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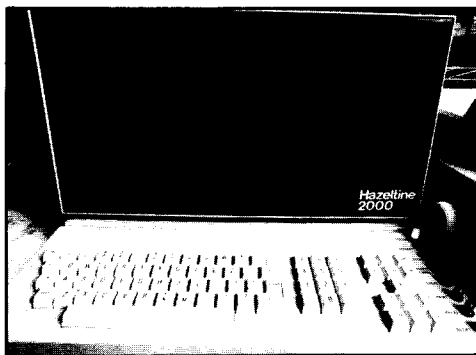
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SLA News

1979 SLA Annual Business Meeting, Jun 13, 1979 147

SLA Hawaii Conference Invitation 148

Chapters & Divisions 151

SLA Authors 151

Vistas

Have You Heard? 153

Have You Seen? 156

Coming Events 157

Reviews 159

Pubs 162

7A Letters

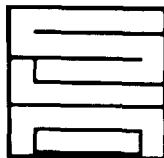
113 Library Services for Forensic Psychiatrists
Rebecca Rutenberg

117 Map Collections and Map Librarianship in the United States:
A Review
Richard W. Stephenson

127 An Examination of Search Strategy and an On-Line Bibliographic System
Arthur Antony, Sally Weimer, and Veronica Eden

135 A Computer-Based Index to Book Reviews in the Physics Literature
Allen Wynne

140 Special Libraries in Singapore
Alice Leong



21A Placement

22A Index to Advertisers



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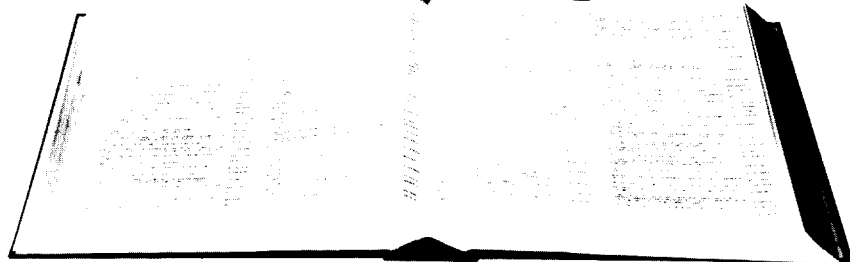
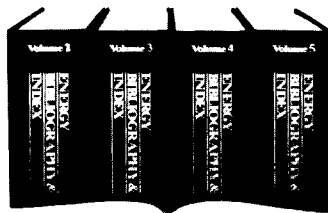
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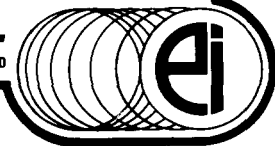
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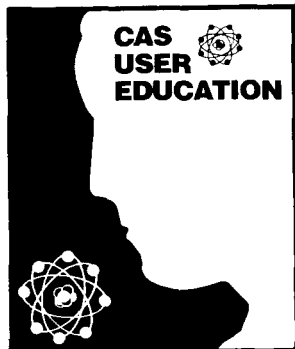
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Library Services for Forensic Psychiatrists

Rebecca Rutenberg

University of Pennsylvania Hospital, Bellet Library, Philadelphia, Pa. 19104

■ In 1974, the Bellet Library opened in Philadelphia to serve forensic psychiatrists. While the services it provides are similar to those of most small special libraries, the collection is quite unique in its interdisciplinary coverage. After a discussion of what the field of forensic psychiatry is, the scope of the library will be examined. Examples of typical users and the reference questions they pose will be given, followed by a section covering special library projects. Included is a bibliography of select journals.

SINCE THE SUMMER of 1974, forensic psychiatrists throughout the Philadelphia metropolitan area have had a special library to meet their particular needs. The Samuel Bellet Library of Law, Medicine, and the Behavioral Sciences is housed in the Forensic Psychiatry Clinic at the Hospital of the University of Pennsylvania, and it is available to anyone desiring its services.

Dr. Bellet, a cardiologist who died in 1971, believed strongly that medicine and the law must communicate in order to fully diagnose, evaluate, and prepare recommendations for the legal/medical health of a patient/client (1). The library was set up to carry out his beliefs. Because it is privately endowed through the Samuel Bellet Foundation, the library receives no additional sup-

port, with the exception of gifts. It is, therefore, in no way connected with the library system of the University of Pennsylvania.

Definition of Forensic Psychiatry

Forensic psychiatry, also referred to as legal psychiatry or psychiatry and the law, is that branch of psychiatry which deals with individuals involved in legal matters, both civil and criminal. Traditionally, the psychiatrist was called upon to act as an expert witness in a criminal proceeding, but during the past decade, the field has grown rapidly to include any aspect of psychiatry that involves legal matters or legislative action. The meaning of forensic psychiatry has also been expanded to include social-legal psychiatry. The American Academy of Psychiatry and the Law (AAPL) has less than 400 psychiatrists as members (2).

Patients are referred to the psychiatrists by attorneys and judges. They are examined and evaluated for a multitude of reasons: homicide, child and/or

Rebecca Rutenberg was librarian, Bellet Library at the Hospital of the University of Pennsylvania. She is presently living in Ann Arbor, Mich.

spouse abuse, sexual crimes, dangerousness, crimes related to the use of drugs and alcohol, juvenile delinquency, and so on. References from the Bellet Library are available on any of these interrelated topics, as well as on prison and penal reform systems, confidentiality, law enforcement programs, and mental health centers.

At present, the Bellet Library is only one of two libraries with a medicolegal emphasis in the eastern United States. The other one is the Milton Helpern Library of Legal Medicine, also a self-supporting, nonprofit organization. Established in 1962, it is housed in the Milton Helpern Institute of Forensic Medicine, where the office of the chief medical examiner of New York City is located. In addition to the basic library resources, the Helpern Library maintains a museum of evidential material from interesting and unusual medical examiner cases. New England also has a great need for a cross-disciplined information center covering medicolegal issues, and one is proposed for the near future.

Users and Scope

While it is primarily an in-house library serving forensic psychiatrists, fellows, and residents, Bellet is also used by attorneys, physicians, sociologists, social workers, psychologists, community mental health workers, criminologists, and students of these disciplines. Because it is located on a major, urban university campus, the library is able to draw upon other libraries at the University of Pennsylvania and throughout the Philadelphia area.

Criminology is one of the basic sciences of forensic psychiatry; this is, no doubt, obvious to members of the Psychiatry Section of the American Academy of Forensic Sciences (3). Thus, Bellet is fortunate to have at its disposal the resources of the library of the criminology department of the University of Pennsylvania. Heavily used by forensic psychiatrists is the *Criminology Index: Research and Theory in Criminology in the*



United States, 1945-1972, edited by M. E. Wolfgang et al. (4). Dr. Wolfgang is the director of the criminology department and library at the university.

The user will find no sophisticated computer terminals, reams of printouts, endless stacks of shelves, or large numbers of librarians employed at Bellet, which occupies one small room. There is one professional librarian and occasionally the services of a clerk-typist are provided. Books and professional journals comprise a large portion of the collection. The library also prides itself on its extensive vertical file of pamphlets, newspaper clippings, unpublished papers, and reprints. Included in this collection are materials on such topics as competency to stand trial, custody, incest, mental incompetency, rape, white collar crime. A complete, up-to-date index of the vertical file is available on request.

There is also a collection of tapes of lectures presented by forensic psychiatrists and persons in related fields at various professional meetings and seminars. All tapes are cataloged.

As the collection has become more familiar to librarians of other institutions, frequent requests for interlibrary loans are made. In addition to maintaining the collection, the librarian spends a substantial amount of time providing reference services and performing literature searches. The following is a typical sampling of users and the types of reference questions they ask:

Physician: material on coercion for the Patty Hearst trial;

Attorney: information on homosexuality;

Attorney: question of the legal right

of the psychologist to give counselling;
Students of social work: civil commitments;
Physician: new theories on electroshock therapy;
Psychiatric hospital librarian: follow-up studies on what happens to the criminally insane;
Toxicologist: a specific article on toxicology;
Attorney: the psychologist as a witness;
Forensic physician: clinical signs of strangulation;
Mental health worker: latest information on the 1976 Mental Health Act.

In most cases, a multidisciplinary approach is used to answer a reference question. The librarian will look at the question from the viewpoint of medicine, law, and the behavioral sciences. Of considerable help are the *Index Medicus*, *Index to Legal Periodicals*, *Psychological Abstracts*, and other specialized indexes and abstracts.

Special Projects

Between the summers of 1974 and 1976, the Bellet Library funded summer law research programs in which six law students, two each summer, were selected to research and prepare papers which are now a part of the library's permanent collection. The project resulted in the following papers: *Workman's Compensation*; *Right to Treatment*; *Family Law*; *Children's Rights in the Law*; *Involuntary Hospitalization*; and *Dangerousness*. Law students were thus able to explore these areas from the interdisciplinary approach provided by the Bellet collection rather than from legal sources only.

A major decision in 1977 resulted in the termination of the law research program and the institution of an annual address: the Bellet Lecture in Law, Medicine, and the Behavioral Sciences. The lectureship brings a nationally recognized authority in law, medicine, and the behavioral sciences

to the University of Pennsylvania to discuss current developments in this rapidly changing, interdisciplinary field. Interested individuals from both academia and applied fields participate. The first lecture was given in fall 1977 by Gerald J. Sarwer-Foner, M.D., Chairman, Department of Psychiatry, University of Ottawa, and President of the American Academy of Psychiatry and the Law. His address was entitled "Issues of Involuntary Hospitalization and Treatment in Relationship to the Current Social Scene." A dinner for selected guests accompanies the lecture; the entire event is funded by the Bellet Library.

Finally, the Bellet Library partially supports a weekly seminar series, open to anyone, in which a forensic psychiatrist or a person from a related field presents a topic. A sampling of these topics includes: "The Battered Husband," "Forensic Mental Health Systems: History and Prospect," "Homicide Motives Reconsidered," "Vehicular Violence." Guest speakers are frequently invited.

Conclusion

Although physically small, the scope and depth of the Bellet Library is quite large, encompassing a multitude of disciplines. As the field of forensic psychiatry continues to grow, so does the collection of available resources. The growth of Bellet is viewed as an ongoing project, with new programs constantly being formed in conjunction with the Forensic Psychiatry Clinic. As the library becomes more highly publicized not only in the Philadelphia area but throughout the country, it is hoped that larger numbers of specialists will avail themselves of its services.

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Bullet currently receives approximately 75 journals. It is the policy not to duplicate those titles held at the other libraries of the University of Pennsylvania. The following list exemplifies the basic, interdisciplinary journals used by forensic psychiatrists:

- American Journal of Law and Medicine*. Semi-annually. American Society of Law and Medicine, 454 Brookline Ave., Boston, Mass. 02215.
- Bulletin of the American Academy of Law and Psychiatry*. Quarterly. Business Office, University of Pittsburgh School of Law, Pittsburgh, Pa. 15260.
- Criminal Law Bulletin*. Bimonthly. Warren, Gorham, and Lamont, 210 South St., Boston, Mass. 02111.
- Criminology: An Interdisciplinary Journal*. Quarterly. Sage Publications, Inc., 275 South Beverly Drive, Beverly Hills, Calif. 90212.
- Culture, Medicine, and Psychiatry*. Quarterly. D. Reidel Publishing Company, P.O. Box 17, Dordrecht, Holland.
- Emergency Physician Legal Bulletin*. Quarterly. Med/Law Publishers, Inc. P.O. Box 293, Westville, N.J. 08093.
- Family Law Quarterly*. Quarterly. American Bar Association, 1155 East 60th St., Chicago, Ill. 60637.
- Forensic Science*. Bimonthly. Elsevier Sequoia S.A., P.O. Box 851, 1001 Lausanne 1, Switzerland.
- Health Lawyers News Report*. Monthly. National Health Lawyers Association, 522 21st St., N.W., Washington D.C. 20006.
- Journal of Forensic Sciences*. Quarterly. American Society for Testing and Materials, 1916 Race St., Philadelphia, Pa. 19103.
- Journal of Health Politics, Policy and Law*. Quarterly. Periodicals Department, Duke University Press, P.O. Box 6697, College Station, Durham, N.C. 27708.
- Journal of Medicine and Philosophy*. Quarterly. University of Chicago Press, 5801 Ellis Ave., Chicago, Ill. 60637.
- Journal of Psychiatry and Law*. Quarterly. Federal Legal Publications, Inc., 95 Morton St., New York, N.Y. 10014.
- Journal of Social Issues*. Quarterly. Society for the Psychological Study of Social Issues, Publication Office, Box 1248, Ann Arbor, Mich. 48106.
- Law and Human Behavior*. Quarterly. Plenum Publishing Corp., 227 West 17th St., New York, N.Y. 10011.
- Law and Psychology Review*. Quarterly. University of Alabama, Box 1435, University, Ala. 35486.
- Legal Aspects of Medical Practice*. (Formerly *Journal of Legal Medicine*) Bimonthly. GMT Medical Information Systems, Inc., 777 Third Ave., New York, N.Y. 10017.
- Medicolegal News*. Quarterly. Medicolegal News, 454 Brookline Ave., Boston, Mass. 02215.
- Mental Disability Law Reporter*. Bimonthly. ABA Commission on the Mentally Disabled, 1800 M St., N.W., Washington, D.C. 20036.
- Mental Health Law Project*. Quarterly. 1220 Nineteenth St., N.W., Washington, D.C. 20036.

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Rebecca Rutenberg presently resides in Ann Arbor, Mich.

Map Collections and Map Librarianship in the United States

A Review

Richard W. Stephenson

Library of Congress, Reference and Bibliography Section, Geography and Map
Division, Washington, D.C.

■ In the 20th century we have witnessed the acceptance of maps as valuable sources of information suitable for addition to a modern library's expanding holdings of nonbook format materials. This paper examines the growth of map libraries in the United States, the evolution of specialized professional training for map librarians, and the associated growth of a corpus of literature about maps in libraries. The Special Libraries Association's establishment of the first national map library organization 34 years ago is cited as clear evidence that a legitimate subfield of special librarianship had emerged and was recognized by the special library profession. The paper also examines map librarianship today and concludes that we have reached the end of an era that can best be described as "The Emergence of Maps in Libraries."

MAPS are universally accepted as valuable objects for communicating geographical information. Virtually no one would disagree with the importance of maps to aid the traveler, to understand the area in which they live, to visualize distant lands, and to comprehend the distribution of human and natural phenomena. Words can be used to describe a region or locate a place, but how much simpler and clearer it is to view it on a map. However, when discussing complex global or regional distributions, relationships, and inter-relationships

of physical and cultural phenomena, words begin to fail. Such relationships can be clearly communicated only on maps.

Despite the wide use of maps by virtually every citizen, it is something of a paradox that maps have not always held an acceptable place in U.S. libraries—the repositories of our knowledge. The U.S. library movement in the past century was closely tied to the storage and use of the book. Materials that did not fit this format were likely to be judged of questionable value and, therefore, not worthy of acquisition, certainly not for permanent retention. When the Rev. Henry C. Badger joined the staff of the Harvard University Library in the late 19th century, he reported that the wise librarian, on assigning him to work with the map collection, could only advise, "Well . . . all I can do is to turn you loose and let you flounder"

This paper was presented as the keynote address on Mar 31, 1978, at the map workshop sponsored by the Texas Chapter, Special Libraries Association, in Houston, Tex.

(1). Unfortunately, this was the general attitude of librarians in the 19th century. To some extent, this same attitude has continued to this day.

Beginnings of Map Collections

Map collecting began in earnest in Europe some 500 years ago, when the invention of printing from movable type made possible the increased production and dissemination of maps. Coinciding with this event was the increased public interest in geography and maps due to the voyages of discovery and exploration then taking place, and the growing number of wealthy princes, church fathers, and merchants interested in collecting books, maps, prints, paintings, and objects of art. Some royal collections ultimately became the core of emerging national libraries. The collections of George II and George III, for example, are in the British National Library (formerly British Museum), the collection of Prince Eugene is in the National Library of Vienna, and the former royal collections of France, substantially enriched during the French Revolution by the holdings of expropriated religious houses, are in the Bibliothèque National in Paris.

The collecting of maps was not totally ignored in the United States. In 1818, Harvard College acquired the Christoph Daniel Ebeling collection of 10,000 maps and charts and 3,200 books on this country. Ebeling, a professor of Greek and history in Hamburg, Germany, had a strong interest in U.S. history. This collection became the nucleus of one of the great university map collections. In the 19th century, it was the preeminent collection in the United States.

Other college libraries, societies, and public libraries acquired varying numbers of maps in the 19th century, but generally speaking the number was small. In 1851, the American Geographical and Statistical Society (now the American Geographical Society) was founded in New York City. Shortly thereafter this organization, the country's first geographical society, established a geography and map library which was destined to become one of the finest in the nation.

Despite the establishment of map collections in institutions in Cambridge, Mass., New York City, and a few other cities in the United States, by mid-century there was still no significant map collection to be found in the federal government. In 1842, the carto-

graphic holdings in Washington, D. C. were so poor that Secretary of State Daniel Webster, while negotiating the northeastern boundary of the United States with Lord Ashburton of England, was forced to borrow large numbers of maps from the Harvard College Library map collection (2).

A federal map library did not become a reality until 1897, when Librarian of Congress John Russell Young established the Hall of Maps and Charts. Maps and atlases had been acquired on occasion by the Library of Congress since its creation in 1800. As a matter of fact, the very first purchase of books for the new library included three maps and an atlas. In 1867, the collections of the library were substantially enriched by the purchase of the magnificent collection of Americana belonging to Colonel Peter Force of Washington, D.C. Force was a printer, historian, and former mayor of Washington, D.C. Included among this vast collection of manuscript papers, pamphlets, broadsides, and books was a collection of some 1,200 maps and views. Other significant collections of maps acquired by the library in these early years were the excellent collection of 101 manuscript and printed maps belonging to William Faden, geographer to King George III, a rare collection of printed maps of North America in six volumes, and the personal collection of sixty-seven maps and one atlas which had belonged to the Comte de Rochambeau, commander of French forces in North America during the Revolutionary War. In 1870 new copyright regulations required the deposit of two copies of each item registered for protection. The library's holdings of modern, commercially produced maps grew substantially as a result of this ruling. When the Hall of Maps and Charts was established in 1897, therefore, the Library of Congress already possessed some 50,000 maps. This was certainly a respectable beginning for the nation's first federal map library.

Growth of Map Collections

The significant growth of map libraries, both in size and overall number, has occurred since 1900. This increase is due in part to the rise of geography departments in the nation's normal schools, colleges and universities, the tactical and strategic military requirements brought on by two world wars, and more recently the needs of

domestic planners to better understand and utilize our natural resources, and the growing awareness on the part of the citizen of the value of maps for research and recreational pursuits.

The growth of map libraries in the United States has been greatly assisted by generous depository programs offered by some federal and state mapping agencies. For example, in each state there are several official depositories of maps produced by the United States Geological Survey. A depository collection of Geological Survey topographic maps may contain maps of the entire country, a region, or perhaps just coverage for the state. From the National Ocean Survey, depository participants can choose to receive all or part of the 1,100 nautical charts of U.S. coastal waters published by this agency. A selection of aeronautical charts at medium and small scales is also available on deposit from the National Ocean Survey. The Defense Mapping Agency's map and chart depository program provides participating map libraries with a selection of maps produced by its Topographic, Hydrographic, and Aerospace Centers. This program has been extremely important because it has provided recipients with hard-to-get medium scale topographic maps of foreign areas. The 240 libraries that are current members in the Defense Mapping Agency map and chart depository program receive shipments of some 200 sheets once a year (3).

The Defense Mapping Agency program had its beginnings at the end of World War II. Frank Nicoletti, a former DMA staff member, notes that in 1945, the Army Map Service presented a package of approximately 5,000 different map sheets to some forty-five U.S. institutions that had aided them during the war. "The response to this gesture was so gratifying that the Army Map Service took steps, after World War II, to establish a formal map depository program. From its own production and that of the Allies, as well as from the wholesale capture of over 900 tons of German and Japanese products, the Army Map Service had accumulated large quantities of maps. The cessation of hostilities had rendered many of them surplus. These surplus stocks formed the basis of the initial distribution under the formal program. Between 1946 and 1950, each of 150 universities and colleges received 20,000 maps. Many of the larger institutions accepted collections in duplicate but only forty-three received

copies of captured German and Japanese maps" (4).

Another significant source of maps has been the special map project sponsored each summer since 1951 by the Geography and Map Division, Library of Congress. Libraries participating in this cooperative program send a representative to work with Geography and Map Division personnel for a period of four to six weeks. In exchange for their services, the participants are permitted to select cartographic items for their institutions from the library's surplus map collection, which varies in size each year from 100,000 to 150,000 items. In the twenty-seven years that the project has been in existence, it is estimated that more than 1¼ million maps and atlases have been transferred by the Library of Congress to participating institutions.

Map Collections Today

The third edition of the Special Libraries Association's directory, *Map Collections in the United States and Canada*, provides a good picture of today's map libraries. The new edition records information on 743 map collections in the United States and Canada. The Northeastern and North Central states each account for 25% of those collections, while 18% are located in the Southern states, 16% in the Southwestern states, 6% in the Pacific Northwest, and 8% in Canada. It is interesting to note that more than half (57%) of the map collections listed are associated with academic institutions. Many of these collections began in the geography department, but are now administered by the university library. The remainder of the collections listed in the new directory are distributed among government agencies (14%), public libraries (14%), museums, clubs, and societies (13%), and corporations (2%) (5).

A review of the data included in the new edition of the directory reveals that a typical map library in a university in the U.S. heartland (i.e., the North Central States) consists of 56,000 maps, 400 atlases, 2,500 maps accessioned annually, 60 atlases accessioned annually, 450 titles in the reference collection, and 13,000 aerial photographs. The map library has one full- or part-time professional assisted by two library technicians. The classification system used is the Library of Congress class G, and the collections are more than 50% cataloged. The library is depository for the Defense

Mapping Agency and the United States Geological Survey. The library has arrangements for interlibrary loans, and, lastly, has quickcopy or photocopy facilities. The map library in the North Central states which most closely compares with these averages is at Ohio State University (5, p. 9).

Training of Map Librarians

In the early years of this century, map libraries were administered by persons with varied academic or professional backgrounds, few of whom had any professional training in library science. Their knowledge of the operations of a map library, by necessity, derived from on-the-job training. As interest in geography grew in U.S. colleges in the years between World Wars I and II, and map collections expanded in size and number, an increasing number of professionally trained geographers found employment as map librarians. The employment of geographers in map libraries was further stimulated during World War II by the rapid development of map libraries within the federal government. Many of the positions in these expanding libraries were occupied by persons with undergraduate or graduate degrees in geography.

Although geographers brought to their positions in map libraries an unprecedented knowledge of the making, interpretation, and use of maps, they were woefully lacking in such library science skills as cataloging and classification, acquisitions procedures, and the maintenance of collections. Their academic education had not prepared them for employment in a map library.

In 1950 Professor Joseph A. Russell, chairman of the Geography Department, University of Illinois, recognized the need for a map course to improve the skills of geography students. He believed that it was necessary "for geographers to have more map information for their own research, to know how to 'catalog' maps, and to have a knowledge of maps to meet requirements for most cartographic positions" (6). The resulting course, designed for both geographers and librarians, was introduced that year by the University of Illinois Library School. Entitled "Maps and Cartobibliographical Aids," the course was taught from 1950 to 1958 by Bill M. Woods, then map librarian, University of Illinois. In more recent years the course has been taught by his successors at the University of Illinois, Robert White and David Cobb, and by William Easton, map

librarian, Illinois State University. For many years, this remained the only accredited course in map librarianship available anywhere in the world.

In 1956, in a statement on "Map Librarianship" prepared for the Subcommittee on Special Library Education of the Council of National Library Associations, Woods noted, "Probably a greater number of map librarians have been trained as geographers than have been instructed in librarianship. It seems desirable, though, that the map librarian have formal training in both geography and library science. . . . The geography-trained map librarian will benefit by registering for basic courses in library science . . . and the library school-trained map librarian without undergraduate experience in geography needs to be instructed in the elements of geography, to review world geographic regions, and to learn the techniques of map making and reading" (7).

There are now five accredited library schools in North America which offer at least one course in map librarianship. These schools are at the University of Illinois (taught by David Cobb), the University of Western Michigan (taught by Louis Kiraldi), Columbia University (taught by Roman Drazniowsky), the University of Toronto (taught by Joan Winearls), and the Catholic University of America (taught by Richard Stephenson).

The most extensive program in map librarianship is the one offered at Catholic University of America, Washington, D.C., in which it is possible to earn up to twelve semester hours in this specialty. This is one-third the number of hours required for the degree of Master of Science in Library Science. "Map Librarianship" reviews the operation of a map library: administration, equipment, acquisitions, processing, preservation, reference service, and bibliographical procedures. It also includes a brief overview of the development of cartography and map collections, and a review of the literature of cartography, cartobibliography, and map librarianship. This course has been taught during the 1975 and 1977 summer sessions.

Offered in alternate summers is the "History of Maps and Map Collecting" which traces the development of maps and map collecting from the earliest times to the beginnings of modern mapping, with special emphasis on American cartography and map collecting. This course also examines appropriate procedures to be followed

in evaluating, acquiring, handling, using, and caring for old maps and atlases in libraries.

In addition to the map courses, the graduate student wishing to specialize in map librarianship can also take a Practicum, i.e., supervised professional training in a map library, and an Independent Study, i.e., research and writing on a topic related to map librarianship, the history of maps, or map collecting.

Recently, announcements have appeared in the literature concerning two additional courses in map librarianship offered during the summer of 1978. One course was offered at the University of Oregon, Eugene, and the other at the University of British Columbia, Vancouver. The former was taught by Edward P. Thatcher, map librarian, University of Oregon, and the latter by Maureen F. Wilson, map librarian, University of British Columbia (8).

Despite the increasing number of graduate courses available in map librarianship in North America, regional map workshops continue to play a valuable role in training and informing people interested in maps and map collecting and in providing a forum for the exchange of ideas. In recent years, regional workshops seem to be on the rise. During the bicentennial year, for example, the Geography and Map Group of the Washington Chapter, Special Libraries Association, sponsored its "Second Conference on Maps and Map Librarianship." In 1975 and again in 1977, pre-convention workshops on map libraries were held in conjunction with the annual meetings of the Southeastern Division of the Association of American Geographers. In addition, "Maps in Libraries; An Update," sponsored by the Graduate School of Library Science, University of Illinois, was held on Sep 9, 1977.

Map Library Associations

As the size and number of collections increased, so grew the need for interaction among map librarians and map libraries. In October 1941 nine Members of the Special Libraries Association successfully petitioned the SLA Executive Board to form a Geography and Map Group within the Washington, D.C. Chapter. The formation of this group provided a valuable forum for the exchange of information and ideas. Because of the expansion of map library staffs and the increased use of maps during the war years, membership in the Group

grew rapidly. Three years later, the Washington Group provided the nucleus for the formation of the first national organization of map librarians, the Geography and Map Division of the Special Libraries Association. At its creation in 1944, membership in the Division totaled 50 people; in 1978 it had grown to 358. The creation of the first national map library organization 34 years ago was clear recognition from the library profession that a legitimate subfield of special librarianship had emerged.

In November 1947, the Geography and Map Division issued its first *Bulletin*. It was a simple four-page, mimeographed publication consisting of a list of Group and Division officers, the highlights of the 1947 SLA Conference in Chicago, the tentative program for the next annual meeting in Washington, D.C., and several brief news notes of interest to the Members. The *Bulletin* was issued twice a year until it became a quarterly in October 1953. Through the years, the *Bulletin* has earned the reputation of being the most significant publication in the field of map librarianship. Subscriptions to the *Bulletin* are worldwide and totaled 599 in 1977. Editions of a directory entitled *Map Collections in the United States and Canada* have been prepared by Members of the Geography and Map Division and published by the Special Libraries Association in 1954, 1970, and 1978.

Two Chapters, New York City and Washington, D.C., maintain Groups which function independently from the national Division. The Group in the latter Chapter has issued a publication entitled *Federal Government Map Collecting; A Brief History*.

In the 1960s, two additional map library associations were established in North America. The Western Association of Map Libraries (WAML), founded in 1966, has approximately 200 members and meets biannually in a western state. It publishes an *Information Bulletin* three times a year and has issued a *Directory of Map Collections* (1969) in western North America. WAML has recently completed a two-volume union list of Sanborn fire insurance maps of U.S. cities.

In 1967, an Association of Canadian Map Libraries (ACML) was formed. It holds annual meetings and publishes a *Bulletin* at irregular intervals. The second edition of its *Directory of Canadian Map Libraries*, describing ninety-five collections, was issued in 1977. The Association also has published the proceedings of its conferences in annual

volumes and has issued a series of five facsimile maps.

Literature of Map Librarianship

The literature of map librarianship has grown rapidly since the first national association in this field was formed 34 years ago. Until recently, the literature of map librarianship has appeared in the form of professional articles in journals or as an occasional chapter in a larger work. In 1977 alone, the journals of the three North American map library associations published thirty-two feature articles, plus news notes, special bibliographies, lists, and reviews. An excellent review of the literature associated with map librarianship appears in the chapter "Maps and Map Collections," by Mary Galneder and Alberta Wood in Pearce S. Grove's *Nonprint Media in Academic Libraries* (Chicago, American Library Association, 1975).

In October 1973, the *Drexel Library Quarterly* devoted an entire issue to map librarianship. In the introduction, issue editor Jeremiah B. Post noted, "This issue of the *Drexel Library Quarterly* was assembled to aid the beginning map librarian or map custodian. The articles were written presupposing little prior knowledge of or experience with maps" (9). The publication admirably succeeds in its intent and should be required reading for all beginning map librarians.

The first book in the field, entitled *Map Librarianship: Readings*, was published in 1975 by Scarecrow Press, Metuchen, N.J. Compiled by Roman Drazniowsky, map curator, American Geographical Society, the work reprints forty-eight significant articles arranged in seven sections; namely "Introduction to Maps," "Elements of Maps," "Map Classification and Use," "Map Bibliographies/Acquisitions," "Map Processing and Cataloging," "Map Storage and Preservation," and "Map Librarianship/Map Collections."

The first freshly written book to deal exclusively with map librarianship was published in 1976 by Clive Bingley, London, England, and Linnet Books, Hamden, Connecticut. It is the work of Harold Nichols, an English librarian. In the preface to his book, Nichols writes, "It is intended that this book will bring together basic principles of librarianship as applied to maps, and, where controversial, stimulate ideas on the development of map libraries. Whilst it is hoped that all map curators and anyone

with an interest in map collections will find much to interest them, the book is primarily directed to those librarians in general public, university, and college libraries, with no special education in map librarianship. . ." (10).

Although the volume provides an interesting overview of map librarianship and deserves special praise for being the first of its kind, it is heavily oriented toward the problems and needs of the map custodian working in a British library and therefore of little practical value to the map librarian in the United States. U.S. librarians interested in the field of map librarianship would be much better informed on current thought and practice if they were to consult current and back issues of the journals of the three North American library associations, the special "Map Librarianship" issue of the *Drexel Library Quarterly*, and Drazniowsky's *Map Librarianship: Readings*.

Another publication which promises to be of great value to map librarians in the United States is the recently published *Map Librarianship: An Introduction*, by Mary Larsgaard (Littleton, Colo., Libraries Unlimited, 1978).

National Union Catalog of Maps

One of the great needs in this country is a national union catalog of maps. Although there is no specific movement underway to form a comprehensive national record of cartographic materials, several active programs presently in progress may lead to realization of this dream.

In 1969, for example, the Library of Congress successfully implemented a program of machine readable cataloging for maps (MARC Map). Essentially, what this program does is place cataloging data on magnetic tape so that by automated means the data can be used for information retrieval and production of various products, such as photocomposed catalog cards, current awareness lists, and bibliographies.

All significant general and thematic maps currently received by the Library of Congress are incorporated into the data base which now stands at over 50,000 records. It is estimated that the current data base "represents bibliographic control for some 150,000 individual pieces" (11).

Maps in all languages are input, with those in non-roman alphabets being entered in transliterated form. Although the data base consists primarily of currently pro-

duced maps, some historical materials, such as more than 2,000 items pertaining to the American Revolutionary War, have been incorporated.

The MARC Map bibliographic record is available by subscription from the Library of Congress in the form of magnetic tape or computer-produced cards. In addition, the Geography and Map Division, in collaboration with the Processing Department, is considering the publication of a book catalog which would incorporate both map and atlas records. It is anticipated that the catalog would be issued quarterly, with annual and quinquennial cumulations. Eventually, the presently existing data base may also be issued in cumulated form. The availability of the MARC Map data base, whether in the form of magnetic tape, cards, or books, provides the library community and the public with a valuable, continually expanding record of the contemporary maps being acquired by the national map library.

Perhaps the most exciting development in the North American library field in recent years has been the growth of regional library networks designed to reduce the cost of cataloging and to provide computerized bibliographic data to their member institutions. To date, most network data bases consist of bibliographic descriptions of monographs held by the Library of Congress and the libraries which make up the network community. This will soon change, however, as the Ohio College Library Center (OCLC) incorporates the Library of Congress MARC Map tapes into its bibliographic file. The entire Library of Congress automated data base for maps will be available to all twenty-two networks affiliated with the Ohio College Library Center. These include the Amigos Bibliographic Council (Amigos), the Southeastern Library Network (SOLINET), the Midwest Region Library Network (MIDLNET), and the New England Library Information Network (NELINET), to name but a few. Other networks not directly affiliated with the Ohio College Library Center, such as BALLOTS and the Washington Library Network, also are planning to input the MARC Map data base in the near future.

Some participants already have begun to add map descriptions to the OCLC data base. The University of Illinois Map and Geography Library recently obtained a grant which has enabled it to establish the Illinois Bibliographic Center for Cartographic Materials. University of Illinois

Map and Geography Librarian David Cobb notes that their "primary responsibilities will revolve around the acquisition, cataloging, and care of Illinois maps and related material. In turn, we will make this information available to the libraries of Illinois through the OCLC data base . . ." (12). Cobb later reported that the Map and Geography Library had added approximately twenty-five titles to the data base in the first two weeks under the grant and expected to add a minimum of twenty-five titles each week in the following months (13).

With the incorporation of the MARC Map record into the various network data bases and the addition of other descriptions provided by member libraries, a significant advancement toward a computerized national union catalog of maps will have been made.

Another significant contribution toward a union catalog of maps, although not in automated form, is the Midwest Cataloging Project. In 1975, the Newberry Library, Chicago, was awarded a grant from the National Endowment for the Humanities to prepare a catalog of maps of the Midwest published before 1900. Participating in the program with the Newberry Library were the state historical societies of Illinois, Indiana, Iowa, Ohio, and Wisconsin, the Chicago Historical Society, and the Michigan State Archives. Recording of the relevant maps in these institutions, other collections in the region, and the Library of Congress is now complete. The Newberry Library is presently editing the records for uniformity of headings and descriptions.

Recently, plans were implemented for a second phase of the Midwest Cataloging Project which will add additional states to the catalog. The new states to be included are Missouri, Minnesota, Kansas, North Dakota, South Dakota, and Nebraska. The eventual publication of this information in the form of a printed book catalog will substantially increase our knowledge of the pre-twentieth century maps of the Midwest. Perhaps other regions of the United States, encouraged by the success of this cooperative cataloging project, will wish to emulate it.

International Cooperation

Geography and map librarianship received a significant boost in August 1969, when the International Federation of Library Associations (IFLA) established a

Geography and Map Subsection within its Special Libraries Section. For the first time, an international organization was created for the discussion of problems and issues of concern to map and geography libraries around the world. In 1977, IFLA was restructured. Geography and Map became a full Section within the Special Libraries Division.

The first project of the Geography and Map Section, the compilation of a *World Directory of Map Collections*, was issued by IFLA in 1976. Edited by Walter W. Ristow, this first international directory of map libraries includes descriptions of 285 collections in 47 countries. Working groups within the Geography and Map Section are also actively engaged in a study of training for map librarians and in the development of a multilingual glossary on map library terms.

In 1974, the IFLA formed a joint working group composed of members from the Association's Committee on Cataloguing and the Geography and Map Libraries Subsection, for the purpose of developing an acceptable international standard for describing maps and related items. The final recommendations of the joint working group were submitted at IFLA's World Congress held in Brussels, Belgium, Sep 5-10, 1977. The International Standard for Bibliographic Description for Cartographic Materials, perhaps better known under its initials ISBD(CM), "specifies requirements for the description and identification of all materials representing, in whole or in part, the earth or any celestial body at any scale . . . and assigns an order to the elements of the description, and specifies a system of punctuation for that description" (14). The second edition of *Anglo-American Cataloging Rules*, published late in 1978 for use beginning Jan 2, 1980, will be largely compatible with the International Standard for Bibliographic Description for Cartographic Materials.

Map Librarianship Today

Writing in 1967, Walter Ristow noted, "Employment prospects in map librarianship today are exceedingly favorable. In part because of retirements, but more especially because a number of colleges and universities have established separate map rooms or departments, the current demand

for map librarians greatly exceeds the supply" (15).

The picture has changed considerably in the twelve years since that statement was written. Libraries in general now find themselves in precarious financial positions due to decreased federal funds, inflation, and the spiraling cost of energy. Library administrators and library boards, in attempting to live within their budgets, have curtailed hours of service, dropped special community programs, frozen or reduced the size of their staffs, reduced the purchase of supplies and equipment to the barest essentials, and decreased the number of items acquired. Map libraries, not islands unto themselves, find themselves caught up in the same debilitating situation.

Societies have also suffered, as stocks and trust funds rapidly decline in value and operating expenses rise. The American Geographical Society, for example, is in serious financial difficulty, literally fighting for survival. In an attempt to "rid the Society of the severe financial difficulties that have plagued it in recent years," the American Geographical Society Council formed an agreement in 1976 with the University of Wisconsin Board of Regents to transfer its famous geography library and map collection to the University of Wisconsin at Milwaukee. After a two year delay while seeking permission to move from the New York Supreme Court, the transfer of the Society's collections to Milwaukee commenced in August 1978 (16).

There appear to be enough map librarians presently being trained to fill the few vacancies which occur each year. Due to budgetary restraints there is little likelihood that the number of persons employed in the map library field will dramatically increase in the near future. A few federal map libraries have actually undergone reduction in staff size in recent years.

The Geography and Map Division, Library of Congress, and the Center for Cartographic and Architectural Archives, National Archives, have continued to flourish. Both have gradually expanded their staffs, improved their controls over their collections, and expanded their service to the public. Ralph Ehrenberg and Charles Taylor, chief and assistant chief, respectively, of the Center for Cartographic and Architectural Archives, National Archives, are now active members in the Geography and Map Division, Special Libraries Associa-

tion. This is the first time that National Archives staff members have actively participated in the map library field.

The staff of the Geography and Map Division, Library of Congress, continues to provide essential national and international leadership in map librarianship. Of special note, and with significant ramifications for the whole country, was the library's successful creation and continuing development of a computerized system for the processing of map cataloging data.

Summary

The field of map librarianship in the United States has never been stronger. There are more well-trained professionals employed in map libraries today than at any former time. In addition, interest in maps continues to expand. However, unless the economy stabilizes it is not likely that employment opportunities will significantly increase in the near future or that collections will grow as rapidly as they did in the past.

In closing this review of map librarianship, it seems appropriate to pay tribute to a leader of our profession, Walter W. Ristow. At the end of April 1978, Dr. Ristow retired as Chief of the Geography and Map Division, Library of Congress. Through his years of leadership at the library, in the active roles he has played in the creation, organization, and growth of the SLA Geography and Map Division and the IFLA Geography and Map Section, and through his extensive writings, Dr. Ristow has had a profound and lasting effect on the development of map librarianship in this country and abroad. The story of map library science since World War II is so intertwined with the career of Walter Ristow that it is impossible to separate the two. His retirement signals the end of an era in our history which can best be described as "The Emergence of Maps in Libraries," the title selected by Dr. Ristow for one of his well-known articles.

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An Examination of Search Strategy and an On-Line Bibliographic System Pertaining to Library and Information Sciences

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■ An examination of an on-line bibliographic search in ERIC data bases on evaluating computerized bibliographic data bases and systems yielded several results. Researchers compared precision ratios of the computer-produced bibliographies with regard to various parameters. The results of an on-line search using a controlled vocabulary were compared with a similar search using combined controlled and uncontrolled terms and were analyzed for sources and authors of publications. The authors recommend several aspects of on-line searching for more relevant search results in library and information science literature.

AS LIBRARIANS are more actively involved in producing bibliographies from computerized data bases via on-line terminals, they are searching the literature in hopes of being able to improve the provision of this service. Two recent reports (1,2) have analyzed the abstracting and indexing of library and information science literature but do not specifically address on-line bibliographic searching of that literature. Neither study included Educational Resources Information Center (ERIC) publications *Resources in Education* and *Current Index to Journals in Education*. However, ERIC regularly covers relevant information science literature. Possibly because the corresponding computer-searchable ERIC

data bases were among the first introduced to many librarians (3), they often turn to it for their own professional literature needs.

ERIC as a literature resource in library and information science fields has been examined in terms of journal coverage and publication type (4). As a consequence of that study, Knapp and Zych recommended an ERIC search, but with some reservations. The purpose of this paper is to examine an ERIC search strategy relevant to computer searching.

Methodology

One of the authors, student Veronica Eden, planned an individualized study course at the University of California,

Santa Barbara (UCSB) and defined a self-paced project using computer searching techniques to analyze a specific library service function. She had some library experience as a library assistant in the UCSB library but no previous on-line/computer searching experience. The two other authors (librarians) instructed the student author about the ERIC resources and on-line searching techniques. Since time was limited, the preparation was intensive. The student author designed the computer search; the results and analysis are discussed in the following paragraphs.

The Search

The study and search were performed in August 1977 to identify documents which discuss the evaluation of computerized bibliographic data bases or search systems for those data bases. The ERIC data bases were searched using System Development Corporation's ORBIT system. Two search facets were intersected (ANDED) (Table 1). Redundancy in search terms was part of the strategy in order to achieve a large output suitable for analysis. A total of 576 citations were retrieved.

It was desirable to obtain some indication of the precision of the search results. As the assessment of the relevance of documents to a search request is highly subjective (5), the techniques used in this study did not lend themselves to accurate quantitative measures.

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Table 1. ERIC Descriptors Used in Search.

| Facet 1 | Facet 2 |
|-----------------------|-----------------------------------|
| information systems | evaluation methods |
| information retrieval | comparative analysis |
| on-line systems | content analysis |
| | relevance (information retrieval) |
| | evaluation criteria |
| | search strategies |
| | cost effectiveness |

Results

The titles and abstracts in the bibliography (output) were scanned by one of the authors. Each citation was classified into one of five categories: relevant, partially relevant, irrelevant, of indeterminable relevance, or duplicate. Two of the citations were exact duplicates of other retrieved citations and were removed from all further consideration in this study. An attempt was made to classify all citations as relevant, partially relevant, or irrelevant. However, 29 citations were considered of indeterminable relevance because it was impossible to determine if they dealt in any way with the topic on the basis of title or abstract. For the most part, these citations had only brief abstracts and nondescript or ambiguous titles.

The 132 partially relevant citations had some bearing on the subject, but, at least as far as could be determined from the information in title and abstract, did not specifically deal with the evaluation of bibliographic data bases or data base services. There were 105 citations classified as relevant and 308 as irrelevant. The researchers were primarily interested in the variation in precision as the parameters of the search are changed and attached little significance to the absolute magnitude of the precision.

Cleverdon (6) has defined the precision ratio as the number of relevant documents retrieved divided by the total number of documents retrieved.* In this study, three variations on the precision ratio (PR) were attempted (7).

Precision ratio 1:

$$\frac{R}{R + P + I + X}$$

Precision ratio 2:

$$\frac{R + 0.5 P}{R + P + I + X}$$

*Cleverdon used the term "relevance ratio" and multiplied the ratio by 100 to express it as a percent. The term "precision ratio" is preferred by Lancaster.

Precision ratio 3:

$$\frac{R}{R + I}$$

R is the number of relevant citations; *P* is the number of partially relevant citations; *I* is the number of irrelevant citations; and *X* is the number of citations for which no decision was made with regard to relevancy.

PR1 treats the partially relevant citations as essentially irrelevant. PR2 gives some weight to the partially relevant citations, but is artificial in that a weight of one-half was assigned to each partially relevant citation. A range of weights reflecting varying degrees of partial relevance may have been more appropriate but would have been virtually impossible to apply realistically. PR3 ignores the "grey" areas of partial or unknown relevancy. For the ERIC/ORBIT search based on descriptors only, described above, PR1 = 0.18, PR2 = 0.30 and PR3 = 0.25.

Two clearinghouses, information resources (IR) and library and informa-

tion sciences (LI), were responsible for all the relevant citations. LI merged into IR in 1974. Had the search been limited only to the IR and LI clearinghouses the precision ratios would have been PR1 = 0.24, PR2 = 0.37, and PR3 = 0.36. As expected, a considerable increase in precision is obtained, and this is offered as evidence that there is some validity to the relevance judgments.

In computing the ratios of precision an estimation of the improvement in precision may be obtained by limiting the search to the IR and LI clearinghouses. Let *A* be the search allowing all clearinghouses, and *B* be the search limited to the IR and LI clearinghouses.

$$\frac{PR1(B)}{PR1(A)} = \frac{.24}{.18} = 1.33$$

$$\frac{PR2(B)}{PR2(A)} = \frac{.37}{.30} = 1.23$$

$$\frac{PR3(B)}{PR3(A)} = \frac{.36}{.25} = 1.44$$

Since PR3 provides the greatest degree of discrimination, and most pertinent



Table 2. Number of relevant items retrieved for each term in facet 2 versus combinations of facet 1.

| Facet 1 \ Facet 2 | Relevance | | | | | | |
|-----------------------------------|--------------------|----------------------|------------------|-------------------------|---------------------|-------------------|--------------------|
| | Evaluation Methods | Comparative Analysis | Content Analysis | (information retrieval) | Evaluation Criteria | Search Strategies | Cost Effectiveness |
| A Information systems (only) | 2 | 2 | 1 | 3 | 0 | 2 | 3 |
| B Information retrieval (only) | 5 | 9 | 0 | 24 | 1 | 21 | 5 |
| C On-line systems (only) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Both A & B | 9 | 7 | 2 | 18 | 1 | 17 | 11 |
| Both A & C | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Both B & C | 0 | 0 | 0 | 0 | 0 | 2 | 4 |
| All A, B, & C | 3 | 4 | 0 | 7 | 0 | 14 | 4 |



citations, it will be the only precision ratio used in the remainder of this discussion.

Each of the two facets was examined to determine if there were any descriptors which did not occur in any of the relevant citations as unique descriptors within their facet. All of the terms appeared in relevant citations at least on occasion. However, "on-line systems" was never a unique descriptor in the information retrieval facet, but the other two phrases were. Therefore that facet could have been constructed from the union of the terms "information systems" and "information retrieval." It should be pointed out that the latter occurred far more often than the former. By similar reasoning, "content analysis" was unnecessary in the other facet; but none of the other terms could be excluded. Had the terms "on-line systems" and "content analysis" been excluded from the search, PR3 would have been improved only to 0.38. A considerable improvement in precision could have been achieved by simply restricting the strategy to "relevance (information retrieval)" and "information retrieval." However, this would have been at the expense of missing some relevant citations. In Table 2, the number of relevant items retrieved for each term in facet 2 intersected with various combinations of terms in facet 1 is illustrated. Note that the combinations of facet 2 terms is not indicated in this table.

Many of the irrelevant citations retrieved dealt with information retrieval systems other than bibliographic. The output indicated that there is no practical way to avoid low precision

resulting from those citations if high recall is desired. This is a reflection of the failure of ERIC to provide a descriptor specifically for "bibliographic information retrieval." A small number of relevant citations carry identifiers such as "computerized literature searches" or "on-line bibliographic search," but the terminology for this concept has not been standardized in the ERIC system.

The descriptor "evaluative criteria" was involved in the retrieval of only two relevant citations, and in both cases it was there as a major descriptor. All other descriptors appeared both as major and minor descriptors for relevant citations. Three of the relevant citations (8-10) were retrieved only by minor descriptors, and hence would not have been retrieved by an exhaustive manual search using each of the descriptors. A more reasonable expectation for a manual ERIC search is that the descriptors in the first facet only would be used, with the client scanning titles for relevance. Eight of the relevant citations had only minor descriptors in the first facet.

A fairly large number of descriptors are assigned by the ERIC indexers (11). In view of the magnitude of the output of relevant citations in the search, it is reasonable to expect that this was an example of the kind of ERIC search that could be performed using controlled vocabulary descriptors alone. In order to test this assumption, and also to learn if any additional descriptors should have been included in the search, the initial search was expanded with some free terms. A union of the initial first facet was made with a selection of names of specific search systems, languages, and data bases (e.g., Lockheed, ORBIT, INSPEC) and other free terms. No attempt at a comprehensive listing or to include all possible variations on a given name was made. The second facet was expanded to include a number of free terms such as "recall," "precision," and "cost AND effectiveness" (Table 3). The intersection of these two new facets was formed and the initially retrieved

set "NOTed" out. The result was 159 citations, of which 39 were judged as relevant and 24 partially relevant. No significance should be attached to the numbers themselves, since relatively few of all possible free terms were included in this second search. All of the relevant or partially relevant citations were from the IR or LI clearing-houses.

Nearly all of the additional relevant citations would have been retrieved in the initial search if the second facet had included the descriptors "evaluation" and "evaluation techniques." A few of the citations should have been retrieved in the initial search because they were indexed by at least one term from the first facet, as well as the descriptor "relevance (information retrieval)"; apparently they were missed because the closing parenthesis of that descriptor was omitted in the data base by the clearinghouse indexers. Only one relevant citation, ED 023421 (12), could not reasonably have been retrieved with only controlled vocabulary

• •

Table 3. Free-Terms Used to Expand Search.

| Facet 1 | Facet 2 |
|---------------------|----------------------|
| Lockheed | evaluate: |
| bibliographic AND | compar: |
| retrieval AND | |
| service | |
| system AND | relevance AND |
| development AND | information |
| corporation | |
| psych AND abstracts | recall |
| psychological AND | precision |
| abstracts | |
| on-line | content AND analysis |
| bibliographic AND | cost AND |
| data AND base # | effectiveness |
| ORBIT | cost AND analysis |
| DIALOG | cost AND benefit # |
| BRS | search AND strateg: |
| CA AND condensates | |
| INSPEC | |
| Agricola | |
| Biosis | |
| NTIS | |
| INFORM | |
| CAIN | |



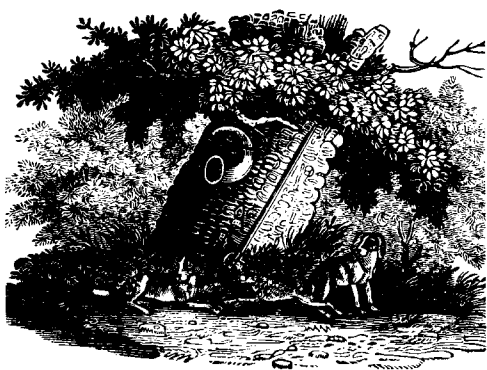
descriptors appropriate to this search question.

More than half of the relevant citations had ED accession numbers (i.e., were from *Research in Education*), 38 of which were technical reports which libraries with standing orders receive automatically on microfiche. The remaining 27 citations with ED numbers are not available on standing order from ERIC and must be purchased separately. These included 21 National Technical Information Service (NTIS) reports, as well as a book from a commercial publisher, and a scattering of reports from professional societies and library schools. The remaining citations were journal articles. Two journals, the *Journal of the American Society for Information Science* and the *Journal of Documentation* accounted for more than half of these citations. Both journals are indexed by *Current Index to Journals in Education*, *Library Literature*, and *Library and Information Science Abstracts*. The rest of the citations were from *American Documentation*, *Information Processing and Management*, *Information Storage and Retrieval*, *Journal of Chemical Documentation*, *Library Resources and Technical Services*, *Special Libraries*, and the *Unesco Bulletin for Libraries*.

An attempt was made to gather statistics about the work location of authors. Citations with EJ accession numbers do not include this information; most of those with ED numbers have an organizational source listed. In many cases this information was not provided for

ED citations, however, and in those cases, the authors looked into the fields for sponsoring organization or notes in order to make some judgment about work location. Some reports with more than one author included different locations for each author. For some reports, no authors were given.

When each individual author was counted separately for each report, only four organizations were counted five or more times: The Center for Documentation and Communication Research at Case Western Reserve University, Cleveland; Westat Research Inc., Rockville, Md.; the Department of Computer Science, Cornell University, Ithaca, N.Y.; and the Institution of Electrical Engineers in London (IEE). Other work



locations included library schools (University of California at Berkeley, University of Illinois at Urbana, Indiana University, University of Southern California, and San Jose State University); other departments and research institutes at universities; corporations which provide information-related services (including both System Development Corporation and Lockheed Retrieval Service); professional societies (American Psychological Association, and the American Society for Information Science in addition to the IEE already mentioned); national and local governmental agencies in the United States, Great Britain, and Sweden; private research organizations; and one nonuniversity library (National Library

of Medicine in Bethesda). In many of the other cases, of course, the work was probably done by the libraries of parent organizations.

An interesting related study might examine the capabilities of the organizations which were cited as contributing substantially to publishing research reports about on-line searching. Were resident researchers given time and support to conduct research and encouraged to publish results of their findings? Were most of the research studies conducted by instructional faculty, by research librarians, or by research assistants (with grants)?

Recommendations

Information and library science literature indexes should establish a specific standardized term for "on-line bibliographic information retrieval." Searching with uncontrolled vocabulary, although it may at times be valuable, often results in irrelevant citations in which terms co-appear in the same paragraph in the bibliographic citation, but in different contexts.

Persons or agencies who submit items to ERIC should allow ERIC to print and distribute the documents on microfiche through the ERIC system, if at all feasible. There may be a serious and growing time lag for the searcher to acquire documents which are not distributed through the ERIC system.†

When a searcher is defining a search strategy with a client in preparation for an on-line search, the team should select whether it desires high recall/low precision (large result of hits) or low recall/high precision (small result). That decision will determine

†There may be problems with this recommendation beyond the control of either ERIC or the individual authors such as the refusal of some publishers to accept material that has been previously published in any form. This problem ought to be resolved so that the person requesting the document does not have to contact the author, whose current address may not be readily available.



how broad or narrow the resulting Boolean statement will be. For example, the searcher should select the most relevant terms for the search statement and omit marginal terms, if precision is to be emphasized.

Often, a preliminary scan of controlled terms and sampling of pertinent full bibliographic citations (with abstracts) for free-text terms by the searcher assists in the selection of the most pertinent terms (controlled and free text) and helps define the limitations of some of the selected controlled and free-text terms.

For searches on ERIC in the fields of library and information science, searchers may want to limit search results to the IR and LI clearinghouses to retrieve the most relevant citations.

Improvement in the overall recall of relevant citations may be achieved by including both controlled and free-text terms in a search. This full coverage of concepts provides greater assurance that errors or variations in the indexing will be overcome.

Conclusion

The evaluation of on-line bibliographic data bases and information retrieval systems by libraries and librarians is in the beginning stages. The terminology needs to be standardized and the indexing error rate and variability should be lowered. Principles of

on-line searching should be explicated, examined, and redefined. And, documentation should be available through standardized clearinghouses.

Acknowledgment

The authors gratefully acknowledge funds made available by the UCSB Department of Electrical Engineering and Computer Science for the computer search.

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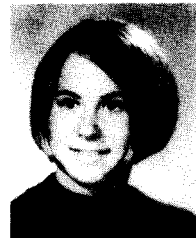
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WEIMER



EDEN

A Computer-Based Index to Book Reviews in the Physics Literature

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■ Production of computer generated author and key word from title indexes to book reviews in physics was undertaken because such compilations were seen as useful bibliographic tools for both librarians and physicists. Included are all reviews which appeared in 1976 and 1977 from journals originally published in the English language by the American Institute of Physics. The TRIAL computer program was used to manipulate the raw data input and produce the printouts. Data elements available from the indexes are: author, title, local call number, publisher, year of imprint, month and year of the journal(s) in which the review(s) appeared, series, cost, and location(s) in the local library system. Searches could be made and/or printouts obtained for any of these data elements, singly or in combination.

WHenever one undertakes a project to produce an in-house reference tool, there must be some demonstrated or perceived need for its existence. Such was the case with this author's decision to create an index to reviews of new physics books. It has been observed that, like other scholars, physicists who are embarking on study in a topic new to them may wish to know what recent books are available. If they are seriously considering taking the time to read a book or two, it is nice to be able to know where one can find some opinions on the merits and shortcomings of titles available on the subject. Some examples of people who may seek book reviews are those entering an area of research new to them; professors teaching a course, especially for the first time; students desiring supplementary reading on a topic; and individuals who are doing independent study for whatever rea-

son. Of course, there are always subject librarians who may, if their time and fiscal budgets permit, wish to read book reviews for acquisition and selection purposes.

Persons who read book reviews may wish to glean more than a statement of what is presented in the book or even a subjective evaluation of its merit. If they are considering personal purchase or adoption as a text, cost will be important. Some readers place special emphasis on the reputation of either the author or publisher. Almost anyone interested would like to know if the book has been added to the library's collection or is on order.

Sources

Having determined a need for physics book reviews, and considering the information that users will likely desire, is there any source that brings

this together in a neat package? The author's answer to this question is no, if one considers all the subject areas of physics. There are physics journals, such as the *American Journal of Physics*, *Physics Teacher*, and *Physics Today*, that print book reviews from a broad range of topics. One might also include the *Technical Book Review Index*. The problem with all of these titles is that, taken either individually or collectively, their coverage is far short of being comprehensive. Turning to the book review listings in *Physics Abstracts* and the *Current Physics Index*, one finds the results to be little improved. Neither source comes close to even mentioning all of the book reviews which are known to exist. Also, the *Physics Abstracts* book section is an index to books abstracted, as opposed to those reviewed, if one wishes to make that distinction. In addition, it is of a strongly British flavor, in terms of source of publication. *Current Physics Index* does have a book review section. However, their coverage does not include all of the reviews appearing in American Institute of Physics journals. Lacking other possible titles having listings or compilations, one concludes that there is no comprehensive source of physics book reviews, nor any all-inclusive index to them.

Trying to select those journals whose book reviews would give the most inclusive coverage of newly published literature was the next step in the process. It had previously been determined that there were 53 physics and astrophysics journals on subscription in the University of Colorado, Boulder, Mathematics-Physics library which sometimes published book reviews. In many of these titles, book reviews were either few or infrequent.

A thorough, year-long study of the number of reviews appearing in each of these titles and how many times a given book was reviewed would have provided the most valid basis for selecting the journals from which reviews would be indexed. Pressures on available staff time did not seem to justify this effort.

However, the following information was determined and taken into consideration.

The "New Books" section included in each issue of *Physics Today* constitutes the most comprehensive listing of current physics books of which the author is aware. During 1976, there were 618 book titles listed therein. It was thought that the journals published by the American Institute of Physics (AIP) in which reviews appear would provide a good combination of breadth of subject scope, level of difficulty, and coverage of a significant percentage of titles recently published. There were 405 titles reviewed by these eight journals in 1976. It was not determined how many of these books corresponded to those listed in the "New Books" section of *Physics Today*. It does seem reasonable to assume that the coincidence would be rather high, especially over a long period of time. One should also consider that *Physics Today* is an AIP journal and their editors probably draw books from this list to be reviewed.

When the project was started the amount of staff time that could be devoted to processing book reviews into machine readable form for this project was limited. Therefore, it was decided to proceed with those eight journals originally published in the English language by the AIP which regularly contain book reviews. They are as follows: *Acoustical Society of America Journal*, *American Journal of Physics*, *Applied Optics*, *Journal of Vacuum Science and Technology*, *Medical Physics*, *Optical Society of America Journal*, *Physics Teacher*, and *Physics Today*.

Processing

Production of a printed index with the features thought to be desirable required the following steps:

- Identify those journals from which book reviews will be indexed.
- Xerox book reviews from those journals as they arrive.
- Check the titles of all books reviewed against those previously processed to eliminate duplication of encoding effort.

- Key punch all bibliographic information to be input from each review into the format accepted by TRIAL.
- Edit the IBM (Hollerith) cards for accuracy.
- Arrange the punched card sets for all book reviews into a master file, alphabetically by title of the book.
- Check the titles of all books reviewed against the library's central card catalog, when all reviews expected from one year have been received. Record the call number and location within the library if the book is in the collection.
- Check the titles of all books reviewed against the orders-in-process file, when all reviews expected from one year have been received. If the book is on order, record the library department to which it will be accessioned.
- Key punch information obtained from the searches done in the preceding 2 items and add these cards to the master file.
- Input the data to the computer to create a permanent file.
- Obtain a printout and listing of the permanent file.
- Edit the printout for errors of varying kinds.
- Repunch incorrect IBM cards.
- Compile a list of those words, numerals, letters, and special symbols which should not appear on index terms in the author and key word from title indexes (stopwords).
- Submit a program to run the indexes.
- Edit and debug as necessary to produce a "clean" copy.

Most of the steps listed above would seem to require no further comment. The only operations that, in the author's opinion, may raise any questions are those pertaining to key-punching information into computer-readable format, programming the computer to perform the operations desired, and debugging and/or editing the results.

The Storage and Retrieval System

The remainder of this paper will briefly treat TRIAL, the information storage and retrieval system used to create the indexes. "TRIAL" is an acronym for "technique for retrieving information from abstracts of litera-

ture." The system was designed especially for manipulation of bibliographic data and was first developed at the Northwestern University Computing Center. It is documented by their Information Services Technical Report 74-004 (1) and by Florida State University's Computing Center publication entitled *FSU/TRIAL Reference Manual; a Textual Data Base Management and Retrieval System* (2). Another practical manual presenting TRIAL is entitled *TRIAL-Producing Media Catalogs* (3) which is available by contacting its author.

TRIAL is constructed to provide nine possible levels of information. In compiling a file, an individual must use level 1, and may use as many other levels as seems necessary. There is virtually no restriction as to what type of information may be input at any given level. For each bibliographic entity (in this case, a single book review) up to 680 cards each are allowed in levels 1-6, and up to 400 cards each in levels 7-9. The information from all levels that describe one bibliographic item constitute a record.

Information included in the file was encoded as follows:

| | |
|---|---------|
| Call number of the book | Level 1 |
| Author of the book | Level 1 |
| Title of the book | Level 2 |
| Journal title and month of publication of the review | Level 3 |
| Publisher and date of publication of the book | Level 4 |
| Series title and volume number of the book | Level 5 |
| Purchase price of the book | Level 7 |
| Location of the book within the CU Boulder library system | Level 8 |

Providing detailed instructions regarding more specific considerations and methodologies used to produce the resultant indexes seems beyond the scope of this paper. The author relied heavily on *TRIAL-Producing Media Catalogs* (3, p. 17), which is written in step-by-step "cookbook" style. With the aid of this publication, no previously gained ability in any programming language is required to use TRIAL. Such experience, and familiarity with

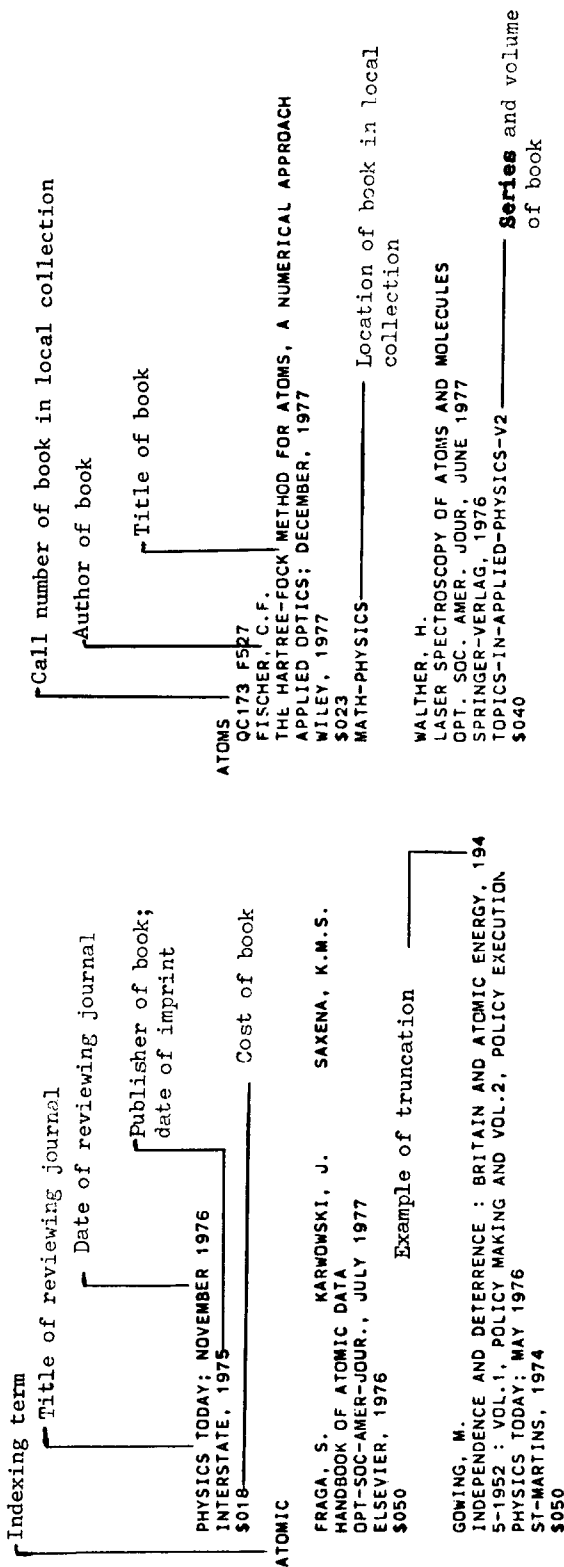


Figure 1. Sample Page—KWOC Title Index.

the general operating procedures at one's computing center is, of course, helpful. One can, and should, seek help from the center's user advisory personnel, preferably the person who maintains TRIAL.

Within McWeeney's guide are found the general procedures for formatting and encoding information. Also present are the specific sequences of cards required to run programs for the most frequently desired procedures and outputs. Among these are creation of a permanent file, obtaining a copy and listing of this file, editing the file, adding to the file, compiling indexes from the corrected permanent file, searching the file for specific terms, and purging the file to eliminate unnecessary storage costs when the information is no longer correct or needed.

A sample page from the key word out of context title index is provided to enable the reader to better visualize an example of the information provided and its format (Figure 1). Location of the various data elements provided within such record is indicated. Index terms are printed at the head of each column or after any citation which has been continued from the previous page is completed. Entries continued from the previous page at the top of the left column have no indication, see the figure, of the term under which they have been indexed. As was just implied, citations may be split, either between pages, as on the sample page, or between columns. Unless keypunched otherwise, words will be truncated after 60 characters of any line printed, as indicated on the example. It is the author's opinion that these features are mostly aesthetically displeasing, and have little effect on the usability of the product.

Summary

This is how author and KWOC title indexes to book reviews appearing in 1976 American Institute of Physics journals were obtained. The author had almost no computer programming experience before attempting the project.

It was undertaken as a learning experience in conjunction with an informal class offered by McWeeney. The instructor offered considerable advice and help with debugging programs. Therefore, a cost analysis of the project, although done, revealed little that could be taken as representative for future projections. The expense related to continuing the project for 1977 book reviews was considerably less. TRIAL is heartily endorsed for use when one needs to convert relatively small, in-house, bibliographic files into computer-manipulatable information systems.

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Special Libraries in Singapore

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■ Special libraries in Singapore were established mostly during the last two decades. Most of them are government supported. Broadly, five main categories of special libraries, each at a different level of development, can be distinguished. Because of the country's rapid industrial expansion, these libraries constitute an evolved rather than a planned response to the nation's information needs. The result is that there is some fragmentation of resources and services. Some suggestions are given for improving various aspects of special libraries and special librarianship.

THE REPUBLIC of Singapore is a compact country with an area of 596.8 kilometers, consisting of the island of Singapore and some 54 islets within the territorial waters. It has a population of slightly over 2.3 million.

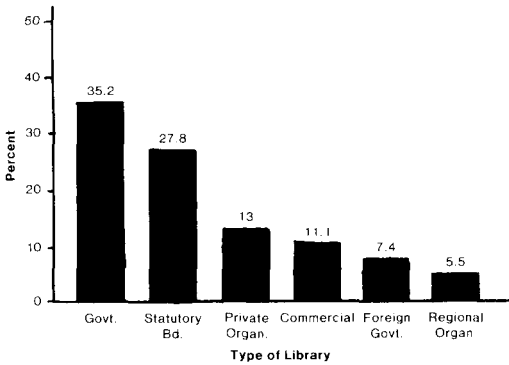
For over a century and a half since its founding, Singapore's history has been one of steady economic growth. In early 1960 when the country's population reached a point where the economy could no longer depend entirely on entrepôt trade and commerce, the Government embarked on an ambitious program of industrialization. This resulted in the establishment of numerous statutory boards* and new govern-

ment departments and educational institutions to train the needed skilled personnel. Accompanying this new development was the setting up of new special libraries to cater to the information and educational needs that arose.

These special libraries, the product of the country's accelerated economic and industrial development, constitute the youngest category of libraries in the country. The *Directory of Libraries in Singapore (1)* published in 1975, listed 104 such libraries. A most recent personal count shows that the number has now grown to 108. Since details of most of them are available from the *Directory*, only an overview will be presented here which includes types of libraries, staff, collections, and services. This will show the state of special library services in the country and suggest steps that may be taken to further improve and upgrade the development of special libraries and special librarianship. The term "special libraries" is used here in a wide sense to embrace all the generally accepted categories, including libraries in technical colleges and universities.

*Statutory Boards are organizations dealing with important or essential public services (such as telecommunications, public utilities, and so on) and which are set up by the Government by Acts of Parliament. As such, they are under the portfolio of a government ministry. Statutory boards are governed under the trustee of Boards with, among others, top civil servants as board members. Though supported by the Government financially, they are autonomous administratively.

Figure 1. Types of Special Libraries by their Source of Support.



Overview

The statistics cited in this paper are based on statistical information contained in the *Directory*, which the Library Association of Singapore obtained by means of a questionnaire. From a total of 701 questionnaires sent out, 147 replies were received. Although the survey return was poor, a fairly accurate picture of the state of special libraries in the country is still

obtainable because the major special libraries responded to the survey.

Figure 1 shows the type of special libraries classified by their source of financial support. Six categories of special libraries were distinguished here, though strictly speaking there are only five; the first two categories are supported financially by the same source, namely, the Singapore government. A total of 63% of the special libraries are funded by the government. The most rapid growth occurred during the 1960s and 1970s, 29.6% and 30.6%, respectively. These two figures provide evidence of the Singapore government's pursuit of rapid industrial development in the last two decades.

Table 1 presents data concerning the size of the libraries by their holdings in terms of physical volumes and periodical titles. As shown in the table, 22.4% of them have less than 1,000 volumes of publications and 40.5% have less than 50 periodical titles.

Table 2 illustrates the state of the special libraries in terms of staff. More than half (60.2%) of these libraries do not have professional staff. Of the

Table 1. Size of Libraries by Holdings.

A. Books

| No. of Vols. | No. of Libs. | Breakdown by Kind of Library | | | | | Regional Organizations |
|---------------|--------------|------------------------------|-----------------|-----------------------|------------------|---------------|------------------------|
| | | Govt. | Statutory Board | Private Organizations | Commercial Firms | Foreign Govt. | |
| < 1,000 | 24 | 8 (33.3%) | 2 (8.3%) | 5 (20.8%) | 5 (20.8%) | 3 (12.5%) | 1 (4.2%) |
| 1,000-4,999 | 17 | 47 (26.2%) | 13 (27.7%) | 4 (8.5%) | 5 (10.6%) | 4 (8.5%) | 4 (8.5%) |
| 5,000-9,999 | 17 | 7 (41.1%) | 4 (23.5%) | 2 (11.8%) | 2 (11.8%) | 1 (5.9%) | 1 (5.9%) |
| 10,000-19,999 | 6 | 2 (33.3%) | 3 (50%) | 1 (16.7%) | | | |
| 20,000-29,999 | 4 | 2 (50%) | 1 (25%) | 1 (25%) | | | |
| 30,000-39,999 | 2 | 2 (100%) | | | | | |
| > 40,000 | 7 | | 7 (100%) | | | | |

B. Periodicals

| No. of Titles | No. of Libs. | Breakdown by Kind of Library | | | | | Regional Organizations |
|---------------|--------------|------------------------------|-----------------|-----------------------|------------------|---------------|------------------------|
| | | Govt. | Statutory Board | Private Organizations | Commercial Firms | Foreign Govt. | |
| < 50 | 43 | 20 (46.5%) | 6 (14%) | 7 (16.3%) | 9 (20.9%) | 1 (2.3%) | |
| 50-99 | 14 | 4 (28.6%) | 2 (14.3%) | 2 (14.3%) | 2 (14.3%) | 4 (28.6%) | |
| 100-199 | 14 | 3 (21.4%) | 6 (42.9%) | 1 (7.1%) | | 2 (14.3%) | 2 (14.3%) |
| 200-299 | 14 | 5 (35.7%) | 3 (21.4%) | 2 (14.3%) | | | 4 (28.6%) |
| 300-399 | 8 | 3 (37.5%) | 3 (37.5%) | 1 (12.5%) | 1 (12.5%) | | |
| > 400 | 13 | 3 (23.1%) | 10 (76.9%) | | | | |

Table 2. Extent of Employment of Professional Staff in Singapore Special Libraries.

| Staff | Percent |
|---|---------|
| All | |
| Trained staff | 39.8 |
| Untrained staff | 60.2 |
| Types of libraries with trained staff | |
| Government libraries | 34.9 |
| Statutory board libraries | 39.5 |
| Private organizations | 4.6 |
| Foreign government | 7 |
| Regional organizations | 14 |
| Types of libraries with untrained staff | |
| Government libraries | 38.3 |
| Statutory board libraries | 21.7 |
| Private organizations | 20 |
| Foreign government | 20 |

• •

libraries that are run by trained personnel, 34.9% are government libraries and 39.5% are statutory board libraries. A similar number of government libraries, 38.3%, are run by untrained staff.

Figure 2 indicates broadly the major subject areas of the libraries. Economics and social sciences as well as science

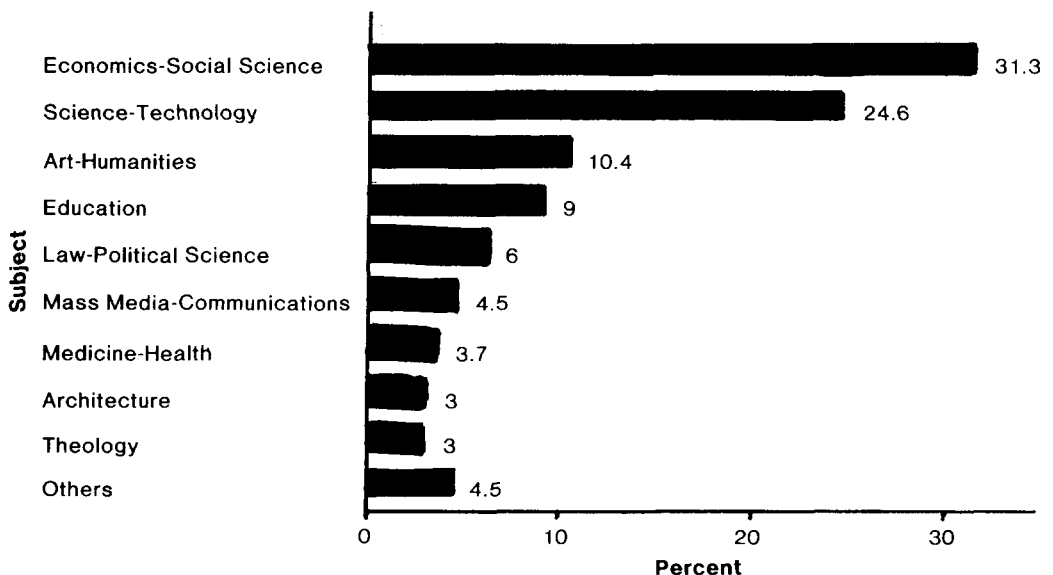
and technology account for 55.9% of the total subject profiles of the libraries. About 14% of the libraries surveyed indicated that besides publications, they also acquire nonbook materials such as microfilms and other audio-visual materials.

General Comments on Each Category of Special Libraries: Libraries of Private Organizations

The information from the *Directory* shows that of all the libraries listed, those in private organizations, commercial firms, and some small government departments are most poorly equipped in all aspects of library services. Though Singapore's economy is based principally on commerce, there are no important commercial libraries in the country, except perhaps the Library of the International Chamber of Commerce. One possible explanation for this is that most of the commercial firms or businessmen are able to obtain information—usually relating to potential markets, industries, quality control, trade statistics, and so on—from such government department libraries as those in the Department of Statistics,

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Figure 2. Subject Profiles of Singapore Special Libraries.



the Department of Trade, the Singapore Institute of Standards and Industrial Research (SISIR), their local Chambers of Commerce or direct from their parent organizations overseas. Hence, few commercial enterprises see the need to establish independent special libraries of reasonable size. This may also explain why almost all the libraries in commercial firms are staffed by untrained persons, as shown by the result of the questionnaire survey. However, the situation is slowly changing. The last five years saw the emergence of libraries in such commercial firms as Price Waterhouse, the Straits Trading Co., the Institute of Banking and Finance, and the Singapore Stock Exchange Co. These are signs of a growing need for systematic information for business and economic planning.

Libraries of Foreign Governments

Some foreign governments set up their special libraries in their various embassies or high commissions in Singapore. Two better known, larger and longer established ones are the American Resource Center (former USIS Library) and the British Council Library. These two libraries are models of excellence in terms of services to users. They are actually public libraries. However, because of the national emphasis of their collections, they, together with the smaller ones in the embassies of other countries, can be considered special libraries. The primary objective of these libraries is to provide current general information on various facets of life of their respective countries. Except for the American and the British libraries, the others in general are not likely to develop in such a way as to play an active role in providing important special library services in Singapore.

Libraries of Government Departments

The growth pattern of libraries in government departments is rather uneven. Their sizes reflect the importance of the departments to which they are

attached. Among them, about 21% have meager collections of a few hundred volumes of publications. These libraries are almost always in the hands of untrained or part-time staff, with a limited budget allocation and cramped physical space (2). On the other hand, the larger and rapidly growing department libraries, like those of the Economic Development Division, the Department of Statistics, and the Department of Trade, all have professional librarians and holdings of well over 30,000 physical volumes. One common feature of this group of libraries is that they all fall within the government library service.

Libraries of Statutory Boards

The next category of special libraries covers those of statutory boards. Compared to those in the government departments, they are better established and enjoy a healthy growing rate. Most of them were founded in the economically active late 1960s and early 1970s. Though statutory boards are semi-government organizations, their libraries are not part of the government library service; consequently, the salaries and conditions of service vary among them. Practically all the libraries in these organizations are provided with professional positions. This may be interpreted optimistically as official recognition of librarianship as a profession, as well as an awareness of the need for specialized and efficient information services that are obtainable only from well-organized libraries.

Libraries of Regional Organizations

Special libraries that feature predominantly in the country's library scene in recent years are those of regional and international organizations. Though few in number, they are comparatively well staffed, well financed, and well organized. These libraries are consequently better off in their services to users and in physical facilities. Among them are the Library of the Asian Mass Communication Research and Informa-

tion Centre (AMIC, 1971); CEPTA Television Library (1972); Colombo Plan Staff College for Technician Education Library (1974); the Library of the International Development Research Centre (IDRC, 1974); the Library of the Regional Institute of Higher Education and Development (RIHED, 1970), and the Library of SEAMEO Regional Language and Information Centre (RELC, 1968). All of them, except RELC Library, were established in the 1970s. They are highly specialized libraries, each actively building up its own collection and each operating independently.



Libraries of Colleges and Universities

Like those in other countries, Singapore's institutions of higher learnings also have outstanding libraries. These are the libraries in the University of Singapore, Nanyang University, the Singapore Polytechnic, Ngee Ann Technical College, and the Institute of Education. Their growth and development are affected by the planning and development policies of the respective institutions which they serve. Since the parent organizations are financed wholly by the government, they are therefore invariably influenced by the education policy of the government. However, within the framework of the national education policy, all these libraries have built up collections that possess considerable research value.

Remarks and Recommendations

Special libraries in Singapore are established under different conditions and have undergone different stages of development. Thus, they vary in size, staff situation, and services provided. But no matter which categories these special libraries belong to, the following general pattern prevails. First, they are all organized according to conventional library methods. Second, the libraries with more funding are run by professional staff. Consequently, these libraries have some form of acquisition policy and all provide some sort of

current-awareness and reference research services. The majority of these services are in the form of monthly accessions lists. They also provide "on-demand" services such as the preparation of bibliographies and reading lists. A number of them have definite publication programs to further disseminate information on their library resources. Third, those not so well developed libraries are almost always without trained personnel or proper professional guidance. In these libraries, acquisition is based entirely on the demands made by clientele or staff. This is particularly true of small government department libraries where books are acquired "to gratify the information needs of the individual . . . officers" (3). A recent survey in cataloging and classification use by libraries in Singapore revealed further that many of them use "home-made" classification schemes and "do not consult any basic cataloging tools in organizing their collections" (4).

One disquieting feature about the development of the special libraries in government departments and statutory boards is that they are sprouting up independently of one another as the country gains momentum in its industrialization program. As a result, some fragmentation of resources and services occur. Take, for instance, the libraries in the Monetary Authority of Singapore (MAS), the Economic Development Board (EDB), and the Economic Re-

search Centre: these are all quite closely related in information needs. They, in turn, are quite closely related to the Economic Development Division library (EDD library) of the Ministry of Finance. In fact, the MAS library had its origin in the EDD library. Within the government department libraries there also exists a number of libraries that are not only close in physical proximity but also in subject coverage. Such is the case of the libraries of the Supreme Court and the Attorney General's Chambers; the Economic Development Division library, the Department of Statistics library, and the Department of Trade library. The last three mentioned libraries are located in the same building and



have quite similar subject interests. In addition, three other smaller department libraries are also located within the same building.

It would certainly be more economical and rational if the library resources of these smaller libraries could be grouped. Such a grouping would surely bring about an enrichment of collections as well as other advantages. It is highly probable that the pooling of resources and staff into one organization would bring about an improvement in the library itself. For example, the libraries of the National Statistical Commission and the Department of Statistics were amalgamated when the two parent organizations merged on Apr 1, 1976. This not only enhanced the

collections of the two libraries but also resulted in an improvement in staff situation and services.

Another disquieting feature is the present system under which new government department libraries may be set up. Although the National Library is supposed to be the central coordinating agency for government libraries, it is not able to carry out its functions effectively. Most departments usually consult the National Library only in the final stage of its library planning. "There is no government directive requesting all government departments to cooperate with the National Library in planning library services" (5) among the various departments. There is, therefore, a need for a Government Department/Statutory Board Library Committee to be set up within the Ministry of Culture or Finance, comprising officials from the two ministries, the Statutory Boards, the National Library, and the Library Association of Singapore with the immediate task of looking into consolidating and reorganizing smaller government department libraries so as to pool scattered facilities and services. The more important task of the committee would be to develop an overall central plan for the library and information needs of the various government departments and statutory boards. This plan should minimize duplication of resources (dissipation of professional manpower and financial resources).

Meanwhile, within the existing government library service, a Government Library Group under the auspices of the National Library should be set up. Such a group could bring about cooperation among the various government department libraries and also serve as a communication channel for them with the National Library and vice versa. It could also provide a forum for discussion of common problems, for bringing about bibliographic control of the respective libraries' collections, and finally for working toward "the eventual development of specialized collections and services" (6).

The Library Association of Singapore (LAS) should also play an important part in the improvement of other special library services. Since more special libraries are expected to be set up in the private sector, an urgent need for trained personnel can be expected. In anticipation of this, the LAS should foster an awareness of the information services a well-organized library with professional staff can provide. This is an opportune time for a Special Library Section to be set up within the LAS. Such a section could undertake the establishment of proper standards in special library services and special librarianship. The section also should try to meet the immediate problem of manpower shortage by organizing training courses and providing consultation for those in charge of such libraries in the private sector.

Special libraries and special librarianship are exciting aspects of the country's library movement where much could be done—the issues are waiting for the professionals to take up the challenge.

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sla news

The 1979 SLA Annual Business Meeting Jun 13, 1979

As required by Article VII, Section 3 of the Association's bylaws, notice is hereby given that the Annual Business Meeting of Special Libraries Association will be held at 8:00 a.m. on Wednesday, Jun 13, 1979, at the Coral Ballroom, Hilton Hawaiian Village, Honolulu, HI, during the Association's 70th Annual Conference.

Concerned about YOUR Association?

Suggest a Possible Candidate to Your Nominating Committee

The Nominating Committee for Spring 1980 Elections requests YOUR assistance in its search for the best qualified candidates to represent YOU as future officers of YOUR Association. This means that YOU, as a member of the Association, must be concerned with the caliber and abilities of the officers who will be leading YOUR Association. We need YOUR recommendations for those members who are most knowledgeable of all phases of Association activity, who have shown a dedication to the goals of the Association, who are representative of its diversified professional interests and various geographical areas, and who would be willing and able to accept nomination.

Candidates are needed for the offices of President-Elect, Chairman-Elect of the Chapter Cabinet, Chairman-Elect of the Division Cabinet, and two Directors.

Please submit your suggested names by letter with a brief note giving qualifications. Contact a member of the Committee whom you know best or the Chairman of the Nominating Committee, "Jims" Murphy U.S. Army, Materials & Mechanics Research Center, Technical Information Office, Watertown, Mass. 02172. This must be done prior to the Honolulu Conference, Jun 9-14, 1979.

**James A. Arshem
M. Elizabeth Moore
William C. Petru
Julia Vance
M. "Jims" Murphy, Chairman**

WORLDWIDE CONFERENCE ON SPECIAL LIBRARIES

POLITICS AND ECONOMICS: THEIR IMPACT ON LIBRARY/INFORMATION SERVICES

*Special Libraries Association 70th Annual Conference
Honolulu, Hawaii, June 9-14, 1979, with the participation of
Japan Special Libraries Association (Sentokyo)
and the IFLA Special Libraries Division*

HONOLULU, at the crossroads of the Pacific, is the site of the first Worldwide Conference on Special Libraries. Japan Special Libraries Association (Senmon Toshokan Kyogikai, frequently called Sentokyo) and the International Federation of Library Associations and Institutions (IFLA) Special Libraries Division will meet with SLA at its 70th Annual Conference. Representatives from library associations of Pacific Basin countries will also participate.

Politics and economics operate at the international, national, and local levels. They operate at the internal levels of each organization. At any level, political and economic considerations are frequently at odds because of their totally different goals. The objectives of this Worldwide Conference on Special Libraries are to increase the awareness of special librarians to the impact of politics and economics so as to enable them to plan and provide for effective information services in ever-changing political and economic climates. A new dimension will be found in this conference through the opportunity to share ideas, techniques, viewpoints, and goals with colleagues from around the world.

Special Events

Continuing education courses will again be held on Saturday and Sunday, providing an intellectually stimulating beginning before the official opening of the conference on Sunday. This day traditionally is used by Chapters and Divisions for a series of house-keeping meetings; in addition, three events will provide a rousing opening to this international gathering. First will be an orientation session for Conference registrants—

especially important for our foreign participants and others who are new to attending Conferences. Second will be the opportunity to meet old friends and make new ones at the Conferencewide Reception in the exhibit area. Third will be the International Welcome to Honolulu, a pagentry of special library representatives from around the world combined with native Hawaiian entertainment.

Early on Monday morning Plenary Session I will feature our eminent keynote speaker,

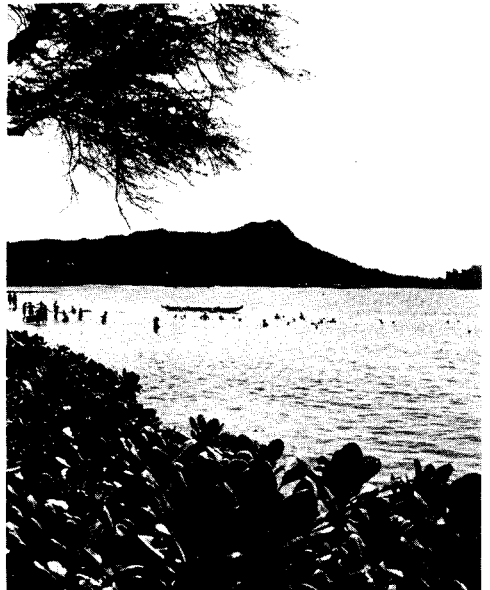


Photo credit: Hawaii Visitors Bureau

Diamond Head volcano looks down on the waters of Waikiki.

Waikiki Beach pictured from the yacht harbor to Diamond Head. The Hawaiian Hilton is the tall building in the center, at the edge of the palm-ringed pool.



Photo credit Hawaii Visitors Bureau

Dr. Margreet Wijnstroom, Secretary-General of the International Federation of Library Associations and Institutions and also an Honorary Member of SLA. Plenary Session II will follow Dr. Wijnstroom's opening remarks. This session will feature a panel of experts in the area of data base production and use, addressing a theme of "Politics and Economics of International Transfer of Information." These experts are Charles Gottschalk, Acting Chief, Office of Technical Information, U.S. Dept. of Energy (producer of the Energy Information data base); Roger Summit, Program Manager, Lockheed Information Systems (producer of DIALOG data base); Rafael Rivera Sánchez de Aparicio, Nacional Financiera, S.A., Mexico, D.F. (a user familiar with the political and economic implications of utilizing foreign data bases, e.g., DIALOG); and L. J. Anthony, Deputy Director-General of Aslib, London (project head of the British National On-Line Information Centre and the United Kingdom

representative on the EUSIREF Committee of the Commission of the European Communities).

Early on Tuesday morning, Plenary Session III will feature a speaker of some note, especially to those from the United States: Caspar Weinberger, General Counsel, Bechtel Corp.; Trustee, Mechanics Institute Library, San Francisco; former head, U.S. Office of Management and Budget; former U.S. Secretary of Health, Education, and Welfare. Weinberger will speak on the "Impact of Corporate Institutional Politics and Economics." Plenary Session IV will follow with the theme of "Impact of Governmental Politics and Economics." Two speakers will address this subject: Hannah Atkins, State Representative, Oklahoma House of Representatives, former law librarian, and SLA member; and Marc Uri Porat, Economist, Executive Director of the Aspen Institute Program on Communications and Society and author of *The Information Economy*.

Contributed Papers

The Contributed Papers sessions should prove to be especially interesting this year because of the participation of speakers from Japan, Germany, Finland, Great Britain, India, Australia, Netherlands, and possibly the USSR. There will be two sessions of contributed papers running concurrently Monday, Tuesday, and Wednesday afternoons, for a total of six sessions. The breadth of subject coverage is wide, from U.S. copyright questions to special librarianship in Japan and nuclear science information in Germany.

Division Programs

The point must be made that the Divisions have planned particularly strong programs, drawing upon the world's resources for speakers and such diverse subjects as food processing in the Pacific Basin and satellite transmission of information across continents and oceans. Hawaii is, of course, contributing its own unique resources for use by the Divisions. Special one and two-day field trips are planned to such natural and man-made attractions as volcanoes, sugar plantations, museums, observatories, military installations, and special libraries.

Hawaii

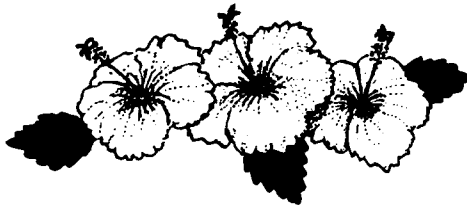
The State of Hawaii observes its twentieth anniversary of statehood in 1979. The year is also the two hundredth anniversary of the discovery of the Hawaiian Archipelago by Captain James Cook. King Kamehameha, as the first Hawaiian monarch to unite the peoples of the islands into a nation, is honored each year with a state holiday, King Kamehameha Day. We are fortunate this year because the day of pageantry and parades on Jun 11, 1979, during the Conference week. If this event does not supply you with the tasty flavors of a Pacific island, then the Scholarship event will. On Monday evening an exotic reception will be held, featuring Hawaiian singers and dancers for your pleasure.

Although Honolulu is known chiefly for its sun and surf, the real attraction of this conference is the depth and breadth of its intellectual stimulation. Plan now to be a part of a truly historic event—the first Worldwide Conference on Special Libraries. Remember too that “SLA no ka oi!” (SLA is the best!).

Aloha!

Honolulu Conference Program Committee

*Rod Casper
Doris Hayashikawa
Roger M. Martin
William C. Petru
Jack Leister, Chairman*



CHAPTERS & DIVISIONS

Alabama—The Chapter's winter meeting was held Feb 1-3 at Auburn University, Auburn. During the meeting, members toured the campus and heard speaker Anthony W. Miehle, director, Alabama Public Library System, Montgomery, discuss the Jan 7 Governor's Conference on Library and Information Services.

Arizona—A map workshop was held Mar 3 at the University of Arizona, Tucson. The workshop, sponsored by the Chapter, covered acquisition, cataloging, preservation, and uses of maps. That night, members gathered for a Chapter meeting at the Spaghetti Company Restaurant in Tucson.

Baltimore—At a Jan 23 meeting, members heard an overview of the trend toward publishing government documents on microfiche. Ann Shaw, network services, Enoch Pratt Free Library, Baltimore, spoke.

Cincinnati—Members met on Jan 24 for lunch at the Forty Thieves Restaurant, Cincinnati. Attendees then proceeded to a tour of the Art Guild Bindery.

A tour of the new University of Cincinnati main campus library was scheduled for

the Mar 21 meeting, planned as a joint meeting with ASIS.

San Diego—Copyright law and libraries was the topic of the Feb 22 meeting in Balboa Park. The speaker was Edward W. Callan, attorney with Brown and Martin, San Diego.

Texas—In a meeting cosponsored by the Houston Subcommittee for Continuing Education, members discussed the topic "Making the Most of Your Library: Physical Facilities." The Feb 16-17 gathering was held in Houston.

Virginia—Members toured the new Federal Reserve Bank in Richmond on Mar 28 as part of a meeting scheduled before the Governor's Conference on Library and Information Services. Members heard a presentation by a member of the Governor's Conference Committee.

Wisconsin—On Dec 2, members toured the Milwaukee Public Museum and its library.

During a meeting scheduled for early February, members discussed the training of short-term employees.

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Erratum—The end of the "In Memoriam" for Virginia Raynes [*Special Libraries* 69 (no. 12):505(Dec 1978)] should read as follows: "... A smile plays 'round my lips as I recognize the voices of our Rocco [Crachi], John [Connor], and Ginny speaking together with the archangels, and I somehow feel all is well and I can say ... auf Wiedersehen."

HAVE YOU HEARD?

Copyright Computer Program for Interlibrary Loan

The Washington University School of Medicine Library has developed a computer program designed to inform interlibrary loan librarians of possible violations of the fair use provisions of the copyright law. The computer program provides a keypunched card for each item borrowed through interlibrary loan. The computer can then list all items borrowed, items chargeable against fair use, titles approaching violation of fair use provisions, and titles in violation of fair use. Contact: Millard F. Johnson, Jr., Research Associate in Machine Methods, Washington University School of Medicine, 4580 Scott Ave., St. Louis, Mo. 63110.

Library of Congress Network Planning Papers

The Library of Congress has issued a series of four Network Planning Papers. The first, *A Nationwide Location Data Base and Service* (ISBN 0-8444-0268-0) 66p, summarizes the activities of LC related to compiling location information for monographic materials and presents a set of recommendations that would build a nationwide location data base and service. *A Glossary for Library Networking* (ISBN 0-8444-0270-2) 34p, contains terms in current use in library networking.

Number 3 in the series, *Initial Considerations for a Nationwide Data Base* (ISBN 0-8444-0271-0) 56p, discusses the fundamental premises behind a library catalog and authority file and presents a framework for considering the participants and resources in a nationwide network. The last paper, *Message Delivery System for the National Library and Information Service Network: General Requirements* (ISBN 0-8444-0300-2) 41p, discusses a facility that will link automated bibliographic services and permit the

transmission of messages among the various services. The Network Planning Papers are available on request from the Customer Services Section, Cataloging Distribution Service, Library of Congress, Washington, D.C. 20541.

Mid Atlantic Regional Archives

The first publication of the Mid Atlantic Regional Archives Conference (Marac) Archival Series is *Paper and Leather Conservation: A Manual*, by Paul Mucci, edited by Mary Boccaccio. The book discusses topics such as the history and development of paper, methods of mending book and document paper, paste recipes, and paper sizing. Copies are available at \$3.00 from Mary Boccaccio, Archives and Manuscripts, McKeldin Library, University of Maryland, College Park, Md. 20742. Checks should be made payable to Marac.

Latin American Librarianship

The Seminar on the Acquisition of Latin American Library Materials (SALALM) has recently published *Twenty Years of Latin American Librarianship*, edited by Louella Vine Wetherbee and Anne H. Jordan. The publication includes the final report and working papers from the twenty-first seminar, held at Indiana University in 1978, and focuses on the acquisition of materials from countries and areas in Latin America. The report also examines SALALM's contributions to Latin American librarianship. Available for \$21.00 from National Educational Laboratory Publishers, Inc., P.O. Box 1003, Austin, Tex. 78767.

New Name for CNLA

The Council of National Library Associations (CNLA) voted at its Dec 1, 1978 meeting to change its name to the Council of National Library and Information Associations, Inc. (CNLIA). At present, sixteen associations, including Special Libraries Association, hold membership in CNLIA.

Archival Studies Summer Institute

The University of Denver Department of History and the Graduate School of Librarianship are offering their eighteenth annual Summer Institute for Advanced Archival Studies, Jun 18-Jul 20, 1979. The course is designed for archival, historical, library, or related professions and for students in related fields. It includes lectures by specialists, field trips to nearby archival agencies, and visits to museums. Projects are arranged with area agencies. Tuition is \$495. Write: Prof. Dolores C. Renze, Institute for Archival Studies, Department of History—424 MRB, University of Denver, Denver, Colo. 80210

Translations Indexes Merge

World Transindex, a combined publication of the International Translations Centre, Delft, The Netherlands, the Directorate General for Scientific and Technical Information, Luxembourg, and the Scientific and Technical Documentation Center of the Centre National de la Recherche Scientifique, Paris, France, has been in operation since January 1978. The publication replaces the three serials previously published separately by the three organizations. *World Transindex* announces translations in Asiatic and East European languages into Western languages, and those from other Western languages into French. It includes a source and author index, which are quarterly and annually cumulated. Subscriptions are \$240 per year. Contact: International Translations Centre, 101 Doelenstraat, Delft, The Netherlands.

Paper Lifetimes

Researchers at Battelle Columbus Laboratories have been measuring the light emitted from paper samples in order to determine the decomposition rate of paper and possibly to learn the lifetime of paper under certain conditions. Dr. G. David Mendenhall of Battelle explains that the light, emitted through chemiluminescence, results from deterioration or degradation. He added that almost all organic chemical substances emit light in this way.

Results so far have confirmed that more aging occurs in dry paper, paper under higher temperatures, and paper that underwent changes in humidity. Further tests are needed before any definite conclusions can be reached concerning paper lifetimes.

New England Document Microfilming Service

The New England Document Conservation Center (NEDCC), Andover, Mass., has begun a microfilm service as part of its preservation operations. A grant from the National Historical Publications and Records Commission enabled NEDCC to staff and equip the new facility. It is expected that the service would become self-supporting during 1979. Some of the first projects have included a test filming of papers of W.E.B. Dubois and filming of Northfield, Mass., town records. The problems of historic records, such as faded ink, stained pages, and embrittled paper, pose special difficulties for microfilming which commercial services cannot always accommodate. The NEDCC service has been specially equipped to handle these problems, so that agencies and libraries can have their documents put on microfilm more easily. For further information contact NEDCC, Abbott Hall, School St., Andover, Mass. 01810 (617/543-1794).

Two-year Master of Librarianship Program

Beginning in September 1979, the University of Washington will offer a two-year curriculum leading to the degree of master of librarianship. Two required courses give students a grounding in the understanding of users and libraries. Students are then required to select an area of specialization for further study. This program makes the University the second school in the country to offer the two year ML, besides the University of California at Los Angeles. Contact: Sylvia M. Dearle, School of Librarianship, University of Washington, Seattle, Wash. 98195 (206/543-1794).

On-Line Search Training

Under a study contract awarded by the U.S. National Library of Medicine, Cuadra Associates, Santa Monica, Calif., has been determining more effective ways of teaching the use of on-line systems. The one-year study is being performed by the firm and its subcontractor, King Research. Judith Wanger, vice president of Cuadra Associates and director of the project, said that the basic purpose is to determine the relationship between the type of training that searchers receive and the quality and style of searching. "We have to learn what these searching methods are . . . and what relationships they have to the training and continuing education received by the on-line searcher."

Data Bases for Environmental Information

Aslib Research and Development Department has recently published *Databases Suitable for Users of Environmental Information*. The report lists ninety-seven data bases that are relevant to various environmental topics. Of these bases, forty-five are assessed according to the number of references indexed for each of the topics in each data base. The emphasis of the report is on the needs of European users, with an analysis of the suitability of the data bases for access through EURONET. \$12 for Aslib members, \$15 for nonmembers, from Aslib, 3 Belgrave Square, London SW1X 8PL England.

Romanian Materials Available

The Romanian Library, New York City, was created in Dec 1971 on the basis of a mutual cultural agreement between the governments of Romania and the United States. All facilities and functions of the library, including the reading room, auditorium, lectures, films, and art exhibits, are open to the public. Universities, cultural associations, students, and the general public may borrow books, records, and films free of charge for up to two weeks. The library will also supply free bibliographic material relating to Romania. The library's monthly publication, *Romanian Bulletin*, is sent free on request. Contact: The Romanian Library, 200 E. 38th St., New York, N.Y. 10016 (212/687-0180).

New Publisher for Taxation Journals

Warren, Gorham, and Lamont, the Boston publisher, has taken over management of the *Journal of Taxation* and its related publications, *Taxation for Accountants*, *Taxation for Lawyers*, and *Estate Planning*. The Boston firm already publishes such professional references as *The Tax Law Review* and *The Journal of Corporate Taxation*. Editorial functions at the transferred journals will continue to be performed by the present editorial staff. In addition, the editorial address will remain the same. However, all business communications should be addressed to Warren, Gorham, and Lamont, 210 South St., Boston, Mass. 02111.

Nutrition Planning

Nutrition Planning, an international journal of abstracts about food and nutrition policy, planning, and programs, published its first issue in February 1978. Abstracts are categorized into several sections such as Public Health and Curative Measures; Planning Process and Methodology; and Agriculture. All abstracts are numbered so that the corresponding document can be ordered from the Nutrition Planning Information Service, Ann Arbor, Mich. Subscription rates for the quarterly journal are \$45 per year, \$55 for air mail. Contact: *Nutrition Planning*, P.O. Box 8080, Ann Arbor, Mich. 48107.

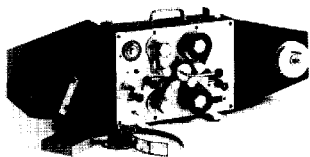
HAVE YOU SEEN?

Audio Cassette "Tattle-Tape" Markers



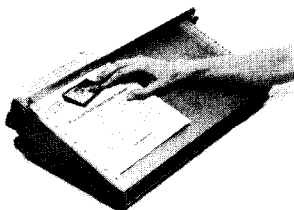
Audio cassette "Tattle-Tape" markers have been developed by the 3M Company's Library Systems unit. The markers are thin sheets of metal, die-cut and with a pressure-sensitive adhesive backing to fit a cassette tape. A plain white pressure-sensitive cover label is supplied to conceal the markers; information about the tape can be typed on the label before it is applied. The permanently sensitized markers cause the Tattle-Tape system alarm to sound if an attempt is made to remove the cassettes from the library without proper check-out. The markers and labels are packaged in boxes holding 300 of each, costing about 30 cents per marker, depending on order quantity. Available from 3M Company, Department LS8-44, Box 33600, St. Paul, Minn. 55133.

Automatic Microfilm Cleaner



A new version of the Extex model 6065C **automatic microfilm cleaner** will accept 16 mm and 35 mm microfilm cartridges, as well as 16 and 35 mm 100-foot reels of roll film. The cleaner has a moving velvet tape system that picks up and carries away dust particles and debris as the film moves through the machine. In addition, regulated amounts of nonresidual cleaning solvent is applied to aid in the removal of fingerprints and fungus. The cleaner can be used with silver, diazo, and vesicular film. Contact: George Barr, Extex Microsystems, Inc., 6955 Hayvenhurst Ave., Van Nuys, Calif. 91406 (213/989-2630).

Paper Trimmer



AJA, Inc., introduces a new **paper trimmer**. The user aligns the paper to be cut and presses down on the spring-tensioned table. Originally designed for the close tolerance of pasteup in the graphic arts, the trimmer can be used for any kind of paper cutting. The machine can trim paper up to 17½ inches wide. AJA claims that the self-sharpening alloy steel blades never need to be replaced. Contact: AJA, Inc., 1400 Lost Acre Dr., Felton, Calif. 95018 (408/335-5922).

Sound/Slide Projector



The Ringmaster **sound/slide projector** from Bell & Howell offers both front-throw and rear screen projection capabilities. The newest Ringmaster model is equipped with automatic focusing, designed to operate without mechanical noise. All models use standard rotary slide trays and compact cassette tapes. Controls are located on the front for easy access. Models available with automatic focusing are a player (model 798), player-recorder (799), and a player with adjustable cue-stop facility (799Q). All models allow the user to "zoom in" on a standard format slide to fill the viewing screen. Contact: Bell & Howell, Audiovisual Products Division, Dept. 8876, 7100 McCormick Rd., Chicago, Ill. 60645.

COMING EVENTS

Apr 16-19. Catholic Library Association, Annual Conference . . . Philadelphia. Theme: Sharing the Light of Faith—Library Services for Life, Liberty, and the Pursuit of Happiness. Registration: \$20. Contact: John T. Corrigan, C.F.X., Catholic Library Association, 461 West Lancaster St., Haverford, Pa. 19041 (215/649-5251).

Apr 22-25. Library Applications of Data Processing, Sixteenth Annual Clinic . . . Champaign, Ill. Sponsored by University of Illinois at Urbana-Champaign. Theme: The Role of Libraries in the "Paperless Society" of the Future. Contact: Prof. Edward C. Kalb, clinic supervisor, 116 Illini Hall, 725 S. Wright St., Champaign, Ill. 61820.

Apr 23-25. University of California at Davis, Workshop . . . Theme: Uses and Applications of Statistics for Librarians and Library Administrators. Taught by Dr. Gail Schlachter. Fee: \$100. Contact: University Extension, University of California, Davis, Calif. (916/752-0880).

Apr 27. Special Libraries Association, Southeast Regional Course . . . Atlanta, Ga. Topic: Micrographics in the Special Library. Contact: Dr. Mary Frances Hoban, manager, Professional Development, Special Libraries Association, 235 Park Avenue South, New York, N.Y. 10003 (212/477-9250).

May 3-4. Eighth Biennial Library Institute . . . Richmond, Va. Cosponsored by SLA Virginia Chapter and Virginia Library Association Region IV. Contact: Phyllis Cox, collection development librarian, Tompkins-McGraw Library, Box 667, MCV Station, Richmond, Va. 23298.

May 3-4. Library Orientation/Instruction for Academic Libraries, Ninth Annual Conference . . . Ypsilanti, Mich. Sponsored by Project LOEX. For Registration, contact: Carolyn Kirkendall, director, Project LOEX, Center of Education Resources, Eastern Michigan University, Ypsilanti, Mich. 48197.

May 6-18. Library Administrators Development Program, Summer Session . . . University of Maryland, College Park. Contact: Effie T. Knight, Administrative Assistant, Library Administrators Development Program, College of Library and Information Services, University of Maryland, College Park, Md. 20742.

May 8-11. National Micrographics Association, 28th Annual Conference and Exhibition . . . World Conference Center, Atlanta, Ga. Theme: "Confluence of Technologies." Contact: John R. Bidwell, Conference Director, NMA, 8728 Colesville Rd., Silver Spring, Md. 20910 (301/587-8444).

May 9-11. National Federation of Abstracting and Indexing Services, Indexing in Perspective Seminar . . . San Francisco.

May 12-15. Canadian Association for Information Science, Seventh Annual Conference . . . Banff Springs Hotel, Banff, Alta. Theme: Sharing Resources, Sharing Costs. Contact: Ronald F. Peters, Publicity and Publications Chairman, c/o Environmental Design Unit, University of Calgary Library, Calgary, Alta., T2N 1N4 Canada (403/284-6828).

May 17-18. Third Annual Institute on Federal Information, meeting . . . Washington, D.C. Sponsored by the American University. Theme: Federal Information: Policies and Access. Contact: Melinda Beard, College of Public Affairs, American University, Washington, D.C. 20016 (202/686-2513).

May 18-19. Council on Library/Media Technical Assistants, Second East Coast Conference . . . Washington, D.C. Contact: Raymond Roney, Library and Media Services, University of the District of Columbia, Van Ness Campus, 4200 Connecticut Ave., N.W., Washington, D.C. 20008.

May 18-19. University of Chicago Graduate Library School, 40th Annual Conference...Palmer House, Chicago. Theme: The Role of Libraries in the Growth of Knowledge. Contact: Dean, Graduate Library School, JRL S-106, 1100 E. 57th St., Chicago, Ill. 60637

May 21-22. The American University, Third Annual Institute on Federal Information...Washington, D.C. Contact: Melinda Beard or Lowell Hattery, Institute on Federal Information: Policies and Access, College of Public Affairs, American University, Massachusetts and Nebraska Aves., N.W., Washington, D.C. (202/686-2513).

May 21-Jun 1. Seminar in Art and Museum Librarianship...Syracuse, N.Y. Sponsored by Syracuse University School of Information Studies. Contact: Prof. Antje B. Lemke, School of Information Studies, Syracuse University, 113 Euclid Ave., Syracuse, N.Y. 13210.

May 24-26. Ontario Association of Library Technicians/Association des Bibliotechniciens de l'Ontario, Sixth Annual Conference...New College, University of Toronto,

Ont. Sponsored by OALT/ABO Toronto Area Regional Branch. Contact: OALT/ABO, P.O. Box 527, Thornhill, Ont. L3T 4A2 Canada.

May 29-Jun 1. National Archives Course in the Use of Primary Sources . . . Archives Building, Washington, D.C. Topic: Going to the Source: An Introduction to Research in Archives. Fee: \$60. Contact: Elsie Freivogel, Education Division, National Archives and Records Service, Washington, D.C. 20408 (202/523-3298).

May 30-Jun 1. Critical issues in Cooperative Library Development: A Conference on Networks for Networkers...Indianapolis, Ind. Jointly sponsored by Indiana Department of Public Instruction, Indiana Cooperative Library Service Authority, Purdue University Library and Audiovisual Center, and Indiana University Graduate Library School. Contact: Jean Gnat, Indiana University-Purdue University at Indianapolis, 420 Blake St., Indianapolis, Ind. 46202.

Jun 2-7. Medical Library Association, 78th Annual Conference . . . Honolulu, Hawaii. Write: MLA, 919 W. Michigan Ave., Chicago, Ill. 60611.

Jun 4-7. National Computer Conference . . . Americana Hotel, New York City. Sponsored by the American Federation of Information Processing Societies. Preregistration cost: \$60. Contact: NCC '79, c/o AFIPS, 210 Summit Ave., Montvale, N.J. 07645.

Jun 6-8. Institute of Information Scientists, Annual Conference . . . Imperial Hotel, Torquay, England. Theme: Towards 2001: New Information Technology and Its Future Impact. Fee: £70 members, £90 nonmembers. Contact: Mike Allen, Head of Information Services Unit, Beecham Pharmaceuticals, Coldharbour Rd., The Pinnacles, Harlow, Essex, England.

Jun 9-14. Special Libraries Association, Worldwide Conference on Special Libraries . . . Hilton Hawaiian Village and Ilikai, Honolulu, Hawaii. Theme: Politics and Economics: Their Impact on Library/Information Services. Also participating: International Federation of Library Associations and Institutions Special Libraries Division and Japan Special Libraries Association (Sentokyo).

REVIEWS

How to Start an Audiovisual Collection, Myra Nadler, ed. Metuchen, New Jersey, Scarecrow Press, 1978, 157p.

This book presents a pragmatic but incomplete approach to the development of audiovisual collections and programs. Six brief chapters, prepared by professionals in the field, are devoted to 1) selection, evaluation, and organization of basic audiovisual materials; 2) audiovisual hardware, pricing, and evaluation; 3) services, including circulation, reference and advisory services, outreach, and the study center concept; 4) space and facilities planning; 5) personnel staffing, duties, and qualifications; and 6) publicity and public relations. The seventh chapter consists of a glossary with brief definitions of terms. Also included is an index to the first six chapters. The work could have been subtitled "A Manual for Public Librarians," since its emphasis is on programs in public libraries.

The volume is well organized and authoritative. One does not find the needless duplication that often occurs in texts that are a sum result of contributions from a number of individuals. At the same time, however, the reader might question the relative emphasis on the selected topics. For example, the first six chapters share only one hundred and five pages, while forty-six pages are devoted to the glossary.

Scant mention is made of budgeting; the term does not appear in the index. Selection policies, procedures, and evaluation criteria are examined in the first chapter but fall

The Vital Network: A Theory of Communication and Society, by Patrick Williams and Joan Thornton Pearce. Contributions in Librarianship and Information Science, no. 25. Westport, Conn., Greenwood Press, 1978. 111p. \$13.95. ISBN 0-313-20324-5.

In *The Vital Network*, authors Williams and Pearce present an intriguing model of communications. The narrative flows freely, but the ideas require the reader to move slowly at times, to stop, ponder, and reflect on what has been presented. Chapter One, on the "cultural biosystem," compares and contrasts human and nonhuman organisms,

short of being comprehensive. Equipment costs in the chapter on hardware are now outdated, although they could be useful for estimating expenditures. Additional sources of information are provided pertaining to standards, selection tools, equipment costs, and the like. In some cases, only minimal standards are enumerated and the reader would have to check the references for complete information. A broader review of the literature and use of illustrations would have served to highlight the contents. The volume leaves one with the question, "Is that all there is?"

The scope of the glossary is unclear. While many of the basic audiovisual terms are defined, a great deal of emphasis is also placed on computing and micrographics terminology. At the same time, one does not find entries for telefacsimile transmission, reprography, or copyright. Considering the intended audience for the volume, the inclusion of such elementary terms as blurb, puzzle, and librarian seems unnecessary.

In conclusion, the volume is not a definitive guide for the development of audiovisual programs, although it is a step in the right direction. It has a technical orientation that needs to be expanded through the use of additional information resources. Primary application of this guide is for the small- or medium-sized public library, although the information may be extrapolated to other types of libraries. Library schools might also consider it as a supplementary text for media courses.

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laying the foundation for the theory that communication sets humans apart from the nonhumans. Language facilitates sociality, intelligence, and continuation of the culture: "... intelligence is a phenomenon of words and concepts and experience, not brain matter" (p. 13). As a consequence, "... it makes no sense to speak of one culture as more intelligent than another" (p. 11). Adding to this concept a value system, which changes from culture to culture, the authors establish for the reader the complex nature of human communication. The generalizations about nonhuman organisms are not well documented but probably are

mostly true. They do not detract from the authors' attempt to build a theory of communication.

Central to the authors' model is the "story systems" concept. Each culture has developed and is maintained by a story system that produces the "real world" for the culture as far as the real world can be known. The real world for one culture may not be the real world for another culture. According to the authors, story systems may contain some or all of the following elements; science, philosophy, myth, legends, history, folklore, tradition, scripture, ideology, and so on. Story systems are produced, organized, adapted, and disseminated by what the authors term "institutions." These are the religious and political institutions that occur in all societies. Inversely, institutional structure and function is determined by the stories.

Institutions produce the literature, the central part of the story systems. The literature provides the stability for cultural structures. The essential characteristics that distinguishes the literature of a culture from the rest of its story system is its fixed nature. Literature is transmitted verbatim from generation to generation both in words and in writing. All literature is categorized as either that of knowledge or that of imagination. The literature of imagination is further subdivided into that of art and that of entertainment. The examples used to explain the exclusiveness of the categories is thought provoking. They invite the thoughtful reader to determine if the authors' model is conclusive.

The final chapter describes what the authors call the "communication industries

in America," which maintain the story systems. The authors divide the communication industry into the "entertainment industry," "journalism industry," and "education industry." They argue that literature creates culture and not the other way around. Perhaps this explains their concern about the excesses of the entertainment industry (radio, television, motion pictures, and popular songs). They also believe that journalism serves first the function of entertainment; they are concerned that the rewards of education are too extrinsic. These same concerns are shared by this reviewer. The authors do not attempt to provide solutions to the problems raised. Rather they leave the solutions to the ingenuity of their readers.

The book concludes with this statement: "The model of the human communication system, which this book presents, offers to librarians as well as other professionals the theoretical resources necessary to formulate policies and set priorities that are appropriate to the social importance of their work." The book certainly is one appropriate for study by library school students as they attempt to gain an understanding of information, its production, storage, and dissemination. Practicing librarians and other communication professionals will also benefit from careful reading of *The Vital Network*.

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Archives Procedural Manual, by Darryl Podoll and Walter Walker. 2d rev. ed. St. Louis, Mo., Washington University School of Medicine Library, 1978. \$7.25.

Archives Procedural Manual was written originally by Walter Walker and subsequently revised and updated by Darryl Podoll for the Archives Section of the Washington University School of Medicine Library. It is a detailed instruction booklet on how this particular archives handles donated collections on a day-to-day basis. The manual begins with a clear statement of purpose and program objectives, setting the

base for its operations and its scope of responsibility. It then describes the various steps in acquiring, processing, evaluating, indexing, and arranging a new donation.

Gifts can be of various types: bound or loose papers, manuscripts, publications, pictorial records, memorabilia, journals, cartographic records, sound recordings, or microfilm. The flow charts, forms, and analysis sheets in the manual for processing these types of records are designed to maximize standardization and limit error due to the vagaries of chance and memory. The Medical Library Archives' oral history program and its computer index are unique entries

for manuals of this type. Other procedures detail the steps involved in microfilming records, and keeping records of reference and circulation activity.

The appendix contains job descriptions for the archivist and assistant, microfilm procedures, and details on the oral history computer index. From a technical viewpoint it is curious to see microfilm procedures treated as an appendix since the entire manual deals with other procedures of one kind or another. Furthermore, the appendix on the oral history computer index more properly belongs with the subject section on the oral history program and interview form. These organizational details of the manual can be corrected by transferring the manual sheets into a three-ring binder, and adding tab sheets for separating major procedural sections. Pages than can be easily relocated or revised as needed.

The value of this manual for staff members of other archives lies not only in the transferability of its forms and instructions but also in the listings of suggested readings and vendors' names and addresses. It would have been convenient therefore to have had compilations of these data added to the appendix: first, a list of all suggested readings, and second, a list of vendors who provide special products or services to archives, such as acid-free file folders. This information is not lacking, but it is provided only under specific procedures rather than compiled in one place.

A major omission in the manual which may be critical to an archivist is a lack of

specific temperature and relative humidity standards used by the Library Archives. There is also no hint about a records management program in the Washington University School of Medicine. One assumes that the Archives has no control over environmental conditions or records management policy and therefore the authors do not cover them in the procedural manual. Gifts thus appear to be made independent of a unified records management program.

There are, however, other uses for the manual. An institution contemplating establishing a new archives will find the donor forms with alternative paragraphs and records analysis sheets to be major time-savers. More experienced archivists might use the oral history computer index section to develop new ideas for their own archives. All archivists will find that the flow charts help to put a procedure into perspective from beginning to end.

Professionals concerned with archives administration and management need more manuals such as this to enable them to make comparisons and develop new ideas. Perhaps the manuals can even goad them into documenting their own daily procedures. This revised edition will be valuable to all 1,200 purchasers of the first edition, and certainly to other organizations which have established archives since 1973.

Jean T. Kadooka-Mardfin
Municipal Reference
& Records Center
Honolulu, Hawaii 96813

PUBS

(79-020) **Using Bibliotherapy: A Guide to Theory and Practice.** Rubin, Rhea Joyce. Phoenix, Arizona, Oryx Press, 1978. 245p. \$14.95. LC 78-9349, ISBN 0-912700-07-6.

Textbook on bibliotherapy, covering design of bibliotherapy programs, mechanics of setting up programs, materials selection guidelines, and education for therapists. Appendices list recommended juvenile and adult materials.

(79-021) **ILO Thesaurus: Labour, Employment, and Training Terminology.** Geneva, International Labour Office, 1978. 223p. \$11.95. In English, French, and Spanish.

In two parts: the first is a listing of the descriptors in order by subject category fields; the second, an alphabetical listing of the descriptors. Many descriptors have scope notes. The thesaurus can be used in conjunction with searching ILO's LABORDOC data base. Available from: International Labour Office, CH-1211, Geneva 22, Switzerland.

(79-022) **A Style Manual for Citing Microform and Nonprint Media.** Fleischer, Eugene B. Chicago, American Library Association, 1978. 66p. \$4.50. LC 78-9375; ISBN 0-8389-0268-5.

Guidelines for producing footnote and bibliographic citations, with sample citations, for such nonprint media as charts, filmstrips, maps, microscope slides, movies, pictures, slides, sound and video recordings.

(79-023) **Guide to Ethnic Museums, Libraries, and Archives in the United States.** Wynar, Lubomyr R. and Lois Buttlar. Kent, Ohio, Kent State University School of Library Science, Program for the Study of Ethnic Publications, 1978. 390p. \$9.50.

Directory of cultural institutions of over 70 ethnic groups. Arranged by ethnic group, with indexes of names of institutions and locations. Each entry includes the following information: name and type of institution, address, officers, founding date, staff, publications, type and size of collection, objectives, activities, and services. Available from: Center for Ethnic Publications, School of Library Science, Room 318, Kent State University, Kent, Ohio 44242.

(79-024) **Directory of Library Research and Demonstration Projects—1966-1975.** Washington, D.C., U.S. Office of Education, 1978. 117p. Free.

Descriptions of 171 projects, supported by the Library Research and Demonstration Program, in such areas as library cooperation and networking, services to new user groups, management and new technologies, provision of new services, and training. Information on how to order project reports is included. Available from: Office of

Libraries and Learning Resources, Research and Demonstration Branch, Room 3319-A, 7th & D Streets, S.W., Washington, D.C. 20202. Send a self-addressed mailing label.

(79-025) **ISBD (CM): International Standard Bibliographic Description for Cartographic Materials.** IFLA Joint Working Group on the International Standard Bibliographic Description for Cartographic Materials. London, England, IFLA International Office for UBC, 1977. 58p. £5.00/\$12.00. ISBN 0-903043-16-5.

Available from: IFLA International Office for UBC, c/o The British Library, Reference Division, Great Russell Street, London WC1B 3DG.

(79-026) **SOLINET Long Range Plan 1978.** Atlanta, Ga., Southeastern Library Network, 1978. 63p.

Available from Southeastern Library Network, Inc., Suite 410, 615 Peachtree Street, NE, Atlanta, Ga. 30308.

(79-027) **Microforms: the Librarians' View, 1978-79.** Bahr, Alice Harrison. White Plains, N.Y., Knowledge Industry Publications, 1978. 118p. \$24.50. LC 78-10645; ISBN 0-914236-25-3.

Recent trends in selection, acquisition, maintenance, and processing of microforms; space and financial considerations; viewing equipment. Includes many illustrations.

(79-028) **Essays on Aslib.** Taylor, Peter J., ed. London, England, Aslib, 1978. 90p \$6.00. ISBN 0-85142-111-3.

Eight pieces—four of them by SLA Honorary Member Leslie Wilson—describing the history and some of the activities of Aslib since its founding over 50 years ago.

(79-029) **Systems Analysis for Information Retrieval.** Townley, Helen M. Boulder, Colo., Westview Press, 1978. 121p. \$13.50. ISBN 0-233-96920-9.

An introduction to computer-based information retrieval, chiefly intended as a practical guide for libraries that are automating their own information services. Covers the initial systems study, storage and retrieval considerations, final design and implementation; with an appendix on programming.

(79-030) **Costs and their Assessment to Users of a Medical Library.** Bres, E. and others. Austin, University of Texas Center for Cybernetic Studies, 1977. 4v. Research Reports CCS 301, 302, 303, 304.

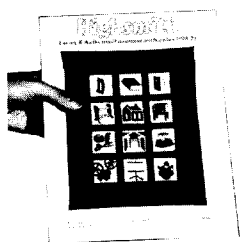
Report on a study undertaken to discover how the costs of library operations could be fairly allocated among its user groups. Available from: Center for Cybernetic Studies, Business-Economics Building, 203E, University of Texas, Austin, Tex. 78712 (512) 471-1821.



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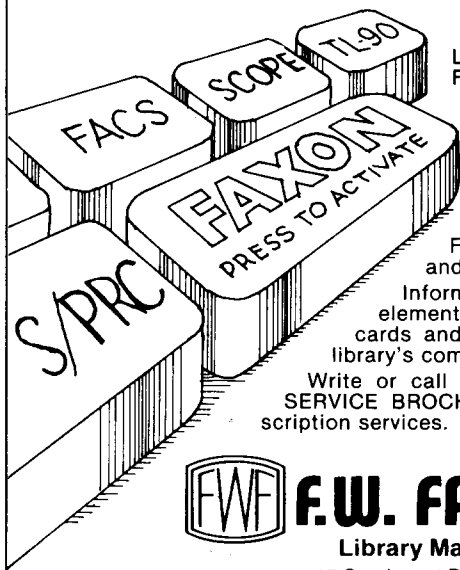
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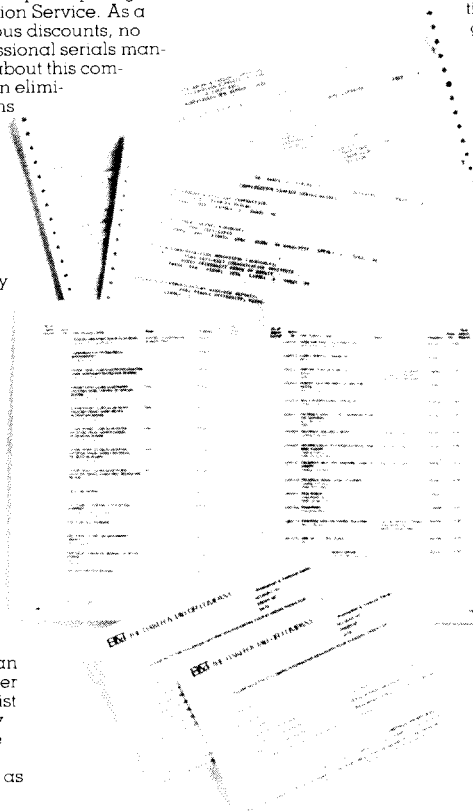
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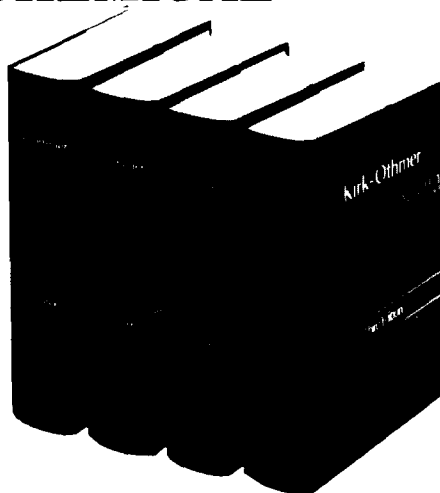
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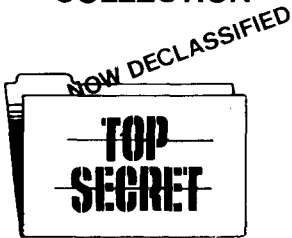
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