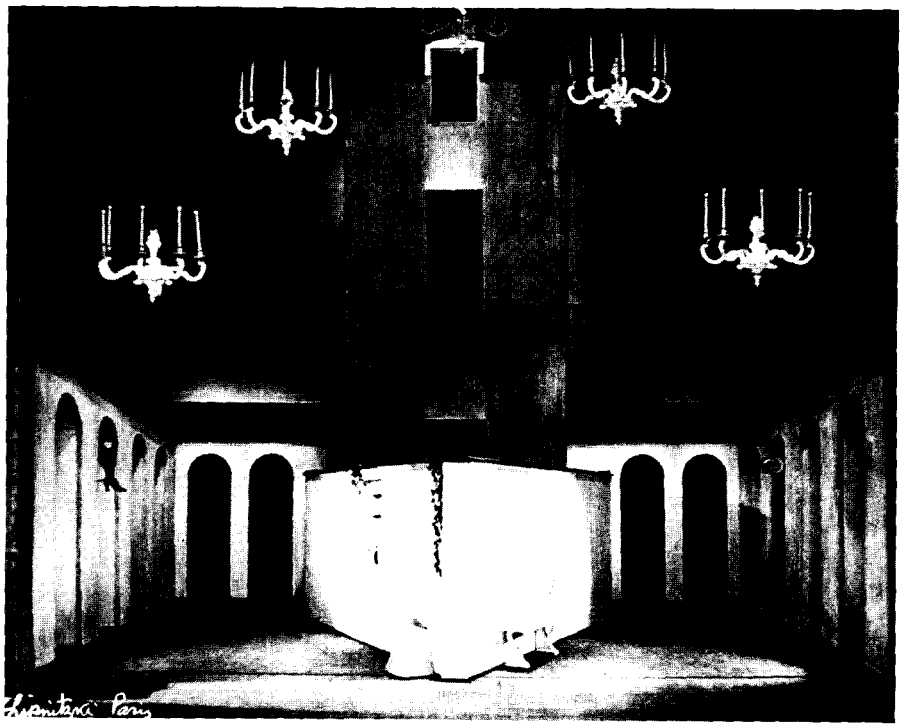
• •

The public that uses a collection largely determines its nature and the lines along which it will develop. For this paper I have selected four major groups of theatre library users: 1) Writers, biographers, historians, dramatic critics, and feature writers supplemented by students of the stage and screen preparing for professional careers; 2) Practical workers in the theatre: designers, producers, directors, press agents, and technicians who find theatre material of constant service in the preparation of a production; 3) Research workers for film companies in search, chiefly, of historical accuracy; and 4) Members of the theatre audience seeking information about a play or players. These researchers are often in need of special materials in ad-

Engraving of Pearl Street Theatre, Albany, N.Y., 1825



Illustrations for this article were provided courtesy of the Walter Hampden Memorial Library at The Players.



Molière's *L'Ecole des femmes*. Produced by La Compagnie Dramatique Francaise des Tournées at the ANTA Playhouse, Mar 18, 1951. Staged by Louis Jouvet. Designed by Christian Bérard.

• •

dition to the book collection, such as clippings, photographs, programmes, prints, and other fugitive items.

Care and Preservation

All references to filing materials, mounting boards and papers imply that these materials used in the care and preservation of the collections are acid free and that the special collections are ideally housed in properly air-conditioned and humidified rooms.

Clippings

The term *clipping* includes any cutting from a newspaper or periodical, any half-tone picture not sufficiently clear to be reproduced, any unbound pamphlet or catalog, dodgers and throwaways; in other words, such material as may be properly placed in vertical clipping files. They are placed in Manila folders lettered with the same legend as the clipping. Source and date are noted on each clipping with the respective folders located in steel correspondence size files.

Certain clippings may be mounted on a Manila stock scrapbook paper allowing a left-hand margin of 1½″ to permit binding later if desired. Clippings should not be placed nearer than 1½″ from the top nor ½″ from the bottom to permit future trimming. Any small file may be so mounted at once or even a large file if clerical help is available. Otherwise the unmounted clippings are placed directly in the folder.

Photographs

Photograph is defined as any photograph, photostat, still, engraving, or print, regardless of process, which is sufficiently clear to be reproduced. All

such illustrations are carefully documented. The source and mark of ownership are placed on the reverse side, as are the classification, cross-references, etc. A portrait of a person gives birth and death dates, or when the former are not known, his flourish dates to indicate his active period in the theatre. Scenes from plays are placed under the title and cross-references are made from all persons represented in the scene, and from the designers, when settings are shown clearly. The pictures are completely backed; that is, all this information is placed on the back, and this backing is, of course, transferred to the mount.

Mounting photographs lessens the likelihood of disintegration and saves storage space. Those already on heavy cardboard mounts are dismounted, because the weight and variation in size make filing difficult. They are then remounted on a heavy stock acid-free Manila paper. The four corners are inserted in slits in the mount and tabbed on the reverse side of the mount by gummed paper to hold the picture in place, and to provide for possible removal for special exhibition mounting. The tabs can be cut without harming either the picture or the mount. Although the librarian must determine whether he wishes his file for exhibition or reference, and the method outlined is strictly for reference, its effect is not unpleasing as balance and line are also considered, though subordinated to practical library use.

The ideal mount, which holds from one to six pictures depending on size, is 12″ × 18″ and is cut to fit the special files. These files are composed of separate wooden frames made to fit a section of a regulation library press, where books are shelved. The frames hold 26 fibre and metal boxes with hooks attached at the upper end. The boxes, which lie horizontally in the frame, may be removed and hung on a bar fastened to the front of the frame. This brings the box into a vertical position, the top pulls back toward the user who can then ripple the mounts and select the pictures desired.

Moving picture stills are handled dif-

SEVENTH SEASON **BOSTON MUSEUM** No. 28.

Tremont St., between Court & School Sts.

Museum opens from 8 A. M. to 10 P. M. Exhibition Room open at 8 1-2 o'clk. Performance commencing at 7 1-2 o'clock. Admission to Museum and Entertainment, 25 cents; Children under 12 years of age, 12 1-2 cents. A limited number of seats may be secured during the day, at 50 cents each.

Stage Manager.....W. H. Smith | Musical Director.....T. Comer

FANCY GLASS WORKING,

By *Professor* CARLING, who may be seen at all hours during the day and evening manufacturing Birds, Animals, Ships, etc., of variegated Glass. The *specimens for sale.*

LAST NIGHT BUT THREE OF

MR. BOOTH'S

ENGAGEMENT.

Shakespere's Tragedy,

RICHARD THIRD

Duke of Gloster **Mr. BOOTH**

POSITIVELY LAST TIME THIS SEASON

TRESSEL, (his first appearance on any stage).... **EDWIN T. BOOTH**

The Popular Farce,

SLASHER AND CRASHER.

PARTICULAR NOTICE.

A limited number of Family Slip Seats may be taken previous to the opening of the Exhibition Room, which will be retained one hour after the commencement of the Performances, at Fifty cents each seat. The Slips not so taken will remain in common with the rest of the seats.

Monday Evening, Sept. 10, 1849.

The performance will commence with the Overture, *ZAIRA*, arranged by T. Comer

After which will be acted (last time this season) the Tragedy,

RICHARD III

Or, The Battle of Bosworth Field.

(BY WILLIAM SHAKSPEARE.)

DUKE OF GLOSTER, afterwards King. .....**Mr BOOTH**
Tressel, (his 1st appearance on any stage).....**Edwin T. Booth**
King Henry 6th.....*Mr Whitman*
Duke of Buckingham.....J. A. Smith
Duke of *Norfolk*.....Dassett
Prince of Wales.....Miss A. Phillips
Duke of York.....Miss Arvila
Earl of Richmond.....Mr W. H. Smith
Lord Stanley.....Curtis
Earl of Oxford.....Toohey
Sir William Catesby.....Muzzy
Sir Richard Ratcliffe.....Aiken
Lieutenant of Tower.....Williams
Lord Mayor.....Warren
Sir Walter Blunt.....Howe
Tyrrell.....Deering
Lords, Officers, Soldiers, &c., *by* Auxillaries.
Queen Elizabeth.....Miss L. Gann
Lady Anne.....Mrs Thoman
Duchess of York.....Mrs Judah
Ladies..Miss Rees, Mrs H. Mestayer, Misses Simpson, Thompson, Vincent, Mason, Whiting, Christie, etc., etc.

Hiberian Pas de Deux..... **Miss Arvila and Master Adrian**

To conclude with [1st time this season] the excellent Farce,

Slasher and Crasher

Mr Sampson Slasher - - Mr Warren
Mr *Christopher* Crasher - - Thoman
Mr Benjamin Blowhard - - Curtis
Lieut. Brown - - - - J. A. Smith
John - - - - - - - - - *Howe*
Miss Dinah Blowhard - - Mrs Judah
Rosa - - - - - - - Miss Phillips

☞TUESDAY—Shakspere's Tragedy,

OTHELLO

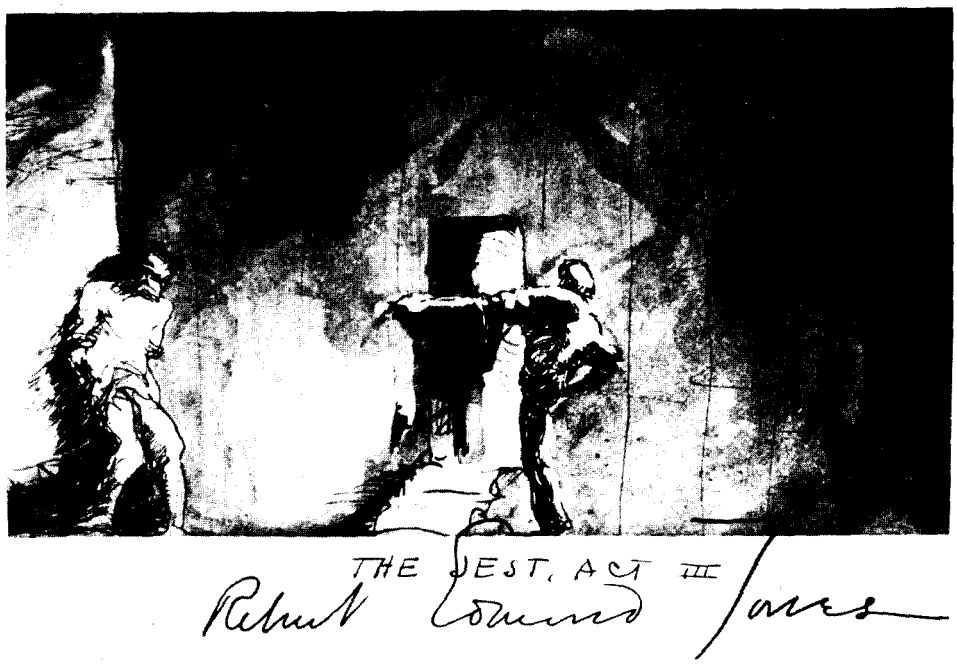
IAGO, (for that night only,)..... **Mr BOOTH**

☞Wednesday Afternoon—**THREE POPULAR PIECES.**

Omnibuses. Hobbs & Prescott's Washington street line of Omnibuses leave the Museum every evening at the close of the performance. Fare 12 1-2 cents. Also Coaches for Roxbury

Hooton's Press Hasking' Building, corner Tremont and Howard Streets.

Playbill



Sem Benelli's *The Jest*. Produced by Arthur Hopkins at the Plymouth Theatre, New York City, Sep 19, 1919. Left to right: Lionel Barrymore as Neri and John Barrymore as Gianetto. Designed by Robert Edmond Jones.

• •

ferently. These almost never vary from the regulation size of 9½" × 7½". It has proved entirely satisfactory to place them, unmounted, in stout envelopes inserted tightly in files to prevent buckling. They are arranged according to title of film and are indexed and backed like other photographs. Star stills are treated as ordinary photographs and are mounted and filed in the regular photograph file.

Engravings that are located in the theatre collection are considered pictures and are treated in the same way as other illustrations. Prints of great rarity are usually given special care in the Prints Division of large libraries.

Two additional methods may be used in the care of photographs. Those in use at The Walter Hampden Memorial Library at The Players and the Harvard Theatre Collection call for the separation of photos into a number of files according to size, *carte de visite*, cabinet, and oversize. This permits a variety of cabinets of different sizes which is economical of space. But where there is heavy reader use, the fewer files there are to be searched the less time will be expended for service, which must always be a factor in any determination of methods.

Programmes

By *programme* we mean a printed sheet or pamphlet which gives the title of the play, the author, the cast of characters, the city and the theatre, the date, and other data relating to a production, and which was intended for actual use within the theatre building on the night of the performance. A *playbill* is usually a single sheet giving all or a substantial portion of this information but printed in advance as a form of advertising. A *cast-list* is an advertisement of a per-

formance cut from a newspaper or periodical. Both of the latter may give incorrect information as formerly both the play and the cast were apt to be changed at the last moment and this still happens occasionally. In such cases the programme gives the most reliable information. Advertisements not giving full casts should be treated as dodgers or throwaways and placed in the clipping file.

Programmes may be filed variously. The majority are filed in Manila folders, lettered with the title, in steel correspondence size cases. Programmes and playbills of unusual size are placed in the oversize file. Fragile playbills, or those in poor condition or of great age, may be mounted in loose-leaf scrapbooks or laminated or microfilmed.

Originals

The *originals* file contains any drawings, water-colors, and designs made by a theatre artist. These are placed in portfolios and classified and cross-indexed in the same way as other files.

Every collection receives gifts of scrapbooks containing a variety of material. When it is not possible or practicable to break these up and place the objects in the regular files, these scrapbooks are treated as books and carefully analyzed. Some libraries and museums collect press books or press sheets for films which contain casts and general information for film exploitation. These are kept in steel legal size files and are bound and indexed at the end of the year.

Conclusion

In summation, the preservation of theatre library materials continues to be a major problem even in this computer-oriented age. In order to insure continuous availability of significant library records and materials it behooves the professional to pursue and examine all possible conservation measures including environmental conditions which play a large part in the cause and effect of deterioration in both book and non-book materials.

Received for review May 17, 1971. Manuscript accepted for publication Nov 18, 1971. Presented at the conference on preservation during New York Library Association's Annual Conference, Nov 12, 1970.

Louis Rachow is librarian of The Walter Hampden Memorial Library at The Players, New York, and president of the Theatre Library Association.

Putting Knowledge to Work in Today's Library Schools

Pauline Atherton

Syracuse University, School of Library Science, Syracuse, N.Y. 13210

■ Students and faculty in library schools and librarians in the field are engaged in a reassessment of librarianship and library education. Such special topics as communication and behavioral science, information retrieval, library automation and systems analysis and design are beginning to form the basis for a new core of library science. Research and development efforts in special libraries and information centers have had a noticeable impact on librarianship but not enough of the knowledge gained in the field has been put to work in today's library schools. New course content in the curriculum, computer-assisted instruction and research projects in library schools point toward the great strides library education can take in growth and change.

MOST CONCERNED PEOPLE have thought about the lag and gap between the library profession and library education. Students in library schools are asking for a new curriculum and for class activities which are relevant to today's and tomorrow's libraries. At the same time librarians are asking for library school graduates who can perform as professionals on their first day on the job. Librarians and students alike wonder why we need to know what happened in librarianship in 1876 when we should be planning what to do in *1976*.

Around the turn of the century, John Cotton Dana and other professional librarians were also questioning the fundamental purpose of librarianship. They thought about the basic purpose of a library and decided its main job was "to take the library idea into the realm of the active doers." SLA has used the phrase "Putting knowledge to work" as its motto ever since an early editor of *Special Libraries,* John Lapp, crystallized the idea *(1)*. Dana was the librarian of the Newark Public Library at the time, and he certainly put his knowledge to work by creating special services for businessmen of Newark. Other librarians have followed suit and today we have thousands of special libraries which are very relevant to the business organizations, research establishments, and government agencies they serve. In many ways these librarians have been the pioneer researchers and developers of many new library techniques and systems. How much of their work has become a part of the curriculum in library schools? A great deal, some might say, while others would say, "at best it is the frosting on the cake." In my opinion, special librarianship, documentation, information

storage and retrieval, and library automation are still things talked about, not the sum and substance of our knowledge put to work in library schools. These are merely topics covered in a lecture. Unfortunately they do not form an integral part of the library school's curriculum.

Learn by Doing

Although there are many examples of library work, practicums, and other learning-by-doing exercises in library schools, most often class activities happen to be no more than demonstrations. Either that or they are on a level slightly above the clerical routines and technical processing and simple reference questions. We have no clinical or laboratory experience as such that is on a par with bio-medical education.

The internship or supervised work in a library is not a regular part of most library school curricula. When it is, rarely does the faculty of the library school participate. The students are usually "farmed out" for a certain period and their experiences may or may not form an integral part of their library education.

Although there are meaningful experiences *in* library science classes, not enough of the knowledge gained in the field of special librarianship has been put to work in an integrated fashion in today's library schools. A lecture or two on MARC, a course in library data processing and systems analysis, an elective in abstracting and indexing or information systems, an exercise in user studies and communication problems in a library, are just not enough.

When students graduate from library schools today, should they not have had firsthand experience with The Library of Congress MARC tapes and know what effect, if any, this new source of data will have on cataloging, reference work, and library system design? When students leave library school and become school librarians, should they not know more than we do about information retrieval and the impact of non-book media on library services?

Most of us are surprised to find new professionals in libraries who are unaware of their changing role. Too few know about their clients' requirements for more direct access to information. Library administrators usually expect new graduates to function with greater ease than they do, but they are often disappointed.

How can we stem the tide of increasing irrelevancy of many of our libraries today? We need a library education where today's knowledge is weighed, examined, applied and critically evaluated. How can tomorrow's decisions and plans be intelligently made if tomorrow's library administrators do not acquire the needed knowledge today?

Revamp Education

If we agree that library education needs to be revamped, how can we begin? Let us return to my theme, "Putting Knowledge to Work in Today's Library Schools." Concentrate on the word *knowledge:* D. W. MacKinnon *(2)* has said,

> Knowledge is the result of playing with what we know, that is with our facts. *Ledge,* the second element in the word *knowledge,* means apart. A knowledgeable person in science is not, as we are often wont to think, merely one who has an accumulation of facts but rather one who has the capacity to have sport with what he knows, giving creative rein to his fancy in changing his world of phenomenal appearances into a world of scientific constructs.

A knowledgeable person in librarianship, then, would be someone who has the facts as well as the experience of playing with these facts, taking them apart as a young boy might examine a clock. If the object of library science education is to develop creative and knowledgeable librarians, then the stage must be set for this. Passive learners do not make creative librarians. Passing an examination or series of examinations is

not the best criterion for judging professional promise, or certifying that someone is a knowledgeable person.

Instead of the usual array of admission tests, lectures, course work, term papers, reading lists, and oral reports, imagine a library school which would operate as follows:

A Proposal

1. The object of the admission procedure would be to determine if the student has the potential to develop in professional competence and take his full responsibility as a librarian. To ascertain this potential, he would be interviewed by "library school representatives" (professional librarians in the field who know the library school's objectives). This new student would also be interviewed by faculty and students currently enrolled in the school. These interviews would be designed to determine the enrollee's independence of thought, intelligence, and potential competence as a professional librarian. If possible, the review and admission process could include a pre-grad internship, a two-month summer work session (paid) in an approved library situation similar to the Library Cadet program sponsored under LSCA.

2. As for curriculum content and method of presentation, the transmission of basic facts, skills and techniques would be principally by means of an independent study program. As many programmed learning and computer-assisted instruction modules as possible would be used. Faculty would be on call for special classes or tutorials on certain topics but would not have regular classes as such covering these basic skills. Some faculty might run routine laboratories where exercises in basic skills could be performed or they might operate experimental libraries as part of their teaching/research load. This activity might require anywhere from one to three months of the student's time, dependent on his rate of development and on a consensus of what we consider to be *the* basic skills and knowledge.

After this initial orientation and basic learning period, the student would be placed in direct contact with various research problems associated with library developments. Either formal courses or directed field work would be arranged for this portion of his education. No longer boxed in by the normal three-course teaching load with thirty students, the faculty would approach this phase of library education as colleagues rather than as teachers of the students. The students would help choose the subject matter and possible projects which would have relevance for their own purposes and development. The library school representatives, useful during the interview stage, would make a contribution at this stage too. Real problems in their libraries could form the basis for projects; sometimes the work would be brought to the school's laboratory and at other times, the students and faculty would study and work at the library in the field. Any problem deemed manageable could be pursued in a discussion setting with the guidance of the faculty and the librarians in charge. In this way, the necessary theories and principles, methods and advanced knowledge could be introduced and assimilated. The students could work with the basic knowledge they acquired during the first phase of their graduate library education. This type of educational experience would approximate the clinical and laboratory experience in many other graduate programs such as the biosciences, social work, forestry, dentistry, etc. The faculty's research interests and the student's objectives in learning would be blended during this phase.

Formal courses as such for certain topics will of course still form a part of this curriculum.

3. The evaluation of students and of such an innovative library science program would take some careful re-thinking of our present evaluation procedures. They say creativity of thought is facilitated when self-criticism and self-evaluation are basic. If the student had a chance to select learning experiences considered relevant to him then he will willingly choose directions, participate

responsibly in the learning process and live with the consequences of his choices. The faculty must be prepared for a transition from formal course work and tests to an environment where the student evaluates his own exercises. This should become much more important than the evaluation of the teacher. When the time eventually comes for the quality of his completed studies and research and the other products of his learning to be certified, this evaluation could be done by the faculty and by representatives of librarianship as a whole.

This brief description of an idealized library school differs greatly from the schools with which I am familiar. In putting knowledge to work in today's library schools, I don't think it would be enough to change only the course content. Even greater student involvement in determining the pattern of his own education would not suffice to bring about necessary changes. Much more is needed. First, a working relationship with the field needs to be established which is *quid pro quo*. Second, and most important, the library school faculty must agree that field experiences and research are essential and that one (or two) year in library school alone does not make a professional librarian. Even though there are many administrative problems associated with field work and experimental laboratory work, to be a relevant learning experience both faculty and students must integrate these experiences with their formal course work.

To Move Forward

Will faculty and students in library schools be willing to admit that a series of courses, no matter what their content, is not sufficient preparation for the responsibilities the student should assume upon graduating? It is difficult for me to see a suitable alternative if we expect to implement the proposed ALA statement of the objective of the master's programs in librarianship. The ALA statement says, "the objective . . . should be to prepare librarians capable of anticipating and engineering the change and improvement required to move the profession constantly forward." That objective can only be met if greater care is taken to relate the library school student to the profession's problems and needs. Concentrating on the tasks and routines in today's libraries will not do this nor will a purely academic library education now typified by a core curriculum with elective courses organized by type of library or type of library work.

No longer can we assume that knowledge in librarianship is merely the accumulation of brick-upon-brick of content and information—that something to be taught is a basic set of courses or learned on the job. Instead we should look at graduate library education as a two-phase operation; first we must master certain skills and facts, and second we must approach some of the problems of librarianship as researchers and scholars. Graduate library schools should be where this happens, where fledgling librarians sprout their wings under the guidance of experienced professionals. I am not referring to work on a Ph.D. dissertation, but I am referring to a research orientation to library education.

If this approach sounds interesting, there is a crucial question for students, library educators and librarians alike: can we abandon some of the assumptions we now have about library education? Students quite often assume that courses and experiences in library school will be like their undergraduate classes; faculty expect to teach course by course and assume it is difficult to innovate in a semester lock-step program; librarians would find it difficult to fit both library school faculty and students into their workaday world. Everyone will need to be reoriented if we are to develop a program whose graduates will be tomorrow's decision-makers in libraries. We will all have to find ways for the students to demonstrate that they are able to make original, significant contributions to professional practice.

Changing Roles

This new library school envisioned would include direct experimental con-

frontation with practical, ethical and philosophical problems. The students would relate their educational experiences to the real problems being faced in libraries today. To do this we need a better working relationship between library school faculty and the field. A corollary to such cooperative activities could be self-criticism and self-evaluation where all participants will benefit. In such a close working relationship a healthier atmosphere might result which would dissipate the present polluted atmosphere of mistrust, skepticism and chauvinism.

Suggesting that we effect a better working relationship among students, faculty and librarians is not very new or different, but there is in this proposal a new emphasis which differs from the old plaintive plea for more cooperation. Before such a school could open its doors, several librarians would have to agree to have their libraries designated as "library education experimental stations." Library educators would have to accept their role as researchers and field workers, and students would have to assume their role as colleagues working on more than studying library problems.

Working Example

During much of the time before I joined a library school faculty, I was engaged in documentation research (later called information systems) in the field of scientific information. When I returned to library education and tried to relate some of the excitement I felt about the developments in information systems, I met the same looks and attitudes that one meets, for example, when showing slides of Europe to a group that has never been there. Gradually, I realized that what I had witnessed could only come alive if the audience were given firsthand experiences; if, in other words, they were able to play with their knowledge and have sport with what they knew. The problem: How to bring information systems into a traditional library school with no strong resources or faculty in special librarianship or computers.

The United States Office of Education and the Library of Congress came to my rescue in particular with financial and technical resources in 1968 to help transform some of the class discussion of library automation and information storage and retrieval into real experiences with computer-based retrieval systems. We started LEEP (Library Education Experimental Project) at Syracuse University. It was designed to be a laboratory environment where the students and faculty have experience with a computer-based catalog, developed from the MARC data. We have learned to search MARC records *(3, 4)* in the computer as a library user now uses the cards in a card catalog. MARC became more than a four-letter word. Students and faculty began to evaluate the bibliographic control system within a library by contrasting it with this new tool. The impact of MARC in libraries was brought home to every student regardless of his orientation to school, public, academic or special libraries because almost every student in the school experienced some use of MARC when he took courses in cataloging, reference, bibliography or information technology. More than 300 students at Syracuse during 1969 had at least a brush with the computer-based MARC catalog. Some of the faculty were glad that LEEP existed because they were able to demonstrate certain concepts and the new developments instead of merely talking about them. The new learning experiences in their courses were not a difficult or time-consuming task for them to design. Actual field experiences were few, but that could be the next step in an overall plan.

A note of caution: All of us engaged in one or more such efforts in laboratory or field experiences in library education would agree that we are only partially successful. Without intensive faculty involvement in or proper support for something like the LEEP/MARC Laboratory, planned activities may be no more than demonstrations. Without field projects there is a chance that something like LEEP could become just another class assignment. As someone said, "One

giant LEEP for Syracuse, but one small step for library education."

Do not construe these last statements to be overly pessimistic. I have great faith in the *combined* efforts of librarians, students and faculty in library schools, but it takes effort to keep things brewing. Someone has to encourage us to find more new ways of teaching and packaging library education. Someone has to find a way to effect a reorganization of library educational facilities.

The absolute essential for success will depend, of course, on our collective willingness to begin to have sport with what we know. Librarianship is a practical world but it is on the edge of a new existence or a certain demise.

Philip H. Rhinelander *(5)* said, "Education ought to be ultimately not a matter of systems, nor of organizations, or of structures, or of theories, but of individuals who *encounter* one another, who respect one another, who can speak to one another, despite disagreement, and who can listen."

Literature Cited

1. Elizabeth Owens / The Long Look: A Keynote Address. *Special Libraries* 50 (no.7): p.303–4 (Sep 1959)
2. MacKinnon, D. W. / "The Nature of Creativity." In *Creativity and College Teaching.* Proceedings of a conference held at the University of Kentucky. Bulletin of the Bureau of School Service, 1963, Vol. 35 #4, College of Education, University of Kentucky, Lexington, Kentucky, p.33.
3. Hudson, Judith / Searching MARC/DPS Records for Area Studies. *Library Resources and Technical Services* 14: p.530–45 (Fall 1970)
4. Atherton, P. and J. Tessier / Teaching with MARC Tapes. *Journal of Library Automation* 3: p.24–35 (Mar 1970)
5. Education and Society. *The Key Reporter* (Autumn 1968)

Received for review Sep 14, 1970. Revised manuscript accepted for publication Aug 25, 1971. Based on a John Cotton Dana Lecture presented at University of Texas at Austin, Graduate School of Library Science, on Mar 5, 1970.

Pauline Atherton is professor, Syracuse University School of Library Science, Syracuse, N.Y.

Commentary on

A Paradigm of Commitment

I WAS APPALLED by the implications when I read "A Paradigm of Commitment."* While it was sometimes difficult to be certain where the author was expressing his own sentiments, and where he was summarizing the work of the sociologist William J. Goode, on the whole I had the impression that he was not only agreeing with it, but elaborating on it.

". . . Goode did feel that librarianship lacked two key attributes that keep it from becoming fully accepted as a profession. One is a prolonged specialized training in an abstract body of knowledge. The second is . . . service orientation, in terms of professionally defined 'needs' of its clients, rather than what its clients simply 'want.'"

Medicine is accepted as a profession, yet in this century it has certainly broken away from medieval 'abstract' medicine to intense concern with actual physical study, and in their internship doctors are certainly concerned with concrete rather than 'abstract' cases. I believe that the librarian's duty *is* " 'serving' the client" by "learning his wishes and satisfying them." I certainly do not believe the librarian should insist upon playing Big Brother before 1984 arrives by "defining what is best for the client in terms of some set of professional standards of concern and giving that to the client." A librarian who truly believes in intellectual freedom and the Right to Read should be willing to provide materials and opportunity for the library client to make his own decisions.

I certainly have no quarrel with the statement that: "Librarians have value commitments and their choices are not unbiased. . . . In part, . . . choices determine the areas of knowledge of the present and of the future." Essentially, because of "limits of time, finances, etc." the librarian is forced into the role of Big Brother in deciding which areas of knowledge are to receive the priorities of time and materials. "If you try to please all the interests of one person, you will probably let all the rest suffer."

DeWeese assails the ALA's old 1939 "code of ethics" because:

"The code, . . . urges fairness and wisdom in book acquisition, a rather wishy-washy exhortation, but does not assert the simple ethical duty to follow professional principles in this matter and to treat lay opinion as irrelevant and incompetent."

The Holy Office of the Inquisition followed its collective conscience and principles also. It also considered lay (nonprofessional) opinions as incompetent and heretical. While this comparison may appear far-fetched, is it? Has this not been the historical process in solidifying an orthodoxy which provides no room for growth and renewal? Can our fragmented society of today afford that type of constraint?

While it may be theoretically correct for the profession to "develop values as to which areas of knowledge must have priority," certainly even a rudimentary survey of history shows many instances of one generation's discarded ideas, radicals, concepts and heretics becoming the models for another era. Dare the library profession disregard these lessons of history?

Is it not better for the ideas of democracy, of compromise, to be applied to the library profession as it attempts to decide priorities? Must the librarians essay the role of the

* DeWeese, Lemuel Carroll III / A Paradigm of Commitment. *Special Libraries* 61 (no.10): p.541–550 (Dec 1970)

physician prescribing for the patient and sending the proper prescription, i.e., the proper bibliography to the book warehouse for the para-professional to fill? To be realistic, while a doctor may prescribe, the patient often leaves his pills on the shelf! To carry the analogy further, could that be one of the reasons for non-use of the library today by such a large part of the population? That the "patient" will not take what the librarian has decided is best for him?

Why not give the Right to Read a chance?

DeWeese criticizes librarians who strive to supply what users want instead of supplying them with what the "professional" knows they should have. In the intangible world of reading, learning, and library usage, the individual may be a better judge of his needs than the best-intentioned professional.

This article may have been written with the idea of certain specific types of librarians in mind, such as those who work in special technical or academic libraries, who may be asked for specialized, technical information; if so, then it might be correct for them to "prescribe" what is best for the client in light of current information, but for librarians as a whole to act as Mr. DeWeese considers correct for professionals appears to me to be adopting the totalitarian credo that the end justifies the means. Are American librarians to abrogate democratic ideals of service for that? I, for one, am not ready to play Big Brother.

Jennie H. Schaefer
Pioneer, Calif. 95666

sla news

CHAPTERS & DIVISIONS

Illinois—The Chapter's Nov 22 meeting featured Marty Kravitt, who runs the Northside Clinic under the sponsorship of the Illinois Drug Abuse Program. He discussed problems of drug abuse.

The Chapter has begun an experimental program of taping addresses at dinner meetings. For information, contact Mrs. Harriette M. Cluxton, Noah Van Cleef Memorial Library, Illinois Masonic Medical Center, 836 Wellington Ave., Chicago, Ill. 60657.

San Francisco Bay Region—The 2nd edition of *Union List of Periodicals: Science-Technology-Economics* is available for $27.50 postpaid from Miss Phyllis M. Browning, Beckman Instruments, Inc., Spinco Division, Library, 1117 California Ave., Palo Alto, Calif. 94304. The publication contains over 12,700 titles and has been expanded to include annuals and proceedings of regularly held symposia.

Southern California—Chairman of the Chapter's Duplicate Exchange Committee is Margaret Cressaty, Exchange Librarian, University of California Library, Irvine, Calif. 92664.

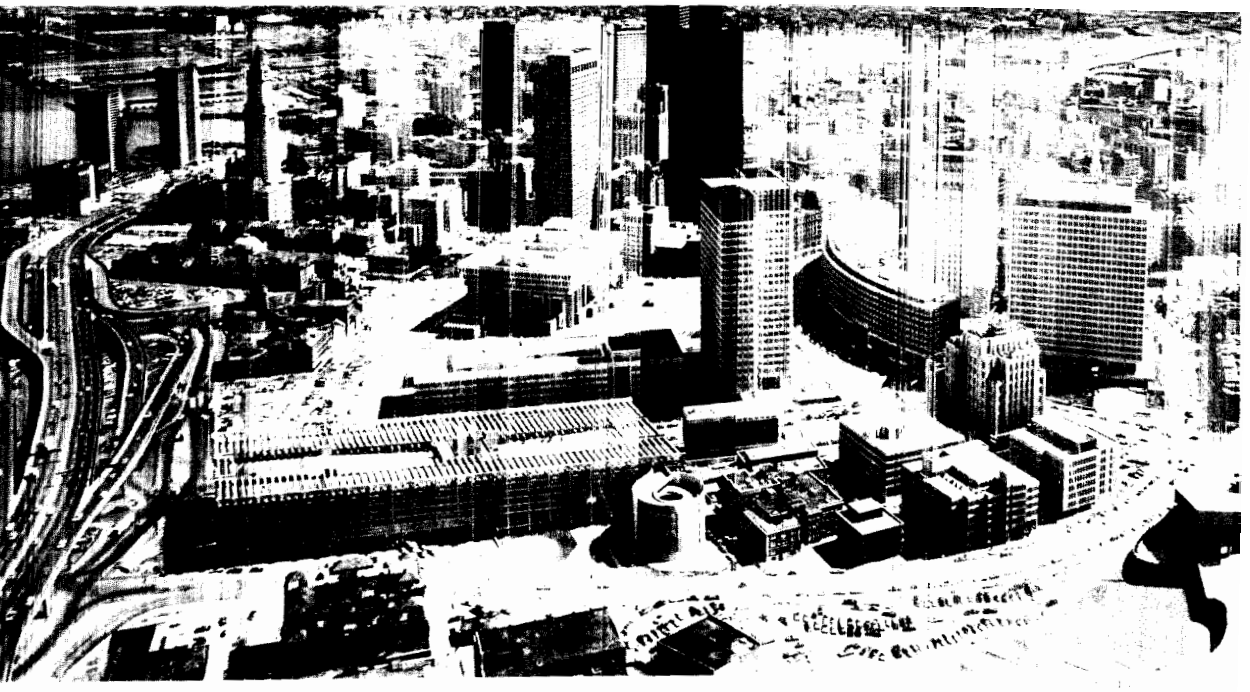
Six regional luncheons were held in November. Each featured a tour or speaker in addition to lunch.

The Chapter's Committee on Social Responsibilities will serve as a clearinghouse for members who believe they have been the victims of discrimination. Susan Kamm, P.O. Box 5033, Inglewood, Calif. 90303 is chairman.

Toronto—The Chapter met Nov 4 at the University of Toronto to see the new School of Library Science Building. Brian Land, the retiring director, presented a slide and tape presentation of library school facilities over the years and discussed the school's program. Tours of the building were included.

Swinging in the Southwest

During his November visit to the Rio Grande Chapter, SLA President Efren Gonzalez met with New Mexico's Governor Bruce King (see photo) to discuss state library matters. He also spoke to the State Library Commission in a discussion of the role of special libraries in the state plan, "Coordinated Library Systems of New Mexico."



63rd Annual Conference
Special Libraries Association

June 4–8, 1972 Boston, Mass.

The Statler Hilton

See February 1972 issue

of Special Libraries

for Conference Program!

Chairman:

Loyd Rathbun
MIT Lincoln Laboratory
Lexington, Mass. 02173

Program Chairman:

Charles Zerwekh, Jr.
Polaroid Corp.
750 Main St.
Cambridge, Mass. 02139

Deadline Nears

This is your last chance to submit entries for the Ferguson Communications Awards. They are due at Headquarters Feb 15. Mrs. Lucille Gordon, Institute of Life Insurance, 277 Park Avenue, New York 10017 (212/922-3000) is chairman of the Committee. Other members are George Barlow, Mary M. Regan, Kenneth Carroll, Ralph Swinburne, Jr.

For the guidelines regulating the award which will be presented at the 1972 Annual Conference in Boston, see *Special Libraries* 62 (no.9): p.375–377 (Sep 1971).

vistas

Charles H. Stevens Appointed Executive Director, National Commission on Libraries and Information Science

Charles H. Stevens, Associate Director for Library Development, Project Intrex, at Massachusetts Institute of Technology, has been appointed the first Executive Director of the National Commission on Libraries and Information Science, Washington, D.C. The SLA Board of Directors had submitted Mr. Stevens' name to the White House for consideration for this position more than a year ago.

Dr. Burkhardt, President of the American Council of Learned Societies and chairman of the Commission, said "The library field and the information community as a whole have awaited this appointment with some anticipation and we are fortunate indeed to find a man who is at once a librarian of acknowledged national stature and an expert on the technical aspects of information retrieval systems. We have every expectation that Mr. Stevens will bring to his new duties a balanced consideration for the mounting problems of traditional libraries as well as for innovations in the field."

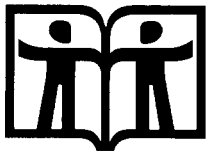
Mr. Stevens, who will take a leave of absence from MIT to accept the new post, is a member of the ALA Council, ASIS, Sigma Xi, COSATI Panel on Library Programs, Engineering Index Board of Trustees, Committee on Library Automation. He was Chairman of the SLA Advisory Council (1967/68) and has been a member of SLA since 1955.

IBY / 72

At its 16th session in Nov 1970, the General Conference of UNESCO proclaimed 1972 as International Book Year with the general theme "Books for All." The basic goal of the effort is to emphasize the importance of books and related materials to the individual and society.

To provide assistance and details about participation, the U.S. Secretariat for International Book Year has published a guide, *International Book Year 1972: A Handbook for Participation*. The handbook explains the purposes of IBY, its Secretariat and Ad Hoc Committee and provides program planning suggestions for use at all levels. Appendices include lists of book-related films and publications, related and resource organizations, and the pertinent resolutions.

The publication is available from the Secretariat, National Book Committee, Inc., One Park Ave., N.Y. 10016, for $1.25 each postpaid for 1–9 copies; $1.00, 10–19 copies; $0.70, 20–50 copies; $0.60, 50 copies. For additional information and specific program and promotional guidance, contact Esther J. Walls, director, at the Secretariat.



The IBY symbol, by now surely ubiquitous, was designed for UNESCO by Michel Olyff of Belgium, whose services were obtained through the International Council of Graphic Design Associations (ICOGRADA). The linking arms symbolize international cooperation through books; the upright and sturdy figures convey the important role of books in national development.

LTP Reports to SLA

Several interesting new programs are being explored by LTP. The first, a cooperative user-testing program for microform readers is under discussion by LTP and the National Archives. The microform readers may be tested in the reading facilities of the National Archives and the Library of Congress. It is anticipated that because readers there are used for extended periods of time, such testing (in addition to laboratory testing) would be more indicative of reader performance than the small scale in-use testing presently carried out. Discussion is still in the preliminary state.

In another effort, LTP is beginning to develop the exchange of design criteria with The Library Association with the aim of getting the best ideas about library equipment and supplies. L.J. Taylor, librarian and information officer of the British association, has already given critiques of a design for a cataloger's camera and a theft detection system. LTP is also exploring the feasibility of conducting a survey of small libraries to find out what their specific problems are, and how LTP might solve or alleviate those that are within its competence.

Among the articles and reports published in the September 1971 issue of *Library Technology Reports* are the final reports on eight models of wood arm chairs being tested under CLR Grant #345-4.

As the test program winds toward its conclusion, preliminary steps in evolving a draft performance standard are being taken. Informal review of the test program and some test results by a qualified third party has indicated that the present test procedure should produce valid and useful information. However, before the test procedures are promoted as a draft ANSI Standard, further study is warranted.

An article on the Book Mark theft detection system marketed by the Library Bureau Division of Remington Rand Corporation also appeared in September. It is an addition to the survey of theft detection systems published in July 1970.

Card catalog cabinet trays have also received attention. In the November issue of *Library Technology Reports* evaluations of five all-plastic trays appeared. These tests were funded by LTP. It is hoped to initiate another program in which plastic trays with wood fronts will be tested.

Library Technology Reports has contracted with Morgan Information Systems, Inc., to test a batch of microform readers, which will include several of the new lap readers.

Testing and evaluation in three categories of AV equipment is planned for the near future. Update testing will be done for self-contained table unit record players in the $100 to $200 price range and heavy duty cassette tape recorders. Also to be evaluated is a new category of equipment—the sound filmstrip projector. The projectors to be tested are designed for one of these two options: wall projection or projection on a built-in screen.

The American Library Association now owns the two patents on the carpet wear tester developed under the auspices of LTP by the Institutional Research Council. The patents cover the device and the testing method. The carpet industry has evinced considerable interest in the device, which is expected to replace the tester used by the National Bureau of Standards. Beginning immediately, LTP is taking steps to make the tester available. The patents were acquired as part of the assets of the IRC which is being dissolved.

Problems with those difficult-to-bind, narrow-margin volumes are becoming a thing of the past, with further improvements being incorporated in the Smyth Cleat Sewing Machine. Some are developed by the Smyth Company and some by the Heckman Bindery of North Manchester, Indiana. The Heckman Bindery, which has been interested in the machine since it was known as the Jones Sewing Machine, obtained one of the three prototypes some time ago. Results with it encouraged them to purchase the two other prototypes. Their success with the machine prompted the Smyth Company to plan the production of 10 machines by next May, the first to be ready for the market in March.

At present, Heckman is sewing all suitable materials having less than ½" margin on the Smyth machines. An innovation by Heckman is the placing of hot-melt adhesive in each of the cleats, which results in securely locking the threads. Heckman comments that it is their opinion that cleat sewing with the application of hot-melt adhesive compares favorably in strength with an oversewn volume, and has the additional advantages of requiring much less inner margin and allowing the book to open more freely.

Howard Pasternack has been appointed assistant editor of *Library Technology Reports* succeeding Howard White who became editor in August.

Mrs. Marjorie E. Weissman
LTP/ALA, Chicago 60611

International Federation of Library Associations
1971 IFLA General Council—37th Annual Session
Liverpool City Central Libraries
Aug 28–Sep 4, 1971

Librarianship in an international milieu can be just as stuffy and uninspiring as at any national or local meeting. The meeting's theme "The Organization of the Library Profession," produced no apparent spiritual uplift among the 700 delegates and observers of the International Federation of Library Associations.

At the opening session, the welcome to the United Kingdom and to Liverpool was handled briefly and effectively by the president of The Library Association, Dr. George Chandler, librarian of the Liverpool City Libraries. Dr. Chandler was an excellent choice to be the local conference organizer. He together with his amiable and hard-working library staff were a crew of excellent stage managers. One suspects that Liverpudlians may have been on short library rations during the IFLA week.

The Lord Mayor of Liverpool, Alderman Charles Cowlin, J.P., welcomed IFLA to the city with an address that was both germane and brief—a model speech for all political personalities as well as for all librarian-speakers. Equally brief and equally effective were the remarks at the opening of the exhibits by Alderman H. W. Hughes, O.B.E. The welcome from Her Majesty's Government was extended by The Rt. Hon. Viscount Eccles, P.C., K.C.V.O. in a surprisingly knowledgeable address for a political figure. Lord Eccles is Paymaster General with responsibility for the arts and libraries. He suggested the need for an international library service to facilitate acquisitions and lending between countries, and that IFLA might operate as a sort of Bank of International Settlements. He further suggested that the libraries of the world would be judged on how strenuously they struggled to bridge the gap to the younger countries who do not possess rich stocks of printed materials or highly developed library systems.

Presiding at the Opening Plenary Session was Herman Liebaers, Director of the Royal Library, Brussels. Dr. Liebaers is serving the second year of a three-year term as president of IFLA. The soporifics of his presidential address were fore-omened in its first sentence when he referred to his address last year as having been too long. The universality of IFLA, Universal Bibliographical Control, the International Book Year, and the organization of the profession seemed to be four topics for this year's address. Liebaers may have had some good points, but they were lost in a mumbled presentation.

Up to this point in the Opening Session, one could believe IFLA's history that IFLA had originally been a gentleman's club consisting of national librarians—all male. But now, a gentle lady representative from Unesco (whose name was murdered in the introduction) took the prize away from IFLA's president as being not only the longest talking but also the most gently unintelligible speaker at that session. Several potent Liverpool fire sirens and Mersey River boats helped to stir the audience occasionally.

IFLA's treasurer, Preben Kirkegaard of Denmark, has a problem common to most treasurers: expenses increasing faster than the income. His proposed solution is to assess dues to associations in each country in proportion to that country's contribution to Unesco. This may seem to be an equitable solution on paper, but it results in dues increases of about 300% for the associations in the United States. Voting on the proposed dues structure will occur in 1972.

The high point of the Opening Session was its *closing* with a cocktail reception at 11:30 a.m. as guests of Lord Eccles. Repeated dosages of Scotch whiskey at room temperature with no ice and in 2 oz. portions lubricated international librarianship. The scoreboard showed that Lord Eccles was far ahead in the popularity polls for all Plenary Sessions.

As at any conference, the more interesting papers were presented at the smaller meetings of the IFLA Sections and Committees, although the problems in large part resembled those at home. For example, there are problems of recognition of special librarianship as a profession in Hungary; there is a library manpower problem in Taiwan; there are problems of cooperation and coordination between special and general libraries in Finland and in Australia. And, just as at home, some of the sessions had truly competent chairmen, and some had

chairmen who fancied themselves to be the principal speaker and managed to use up their session's time slot by expounding their own expertise.

The Second Plenary Session was titled "Organization of the Library Profession." These papers led more than one of the 700 registrants to wonder if the session should not have been titled "Lack of Organization . . . ." Papers presented from some developing nations seemed to suggest that they may be blindly following the supposedly enlightened leads of the older self-satisfied library organizations in both hemispheres north of the equator. A few person-to-person contacts provided the real zest after this Session.

The number and size of the receptions and other elegant bashes at IFLA meetings are always awe-inspiring: on Monday evening a reception in Liverpool's Walker Art Gallery; on Tuesday evening a cruise on the Mersey River with a reception and dance on board the *Royal Iris,* and organized by the North Western Branch of the Library Association; on Wednesday evening a reception at the University of Liverpool; and on Thursday evening a reception by the Lord Mayor at the Liverpool Town Hall.

On Friday a day-long bus tour had its morning coffee-break south of the Welsh border at the Flintshire County Council Library Headquarters in Mold. The County Library (Llyfrgell y Sir) is a very modern functional building as the headquarters for 11 full-time libraries, 8 part-time libraries and 3 bookmobiles. North of the Welsh border, lunch was at the Cheshire County Hall with the County Aldermen in Chester, followed by a visit to the Nantwick Branch Library. The day ended with further busing, with tea and a tour of Tatton Hall and Park in Knutsford, Cheshire.

The cost of such continuous hospitality boggles the mind of any American librarian concerned with the possibility of an IFLA Meeting in Washington, D.C. in 1974.

As the week progressed, it was once again apparent that the real advances occurred in the work of the committees and sections and not in the Plenary Sessions of the General Council. No meetings were scheduled for two of the three Subsections of the Special Libraries Section: Observatory Libraries Subsection, Geography and Map Libraries Subsection. Is such a minute structural differentiation needed in an international federation?

The Final Plenary Session had the tedium of all business meetings. Resolutions from the sections and committees were somehow adopted by the General Council without taking a vote. If there was any attempt to follow any parliamentary procedure, it was not apparent from any action of the presiding officer.

One agenda item was the election of a Vice President for North America. Foster Mohrhardt had served in this post for six years and, therefore, was now ineligible for further re-election. SLA had nominated Erik J. Spicer, Parliamentary Librarian, Ottawa. Mr. Spicer's nomination was supported by all six Canadian associations and by three of the five American associations. ALA had nominated Robert Vosper (UCLA) who was also supported by ARL.

By the quirks of IFLA's Statutes, nominations are reviewed by IFLA's Consultative Committee which recommended Vosper over Spicer by a vote of 28 to 5. In the General Council, Spicer picked up additional votes but was defeated by a vote of 40 to 24. Of the 92 full member associations of IFLA, only 64 cast a ballot. The use of proxies in favor of Spicer had been ruled out by the IFLA Executive Board. But soon after the vote had been announced, it was learned that some voting delegates had left Liverpool on the preceding day and had passed their ballots to persons who, in some instances, were neither delegates nor alternates.

Why does an Executive Board opinion (added to the IFLA Statutes) specify that of six Vice Presidents there be a Vice President for North America, a Vice President for the socialist countries of Eastern Europe, and a Vice President for Western Europe? Why does international politics blow into the rules of this federation of library associations? Why do *all* the associations have a voice in electing a Vice President who represents one region, such as North America?

"Curiouser and curiouser," said Alice in Wonderland as she went to lunch at her seventh of Liverpool's infinite Chinese restaurants. How will the Statutes be interpreted in 1972 and 1973 when a Vice President for the socialist countries is to be elected—especially if some organization in the People's Republic of China attains IFLA member status by that time?

The 1972 meeting of IFLA will open on August 26 in Budapest with the theme: "Reading in the Changing World."

VICTOR BRITANNICUS

• •

HAVE YOU HEARD ?

Urban Information

Beginning in 1972, Greenwood Press, Inc. (Westport, Conn. 06880) will offer an information service on current urban documents. The program consists of a paperbound quarterly *Index to Current Urban Documents* with an annual clothbound cumulative volume. All documents cited in the index will be available in microfiche.

Police Librarians

The South Dakota Planning Agency is establishing an Administrative Library and Information Center in the state capitol, with Ted Kneebone, formerly head librarian at Yankton College, as director. The Center will serve the Law Enforcement Assistance Administration, and eventually extension services will be established with those cities' police training officers becoming the librarians.

ASIS President-Elect

John Sherrod, director, National Agricultural Library, has been elected president-elect of ASIS. He will take office as president at the October 1972 ASIS meeting in Washington, D.C.

Research Journal

A new journal—*Research Policy*—is being published by North-Holland Publishing Co., P.O. Box 211, Amsterdam, The Netherlands. The journal will cover priorities for research in the various scientific disciplines through papers dealing with industrial R&D. Specimen copies are available from the publisher.

Micropublishing

Microform Review is a journal that provides articles on micropublishing and reviews of microform publications. The publication is available in both a paper version and microfiche version for $20.00 each per year or $30.00 combined per year. For information: Microform Review, Rogues Ridge, Weston, Conn. 06880.

ERIC On-Line

An on-line service, SDC/ERIC, contains the 75,000-item data base from the U.S. Office of Education's Educational Resources Information Center files. The service, available from System Development Corp., Santa Monica, Calif., identifies relevant items of educational literature to speed up research projects. A user enters his search request in English via a standard teletypewriter and telephone connection and receives the information. It is available at a minimum charge of $380 for 10 hours per month or $23 per hour.

Interlibrary Communication

Library Telecommunications Directory: Canada—United States, 4th ed., lists libraries in the U.S. and Canada using TWX or TELEX for interlibrary communication. The Directory is available for $2.00 prepaid from Library Systems and Communications Division, Duke University Medical Center Library, Durham, N.C. 27710. Copies will be sent automatically to libraries that purchased the 3rd ed.

NMA Publications

The National Microfilm Association is offering to libraries a special package of microfilm equipment reference works. For $36 libraries receive three NMA publications (*Guide to Microreproduction Equipment,* 5th ed.; *Computer Output Microfilm,* 2d ed.; *Readers/Reader-Printers*) and they may purchase a subscription to the *Journal of Micrographics* at the special $20 library rate. For information: NMA, 9728 Colesville Rd., Silver Spring, Md. 20910.

Information Science Proceedings

The *Proceedings* of the International Conference on Information Science, held in Tel Aviv, Aug 29–Sep 3, 1971 are expected to be available in Mar 1972. Prepublication Price (until Feb 15) $20; afterward $28. Orders to Organizing Committee, International Conference on Information Science, P.O. Box 20125, Tel Aviv, Israel.

Federal Information Resources

The *Proceedings of the Second Federal Information Resources Conference* represents the continuing dialogue between research librarians throughout the country and representatives of federal library and information processing agencies. The publication is available for $4.25 from The Federal City Colleges Press, 425 Second St. N.W., Washington, D.C. 20001.

COMING EVENTS

Feb 25–27. Environmetal Communication Workshop . . . at St. Louis University, Missouri. For information: Environmental Communication Workshop, School of Law, St. Louis University, St. Louis, Missouri 63108.

Mar 6–8. National Federation of Science Abstracting and Indexing Services, annual conference . . . at the Belmont Plaza Hotel, New York City. For information: Stella Keenan, NFSAIS, 2102 Arch St., Philadelphia, Pa. 19103.

Mar 23–24. Information Sciences and Systems, 6th annual Princeton conference . . . at Princeton University, N.J. For information: Professor Murray Edelberg, Dept. of Electrical Engineering, Princeton University, Princeton, N.J. 08540.

Mar 30–31. "Serials/Periodicals: Systems & Subsystems," LARC Institute . . . at Regency Hyatt House, Atlanta, Georgia. Fee $130 members; $150 non-members. Contact: LARC Association, 365 Ravello Lane, Costa Mesa, Calif. 92627.

Apr 3–6. Catholic Library Association . . . at Pick-Congress Hotel, Chicago, Ill.

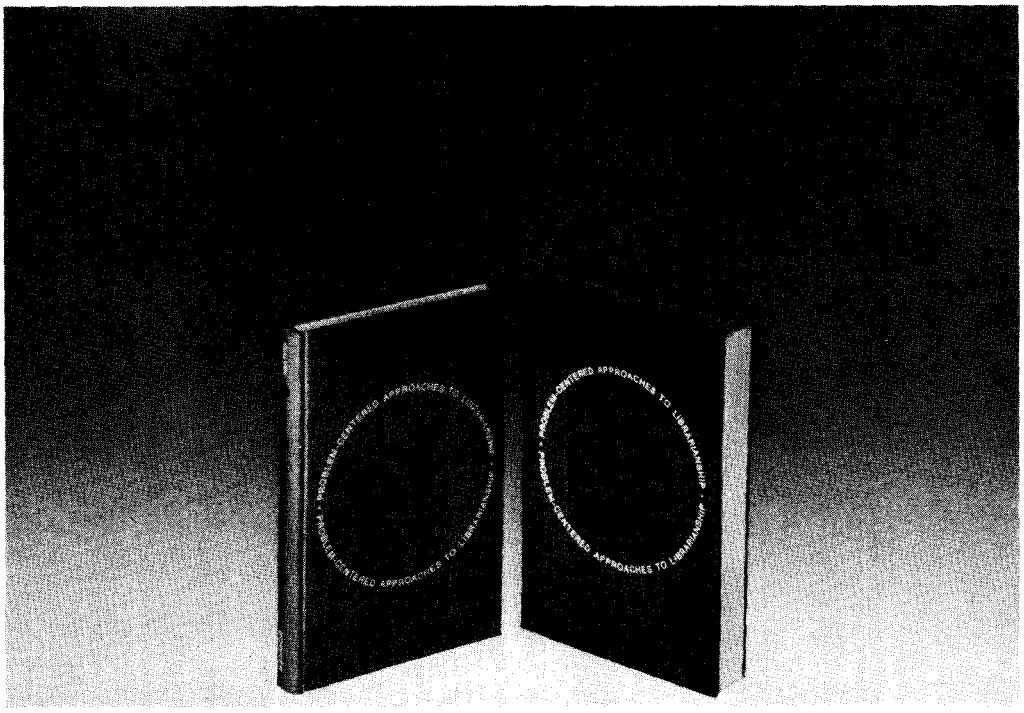
Apr 10–12. Information Industry Association, 4th annual meeting . . . at the Roosevelt Hotel in New York City. *Theme:* "The Information Enterprise, Part II—Information Centers." For information, contact Paul G. Zurkowski, Executive Director, Information Industry Association, 1025 15th St. N.W., Washington, D.C. 20005.

Apr 16–22. National Library Week.

Apr 24–26. Indexing seminar . . . at the University of Maryland Center of Adult Education.

May. Symposium of editors of library, documentation and archives journals . . . at Unesco House, Paris.

Apr 30–May 3. Library Applications of Data Processing, annual clinic . . . at Graduate School of Library Science, University of Illinois at Urbana-Champaign. *Theme:* "On-Line Systems Applied to Library Automation." For information: Leonard Sigler, Division of University Extension, 111 Illini Hall, Champaign, Ill. 61820.



CURRENT PROBLEMS IN REFERENCE SERVICE

by Thomas J. Galvin
6" x 9". 162 pages. $9.95 net pp.
20% off on 5 or more.

Here are 35 case studies based on actual, emerging political and social issues which might arise in any modern library. They offer remarkable learning and teaching experiences for anyone concerned with libraries because they help the reference librarian, library student and library administrator to identify, analyze, judge and resolve such problems as requests for reading lists on sex education . . . library service in open-admissions colleges . . . application of performance budgeting to reference service . . . and more. *LC 77-162527. June 1971.*

LIBRARY PROBLEMS IN SCIENCE AND TECHNOLOGY

by James M. Matarazzo
6" x 9". 191 pages. $9.95 net pp.
20% off on 5 or more.

These 35 realistic case studies are designed to help students in pre-service and in-service programs, graduate classes, seminars and workshops master the sources and uses of scientific literature, and make the information available to a variety of clientele, from the young to the advanced researcher. The case studies cover the whole spectrum of complex literature and administrative problems involving scientific reference questions and sources . . . dissemination of scientific information . . . library planning, policy and supervision . . . collection building . . . and more. *LC 70-164033. November 1971.*

Both volumes are part of the Bowker Series, "Problem-Centered Approaches to Librarianship," edited by Professor Thomas J. Galvin of the School of Library Science, Simmons College.

Order your copies today on 30-day approval!

R. R. Bowker Order Department, P.O. Box 1807, Ann Arbor, Mich. 48106

_____ CURRENT PROBLEMS IN REFERENCE SERVICE. $9.95 net pp. U.S. and Canada; $10.95 elsewhere. 20% off 5 or more. ISBN 0-8352-0425-1.

_____ LIBRARY PROBLEMS IN SCIENCE AND TECHNOLOGY. $9.95 net pp. U.S. and Canada; $10.95 elsewhere. 20% off 5 or more. ISBN 0-8352-0486-3.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

Published by R. R. Bowker Company / A XEROX EDUCATION COMPANY

Some librarians tend to overestimate us.

They're convinced that The Times on Microfilm costs more than it actually does.

The truth, however, is that current reels of The New York Times on Microfilm cost considerably less than any other major news publication on microfilm. Less than 8 cents per foot . . . less than $7 per reel.

A subscription for 1971 costs $325.

Of course, the complete back file is more expensive. But thousands of our current subscribers handle this by purchasing additional microfilm as their budgets allow.

And by using our Deferred Payment Plan.

Under this plan, libraries can purchase as much microfilm as they need. And have four years to pay. With immediate use of the microfilm.

So if you haven't yet subscribed to The New York Times on Microfilm, we hope it's not because you're overestimating us.

Let us send you complete details. Write to The New York Times, Library and Information Services Division, Dept. 1056, 229 West 43d Street, New York, N.Y. 10036.

NYT

"The New York Times on Microfilm? We'd love to subscribe to it. But it's just too expensive for our library."

POSITIONS WANTED

Dir. Foundation Libr. Research Center & Museum—10 yrs. exp. in development, administration; upgraded, selected, researched, classified materials; prepared interntl. exhibits. Desires business-related affiliation in NYC. Box C-173.

Biological Sciences Librarian—BS, MS, Biology; MSLS. Research and teaching experience. Seeks challenging position in academic or industrial environment. Box D-180.

Librarian (MSLS)—Desires part-time employment in medical, pharmaceutical, law, or industrial library (in or near Philadelphia) on Friday night, all day Saturday and Sunday. Box D-179.

Geog./Libn.—MSc, MA (Cartog., Air-photo interp.), MSLS (map). 15 yrs. teaching; work exper. ARDA, Govt. of Can., Natl. Atlas of India. Seeks work geog., map libr. U.S./Canada. Box D-181.

POSITIONS OPEN

Information Specialist—The Brain Information Service, UCLA, has a position open in its Information Services Section with salary range up to $10,596 depending on qualifications.

Minimum Qualifications: Background in the sciences, preferably biological; library degree or scientific background with literature searching experience. MEDLARS experience and knowledge of foreign languages desirable.

Assignments: To index current literature in biological sciences for input to computer retrieval system; formulate searches for retrieval from this file; prepare bibliographies from files and other standard reference tools in the biological sciences; scan and evaluate literature for selection of material relevant to information center scope. Some general reference work and editorial assistance with publications also involved.

Direct résumé and inquiries to: Miss Louise Darling, Librarian, Biomedical Library, Center for the Health Sciences, University of California, Los Angeles, California 90024.

• •

Information concerning the Employment Clearinghouse to be held at the 1972 Annual Conference in Boston will appear in the March 1972 issue of Special Libraries.

THE MARKET PLACE

Back Issue Periodicals—Scientific, Technical, Medical and Liberal Arts. Please submit want lists and lists of materials for sale or exchange. Prompt replies assured. G. H. Arrow Co., 4th & Brown Sts., Philadelphia, Pa. 19123.

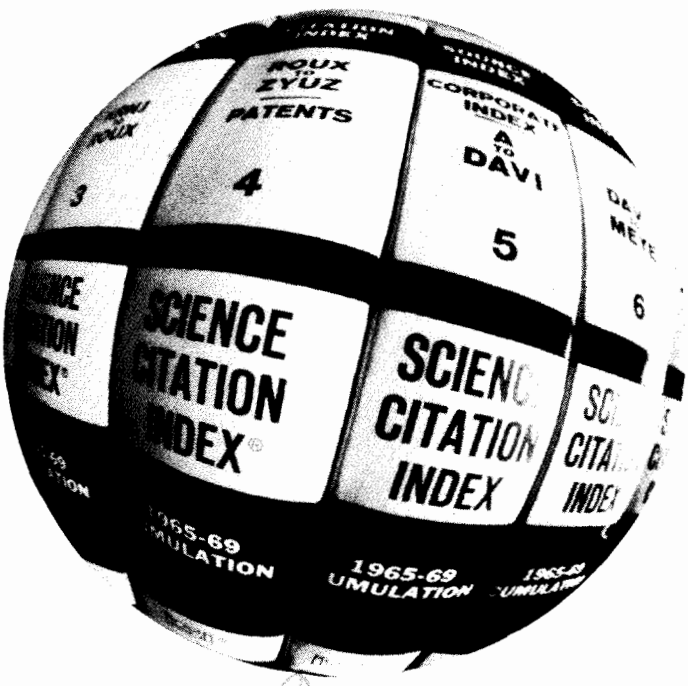
Foreign Books and Periodicals—Specialty: Search Service. Albert J. Phiebig Inc., Box 352, White Plains, N.Y. 10602.

For Sale—*Chemical Abstracts* (v.17–43; 1923–49); bound, best offer. Hamilton College Library, Clinton, N.Y. 13323.

INDEX TO ADVERTISERS

January 1972

Second class postage
paid at New York, N.Y.
and at additional
mailing offices



at your fingertips...

the finest tool for bibliographic verification ever published!

New Science Citation Index® 1965-69 Cumulation identifies over 90% of the world's published scientific and technical literature.

What was the title of that article? The author's correct name? The journal in which it appeared? The year and volume? Whether you're assisting a library patron in writing a paper, researching a scholarly study, or borrowing an article from another library through an interlibrary loan, it's essential that you know. And the **Science Citation Index** tells you, like no other combination of references available anywhere.*

In study after study, the **Science Citation Index** has demonstrated its ability to identify specific items of the world's scientific and technical literature with an ease, speed, accuracy, and thoroughness that make it indispensable to scientific, medical, and technical libraries both large and small.

And the new 5-Year Cumulative **SCI®** — covering all of the scientific disciplines for the years 1965 through 1969 in a single reference — virtually guarantees that you'll find and validate the information about almost any paper ever published. So there's no need to waste time looking through all the other indexes it **might** be in. What's more, the new 5-Year **SCI** takes less than half the space of the five annual issues it replaces.

You owe your library patrons, your staff, and yourself the convenience, the authority, and the unrivaled efficiency of the new 5-Year **SCI.** Find out more about how it can save you time and money. Write for our new brochure.

*Williams, J. F. & Pings, V. M., "A Study of the Access to the Scholarly Record from a Hospital Health Science Core Collection," Report No. 54, Wayne State University, School of Medicine, Library and Biomedical Information Service Center, Detroit, Michigan, January 1970, 72pp.

isi®

Institute for Scientific Information