

ENCYCLOPEDIA
OF LIBRARY
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VOLUME 13

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Inventories to Korea

MARCEL DEKKER, INC., New York

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INVENTORIES OF BOOKS

To inventory the books in a library is to determine whether the collection is intact by comparing a list of the library's holdings with the books on the shelves, a record of the books in the hands of borrowers, at the bindery, or otherwise not on the shelf at the time of the inventory.

This kind of stocktaking did not become an important and necessary part of library administration until the development of libraries in which there were a relatively large number of books, books were available to the borrower in open stacks, and borrowing privileges were freely extended. These conditions did not exist until the nineteenth century. Until the end of the nineteenth century, fixed shelf location was in common use, and with this method of shelf arrangement it is easily seen whether there are books missing from the shelves. Relative shelf location based upon classification schemes developed during the last quarter of the nineteenth century. If the library's shelves are crowded, it becomes impossible to determine, by scanning the shelves, whether there are books missing. For these reasons, inventorying, or stocktaking as it was usually called, became a subject of professional discussion.

During the nineteenth and early twentieth centuries, in order to complete the inventory process, some libraries closed, after warning their patrons, for periods ranging from a few days to a month and the inventory was completed within a fixed time period. This is still occasionally the case. During the last decade of the nineteenth century, however, it was recognized that closing was usually unnecessary. Now, the tendency is to extend the inventory process for a much longer period of time. Some libraries, in fact, have a continuous inventory process.

In college libraries, prior to the nineteenth century, the librarian was often financially responsible for the replacement of missing or damaged books, so that an inventory was required annually, or at the end of the librarian's term of office. This is still true in less well-developed parts of the world in which books are still relatively scarce. Efforts are being made to end these laws of accountability as they are not in the best interests of library service. Obviously, the use of books in the library and borrowing privileges are not going to be encouraged if the librarian is financially responsible for missing and damaged materials.

Some school libraries in this country are currently required by state law to make an annual inventory, although there are in these cases no implications for financial responsibility.

The inventory process consists of checking the books on the shelves against the shelf list. The book and card are coded or dated to indicate that the book was present during inventory. Books missing from the shelves are checked against the borrower's file, the binding file, and the mending shelf. If no record of the book can be found, it is presumed to be missing. Books that have not been located during the inventory period are re-searched periodically. If not finally found, the book is either

replaced or the cards for it are pulled from the catalog. The use of a transactional charging system makes inventorying much more difficult because there is no hard copy record of the individual book in an easily searchable borrower's file. It is feasible to complete an inventory in libraries using transactional charging systems by extending the inventory period and checking the books not on the shelves or otherwise in the library against the daily book returns.

Large libraries would find it impossible to schedule an annual inventory because of the cost of staff time involved, even though the per item cost of an inventory is very low. However, all libraries should schedule either periodic or continuous inventories because only through the comprehensive, systematic approach of an inventory is it possible to correct the catalog, so that the catalog actually represents the holdings of the library. Unless a library inventories its collection periodically, the only book losses recorded are those that result when a patron requests material that the library is subsequently unable to find. Other equally important missing material will not be identified. Even a loss of 0.5% of the collection over a 10-year period can pose problems in the use of the catalog. For much used collections, e.g., the reserve book room, the percentage of loss may be much higher. Although in a recent survey of 225 public libraries, administrators ranked book thefts as a major problem, they were able only to estimate the extent of loss because regular inventories were not made. Administrators cannot evaluate a security system without accurate information on book losses.

An obvious by-product of the inventory process is an accurate count of the library's holdings. If this were the only benefit accruing, it would seem hardly worthwhile to inventory the collection as a census can be made more easily and economically. Other functions of the inventory, familiarizing the staff with the collection, removing damaged books from shelves, etc., can be performed more economically by shelf-reading. However, no reliable method for assuring the accuracy of a public catalog exists except as the result of an inventory.

SELECTED BIBLIOGRAPHY

American Library Association, *A Survey of Libraries in the United States*, Chicago, 1927, pp. 119-132.

ALA Committee on Library Administration, "Inventory: Report of [the committee]." *ALA Bull.*, 3, 207-208 (1909).

Beck, R. E., and J. R. McKinnon, "Development of Methods for a Large Scale Library Inventory." in *Case Studies in Systems Analysis in a University Library* (Burton R. Burkhalter, ed.), Scarecrow Press, Metuchen, New Jersey, 1968, pp. 48-75.

Bluh, Pamela. "A Study of an Inventory." *Lib. Resources Tech. Services*, 13(3), 367-371 (Summer 1969).

Books As Tools for Turkish National Growth, a Survey and Evaluation of the Book Industry in Turkey, [by] Stanley A. Barnett [and others], Agency for International Development. Contract AIDesd-681, January 1965, pp. 102-103.

Braden, Irene A. "Pilot Inventory of Library Holdings." *ALA Bull.*, 62, 1129-1131 (October 1968).

Burns Security Institute, *National Survey on Library Security*. Briarcliff Manor, New York, 1973, pp. 3-4, 12-14.

Crunden, F. M., "Closing a Library for Stocktaking," *Lib. J.*, **18**, 37-38 (1893).

Crunden, F. M., "How Things Are Done in One American Library," *The Library*, **2**, 31-34 (1901).

Developmental Book Activities and Needs in the Philippines, [by] Leo N. Albert [and others], Agency for International Development, Contract No. AID/csd-1162, November 1966, p. 69.

Emerson, William L., "The Problem of Inventory," *California Lib.*, **22**, 155-157 (July 1962).

"Frequency of Inventory," *Lib. J.* **52**, 827-828 (September 1, 1927).

Huttner, Marian A., "Measuring and Reducing Book Losses," *Lib. J.*, **98**, 512-513 (February 15, 1973).

"Lj's Survey of Accession and Inventory Practices," *Ibid.*, **84**, 1048-1052 (April 1, 1959).

Martin, Jess A., "Are Inventories Justified?" *Bull. Mod. Lib. Assoc.*, **59**(1), 50-52 (January 1971).

Miller, Lindsay, "Stocktaking in Lending Libraries," *Australian Lib. J.*, **5**, 66 (April 1956).

Moody, Roland H., "An Inventory at Widener," *Harvard Lib. Bull.*, **2**, 130-131 (1948).

Russell, Florence, "The Sunday Inventory," *Lib. J.*, **57**, 704-705 (1932).

Sanner, Marian, "Pratt Takes Inventory," *J. Cataloguing Classification*, **11**, 125-132 (July 1955).

Shores, Louis, *Origins of the American College Library, 1638-1800*, Shoe String Press, Hamden, Connecticut, 1966, pp. 183, 186-187, 197.

Sivertz, Chloe T., "Inventory Up To Date," *Wilson Lib. Bull.*, **26**, 68-69 (September 1951).

Smith, Cordelia, "The School Library Inventory," *Ibid.*, **6**, 208-209 (1931).

Smith, Harden E., "Taking Inventory," *Lib. J.*, **87**, 2847-2848 (September 1, 1962).

State University of New York, International Studies and World Affairs, *Book Production, Importation and Distribution in Pakistan*, Agency for International Development, Contract No. AID/csd-1199, December 1966, p. 5.

Webster, William A., "Book Inventories with Transaction Charging," *Wilson Lib. Bull.*, **36**, 302-305 (December 1961).

MARTHA L. MANHEIMER

IOWA LIBRARY ASSOCIATION

An invitation signed by Ada North, University Library; Mary H. Miller, State Library; T. S. Parvin, Iowa Masonic Library; Clara M. Smith, Burlington Public Library; and Clara C. Dwight, Dubuque Y. M. Library; brought seventeen librarians and several Des Moines citizens to the capitol in Des Moines on September 2, 1890, at 10:00 A.M. for what proved to be the organizational meeting of the Iowa Library Association.

After Mr. Parvin's introductory remarks at that meeting, Mrs. North gave reasons why the result of the meeting should be the formal organization of an association of those interested in the library profession in Iowa. She suggested that even this first meeting could establish better acquaintances, provide consultation about library management, adopt a uniform system of reports, and arouse more general interest and library cooperation around the state.

The program of the meeting included a paper read by Mrs. Dwight entitled "Public Libraries and Their Relation to the Public Schools," a business meeting, and an appearance of the governor and the secretary of state who both spoke favorably toward the interests of the group assembled.

During the business session Mr. H. N. Lanthrop of the State Historical Society moved that a state association be organized and Mr. Charles Aldrich of Webster City seconded. A unanimous, favorable vote was cast. Chairman Parvin appointed a committee composed of Miss Dwight, Mr. Lanthrop, Mrs. Stella B. Morse of Des Moines, Mrs. North, and Miss Smith to draft a plan of organization. Before recessing for lunch the assembly also elected a committee for nominating the first officers of the association. The nominating committee members were Miss Ambler of Mt. Pleasant, Mr. F. V. Gay of Boone, and Mr. T. S. Parvin.

After deliberating during the noon period, the two committees presented recommendations which were unanimously accepted by the association.

The Committee on Plan of Organization presented in modified form the plan earlier adopted by New York. The plan's provisions are as follow:

1. The association shall be called the Iowa Library Society.
2. Its object shall be to promote the library interests of the State of Iowa.
3. Any person interested in promoting the object of the association may become a member, by vote of the Executive Board, on payment to the Treasurer of a registration fee of one dollar.
4. The officers of the association shall be a President, Vice-Presidents, a Secretary, and a Treasurer who shall together constitute the Executive Board, which shall have power to act for the association in intervals between its meetings.
5. A regular meeting of the association shall be held in the Iowa State Library during the week of the annual State Fair.
6. No officer, committee, or member of the association shall incur any expenses in its name, nor shall the Treasurer make any payment unless authorized by specific vote of the Executive Board.
7. No member shall be liable for any dues beyond an assessment for necessary expenses which shall not exceed one dollar per year.

The Committee on Nominations presented the following slate of officers:

President: Mrs. Mary H. Miller, State Librarian of Des Moines.
Vice-Presidents: Mr. W. H. Johnston of Fort Dodge and Mrs. Clara E. Dwight
of Dubuque
Secretary: Mrs. Ada North, University Librarian of Iowa City
Treasurer: Miss Clara M. Smith of Burlington

So began one of the first state associations of librarians in the nation. (There is evidence to support the position that Iowa was second only to New York in establishing a state library association as such.) The first meeting was unusually well planned and presented. Iowa can be justly proud of its pioneering in organized librarianship.

During the year following the first meeting, the momentum of the association continued at a fast pace. At the second conference Iowa Governor Bois invited the group to a reception in his administrative parlors and Iowa Supreme Court Judge Beck addressed the meeting. For several years Judge Beck had been a member of the Board of Trustees of the Iowa State Library. It was his influence that brought the association to meet its second time in the Supreme Court Room.

Growing local library support of the association was indicated by the fact that trustees of Sioux City, Council Bluffs, and Keokuk public libraries sent their librarians to the conference, paying all expenses to this September 1, 1891 meeting.

On August 31 and September 1, 1892 the third annual conference convened in Des Moines. Mrs. Mary W. Loomis of the Cherokee Public Library reported that free access to shelves, Sunday opening, library legislation, taxation for the support of public libraries, statistics, and the World's Fair library exhibit were the main topics of the session. The association agreed that henceforth it should hold its meetings at the same time and place as the Iowa Teacher's Association.

A resolution passed on this occasion leaves little doubt about who was the prime spark in bringing the Iowa Library Association into existence. In part the resolution states:

Whereas our most efficient Secretary, Mrs. Ada North, to whose efforts the organization of this society is so largely due, after serving almost a quarter of a century as State Librarian and Librarian of the State University, has retired from the latter position, this association deems it but a matter of simple justice to place upon record its estimation of her life-work.

Further evidence of Mrs. North's early contribution to service to librarianship in Iowa was shown by the Library Association when in November 1899 it unanimously and by a standing vote adopted the following resolution:

This association has heard with profound sorrow that Mrs. Ada E. North departed this life at Des Moines, January 9, 1899. We recognize in Mrs. North the founder of this organization, and for nearly a quarter of a century the most potent influence in Iowa in connection with the development of libraries.

The resolution continues with

our high estimate of the valuable life-work and patriotic example of this distinguished Iowa woman, whom we recognize as the pioneer in the general movement destined to result in the establishment of a public library in every town and village in Iowa.

Other prime founders of the association certainly include Mrs. Mary H. Miller who was Iowa State Librarian at the time of organization and who served as president during its first 3 years. Mr. Theodore S. Parvin, the first state librarian and long the chief administrator of the Masonic Library in Cedar Rapids, was one of the association's first leaders. The Masonic Library there was purported to have been, even at that time, the world's largest collection of Masonic and other secret society resources. Its reputation continues to the present.

Iowa library legislation was furthered, perhaps with more ease, because the five Supreme Court Justices were ex officio trustees of the Iowa State Library in 1892. Three bills were enacted into law that year providing for funds for the State Library, the State Historical Society, and establishing an Historical Department in the State House. Much of the popular support for these bills was created by many excellent articles written by Mrs. Ada North and published across the state. Because Mrs. North had been an early Iowa State Librarian, she was listened to with respect throughout the state.

In 1893 T. S. Parvin as president of the association urged that the society cooperate more closely with the Iowa State Teacher's Association. His contention was that there was much common interest of the two groups. He had been one of the founders of the Teacher's Association in 1854. Beginning in 1895 the Library Society met as the library section of the Teacher's Association. This arrangement lasted for three meetings through 1896, in which year two meetings were held, one on January 1-2 and one on December 29-31.

The January 1-2 meeting was not well attended and some speakers were not present. Amalgamation appeared too complete to some of the librarians even though some outstanding educators were indicating a strong interest in library activities. For example, President Homer H. Seerley, President of the Iowa State Normal School, presented a paper entitled "The Library as a Necessary Factor in Educational Work."

The result of this unhappiness was that the library group withdrew from the Education Association and appointed a committee to draft articles of incorporation. The committee consisted of C. H. Gatch, President of the Board of Trustees, Des Moines Public Library; Lana H. Cope, State Librarian; J. W. Rich, State University Librarian in Iowa City. Mr. Rich had been president of the Library Association.

At that December 29-31, 1896 meeting, the group also elected Mr. Witter H. Johnston, President of the Board of Trustees of the Fort Dodge Public Library, as president. He was elected president of the Library Association for five successive elections, longer than anyone else in its history. Strong sentiment was expressed at that meeting that an earnest attempt be made to secure a library commission for Iowa.

The committee concerned with incorporation did its work rapidly and effectively. The articles of incorporation of the Iowa Library Association were filed with the *Polk County (Des Moines) Recorder* on April 22, 1897. After 7 years the organizational ties with the Education Association were severed.

On October 13, 1897 in the Women's Parlors of the YMCA at Des Moines, the association under President Johnston's leadership spread its independent wings and poised for bold action. A committee on legislation was appointed and charged with exerting every possible, legitimate influence upon the next legislature to create a state library commission. The charge was given in the following resolution which received unanimous, enthusiastic support.

Resolved, That it is the sense of the Iowa Library Association that a state library commission should be provided by law, and the committee on legislation is hereby instructed to bring the matter properly to the attention of the general assembly and urge its adoption.

The forces which that resolution released were demonstrated in the Iowa legislature during the 1900 session. No less than six laws were added to the statutes improving in various ways library services in Iowa. Summaries of these laws follow:

1. A law consolidating the miscellaneous portion of the state library with the historical library, and placing the consolidated library (in the new historical building) and the law and document library (in the state capitol) under one administration, that of the state librarian, and voting an annual appropriation of \$12,500 for their support, exclusive of salaries paid officials and employees. This was an increase of \$1,500.

2. A law creating a state library commission. The law was modeled after the Wisconsin commission and provided for seven commissioners, at least two of whom should be women, and including the state librarian, state superintendent of instruction, and president of the state university. The first commissioners were to be appointed by the governor for terms of 2, 3, 4, and 5 years from July 1, 1900, with subsequent appointments to be for 5-year terms. The commission was to give advice regarding the establishment and maintenance of public libraries, report annually on the libraries of the state, and cooperate with the trustees of the state library in the development of the traveling library system. An annual appropriation of \$2,000 was provided for the secretary's salary, traveling, and clerical expenses.

3. A law appropriating \$2,000 additional for cataloging the state library.

4. A law giving the state library board more latitude in the expenditure of the \$2,000 regular annual appropriation for the purchase of books, etc., for the traveling libraries.

5. A law raising the salaries of the state librarian's three women assistants from \$400, \$500, and \$600 to \$700, \$800, and \$1,000. The consolidation bill raised the state librarian's salary from \$1,200 to \$2,000, and his law librarian assistant's salary from \$720 to \$1,200.

6. A law requiring the treasurer of each school township and rural district to withhold annually not less than 5¢, nor more than 15¢, for every person of school age resident in each school corporation, for the purchase of books for a school library, and prohibiting any diversion of the fund to any other purpose.

On April 21, 1900 Governor Shaw appointed the members of the first state library commission as follows: Captain W. F. Johnston, Fort Dodge; Mrs. D. W.

Norris, Grinnell; Mrs. H. M. Towner, Corning; Miss Jessie B. Waite, Burlington. The other members, ex officio, were Johnson Brigham, State Librarian; R. C. Barrett, superintendent of public instruction; and President McLean, of the State University in Iowa City.

Perhaps because of the early affinity of the Iowa Library Association with members of the courts, legislators, and leaders of the state executive branch, the group maintained an excellent organizational entity. In October of 1904 a constitution and by-laws were adopted as presented by a committee which had been charged specifically with that responsibility. Miss Ella M. McLoney of Des Moines chaired the committee and was elected president of the association 2 years later. That constitution and by-laws document has been updated as needed through the years, but it remains essentially as originally adopted. Most of the changes, as would be expected, have been in the by-laws and have had to do with committee structure, election procedures, and meeting arrangements. The text of this document follows.

Constitution

Section 1. The name of this association shall be the Iowa Library Association.

Section 2. The object of the association shall be to promote the library interests of the State of Iowa.

Section 3. The executive board of this association shall consist of the president, vice-president, secretary, treasurer, two other association members, and the secretary of the Iowa Library Commission, who shall be a member of the board ex officio. The officers shall be chosen by the association at the annual meeting, and shall serve one year, and until their successors are chosen. Of the non-official members of the board, following their first election one shall hold office for one year, the other for two years. Thereafter one member shall be elected at each regular annual meeting who shall hold office for two years, and until his successor is elected.

Section 4. The executive board shall have power to fill all vacancies occurring in the board in intervals between meetings of the association. Three members of the executive board shall constitute a quorum.

Section 5. The president shall perform the duties usually pertaining to such office.

Section 6. The secretary of the association and the secretary of the Iowa Library Commission shall render a report to the association at each annual meeting, and these reports shall be filed and preserved with the records of the association.

Section 7. The treasurer shall keep a permanent roll-book, notify delinquent members of unpaid dues, receive all association moneys, keeping an accurate record thereof, pay all bills authorized by the association or its executive board, preserve all official papers and vouchers, and make an annual report of official transactions.

Section 8. The rules of order governing the association shall be those of Robert's Manual.

Section 9. This constitution may be amended at any annual meeting by a two-thirds majority vote of the members present: provided that the proposed amendment has been submitted in writing at one session of the meeting and voted upon in a subsequent session.

By-Laws

Section 1. Any person interested or institution engaged in library work may become a member of the association, and be entitled to all its privileges, on payment annually of a fee of one dollar.

Section 2. The annual meeting of the association shall be in October, at such time and place as may be designated by the executive committee.

Section 3. During the first day of an annual session, the president shall appoint the following committees, consisting of three members each: Necrology, Legislation, Resolutions and Nominations. Special committees may be appointed in the same manner, unless otherwise ordered by the association. After appointment the committees on Legislation and Necrology shall be standing committees for the ensuing year.

Section 4. The President and Secretary of the Association and the Secretary of the State Library Commission shall constitute the program committee.

Section 5. The adoption of the report of the nominating committee shall be considered an election.

Section 6. These by-laws may be amended at any session by a majority vote of the enrolled members present.

Throughout the association's history the prevalent attitude of the leadership and within the membership generally has been the desire to meet all, including the special, library needs of the state. The training of librarians and other library personnel, library legislation, freedom of expression and learning, library service to those institutionalized, rural library needs, small town and village constituencies, and special urban requirements have all received appropriate attention as occasions have demanded.

In order to meet these special requirements of libraries and librarians, the state association has used special committees and organized itself into subsections and divisions. Committees that have been or are now active to enable the association to promote excellent library service to the citizens of Iowa include honorary membership, Johnson Brigham plaque, membership, legislation, certification, intellectual freedom, organization manual, extension, recruitment, scholarship, educational requirements for public librarians in Iowa, institutional library service in Iowa, librarians retirement benefits, and service to the unserved. Special awards have been given to those who have made major contributions through these committees as well as individually.

As early as October 21, 1909 a round table group met to consider the matters pertaining to small libraries. At the same conference a symposium was conducted on children's literature. On October 26, 1905 a meeting of college libraries was held to consider challenges to the academic librarians of Iowa. The next day the librarians of the larger libraries organized a section with Miss Mary E. Downey of Ottumwa as president and Miss Bessie Sargeant Smith of Dubuque as secretary. Earlier on October 11, 1902 at the Grinnell conference, a trustees' section was organized with Mrs. Towner as chairman and Mrs. Van Vechten as secretary. The continuing cooperative relationship between librarians and trustee boards of public libraries in Iowa has been extremely conducive to excellence in library

Iowa Library Association Statewide Conferences

Conference	Date	President	Place
1st	1890 September 2	Mrs. Mary H. Miller	Des Moines
2nd	1891 September 1	Mrs. Mary H. Miller	Des Moines
3rd	1892 August 31	Mrs. Mary H. Miller	Des Moines
4th	1893 December 27-28	Mrs. Mary H. Miller	Des Moines
5th	1894 December 26-27	Theodore S. Parvin	Des Moines
6th	1895 December 31, January 1-2, 1896	J. W. Rich	Des Moines
7th	1896 December 29-31	Witter H. Johnston	Des Moines
8th	1897 October 12-13	Witter H. Johnston	Des Moines
9th	1898 September 29-30, October 1	Witter H. Johnston	Omaha
10th	1899 November 8-9	Witter H. Johnston	Cedar Rapids
11th	1900 October 18-19	Witter H. Johnston	Sioux City
12th	1901 October 9-11	A. P. Fleming	Burlington
13th	1902 October 28-30	Frank F. Dawley	Grinnell
14th	1903 October 5-7	Johnson Brigham	Marshalltown
15th	1904 October 18-19	Mrs. Henry J. Howe	St. Louis
16th	1905 October 25-27	Mrs. Horace M. Towner	Fort Dodge
17th	1906 October 10-12	M. H. Douglass	Ottumwa
18th	1907 October 8-11	Ella M. McLoney	Council Bluffs and Omaha, Nebraska
19th	1908 October 20-21	Mrs. A. J. Barkley	Cedar Rapids
20th	1909 October 12-14	Harriet A. Wood	Des Moines
21st	1910 October 11-13	Irving B. Richman	Davenport
22nd	1911 October 10-12	Malcolm G. Wyer	Mason City
23rd	1912 October 8-10	Grace D. Rose	Nevada
24th	1913 October 14-16	Mrs. Charles C. Loomis	Sioux City
25th	1914 October 20-22	Lillian B. Arnold	Marshalltown
26th	1915 October 12-14	L. L. Dickerson	Colfax
27th	1916 October 11-13	Jeannette M. Drake	Colfax
28th	1917 October 9-11	Ione Armstrong	Iowa City
	1918 (no meeting— quarantine)	Mrs. Irving C. Johnston	
29th	1919 October 7-9	Mary Burnside Johnson	Waterloo
30th	1920 October 12-14	Maria C. Brace	Des Moines
31st	1921 October 12-14	C. W. Sumner	Ames
32nd	1922 October 23-25	William F. Riley	Cedar Rapids
33rd	1923 October 9-11	Grace Shellenberger	Fort Dodge
34th	1924-October 1-3	Callie Wieder	Boone
35th	1925 October 13-16	Mary Rosemond	Sioux City
36th	1926 July 6-8	C. V. Findley	Iowa City
37th	1927 October 18-20	Johnson Brigham	Des Moines
38th	1928 October 23-25	Mary A. Egan	Marshalltown
39th	1929 October 14-16	Charles H. Brown	Des Moines
40th	1930 October 14-17	J. Sidney Johnson	St. Paul, Minnesota
41st	1931 October 7-9	J. Sidney Johnson	Cedar Rapids
42nd	1932 October 12-15	E. Joanna Hagey	Des Moines

(continued)

Iowa Library Association Statewide Conferences (*continued*)

Conference	Date	President	Place
43rd	1933 October 17	E. Joanna Hagey	Chicago
44th	1934 October 11-13	Mary Bell Nethercut	Des Moines
45th	1935 October 10-12	May B. Ditch	Sioux City
(The 46th conference designation was omitted at this point, apparently to correct the theoretical problem of having considered the first meeting in 1890 as the first "annual" meeting.)			
47th	1936 November 3-5	Mildred H. Pike	Des Moines
48th	1937 October 14-16	Forrest B. Spaulding	Davenport
49th	1938 October 12-14	Edna Giesler	Fort Dodge
50th	1939 October 15-17	May C. Anders	Des Moines
51st	1940 October 13-15	Jessie B. Gordon	Burlington
52nd	1941 September 6-9	Mrs. H. C. Houghton	Ames
	1942 (no meeting, World War II)	Evelyn Spencer Bray	
	1943 (no meeting)	Frances Warner	
	1944 (no meeting)	Alice B. Story	
	1945 (no meeting)	Lydia M. Barrette	
53rd	1946 May 1-3	Mrs. Albert Hollingshead	Des Moines
54th	1947 October 3-7	Helen Rex	Minneapolis, Minnesota
55th	1948 October 7-9	Robert W. Orr	Mason City
56th	1949 September 29-30, October 1	Elizabeth Lilly	Des Moines
57th	1950 October 12-13	Florence W. Butler	Waterloo
58th	1951 October 4-6	Norman L. Kilpatrick	Iowa City
59th	1952 September 25-27	Germaine Krettek	Sioux City
60th	1953 October 22-24	Opal Tanner	Des Moines
61st	1954 October 21-23	Elizabeth Hage	Cedar Rapids
62nd	1955 October 20-22	Oivind M. Hovde	Council Bluffs
63rd	1956 October 18-20	Frank T. Milligan	Des Moines
64th	1957 October 22-24	Dan A. Williams	Davenport
65th	1958 October 22-24	Donald O. Rod	Mason City
66th	1959 October 21-23	Ruth A. Dennis	Des Moines
67th	1960 October 20-21	Dale M. Bentz	Lincoln, Nebraska
68th	1961 October 18-20	Mildred K. Smock	Cedar Rapids
69th	1962 October 24-26	James C. Marvin	Des Moines
70th	1963 October 2-4	Mrs. Louane Newsome	Minneapolis, Minnesota
71st	1964 October 21-23	Ray Smith	Sioux City
72nd	1965 October 27-29	Oswald H. Joerg	Des Moines
73rd	1966 October 19-21	C. King Balsechelet	Mason City
74th	1967 October 11-14	Lee Sutton	Milwaukee, Wisconsin
75th	1968 October 9-11	Andrew M. Hanson	Des Moines
76th	1969 October 8-10	Leslie W. Dunlap	Davenport
77th	1970 October 7-9	Ethel L. Beeler	Cedar Rapids
78th	1971 October 14-15	Sister Marita Bartholome	Des Moines
79th	1972 October 12-13	Marjorie Humby	Waterloo
80th	1973 October 11-12	H. Wendell Alford	Cedar Rapids
81st	1974 October 10-11	Thomas L. Carney	Des Moines
82nd	1975 October	Carl Orgren	Sioux City

service. Today the Iowa Library Trustees Association is organizationally a section of the Iowa Library Association.

In 1974 the sections of the Library Association are Adult Services, Children and Young People, College and University, Health Science, Government Documents, and an affiliate, the Junior Members Round Table.

Iowa librarians through their state association have demonstrated an eagerness to cooperate with those outside the state to promote excellent librarianship throughout the nation and around the world. The association today supports the American Library Association by maintaining a chapter councilor and paying his total expenses to both the ALA annual conference and its midwinter meeting. Further, in 1971 Iowa helped in forming the Midwest Federation of State Library Associations which it still supports. The federation includes the state library associations of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.

The Iowa Library Association learned early in its life that library interests have to be promoted in many ways. When in 1906 it was realized that many persons associated with library service in many Iowa small towns were being by-passed by the statewide annual conferences, action was taken initiating a practice still in existence in the state. That year at the annual conference in Ottumwa, it was decided that a plan of district meetings be tried during 1907. Accordingly the executive board divided the state into four districts and appointed a chairman to arrange for a meeting in each district. One outstanding advantage of these meetings is trustee participation. Beginning in 1909 special sessions at the district meetings were devoted exclusively to the interests of library trustees. The number of districts into which the state has been divided has varied through the decades. Beginning in 1974 there are seven.

District meetings in recent years have been directed by the vice-president who is also president-elect. This arrangement enables the incoming president to learn much about the needs and interests of association members before the presidential responsibilities are undertaken. More often than not the vice-president attends a planning session in the winter with representatives from all districts and also attends each of these meetings later in the spring.

In 1971 Iowa's Governor Robert D. Ray called for a conference to examine library service in the state. That conference replaced the district meetings for that year. It also set in motion a legislative interest in Iowa library service which culminated in the passage of two laws in the 1973 session of the state legislature. Those laws combined the State Medical Library, the State Law Library, and the Iowa State Traveling Library (State Library) under a reestablished State Library Commission and a State Librarian, and established a seven-region library system with state and regional financing. Considerable impetus was given to the enactment of these laws by the curtailment of federal funds which had been received beginning in the mid-1960s. Another positive factor in the passage of these laws which became effective on July 1, 1973 was that the Iowa Library Association retained the services of a paid lobbyist in the legislature for that session. Also, the association's legislative committee was exceedingly effective during the birth and development of the bills.

In 1973 the Iowa Library Association was again instrumental in helping bring about sweeping changes in library services in the state of Iowa. Only the testing of time can prove to what extent the changes involve wisdom.

BIBLIOGRAPHY

Archival materials of the Iowa Library Association deposited at the University of Iowa Library at Iowa City, Iowa.

The Catalyst (Iowa Library Association), 1948 to date.

Iowa Library Quarterly, 1901 to date.

Library Journal, beginning with Volume 16, 1891 to date.

H. WENDELL ALFORD

IOWA, UNIVERSITY OF IOWA, SCHOOL OF LIBRARY SCIENCE

Establishment of a School of Library Science at The University of Iowa was authorized by the Board of Regents in the fall of 1965. A director, faculty, and librarian were appointed the following year, and in September 1967 the school began full operation with its first class of students.

Although the School of Library Science and its graduate program were newly created, the concept of library education was not new at The University of Iowa. For a number of years courses in school librarianship had been offered in the College of Education. The establishment of a separate School of Library Science grew out of the belief that the needs of Iowa would best be met by having an all-purpose library school to train librarians not only for schools but for public, academic, and special libraries as well.

An even earlier historical precedent for library education in Iowa had been the Iowa Summer School for Library Training which was founded in the summer of 1901 and which continued throughout the early decades of the twentieth century. According to an announcement for the first session:

This school is intended for the librarians of the smaller libraries and for assistants in the larger libraries . . . who wish to prepare for their work. It is in no sense offered as a substitute for the full course of one of the regular library schools, but is given for those who feel their lack of knowledge of modern library methods and have not the time or means to attend a regular library school. By securing a leave of absence for six weeks they may gain a broader view of the work as a whole in this brief, systematic course.

Over the years the faculty of the Iowa Summer Library School carried the names of some distinguished librarians. Two of the early directors, Alice S. Tyler and Malcolm G. Wyer, later became heads of accredited library schools, Alice Tyler holding this position at Western Reserve University and Malcolm Wyer as first dean of the University of Denver's School of Librarianship.

With the founding of the School of Library Science in 1965 the Board of Regents closed the circle of library education in Iowa, recognizing the need for the state to provide a full graduate program in librarianship. Whereas earlier programs had been aimed at the small community librarian or the school librarian, now residents of the state would have the opportunity to receive full training for any area of librarianship.

Frederick Wezeman was appointed first director of the school, assuming his position on September 1, 1966. Previously he had taught on the faculty of the University of Minnesota Library School and served as head librarian of the Racine, Wisconsin, Public Library and the Oak Park, Illinois, Public Library. Faculty members formerly engaged in teaching library education courses in the College of Education formed the nucleus of the new Library School faculty. Included among these was Louane L. Newsome, specialist in children's literature, who headed the earlier program in the College of Education and then continued on the faculty of the School of Library Science. A library science librarian was appointed and assigned the task of expanding and developing the basic collection of library science materials. A program of studies was developed and approved following an intensive study of library school curricula and the *ALA Standards for Accreditation*. The school's statement of purpose affirmed its commitment to provide the student not only with a basic knowledge of historical concepts and technical skills, but also a philosophy of librarianship which would include devotion to the cause of intellectual freedom and to the ideal of free, complete dissemination of information and ideas.

The curriculum remains basically the same as that approved in 1967, although certain changes and additions have resulted from the faculty's periodic evaluation of the program. The one-calendar-year program for the master's degree includes 12 semester hours of core courses, one 3-hour type-of-library course, one 3-hour bibliography course, and 15 hours of elective courses. Recent additions to the curricular offerings include a course in medical librarianship and an advanced course in public and academic library management. The program of the school received accreditation by the ALA in June 1971.

A rigorous admissions policy is pursued, and all applicants are personally interviewed before being admitted to the school. By limiting the size of the student body, classes are kept small, and a free exchange of ideas is encouraged between students and faculty.

From its inception the School of Library Science has been keenly aware of its responsibility for furthering good library service throughout the state of Iowa. This is achieved primarily through its instructional program of preparing professional librarians to serve in libraries throughout the state. But the school performs other service functions as well. These activities fall into three main categories: continuing education programs (workshops, institutes, guest lectures), consultant services for

libraries and librarians (teletype reference service, consultation with public libraries, placement services), and the professional activities of individual faculty members.

In 1972 the Library School moved to new quarters in the Main Library of The University of Iowa. Large, well-equipped laboratory-classes and a greatly expanded departmental library science library enhance the teaching program of the school, while the close proximity to the bibliographic resources of the university libraries and the comfortable facilities are appreciated by students and staff alike.

Publications of the School of Library Science include a survey of reference/information services in Iowa libraries, a directory of information resources in Iowa City, a historical account of the early Iowa Summer Library School, and several annotated bibliographies for school libraries. The school publishes a newsletter twice yearly.

BIBLIOGRAPHY

"Iowa Summer School for Library Training." in Iowa Library Commission, *Report, 1900-1903*, Des Moines, Iowa, 1904, pp. 23-30.

Watts, Blanche. *Iowa Summer Library School*. The University of Iowa School of Library Science, Iowa City, Iowa, 1970.

Wezeman, Frederick. "The School of Library Science at the University of Iowa." *Iowa Lib. Quart.*, 20(9), 227-229 (July 1967).

ETHEL BLOESCH

IRAN, LIBRARIES IN

Introduction

The concept of library services or access to information may be new to Iran, but library in the sense of a collection of books is an old institution in this country where the keeping of recorded knowledge has an ancient history. The 2,500th anniversary of the Persian Empire was celebrated in 1971. Twenty-five centuries ago, the king of Iran, Darius the Great (reigned 522-486 B.C.) placed his famous trilingual inscription on the face of Bisotun mountain in the northwest of Iran. The inscription is in Babylonian, Old Persian, and Elamite, and records immortal information on an historical event. As a center of man's ancient civilization and with her long history, Iran has faced many ups and downs; and so have Iranian libraries. Many priceless collections of books were built up and many great libraries have been leveled to the ground by enemies, but some have survived in spite of various attacks; the age of one of them existing now as a significant religious library goes beyond the discovery of America.

In discussing the libraries of an area such as Iran, some social and historical characteristics should be clarified. Until the beginning of the twentieth century Iran's government was an absolute monarchy. With a revolution in 1906 it was replaced by a constitutional monarchy. Before the revolution the illiteracy rate was extremely high. The constitution of 1906 emphasized the importance of modern education and the freedom of all to study. The changes that took place after the constitution were numerous and the libraries, although untouched for a while, gradually found their proper place in society. In order to give a brief and introductory background before speaking about specific libraries, we have chosen the year 1906 as the border between two distinct eras.

The "traditional era" covers the beginning of Iran's history to the constitutional revolution, and the "transitional stage" starts from the beginning of the twentieth century and continues up to the present time. A few characteristics of each of these two periods must be touched upon, otherwise many problems which interfere with modern librarianship in Iran will remain unclear.

TRADITIONAL ERA

The main features of this long period are summarized as follows:

1. The economics of the country were based on agriculture. The relation between landowners and farmers was the same as that of lord and slaves. The peasants had no opportunity for learning for century after century.
2. Women, for religious or other reasons, were kept in ignorance. Hardly one literate woman could be found throughout the country.
3. The rate of illiteracy was quite high, estimated to be over 95%.
4. Progress from a lower to a higher social class was very slow. The movement of people from place to place was not common either. Social structure and educational conditions remained unchanged for a long time.
5. In spite of the illiteracy of the majority of the population, the literary richness was amazing. Poetry was a part of Iranian life. The masterpieces of poets were widely known by recitation, and the illiterates learned them by heart.
6. Religion was dominant in education. There were religious schools, or *maktabs*, and religious colleges, or *madressehs*. Other instructional centers were very limited although a few of them, like Gondishapur school, were quite well known. However, the number of nonreligious schools which are traceable in history, including Dar ul-Funun (College of Science), founded in Tehran in 1852, is not more than a dozen.
7. The monarch had divine rights. He was usually called Zell-Alah (the shadow of God). His court was the shrine for many poets and scholars. The monarch might support and encourage a poet by offering him golden coins or he might condemn him to prison or even to death. He had the same approach with writers.
8. Autocracy had deep and strong roots. There was no room for freedom of thoughts, ideas, and information.

9. Book production was a delicate art, like carpet making. Calligraphers, miniaturists, illuminators, and binders were gathered in the book markets. The Koran was copied on fine vellum or parchment, with excellent binding. Many valuable manuscripts of this period are now held in famous libraries of the world, especially in Europe, the Soviet Union, and the United States.

10. The content of manuscripts was mostly poetry, philosophy, history, and religion. Even a great scientist and physician like Avicenna (A.D. 980–1037), whose doctrines on medicine and anatomy were taught in European universities, or a world known mathematician and astronomer such as Omar Khayyam (d. 1123 or 1132) could not be free from poetry and philosophy.

11. The scholarly language was Arabic. Use of the Persian language was not common for writing books on advanced subjects.

12. Although paper was made in Iran in A.D. 751 and from there went to European countries, the printing of books in Farsi was not introduced in this country until 4 centuries after the invention of printing. The first Persian books were printed in Iran in the early nineteenth century.

13. Generally, libraries were of three types: a) imperial, b) religious, and c) private. Imperial collections were kept in the royal court, religious libraries were in mosques, and private libraries belonged to the scholars. The landlords and aristocrats who were judged by their possessions were also interested in collecting the expensive illuminated manuscripts. Regardless of the kind of library, the librarians were learned men.

14. Books were preserved very carefully as a valuable heritage from a luminous civilization. Not everybody was allowed to use them.

TRANSITIONAL STAGE

This stage, which started with the constitutional revolution (1906), overlaps the traditional era up to the middle of the twentieth century. The transitional stage can be characterized as follows:

1. Technology and new industries were introduced in Iran and factories were established.

2. The high acceleration rate of economic growth, especially after 1950, was considerable. The villagers began to move to the towns and cities. The rigid structure of society came to an end and new social classes were created.

3. Quantitatively the progress of education in Iran grew in an almost vertical line. The first Imperial Decree for a campaign against illiteracy was issued in 1936. The course of instruction was 2 years, and there were no special books or trained teachers. During World War II this program came to a halt. According to the Compulsory Education Law of 1943, primary education became compulsory for all Iranian children of school age. But problems of population distribution, migration of villagers, and the lack of sufficient means prevented the achievement of the objectives of this law. The 1956 census revealed that only 14.6% of persons over 10

years of age and 17% of persons between 10 and 45 years of age were literate. In 1963 the "literacy corps," a semimilitary organization attached to the ministry of education, came into existence. Conscripts holding high school diplomas are enrolled in this corps and required to spend their 2 year compulsory military period in educating illiterate villagers. This was a giant step toward literacy. In 1 year's time more than 300 new primary schools were founded in villages. During the 1960s the number of high school students tripled. The first modern university was established in Tehran in 1934, and now the number of colleges and universities, public and private, in the country exceeds 100. Also, thousands of Iranian students are studying in American and European educational institutions. The liberation of women in the first half of this century has doubled the number of students and educators. This tremendous change in education during a short period has presented the libraries and librarianship with a complex situation.

4. In spite of the marvelous quantitative improvements, quality of teaching methods did not develop. The educational system is based on a single textbook, memorization, lecture notes, and mimeographed pages. A student can graduate from a university without writing a term paper or being aware of library research. Education is still in the unidimensional system and the trend toward the multi-dimensional method is not yet tangible. Until 1 or 2 decades ago, the instructor and student had a kind of lord and subject relationship, even at the university level. Generally speaking, the instructor tries to keep his "autocracy" in his realm for historical and cultural reasons. A student has to gain and give back whatever his instructor decides. It is unusual to have discussion and exchange of thoughts in the classroom. In fact, to express an idea opposite to what the instructor believes is dangerous for the student. In spite of the ever-increasing number of students, this old-fashioned system of teaching has not motivated the development of the libraries.

5. Applied research in technical and social matters is still in its infancy because of the educational system and the rush of manufactured goods from abroad. The only method of research now common is the historical one, and it has been mostly used for the classics, especially collections of poems. At the moment, Iran is at the primary steps in using libraries and information centers for the purpose of decision making and problem solving. Unfamiliarity with objective research has had its own effect on modern librarianship. Many decisions are made in this field without taking into account the local needs and problems.

6. The long history of autocracy in Iran has left a great impact on current administrative affairs from which library administration cannot be free. Bureaucracy and the abundance of letter writing, the lack of cooperation among the libraries and their superior units such as universities, and the lack of consideration of the fundamental principles of administration have all delayed the improvement of library services and the recognition of the role of librarianship in the society.

7. As a developing country, Iran follows in the footsteps of developed countries. The basis of actions is "imitation" rather than needs and necessities. There is a kind of social pretense. You may find microfilm readers unused in libraries for many years, but they have been purchased because these tools are available in western libraries.

8. There is a tendency to keep aristocracy alive. An executive may have a beautiful collection of expensive books in his house without studying any of them; or a librarian, while striving in the network of a complicated administration, may enjoy fancy and luxurious furniture in his office.

9. Printed books and other mass media came to Iran almost simultaneously. The number of printed books grew gradually after World War II. At the same time newspapers and popular magazines increased; radio stations were established in 1939 and television in 1955. The motion-picture industry became highly active in the last 2 decades. As a result, Iranian literates became movie-goers and TV-watchers before acquiring the habit of book reading. This is a significant characteristic of this stage. It hinders the increase of printed books in proportion to the growth of literates. In 1935 only 233 books were printed in Iran, two decades later there were 561, of which 284 were belle-lettres.

10. A gap between the old type librarian and the new one exists. The former is a scholar with little idea of library service and the latter is a professional man who has been impressed by western influence and has departed from his historical culture.

11. The main feature of this stage is the severe and hard contact between historical culture and western civilization. Many examples can be given to show the dilemma raised from this impact. Traditionally the conservation of books is an important aim; on the other hand, subject classification has become common in Iranian libraries. So, in a large university library in Iran, the books are being classified by subject but there are no open shelves; the materials are held in closed stock as before.

The enriched Persian classics cast a vast shadow on current literature. More books are still written and published on belle-lettres than on science. Even in this area the majority of books are new editions of old ones. The number of original scientific books rarely goes beyond 100 in 1 year. Books on science in modern libraries are mostly in foreign languages, but language barriers are a hindrance for their use.

The lack of intellectual freedom in an environment where various types of libraries are growing is another effect of the contact between the traditional era and westernization. Books printed in the country are supposed to be surveyed before their publication. In 1969 a copyright law was passed by Parliament. According to "The Law for Protection of the Rights of Authors, Composers, and Artists," the rights of any work are protected for its author and will be transferred to his heirs-at-law until 30 years after the author's death. Anyone who publishes the works of others under his own name or without the permission of the original author may be imprisoned for up to 3 years. Article 21 of this law indicates that authors must officially register their works. However, the regulations made in regard to this article collapse the whole idea of the copyright law. Article 1 of the regulations says: "The managers of printing-houses have to send two copies of every work, after the completion of printing and before the binding, to the National Library for registration of author's name and the number of copies to be published. The registration will be done within a maximum of ten days." However, some books which have been given to the National Library for this purpose have been kept there for months because the surveyors do not give permission for their publication!

Article 5 of the regulations completes this sad story. It indicates that "No work can be published without registration." The license of any printing house which delivers the copies of a printed work to its author or publisher before registration will be canceled and the manager of the press will be prosecuted.

In this introduction an effort was made to give a short background of the two periods of Iran's development. In the section on the history of Iranian libraries a few important ones which belong to the traditional era will be mentioned. Discussion of the transitional stage will include descriptions of various types of libraries.

Historical Background

Since Persian manuscripts have an outstanding position in the history of libraries, some mention of them is indispensable here. The low literacy in Iran meant that the public was not educated, but this did not prevent the continuation of Iran's contribution to human knowledge from the time of ancient civilization to the present. Although education was the privilege of special categories of society, numerous scholarly works and scientific treatises appeared. It is true that poetry and theology were the dominant subjects, but in various fields such as philosophy, ethics, politics, medicine, logic, astronomy, geometry, psychology, and zoology, precious books were written.

Throughout the history of Iran, book making has been a venerated profession. Calligraphy was also a delicate and important art. It is still believed that if Iran changes Arabic script to the Roman alphabet a national heritage will be lost and the next generations will be separated from the classical texts.

The copies of Persian manuscripts which were destroyed and burned by enemies were innumerable, but today a great many of them exist wholly or partially in famous libraries and museums of the world. One may find these invaluable sources of man's recorded knowledge from the State Library at Leningrad to the Bibliothèque Nationale, and from the Bodleian Library to the Metropolitan Museum of Art.

The supremacy of Iran in the art of the book has never been challenged. The earliest evidence we find in Iran of the possibility of beauty in writing is in the Achaemenid period when color was employed to enhance monumental inscriptions. In the same period the Iranian often scribed on silver and gold tablets. This procedure was important for the safekeeping of written works.

In the pre-Islamic age Iran became the center of two widespread religions, Zoroastrianism and Manicheism, both of which had a vast influence in book making. Zoroaster (618-541? B.C.) brought Avesta, the holy book, which was copied on leather or bark in gold ink and decorated with jewels. Mani (A.D. 215-274?), whose religious teachings were composed of Buddhism, Zoroastrianism, and Christianity, brought the evolution of the art of the book toward perfection. Mani himself was the inventor of a script. His famous work, *Arzhang*, was his painting and drawing of the cosmos, with a commentary. The Manichean texts were written in colored inks and richly illuminated.

For 2 centuries after the Arab invasion and Islamic conquest, book decoration in Iran came to a halt. It was then revived with the illuminating of the glorious Koran which bears witness to an appreciation of the cultural and spiritual, if not aesthetic significance of writing. One passage in the Koran runs, "Read, and thy Lord is most beneficent who hath taught the use of the pen, who has taught man what he knew not."

As early as about the tenth century, paper had supplanted parchment not only in secular works but also in copies of the Koran and other religious texts.

Calligraphy developed with the change of the alphabet, and many new scripts were invented. The *naskh* script had different forms. The inventor of the decorative *thulth* was Ibrahim Segzi of Sijistan. In the beginning of the sixteenth century, Mahmud of Nishapur came to eminence as a master of the *taliq* script, and later *nastal'iq*, an offshoot of the old cursive character invented by the celebrated Mir Ali of Tabriz, the royal scribe (d. 1559).

The various styles of book painting began in the twelfth century with the Seljuk period. The works of the Seljuk School are veritably astonishing in their wealth of color, shading, and the forcible depiction of their subjects.

In the second half of the thirteenth century Iranian book paintings enter the transition phase, passing from the Seljuk style to a new orientation imposed by the Mongol conquest. The main tendency of Il-Khanid School was toward the pictorial representation of historic events and legendary episodes. The whole art of miniature painting was established in Iran when the great national epic of Firdausi, *Shah-Nameh*, became increasingly common in illustrated copies. Iranian masters were primarily concerned with the production of the magnificent Korans of the age of Il-Khans, with their large size and their few and incomparably imposing lines of script in black and gold.

The Herat School of book painting came into existence in the time of Timurid. Baisorghur Mirza (d. 1434), the grandson of Timur, was himself a famous calligrapher. He founded the academy of the art of the book at Herat in connection with his library. More than forty calligraphers, in addition to numerous illuminators, illustrators, gilders, and painters, were among the staff of this academy, the head of which was Behzad. In all Oriental sources Behzad is appraised as the most important painter of Iran. He was a revolutionary personality. His works had a superior quality in conception and execution. Behzad's masterly skill of book painting made him the director of the Royal Library. In 1438 this order was issued at Herat: "By the will of God, the Architect of Creation, the Great Painter of the Sky and Earth, . . . it is our order to appoint the rarest man of the times . . . the ablest painter . . . Behzad, to the position of the chairmanship of all the Royal Library's staff and the scribes, painters, illuminators, table drawers, gold beaters and gold mixers and other groups associated with these affairs . . ." (1).

Beautiful polychromy, harmony of colors, close attention to the details of scenes, and innovation in perspectives are peculiar to the Herat School.

In 1506, Shah Ismail, the founder of Safavid dynasty, invited Behzad to Tabriz and made him his chief librarian. The pupils whom Behzad took with him from Herat

developed to such an extent in their new environment that they are considered wholly of the school of Tabriz.

In the threshold of the seventeenth century, Shah Abbas the Great moved his capital to Isfahan and there, through his encouragement and favor, a new style of book painting came into being. The famous painter and calligrapher of this period was Riza Abbasi. He became so much admired that he overshadowed, for a time, the fame of Behzad. He was the founder and most prominent artist of the Isfahan School. His elegant, fashionable style gained him a great influence in the other decorative arts. Iran has numerous authentic signed and dated works by Riza Abbasi. He had many pupils. The Isfahan School tends to copy nature completely.

During the eighteenth and nineteenth centuries two more important styles of book painting were founded; one was the Zand School and the other the Qajar School. Each of them had their own features and particularities.

With the beginning of the twentieth century and the increase of printing houses, the art of book painting declined.

Book decoration and book binding supplemented calligraphy in Iran. The classical bindings were made of leather, wood, gold, or silver. Saint Augustine speaks of the expensive bindings of the Manichean books. Iranian book binding has two characteristics: leather filigrane and polychromy. The decoration of chapter headings, especially in Korans, perhaps the illuminators' earliest task, began in the seventh century.

From the twelfth to the fifteenth century marginal decorations with abstract patterns were introduced. A tendency toward naturalistic design was noticeable. The backgrounds of the title headings were decorated with floral patterns. Elaborate tables of contents also began at this time. Illumination maintained a distinctly individual character. The outside covers were made of brown goatskin, tooled and stamped. At the same time the interior decoration of the medallion became more elaborate. The custom of decorating the inside as well as the outside of a binding was also common.

During the sixteenth to the eighteenth centuries, illumination style was in accordance with the other arts. The outstanding feature of this time was the preference for arabesques and cloudlands. A new and sumptuous style of binding with the covers lacquer-painted appeared in this period.

History of Libraries

Until the constitutional revolution, as mentioned before, there were three types of libraries in Iran:

1. Royal libraries, including the libraries of princes and ministers.
2. Private libraries, especially those belonging to poets, scholars, and theologians.
3. Special libraries which were connected with the mosques, colleges, and hospitals.

Three great invasions by the Greeks (333 B.C.), Arabs (641), and Mongols (1220) annihilated numerous libraries. Although many important historical libraries which existed in the past are untraceable, their number was astonishing. R. Homayoun Farokh, who has written three volumes on the history of Iranian libraries, enumerates 459 of them with a brief description for each. Obviously in this short article it is difficult even to list these libraries. To select the most significant ones is not an easy task, because every single one of them was important. We have mentioned only a few of them here as samples.

The first source which helps us to determine that Iran had libraries is the Old Testament. Delivered by the Achaemenid from captivity, the Jewish nation has spoken highly of the Iranian with an occasional mention of libraries. In Ezra we find that the Iranian monarchs kept archives and libraries in Babel, Media, and other towns. Esther tells us that the Iranians maintained "The Book of Chronicles" to record historical events.

According to Ibn Nadim, the author of *al-Fihrist*—compiled about A.D. 987—there were in the Apadana Palace at Persepolis inscriptions on wooden, stone, and clay tablets which covered various subjects. A great many of these were destroyed by Alexander of Macedonia or sent by him to the Alexandria Library. The discovery of 30,000 clay tablets in 1934 in the basement of the ruined Apadana Palace confirms this statement. Archaeologists have called this place the Treasure of Persepolis or Estakhr Library. Alexander also burned 20,000 cowhides on which the Avesta was recorded. We are told that these books, kept in the archives of Persepolis, were put to flames when Alexander made the palace a burning torch.

There were at least two great libraries in the Sassanid period (A.D. 225–651). Ibn Nadim writes: "Ardeshir [Sassani] collected, from India and China, all the ancient Iranian books that had survived but had been dispersed, and kept them in a treasury; his son, Shapur I, followed his example and collected all the works which had been translated into Persian from other languages. . . . He collected the Avesta into book form . . . thus reviving it after its having been burned by Alexander" (2).

Another library of this period was established by Khosrow I in Gondishapur for its university. His special interest in collecting books from the farthest quarters of the world is well known. Gondishapur was the foremost research center during the Sassanid time. Many scholars of various nationalities, especially Nestorians, were gathered there and many books were translated into Persian by the order of Khosrow I.

In addition to these two libraries, there were other big and accredited libraries. All the fire-temples and places of worship as well as all hospitals and centers of research and learning boasted of their treasures of books.

Then came the Arab invasion in 641. The Arabs worked zealously to eradicate all that was non-Koranic. Famous libraries throughout the realm suffered oblivion. It is said that the Arab invaders believed that the content of a book might agree with the Koran, but could not be superior to it; worse than that, they might disagree with the holy book. In both cases the non-Koranic book deserved to be annihilated.

And it was. The Iranian libraries were destroyed, the books were thrown into rivers or were burned.

To escape this fate Iranians buried and hid their writings, many of which were forgotten due to lapse of time. Ibn Nadim says that two such libraries were discovered during the tenth century. The excavations at Turfan also show the Iranian love for books and libraries.

The earlier persecution of books did not make the Iranians lose their zeal. As soon as circumstances permitted, books were written and libraries were assembled. Many newly established libraries were so large that they had separate rooms for different subjects. In fact, when the Arabs conquered Iran, they fell heir to the native Persian literature. Gradually their libraries were filled with the books of Persian literature. In the eleventh and twelfth centuries libraries were numerous, and there was a flourishing book trade.

The Nizamiyah college was founded in 1064. It had a great collection of books of a semipublic nature. As we know from the *al-Fihrist*, there were many private libraries. Almost every important city in Iran had its library. Everywhere princes and governors encouraged learning. This was true of the Samanid in Bukhara and the Buyyids in Shiraz. In Bukhara, for example, the famous physician and philosopher Avicenna (980–1037) was summoned by Nuh Ibn-Mansur to come to court to be the librarian. The royal collection Avicenna saw at court astonished him. He states: "The books on each particular science had a room to themselves. There were many rooms. In one room there was the collection of poetry, another room had the books on theology and so on. I inspected the catalogue of ancient Greek authors and looked for the books which I required; I saw in this collection books of which few people have ever heard and which I myself have never seen before" (3).

Nuh Ibn-Mansur also invited the eminent scholar Ibn-Abbad (938–995) to become his chancellor. Abbad is said to have refused on the grounds that he could not transport his library, the theological works alone requiring 400 camels. On ordinary travels he took with him thirty camel-loads of books. He left his library, the catalog of which filled ten volumes, as an endowment in Ray.

In the city of Ray lived Ibn al-Amid (d. 971) who was not only a fine scholar but a passionate booklover. In 965 wandering sectarians broke into al-Amid's house, plundered the furniture, and carried off his possessions. Ibn Miskawih, al-Amid's librarian, writes: ". . . He loved his books better than anything else . . . When he saw me, he asked about the books, and when I told him that they were safe, that no hand had touched them, he brightened up and said: Thou art a child of fortune; all other things can be replaced, but not the books . . ." (4).

Book collections and libraries were to be found in Nishapur, Isfahan, Ghazneh, Basrah, Shiraz, Merve, and Mosul. In the ninth century Abul Vafa Ibn Salma founded a house of learning and stocked it with books on all branches of knowledge. It was open to all scholars. In Isfahan a rich landowner established a library in 885 and it is said that he spent 300,000 *dirhems* on books. When Mahmud of Ghazna plundered the libraries of Ray in 1029 and of Isfahan in 1033, he had several hundred loads of books carried back to Ghazna. Ibn Hibban (d. 965) bequeathed to his

city, Nishapur, a house with a library and quarters for students and provided stipends for their maintenance. Books were not to be loaned out.

The best libraries of this time, perhaps, were those of Shiraz and Merve. The Shiraz foundation was built by the Buyyid prince, Azud al-Daula (d. 982) on his palace grounds. The library, which contained much scientific literature, was in the charge of a director (*wakil*), a librarian (*hazen*), and a superintendent (*musk-rif*). The books were stored in a long, arched hall with stack rooms on all sides. Each branch of knowledge had separate bookcases and catalogs.

At Merve, at the time of the Mongol invasion in the thirteenth century, there were no less than ten libraries, two of them in the mosques and the rest in the schools. Yakut al-Hamawi (1178–1229), the famous geographer, stayed in Merve for 3 years and marveled at the liberality with which the libraries loaned books to him. He writes "My house was never clear of 200 volumes, or more, taken on loan, and I had never to give a deposit though their value was high" (5).

Once more the great Iranian civilization was crushed by invaders; this time the hordes of Mongols and Tartars. They stabled their horses in mosques, burned libraries, and used precious manuscripts for fuel. And once more, a short time after the invading and plundering ended, the books were collected and large libraries were again built in Iran.

In the fourteenth century an observatory was founded in Maragheh and a large library was connected with it. Nassir al-Din Tusi, the famous scholar, mathematician, and astronomer, was in charge of this library. He collected numerous works which survived the Mongols from Nishapur, Merve, Samarkand, Bukhara, Alamut, and other cities. The number of works in this collection was more than 400,000; many of them had been translated from Chinese, Mongolian, Sanskrit, Arabic, and Assyrian languages.

Rashidi library was established by Rashid al-Din Fazlullah, the minister of Ghazan Khan, early in the fourteenth century. Rashid al-Din was a learned man and master of various fields of knowledge who is best known as a great historian. Since Rashid al-Din was a wealthy man, he built a center of science and research near Tabriz whose library is quite famous. In his will Rashid al-Din asked to be buried close to his library. He endowed his library with thousands of precious books. He stated, ". . . I endow Rashidi library sixty thousands of books on various subjects of science, history, literature, etc. which I have collected from Iran, Turkestan, Egypt, India, China and Rome" (6). In order to keep safe his own works, Rashid al-Din sent copies of them to different libraries in Iran.

Sheikh Safi library was founded in the same time and survived until the nineteenth century when a big part of its collection was taken to Russia by orientalists. This library had books in Persian, Arabic, and Turkish; a few of the copies had been offered by Shah Abbas the Great.

Many large libraries were founded in the Safavid period (1501–1736). The Royal Library in Isfahan was the greatest one. Shah Abbas warmly accepted the Armenian refugees who had been persecuted. Jolfa, near Isfahan, was a safe place for them. They were permitted to build their church and library. The religious

Jolfa library which has invaluable works on Christianity still actively exists and is one of the oldest libraries in the world. A small printing house was affiliated with the library and the first book in Iran was printed there in 1641; however, it was in the Armenian language. Many decades later, in 1826, the first Persian book of Iran was printed in Tabriz.

Another library which connects the traditional era to the present is Astan-e Qods-e Razavi Library in Meshhad which was established in the fourteenth century. Although it has been plundered once or twice, it has survived and now is the greatest religious library in Iran. The city of Meshhad is proud of the shrine for Imam Reza, the eighth Imam of Shiites. Razavi library is a part of this holy shrine. It has 8,910 rare manuscripts and it is open to the public, but books may not be taken out. The collection of this library grew largely by endowment. As the oldest library now existing in Iran, it helps other libraries by producing microfilms of the old manuscripts. So far, five volumes of its book catalog have been published. This library also has a monthly publication. Hussain Malek, the contemporary Iranian collector, recently gave the Razavi library a precious collection of manuscripts. This collection is now kept in the Malek Library in Tehran, a branch of the Razavi library.

A short description of two libraries which were founded in the Qajarid period (1794–1925) shows the continuity of the old pattern of libraries up to this period. In 1878 Hussain Sepahsallar, the prime minister of the time, built a mosque and religious school with a large library in Tehran. The first endowment of Sepahsallar to his library was a collection of 40,000 volumes, most of them manuscripts on religion. In 1935 the Sepahsallar School became, for a while, the College of Theology and during this time its library grew faster. Two volumes of its bibliography, edited by Ibn-Yusef Shirazi, have been published so far.

Another library was founded in this period and exists now as the Royal Library. Established by Fath Ali Shah Qajar and supported by other Kings of the Qajar dynasty, this library is considered the latest Royal library in a long line. It is located at the Golestan Palace in Tehran and contains significant and unique manuscripts.

The National Library

At the threshold of the constitutional revolution a group of liberalists and patriots installed a small library in Tehran. A few years later its collection was transferred to Dar ol-Funun School, and there the Public Library [of the Ministry] of Education (*Ketab Khaneh Omumi Máaref*) was developed on the occasion of the thousandth anniversary of Firdausi in 1935. This library had a head, a librarian, an assistant librarian, a bookkeeper in charge of the closed stock, specialists for old books in Persian, Arabic materials and books in foreign languages, and also typists and secretaries. The books were not allowed to be taken out; however, the organization of the library was quite new in Iran. A list of this library's holdings, compiled by Mr. Abdol Aziz, was published in two volumes in 1936.

The collection of the Public Library became the core of the National Library



FIGURE 1. *The National Library of Iran.*

when a new building was constructed for it (see Figure 1). In 1939 all of its books, together with a selected collection of the Royal Library, were moved to the newly-founded National Library close to the Museum of Ancient Iran. Dr. Mehdi Bayani was appointed as its director and he remained in this position for 22 years. Some private libraries, most of them consisting of old Persian manuscripts, were bought for the National Library. Foreign books were also ordered.

Six thousand books of the Iranian and Russian Bank which had been delivered to Iran after World War I were added to the National Library. In 1941 a large collection—with its catalog in 203 pages—was offered to Iran by the German government and housed in this library.

The National Library has two floors. On the first floor are the administrative offices, periodical division, cataloging division, photocopy and binding division, exhibition room, and Firdausi amphitheatre; on the second floor there is a reading area with a capacity for 100 persons, the treasury of manuscripts, the stock of printed books, and reference works.

Until 1965 the National Library was a section of the Ministry of Education and its director was responsible for the supervision of all libraries of this ministry. It had a council whose members were the Minister of Education, General Director of Libraries, and twelve scholars and eminent bookmen.

In 1967 the National Library became a part of the Department of Libraries which was established in the Ministry of Culture and Arts. Its internal organization, however, did not change.

As a legal depository, the National Library has failed to fulfill its function. For many years after its foundation, book collection policy emphasized manuscripts and rare books. In 1968 a rule was made for the placing of two copies of newly printed books in this library and since then it has been enforced. But the rule does not say anything, implicitly or explicitly, about government publications.

In 1962 the National Library became responsible for publishing the *Iranian National Bibliography (Ketab Shenasi Melli Iran)*, a work which had already been started, for the first time in Iran, by Iraj Afshar and his colleagues. The *Bibliography* was published annually up to 1966 and ceased for 2 years, then was restarted in 1969, this time monthly and quarterly.

The National Library has a photocopy service, mostly for the Iranologists overseas. It also exchanges books with libraries throughout the world. The number of books in this library is about 85,000; they are in Persian, Arabic, and European languages. The library collects photoprints of manuscripts which are in foreign libraries but are not available in Iran.

University and College Libraries

Universities and colleges in the western pattern have not had a long history in Iran. The first modern Iranian university was established in Tehran, the capital, in 1934. During the last 2 decades higher educational institutes have grown so rapidly that the foundation of the Ministry of Science, Technology, and Higher Education became indispensable in 1967. The enrollment in academic institutions increased from 24,885 in 1960 to 67,093 in 1969. The number of applicants is ever increasing; usually they are more than triple the universities' capacity. In order to select the applicants, a general entrance examination is held each summer throughout the country. The mushrooming growth of the higher educational institutions has not yet come to the end. As pointed out earlier, such extended growth has brought about an exceptional circumstance for the university and college libraries. The continuation of the old method of teaching, the lack of scientific books in the Persian language, the shortage of professional librarians, and many other factors, a few of which we have already mentioned in the Introduction, have given a unique shape to this type of library. Their conflicts, arising from the contact of two poles, history and westernization, are outstanding. While the collection of a university library has been classified by DDC, it is kept in a closed stock and, interestingly enough, another academic library may use the open-shelf system with accession-number arrangement for the books. However, these libraries are in their infancy at present but their future is promising.

In July 1971 *A Survey and Evaluation of the University and College Libraries of the Country* was published by the Ministry of Court in 358 pages. Table 1 summarizes some results of this large survey.

The majority of academic libraries, i.e., thirty-five out of sixty, are located in Tehran. There are eight in Tabriz, the center of Eastern Azerbaijan province; five in the city of Isfahan, the center of Isfahan province; five in Meshhad, the center of Khorasan province; four in Shiraz, the center of Fars province; and three in Ahvaz, the center of Khuzistan.

Almost all universities, and thus their libraries, are supported financially by the government. A very few of the academic libraries have been endowed by benefactors. Usually the endowments are small collections of rare books.

Although the matter of centralization of university libraries has now been taken into consideration and the trend is toward this kind of administration, there is no real library system as yet. Pahlavi University, in Shiraz, has a Director of Libraries, but he acts as a coordinator and each school has its own library. The bylaws for the centralization of libraries in this university have been prepared, however, and will be carried out in the future.

Three universities, in Tehran, Isfahan, and Tabriz, have central libraries. The central library of Pahlavi University is under construction. The collections of these libraries are mostly in the humanities and social sciences. The number of books in the Isfahan and Tabriz central libraries is not considerable because both of them are quite new. The largest of the three is the one in Tehran which was founded officially in 1959 and named the Central Library and Documentation Centre of the University of Tehran. In 1950 the embryonic collection of this library was endowed by Seid Mohammad Meshkaat, a professor of law. This gift consisted of 1,320 rare and priceless books, all of them on Islamic law and jurisprudence. Its catalog, prepared by Monzavi and Danesh Pajouh, has been published in seven volumes. Gradually, other collections of books, most of them manuscripts and old books, were added to the collection through exchange, gift, and purchase. Now the book catalog of the library has reached fourteen volumes. From volume eight on, its title page covers: "Catalogue Méthodique, Descriptif, et Raisonné des Manuscrits de la Bibliothèque Centrale de l'Université de Tehran. Par M. T. Danesh Pajouh."

A large building for the Central Library and Documentation Centre of the University of Tehran was constructed in 1958 (see Figure 2). The main divisions of this library are: Administration, Cataloging and Classification, Circulation, Reproduction, Loan and Exchange, Bibliography, Book Binding, Audio Visual, Periodicals, Public Relations, and Exhibits. The library compiles a union catalog of all colleges, and its cataloging division is responsible for all college libraries of the university. The establishment of this library, with regard to the functions it has already accomplished, is the first step for the centralization of the academic libraries of Iran. Thus far this library has collected many photoprints of rare Persian books from other libraries, especially those abroad. Its own reproduction service is unique in Iran.

The first publication of the central library of Tehran University is *Bulletin de la Bibliothèque Centrale de L'Université de Tehran: Contents des articles sur les manuscrits orientaux. No. 1* which was published in 1961. Another significant publication of this library is the annual *Ketabdari (Librarianship)*, the first issue of which was published in 1967. It is edited by Iraj Afshar, director of the Central

TABLE 1
University and College Libraries^e

	Estab- lished	Books	Books per student	Periodicals librarians	Professional librarians	Shelving	Classification system
Tehran (Capital)							
University of Tehran	1959	87,500	15	1678	10	Open and closed ^b	LCC
Central Library							
College Libraries							
Ad. and Bus. Management	1954	17,000	22	69	1	Open	DDC
Agriculture	1934	20,000	41	335	1	Open and closed	DDC
Dentistry	1956	5,400	12	42	—	Closed	LCC
Economics	1967	8,500	10	95	5	Open	LCC
Education	1966	15,000	16	130	1	Open	LCC
Fine Arts	1940	8,000	8	25	—	Open	DDC
Forestry	1966	4,500	28	46	—	Closed	UDC
Hygienics	1955	9,300	51	500	1	Open	LCC
Humanities	1934	86,500	31	210	3	Open and closed	DDC
Law and Political Sciences	1941	94,000	51	600	3	Open	LCC
Medicine	1934	35,000	13	670	4	Open	LCC
Pharmacology	1956	8,000	22	11	1	Open	DDC
Sciences	1945	28,000	23	123	1	Closed	DDC
Technology	1934	30,000	24	235	2	Open	LCC
Theology and Islamic Studies	1934	25,000	49	3	1	Closed	LCC
Veterinary	1940	7,500	8	175	1	Open	DDC
University of Arya Mehr	1966	25,000	14	545	—	Closed	DDC
National University	1960	22,000	4	430	1	Open	DDC
College of Business	1962	5,500	4	19	—	Closed	DDC
College of Foreign Literature and Languages	1965	7,000	6	1	—	Open	Accession number
College of Pars	1967	7,500	5	55	1	Open	LCC
College of Polytechnic	1964	8,000	20	7	1	Closed	DDC

Teachers' College of Education	1955	40,000	15	35	1	Open and closed	DDC
Technical College of Narmak	1962	10,000	3	3	—	Closed	DDC
Womens' College	1965	7,000	3	9	—	Open and closed	DDC
Institute of Communication	1967	12,000	9	10	1	Open	DDC
Institute of Statistics	1968	5,000	20	22	—	Closed	Accession number
Ahvaz							
University of Gondishapur							
College Libraries							
Agriculture	1958	5,700	16	80	—	Open	DDC
Medicine	1969	1,000	1	25	—	Open	Accession number
Sciences	1956	7,500	14	245	2	Open	LCC
Isfahan							
University of Isfahan							
Central Library	1969	8,000	6	175	1	Closed	DDC
College Libraries							
Education	1970	2,750	5	—	—	Open	LCC
Humanities	1958	60,000	80	37	1	Closed	LCC
Medicine	1949	13,500	12	240	—	Closed	DDC
Sciences	1964	11,000	17	75	—	Closed	DDC
Meshhad							
University of Meshhad							
College Libraries							
Dentistry	1968	1,750	14	36	1	Closed	LCC
Humanities	1958	30,500	29	28	—	Closed	Accession number
Medicine	1949	11,000	20	180	1	Open and closed	DDC
Sciences	1962	8,250	12	40	—	Closed	DDC
Theology and Islamic Studies	1958	13,500	41	22	—	Closed	Size

(continued)

TABLE 1 (continued)

	Estab- lished	Books	Books per student	Periodicals	Professional librarians	Shelving	Classification system
Shiraz							
Pahlavi University College Libraries							
Agriculture	1955	10,000	13	255	1	Open	DDC
Arts and Sciences	1963	75,000	58	600	2	Open	DDC
Engineering	1968	11,250	18	300	1	Open	DDC
Medicine	1949	12,000	14	800	2	Open	DDC
Tabriz							
University of Tabriz Central Library	1965	75,000	45	42	2	Open	DDC
College Libraries							
Agriculture	1969	1,250	3	10	—	Closed	DDC
Education	1968	2,500	4	10	—	Open	DDC
Humanities	1968	21,000	22	9	—	Closed	DDC
Medicine	1969	1,200	1	2	—	Open	DDC
Pharmacology	1968	2,800	7	51	—	Open	DDC
Sciences	1963	1,400	2	17	—	Open	DDC
Technology	1968	900	2	10	—	Closed	DDC

^aSource: Iran, Ministry of Royal Court, *A Survey and Evaluation of the University and College Libraries of the Country*, Tehran, 1971.

^bPartially open shelves and partially closed stock.



FIGURE 2. *The Central Library and Documentation Centre, University of Tehran.*

Library and Documentation Centre, whose services to library science in Iran, particularly in the field of current bibliographies, are highly appreciated.

In 1954, through an agreement between the University of California and the University of Tehran, a new educational organization was founded in the College of Law and Political Sciences at University of Tehran. It was the Institute for Administrative Affairs (IAA). The library of this institute essentially became a pilot project for the academic libraries of Iran. Three American librarians, Donald Ramzdel, Richard D. Galloway, and John Smith, worked in this library consecutively. One of the staff, Ali Akbar Jana, a talented young Iranian, was trained by these professional librarians and later organized other libraries on his own. The library of the IAA was the first academic library in Iran which was open to its clientele and had a logical organization with new services. In 1964 the IAA had enlarged enough to become the College of Administration and Business Management with an accompanying expansion of its library.

Interlibrary loan among academic libraries has been started, but it seems there is a long way to go in this direction. The libraries do not contact each other directly for this purpose. The problems in this area are considerable but the number of books loaned or borrowed by the academic libraries is gradually increasing.

The catalogs are in card form, and the few of them that have been printed in book format cover rare books and manuscripts. In many cases the lack of a union catalog, in any form, makes interlibrary loan very difficult, even among the college libraries of a university.

A very important event in the academic libraries which will revolutionize the whole system of these institutions is the employment of professional librarians as library directors. The faculty members who were responsible for the libraries up to recent times are being replaced by librarians who are educated in the field of library science. Although the number of them is now very small, these professional librarians have vitalized the university and college libraries, and certainly their established position in the libraries will create a tremendous reform.

Generally the book selection is still done by the academic members. None of the libraries has an acquisition librarian in a real sense. The ordering of books and all its accompanying routine is carried on by trained clerks. Weeding and exchange is very rare.

Two or three decades ago every university or college library had a closed stock with someone, sometimes a servant, who found the requested books. Today in many academic libraries of Iran one may be helped in various ways by a librarian, whether he is in charge of reference or not.

As the column for the year of establishment in Table 1 shows, the university and college libraries in Iran are so new that it is too early to expect perfect services and complete achievements from them. They are, however, improving very fast.

Special Libraries

Special libraries of Iran may differ, to some extent, with those in the western world. They are not strict enough regarding the homogeneity of their clientele and the specificity of their collection. They do have, however, some common features. Many of them collect both the books on and outside the subject they are supposed to be specialized in. With some terms and conditions, mainly by getting a membership card and having one or more references, everybody is allowed to use them. Roughly 90 percent of special libraries are also governmental libraries located in Tehran. They are not strong in offering up-to-date information. This task is now carried on by the information centers which have been recently emerging in Iran. A very few of the private business or technical enterprises have special libraries.

Almost each Ministry has its own library in Tehran. Among them the libraries of the Ministries of Agriculture, Education and Training, Economy, Finance, Labour and Social Affairs, Interior, and Justice should be mentioned here. However, the most significant in this category is the Library of the Ministry of Foreign Affairs which was founded in 1934. It keeps materials on politics and law, and holds an archive for governmental documents and historical diplomacy of Iran. The collections of maps and atlases, the handwriting of foreign kings and political leaders, the orders of Persian kings, and the international agreements and contracts give a high value to this special library. It has 10,000 books.

The library of *Majlis-e Showra-ye Melli* (the National Consultative Assembly) may be considered a special library because of (a) its unique collection of manuscripts and rare books and (b) its printed or original copies of materials about legal and political affairs of Iran in modern time. It was founded by M. Foroughi, the statesman, and his colleagues in 1923. Its collection grew through the gifts of politicians and purchases from the private libraries. The number of its staff, excluding the chief librarian and his assistant, is thirty-two. Some have been trained but none is a professional librarian. The Majlis Library has a special division for compiling the bibliography of manuscripts; its other divisions are (1) Technical Services, (2)

Microfilm and Reproduction, which provides the photoprints of the borrowed texts not available in the library and also has a service for the libraries inside and outside the country; (3) Binding, which has two sections, (a) Printed Books, and (b) Manuscripts; and (4) Periodicals.

The Majlis Library is one of the largest libraries in Iran. It holds more than 80,000 books including 11,000 rare manuscripts. In fact it has been extended so much that it is regarded as complementary to the National Library of Iran. It is open to the public, but its stock is closed. A part of the Majlis Library stock is devoted to the gifts of private collections, most of them on governmental matters; the collections of Tabataba'yi and Firouz have recently been endowed.

The Senate Library was established by Senator Taghi Zadeh in 1951 and is rich in the field of Iranology. Its collection is around 25,000 titles.

In order to collect in one place the reproduced copies or preferably the original texts of books and documents on civilization, culture, history, and geography of Iran which have been scattered throughout the world, Pahlavi Library was founded in 1963, in Tehran, by the order of H.I.M. Mohammad Reza Pahlavi. This library completes the Royal Library. According to the bylaws of Pahlavi Library, its organization consists of (1) the Board of Trustees whose members are those of the Royal Educational Council; (2) Technical Group—the experts and scholars in charge of evaluation of books and documents; (3) a General Director who is responsible for the administration of the library; and (4) the Board of High Advisors consisting of Iranian and foreign specialists in Persian books and bibliography. Pahlavi Library is supported financially by the gifts of His Imperial Majesty and some benefactors. This library has a serious and continuous relation with all the libraries of the world which keep rare materials produced in or written about Iran.

The Central Bank of Iran Library was established in 1961. Its main collection had been transferred from the National Bank of Iran and now has around 27,000 titles in Persian and European languages. This library receives 250 periodicals regularly, all of them on economics. In 1962 the bylaws and the rules and regulations of this library were published. It has been a pioneer in the compiling and publishing of Persian periodical indexes. The Central Bank Library follows the DDC system and uses the LC printed cards. Many students have benefited from this library for their research work. It is one of the best special libraries of Iran and has two professional librarians.

The Factory of Electricity Library was founded in Tehran in 1958 and has 5,000 books and receives 1,500 technical journals from abroad.

Avicenna Library, founded in 1950 at the tomb of Avicenna in Hamadan, keeps the various editions of his works and the books written about him. The Library of the Museum of Ancient Iran, in Tehran, has about 4,000 books on archaeology.

The Society of National Music Library, established in 1944, holds 2,500 books. The Library of the Association of Lawyers, organized in 1938, has 5,000 titles. The Book Society of Iran which publishes the monthly *Rahnema-ye Ketab*, a journal of Iranian studies and book reviews, has a special library with more than 10,000

books, mostly on Persian language and literature. Yeganeggy Library in Tehran, affiliated with the Society of Zoroastrians, was established in 1931 and has 7,000 books. It is open to all.

The number of religious libraries in Iran is considerable. There are many mosque libraries with special collections on Islam. Some of them have hundreds of precious manuscripts. Three important Islamic libraries are (1) The Library of Hazrat-e Abdol Azim in Ray, founded in 1945, with 5,000 books including 500 rare manuscripts; (2) Faizieh Library, formed in the city of Ghom in 1930, holding 10,000 titles and (3) Hodjatieh Library, established in Ghom, in 1952, with 8,000 books.

The Razi Institute Library in Tehran was founded in 1931 and has 6,000 books on biology and pathology. It subscribes to more than 100 scientific foreign periodicals. In addition to the staff of the institute, the students of the medical schools use this library. The capacity of Razi Library is about 100,000 books. Namazi Hospital Library, in Shiraz, was founded in 1953 and is the best of its kind in Iran. It holds 5,000 titles on medicine and nursing, receives 200 special periodicals, and also subscribes to many popular magazines for the benefit of the sick confined in the hospital.

Public Libraries

As explained before, some libraries in Iran, regardless of their type, are open to all and are usually called "public library." Practically, however, they do not carry on the functions of public libraries. Other than this group there are, administratively, two categories of library in Iran: (1) The municipal public libraries under the supervision of a board of trustees, and (2) the public libraries under the direction of the General Department of Library Affairs, the Ministry of Culture and Arts.

MUNICIPAL PUBLIC LIBRARIES

In 1961 H.I.M. Shah of Iran inaugurated the City Park of Tehran in which a small public library has also been constructed. This pioneer library, directed first by Miss F. Mansour and then by Mr. R. Homayoun-Farokh, was found so helpful and effective that a short period after its foundation the bylaws of the Organization of Tehran Municipal Libraries (O.T.M.L.) were written by the Ministry of Interior. This was in 1964. According to these bylaws, the executive board of the O.T.M.L. is to consist of five well-known personalities who serve in honorary positions. The budget of the libraries is maintained through (1) Tehran municipal subsidiary; (2) membership fee—\$1.50 per year for each member; (3) assistance of national or governmental institutes, in cash or materials; and (4) incomes gained by garden parties, exhibitions, festivities, and so on. The headquarters of the O.T.M.L. is located in the City Park of Tehran. Article 18 of the bylaws recommended the employment of professional librarians. Among the members of the first

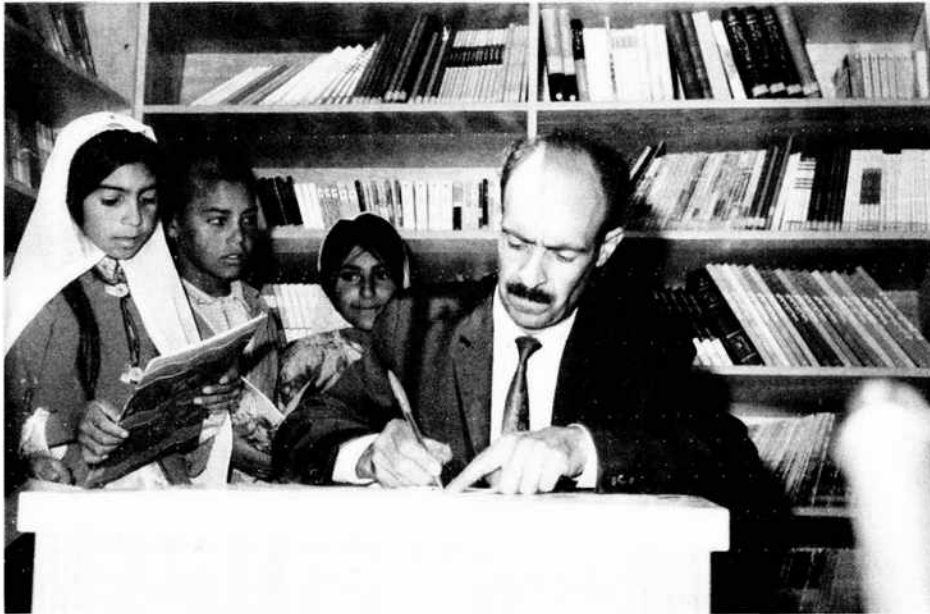


FIGURE 3. *A part of a rural library in Fars, founded for the tribes of this province.*

executive board were two senators and one university professor. The budget of the O.T.M.L. for the first year was \$200,000 (RIs. 1,500,000).

During 1964 three more libraries were founded by O.T.M.L. in other newly-established parks in Tehran; two of the new libraries were devoted completely to children. In the following year, four more public libraries for adults and one more for children and young adults came into being.

The rules and regulations of the O.T.M.L. were prepared in twenty-six articles and nine notes. According to Article 1: "All residents of Tehran who are over 10 years old can use the municipal public libraries of the city." Moreover, each member was allowed to borrow books for 2 weeks.

In 1965 a revolutionary law was passed by Parliament and received royal assent. That was "The Law for Foundation of Public Libraries in All Cities and Towns of the Country." Article 1 of this law states that the municipalities are bound to devote 1.5% of their total annual income to the construction and improvement of public libraries. If the building already exists, the money should be spent for book collection, organization, and administration. In each city a Library Council, as a corporate body, supervises the related activities. The members of the council are the Head of the Office of Culture and Arts, the representative of the city council, the representative of the municipality, and four reliable citizens (see Figure 3).

Article 2 of this law indicates that in order to guide and assist the system of Library Councils, a board of trustees in Tehran is to consist of (1) the Minister of Interior, (2) the Minister of Culture and Arts, and (3) five eminent persons

TABLE 2
Municipal Public Libraries^a

	Library councils	Libraries	Books	Periodicals	Members	Books loaned	Clientele
Provinces (Ostans)							
Baluchistan-Seistan	5	4	7,029	733	972	2,792	192,330
Central	24	29	200,536	15,783	45,221	660,268	792,781
East Azerbaijan	31	24	45,808	3,211	1,525	19,634	277,791
Fars	21	14	20,353	530	2,733	2,281	10,812
Gilan	30	23	19,810	3,195	2,932	51,992	136,627
Isfahan	38	32	28,382	4,174	1,493	24,153	316,724
Kerman	16	15	31,691	2,118	1,800	535	24,070
Kermanshahan	11	6	7,749	290	100	213	2,405
Khuzasan	39	38	34,197	10,127	702	24,886	174,293
Khuzistan	18	12	22,357	499	2,358	7,831	15,553
Kurdistan	8	6	7,593	618	1,069	570	5,100
Mazenderan	41	26	41,777	3,968	4,077	45,106	345,479
Saheli	15	5	4,065	2,949	395	17,695	23,618
West Azerbaijan	17	15	12,915	2,985	331	4,689	90,674
General Governorships							
Bakhtiari Chahar-Mahal	5	3	3,687	9	503	30,000	11,410
Hamadan	10	9	12,096	2,000	352	23,686	107,548
Ilam	5	1	494	5	5	20	3,650
Luristan	5	4	4,890	1,358	6	5	646
Semnan	5	5	3,955	150	584	780	23,125
Yazd	5	4	6,545	2,442	18	1,707	35,308
Zanjan	3	1	2,580	100	85	1,400	10,000
TOTAL	352	280	512,509	57,244	67,261	920,243	2,599,964

^a Source: Iran, Board of Trustees of the Municipal Public Libraries, *The Five Year Report: 1966-1970*, Tehran, 1971.



FIGURE 4. *A bookmobile of the Department of Library Affairs, Ministry of Culture and Arts, in front of the National Library building.*

selected and proposed by the Minister of Culture and Arts to H.I.M. A royal order is issued for each of these seven members.

The Ministries of Interior and Culture and Arts are in charge of the enforcement of this law.

The *Five Year Report of the Board of Trustees of the Municipal Public Libraries: 1966-1970*, published in the beginning of 1971, gives a vivid picture of the progress in this area. Table 2 summarizes this report in facts and figures. The number of Library Councils (352) is less than the number of libraries because in some cities and towns the annual credit given to the public libraries by the municipalities is not enough for building. In such cases the 1.5% of the municipal income is to be accumulated in order to provide the budget for building in the future.

Many governmental, private organizations, and individual benefactors have helped the public libraries by paying cash, giving lands for construction, and even offering chairs and tables. In 1971 the Ministry of Culture and Arts, in various parts of the country, completed the building of thirty public libraries which had remained unfinished because of the shortage of money.

The total annual budget of the municipal libraries is about \$600,000, one third of which is gained and spent in Tehran. So far there is only one bookmobile in Tehran but ninety-two in other cities. The bookmobiles, each with a capacity of 400 books, have circulated hundreds of books in the farthest towns and villages (see Figure 4).



FIGURE 5. *The Central Public Library of Tehran, located in the City Park.*

The best municipal public library is located in the City Park of Tehran. Its new building was inaugurated in 1971 by H.I.M. Shah of Iran. It is called the Central Public Library of Tehran and has a capacity for 250,000 volumes (see Figure 5). The amphitheater, the chess room, and the audiovisual section of the CPLT make a distinction between this library and other municipal public libraries. Any member who has no overdue book for the first 3 years becomes exempt from paying a membership fee and may benefit from the special services of the library.

GOVERNMENTAL PUBLIC LIBRARIES

The public libraries which are managed by the General Department of Library Affairs and the Ministry of Culture and Arts have been counted in this group. There is a close relationship between the two categories of libraries, particularly because the head of the Board of Trustees of municipal libraries is the Minister of Culture and Arts.

The number of governmental public libraries at the beginning of 1970 was thirty-eight. They are scattered in the country and none of them exists in Tehran. However, as pointed out before, the National Library of Iran, located in the capital, is under the supervision of the General Department of Library Affairs. The total annual budget of these libraries, including NLI, for books and periodicals in the year 1969 was \$35,000. For personnel it was \$220,109. In the Fifth Five-Year Plan of Iran, beginning in 1973, a considerable amount of credit has been proposed for the construction and management of new public libraries.

Almost 90% of the library staff in all public libraries have high school diplomas, 5% have B.S. or B.A. degrees, and the education of others is under

the high school level. However, most have been trained for librarianship through the short courses held in Tehran once a year.

The stock of many public libraries is closed and because of the shortage of staff, library hours are limited. In some towns the public library is open only in the afternoons. These conditions seem very poor in comparison with western countries, but comparing them with what was in Iran in the last decade, the progress made is unbelievable. The mere existence of public libraries and the services they offer, especially the loan of books to citizens, show the strides taken in the development of the library situation in Iran in recent years.

The governmental and municipal public libraries cooperate with each other in constructing new buildings through an office of library architecture. The design of the buildings usually depends primarily on the climate and population of geographical areas.

School Libraries

In spite of the remarkable progress of the different types of libraries in the last decade, the school libraries have been neglected almost completely. Certainly their numbers have grown and, on the whole, their collections have increased, but qualitatively the conditions of school libraries have remained the same as they were in previous decades.

Generally a current school library in Iran is a collection of books, an average of 1,000 volumes, housed in a room or in one of the offices of the school, and open only a few hours in a day after the regular hours when the students have gone home and the loaning of books is not permitted. Such a library either has no one in charge or the so-called "librarian" is one of the teachers, or the employees, or he may even be the director of the school.

Up to this time the school libraries of Iran have not undertaken their vital role in education. The main reason for this is that the old method of teaching is still enforced in the schools at all levels. Another reason is the shortage of Persian books written and published for young adults. Many books existing in the school "collections" are never used by the students because they are above their understanding. Since the number of books published for young adults in the Persian language is limited, no policy for book selection can be followed.

The poor situation of school libraries has left its impact on other types of libraries. Most of the college students cannot use the college libraries for their academic studies because of their unfamiliarity with them. On the other hand, wherever a public library is founded the students rush to it in order to compensate for the lack of a library in their schools. This is why roughly 90% of the clientele of every public library in Iran consists of high school students.

Some surveys have been done on school libraries by sending questionnaires, but the statistics obtained from these surveys do not agree. Such disagreements and

inaccuracy indicate, indirectly, the unsatisfactory position of these libraries in the society.

Interestingly enough, the number of school libraries is considerable. Although it is hard to find a library in an elementary school, most of the high schools, public or private, have a "library." The Ministry of Education and Training assists the public school libraries by purchasing books and arranging short courses for training those who are in charge of libraries. In private schools, at the time of registration, a definite amount of money—usually 5% of the tuition fee—is paid by the students for the library. None of the school libraries has a professional librarian and the teachers do not promote the use of the libraries seriously. The students are rarely assigned to use the libraries and they are not encouraged to do so.

To exemplify the conditions of school libraries, some information on three of them, selected randomly from the *Directory of Iranian Libraries, Vol. 1*, published by IRANDOC in 1968, are given in Table 3.

TABLE 3
Examples of School Libraries

City	High school	Librarian	Books	Affiliation	Hours
Tabriz	Amirnezam	Nonprofessional	630	Ministry of Education	2/week
Khalkhal	Pahlavi	Nonprofessional	920	Ministry of Education	4-6
Ghasr-e Shirin	Pahlavi	Nonprofessional	1320	Ministry of Education	8-12, 2-4

Children's Libraries

In contrast to the school libraries, the achievements of children's libraries in recent years is marvelous. The first children's library in Iran was established in 1958 by the Department of Kindergartens, Ministry of Education, in Tehran. It had 1,145 books, including 214 in English and French. This collection was later transferred to the Library of City Park which was under the supervision of the Organization of Tehran Municipal Libraries.

The O.T.M.L., soon after its beginning, founded four more libraries for children in Tehran, but very soon this task was given to another organization with an extended authority.

Owing to the suggestion and protection of Queen Farah Pahlavi, the Institute for the Intellectual Development of Children and Young Adults (INIDCYA) was founded under her honorary direction in 1965.

The main object of INIDCYA, as its bylaws indicate, is the improvement of the knowledge and understanding of children and young adults through the use of books and nonbook materials. To achieve this aim, these actions are to be taken: (1) Establishment of children's libraries in cities, towns, and villages; (2) assistance to the public libraries for creating or developing children's departments; (3) coopera-

tion with the municipalities and related ministries in founding and improving children's and young adults' libraries; (4) using the bookmobiles, especially for meeting the needs of village children; (5) introduction and extension of children's literature by the encouragement of writers, artists, and publishers; and (6) using the audiovisuals and producing moving pictures for children.

The members of the INIDCYA Board of Trustees, all appointed by the order of the Queen, are: the Minister of Culture and Arts, the Minister of Education and Training, the Minister of Interior, the Executive Director of the National Iranian Oil Company, and nine other well-known personalities. Their service is honorary. Queen Farah is the High Director of the Board of Trustees which meets at least four times a year at 3-month intervals. Other administrative bases of the INIDCYA are the Board of Directors, the executive director, and the treasurer.

In each city there is a Supervisory Board of Children's Libraries consisting of the governor (in the center of the province), the mayor, the head of the Division of Education and Training, the head of the Division of Culture and Arts, and the librarian of Children's Library. This board meets at least once a month and sends a report to the headquarters of INIDCYA in Tehran.

The INIDCYA is financially supported by governmental subsidiaries and funds gained from industry. Also, according to a supplementary law passed by the Parliament in 1969, the Board of Trustees of the public libraries of the country has permission to allot 20% from the 1.5% municipal income to the INIDCYA children's library, if the library has already been founded in the related city.

The INIDCYA in its beginning was fortunate in having Mrs. Lili Amir-Arjomand, an influential person, as the executive director. Mrs. Amir-Arjomand, who received her MLS degree from Rutgers University, is still in this position.

The most active and significant part of the INIDCYA is its Division of Children's Libraries which has three subdivisions for (1) Tehran, (2) cities and towns, and (3) villages.

The 1971 annual report of the INIDCYA Board of Trustees shows that the number of children's libraries has reached seventy-one, nineteen of them in Tehran, with 250,000 members. The bookmobiles have distributed books to 1,071 villages; and 127,000 children of the farthest rural areas have become members of the mobile libraries. Moreover there are three bookmobiles for visiting Tehran schools. The number of clientele in the cities and towns was 5,333,815 in 1971.

The literacy corps assists the INIDCYA in extending the use of bookmobiles in villages. The children of the northern and southern tribes of Iran have highly benefited from the mobile libraries. In 1970 the foundation of children's libraries in villages became of primary importance and their constructions began to increase.

There are also a few children's libraries affiliated with the INIDCYA and under the direction of other organizations, among them the Children's Prison Library, the Library of Training Center (for orphans), the Library for Blind Children, and the Children's Hospital Library.

An INIDCYA children's library is not merely a collection of books with a reading room. It is, in fact, a cultural and educational center. In order to better know such a

library, we may enumerate some of its activities: (1) introducing new books; (2) presenting the biographies of great persons; (3) presenting the lands and peoples of the world; (4) showing films and film strips; (5) story telling; (6) discussing the various aspects of the library; (7) carrying on different contexts; (8) holding exhibitions; (9) teaching the library members to draw, to play musical instruments, and to do handiworks; (10) visiting museums, factories, and radio and TV stations; (11) having discussions with the authors of children's literature; (12) reciting poems; (13) playing chess; (14) acting the plays written for or by the children and young adults; (15) carrying out puppet shows.

The libraries are located in the crowded or poor areas of the cities. The collection of each library starts with a minimum of 3,000 volumes. The members are between 6 and 15 years old. There is no membership fee, and if a book is lost the borrower is charged for half of its price. The rate of fine is one penny per day. The holdings are kept in open shelves and the books can be loaned out.

The professional librarians of the INIDCYA with Master's degrees are few, but short training courses are held for all of those in charge of children's libraries. These courses, particularly for the librarians of towns and villages, have been very helpful.

There are some committees which assist the children's librarians. One of them is responsible for reviewing new books and selecting the appropriate ones. This committee consists of two specialists in children's literature, an editor, a psychologist, and two experienced librarians. Generally, when a book is refused purchase, the reason will be brought to the notice of the publisher. The selected books are purchased in Tehran and then are distributed among all children's libraries throughout the country. This procedure keeps consistency in the libraries. Other committees are concerned with planning, exhibitions, arts, and public relations.

The second significant activity of the INIDCYA is related to children's literature, and this function is carried out by the Publication Division. Its first Persian book for children was published in 1965 and won the Royal Prize of that year. The Publication Division is very well organized and a group of enthusiastic young writers and artists cooperate with it. It is interesting to note that while the average circulation of each title for adult books is 2,000, the circulation of children's books has passed 15,000 per title. Many books, originally written or translated from foreign languages, have been published by the Publication Division. They cover from fables and stories to books about atoms and oil. So far, on an average, fifteen new titles have been printed each year.

The annual International Festival of Children's Moving Pictures held in Tehran is another great task of the INIDCYA. Recently, Persian films have also been produced for children.

Foreign Libraries

Some countries having cultural relations with Iran have founded libraries in the capital, and in a few cases, branches in other cities. This category of libraries has

sometimes been called "public libraries" because they are open to all, and sometimes they have been considered "special libraries" because the collection of each represents the civilization of a definite country. Generally, however, they are known as foreign libraries.

Foreign libraries in Iran came into being after World War II. No matter what their objectives might have been, they are significant for two reasons: (1) the introduction of open shelves in an environment where almost all collections were kept in closed stocks; (2) the creation of sample public libraries, regardless of size, and the establishment of the belief that everyone has the right to use a library.

The library of the Cultural Society of Iran and USSR was founded in Tehran in 1944. It holds more than 18,000 books in the Russian language.

In 1946 the Iran-France-Institute Library was established with 12,000 books in French. Two years later, the Association of Iranology, affiliated with the institute, created a library under the supervision of Henry Corbin, the well-known orientalist.

The highest rank of this type of library belongs to the United States Information Service Library in Tehran which came into being in 1948; and in 1959, on the occasion of the 150th birthday of Abraham Lincoln, it was named after him. The Lincoln library has branches in Shiraz and Isfahan. The main library in Tehran has around 16,000 books and receives 150 American periodicals. Each branch has about 5,000 books. The number of members in 1971 was 3,955 in Tehran, 1,274 in Isfahan, and 215 in Shiraz. The total annual budget for purchasing books is \$20,000. Two professional librarians, one American and one Iranian, work in the main library. Other members of the staff have been trained and one has visited libraries in the United States. On some occasions, an Iranian in charge of a small library can take a course of training in the Abraham Lincoln Library. Even though the branches in Kermanshah, Khoramshahr, and Meshhad which were previously active have been closed, the Lincoln Library has extended its services throughout the country. It issues postal membership cards in all cities and towns, and members holding such cards can borrow books through mail service. This library is used mostly by students. It keeps a small collection of Persian books—all are selected from Franklin Publications. Among the services of the Lincoln Library are (1) compiling bibliographies; (2) answering reference questions by phone or mail, or in the library; (3) providing reproductions; (4) using audiovisual tools.

The Iran-America-Society Library was established in 1952. It had a small collection at the beginning, and now a large building is under construction in the northern part of Tehran for this library. It has branches in Meshhad and Tabriz. The Student Centre Library, established in 1960 and located opposite the University of Tehran, is a branch of IAS Library.

Founded in Tehran in 1957, the British Council Library was later expanded and now has branches in Isfahan, Meshhad, Shiraz, and Tabriz. The main library has 20,000 books and 4,000 members. Each branch has between 4,000 to 5,000 books and between 300 to 400 members. The majority of the users of British Council Libraries are Iranian students. The total annual budget is £9,000 for books and £1,000 for periodicals. The director of the main library is a British professional

librarian. The library in Tehran has a reference section, periodical room, reading area, and technical services section. The British Council Libraries use the classified catalog with the DDC system.

The cultural societies of Iran and India, Iran and Pakistan, Iran and Austria, and Iran and West Germany also have their own libraries in Tehran.

Information Services

In addition to the Iranian Documentation Centre (IRANDOC), about which there is a separate article in this Encyclopedia, and the University of Tehran Documentation Centre, which was mentioned in the explanation of university libraries, there are four more information centers at the moment. All of them have been founded recently; three in Tehran and one in Karaj, a town close to the capital.

The Technical Documentation Department of the National Petrochemical Company was established in 1966. It subscribes to 100 periodicals and has three publications: (1) *Title Index*, (2) *Petrochemical News*, and (3) *Petrochemical Bulletin*.

The Technical Information Section of the Research Department, National Iranian Oil Company, was established by Dr. M. Zarrin in 1967. This modern center subscribes to the information services of the American Petroleum Institute. It is computerized and highly specialized; the information is limited to the field of petroleum engineering.

Technolog Incorporated, affiliated with the Industrial Development and Renovation Organization of Iran, was also established in 1967. The information center at Technolog was created with the objective to provide basic information relating to engineering and industrial activities. The information can be a basis for macro- and microlevel planning, investment decision, scheme evaluation, and detailed designing and engineering. The utilization of information is based on up-to-date, automated information retrieval systems.

In 1968 UNESCO sent Mr. Mohajer, the former director of Pakistan's Documentation Centre (PANSDOC), to Iran as a consultant. He proposed that the Technical Documentation Center at the Institute of Standards and Industrial Research of Iran (ISIRI) be established. The project was finalized in 1971 and is being carried out. A large information center will eventually be established by the implementation of this project.

The existing documentation centers have a coordinating committee through which they try to avoid duplication, to keep consistency, and to cooperate with each other.

Parallel to the growth of industrialization in Iran, information science is improving. Documentation centers are in their infancy, but certainly in the near future their number will increase and their services will be expanded.

Tehran Book Processing Centre

In our discussion of modern libraries in Iran, the Tehran Book Processing Centre (TEBROC), a newly founded and highly active organization, cannot be neglected.

In fact, the functions and services of this center are much more than its title indicates. It has been very effective for the propagation of librarianship and the improvement of large libraries. TEBROC, established in 1968, is a part of the Institute for Research and Planning in Science and Education, which in turn is affiliated with the Ministry of Science and Higher Education. One outstanding objective of this center is to acquaint libraries with modern library services for giving vitality to their book collections.

TEBROC has four divisions: (1) Book Selection and Acquisition; (2) Cataloging and Classification; (3) Propagation of Librarianship; (4) Library Science. There is also another division whose staff consists of the professional librarians of TEBROC and IRANDOC. This division has the functions of library planning, making standards, doing research, and preparing bibliographies.

More than twenty-five university and higher-education-institute libraries and twenty other large libraries have benefited from the services of TEBROC.

One of the most significant activities of this center relates to its publications. They are: *The Expansion of DDC for Iranian Languages*, *Technical Services (Khadamat-e Fanni)*, *Persian Glossary of Library Terms*, *Explanation of the Cutter-Sanborn Author Marks*, *Farsi Author Numbers*, *Books Cataloged by Tehran Book Processing Center No. 1-*, and *Persian Author Marks Three-Figure Tables*.

Mrs. M. Tafazoli, one of the first professional librarians of Iran, was appointed as the director of TEBROC in the year of its establishment.

Library Education

The progress of libraries in recent years has been based mainly on the improvement of library education, which was started with short courses and soon emerged at the formal academic level.

The first short course in librarianship was conducted by the Ministry of Education in 1938. Dr. M. Bayani, with the help of seven instructors, was in charge of this course. The subjects were limited to manuscripts, history of books and libraries, alphabet and calligraphers, and cataloging. Four well-known personalities also gave lectures in this course which lasted 3 months for a total of 132 hours, including 12 hours of practical work. The candidates were required to have at least a high school diploma. This course, which is historically important, had thirty-five graduates, two of whom are now university professors.

In 1952 Josef Stummvoll, the UNESCO library expert and Director General of the Austrian National Library, together with Mary Gaver, U.S.I.S. Leader Specialist, conducted a 6-month term of librarianship at the Faculty of Letters, University of Tehran. Two hundred students enrolled for this term. The lectures were given in French, English, and German, and they were translated into Persian by an interpreter, sentence by sentence.

In 1953 another training course for librarians was conducted by Sigmund Frauendorfer, also from Austria, at the Faculty of Medicine in Tehran.

The Faculty of Letters at the University of Tehran and the National Teachers College, in cooperation with the Fulbright Commission, gave courses on librarianship and archives in the academic year 1954–1955. The courses were taught by Susan Akers, the well-known American Librarian, and Herbert Angel of the U.S. National Archives and Iranian Librarians.

In 1960 a graduate summer library term for the school librarians was held in the National Teachers College of Tehran. Dr. Nasser Sharify, the first Iranian who received a Ph.D. degree in Library Science, conducted this course with the assistance of Dean Fransworth, from Brigham Young University, at that time adviser of the National Teachers College. More than sixty high school teachers and librarians enrolled for this summer term which had excellent results. Dr. Sharify then became the Director General of the Ministry of Education, in charge of national, public, and school libraries, but he left the country in 1962.

The inception of library education at the MLS level did not erase the short terms of instruction on librarianship. These courses are still taught on an ad hoc basis. The Ministry of Culture and Arts, the Ministry of Education and Training, the Tehran Book Processing Centre, and the Institute for the Intellectual Development of Children and Young Adults have been conducting these brief courses.

In 1966 the formal library education program at the MLS level was started at the University of Tehran where the Department of Library Science was organized by Alice Lohrer in the College of Education. The courses were taught, in English, by Mrs. Lohrer, Mrs. Hopkins, and a small group of Iranian professional librarians who had been educated in the United States or Great Britain. The main purpose of the department, at the beginning, was preparing school librarians, but later on its aim was expanded.

The candidates of this program are required to have a B.S. or B.A. in any field. They must take an admission test and pass an interview. The background of most of the students is social sciences and humanities. The duration of the program is 2 academic years. Each year, between twenty and thirty students are admitted. So far the graduates have been employed in special, governmental, and university libraries. In 1967 Dr. John Harvey became the head of the department, and for the first time in Iran he taught a course in Information Science. At present the instructors are Iranians, with the exception of one Fulbright grantee. Some of the instructors are the first graduates of the department. The total credit hours are thirty-six, including three credits for practical work, which consists of 180 hours of training in an advanced library under the supervision of a professional librarian. In addition to the thirty-six credits, the students are required to write a thesis. This is a good policy for preparing Persian library literature, but their theses are usually devoted to compiling directories and bibliographies.

The core courses are (1) Library Administration; (2) Library Materials and Reference Works; (3) Books Selection and Acquisition; (4) Cataloging and Classification. Each of these has three credits and a student is free to choose the other twenty-four credits among the various courses.

In 1968 the Department of Library Science at University of Tehran started the minor program. The junior and senior students of the College of Education or of any other colleges of the university can take thirty credits in library science, including three credits of practical internship. A certificate is given to the graduate of the minor program, indicating his academic study of library science. The primary aim of this program is to prepare librarians for the schools and public libraries.

In 1968 the University of Tabriz, in northwest Iran, established its Department of Library Science at the Faculty of Education. Mr. Pramond B. Mangala, from India, was invited to organize the program which started with a BLS level. Each year the department admits forty students. Admission is made through the National Entrance Examination. The duration of the BLS program is 4 academic years after acquiring a high school diploma. The medium of instruction is Persian and English. The program includes courses in library science in addition to different academic subjects in various disciplines. The courses in library science are started from the second year of the total program which consists of 156 hours. Forty-four credits are devoted to library science, three credits of which are for 90 hours of practical work.

The Department of Library Science in the University of Tabriz founded the MLS program in 1970. The applicants are required to have a B.S. or B.A. and pass an admission test. Because of the limited teaching facilities of this department, its MLS program is unable to admit many students. At present there are four teachers in the department.

In 1969 the Iranzamin College in Tehran started the Diploma Program of Library Science. The program is directed by M. Mazaheri, the director of the National Library. The duration of the course is 2 years after the completion of high school. The library science courses that are taught in the second year of study are: (1) Management and Operation of Libraries; (2) Selection and Utilization of Library Materials; (3) Introduction to Reference Sources; (4) Cataloging and Classification; (5) Library Materials for Children; (6) Services to Adult Readers; (7) Internship.

In 1971, following a survey of libraries in the province of Fars, the writer proposed the establishment of the Library Science Department to the authorities of Pahlavi University in Shiraz, the center of the province. The project has already been approved by the chancellor and the MLS program at Pahlavi University will start in the near future.

The main problem of library education in Iran is the deficiency of library science literature in Persian. Since Iranian students rarely have proficiency in English, they cannot use the English texts easily. The Persian textbooks in library science, at present, are very few. The first one, however, was written by Dr. Mohsen Saba and published in 1951 by the University of Tehran. Dr. Saba is one of the first educated librarians of Iran. He received his doctoral degree from *École Nationale des Chartes*. He has been the director of some progressive libraries, and is the head of the Bibliographic Group in Iran and the founder of the Council of Booklovers. The

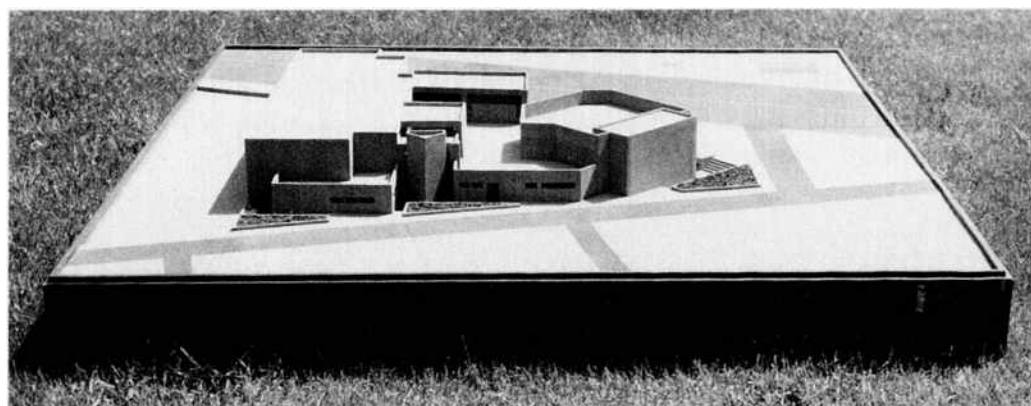


FIGURE 6. Model of the public library building planned for Kashan.

second edition of his book *The Principles of Librarianship: The Organization of Public and Special Libraries* was published in 1957, again by the University of Tehran.

The Future

Even though the situation of libraries and library science in Iran is rather complicated because of the contact of a deep traditional culture with western civilization, the future of libraries in this region is promising.

The economic and social progress of Iran in the last few decades has been very fast, and it is anticipated that in the next few decades it will be even faster. Libraries and librarianship have their own part in this development. The fact that economic progress and educational improvement are interrelated has made the Iranian government and private sections pay more attention to the libraries and book production. In the Fifth Five-Year Plan, March 1973–March 1978, a considerable amount of credit has been set aside for libraries (see Figure 6).

Through the educators who have been in developed countries, the educational system will change gradually and the nondependency on the single textbooks and lecture notes will bring forth the real role of school and academic libraries. Sooner or later intellectual freedom will be known in the country and public libraries will enter a new era. The rural libraries, now in their infancy, will grow in the future and will attract the newly-literate people who have not yet been acquainted with motion pictures or television. Children's libraries, already in good condition, are taking more serious steps toward their aims.

The rapid growth of the literacy rate, the establishment of more and more elementary and secondary schools, colleges, universities, and higher education institutions will give a higher rank to the libraries. The industrialization of Iran and the creation of research centers will motivate the expansion of information services.

Librarianship, once not accepted as a career and now a firmly established profession, will attract more energetic young persons. Because of the need of society, the librarians will enjoy even more prestige than they have now.

REFERENCES

1. R. Homayoun Farokh, *History of Books and the Imperial Libraries of Iran* (Translated into English by A. Saremi), Ministry of Culture and Arts, Tehran, 1968, p. 127.
2. Mohammad Ibn-Eshagh Nadim, *Al-Fihrist* (Translated into Farsi by M. Reza Tadjadod), Ibn-Sina, Tehran, 1343 [1964], p. 437.
3. Saïid Naficy, *Pour Sina*, Danesh, Tehran, 1333 [1954], p. 65.
4. James Westfall Thompson, *The Medieval Library*, Hafner, New York, 1967, p. 353.
5. O. Pinto, "The Libraries of the Arabs During the Time of the Abbassid," *Islamic Culture*, **3**, 215 (1929).
6. R. Homayoun Farokh, *Ketab va Ketabkhane ha-ye Shahanshahi-ye Iran (Books and Imperial Libraries of Iran)*, Vol. 2, Ministry of Culture and Arts, Tehran, 1347 [1968], p. 92.

BIBLIOGRAPHY

- Afshar, Iraj, "ketabkhane ha-ye Iran" ("Iranian Libraries"), *Yaghma*, **17**, 331-336, 418-422 (1964); and a supplement to **17**(11), 1-16 (1964).
- Afshar, Iraj, *ketabkhane ha-ye Iran va moghadame-i dar bare-ye ketabkhane ha-ye ghadim (Iranian Libraries; with an Introduction to the Ancient Libraries)*, The Ministry of Education and Training, Tehran, 1965.
- Afshar, Iraj, "ketabkhane ha-ye keshvar-e ma" ("The Libraries of Our Country"), *Etela'at Mahane* **4**, 35-38+ (1953).
- Akers, Susan Grey, "A Library Workshop in Shiraz," *Univ. N. Carolina Lib. School Alumni Assoc. Bull.* **16**, 2-5 (December 1955).
- Akers, Susan Grey, "Comparison of College and University Libraries in Japan, Iran and the United States in the 1950's," *S. Carolina Lib.*, **3**, 7-9 (March 1959).
- Akers, Susan Grey, "Glimpse of Library Conditions in Iran in 1954-55," *N. Carolina Lib.*, **14**, 72-77 (February 1959).
- Amir Arjomand, L., "Libraries for the Children of Iran," *Wilson Lib. Bull.*, **41**, 1055-1061 (1967).
- "amuzeshe ketabdari-ye jadid dar Iran" ("Modern Library Science Education in Iran"), *Iranian Lib. Assoc. Bull.*, **3**, 37-44 (Winter 1970).
- Carter, M. D., "Special Libraries in Near East," *Spec. Lib.*, **42**, 245-248 (1951).
- Deale, H. V., "Librarianship in Iran," *College and Research Lib.*, **27**, 461-463 (1966).
- Frauendorfer, S. von, "Als bibliotheksexperte der UNESCO in Iran" ("As Library Expert in Iran"), *Biblos*, **4**(2), 51-57 (1955).
- Freytag, Ev-Maria, "Das Bibliothekswesen in Iran" ("Librarianship in Iran"), *Zentralblatt für Bibliothekswesen*, **86**, 15-26 (January 1972).
- Galloway, R. D., "Library Experiment in Iran," *Lib. Quart.*, **30**, 188-200 (July 1960).
- Gayer, Mary V., "Iranian Libraries," *Lib. J.*, **78**, 772-776 (1953).
- Harîry, M., *gozaresh-e tath-e uzmayeshi-ye amanat bain-e ketabkhane ha-ye Iran (A Report about the Tentative Plan of Interlibrary Loans in Iran)*, Iranian Documentation Centre, Tehran, 1970, mimeographed.

- Harvey, John F., and Bettina Lambert, "Librarianship in Six Southwest Asian Countries," *Int. Lib. Rev.*, **3**, 15-34 (January 1971).
- Harvey, John F., "Persian Perspective: Iranian Librarianship," *Lib. J.*, **93**, 4239-4245 (1969).
- Holloway, Michael F., "Pattern of Library Service in the Middle East," *Lib. Trends*, **8**, 192-208 (October 1959).
- Homayoun Farokh, R., *History of Books and the Imperial Libraries of Iran* (Translated by Abutaleb Saremi), The Ministry of Culture and Arts, Tehran, 1968.
- Homayoun Farokh, R., *ketab va ketabkhane ha-ye shahanshahi-ye Iran (Books and Imperial Libraries of Iran)*, The Ministry of Culture and Arts, Tehran, 1966, 1968, 2 vols.
- Homayoun Farokh, R., *tarikhche-ye ketabkhane ha-ye Iran va ketabkhane ha-ye omumi (Public Libraries of Iran; with a Brief History of Iranian Libraries)*, The Organization of Tehran Municipal Libraries, Tehran, 1965.
- Ibn-Nadim, M., *Al-Fihrist* (Translated by M. Reza Tajadod), Ibn-Sina, Tehran, 1964.
- Iran, The Ministry of Education and Training, *ketabkhane ha-ye mo'tabar-e omumi va khossusi (The Large Public and Private Libraries)*, Tehran, 1966.
- Iran, The Ministry of Royal Court, *ketabkhane-ye Pahlavi (Pahlavi Library)*, Tehran, 1965.
- "Iranian Library Facility to Offer Central Services," *Lib. J.*, **94**, 2993+ (1969).
- "ketabkhane ha-ye Iran" ("Iranian Libraries"); *ketab ha-ye mah* ("Books of the Month"), **2**, 52-55, 214-221 (1959); **3**, 49-52, 117-125, 157-159 (1960).
- "Libraries in Iran for Children and Young Adults," *Bookbird*, **6**, 24 (1968).
- "Library Training in Iran," *UNESCO Bull. Lib.*, **15**, 45-46 (January-February 1961).
- Lohrer, Alice, "School Libraries in Iran and the Near East," *ALA Bull.*, **63**, 1284-1289 (1969).
- Martin, Robert, "Iran Attacks Illiteracy with an 'Army of Knowledge,'" *UNESCO Features*, **416**, 12-13 (May 1963).
- Moe-Berntsen, Elisabeth, and Unni-Lise Gabrielson, "Salam aleikom-Norske bibliotekarere i Iran" ("Peace Be with You—Norwegian Librarians in Iran"), *Bok of Bibliotek*, **37**, 324-335 (November 1970).
- Mossaheb, M., "Development of Libraries in Iran," *UNESCO Information Bull. on Reading Materials*, **4**, 55-56 (January 1963).
- Pope, Arthur Upham, ed., *A Survey of Persian Art: From Prehistoric Times to the Present*, Manafzadeh, Tehran, 1964, Vol. 4, pp. 1707-1807; Vol. 5, pp. 1809-1994.
- "Proposal for a National Library Plan for Iran," *Int. Lib. Rev.*, **2**, 253-261 (July 1970).
- Saba, M., "The Training of Libraries in Iran," *UNESCO Bull. Lib.*, **12**, 40 (February 1958).
- Safa, Zabihollah, "Books and Libraries in Ancient Iran," *Anjoman Farhang Iran Bastan (The Ancient Iranian Cultural Society Bulletin)*, **1**, 29-33 (February 1963).
- Schindel, M., "Report from Iran," *Horn Book Magazine*, **43**, 726-729 (December 1967).
- Sepehri, Abazar, *rahnama-ye ketabkhane ha-ye Iran (Iranian Libraries Directory)*, Vol. 1-, Iranian Documentation Centre, Tehran, 1970.
- "Shah of Iran Inspected the New Undergraduate Library at Pahlavi University, Shiraz," *Wilson Lib. Bull.*, **40**, 903 (1966).
- Sharify, Nasser, "Education for Librarianship Abroad: United Arab Republic (Egypt), Iran, Iraq, Lebanon, and Syria," *Lib. Trends*, **12**, 227-259 (October 1963).

- Shirvanloo, F., "Literature for Children and Young People in Iran," *Bookbird*, **9**, 32-37 (1971).
- Sinai, Ali, and John Harvey, "The Iranian Library Scene," *Int. Lib. Rev.*, **1**, 114 (1969).
- Stummvoll, Josef, "UNESCO—Sponsored Library Project in Iran," *Lib. Congr. Information Bull.*, **11**, 4-6 (December 1952).
- Tehran, University of Central Library and Documentation Centre, *ketabdari (Library Science)* (Iraj Afshar, ed.), No. 1- (1966-).
- "Tehran Book Processing Centre and the Iranian Documentation Centre," *Lib. Congr. Information Bull.*, **28**, 535 (October 1969).
- Thompson, James W., *The Medieval Library*, Hafner, New York, 1967.
- Thompson, Lawrence S., "Awakening Library Consciousness in the Middle East," *Lib. Quart.*, **24**, 154-168 (April 1954).
- Tuteja, T. C., "Libraries in Iran," *Herald Lib. Sci.*, **6**, 248-252 (1967).
- "University Libraries in Iran and Syria," *UNESCO Bull. Lib.*, **7**, 137-138 (October 1953).

HOOSHANG EBRAMI

IRANIAN DOCUMENTATION CENTRE (IRANDOC)

Origin, Development, and the Present Organization

Iranian librarianship has developed rapidly during recent years. As a result of these developments, the need has grown for the establishment of specialized documentation centers to serve the research efforts of science and industry.

The need for the establishment of a national documentation center in Iran was advocated for several years by Dr. Mervyn Smith, the then scientific secretary of the Central Treaty Organization (CENTO). He believed that a national documentation center should be founded after the two other national documentation centers in CENTO Regional Countries, Pakistan (PANSDOC), and Turkey (TURDOK). On his request, in December 1967, Dr. John Harvey, the then Fulbright Professor of Library Science, prepared a memorandum to outline plans for a combined science and social science documentation center associated with the Iranian Centre for International Conferences. After some revisions Dr. Harvey submitted his final proposal on the Iranian Documentation Centre (IRANDOC) and the draft proposal for the establishment of Tehran Book Processing Centre (TEBROC) to the then Minister of Science and Higher Education, Dr. Majid Rahnema, who warmly accepted both proposals. The two organizations, IRANDOC and TEBROC, were created simultaneously in September 1968 and were located in the same building. The two centers later became parts of the new Institute for Research and Planning in Science and Education (IRPSE) which was created in May 1969 and is responsible for

planning in research, determining the national scientific and research policies, and drawing up educational plans at all levels.

IRPSE is a nonprofit government organization financed by state grants, which come from the Ministry of Science and Higher Education under whose jurisdiction IRPSE functions.

IRANDOC has several basic functions:

1. To collect, organize, develop, and service the national research library in science and social science.
2. To provide modern, quick, and intensive literature analysis service for Iranian scientists and professors.
3. To publish bibliographic and reference material useful to the scholarly world.
4. To serve as the Iranian link in a future Middle Eastern information network as well as in the world scientific information system (UNISIST).
5. To encourage cooperation and coordination among Iran's research and special libraries and information centers.

To fulfill these functions IRANDOC has four departments: Processing, Publication, Documentation, and the Library.

The Processing Department is in charge of acquisition and preparation of all material received at IRANDOC. It is worthwhile to mention here that IRANDOC and TEBROC cooperate very closely in all aspects of library and information work. A fortunate result of this cooperation is that the acquisition and cataloging of IRANDOC books are done by TEBROC. Therefore IRANDOC Processing Department's main duties are acquisition and preparation of serials and nonbook materials, while it relies on TEBROC for books.

The Publication Department started its activities in fall 1969 and is responsible for planning IRANDOC publications, and editing, preparing, and printing them. It also comprises the reprography and binding sections.

The Documentation Department was created in the spring of 1971 as a result of dividing the former Research Services Department into two separate departments: Library and Documentation Departments. It is in charge of selection of materials, preparation of bibliographies—on request or on the initiative of the department—abstracting and indexing of Persian documents, advisory service, and scientific contacts.

The library offers reading room, book circulation, photocopy, and reference services and is in charge of interlibrary loan.

Activities

Library. IRANDOC's open shelf library uses the Library of Congress Classification. Up to March 1973 it had collected 11,000 books and subscribed to 3,500 serial titles. It also holds a great number of Iranian government publications, pamphlets, and audiovisual materials. The reading room is open to undergraduate and graduate

students, faculty members, and other researchers from 8 A.M. to 8 P.M. The library also offers reference service; questions may be asked in person, by telephone, or by mail. Nearly half of the reference questions are asked by telephone. Use of the service is increasing. Library books may be checked out for 2 weeks; periodicals are not loaned.

Interlibrary Loan. For the first time in Iran, an interlibrary loan project, was launched by IRANDOC in Fall 1969 on an experimental basis for 1 year. Fifteen libraries participated in the project. All interlibrary loan requests are processed through IRANDOC, which also pays the system costs including postage and replacement in case of loss or damage. At the end of the experimental period in 1970, the results were found encouraging. More libraries joined the project and at the present time thirty-six libraries from Tehran and eleven libraries from the provinces cooperate with the project.

Photocopy Service. This has proved a very successful program and helps the development of the interlibrary loan project. Contacts have been established with a few foreign sources for provision of articles from periodicals which are not available in Iran. The National Lending Library for Science and Technology, Boston Spa, England, and the Centre de Documentation du CNRS, Paris, occupy the first place among the foreign sources. Telex connection, established in March 1972, will greatly help increase the use of foreign sources. A very nominal charge is made to prevent abuse of the service.

On Request Bibliographies. This service is given to researchers in very specialized fields of science and social science. Interviews with the requestor and telephone calls are made to define exactly his subject of study, the language, and the period of the references he needs. A very nominal charge is made for this service also.

Scientific Contacts. In order that Iranian scientists and researchers are known, a list is being compiled, giving their name, address, academic or professional qualifications, foreign languages known, subject specialty, and the institution with which they are connected. The list will be used for reference on related questions and also for establishing contacts between Iranian and foreign scientists. The list is now complete in the fields of biology, road engineering, and chemistry and will be published after completion.

List of Iranian Scientific Research Institutions. This is a preliminary step toward compiling a list of research projects in Iran. One of IRANDOC's aims is to be aware of scientific research institutions. A questionnaire has been sent to these institutions asking for information about their fields of study, their senior staff, and other pertinent information. This list was published in English in March 1972.

Abstracting and Indexing. IRANDOC plans to collect and analyze all information on science and social science pertaining to Iran that is published in Iranian periodicals or reports of various institutions. Therefore, all Iranian material received at IRANDOC is scanned, and an abstract of pertinent material is made. Abstracts are put on cards and indexed by UDC. Part of these abstracts will also be published in *IRANDOC Science and Social Science Abstract Bulletin*, which will be discussed later.

Collection of Iranian Government and Nongovernment Institutional Publications. There has been very little organization and planning in the publication and collection of Iranian government and nongovernment institutional reports. Since Summer 1969, IRANDOC has made strong efforts to compile a good collection of these materials, which are acquired by writing to institutions and by directly calling IRANDOC representatives. By March 1972 about 5,600 reports had been received and indexed. To facilitate use of the collection, a list of these documents is being published, each covering publications of one institution. Three volumes were published by March 1973.

Collection of University Theses. In addition to the collection of government and nongovernment institutional publications, IRANDOC has started collecting and indexing university theses. Letters were sent to all institutions of higher learning asking them to provide copies of this material. A number of these institutions, including the National University, University of Tabriz, and a few faculties of the University of Tehran, have agreed to send their theses. The list of these received and indexed is published in IRANDOC's fortnightly accession list, titled "Library News."

Publications

As a major activity of IRANDOC, its publications are worthy of separate mention. There are two types: internal publications intended to assist in training personnel; and external publications intended to transfer information to users. Internal publications are mainly pamphlets, written or translated into Farsi language, on techniques of preparing abstracts, writing in Farsi, indexing, selecting materials, and similar subjects. External publications distributed widely to Iranian scientists and researchers are abstracts and indexes, the union list, bibliographies, directories, and others.

ABSTRACTS AND INDEXES

IRANDOC Science and Social Science Abstract Bulletin. This is the first abstract bulletin published in Farsi language. It publishes selected abstracts of articles appearing in Iranian periodicals, with only articles useful for university studies or use on a higher level abstracted. The first issue of the quarterly bulletin was published in the winter of 1970. An experimental single issue of the English edition was published parallel to the Farsi edition.

Contents Pages, Iranian Science, and Social Science Journals. This is a monthly bulletin first published in September 1969. It reproduces contents pages of Iranian periodicals on science and social sciences. The bulletin is widely distributed to scientists and scientific libraries; photocopies of articles in this periodical may be obtained by writing to IRANDOC.

UNION LIST

The Iranian National Union List of Serials. This is the first of its kind in Iran and is published in two volumes, with provision for revision and updating. Volume 1 published in September 1971 covers 760 social science serial titles, both foreign and Farsi, held by fifty-two Iranian research libraries. Volume 2 was published in February 1972 and covers 3,000 scientific and technical serials available at sixty libraries. The second edition of the list is already under preparation and it is intended to put the data on computer for this new edition.

BIBLIOGRAPHIES

Subject Bibliographies (Books). Four titles have been published. *Bibliography of Persian Printed Law Books up to 1345 (1966)* gives full bibliographic information on 465 publications; *Bibliography of Persian Books on Economics up to 1349 (1970)* describes 783 titles on economics; *Bibliography of Iranian Scientific Publications* was published on the occasion of the twenty-fifth century of the Iranian Empire and introduces all Iranian books on mathematics, astronomy, physics, engineering, agriculture, and medicine; *Selected Bibliography of Education* (with special emphasis on educational planning), published in January 1972, describes 270 selected foreign titles on educational planning and related subjects.

Subject Bibliographies (Periodical Articles). This covers a series of publications containing full bibliographic reference and abstracts of most recent articles published in international scientific and social scientific periodicals. These are published in a limited number of copies—about 200 to 300—and are especially intended to provide documentation for research needs of the country. The following titles are published: *Selected Bibliography of Chemistry*, bimonthly, started September 1971; *Pollution; Air, Soil, Water*, quarterly, started October 1971; *Transportation and Traffic Engineering Bibliography*, semi-annual, started July 1971; *Bibliography of Caspian Sea (Biology)*, semi-annual, started October 1971; *Bibliography of Education*, bimonthly, started March 1972 and especially intended for researchers of IRPSE.

DIRECTORIES

A Directory of Iranian Periodicals. This directory is published in Farsi and English editions. The last edition (1971) covers 300 periodical titles; it provides full bibliographic description. The address, telephone number, founding date, subject matter, frequency, affiliation, name of editor and publisher, price, and language of publication are given.

A Directory of Iranian Newspapers. This is a publication similar to the *Directory of Iranian Periodicals*: it is also published in Farsi and English editions and provides the same kind of information on newspapers. The last edition (1970) covers 112 newspapers.

A Directory of Iranian Libraries. This directory is published in several volumes, each volume covering a geographical area. Two volumes have been published. Volume 1 gives information on eighty-nine libraries in Northwest Iran and Volume 2 describes the same number of libraries in the northeastern part of the country. Each entry consists of full name, address, telephone number, librarian, number of books, number of periodical subscriptions, number of manuscripts, budget, name of parent organization, opening hours, and average number of users per day.

MISCELLANEOUS

Other publications of IRANDOC consist of useful books and pamphlets. Examples of these are *Guide to the Preparation of Research Papers* (in Farsi); *First Southwest Asian Documentation Centre Conference Proceedings, Iran, Pakistan, Turkey, April 5-9, 1970, Tehran.*

Advisory and Coordinating Role

As the National Centre, IRANDOC provides advisory service for the existing or newly established specialized documentation centers and supports the establishment of specialized services.

IRANDOC accepts trainees from specialized documentation centers and holds short-term courses on different aspects of documentation work, such as abstracting, indexing, UDC, etc. This helps IRANDOC to act as a coordinating body for documentation services and avoids duplication of work as much as possible. To create a formal cooperation, in the summer of 1971 IRANDOC invited several documentation services to form a coordinating committee. The following centers accepted the invitation: The Department of Scientific and Technical Information of the National Iranian Oil Company, the Documentation Centre of the Institute of Standards and Industrial Research of Iran, Technologue Information Centre, the Information Centre of the National Petro-chemical Company, and the Central Library and Documentation Centre of the University of Tehran. The Committee decided that it will also work as the Iranian National Committee for FID, with its secretariat located at IRANDOC.

Automation Program

Since its inception IRANDOC has planned to move toward automation, mainly because it was believed that in several years large quantities of information would have to be processed and that the data bank would be of considerable size. IRANDOC could not introduce Selective Dissemination of Information service unless data were recorded in computer processible form. But it was difficult for this idea to be accepted in a government setting where even moderate library ideas are not neces-

sarily understood and approved. Therefore IRANDOC had to postpone the automation program for a few years and limit itself to one project already accepted by the administration: to produce the Iranian National Union List of Serials by computer. As a pilot project, the collected data were typed on IBM Magnetic Tape Model 72 typewriters. The information on these tapes was afterwards transferred to computer tapes. Computer time was obtained from the Iranian Statistical Centre Computer Section, using an IBM 360-30 computer. Printouts for the first edition are now available, and it is hoped that updated information will be put in computer logic for the second edition of the Union List.

International Activities

No documentation center can be self-sufficient, especially in a developing country. The experiences of national and international professional organizations are always useful. IRANDOC is fully aware of the importance of international connections. Right after its establishment, IRANDOC applied to FID to be accepted as the National Member. After admission, it joined the FID Committee for Developing Countries; recently it joined the new Committee on Terminology. It has sent representatives to conferences and meetings and has agreed to carry on the FID project "List of Technical Journals for Industry" for Iran. This was prepared and published by IRANDOC and distributed by FID in 1971. IRANDOC is also an associate member of IFLA and has joined other foreign associations such as Special Libraries Association, American Society for Information Science, Aslib, and The Library Association (British). It has established relations with All Union Institute for Scientific and Technical Information USSR (VINITI) and Organization for Economic Cooperation and Development (OECD) and provides information regarding development projects of Iran for the latter organization. Collaboration with PANSDOC and TURDOK is extensive. In April 1970 a conference was held in Tehran to discuss cooperation between IRANDOC, PANSDOC, and TURDOK. The three centers move toward creation of a regional information network. IRANDOC has been designated to act as the national Iranian link with UNISIST. The Iranian delegation, consisting of IRANDOC representatives, participated at the UNISIST Conference in Paris in October 1971. As a very useful step toward facilitating communication abroad, IRANDOC's telex line was connected in March 1972 and it is used increasingly.

IRANDOC held an international course on veterinary medical librarianship in the summer of 1971 in cooperation with Near East Animal Health Institute. Discussions are now going on between IRANDOC and VINITI for a course to be held with their assistance in the autumn of 1972.

Requests for further information on IRANDOC may be addressed to P.O. Box 11-1387, Tehran, Iran. Telephone 662548, Telex 2889IRANDOC TN.

BIBLIOGRAPHY

- Chandler, George, "Near, Middle and Far Eastern Libraries, *Int. Lib. Rev.*, 3, 187-227 (1971).
- Harvey, John F., "Irandoc Proposal," a report submitted to the Ministry of Science and Higher Education, 1967, unpublished.
- Proceedings of the 1st Southwest Asian Documentation Conference (Iran, Pakistan, Turkey), Tehran, April 5-9, 1970, Iranian Documentation Centre, Tehran, 1970.*
- Sinai, Ali, "The Impact of Recent Developments on Iranian Librarianship," in *International Librarianship, Papers Submitted to the IFLA Seminar for Developing Countries, Liverpool, August 24-September 1, 1971* (George Chandler, ed.), Library Association, London, 1972, pp. 61-65.
- Sinai, Ali, "Services of the Iranian Documentation Centre," Paper presented at the International Congress of Documentation, Buenos Aires, September 21-24, 1970.
- Sinai, Ali, and John Harvey "The Iranian Library Scene," *Int. Lib. Rev.*, 1, 107-117 (1969).
- Sinai, Ali, and John F. Harvey, "Recent Iranian Information Science Progress," in *The Information Conscious Society. Proceedings of the 33rd Annual Meeting of the American Society for Information Science, Philadelphia, October, 11-15, 1970* (Jeanne B. North, ed.), ASIS, Washington, D.C., 1970, pp. 191-193.

ALI SINAI

IRANIAN LIBRARY ASSOCIATION (ILA)

History

Although there have been libraries in Iran for several millenia, it is only during recent years that they have developed rapidly and moved forward in modern fashion. This is why librarianship as a profession has only emerged during the last 7 or 8 years, enabling Iranian librarians to form their professional association. Two previous attempts by Iranian librarians in forming their professional association during the 1950s failed because of lack of professional conscience and interest. The return of a few enthusiastic foreign educated Iranian librarians during the first half of the last decade caused an awakening of professional library conscience in Iran. The activity of these librarians, who were assisted by their foreign colleagues working in Iran, led to major developments in Iranian librarianship. Eight librarians, all women and mostly trained in the United States or United Kingdom, were able to found the Iranian Library Association (ILA) in the winter of 1966.

The enthusiastic founders of ILA launched a very ambitious program for the association, which was inappropriate in relation to realistic possibilities. With sixty members, of whom only about ten were professionals, heavily engaged in their own libraries, the following committees were formed: Constitution, Conference, Class-

ification and Cataloging, Farsi Library Glossary, Farsi Subject Headings, Membership, Library Work with Children and Young Adults, Legislative, and Publications Committees. A few of these committees were not even able to hold a single meeting. The inability of the committees in carrying on their functions plus a passive policy adopted by the new Executive Board led to frustration and a period of decay for 2½ years during which the association was practically inactive.

The reactivation of ILA began early in 1970 when it was realized that ILA should not launch ambitious programs, but concentrate its efforts on fewer activities. It allowed the technical matters to be taken over by government financed organizations such as the Iranian Documentation Centre (IRANDOC), Tehran Book Processing Centre (TEBROC), and the Department of Library Science, University of Tehran.

The new policy proved to be correct and successful. With more professional librarians now graduated from the Department of Library Science, the association concentrates on activities of a more general character and supports the work of IRANDOC, TEBROC, and the Department of Library Science on technical matters.

Objectives and Constitution

The objectives of ILA, in accordance with its constitution, are: "(a) to promote the adoption of more effective systems of library service; (b) to encourage the development of librarianship as a profession" in Iran. The Executive Board is responsible for the activities of ILA. It consists of four officers: The president, the vice-president, the treasurer, and the secretary. The officers are elected at the General Assembly for a 2-year term; but to ensure continuity in the work of the association, each year two new officers are elected at the General Assembly to replace two officers whose term of service have expired. Officers are not eligible for reelection for a consecutive term. The Constitution provides for committees and branches to be established to carry on a special type of activity or to promote activities of the association in a geographical area.

Soon after the foundation of ILA, it was realized that the Constitution needed some changes to make it more specific and detailed. The Constitution Committee was appointed, and after about 2 years it prepared the draft of a revised Constitution and by-laws. The new Constitution is being studied by the Executive Board for submission to the General Assembly for approval.

Activities

ILA has had difficulties in extending its activities to the provinces, mainly because of the lack of professional Iranian librarians outside the capital. Only recently, when some provincial universities hired professional librarians, they were asked to act as

ILA representatives. Now the association has members in three provincial capitals: Tabriz, Mashad, and Shiraz, which form the nucleus of ILA branches.

In Tehran ILA cooperates closely with IRANDOC, TEBROC, and the Department of Library Science. Its activities are mainly guided through four committees: Publications, Conference, Membership, and Legislative.

The Publications Committee was appointed early in 1970 when the new policy of the board was adopted. It has been successful in publishing a quarterly *Bulletin* and a monthly *News*. The *Bulletin* contains articles on different professional and technical matters and has summaries of some articles in English. It is the only Iranian library journal and is widely distributed to Iranian librarians. The news section of the *Bulletin* has been published in a separate monthly issue since Winter 1971. The *Bulletin* and the *News* have had a great influence in spreading modern library ideas to Iranian librarians and in recruiting new members for the association. These publications have added to ILA prestige and helped in advancing the cause of librarianship among administrators.

The Conference Committee was appointed early in 1971 and is in charge of organizing lectures and public meetings. It has used monthly lecture series as a good means of promoting modern librarianship in Iran. Social meetings and exhibits usually follow the lectures, or are held separately on various occasions.

The Membership Committee was appointed when ILA was founded. It is in charge of studying applications for membership, keeping records of membership, and all other matters relating to members.

The Legislative Committee was appointed in 1970 and reappointed in 1972. It is in charge of studying the classification of library duties in Iran, preparing job descriptions and specifications, and contacting authorities in matters relating to the position of librarians in Iranian government and nongovernment institutions.

Besides the activities carried through committees, ILA participates in national and international activities concerning books and library matters, such as those instigated by the International Education Year (1970), the International Book Year (1972), and the annual National Book Week. In cooperation with the Children's Book Council, ILA prepared a program for promotion of libraries in schools and creation of reading habits in school children; the program was submitted to the Department of Planning for Primary Schools, Ministry of Education, in February 1972.

ILA joined IFLA in 1970 and has sent representatives to IFLA conferences since then. It has established publication exchanges with some foreign library associations and with foreign libraries. As a sign of recognition of valuable contributions made by some foreign librarians to modern Iranian librarianship, the General Assembly of ILA conferred honorary memberships upon three foreign librarians at its annual meeting of March 1972.

Further information on ILA may be obtained by writing to P.O. Box 11-1391, Tehran, Iran.

BIBLIOGRAPHY

- Chandler, George, "Near, Middle, and Far Eastern Libraries," *Int. Lib. Rev.*, **3**, 187-227 (1971).
- Sinai, Ali, "The Impact of Recent Developments on Iranian Librarianship, in *International Librarianship, Papers Submitted to the IFLA Seminar for Developing Countries, Liverpool, August 24-September 1, 1971* (George Chandler, ed.), Library Association, London, 1972, pp. 61-65.
- Sinai, Ali, and John Harvey, "The Iranian Library Scene." *Int. Lib. Rev.*, **1**, 107-117 (1969).

ALI SINAI

IRAQ, LIBRARIES IN

Libraries have existed in this part of the world since the earliest period of recorded history. A highly developed culture and an advanced civilization in ancient times was found in Iraq, which was then called Mesopotamia. The earliest accumulations of written records were stored in the Sumerian temples. These records contained history; commercial accounts; mathematical texts; treatises on medicine and astrology; collections of hymns, prayers, and incantations; and the beginning of literature.

At Nippur, in the southern part of Iraq, part of a large temple library and archives containing clay tablets has been discovered. These tablets were dated partly from the Sumerian period (about 4000 B.C.), and partly from the Babylonian and Assyrian period (about 3000 B.C.). At the temple of this city there were several rooms used for the library and archives.

About half a million tablets have been excavated to date from the ruins of Mesopotamia and some other parts of the Near East, and many of these tablets were moved to European and American museums.

In the period of Assyrian greatness, which followed that of the Babylonians, the library and archives of King Ashur-Bani-Pal were established in the city of Nineveh (in northern Iraq), the Assyrian capital. More than 20,000 tablets were excavated in this city and are now in the British Museum. Some private Assyrian libraries have also been found. A general classification was found in the Nineveh library, called the Royal Classification, for the main subjects dealt with. The tablets were arranged on shelves or in large potteries and vessels.

After that, and during the Abbasids era, Baghdad was the center of a great civilization and empire that extended from Central Asia to North Africa and Spain. During the ninth century there were sixty-three libraries in Baghdad, most of them open to the public and scholars. In addition, there were more libraries in such other Iraqi cities as Al-Basra, Al-Kufa, and Al-Musil. The library of the famous Caliph Harun Al-Rashid and his son Al-Ma'Mun reflects the Arabic and Islamic

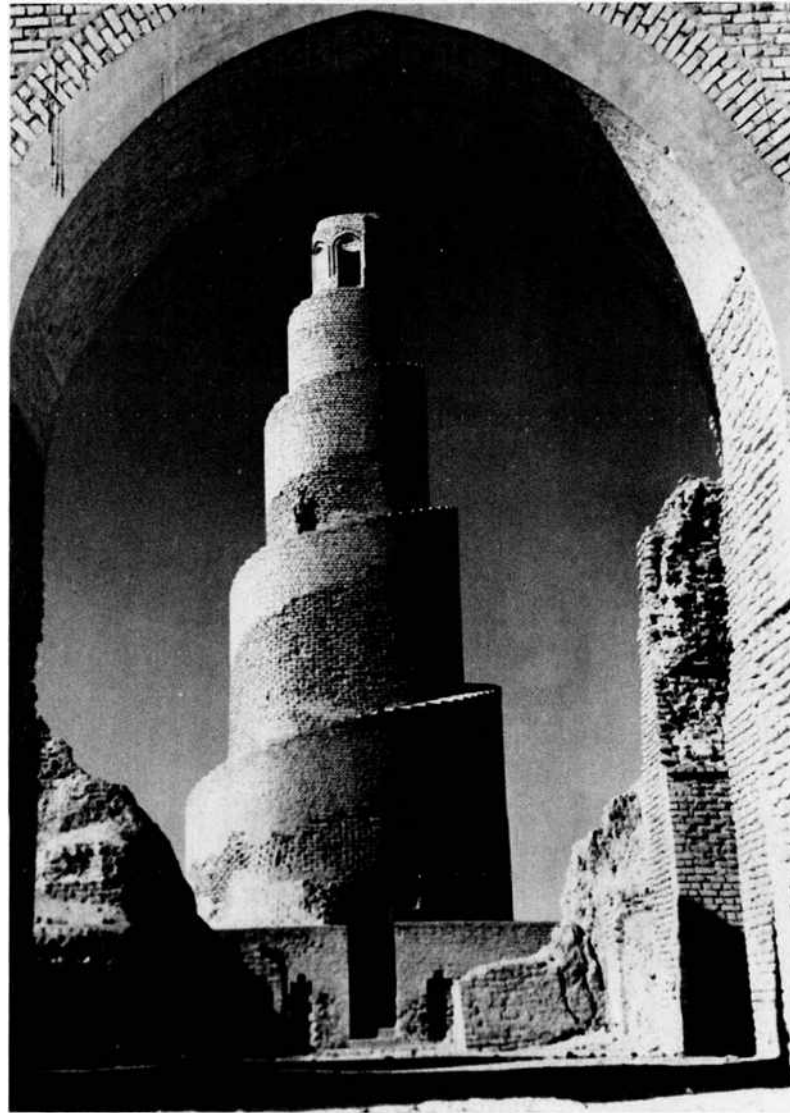


FIGURE 1. *Abo Dalef Mosque is one of the Abbasids ruins surviving today in Iraq, where the library of the famous Caliph Harun Al-Rashid and his son Al-Ma'Mun reflects the Arabic and Islamic culture.*

culture (see Figure 1). A medical school with its library was established in Baghdad in that period, A.D. 931. Widespread destruction of books accompanied the storming of Baghdad by the Mongolians in 1258, when the Tigris River was glutted with books from the libraries of Baghdad.

Libraries and education have been developed in modern Iraq recently. The Iraqi National Library, which was opened in 1924, has holdings of 39,000 volumes, a large number of periodicals and newspapers, including the first newspaper published in the early days of this century, and a collection of manuscripts and archives. The library is open to the public and is used heavily, especially by high school students.

The Ministry of Information, which is in charge of the Iraqi National Library, planned for a new and modern building for this library in one of the busiest and most important areas of Baghdad, Bab-Al-Mo'adhen, at a cost of about \$2 million. It will open in 1975. Although the present building of the National Library is overcrowded, understaffed, and lacking modern equipment, the new building will be large enough to hold more than 500,000 volumes, and will provide all the equipment and facilities that are necessary for a modern library. It will be a depository library as well as a center for national and international exchange of books and other publications. The National Library publishes a union catalog, which is supplemented by the union catalog published by the Central Library of the University of Baghdad.

There are seventy-three public libraries in Iraq (1970), with combined holdings of about 500,000 volumes. These libraries have attracted about 1,250,000 visitors and users annually. Some examples of the Iraqi public libraries are: The Mosul Public Library (in Nineva Province), which has a collection of 44,000 volumes and a number of periodicals, rare books, old and current newspapers, maps, and other library materials; Al-Kadisiya Public Library (in Al-Kadisiya Province), which has a collection of more than 17,000 volumes, 200 titles of periodicals, and 150 titles of newspapers; Al-Kadheniya Public Library (in Baghdad), with 11,681 volumes, more than forty titles of periodicals and newspapers, 1,050 children's books, and a beautiful building located across the street from the Tigris River; Al-Kindi Public Library (in Baghdad), with about 10,000 volumes and thirty-eight titles of periodicals and newspapers; and Al-Adhemiya Public Library (in Baghdad) which has about 10,000 volumes and about thirty periodicals and newspapers. It is conveniently located in the center of Al-Adhemia section of Baghdad, surrounded by schools and shopping centers. There are audiovisual materials in some of the public libraries.

Besides the National Library and the public libraries, the Iraqi Museum (public) Library has a collection of more than 80,000 volumes, 9,000 manuscripts, and a large number of periodicals and newspapers (current and old). Although a large portion of this library collection is devoted to history and archaeology, other subjects are also covered, particularly in the social sciences. Books are mostly in Arabic; however, there are some in English, Spanish, Japanese, Turkish, Persian, Kurdish, French, German, and other languages. This modern library building is equipped with all the necessary facilities. It has a beautiful, large meeting hall seating 400 people which is used for meetings, lectures, and film showings.

The Ministry of Higher Education is responsible for the academic libraries. Academic libraries are better organized, have larger collections, and are staffed with better qualified and trained personnel. Among these is the Central Library of the University of Baghdad which was established in 1959. It has a collection of 142,388 volumes, including about 110,000 titles. The library also has a large number of periodicals (the largest in the country), theses, maps, phonorecords, manuscripts, United Nations documents, and microfilms. The library has the following departments: circulation, reference, Arabic classification and cataloging, English classification and cataloging, acquisitions, exchange, government documents, bibliography, the United Nations publications, and binding. It has a staff of seventy-three, about

thirty of whom are either professional librarians or have been well trained for the different types of library work. Its building is a modern one, but it is crowded with books and people using its collection and facilities.

Al-Basra University Library (founded in 1965) has a collection of 51,307 volumes, including more than 9,000 bound periodicals in Arabic, English, and some other languages. It also has about 600 manuscripts and 223 maps.

The College of Arts Library (at the University of Baghdad) has 104,678 volumes, more than 40,000 volumes of which are in foreign languages (mostly English). There are also a number of manuscripts, microfilms, maps, and many periodicals and newspapers. It was founded in 1949, and as a result of the amalgamation of other co-related colleges in 1969, the library has developed in both its collection and services.

The College Science Library has about 37,400 volumes, more than 20,000 of them in foreign languages. In addition there are films, microfilms, microfiche, periodicals, and scientific documents.

Al-Mustansiriya University Library (founded in 1964) had a collection of 44,634 volumes at the end of November 1972, including 35,789 volumes in Arabic and 8,845 in foreign languages. In addition there are about 200 titles of periodicals and a number of government documents.

The library has a staff of thirty, and it is open 12 hours a day. It seats 350 students, and with its affiliated colleges serves about 15,000 students.

The number of books circulated as of November 1972 was 31,118 including 28,775 books used inside the library and 10,343 books used outside the library. The library publishes its own quarterly bulletin.

Other academic libraries include the College of Medicine Library with more than 25,000 volumes and the College of Economics and Administration Library with 24,500 volumes.

Special libraries are mostly organized and administered by governmental or semigovernmental agencies. Most of them are located in the capital, Baghdad. Ministries, large governmental departments, banks, chamber of commerce, big companies, and some other agencies have their own collections of books, periodicals, pamphlets, technical reports, and other materials. Some examples of these libraries are: The Library of the Ministry of Information; the Library of the Ministry of Planning; the Library of National Oil Company; the Central Bank Library; and the Chamber of Commerce Library in Baghdad.

Courses in library science are offered by both the University of Baghdad and Al-Mustansiriya University. The latter has a 2-year undergraduate program, after which students are qualified for a diploma in library science, and there is a plan to extend it to four years with a B.A. degree awarded at the end of the program.

A 2-year graduate program was started in 1972 at the University of Baghdad as a substitute for the 10-month graduate program of the Central Library, University of Baghdad.

Library training courses for different periods of time and in different years were taught at the Central Library. Such courses included: the 6-month training course in

1967, 1968, 1969, and 1971; and the 3-month training course in 1960, 1962, 1963, and 1970. Most of these courses as well as the other programs mentioned above were and still are taught by Iraqi professional librarians with some help from UNESCO.

A library board at the national level, called the Higher Committee of Libraries, was formed in 1970 at the Ministry of Information, with representatives from the Ministry of Higher Education, the Ministry of Interior, the Governate of Baghdad, the Ministry of Information, and three professional librarians with degrees in library science and experience in the field. The committee is headed by the under secretary of the Ministry of Information and is responsible for technical and administrative planning for Iraqi libraries.

The Iraqi Library Association was established in 1968 and has participated, since then, in such activities as book displays, lectures, and meetings. It is planning to issue its own publication periodically. The association's membership is open to professional librarians (graduates of both foreign and domestic library schools and training courses).

AMER I. AL-KINDILCHIE

IRELAND, LIBRARIES IN THE REPUBLIC OF

Introduction

The division of Ireland by the Government of Ireland Act 1920 into the Republic of Ireland and Northern Ireland imposed a political division on the country for the first time in its history. This did not, however, succeed in creating a cultural division. When the political realities had been accepted and assessed, the essential unity of Irish culture asserted itself in the resumption of relationships between librarians in both parts of the country. For some years now there have been joint conferences of the Library Association of Ireland and the Northern Ireland branch of the (British) Library Association. Joint committees have been functioning concerning matters of common concern. In 1972 the two library periodicals *An Leabharlann* and *Northern Ireland Libraries* merged to become *An Leabharlann: the Irish Library*.

Early History

The history of libraries in Ireland in the early centuries has probably no parallel in any country in Europe. From the fifth century onward the achievement of the Irish monks in the writing of books and the development of libraries was remarkable. Books were written mostly in Latin, the official language of the Church, but

works on the traditional literature were written in the Irish language, as were also numerous religious treatises. Contemporary scholars such as Venerable Bede testify to the abundance of material, and modern and contemporary scholars such as Eugene O'Curry, Dom Louis Gougaud, James F. Kenney, Charles MacNeill, and Ludwig Bieler bring further testimony. The Martyrology of Cengus (Félire Cengus) ca. 800, mentions a library of Saint Longarad of Ossory (sixth century) which is described as a collection of books of all the sciences. The Annals of Tigennach (d. 1088) referred to a large library at Clonmacnois. Books were written in the scriptoria and housed in *teacha screaptra* (houses of writing); these were in the charge of a *leabhar coimhedaigh* (keeper of books).

The books were written on vellum and held by a loose form of binding. Some were kept in leather satchels which hung on walls; it is believed this custom was peculiar to Ireland among European countries. The valuable books were enclosed in *cumtachs*, cases or covers, often called shrines, with the intention of sealing them off, like relics, and hiding them from the vulgar gaze. The earliest *cumtach* for which there is an approximate date is that which enclosed the *Book of Durrow*; it was provided by Mael Sechnaill, king of Ireland, 877–916, and was made of silver plates adorned with a silver cross. The *cumtach* was deemed by thieves to be of greater value than the book it protected and was often stolen and the book itself discarded. The story of that of the *Book of Kells* is found in the *Annals of Ulster* (1007) "on account of its secular cover it was stolen by night from the great stone church of Cenannus. That Gospel was found with its gold stolen from it." The *Cumtach* of the celebrated *Catach*, a fine example, is in the Royal Irish Academy Library. The National Museum of Ireland also contains examples of both *cumtachs* and satchels.

The script of the books is perhaps one of the most beautiful and distinguished known of this period in Europe. A glance at the *Book of Kells* leaves little doubt on this score. The illumination is unsurpassed; it is in the *Book of Durrow* that the artistic type of Irish Gospel book is fully developed.

There was no shortage of books for students, and books were freely interchanged between centers in Ireland and abroad. The missionaries who early in this period went to Britain and the continent of Europe to preach the gospel brought with them numbers of books, some of which are to be found today in libraries and archive repositories in these countries.

The Norse invasions in 759 began the destruction of the libraries. Books which the monks succeeded in saving were taken with them when they went into exile, enriching for the second time the libraries of Europe. In the following centuries the work of the scribes and the development of libraries never regained their former momentum. The Anglo-Norman invasion in the eleventh century finally brought this early period of library history to a close.

From this period to the seventeenth century the native population endeavored against odds to preserve learning, but achievement was slow and with the dissolution of the monasteries during the Reformation, many libraries were dispersed.

Meanwhile many of the Irish who had to leave the country were alive to the need to save the records of Irish civilization and also to provide facilities for the education denied to them in Ireland. A number of Irish colleges were founded in continental countries for this purpose. Their libraries became the repositories for such Irish material as could be collected. The best known of these libraries is that of the Irish Franciscans in Louvain, Belgium, which today houses a magnificent collection of Irish manuscripts and books.

Since much of the material required for early Irish studies is to be found not in Ireland but in libraries and archive repositories abroad, the National Library of Ireland began a search for this material in 1947, a search which is continuing. An account of this search is given each year in the *Annual Report* of the National Library of Ireland. Prominent among the scholars who undertook searches is Professor Ludwig Bieler, professor of Palaeography and Late Latin at University College Dublin. These scholars followed up the work of Kenney who had described about 750 items in his work published in 1921. In *Manuscript Sources for the History of Irish Civilisation*, (R. J. Hayes, ed., Boston, 1965) close to 4,000 items were added: these had been discovered in 678 collections in 395 places in thirty countries. Photocopies of these and of items still being discovered are being made for the National Library of Ireland. It was in *The Nation* of August 17, 1845, that the Irish patriot Thomas Davis called attention to the dispersal of Irish material and called for its collection as "a practical and essential labour."

Another rescue operation for Irish studies was that undertaken by Professor Patrick McBride of the Belgrove Archive, University College Dublin, who visited European countries to search for material relating to the Irish who in the sixteenth to the eighteenth centuries had to emigrate to countries abroad. A wealth of material of genealogical significance found there is preserved in microfilm in the Belgrove Archive.

The history of libraries from the fifteenth to the eighteenth centuries is largely that of foundations associated with the English and Anglo-Irish population in the eastern part of Ireland. Prominent among them is the Library of Trinity College Dublin, established in 1601; Marsh's Library, 1701-1708; the Library of the Royal Dublin Society, 1736; in 1783 the Library of the Royal Irish Academy; and in 1787, King's Inns Library. These libraries are situated in Dublin, and it is in Dublin that the major library resources of the country are concentrated at present.

With the gradual easing of the Penal Laws against Catholics in the eighteenth century, a more tolerant official policy toward Catholic education permitted the establishment of schools for the education of Catholic youth, some of which added seminaries for the education of priests. Libraries became an essential part of these schools, notably at Carlow. In 1795 St. Patrick's College, Maynooth, was officially established for the education of priests and laymen: an endeavor to establish a separate school of Divinity in Trinity College Dublin had met with no success. Maynooth later became a recognized College of the National University of Ireland (1909); it has acquired a fine library especially strong in religious subjects.

Popular Libraries

The late eighteenth and early nineteenth century saw the development of libraries designed to provide books and other reading material for people to whom the existing libraries were not suited and to which they would not have had easy access. These included parish and similar libraries established upon the relaxation of the anti-Catholic laws. These were much used by the people; the holdings, as might be expected, included spiritual writings that were especially popular at this period. Others were administered by societies or institutes that charged a modest fee for membership. Some, particularly the Mechanics' Institutes, had a declared educational aim and provided lectures and formal instruction in addition to well stocked libraries. Various reasons have been given for the emergence of these libraries: philanthropists believed useful knowledge should be made available to the people, workers desired the means of advancing themselves in their trades; the ordinary people found pleasure in general and recreational reading and in meeting others of similar tastes in the societies' rooms.

In Ireland there was an extra incentive: recent history had made people deeply conscious of the need to study political movements elsewhere, particularly in France, and there was a real desire to learn of the progress of new forms of government. This influence was to become especially manifest in the 1840s when the Repeal Reading Rooms became widespread—at one time there were over 1,000 of them. Their aim was repeal of the Act of Union by which the Irish Parliament had been dissolved in 1801.

The Dublin Library Society was founded in 1791. Its library had a stock of over 10,000 volumes before it declined in the 1870s. The Cork Library Society, founded in 1792, survived to 1941 when its effects were sold by auction. This library was mentioned in Thackeray's *Irish Sketch Book* (1843) as "the Cork Library where there are plenty of books and plenty of kindness to the stranger." Similar societies were situated in the smaller towns. The Mechanics' Institute in Dublin was founded in 1838, providing a variety of commercial and technical courses and "one of the finest libraries in Ireland." Several others were established. That in Dundalk was particularly well attended.

The libraries of the Mechanics' Institutes and societies fell into disuse as the century progressed. In many cases the buildings remained, but were used for other purposes. The Mechanics' Institutes did not succeed in appealing to the working classes to any satisfactory extent, and with the coming of public rate-supported libraries, which gave service without the payment of fees, the incentive to afford financial support to these libraries was lessened. The political eclipse of the Young Ireland movement brought the era of Repeal Reading Rooms to a close. The Great Famine in its turn left the people with little heart for cultural or political activity for decades to come.

Public Libraries

For these same reasons, the early public rate-supported libraries found little support. From the date of the first Public Library Act in 1853 until 1880, only two public libraries had been established. Apart from the apathy of the people, the income derived from the local government was insufficient to support a library that would attract popular attention. The capital city of Dublin did not achieve a public library until 1884 when two buildings opened on the North side.

From 1877 a new act led to a quickening of interest in public libraries. The legislation which up to then had proved cumbersome was changed to allow for easier adoption of the Acts and to permit the raising of loans for library purposes. In 1893 the Young Ireland League was established with the aim of reviving the ideals of the Young Ireland Movement of the forties: to encourage the establishment of reading centers by the people. The Public Library Act of 1894 which was promoted by the league resulted in still easier adoption of the Acts and their extension to cover smaller units of population. For the first time, it gave power to local government units to cooperate and establish a joint committee of management—a far-seeing enactment of much importance in the next century when areas were amalgamated to form more viable units for library purposes. The Draft Bill of the League contained a clause to include rural districts within the scope of the Acts. This was omitted in 1894 but was to be included in the Act of 1902.

Among benefactions with far-reaching effects on the public library movement were those of Andrew Carnegie, which operated mainly from 1907 to 1913, when a sum of £115,000 was given for the erection of library buildings. These grants were most welcome as the libraries were still restricted to incomes based on the one penny rate limitation. The actual buildings gave visual indication of the idea of libraries and were indeed much more handsome than could have been afforded by the libraries' permitted expenditure. Encouraged by the 1902 Act, the availability of a building grant, and the leadership of the Irish Rural Libraries Association, established in 1904, many small libraries were set up in the countryside, especially in Dublin, Limerick, and Kerry. These buildings in the countryside were to prove unworkable as libraries, again because the income available locally for books and salaries amounted to a mere pittance.

In the cities, however, the Carnegie grants generally stimulated interest in the libraries, principally because the income available locally, though still inadequate, did permit the purchase of material in proportions sufficient to attract readers.

The administration of the Carnegie grants having become very difficult, and for these rural libraries unrewarding, Andrew Carnegie created the Carnegie United Kingdom Trust. The Trust's initial action was to call for a report by W. G. S. Adams on the effect of the Carnegie grants in Ireland and in Great Britain. It was disclosed that many Carnegie buildings were no longer functioning as libraries in rural districts and that libraries still in existence there were mostly moribund. A special report on rural libraries by Cruise O'Brien led to the appointment of Lennox Robinson to reorganize the libraries and to make recommenda-

tions for future policy. The Robinson report revealed deplorable conditions, due mainly to lack of income and to poor supervision. A decision was ultimately made by the Carnegie Trust to subsidize the purchase of books, rather than to provide buildings, and to support rural libraries under the administration of a large local government authority. This proved to be the county council, and the first grant to a county, that of Donegal, was given in 1921.

Meanwhile in 1918, the trust had established a Book Repository in Dublin to provide books for a modest fee to existing libraries. The first box of books was dispatched in 1919, and this system continued to be used until 1928 when it was brought to a close. In 1923 the Trust established the Irish Central Library for Students, a support lending library to supply expensive and little-used books to libraries, and maintained it until 1948 when it was transferred to the Library Council (An Chomhairle Leabharlanna), with a 5-year grant in aid. The Trust administered (as from the premises of the Irish Central Library for Students) their grants to libraries continuously from 1921 until 1935, with a few isolated grants in following years.

When the Carnegie Trust grants were withdrawn, the income afforded by the local authority was still in most cases far too low to permit satisfactory service. The rate limitation of 1d. had been extended in 1920, and finally abolished, but many library authorities did not levy even the 3d. rate permitted. It became evident that some substitute for the Carnegie grants had to be found and support found also for the Irish Central Library for Students, since the Carnegie Trust had decided to hand it over to Irish ownership. Both these decisions led to the Public Library Act of 1947 which established the Library Council and authorized it to accept from the Carnegie Trust the Irish Central Library for Students and to undertake advisory and grant-recommending functions for public libraries. The Library Council issued two reports on public libraries in 1955 and 1958. These reports disclosed that the county libraries were operating under grave difficulties due to lack of suitable staff, to inadequate buildings, and to bookstocks generally below an acceptable standard; and, also, that the urban libraries, though they had more suitable buildings and a better bookstock, were lacking in a sufficient number of qualified staff to offer adequate service.

As a result of these reports, the Library Council was in 1961 enabled to recommend that loans be given to libraries for the purchase of books and erection of buildings. The loans have stimulated development and have also remedied the local imbalance imposed by rating inequalities. The self-appraisal of libraries as a preparation to a grant application and the subsequent visit of the director of the Library Council in an advisory capacity have promoted a questioning of library policies in all libraries. Positive thinking has replaced an unwilling and imposed acceptance of the former standards. The entire country is now covered by the Public Library Acts, and service becomes more satisfactory as the Library Council's work continues to develop. There is presently a demand for legislation that will compulsorily amalgamate local government units to provide a basis for regional cooperation for libraries as well as for other local services.

National, University, and Special Libraries

NATIONAL LIBRARY OF IRELAND (1877)

The National Library of Ireland was established under the Dublin Science and Museum Act, 1877, when 30,000 books were transferred from the Royal Dublin Society to the Science and Art Department. These books were retained in Leinster House (formerly the seat of the Royal Dublin Society), until 1890 when the building for the National Library was completed. The National Library is the state reference library with a major aim of acquiring all material relating to Ireland and by Irish authors. It holds a large collection of manuscripts of significance for Irish history and contains many private libraries of distinguished Irish people. It has the largest collection in Ireland of books and pamphlets relating to Irish history of all periods and holds unique files of Irish newspapers from the eighteenth century. A former director of the library, Dr. R. J. Hayes, gave some evidence of its holdings in his monumental catalog, *The Manuscript Sources for the History of Irish Civilisation*, in which a detailed analysis is made of the manuscripts of the National Library of Ireland in particular, but there is also reference to early material of Irish interest in other Irish and in overseas libraries. Dr. Hayes has also been responsible for a 9-volume index to the contents of the more important Irish periodicals. The library's holdings amount to 500,000. It is the depository library for the United Nations and other international and intergovernmental publications, and it also receives by legal deposit all Irish publications.

TRINITY COLLEGE DUBLIN LIBRARY (1601)

The oldest library in Ireland is that of Trinity College Dublin. It is contemporary in origin with the Bodleian in Oxford. Sir Thomas Bodley was collecting for his library at the same time as Dr. Challoner and Dr. James Ussher were in London acquiring the original stock for the library in Dublin. In 1801 this library and that of the King's Inns were granted legal deposit of all books published in Great Britain and Ireland to commemorate the Act of Union which had abolished the Irish Parliament, and also to discourage piracy among Irish printers who were making a thriving living out of reprinting English books without permission.

In 1927 it was declared a copyright library (with four other Irish libraries) for Ireland, thus ensuring continuous intake of Irish-published items. With a stock of over one million and a quarter volumes, it is the largest library in Ireland. The manuscript collection includes the *Book of Kells*, the *Book of Durrow*, and other world-famous manuscripts. The incunabula collection is the largest in Ireland. Among celebrated holdings are the Fagel Collection of Dutch and Continental books pre-1800 and the Starkey Collection of hymn books.

ROYAL IRISH ACADEMY, DUBLIN (1783)

With the establishment of the Royal Irish Academy in 1783, the collection of Irish manuscripts obtained a new impetus, and today the Academy holds the largest

collection of Irish manuscripts in Ireland. The catalog of these manuscripts in twenty-seven fascicles was compiled between 1926 and 1970. It contains a fine collection of early manuscripts and many valuable modern manuscripts, such as the O'Donovan Letters written for the Ordnance Survey in the 1830s with their revealing details on the economic and social conditions of Ireland and its antiquities, monuments, placenames, and legends. The Academy's magnificent collection of pamphlets, over 30,000 in number, is invaluable for the study of Irish affairs from the beginning of the seventeenth century. It also has a large collection of institutional periodicals, some 800 in number, which are received in exchange for the Academy's *Proceedings*. This exchange ensures for Ireland ready access to little known and otherwise unobtainable periodicals.

ROYAL DUBLIN SOCIETY (1731)

A somewhat similar service for periodicals is performed by the Library of the Royal Dublin Society which receives a large collection of unusual items in exchange for its own *Scientific Proceedings*. Founded in 1731 to forward the development of "husbandry, manufactures and other useful arts and sciences" in Ireland, it had built up a large collection when the bulk of its books and property were transferred to the National Library in 1877. It now holds about 200,000 volumes, general, scientific, and technical, with emphasis on agriculture. It contains a number of rare early books on agriculture.

LIBRARIES ATTACHED TO DIOCESES, CATHEDRALS, AND RELIGIOUS HOUSES

These, due to Ireland's chequered career in religious matters, have much importance. In general they possess many early and rare books, some of great local and historical value. Much research is undertaken on the collections and they are generally well cataloged. The library at the Jesuit House in Milltown has many incunabula among its stock, and a carefully assembled collection on theology. The library is regularly expanding to meet the needs of students studying at university level at Milltown. The Library of the Representative Church Body (Church of Ireland) has recently moved its important collection to a new library in Dublin. The Library of the Franciscans at Killiney holds many precious manuscripts, a number of which were brought back to Ireland from houses in Europe.

CHESTER BEATTY LIBRARY, DUBLIN (1951)

This magnificent library was left in trust by Sir Alfred Chester Beatty for the benefit of the Irish people. It contains about 15,000 volumes, papyri, oriental and Western manuscripts, Japanese color prints, and a large collection of miniatures from India, the Far East and Islamic countries. This unique library is being fully cataloged by a team of specialists.

MARSH'S LIBRARY, ST. PATRICK'S CLOSE, DUBLIN (1701)

In 1701 Archbishop Narcissus Marsh established a library in Dublin "to contain books for publick use where all might have access." An act was passed in 1707 for its administration. One of his intentions was to provide a place of study for the students of Trinity College Dublin who were denied access to the library there at the time. It is today a splendid example of early eighteenth century architecture. The original stalls are still in place and many of the books retain the clasps by which they were chained to the shelves. The contents which remain practically intact are a fine example of a library of the period. It contains about 25,000 books and 300 manuscripts. Many of the books contain annotations, some very outspoken, made by Jonathan Swift, dean of St. Patrick's.

KING'S INNS LIBRARY, DUBLIN (1787)

King's Inns Library has the primary aim of serving the legal profession, but contains also a large collection of general works amounting to some 90,000 volumes. It enjoyed the British copyright from 1801-1836.

ST. PATRICK'S COLLEGE, MAYNOOTH, LIBRARY (1800)

Maynooth (1795) was established primarily as an institution of university standing to educate candidates for the priesthood and assembled a valuable library, mainly of theological literature, to this end. Recently the admission requirements for students have been widened, and there is consequently a greater intake of general subjects. The library contains about 70,000 volumes. It was created a copyright library for Irish publications in 1964.

UNIVERSITY COLLEGE CORK LIBRARY (1849)

University College Cork was established as a Queen's College in 1845; the library dates from 1849. It contains about 400,000 volumes. There is a general emphasis on provision for all branches of dairy science. The d'Arbois de Jubainville collection is a noted feature of the library. It is a copyright deposit library for Irish publications.

UNIVERSITY COLLEGE GALWAY LIBRARY (1849)

University College Galway was established as a Queen's College in 1845. The library has a total stock of 125,000 volumes. It is especially strong in holdings in the Irish language, in history, and in economics. It acts as support library for other libraries in the West of Ireland. It is a copyright deposit library for Irish publications.

UNIVERSITY COLLEGE DUBLIN LIBRARY (1908)

University College Dublin was established in 1908 and is today the largest university institution in Ireland. The library contains some 500,000 volumes. It

inherited many thousand volumes including some rare and early printed books from the Library of the Catholic University of Ireland. The Catholic University of Ireland had been established in Dublin in 1852 with J. H. Newman (later Cardinal Newman) as first Rector. Newman had built up an excellent library which was later dispersed, some volumes to Maynooth, some to Clonliffe College, some in due time to University College Dublin. Many of the manuscripts of Eugene O'Curry, one of Newman's professors, also came to University College. The collection of the Royal University of Ireland, one of the late nineteenth century foundations established in an attempt to solve the Irish university problem, also passed to the library in 1908. In 1926 the libraries of the Royal College of Science for Ireland and of the Albert Agricultural College were transferred to the library. The library has separate libraries for Agriculture (Faculty and Experimental Farm), Engineering, Science, Medicine, Architecture, and Town Planning; the new library (Stage 1A) for Arts, Law, and Commerce opened in the new campus in Belfield in 1972. Important collections are the Baron Palles Law Library, the Stopford Green History Library, the Zimmer Celtic Collection, the J. F. Kenney History Collection. The library holds copyright deposit for Irish publications.

INSTITUTE LIBRARIES

The new Irish state felt the need to enlarge the scope for research and to provide facilities for industrial and economic development. In consequence, there was established the Dublin Institute for Advanced Studies for research in Celtic studies, and theoretical and cosmic physics, and institutes also were set up for agriculture, physical planning, industrial research and standards, public administration, management, etc. The scope and holdings of these and others are given in *Sources of Scientific and Technical Information in Ireland* published in 1972 by the Institute for Industrial Research and Standards.

THE IRISH CENTRAL LIBRARY FOR STUDENTS (1923)

This was established by the Carnegie Trust primarily as a support service for inadequately-stocked public, especially rural, libraries. It has since developed into the national and international center for the interloan of books and periodicals. It was handed to the Library Council in 1947. It holds a stock of some 50,000 volumes.

SCHOOL LIBRARIES

A number of the older secondary schools have had from their foundation good libraries for their pupils. The primary schools had, however, very few books, sometimes provided by the teachers themselves. The 1902 Public Library Act permitted the use of school premises by the public libraries for their depository collections of books for the local community, the teacher often acting as the custodian. With the coming of the county libraries in the 1920s, this practice of using the school

premises as community library centers, both adult and juvenile, continued. These latter libraries came to be called "school libraries." The Irish Association of School Librarians was established to promote the establishment of libraries in schools and to foster their development, and in pursuit of these aims petitions were made to the Department of Education for direct grants to schools for their school libraries. In the event, the department has preferred to finance school libraries through the public libraries from a bookstock assembled there. The School of Librarianship at University College Dublin organized summer courses in school librarianship from 1952 until 1972 when the school decided to hand over the organization of the courses to the association. In 1970 the School of Librarianship inaugurated a course leading to a Certificate in School Librarianship. The course lasts for one university year and is open to qualified teachers of at least 5 years' teaching experience. Already there is a core of qualified teacher-librarians doing excellent work in their own school libraries.

Associations

When the (British) Library Association was founded in London in 1877 it was called "Library Association of the United Kingdom." Ireland was then a part of the United Kingdom and invitations to attend the 1877 conference were issued to all librarians in Great Britain and Ireland. Subsequently, two conferences of the Library Association were held in Ireland: at Dublin in 1884 and Belfast in 1894. With the national revival in the late nineteenth and early twentieth century, it was felt that an Irish association would more usefully serve the country, and Cumann na Leabharlann was established in 1904. Although the Cumann ceased to exist in 1909, it had produced meanwhile two volumes of a journal called *An Leabharlann* (1905-1907) which are invaluable for the study of Irish library history. This association was distinguished for the number of literary personalities associated with it and its aims of promoting the opening of libraries and the study of bibliography.

The Bibliographical Society of Ireland, established in 1918, remained active until 1953. The *Publications* of the society, issued in pamphlet form, contain unique contributions to Irish bibliography by prominent bibliographers such as E. R. McClintock Dix and P. S. O'Hegarty. The associated journal, *The Irish Book Lover*, Vols. 1-32, 1909-1957, was devoted to Irish books, books of Irish interest, books by Irish authors, modern and ancient. The success of the society was largely due to the distinguished scholar printer, Colm Ó Lochlainn of the Three Candles Press, and it declined as he was obliged to discontinue his work for it. An attempt to continue the work of *The Irish Book Lover* was made in *The Irish Book*, of which only five numbers were published. *Irish Booklore*, Vol. 1 (1971), published in Belfast, has now taken over the task of recording work of bibliographical interest in Ireland.

The Irish Rural Libraries Association was founded in 1904 to encourage rural

districts to adopt the Public Library Act of 1902 and to establish and maintain libraries. It acted in an advisory capacity and issued lists of recommended volumes. The comparative failure of rural public libraries to afford an adequate collection of books led to the decline of the association.

In 1923 an Irish Library Conference was held, largely on the prompting of the Carnegie Trust, at which the establishment of a library association for Ireland was proposed. The new policy for the administration of the Trust grants had recently been inaugurated and it was felt that guidance and encouragement in library development could be assisted by a well-informed body of library opinion. Despite the enthusiasm expressed at the Conference, the committee appointed did not follow up the resolution. In 1927 the need for an association was again discussed and in 1928 Cumann Leabharlann na hEireann (the Library Association of Ireland) was established. The new association chose the title of *An Leabharlann* for its journal, resuscitating the title of the journal of the earlier association. The first number was published in 1930, and the title was extended in 1972 as *An Leabharlann: The Irish Library* when the journals of the two parts of Ireland were amalgamated.

The Irish Association for Documentation was established in 1947 to promote the recording, organization, and dissemination of specialized knowledge. In 1967 it extended its title to become the Irish Association for Documentation and Information Services as an expression of its scope in catering for the needs of all aspects of special librarianship. It gives approval to the publication of the *Union List of Current Periodicals in Irish Libraries* and *The Irish Publishing Record*.

Cumann Leabharlannaithe Scoile (The Irish Association of School Librarians), established in 1962 to foster the development of school libraries, has as official organ *CLS Bulletin*, published three times a year. The membership consists principally of teachers engaged in school library work.

Education for Librarianship

This began with the establishment in 1928 of the School of Librarianship in University College Dublin. The school offers a 1-year postgraduate course which leads to a Diploma in Librarianship. It covers the core curriculum, methods of research, information studies, and archive work. Nongraduates who are holders of the Library Council's scholarship spend 2 years following courses leading to the diploma. The school is a member of the British Association of Library Schools. The extern examiner is presently the director of the Library School of University College London. The library of the school contains about 10,000 volumes in addition to the valuable library of one of its former lecturers, Colm Ó Lochlainn, the noted scholar-printer, and the excellent collection on Irish bibliography of Frank O'Kelley, the Irish-American bibliographer.

Later the Library Association of Ireland established courses for persons who could not leave their posts to study at a university library course. Their qualification was obtained by following a 3-year correspondence course with examination

annually in the courses studied during the year. The final examination was followed by a thesis. The association, dissatisfied by this form of education, decided to bring it to a close and follow the Library Council's scholarship scheme enabling public library staff to attend a university library school. The school inaugurated a course leading to a Certificate in School Librarianship in 1970. This is a 1-year course open to registered teachers with at least 5 years' teaching experience.

The Irish Publishing Record, the Irish national bibliography, is produced by the school. The compilation is much facilitated by University College Dublin as a copyright library for Irish publications.

BIBLIOGRAPHY

General

- Bibliographical Society of Ireland, *Annual Reports*, Dublin, 1919–1953, Nos. 1–36.
- Bibliographical Society of Ireland, *Publications*, Dublin, 1918/20–1953/58, Vols. 1–6.
- Hayes, R. J., *The Manuscript Sources for the History of Irish Civilisation*, Hall, Boston, 1965, Vols. 1–11.
- Hayes, R. J., *Sources for the History of Irish Civilisation: Articles in Irish Periodicals*, Hall, Boston, 1970, Vols. 1–9.
- Institute for Industrial Research and Standards, *Sources of Scientific and Technical Information in Ireland*, Dublin, 1972.
- Irish Library Conference, *Proceedings of the Irish Library Conference held at University College Dublin, June, 1923*, Carnegie United Kingdom Trust, Dublin, 1923.
- Library Association of Ireland, *Reports of the Executive Board, 1928/29–*, Dublin, 1929–.
- O'Neill, T. P., and D. J. Clarke, "Libraries in Ireland," *An Leabharlann*, 13, 67–80 (June 1955).
- Wall, T., *The Sign of Doctor's Hay's Head: Being Some Account of the Hazards and Fortunes of Catholic Printers and Publishers in Dublin from the Later Penal Time to the Present Day*, Gill, Dublin, 1958.
- Walsh, R., "Libraries," in *Saorstát Eireann Official Handbook*, Talbot Press, Dublin, 1932, pp. 199–211.

Periodicals

- The Irish Book*, Dolmen Press, Dublin, 1959–1964, Vols. 1–3, No. 1.
- Irish Booklore*, Blackstaff Press, Belfast, 1971–, Vol. 1–.
- Irish Book Lover*, London and Dublin, 1909–1957, Vols. 1–32.
- An Leabharlann*, Journal of Cumann na Leabharlann, Dublin, 1905–1907, Vols. 1–2.
- An Leabharlann*, Journal of the Library Association of Ireland, Dublin, 1930–, Vol. 1–, [from 1972 has title *An Leabharlann: The Irish Library*].

Early

- Bieler, Ludwig, *Ireland: Harbinger of the Middle Ages*, Oxford Univ. Press, London, 1963.
- The Book of Kells: Evangeliorum quattuor Codex Ceannensis, auctoritate Collegii . . . Trinitatis juxta Dublin*, Urs Graf-Verlag, Bern, 1950–1951, Vols. 1–3.

The Book of Durrow: Evangelium quattuor Codex Durmachensis . . . prolegomensis auxeront A. A. Luce, G. O. Simms, P. Meyer, L. Bieler, Urs Graf-Verlag, Bern, 1960, Vols. 1-2.

De Paor, Máire and Liam, *Early Christian Ireland*, Thames & Hudson, London, 1958.

Gougaud, Louis, *Modern Research, with Special Reference to Early Irish Ecclesiastical History*, Hodges, Figgis, Dublin, 1929.

Henry, Françoise, *Irish Art in the Early Christian Period*, 2nd ed., Methuen, London, 1947.

Kenney, James F., *The Sources for the Early History of Ireland. Vol. 1. Ecclesiastical*, 2nd ed., Irish Univ. Press, Shannon, 1966.

MacNeill, Charles, *Publications of Irish Interest Published by Irish Authors on the Continent of Europe Prior to the Eighteenth Century*, Bibliographical Society of Ireland, Dublin, 1930.

O'Curry, Eugene, *Lectures on the Manuscript Material of Ancient Irish History*, Duffy, Dublin, 1861.

O'Curry, Eugene, *On the Manners and Customs of the Ancient Irish*, Williams & Norgate, London, 1873, 3 vols.

Ryan, John, *Irish Monasticism*, Longmans Green, Dublin, 1931.

Popular, Public Libraries

Barnes, M., "Repeal Reading Rooms," *An Leabharlann*, 23, 53-57 (June 1965).

Carnegie United Kingdom Trust, *County Libraries in Great Britain and Ireland: Reports: 1925-1927/28*, Edinburgh, 1925-1928.

Carnegie United Kingdom Trust, *1st Annual Report*, Constable, Edinburgh, 1915-.

Carnegie United Kingdom Trust, *Glimpses of the Rural Library Problem in Ireland*, by Lennox Robinson, Dunfermline, 1915-1917.

Carnegie United Kingdom Trust, *The Public Library System of Great Britain and Ireland, 1921-23: a report . . .*, by J. M. Mitchell, Edinburgh, 1924.

Carnegie United Kingdom Trust, *A Report on Library Provision and Policy*, by W. G. S. Adams, Edinburgh, 1915.

An Chomhairle Leabharlanna (The Library Council), *1st Annual Report, 1948/49-*, Dublin, 1950-.

An Chomhairle Leabharlanna (The Library Council), *The Improvement of Public Library Services*, Dublin, 1955-1958, Series 1-2.

Davis, T., *Essays, Literary and Historical*, centenary ed., Tempest, Dundalk, 1914.

Gill, M. J., and W. J. Johnston, *Public Libraries for Ireland*, Gill, Dublin, 1903.

Glynn, P. B., "The Gilbert and Local Collection of the Dublin Municipal Libraries," *An Leabharlann*, 10, 181-185 (December 1952).

Great Britain, Parliament, *Report from the Select Committee on Public Libraries, Together with the Proceedings of the Committee, Minutes of Evidence and Appendix*, London, 1849.

Irish Rural Libraries Association, *List of Books for Irish Rural Libraries*, Dublin, 1905 (?).

Irish Rural Libraries Association, *The Organization of Rural Libraries in Ireland*, An Clóchunnann. Dublin, 1905.

McEvoy, J., *Reasons for the Establishment of a Free Library and an Industrial College, etc.*, Kelly, Dublin, 1864.

Morton, K. G., "Mechanics' Institutes and the Attempted Diffusion of Useful Knowledge in Ireland, 1825-79," *Irish Booklore*, 2, 59-74 (Spring 1972).

Neylon, M., and M. Henchy, *Public Libraries in Ireland*, University College Dublin School of Librarianship, Dublin, 1966.

Power, E., "Some Early Sources of Book Supply in Ireland," *An Leabharlann*, 8, 49-53 (September 1942).

University and Special Libraries

Bonfield, C., "Manuscripts in the Royal Irish Academy," *An Leabharlann*, 10, 175-180 (December 1952).

Bonfield, C., and A. Farrington, "The Library of the Royal Irish Academy," *Ibid.*, 8, 10-16 (October 1941).

Clarke, D. J., "The Library of the Royal Dublin Society," *Ibid.*, 8, 135-140 (January 1945).

Corkery, S., "Maynooth College Library," *Ibid.*, 14, 51-57 (June 1956).

Hayes, R. J., *The Chester Beatty Library*, Dublin, Chester Beatty Library, Dublin, 1963.

Jackson, R. W., "The Ancient Library of Cashel," *Cork Historical and Archaeological J.* 2, (52), 128-134 (1947).

"Manuscript Material for Diocesan and Parochial History, Report on Collections of Sources, 1: The Library of the Representative Church Body," *Seanchas Ardmhacha*, 1, 202-205 (1954).

McGrath, F., *Newman's University*, Browne & Nolan, Dublin, 1957.

Mooney, C., "The Franciscan Library, Merchants' Quay, Dublin," *An Leabharlann*, 8, 29-37 (September 1942).

Mooney, C., "Irish Franciscans in Libraries of the Past," *Irish Ecclesiastical Record*, 5(60), 215-228 (September 1942).

National Library of Ireland, *Report of the Council of Trustees, 1946/47-*, Dublin, 1947-.

Royal Irish Academy, Dublin, *Catalogue of Irish Manuscripts in the Royal Irish Academy, 1926-1970*, Fasc. 1-27.

Tallon, M., "Church of Ireland Diocesan Libraries," *An Leabharlann*, 17, 17-27 (March 1959), *Ibid.*, 17, 45-63 (June 1959).

Tierney, M., *Struggle with Fortune: A Miscellany for the Centenary of the Catholic University of Ireland 1854-1954*, Browne & Nolan, Dublin, 1954.

Townley, C., "University College Galway and Its Library," *An Leabharlann*, 22, 39-43 (June 1964).

Trinity College Dublin Library, *Catalogue of 15th Century Books in the Library of Trinity College Dublin and in Marsh's Library, Dublin, with a Few from Other Collections*, by T. K. Abbott, Hodges Figgis, Dublin, 1905.

Wall, T., "Rare books in Maynooth College Library," *Irish Ecclesiastical Record*, 5(52), 46-59 (July 1938).

White, Newport J. D., *An Account of Archbishop Marsh's Library*, Dublin, Dublin, 1926.

Wilkinson, J. V. S., "The Chester Beatty Library," *An Leabharlann*, 14, 111-117 (September 1956).

IRELAND, NATIONAL LIBRARY OF

The National Library of Ireland, like its sister institution the National Museum, traces its origin to the Royal Dublin Society which was founded as the Dublin Society in 1731. This institution provided for a library in its earliest rules and acquired books relating to its purposes, that is to say, the fostering of science and the arts. It was open to visitors without charge on the introduction of a member of the Society. Leinster House, now the seat of both houses of the Irish Parliament, built in 1745 as a private residence by James FitzGerald the 20th Earl of Kildare, afterward created Duke of Leinster, passed into the hands of the Royal Dublin Society in 1815. Here, in addition to their offices and natural history collection, was kept the library of the Society, which was purchased by the government together with the adjoining site for £10,000 in 1877, and developed into the National Library of Ireland. Thus, the government gave effect to what had been advocated for some years. The accommodation for the library in Leinster House was inadequate, however, and so it was decided to build a spacious and separate National Library on the adjoining site. Work commenced in 1885 to the plans of Thomas Deane, architect, and was completed in 1890 when the library was declared open. Its first librarian was William Archer, who had been librarian of the Royal Dublin Society since 1876. He continued in his new post until 1895. To him is due the adoption of the dictionary form of catalog. The merits of the Dewey Decimal system of classification appealed to him, and it is believed that he was the first librarian in Europe to adopt it for his library.

The façade of the library is about 200 ft. in length. It is an imposing, dignified building, illustrating the ornate but solid decorative features of the Victorian period, with handsomely carved mantlepieces, and beautiful oak doors (see Figure 1). These and the enrichments in plaster around the ceilings, and the mosaic floors, were executed by Dublin craftsmen.

The building was planned to hold 500,000 volumes. That number has long since been passed, as, in addition to the normal intake of books, new departments were set up. While there is much congestion and some off-site storing it is gratifying to note that the state has now announced plans for vast expansion and development on adjacent sites.

There are three main divisions in the National Library: the Department of Printed Books, the Department of Manuscripts, and the Genealogical Office which is at present housed in Dublin Castle. In 1943 the library took over the Ulster Office of Arms with its large collection of Irish genealogical manuscripts and its Heraldic Museum. All the functions of this office, including the granting of coats of arms, are now discharged by the genealogical officer and chief herald.

The National Library of Ireland is conscious of its primary function to collect and preserve the records of the civilization of the country whether in printed word, manuscript, engraving, map, drawing, photograph, film, or musical score, and eventually, make them available for consultation and research. It is generally

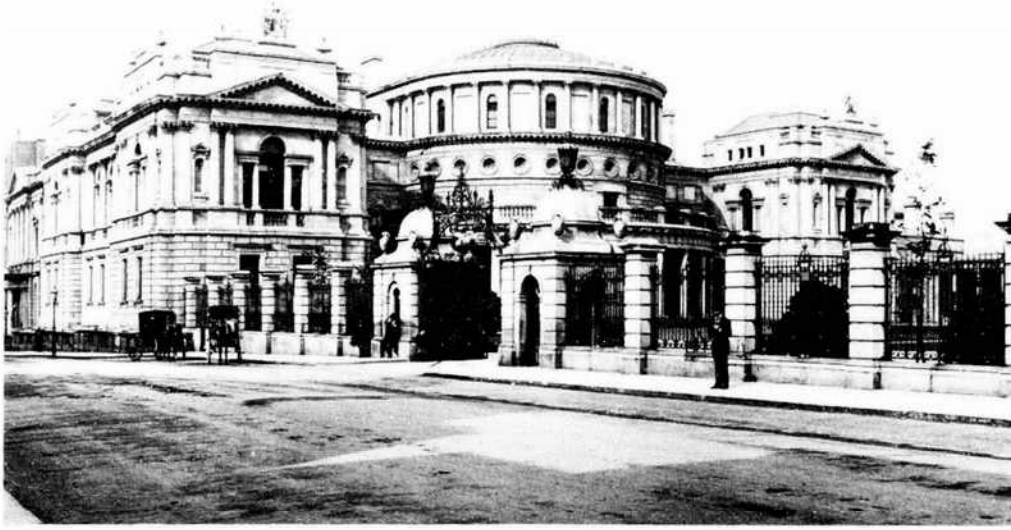


FIGURE 1. *National Library of Ireland, Dublin.*

accepted, too, that a National Library should be the principal information and bibliographical center for the country, and, as such, should concern itself with the compilation of catalogs, bibliographies, and union lists. It has also, to some extent, an encyclopaedic character and provides coverage in a wide variety of subjects and languages. Thus, while the National Library of Ireland has a considerable range of general reference books on most subjects, such as art, history, and archaeology, as well as the publications of many international organisations such as UNO, UNESCO, WHO, OECD, its chief concern is with material relating to Ireland, and it is in this field that we find its greatest treasures.

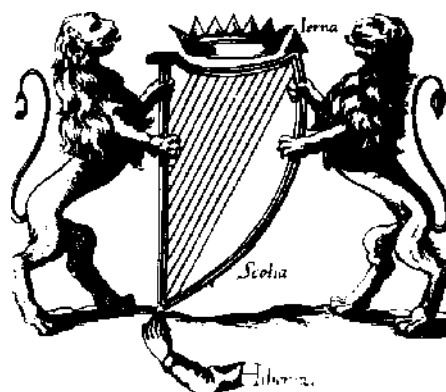
Among the half million volumes in the Department of Printed Books are many old and rare items, such as Gould's books on birds of the various continents with their delightfully colored plates, and some incunabula. One of these was written by an Irishman: *Defensorium curatorum contra eos qui privilegiatos se dicunt*, by Richard Fitzralph, Archbishop of Armagh who died 1360. This was a sermon preached in Latin in defense of the secular clergy against the mendicant orders. The library's copy was printed in Paris in 1485, and is in splendid condition.

Another item of Irish interest in this category is *Purgatorium S. Patricii in Hibernia*. It consists of only two leaves, and the copy is probably unique. The text is in German and is printed in coarse Gothic type. The verso of the second leaf contains a most singular and rude full length woodcut representing that celebrated purgatory where St. Patrick saw such frightening sights. It is without place but was printed in 1475. Among the other incunabula is a fine copy of *The Nuremberg Chronicle*, 1493.

The Joly Collection comprising upwards of 23,000 volumes of printed books contains many rarities. Dr. Jaspar Joly, who graduated from Trinity College Dublin in 1837, made over his vast collection to the Royal Dublin Society in 1863, pending the setting up of a National Library. In addition to the printed books this valuable collection contains manuscript material, engraved portraits, and topographical prints. At the time of the acquisition of the collection it was estimated that the section on Napoleonic literature was probably the finest in the British Isles. The history of the French revolution is also well represented, while there are numerous works illustrating the reign of Louis XIV and the period from 1815 to the end of the Franco-German war. The French revolution period has now been supplemented by the acquisition of the Maclure Collection of French Revolutionary Material on microfilm. This covers some 25,000 items formed during the French revolution and after.

Among the rarities in the Joly Collection worth mentioning are Thomas Carue's *Lyra*, printed in Venice in 1651, of which only two other copies are known. Carue was born in Tipperary in 1590, became a priest, and acted as chaplain to an Irish regiment in the army of Ferdinand II of Austria during the Thirty Years War. All his books which are extremely rare are in this collection. His *Lyra* carries an engraving depicting the harp (Lyra) as the symbol of Ireland (see Figure 2). His

SYMBOLUM HIBERNIÆ.



Hibernis quondam testudo Regia terris
 Atq; Orpheus dulces infonere sonos
 Audijt his chordis attract⁹ Hibern², & inquit
 Quid vetat Augustæ plectra mouere lyre?
 Dixerat: & subito contingens pectine chordas
 Vix Orpheo abtimilem reddidit ante tonum,
 Hinc contacta chelis pro signo cecit Hibernis
 Nomenq; æternum Musi sonora dedit
 Hinc decus æternum statuit grandæua vetustas
 Hibernis, nulli quod potuere duces.
 Tumq;

FIGURE 2. The harp—the symbol of Ireland. An engraving in Carue. *Lyra, seu Anacephalæosis Hibernicæ*. . . , Vienna, 1651. In the National Library of Ireland.

Intinerarium, printed in Mainz in 1639, contains an informative account of Ireland at the period, as well as giving an interesting description of the Thirty Years War.

Practically all the first editions of David Rothe, John Colgan (*Acta Sanctorum*), Nicholas French, and the other Irish writers of the seventeenth century are represented.

Included with the manuscripts received with this collection is a copy of Captain Cook's *Voyage 1772-1775* (Mss. 7 and 8); and Ms. 9 is *A collection of specimen bark cloth etc. collected in the different voyages of Captain Cook to the South Sea*.

There is in the National Library, as one would expect, a very valuable collection of Swift and Goldsmith first editions, to which additions are being made as the required items come on the market. There is also a full set of the first editions of W. B. Yeats, as well as his extremely valuable manuscript collections donated by the Yeats family. While the books by Irish authors are available in libraries abroad, the background material here is unique. In addition to the Library's vast manuscript sources there is a full file of Irish newspaper and periodical material for the research scholar working on Irish subjects. It is the wide coverage of literary material that draws the James Joyce scholars from America, and, indeed, from all parts of the globe.

Since the library became a legal deposit library in 1927 it has not been difficult to collect all items published in Ireland. These are listed in the *Irish Publishing Record* published annually in conjunction with the Irish Association for Documentation and Information Services (q.v.). The Library receives all daily and weekly newspapers running to hundreds of bound volumes.

In 1970 G. K. Hall & Co., Boston, published *Sources for the History of Irish Civilization: Articles in Irish Periodicals*, Vol. I-IX. This is an index to Irish periodicals under author, subject and place.

As the National Library is a modern institution, one would not expect to find a wealth of ancient manuscripts like *The Book of Kells*, *The Book of Leinster*, or *The Book of Lindisfarne*. Many manuscripts had been carried abroad by Irish scholar monks in the early medieval period, and these were preserved in the libraries and archives of France, Germany, Switzerland, and Italy. In *Manuscript Sources for the History of Irish Civilization*, Vols. I-XI, edited by R. J. Hayes, G. K. Hall & Co., Boston, 1965, the editor points out that most of these sources are to be found, not in Ireland, but in libraries, archives, and private collections outside the country.

This was because of the successive wars from the ninth century onward which resulted in the destruction of the great monastic collections in Ireland. For the period before A.D. 1200 more than 4,000 Irish manuscripts survive, and of these less than 100 are in Ireland. For the period from A.D. 1200 to the nineteenth century the same disposal of material has occurred, and most of these manuscripts are now in England—in the British Museum, the Public Record Office (London), the Bodleian Library, Oxford, and in many other collections. As the result of a survey carried out by the National Library, these have been located and reported on over

a number of years. Most of this material has now been microfilmed and is listed in *Manuscript Sources*. . . .

The library has 1,020 Gaelic manuscripts in its collection, as well as many photocopies from other collections. Some of these are in vellum, dating from the fourteenth century. Most of them are listed in the *Catalogue of Irish Manuscripts in the National Library of Ireland, Fasciculus 1*, Dublin Institute for Advanced Studies, 1967. The most recent accession (March 1972) is *The Book of Magauran*, a collection of bardic poetry of the early fourteenth century which was acquired from the O'Connor Don family—descendants of Rory O'Connor, the last High King of Ireland.

With the break-up of the big houses since the foundation of the state much manuscript material has been collected. The papers from these houses usually contain rentals, maps, accounts, and family papers, all of which add further pieces to the large jigsaw puzzle that goes to make up the history of this country. The largest and most valuable single manuscript collection acquired was the Ormonde Archives in 1946. This collection was amassed by the Butler family at Kilkenny Castle, who had almost a dynastic rule over much of south and central Ireland for several centuries. The earliest document here is a charter dated 1173. The collection is particularly rich in documents relating to the turbulent seventeenth century, and in deeds relating to Kilkenny, Tipperary, and adjoining counties from the fourteenth century onward.

Another very fine collection is the Inchiquin Archives from Dromoland, County Clare. These are the papers of the O'Brien family from the middle of the sixteenth century. In common with the other family collections here, its chief value lies in the light it throws on local, social, economic, and domestic affairs from the seventeenth to the nineteenth centuries.

There is a good collection relating to O'Connell and the Young Ireland period, and of more modern vintage are the manuscripts of G. B. Shaw's early novels generously donated by the author, and the manuscript copy of James Joyce's *Portrait of the Artist as a Young Man*.

One of the show pieces in this department is the *Joseph Holloway Diary*. Holloway was a quietly eccentric character whose ruling passion was the theatre and who seldom missed a first night. The 200 large manuscript volumes of this diary dating from 1895 to 1944 include notes, criticisms, biographical comments, and programs dealing with every play performed in Dublin from the end of the last century until his death. Perhaps the greatest manuscript treasure of all the single items is a thirteenth century copy of Giraldus Cambrensis's *Topographia Hibernica (Description of Ireland)* written about 1190 and illustrated with the most amazing marginal drawings, one of which depicts the ceremonial crowning of a king.

There is a rich section of manuscripts dealing with the 1916–1922 period of Irish history. A recent and valuable acquisition was the *Major Florence O'Donoghue Collection*, but in compliance with the terms of the bequest it will not be available for general consultation for some time.

The library houses the largest known collection of Irish topographical prints and drawings, and a fine collection of engraved Irish portraits. A catalog is available for each of these collections while new up-to-date editions are being prepared for publication. There is also a collection of Irish historical prints, and of prints relating to social life, as well as a collection of cartoons.

The Irish Architectural Records Association, founded in 1939, is based in the National Library, and architects collaborate with the library in collecting and preserving the architectural drawings of such illustrious men as Francis Johnston who designed the Post Office; Thomas Cooley (the City Hall), and Thomas Gandon (the Custom House and the Four Courts). The latter's contribution to the embellish-

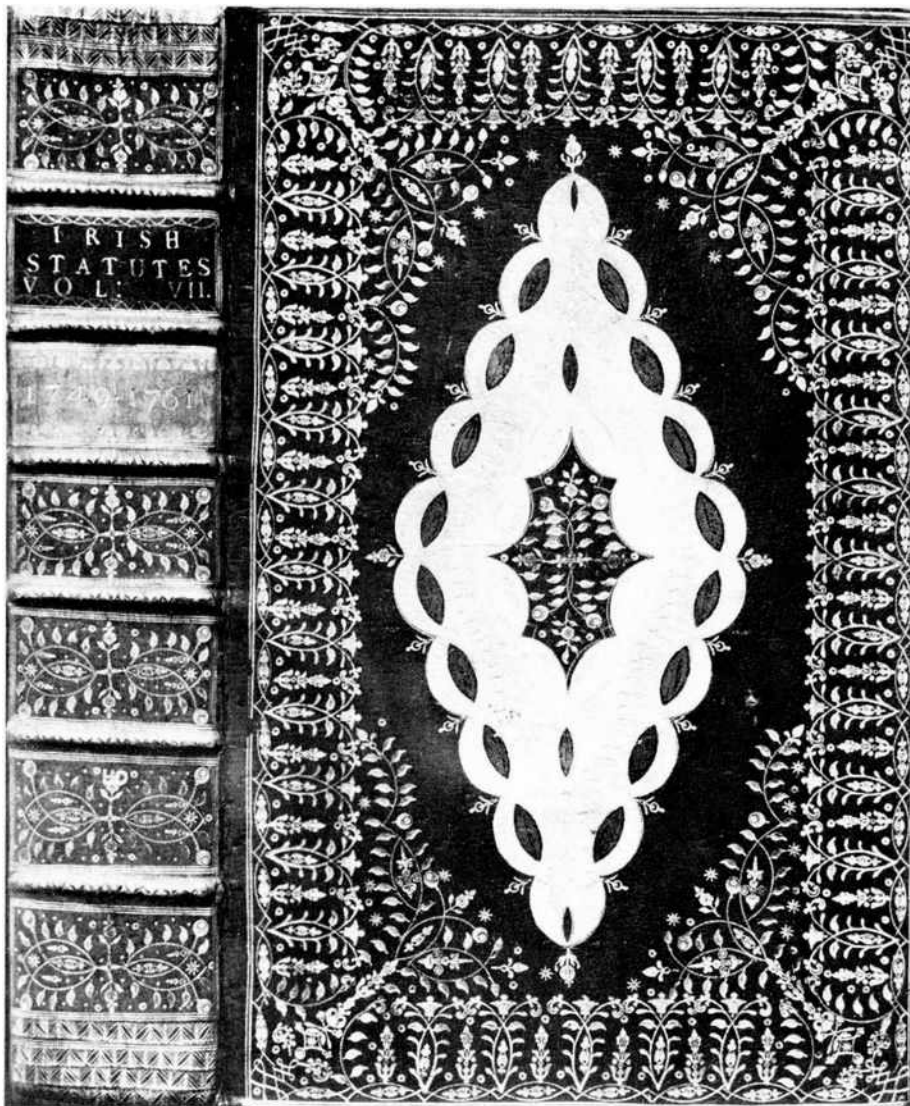


FIGURE 3. *Ornamented bookbinding, Statutes of the Irish Parliament, Printed by Boulter Grierson, 1765. In the National Library of Ireland.*

ment of Dublin is regarded as the greatest of any single architect. A selection of these was exhibited in the Municipal Gallery of Modern Art in 1965 when a very fine illustrated catalog was published.

The collecting, storing, and listing of maps of Irish interest, both printed and manuscript, receives much attention, and when additional accommodation becomes available a new Department of Maps will be set up and a comprehensive catalog prepared. A map may be printed, or it may be a manuscript scrap in a collection of estate papers. It may have been used to allocate tenants on an estate, or for a variety of reasons, and in a variety of circumstances and places. Hence the discovery of map material goes on all the time.

There is also a fine collection of Irish book bindings with some interesting examples of this craft particularly in the Georgian period (see Figure 3).

The general reading room, which seats seventy-eight and is approached by a broad flight of stone stairs with magnificent balustrades, is in the shape of a large "U," with the severity of the high walls broken by a frieze of plump cupids. The newspaper room and the manuscript room adjoin it. Ranging from the scholar editing a medieval Gaelic text to the caller with a casual query or seeking a photocopy, about 200 people visit the library each day. It gives a service from 10 A.M. to 10 P.M. from Monday to Friday and until 1 P.M. on Saturday.

PATRICK HENCHY

IRISH ASSOCIATION FOR DOCUMENTATION AND INFORMATION SERVICES (IADIS)

An Irish Association for Documentation was formed in 1947 in response to an opinion expressed by several members of the International Federation for Documentation that Ireland should have her own national organization through the medium of which she should take her place in the international field of documentation. Since then considerable progress has been made in the coordinating of documentation services within the country, in the pooling of information, and in bringing together those who are engaged in documentation and those who need it. In 1967 this association became the Irish Association for Documentation and Information Services (IADIS) when a new constitution was introduced giving the association a broader base. Briefly stated the objectives were to be the promotion in Ireland of the recording, organization, and dissemination of specialized knowledge and information by providing for:

1. The collaboration of all documentation, information, and library services in acquiring and making available books and other material, and the preparation

of bibliographies, abstracts, indexes, systems of classification, and other activities of documentation and information.

2. The encouragement of all measures for improving the dissemination of specialized knowledge and information in Ireland, and for promoting cooperation with similar bodies in other countries.

Membership in the association is open to institutions and corporate bodies, and in 1972 stands at sixty-three.

IADIS functions through a Council and a number of working panels:

1. The Irish National Bibliography Panel initiated the publication of the *Irish Publishing Record* which appears annually and covers Irish publishing for the previous year. The editorial work is at present in the hands of the librarian, University College Dublin.
2. The Union List of Periodicals Panel is responsible for the publication of the valuable *Union List of Irish Periodicals and Serials* with recurring supplements and editions. This is compiled in the National Library of Ireland. The preface to the current edition (March 1972) tells us that its scope has been greatly extended by the inclusion for the first time of details of periodical holdings in libraries outside Dublin, and the addition of material from many additional libraries in Dublin. For this edition the typed draft of the list was reproduced on punched cards, which were then processed by the computer of the Agricultural Institute.
3. The Education and Training Panel plans and conducts courses and seminars each year. These courses are designed to cover the various stages of information and special library work, on a fairly broad basis. They deal with such subjects as classification and cataloging, indexing techniques and applications, and information and dissemination methods.

A survey is at present being carried out to identify the sources and estimate present costs of scientific and technical information and documentation in Ireland, and to estimate further requirements and priorities; and a survey of communication patterns among scientists is being carried out for the association by Professor T. J. Allen of the Massachusetts Institute of Technology and Mr. S. Cooney of the Agricultural Institute. The first phase covers an estimated 1,600 research scientists. The object is to determine the communication channels through which scientific and technical information of value to national development enters the country and is passed along to where it is required.

IADIS is based in the National Library of Ireland and has as secretary the director of that institution.

PATRICK HENCHY

ISLAMIC BOOKS

The word *kitāb* ("book") occurs rather frequently in the Koran in several meanings, but the most outstanding meaning is the sacred book containing the revelation of God to the prophet Muhammad and his followers. Islam and the preachings of the prophet may have been the extraordinary factors that contributed to the development of Arabic writing and to the birth and maturity of the Arab-Islamic book in Arabia and throughout the Moslem world. It is well worth noting the appreciation and praise Moslems have always shown for the poetic beauty of words of the Koran. Throughout the Moslem world the Koran is considered to be the masterpiece of the Arabic language; a work whose literary perfection was itself a miracle sufficient to prove that it was inspired by God.

Before the time of Muhammad, the Arabs had no known written literature. Most of their legends, poetry, and genealogies were transmitted orally from generation to generation. The practice of oral transmission was used in the early period of Islam. Muhammad, an illiterate, dictated every part of the Koran which was revealed to him. These parts in turn were dictated to others who wrote them down on various accessible material and to companions who committed them to memory. These men were known as the *ḥuffāz* ("those who had learnt the Koran by heart").

Reading and writing was encouraged by the prophet Muhammad and, since his time, books have always been spoken of by the Arabs with great respect. His followers consider books as "faithful companions and good guides," so that if one hears an Arab speaking about books, one can hardly realize that he is not talking about an affectionate brother or friend.

Dependence on oral transmission of the Koran among the faithful was replaced by the written word, when a large number of *ḥuffāz* fell in the early battles in Iraq and Syria. The Caliph Abu Bakr al-Siddiq (d. A.D. 634) ordered the collection of the Koran into one manuscript, the classification of its chapters, and arrangements of its verses. If this historical recount is true, this may be considered as the first compilation of the Koran and the first comprehensive Arabic-Islamic copy known to the Arabs.

A few copies were later prepared by order of the Caliph Usāmah Ibn 'Affān (d. A.D. 656) from the first manuscript prepared by the Caliph Abu Bakr and sent to each of the principal towns of the early Arab dominions. It was from these manuscripts that later Moslems began to prepare their own individual manuscripts, so that soon their number multiplied and became easily accessible (1).

This Moslem-Arab appreciation of learning and books was a prime factor in the extensive intercourse between Arabs and foreigners. The Arabic language accompanied Moslem troops marching on Byzantine and Persian territories, and the victory of Islam was the victory of the Arabic language.

Early Arab historians did not preserve a scientific theory or tradition concerning the origin of Arabic writing that was available for the Arabs during the times of the prophet Muhammad. Rather, they surrounded the origin of Arabic writing by



FIGURE 1. Page from the Koran written in the Kufi style on parchment. The copy is attributed to the Caliph 'Ali Ibn Abi Tālib, ca. 35–40 A.H. (Reproduced from Najī Zain al-Dīn. Muṣawwar al-Khatt al-'Arabī. Iraq Academy, Baghdad, 1968, p. j.)

mysterious stories which amounted to fables and fiction repeated by other historians in their survey of world history, including that of Arabia. The early Arab historian al-Balādhuri (end of the eleventh century), following authorities which may date back to the end of the first century, seems to hold that Arabic writing was invented in the kingdom of Lakhmids.

New scientific facts revealed during the last century indicated that pre-Islamic Arab writers received their alphabet through the Nabateans, who for centuries had used the Aramaic characters. These and other early Islamic remains reveal three principal types of Arabic writing known as the *kufi*, the *thuluth*, and the *naskhi*.

The outstanding characteristic of the *kufi* was its geometric quality. No matter what type of *kufi* is examined, its horizontal and vertical lines immediately strike the eye. The lines in *kufi* writings are usually drawn with such mathematical precision that their length and width and the distances separating them are found to be equal (2). Koranic manuscripts in the early Islamic days used to be written in large *kufic* letters (see Figure 1).

The *Naskhi* style owes its existence to the *thuluth* which existed side by side with *Kufi* until the latter fell into disuse. It is a finer form of writing and was used more in copying the bodies of the texts. Turkish calligraphers have excelled over all other



FIGURE 2. Page from the Koran written in Naskhi style by Yaqut al-Musta'şimî and dated 963 A.D. (Reproduced from Najî Zain al-Din, *Musawwar al-Khatt al-'Arabî*. Iraq Academy, Baghdad, 1968. Fig. 198.)

Moslems in developing this type of writing and in rendering it more elegant and beautiful (3) (see Figure 2).

The *Nasta'liq*, or *Ta'liq* is purely an Iranian invention. Its founder was Mir 'Ali of Tabriz, a contemporary of Timurlane, who is known to have taught in his later years the forty calligraphers of the latter's grandson, Bay Sungur, at his court in Samarqand. His son 'Abdullah, surnamed Sakkerin Qalam, or the sweet-penned, also helped in the development of this type of writing. The main difference between *thuluth* and *nasta'liq* is that in the latter the heads of certain letters have been made to look smaller and their tails have been dropped off. From *Nasta'liq* another well-known form of Iranian writing, *Shikasta*, was later developed (3).

The *Rihānī* was invented by 'Ali b. 'Ubaida al-Rihānī a prolific writer who lived under the Caliph al-Ma'mun and died in A.H. 219 = A.D. 834 (4).

Another style of writing is *al-Ghubāri* ("dust," which it resembles). This is a microscopic style. The well-known writer Omar Akta is reported to have once presented Timurlane with a copy of the Koran inscribed in *al-ghubari* and which was so small that it could be placed in the setting of a ring (5).

A new form of writing arose in Spain after the cultural center of the Maghrib (North Africa) had been shifted from Qairawān to that country. It was called *Andalusian* or *Cordovan*, and is distinguished from the still somewhat stiff script of Qairawān by the remarkably round forms of its letters. Ibn Khaldun states that after the script of Qairawān had gone out of fashion, the Andalusian writing spread over North Africa, where its use declined together with the decay of the Almohade power (6).

After the seventh century A.H. (thirteenth century) Moslem states of considerable importance arose in Central Africa; their center was Timbuktu (founded A.H. 610 = A.D. 1213–1214. It also became the home of yet another script called the script of Timbuktu or of the Sudan.

In addition to these types which have been described, there were many other styles which were in their time very popular. Among the Arab contributions may be mentioned *Mohaqqaq* and *Tawqī'i*. Iranian variations include *Gulzar*, *Zulfu Arus*, *Hilāli*, *Larzayi*, and *Tavusi*. Turkish calligraphers developed many forms, among which *Jeli*, *Riqā'i*, *Diwānī*, and *Siāq* were the most important (3).

From the beginning, considerable emphasis was laid on a fine calligraphy for the text of the Koran. The first who gained distinction in this respect was the contemporary of 'Umar II (d. A.D. 720), Khalid b. Abi 'l-Hayyaj, who, as Muhammad b. Ishāq al-Nadīm tells us, also prepared the inscription in golden letters from Sura XC1 on the South Wall of the Mosque of the Prophet in al-Madina.

In view of the religious and literary status of calligraphers in the early Islamic period, extravagant sums were sometimes paid for the handiwork of the expert calligrapher, and no expense was spared in the preparation of manuscripts, especially those of the Koran. Historians quote figures which emphasize the financial gains made for calligraphers. One calligrapher is said to have received 10,000 pieces of gold for 1,000 verses (7).

The most famous calligraphists in Islamic history were the vizier Ibn Muqla (A.H. 272–328 = A.D. 885–940) and his brother Abu 'Abd Allāh al-Hasan (268–330 or A.H. 338 = 942 or A.D. 950). Ibn Muqla, who began his career as governor of Fars, is credited with the invention of geometric control to regulate writing by using a circle in which the letters were inscribed, rather than the rectangle form of later authorities. He also invented the *Badī'* script. It is recorded that he entirely abolished *Kufic* in favor of *Naskhi*. Since round scripts were used for profane writing in the preceding period, his reformation must have been in Koranic writing.

After Ibn Muqlā, 'Ali ibn Hilāl (d. A.H. 413), known as Ibn al-Bawwāb, became conspicuous. He gave a definite form to the rules of *Badī'* script in a final arrangement of its perfections. It is plain from Hadjdji Khalifa's list that *Badī'* ranked as a major style; it is placed by him between *Kufic* and *Naskhi*.

Another calligrapher who achieved great fame during the Abbasid period was Yāqūt al-Musta'şimī, the court calligrapher of al-Musta'şim, the last Abbasid caliph. A script called *yaquti* derives its name from him. A specimen of his work is reproduced in Moritz's work, Plate 90.

Only in the late Moslem period did the art of making a book in the Moslem world become the work of a number of specialists. Besides the painter (*muşawwir*) there were the leaf-cutter (*qāṭi'*), the gilder (*mudhdhahib*), the draftsman (*tarrāḥ*), the binder (*mujallid*), the preparer of old manuscripts and the master who put together the artistic albums called *murqqa'āt*. In the period from the seventh to the eighteenth centuries, the art of cutting paper which had been used in the service of the book-binder and draftsman was extended to cover the entire field of decoration, which included the calligrapher and painter.

In analyzing the artistic qualities of the different forms of Islamic writing, one could go into great detail. In addition to individual characteristics of the calligraphy itself, one could also consider the various influences which were exercised by the local culture of the particular countries in which the form of writing was invented, adopted, or developed. For example, a form of writing which was invented in one of the Islamic countries would assume a different form in another country, and the calligrapher of that particular school would have a style of his own. This style, although akin to the original style of the inventor, would display certain peculiarities and traits which had already been penetrated by the Greek. Thus when the Arabs conquered Persia they fell heir to the native Persian literature and science on the one hand and Persian-Greek philosophy on the other. The same pattern followed the Arab dominion over the vast territories of the Byzantine Empire and India.

Many of the Arab caliphs were patrons of learning and delighted in collecting ancient and contemporary literature of their time. Transcribing and translating books were encouraged by Caliphs. The Caliph al-Ma'mun (A.D. 813-833) gathered around him a great number of Syrian translators and scribes, who translated into Arabic and Greek Syrian and Persian works which the Arabs had found.

Islamic proscriptions of iconoclastic representations contributed to the development of calligraphy into an art form in Arabia and throughout the Moslem Empire. Forbidden to make images of any living being by their iconoclastic prophet who was bent on destroying the worship of idols, Moslems could not cultivate the arts of painting and sculpture which other religions have so greatly stimulated. But the temptations of art were so great that the Moslems had to have some means of expressing beauty and they found it in the written word.

Beauty and perfectionism became part of a new and developing art that attracted artistic talents which had no other outlet for self expression (8). Art, therefore, found refuge in Islamic calligraphy.

Arabic writing, which lent itself so easily to such purposes, became a valuable medium for ornamentation. The beauty of the curves of the Arabesque and *Kufic* inscriptions not only decorated the mosques and the palaces but also embellished

illuminated pages. Valuable specimens of rare manuscripts are still preserved in museums and collections throughout the world.

The Moslem art of decorating books, which later became so highly developed, grew out of modest beginnings like the ancient and early medieval Christian art. In literary texts of the second and third century A.H. = eighth and ninth centuries A.D. the end of a section of any size was occasionally marked by a row of ornamental dots.

At the end of the whole book such ornaments used within the text to divide the larger sections were employed more elaborately. Occasionally a bird ornament was placed at the end of the whole text similar to that of the coronis of Greek manuscripts.

Combinations of geometrical figures, sometimes in combination with leaves or knots, later replaced the simple ornaments to mark the larger paragraphs. As in Christian manuscripts, these figures took up considerable space and effectively enlivened the monotonous appearance of the text.

Writing in gold and silver, in keeping with the illuminated sura titles of the Koran codices, was also used to emphasize the titles and chapter headings in profane manuscripts; frameworks also were used for emphasis. An example of this is found in the Rainer collection in Vienna (see Figure 3).

Among the colors used, red was the most frequent, usually in a pale red shade, a brilliant vermilion, crimson, or ruby. In addition yellow, found as dingy yellow, chrome yellow, and bright ochre, and green in the shades of dark dull green, yellowish-green, and dark green were popular colors. That these are the colors most used seems to show a certain dependence on the traditions of coptic art. In coptic manuscripts yellow and red were the predominant colors, usually associated with some green. In the decorations of the early Moslem Korans the combination red-yellow-green continually occurred, and even today there is still an undeniable preference for these colors. Next to those colors a dingy white and bright crimson were used to represent fresh outlines. Borders were usually painted in a deep black. Grohmann concludes from his comparison that we have the same colors used in the Arab period as were contained on the palettes of Egyptian painters and Greek masters of the Hellenistic period (9).

He uses the example of the *Egyptian Book of the Dead* (preserved at the Rainer Collection in the National Library of Vienna) which shows Osiris in the judgment scene with the pattern of his garment indicated by bright red dots, the golden neck ornament and the crown inlaid in gold, and the outlines drawn in black. Grohmann concludes his comparison by pointing out that "here we have already the same technique which was later in use among the Manicheans and with which Moslem illustrators also show themselves familiar . . ." (10).

Text illustrations are generally either simply drawn in outline or colored, as can be noticed from ancient and Egyptian papyrus texts. Some of these manuscripts recall the techniques used in Hellenistic models.

Ornamentation of the Koran had a unique place in the development of book decorations, separate from ornamentation in profane manuscripts. Ornamentation



FIGURE 3. Ornamentation of the Sura titles from a seventh century A.H. Koran written by Yaqui al-Musta'simī. (Reproduced from Najī Zain al-Dīn, *Musawwar al-Khatt al-'Arabī*, Iraq Academy, Baghdad, 1968, Fig. 197.)

of the Koran was to a great extent influenced by models used among "the people of the book," as the Christians and Jews were called. This was natural in view of the frequent intercourse between the members of the three world religions. Thus the large format of copies of the Koran kept for reading in mosques recalls the folio missals of the Christian Church.

Islamic calligraphy is also credited with the influence it made on the work of the Moslem painter and his draftsmanship, which has been described sometimes as "calligraphicant" because it suggests the flowing rhythmic lines of the beautiful Arabic characters. The art of the gilder attained dignity equal to that bestowed on the other arts which contributed to the making of manuscripts of the Koran. It was quite distinct from that of the painter. However, there were times when both arts might be

practiced by the same artist, and many of the painters who appended their signatures to their paintings described themselves as gilders (*mudhahhib*), obviously with the desire of claiming respectability for themselves.

The invention of printing reacted upon the art of calligraphy in Islamic countries in much the same way as in Europe. In the East, however, it took somewhat longer for the printing press to supplant the copyist and therefore the art continued to develop. The leading masters of the sixteenth, seventeenth, eighteenth, and even the early nineteenth centuries kept their own writing schools and received the support of their royal patrons. By the latter half of the nineteenth century the printing press became increasingly active and the services of the calligrapher were less and less acquired. However, the various phases of the progress of Islamic calligraphy and the system upon which they were founded have proved to be the pillar of Islamic art.

The calligrapher, like any other artist, had to work with certain tools, the quality and the efficiency of which were largely responsible for the perfection of his work.

Most of the writing materials known to the ancient and medieval world were also known to the Moslem world. Among those chiefly used by the Arab-Moslem may be mentioned: stones, wood, metals, bones, ostraca, linen, silk, leather, parchment, papyrus, and paper. Grohmann has dealt in detail with these materials among the Arabs (11), citing numerous Arabic sources which prove that Arabic literature abounds with references to the papyrus plant, its different parts, and its rich and varied usage (12).

Though known to the Arabs of the *Jāhiliyah* ("pre-Islamic period"), papyrus did not become the main carrier of Arab thought and history until the rise of Islam. It served the important function of preserving records of world civilization and history of Islam until it was replaced by paper in the ninth and tenth centuries.

With the conquest of Egypt, papyrus became available and was eventually adopted by the caliphs for official use. The advantages of using papyrus there were its ready availability and convenient form and the fact that it betrayed any tampering with the text once written, since an attempt to remove or change the writing resulted only in destroying, or at least marring, the writing material (13).

The Egyptian *diwān* took over from the Byzantine the use of papyrus; and the Syrians used it freely if not exclusively (14). The Colt Expedition of the British School of Archeology in Jerusalem has found at 'Auliā al-Ḥāfir a large number of papyri, among them five Arabic-Greek tax documents from the province of Gaza in Southern Palestine dated A.H. 54 and 55 = A.D. 673-674 and 674-675 (15).

Papyrus continued to hold the first place in the 'Abbasid *diwān*'s of Iraq until its first serious rival, paper, appeared sometime after A.D. 751. The first paper factory was established at Baghdad between the years A.D. 793 and 795 (16). But the appearance of paper did not at once put a stop to the use of papyrus, for in Iraq the two were used side by side up to the end of the tenth century. The papyri, however, grew by that time fewer in number and coarser in quality (17). In Egypt, papyrus naturally held its own, and in an Arabic source, a writer of the nineteenth century could state that the papyrus of Egypt was at that time for the West what the paper of Samarqand was for the East.

Chinese paper became known to the Moslems about the middle of the seventh century, but they mastered the art of papermaking a few centuries later. They were the first to use linen rags for the fabrication of paper. The paper industry developed in Samarkand and from there spread all over the Islamic states.

Numerous factories were founded in Baghdad, Tabriz, and other important centers of Islamic civilization. Several brands of paper were developed. Among those which were still in use at the end of the tenth century were the *Fir'awnī*, or *Pharao*, a quality paper designed to compete with the Egyptian papyrus; the *Ja'farī*, named in honor of Ja'far Barmakī, the Iranian vizier of Caliph Harun al-Rashid; the *Tāhirī*, named after the second ruler of the Tāhirī Dynasty; the *Nūhi*, named after Nuḥ b. Nasr of the Samanīd Dynasty (18). The *Ṣultān* and the Samarkand *Silk* paper were also in use. The last brand, despite its name, was not made of silk, but like the others was from linen rags and received its name from the soft silky touch which it obtained from a light sizing of soap and the use of a glassy polishing stone. It was generally gold-sprinkled before used. Such was the variety of native paper which the calligrapher had at his disposal and from which he could make his choice (18).

Another feature of paper was its color. Paper was made in a variety of colors, and each had its particular significance. In Egypt and Syria, blue paper was almost invariably used by those in mourning; orders of execution, also, were signed on a paper of this color. Red paper was considered a sign of happiness and good fortune. Since the bright color of red or rose was especially esteemed, it was a rare and distinct privilege accorded to some high government officials to use this color of paper while corresponding with their Caliphs or Sultans. It was also used among lovers as an emblem of fire to symbolize the intensity of their devotion. Light violet color, the color of royalty, was used only in correspondence by rulers. Yellow paper, obtained by the use of a solution of saffron, was chiefly used by the clergy and nobility (18).

The *qalam* ("pen") was the calligrapher's indispensable tool. The reed pen was used by Arab scribes in much the same manner as today. The *qalam* which was made of reed had to be very hard and was durable so as not to wear out easily. The swamps of Lower Egypt and sections of Iraq and Persia produced a variety of reeds suitable for this purpose. The best reed pen was that called *al-waṣīt* which grew in the marshes along the coast of the Persian Gulf (18).

Though the Arabs were familiar with the use of the reed pen and their early writers associated it with Egypt, the date of their adoption of the split reed pen is not clear. They became acquainted with it at the time of the conquest of Egypt, and there is every chance that they knew it and used it even before the rise of Islam, since it had been introduced in Egypt in the fourth century and was used in the Christian monasteries of Egypt (19).

Reeds of different lengths and thickness were used for different styles of writing, though it was not so much the thickness of the reed as the width, slant, and form of the pen that were of prime importance.

The art of penmanship, as Arab authors tell us, is in the pen, and the art of cutting the point is the secret of the pen. Pen sharpening is described in Islamic classics as

an art and instructions in it from acknowledged masters were eagerly sought, prized, and guarded by those who mastered the art (18).

The next important item on the Moslem calligraphers list was ink. There were two kinds of ink in use. The one called *dudi* was made from soot dissolved in honey, gum, and other ingredients. The other kind, called *hibr*, was prepared from the shells of nuts and resembled European ink. The first type, the *dudi*, was not indelible; it could easily be removed by the touch of the tongue, which was used in lieu of an eraser. The second type was the kind mostly used by well-known calligraphers; it had a brighter luster, was waterproof and would not fade with age (18).

Grohmann mentions a variety of colors found in Arabic documents, deep black and reddish brown being the ones most frequently used in earlier times, whereas with the introduction of diacritical points and vowel signs and illustrations, red, green, and blue also were employed, both usefully and aesthetically (20).

Qalqashandi gives an account of the ingredients and the manufacture of inks, both in powder and in solution, and indicates that there were several different processes and that some of these were kept secret (21). The main ingredients for the dark inks was lampblack. Other kinds of lampblack were also used, including the use of ashes of slowly burnt papyrus (22). The ink on written documents was either allowed to dry by evaporation or else sprinkled with red sand which acted as a blotter (23).

Although brown and black inks were very much in use, some copies of the manuscripts of the Koran were written in gold ink at quite an early date. Writing in gold and silver, in keeping with the illuminated Sura titles of the Koran codices, was used quite early to emphasize the titles and chapter headings in profane manuscripts; frameworks also were used for emphasis (24). An example of this method is found in the Rainer Collection and is reproduced by Grohmann. (25).

The Library of the Fatimids in Cairo was reported to have possessed several copies of the Koran written in letters of gold. A fragment of fifty-two leaves written in the *thuluth* hand in gold is still preserved in the Egyptian National Library in Cairo (26).

Another indispensable tool was the *miqata*, a little piece of flat bone or ivory, oblong in shape, on which the point of the qalam was laid and resharpened whenever necessary.

The *hoqqa*, ("inkwell") formed another important possession of the calligrapher. There were several types in use. The one made of faience or porcelain consisted of a rack in which ink cups made of the same material were inserted. It had a flat palin surface on its side for *qalams*. There were three types of portable *hoqqas* which were carried in a holster or stuck into the belt (18). Those made of leather were of Arab origin; those of metal and ornamented with inscriptions were of Turkish make; and lastly the *qalamdan* with inscriptions and other design was of Iranian origin.

Binding, as the Arab philologist al-Jāhiz reports in one of his works, is an Abyssinian invention which was introduced to the Arabs along with the codex (*mushaf*), the form in which the contents of a book are most easily and most beautifully kept.

According to other authorities, the loose leaves on which the parts of the Koran were written had already been placed between two wooden boards (*lawḥānī* or *daffatānī*) in the lifetime of the prophet Muhammad. These parts were later copied in book form by Zayd ibn Thabit in the time of the Caliph Abu Bakr. Grohmann concludes "in any case we can safely assume that by the beginning of the seventh century A.D. the codex form was known in the Moslem community, even if it only consisted of two rough boards between which the separate leaves or folded sheets were placed" (27).

The various stages of development of this kind of binding are reported by Grohmann: First, the quite primitive method of tying the body of the book without the use of a leather back to the blank wooden covers by strings of gut, then the more advanced method with the back pasted on to a strip of leather which is fastened to the two boards, and lastly the wooden boards artistically covered with an ornamental leather cover and inside covered with silk or cloth (28). A similar use of wooden covers in the Moslem world was, until quite recently, known only from the unique example in the Egyptian National Library in Cairo, which has among its treasures a manuscript of the Koran in format 34 x 23 cm., written by the Imām Ja'far ibn Muhammad al-Sadīq (d. A.D. 765) now numbered *Maṣāḥif* no. 1, containing the first half of the sacred book of Islam on 209 leaves of gazelle parchment. Moritz, who published specimens from this manuscript on pages 31–34 of his *Arabic Paleography*, places its origin in the second or third century A.H. = eighth or ninth century A.D.

Like most Moslem art, the art of book covers passed through three distinct changes which can hardly be said to have originated one from the other, but which developed from outside influences acting upon a common artistic principle or core. At certain nodes, these stages or types were connected and related, but at the apices or points of highest developments they were centuries apart in time as well as miles apart in principle. There was first the naturalistic tendency and execution of Arabic covers that were decorated with the facade of a palace or mosque covered with mosaic tiles, adorned with pillars, and with the opening between the arches and arcades shielded by drooping or folded curtains, as on the famous mosaic representing the palace of Theodoric in Ravenna. This naturalistic style was fashionable and beloved by the Arabs of the sixth and seventh centuries A.D., before their art had developed features of its own. The second style of Moslem art of book covers is known as the geometric. It had already been foreshadowed while the naturalistic style was in vogue.

The earliest and simplest design which appeared in book covers as well as in tiling consisted of superimposed squares turned around their axis so that their points separated and formed a star. Connected with similar stars, of the same or different sizes, they constituted the units of a pattern. This pattern was later developed by the use of rectangles and triangles instead of squares, resulting in artistic combinations (29).

The simple leather bindings which Grohmann discusses (30) are in rather striking contrast to the internal adornments of the contemporary manuscripts with their

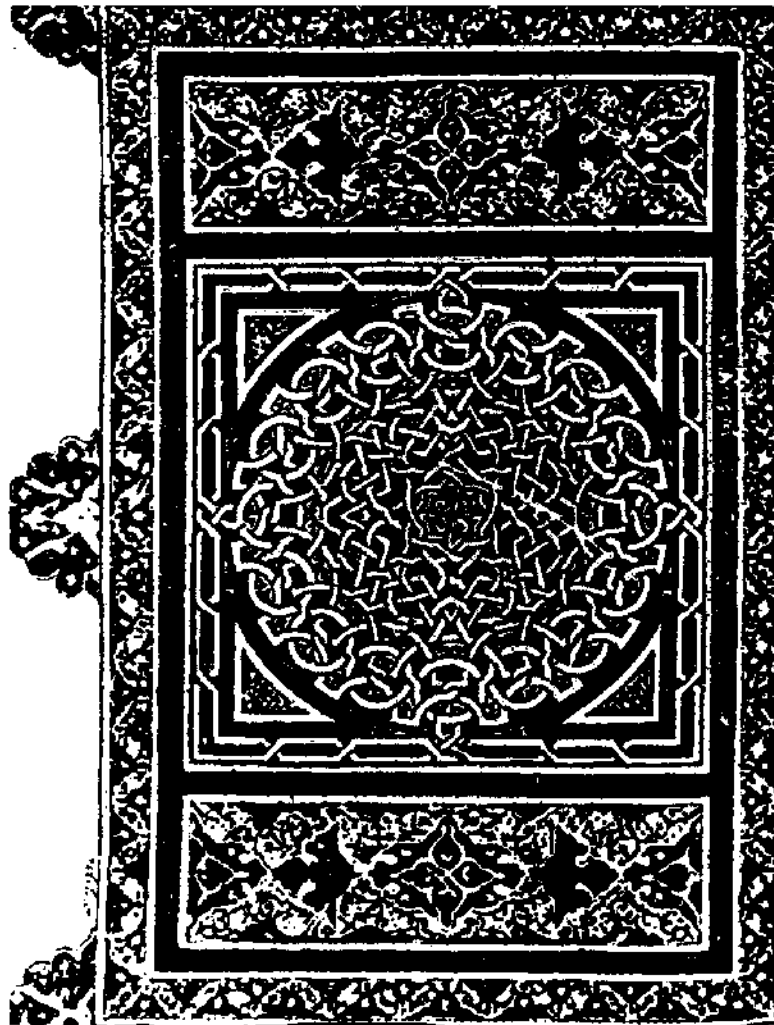


FIGURE 4. *Ornamental designs on the cover of a copy of the Koran. (Reproduced from Najî Zain al-Din, Musawwar al-Khatt al-'Arabi, Iraq Academy, Baghdad, 1968, Fig. 631.)*

golden punctuation marks separating the verses, *sajda* rosettes, and the splendid colors of the *Sûra* divisions and decorated leaves.

Other splendid decorations of the leather cover were in many cases accompanied by a no less rich ornamentation of the inside cover, probably in order to conceal the ugly overlap of the leather cover and to give the inside of the cover a more pleasing appearance. Prior to these decorative styles a leaf of papyrus or parchment was probably used (31).

A peculiarity common to all Islamic bindings is the triangular shaped flap hinged to the back cover of books in the West, which serves to protect the book (32) (see Figure 4).

The Moslem bookbinders and artisans made practical contributions to their craft through the invention of the triangular-shaped flap hinged to the side of the cover,

which folded over the edges of the leaves of the book or manuscript when closed. This flap was a forerunner of the clasp, a latter invention made of metal, whereby the two covers were firmly held together, sometimes with the addition of a lock.

Another practical as well as artistic invention was the beveled edge, which was produced by paring the edge of the cover so that it sloped and thinned outward, thereby preventing wear and tear when the book was slid over the table or desk top. The thinning of the edge contributed also to the beauty and elegance of the book, as is quite apparent when a twelfth century masterpiece is laid side by side with certain specimens of professional modern bookbinding, in which force is substituted for charm (29). Sarre, in his work on Moslem book covers, introduces various specimens of this charming style.

When papyrus and parchment were replaced as writing materials by paper, the latter was naturally also used in place of sheets of parchment and papyrus to cover the inside of the board and was painted with artistic decorations, just as the parchment end leaves had been.

Of the methods used to adorn the leather cover, tooled work, stamping, incised work, and leather-cutting can also be found on early Moslem volumes, but not so the leather appliqué work. This technique may have found its way from Egypt to Turkistan, and thence to Persia, where it reached its greatest perfection in the splendid bindings and filigree leather work of the Harāt school. Coptic binding was retained not only on early Moslem bindings but long remained usual on South Arabian bindings. The influence of Coptic binding was then transmitted to Persia through the medium of Arabic books, which thenceforth dominated Persian bookbinding in all its artistic aspects (33).

Much of the finest bookbinding of the pure period of the Mameluks was probably imported to Egypt from Damascus, until then the greatest seat of mosaic art. After the destruction of that city and a great part of Syria by the Mongols and Tartars, Egypt had to fall back on its own artistic resources, with the result that in and after the fifteenth century, bookbinding overflowed in richness and beauty until the art finally became surfeited and thus decayed (34).

The art of Arabic-Islamic bookbinding went far beyond the boundaries of Persia and Turkey. The discoveries in 1908 of the Asiatic Expedition of the Russian Geographical Society have shown that the influence of Arabic bookbinding went far beyond the boundaries of Moslem Persia. In Southern Mongolia. P. K. Koslov found a partially preserved Islamic book cover which dates back to the thirteenth century among fragments of Persian manuscripts in the ruins of Khara Khoto, a town of considerable importance during the early Middle Ages (35). These and other similar discoveries have encouraged historians of the Islamic book and art to believe that a high degree of perfection in Islamic Persian art, attained under strong Eastern-Asiatic influence, was bound up with the Mongolian domination of the thirteenth to fifteenth centuries, and this naturally found its expression in the book art as elsewhere (32).

During the fourteenth century, while the art of bookbinding in the western Islamic countries, particularly Egypt, was reaching its highest level of development, the Arabic influence in Persia became still stronger.

The collective orthodox Koranic output must have exceeded that of any other one book, and the Koranic manuscripts were to be found not only in outstanding libraries, public and private, but in the numerous and prosperous lesser mosques of every large Moslem city, and in the possession of many learned and pious citizens.

The bulk of Koranic output, almost always of good script and workmanship, circulated freely in the private book-markets and in the shops of the *warrāqīn* ("stationers," "booksellers," or "copyists"). Such a *warrāq* ("bookseller") was Mālik ibn Dinār (d. A.H. 130 A.D. 745), who copied out Korans for a fee, though the practice of buying and selling Korans was much earlier dating, according to some, at least as far back as the time of Mu'awiyah (36).

The progressive increase in the size and number of early Islamic libraries was paralleled by a progressive increase in private and public book sales. Earliest book purchases were made in non-Moslem communities, which were not restricted in their book trade among themselves or among the Arabs (Surah 3:77). By contrast, the sale of sacred literature (*ba' al-'ilm*), including even the Koran, was at first a point of religious controversy. But by the end of the first century the practice had already been rationalized and was becoming increasingly widespread. Increasing demand for books, both religious and secular, was generated by the vigorous and aggressive ruling Moslem community, rapidly accelerating its rate of literacy, zealously spreading its new faith, and coveting increasing recognition for its mother tongue in church, state, and scholarship. The demand was met both by the increased output of original manuscripts and by an effective means for their multiple production and distribution. The ordinary stationer was being rapidly transformed from simplest trader in writing materials to copyist—at first of the Koran, then of *Hadīth* and other manuscripts—and finally to book seller and publisher, who presently found it more practical and economical at times to manufacture his own paper stock. This rapidly increasing demand for books established early and firmly the flourishing industry and the profession of *wirāqah* ("the art of book selling and copying") and *warrāq* respectively.

The *warrāq* and his fellow professionals established themselves in the chief cities in a business street named after the profession, as *sūq al-warrāqīn* ("booksellers street"), or after their chief product, as *sūq al-kutub* ("bookmarket street"). Reference to such a street is found as early as the time of the famous Muḥallab ibn Abi Ṣufrah (d. A.H. 82 or 83 A.D. 701 or 702), who took a practical interest in *Hadīth* and who counseled his sons to "frequent the arms and book markets" (37).

Thus, while pious scholarship struggled to hold on to the idea of the absolute primacy of oral transmission, from the second half of the first century of Islam onward, pamphlets and books grew and multiplied in all intellectual fields, though more in some than in others. Authors, copyists, compilers, and publishers earned an honorable living while their end-product "books" filled treasured private trunks, graced library shelves, and stocked book-sellers' shops. It was to such shops that Ibn Ishāq resorted, while he was still in Medina in the last decade of the Umayyads, for available written sources for his ambitious universal history (37).

Al-Ya'qūbi asserts that in his time (891) the 'Abbasīd capital boasted over a hundred book-dealers congregated in one street. Many of these shops, like their

modern successors in Cairo and Damascus, were but small booths by the mosques, but some were undoubtedly large enough to act as centers for connoisseurs and bibliophiles (38).

Information expressed in early Islamic books which reached us shows that the Islamic community reached out for all sorts of historical information; *khavar* (plural *akhbār*) ("historiography") to explain and supplement the historical allusions of the Koran, and *Ḥadīth* ("sayings of the prophet"). With the Koran as a historical document for a starter, in much the same way as the sacred scriptures of Jews, Christians and Magians were considered historical, the earliest Arab historians were interested as much in religious historical legends as in such contemporary and factual history as they could gather on *Ḥadīth* and *akhbār* together with the results of their own experiences and observation. In a general sense, both *Ḥadīth* and *akhbār* mean a "report" or "information" irrespective of its nature or its source.

Religious and legalistic interest called for biographies of Islam's earliest traditionists, jurists, and theologians, while secular historical interests centered on biographies of caliphs, governors, and generals. *Sīrah* (plural *Siyar*) ("biographies") became prominent in the titles of the very earliest prose works of Islam—works that antedate the original *sīrah* ("the prophet's biography") of Ibn Ishāq and which are at present lost to history and scholarship.

As the paths of the historian and the traditionalist converged toward the close of the first century, the more serious historian, already committed to writing down most of his materials, adopted the *isnād*, which had in the meantime gained more weight and currency in *Ḥadīth* proper. Books of traditionalists, on the other hand, concerned themselves with the "chain down" of words, facts, and dates. The oral transmission continued but it was to go hand in hand with the written record. This evolution is fully illustrated in what has survived of the historical works of Ibn Ishāq and al-Wāqidi, both of whom were formal and methodical historians displaying a measure of tacit criticism in the very selectivity and/or brevity of their work. Books on poetry were equally favored by Moslem rulers. Like Mu'āwiyah, the caliph 'Abd al-Malik paralleled his interest in history with that in poetry.

Analysis of the contents of early Islamic books, especially during the Umayyid period, reveals how history is linked to poetry as seen in *Akhbār 'Ubaid* and to tradition as seen in the activities of 'Urwah and Zuhri, culminating in the historical works of Ibn Ishāq, in which *khavar*, *shī'r*, *Ḥadīth*, and *ansāb* go hand in hand.

The study of the Koran and the necessity of expounding it also gave rise to the twin sciences of philology and lexicography as well as to that most characteristically Moslem literary activity, the science of tradition (*Ḥadīth*).

The cultural foundations during which the Islamic book flourished in the Umayyad period set the pattern for the Khalid and Mansur's patronages of scholarly leaders in each field during the 'Abbasid period. Ibn Sa'id, the Spanish Moslem historian of comparative cultures, writing in the eleventh century, recognizes the rapid progress made in the linguistics, religious, and medical sciences and in law, philosophy, and astronomy.

While the early Islamic period up to 850 was a period of active translation into

Arabic from foreign literature, it was followed by one of creative activity; for the Arabs not only assimilated the ancient lore of Persia and the classical heritage of Greece, but adapted both to their own peculiar needs and ways of thinking.

New sciences such as medicine, alchemy, astronomy, and pharmacy were also developed by the Arabs and many books and treatises were written in these and other branches of knowledge.

Moslem libraries grew out of the interests and needs of cultivated individuals, literary societies, and institutions of learning. From the very early history of Islam, rulers and caliphs took serious interest in educating the followers of this religion and in disseminating information, mainly religious and historical, to the followers of the Moslem faith.

The Arab-Moslems who emerged from the Arabian Peninsula had no libraries and no library or book tradition, but as they conquered the centers of old civilization their interest in books and libraries developed. They not only adopted Persian literature and Greek science but also developed their own book industry by the seventh century and libraries by the ninth century.

The great rise of literacy and scientific activity in the Islamic world set in toward the end of the eighth century. It was promoted by the manufacture of paper, introduced at that time from the Far East, which provided a cheap material for the production of books. The libraries of the Eastern Roman Empire seem to have been used as models in building. The Abbasid caliph Harūn al-Rashīd founded a library in Baghdad and received manuscripts from Byzantium and elsewhere as tribute. His son Ma'mūn (d. 833) was an even more ardent collector. He is credited with having instigated the scholarly enterprise of translating masterpieces of Greek and Oriental literature into Arabic.

In addition to Moslem libraries in Baghdad, there were libraries at Kufa and Basra; in fact, before long, all the larger mosques as well as the universities established throughout the Islamic Caliphate, acquired their own book collections. Similar reports also mentioned the existence of libraries in Persia, in Shiraz, and Merv.

Not only did cultured or scholarly individuals assemble private collections, but special libraries were founded for the cultivation of various departments of literature and the sciences: collections of medical books in hospitals; works on mathematics, astronomy, and astrology in observatories; religious and legal writings in mosques and colleges; rich and more diversified collections in several of the great academies.

Apart from the public classrooms, religious circles, and royal courts of the later Umayyads, the private houses of men of affairs and men of letters served as social and literary clubhouses. 'Abd al-Ḥakam ibn 'Amr, grandson of a companion whom Muhammad had seen fit to appease, kept open house at Mecca, where he provided his guests not only with chess and other games but also with a library stocked with books (39).

The earliest record of anything like a public library is connected with the name of Khālid ibn Yazīd ibn Mu'āwiya, who devoted his life to the study of Greek sciences, particularly alchemy and medicine. We are told that he caused such books

to be translated, and when an epidemic occurred at the beginning of the reign of 'Umar al-'Azīz, he commanded the books to be taken out of the library (*khizānah*) to be made available for the people (40).

The first public library on a large scale was the *dār al-ḥikma* ("house of wisdom") inaugurated by the Abbasid Caliph al-Ma'mun in Baghdad. To make his library as comprehensive as possible he had valuable Greek manuscripts purchased in the Byzantine Empire and translated by a number of competent scholars into Arabic. This library contained books in all sciences cultivated by the Arabs. It flourished until the city was sacked by the Mongols in A.H. 656 (40).

In the fourth century A.H. = tenth century A.D. there were already buildings devoted solely to libraries and erected especially for this purpose. For example Ṣābur ibn Ardashīr, the vizier of Baha' al-Dawlah, built in 381 (991) in Baghdad in the Karkh quarter a *dār al-kutub* which contained over 10,000 volumes. The geographer al-Muqaddasi found in Shiraz a huge library which had been built by the Buyid 'Adud al-Dawlah (A.H. 338-372 = A.D. 949-982). This library was a separate building and consisted of a great hall and a series of rooms (*khazā'in*).

Another academy which bore the name of the house of wisdom was founded by the vizier Ṣābur ibn Ardashīr in A.H. 381 or 383 = A.D. 993-994. Its activities seem to have been literary and philosophical rather than scientific. An unusually fine library was a part of the original institution and contained rare and beautiful books which later were plundered.

Centers of learning existed in mosques, and many a scholar bequeathed his library to the mosque of his city, both to insure its preservation and to render the books accessible to the learned. This is how the great universities such as those of Cordova and Toledo acquired their libraries. Baghdad was reported to have thirty-six libraries. The last library was that of the last vizier, Ibn al-'Alqamī. It perished during the sack of the city by the Mongols. Cairo possessed at least four great private libraries apart from al-Ḥākim's house of wisdom. Information on Cairo's private libraries is derived from the comprehensive history of Greek and Arabic physicians written by Ibn Abi Usaibi'ā.

Another great library was that of the Umayyad caliphs of Cordoba, which was also dispersed after the Almoravid conquest of Spain early in the fifth century of the Hidjra.

Among the minor libraries was one founded by the Ghaznawi Sultan Mas'id, most of whose treasures were later transferred to Bukhāra. We are frequently told of valuable private libraries which were placed at the disposal of learned men. In the biographies of al-Ṣulī, for example, we read of his large collection of books which were bound in tasteful leather bindings in red and yellow leather.

A great impulse was given to the foundation of libraries by the vizier of the Saldjug Sultan Malikshāh Nizām al-Mulk, when he founded in Nishapūr, Baghdad, and other places colleges or madrasas for public instruction. These colleges were not only endowed with funds for the salaries of the professors, but were also provided with the most precious manuscripts dealing with the science taught at these institutions.

We read of a learned jurist and poet of Mosul, Ja'far ibn Muhammad ibn Hamdan al-Mawṣilī (from Mosul, d. 323) who owned a *dār al-'ilm* ("abode of science") in which was a library containing works of a great variety. There he provided facilities for those who would study, including free paper for the poor. He lectured on law, literary history, and poetry to all who would listen. Hence it would appear that his academy, like Ṣabūr's was devoted to literary matters (41).

Two other men of culture and learning, probably in imitation of the caliphs Harūn al-Rashīd and al-Ma'mun, called their libraries their "treasures of wisdom" (*khazā'in al-hikma*). One was 'Ali ibn Yahya ibn al-Munajjim, whose father was an astronomer in the court of al-Ma'mun, who converted him to Islam. The son, a singer of merit and a translator and a patron of translators, had at his country seat an unusual library to which he admitted other scholars. One of them, Abu Ma'shar, a much-quoted astronomer of Khurasan, on his pilgrimage to Mecca stopped to use the library of ibn al-Munajjim and became so engrossed in the treasures there that he cared not whether he ever completed the pilgrimage (42).

Books in Moslem libraries were systematically arranged and classified according to the various branches of knowledge. Copies of the Koran usually had a special place. In the Fatimid library in Cairo for example, they were kept on a higher level than the other books. Various titles were often present in several copies which made it possible to read corrupt passages in one manuscript by referring to another copy. The Fatimid library, for example, had thirty copies of the *Kitab al'Ain* of Khalil, twenty copies of *Tarikh al-Ṭabarī* and, if the figures quoted are not wrong, 100 copies of the *Djamhara* of Ibn Duraid (43).

The catalogs of Moslem libraries consisted either of several volumes in which the titles of books were arranged (probably according to the various branches of knowledge) or, as in the Fatimid library, a list of the books within was fastened to the door of each room (43).

Sprenger in his "Report into Mohammedan Libraries of Lucknow, 1896" is of the opinion that *al-Fihrist* is a catalog of one of the libraries existing at that time. Hussain approves the idea that al-Nadīm arranged his *Fihrist* on the system of classification prevalent at that time in Moslem libraries (44). It is reasonable that al-Nadīm and no other bibliographer of an age would prepare a systematic list of books totally ignoring the prevailing presentation of knowledge in the libraries of his time. As a bibliographer he would certainly try to list the reading material on the system with which the majority of the literate public would be well versed.

It is believed, therefore, that al-Nadīm's *Fihrist* is a clear picture of the system of classification adopted in the libraries of those times. According to this belief, libraries of that period were divided into ten main classes which al-Nadīm has called *Maqālat* in his *Fihrist*. These main classes were subdivided according to the needs of a library. The ten main classes are listed by al-Nadīm as follows:

1. Koran
2. Grammar
3. History
4. Poetry

5. Dogmatics
6. Jurisprudence
7. Philosophy
8. Light Literature
9. Religion
10. Alchemy

The first six classes deal with literature of Islam and the last four with non-Islamic literature.

The catalogs in book form were probably classified as *al-Fihrist* was and the entry was made like the main entry under the name of the author, as is done today, with a short bibliographical note on the author at the end.

Islamic libraries usually had a director (*ṣāhib*), one or more librarians (*khāzin*), copyists (*nāsikh*), and attendants (*farrāsh*) according to the size of the institution. Library directors were recruited from the ranks of celebrated scholars. The historian Ibn Miskawihī was librarian to the vizier Abul Faḍl b. al-ʿAmīd in Ray (45). Al-Shabushtī (d. A.H. 390 = A.D. 1000), the author of the book on monasteries, was librarian of the Fatimid library in Cairo under the Caliph al-ʿAzīz.

Libraries were open to everyone free of charge. Paper, ink, and reed pens were supplied by the authorities. Some private libraries even provided for the maintenance of scholars who had come from a long distance. A deposit usually had to be made if books were taken outside the library buildings. Books were acquired partly by purchase and partly reproduced by the copyists attached to the libraries.

In the great period of Moorish culture, there seemed to have been about seventy public libraries on the Iberian Peninsula. Caliph al-Ḥakam 11 (d. 976) is famous for having founded the grandest institution. He united the libraries of his father and brother with his own and had them set up in his palace at Cordova. He gathered about him scholars, copyists, and miniaturists, and sent agents to the Orient in order to get as complete a collection of its literature as possible.

The chief place for the dissemination of Arabic science to Europe was Toledo, whose recovery by the Christians in 1085 is a landmark in the history of medieval science. To quote Victor Rose: "Toledo was the natural place of exchange for Christian and Mohammedan learning." The Arab-speaking peoples were the main bearers of the torch of culture and civilization throughout the world. The Islamic book was the medium through which ancient science and philosophy were recovered, supplemented, and transmitted in such a way as to make possible the renaissance of Western Europe.

REFERENCES

1. Nasser al-Naqshabandi, "Early Islamic Manuscripts of the Qurān," *Islamic Rev.*, 46(1), 18 (January 1958).
2. Muhammad A. Simsar, "Islamic Calligraphy," *Asia*, 36, 814 (1936).
3. Ref. 2, p. 817.
4. Ibn al-Nadīm, *Kitāb al-Fihrist: mit Anmerkungen hrsg. von Gustav Flügel*, Vol. 1, Vozel, Leipzig, 1871-1872, p. 119.

5. Clarence K. Streit. "Calligraphy of the Moslems." *Int. Studio*, **81**, 346 (1925).
6. B. Moritz. *Arabic Palaeography*. Hiersemann, Leipzig, 1905, p. 381.
7. Ghulam Muhammad Dihlawi. *Tadkhira-i-Khushnavisān*, Calcutta, 1910, p. 92.
8. Ref. 2, p. 813.
9. Adolf Grohmann, ed. *Corpus Papyrorum Rainerie Archiducis Austriae*, Vol. 1, Part 1. K. & K. Hof & Staatsdruckerei, Vienna, 1923, p. 19.
10. Sir Thomas Arnold and Adolf Grohmann. *The Islamic Book: A Contribution to its Art and History from the VII to XVIII Centuries*, Pegasus, Leipzig, 1929, p. 12.
11. Ref. 9, pp. 21-64.
12. Ref. 9, pp. 22-32.
13. Ahmad Ibn'Ali al-Qalqashandi, *Kitāb Ṣubḥ al-A'shā fi Ṣinā'at al-Inshā'*, Vol. 2. Dar al-Kutub, Cairo, 1913-1919, p. 476.
14. Ahmad ibn Yahya al-Balādhuri, *Futūḥ al-Bulḏān (Liber Expugnationis Regionum)* (M. J. de Goeje, ed.), Lugduni Batavorum, 1866, p. 465.
15. Palestine Exploration Fund. *Quarterly Statement*, 1936, pp. 216-220, *Amer. J. Archeology*, **41**, 149 (1937).
16. Ref. 9, p. 35.
17. Ref. 9, pp. 29-32.
18. Ref. 2, p. 815.
19. Alfred Lucas. *Ancient Egyptian Materials and Industries*, 2nd ed., rev., Arnold, London, 1934, p. 134.
20. Ref. 13, pp. 446-448.
21. Ref. 13, pp. 461-466.
22. Ref. 13, p. 465 ff.
23. Ref. 13, p. 468; Nabia Abbot. *The Rise of North Arabic Script*. Univ. Chicago Press, Chicago, 1939, p. 27.
24. Ref. 10, p. 18.
25. Ref. 9, Plate 4c.
26. Ref. 10, p. 21.
27. Ref. 10, Figure 5.
28. Ref. 10, p. 44.
29. Gustavus A. Eisten. "Arabic and Persian Bindings," *Int. Studio*, **80**, 220 (1924).
30. Ref. 9, p. 47.
31. Ref. 10, p. 43.
32. Frederick Sarre. *Islamic Bookbindings*. Scabraeus Verlag, Berlin, 1923, Plate 111, p. 11.
33. Mehmet Aga-Oglu. *Persian Bookbindings of the Fifteenth Century*, Univ. Michigan, Ann Arbor, 1935, p. 2.
34. Ref. 29, p. 227.
35. Ref. 32, p. 3.
36. N. Abbot. *The Rise of the North-Arabic Script and Its Kuranic Development, with a Full Description of the Kur'ān Manuscripts in the Oriental Institute*, Univ. Chicago Press, Chicago, 1939, p. 29.
37. Ref. 36, p. 24.
38. Philip K. Hitti. *History of the Arabs*, 10th ed., Macmillan, London, 1970, p. 414.
39. N. Abbot. *Studies in Arabic Literary Papyri I. Historical Texts*, Univ. Chicago Press, Chicago, 1957, p. 29.
40. F. Krenkow. "Kitabkhana," in *Encyclopedia of Islam*, Vol. 2, Part 2. Brill, Leiden, 1925-1928, p. 1045.
41. Ref. 40, p. 420.
42. Ref. 4, p. 143.
43. Ref. 40, p. 1046.

44. S. Vilayat Hussain, "Organization and Administration of Muslim Libraries (from 786 to 1492 A.D.)," *Pakistan Lib. Assoc. J.*, 1(1), 8-11 (July 1966).
45. Ibn Miskawaihi, *Tadjarub al-Umam* (Amedroz and Margoliouth, eds.), Oxford Univ. Press, London, 1921.

BIBLIOGRAPHY

- Abbot, Nabia, "Arabic Paleography, the Development of Early Islamic Scripts," *Ars Islamica*, 8, 65-104 (1941).
- Abbot, Nabia, "The Contribution of Ibn Muklah to the North-Arabic Script," *Amer. J. Semitic Languages and Literatures*, 56, 70-83 (1939).
- Abbot, Nabia, *The Rise of the North-Arabic Script and Its Kuranic Development, with a Full Description of the Kur'an Manuscripts in the Oriental Institute*, Univ. Chicago Press, Chicago, 1939.
- Abbot, Nabia, *Studies in Arabic Literary Papyri I. Historical Texts*, Univ. Chicago Press, Chicago, 1957.
- Baladhuri, Ahmad ibn Yahya al-, *Futūḥ al-Buldān* (Liber Expugnationis Regionum) (M. J. de Goeje, ed.), Lugduni Batavorum, E. J. Brill, 1866.
- Ballantyne, James R., *Principles of Persian Calligraphy. Illustrated by Lithographic Plates of the Ta'liq Character, the One Usually Employed in Writing the Persian and Hindustānī*, 2nd ed., Madden, London, 1845.
- Becker, Carl H., "Arabische Papyri des Aphroditofundes," *Zeitschrift für Assyriologie und Verwandte Gebiete*, 20, 68-104 (1907).
- Bhattacharyya, A. K., "A Study in Muslim Calligraphy in Relation to Indian Inscriptions," *Indo-Iranica*, 4(2-3), 13-23 (1951).
- Cairo, Dār al-Kutub, *Arabic Papyri in the Egyptian Library* (Adolf Grohmann, ed.), Cairo, 1934.
- Carter, Thomas F., *The Invention of Printing in China and Its Spread Westward*, Columbia Univ. Press, New York, 1925.
- Cheikho, L., "Arabic Palaeography, Publiée Par Dr. B. Moritz," *Al-Mashriq*, 9, 811-815 (1906) (in Arabic).
- Encyclopedia of Islām*, Brill, Leiden, 1913.
- Ettinghausen, Richard, "Manuscript Illumination," in A. U. Pope, *Survey of Persian Art*, 3, 1937-1974 (1939), Figs. 640-642 and Plates 926-950.
- Ettinghausen, Richard, *Arab Painting*, Skira, Cleveland, distributed by the World Publishing Co., 1962 (Part 2, "The Flowering of the Art of the Book").
- Fleischer, Heinrich Leberecht, "Zur Geschichte der Arabischen Schrift," *Zeitschrift der Deutschen Morgenlandischen Gesellschaft*, 18, 288-291 (1864).
- Grohmann, Adolf, *Allgemeine Einführung in die Arabischen Papyri, Nebst Grundzügen der Arabischen Diplomatik. Mit Fünf Abbildungen im Texte*, Burgverlag, Vienna, 1924.
- Grohmann, Adolf, *From the World of Arabic Papyri*, with a Foreword by Shafik Ghorbal, Royal Society of Historical Studies, Cairo, 1952.
- Grohmann, Adolf, "The Origin and Early Development of Floriated Kufic," *Bull. de l'Inst. d'Egypte*, 37, 273-304 (1956).
- Grohmann, Adolf, "Bibliotheken und Bibliophilen im Islamischen Orient," in *Austrian National Bibliothek. Festschrift . . .*, Vienna, 1962.

- Ibn Durustuyah. 'Abd Allah Ibn Ja'far. in *Kitāb al-Kuttāb* (L. Cheikho, ed.), Beirut, 1921.
- Ibn Khaldūn. 'Abu Zaid Abd al-Rahmān. *Al-Muqaddimah*, al-Matba'ah al-Amiriyah. Bulaq, 1857.
- Jahshiyāri, Muhammad Ibn 'Adbūs al-. *Kitāb al-Wuzarā wa al-Kuttāb*, (Hans V. Mzik, ed.), (*Bibliothek Arabischen Historiker und Geographen*, I), Leipzig, 1926.
- Mackensen, Ruth Stellhorn. "Background of the History of Moslem Libraries." *Amer. J. Semitic Languages*, 51, 114-225 (October 1934-July 1935).
- McLennan, Jeanne. "Turkish Calligraphy." *Lands East* (Washington), 2(4), 9-11 (1957).
- Moritz, Bernard, ed., *Arabic Palaeography*, Hiersemann, Leipzig, 1905.
- Naqshabandi, Nāṣir al-Mansha' al-Khatt al-'Arabi wa Tatawuruh li-Ghāyat 'Ahd al-Khulafā al-Rashidīn ("The Origin of Arabic Writing and Its Development to the Time of the Orthodox Khalifs"), *Sumer*, 3(1), 129-142 (1947).
- Rehatssek, E., "On the Arabic Alphabet and Early Writings (With a Table of Alphabets)." *J. Roy. Asiatic Soc., Bombay Branch*, 14, 173-198 (1879).
- Rosenthal, Franz. "Abū Haiyān al-Tawhīdī on Penmanship." *Ars Islamica* 13-14, 1-30 (1948).
- Vajda, George S., *Album de Paléographie Arabe*, Adrien-Maisonneuve, Paris, 1958.
- Zain al-Din, Naji, *Atlas of Arabic Calligraphy / Musawwar al-Khatt al-'Arabī*, The Iraq Academy, Baghdad, 1968 (Text in Arabic).
- Ziauddin, Mehmet, *A Monograph on Moslem Calligraphy with 163 Illustrations of Its Various Styles and Ornamental Designs*, Visva-Bharati Book Shop, Calcutta, 1936.

MOHAMMED M. AMAN

ISRAEL, LIBRARIES AND INFORMATION SERVICES IN

Area and Population

At the beginning of 1971, the population of Israel (excluding the administered areas) was 3,001,400. This figure was broken down to include 2,561,400 Jews, 328,600 Moslems, 75,000 Christians, and 39,900 Druzes and others.

The Jewish population has quadrupled since the renewal of independence in 1948, when there were only 650,000; two-thirds of the increase is due to immigration. The non-Jewish (mainly Arab) population has tripled since 1948, partly by natural increase, partly by the admission of relatives under the government scheme for reuniting families, and partly by the unification of Jerusalem.

The area of the state—within the cease fire lines of 1967—is 34,493 square miles, 6,200 square miles of which are the administered areas of Judea, Samaria, the Gaza Strip, and North Sinai. A large majority of the population, 82.5%, lives in urban areas, including "development towns" set up for the absorption of immigrants on the basis of a comprehensive plan for housing, employment, and the siting of

industry. Only 7.5% lives in rural settlements, including the *Kibbutsim* ("collective settlements") ideologically and economically developed in the country especially in the pre-State period of Jewish renaissance. About 3% of Israel's population is claimed by *Kibbutsim*.

Education

Educational activities in Israel are the indispensable instruments for welding native-born, old-timers, and newcomers into a nation. In spite of the heavy burdens of immigration, defense, and development, a complete educational system has been built from kindergarten to university. Education is the third largest item in the national budget, next to defense and housing. Students attending educational institutions now number 966,000 (1948/1949: 140,000).

Primary education is free and compulsory between the ages of 5 and 14. Under reforms approved by Parliament (*Knesset*) in 1969, primary education is to be limited to 6 years, followed by 6 years in the post primary school, which will be divided into junior and senior sections each covering 3 years. In 1971 there were already ninety-one junior secondary schools, twenty-nine of them for Arabs. The school leaving age is to be raised to 16 over the next 5 years; this change is already being introduced in eight cities, forty-nine local council areas, one-third of the Jewish villages, and one-third of the Arab and Druze areas.

Higher Education

There are seven institutions of higher education in the country: the Hebrew University of Jerusalem (16,000 students); the Technion-Israel Institute of Technology in Haifa (8,000 students); Tel-Aviv University (12,000 students); the religious Bar-Ilan University at Ramat-Gan (6,000 students); the University of Haifa (5,000 students); the Ben-Gurion University at Beer-Sheva (3,000 students); and the Weizman Institute of Science in Rehovot, which offers higher research degrees in the pure and applied sciences.

National and University Libraries

The development of modern libraries in Palestine (Israel) started with the concept of a Jewish national library in Jerusalem. The idea of establishing a central library in Jerusalem which was to acquire systematically every publication pertaining to Judaism—Judaistic studies, Bible, Jewish history, Geography and History of Palestine—and everything written and printed in Hebrew characters (Hebrew, Yiddish, Ladino, Judeo-Arabic, Judeo-Persian, etc.) was expressed for the first time by a Bialystok doctor, Josef Hazanovitsch (1844–1920). The idea has its roots in

the Jewish national renaissance movement, which led finally to Zionism. Hazanovitch visited the country in 1890, after which he wrote, "We, the People of the Book, must honour and keep the book. We, the wanderers of old, must find a home for our books. We, the people of history, must take care that the chain of history will not be broken off, must guard ourselves for the future what our spirit created in the past." His saying of 1898 is engraved as an inscription above the entrance of the Main Reading Rooms of the library: "In Jerusalem, a large and superb building will be erected, in which all the spiritual treasures of Judaism shall be kept, and to this house all our rabbis, scholars and educated, will stream."

It will be noted that both the idea and the realization of a national library for the Jewish people preceded the establishment of the state by more than 50 years. In 1920 the library came under the ownership of the World Zionist Organization, and in 1925 it was presented to the Hebrew University. From this year until today it has been the Jewish National and University Library. It will be noted that this double function has caused different trends in policy: as a national library it is an archival library, which collects everything pertaining to Judaism, whereas as a university library it selects and keeps in its central and departmental libraries material for study and research in the subjects taught in the university.

The Jewish National and University Library serves—for reasons which will be developed in the section on public libraries—as the largest public library open to every Israeli for reference and lending and linked with interlibrary and international interlibrary loan. In 1930 the library was transferred to the David Wolfson Library on Mount Scopus, with a collection of 200,000 titles. Since then it has grown to 1.6 million titles and it is now located in the center of the main campus at Givat Ram. The directors of the library were: Professor Emeritus of Philosophy Dr. Hugo Bergmann, 1920–1935; Professor Gotthold Weil, 1935–1946; Professor Curt Wormann, 1947–1968; Dr. J. Joël, 1968–1969; and Dr. Israel Adler, 1969–1971.

Professor Roy Mersky of Texas University, Austin, served as acting director in 1972. At present, Professor Rëuven Yaron of the University's Law School is director of the library.

As a result of the planned re-transfer of the faculties of humanities and social sciences to the original campus on Mount Scopus, a study-library with 300,000 titles will be opened in 1974. Thus the Jewish National and University Library today fulfills four functions:

1. It is the national library of the Jewish people;
2. Since 1948 it is the state library of the State of Israel. It is entitled to receive two legal deposit copies of every Israeli publication.
3. As the library of the Hebrew University it serves its academic staff and students for teaching and research. Most of the numerous department libraries are affiliated according to the United States pattern to the central library which does the acquisition and processing. Thus the central catalog contains the holdings of the greater part of the departmental libraries. The Medical Library enjoys a special status: it is part of the National and University Library and not the department library of the Medical School. Practically, it is the National Library of Medicine. With its transfer to Mount Scopus the library

of the School of Education is planned to become the National Library of Education.

Automation programs are used in the Acquisition Department and the Serial Department; circulation was automated in 1972. A special team converts the central card catalog to machine readable form. The output will most likely be in microfilm.

The younger universities of Israel have their own libraries. Tel-Aviv University has its libraries decentralized. The central library volumes include only the humanities and social sciences; the libraries of the faculties and departments of the sciences and of the Law School are independent (360,000 titles and 3,500 periodicals).

Haifa has two institutions of higher learning. The older Technion, a technical university, has a well organized central library. The departmental libraries show centrifugal tendencies towards independence. The University of Haifa has a library of 210,000 volumes, among them 40,000 volumes of periodicals. It has been planned as a strictly centralized library with maximum flexibility for special collections to serve the needs of seminars, departments, and even smaller units within the general framework. The library is the first in Israel which has adopted the Library of Congress classification.

The holdings of the library of the Weizman Institute of Science are 102,000 titles (books and periodicals). Characteristic of its activity is the amount of pages copied by the reprographic service (1971: 360,000 pages).

The Library of the Bar-Ilan University has 150,000 volumes, including 3,500 periodicals.

The Ben-Gurion University at Beer-Sheva (125,000 titles, over 2,000 periodicals) has systematically built a very sound undergraduate library, which has been helped in the first years by conspicuous interlibrary loans from the National and University Library in Jerusalem and is now upgrading its holdings for postgraduate studies. The library has been successful in purchasing or receiving as gifts whole collections, especially in the humanities.

In 1970 a Standing Committee of the National and University Libraries was founded according to the British system (SCONUL). Its first major achievement was the creation of an interlibrary telex-network, for which the Ministry of Finance made budgets available. The network has been beneficial especially in the acceleration of interlibrary loan. Interlibrary loan material is transported once a week by a special van of the largest transport cooperative in the country.

The Standing Committee has taken responsibility for the publication of the third edition of the *Union List of Serials in Israel Libraries, Natural Sciences and Technology* (excluding clinical medicine) (1971). Like the first two editions the list is being prepared by the National and University Library in Jerusalem. An additional volume containing clinical medicine is being prepared.

Public Libraries

The creation of modern public libraries started rather late in the history of the Jewish National Home, which preceded the State of Israel. That is a rather

astonishing fact, if we take into account that the movement of the first pioneers and settlers (*Halutsim*), who laid, since the 1880s, the foundations of the main types of agricultural settlements in the country—the collective farms (*Kibbutsim*) and co-operative workers' villages (*Moshavey Ovdim*)—came from the East-European and later Central European intelligentsia, and were high school and university students who left the schools and became farmers. It is hard to believe that these people could live without book collections, not only in the old-new Hebrew language, but also in European literature. Yet, the question as formulated here leads to the answer: indeed most of the *Kibbutsim* have first-class libraries—the average number of titles per capita in these libraries is nineteen. These libraries, however, are not “public libraries” in the Anglo-American and Scandinavian sense of the term: municipal institutions sustained by the local taxpayer and aided by the central government and above all, accessible to the general public. In the towns and larger colonies, there existed no really modern public libraries appropriately stocked, staffed, and located.

The British mandatory government was not interested in the promotion of local self-government, and thus the few existing municipalities and local councils lacked even the constitutional and legal basis for developing public libraries. Even Tel-Aviv will have only within a few years a really modern Central Public Library, whereas her suburbs—especially those populated by new immigrants, e.g., old Jaffa—have good branch libraries.

In some towns and a considerable number of colonies, the activities of the General Labour Federation, and especially the Library Section of its Cultural Centre contributed to fill the gap, at least partially. Until recent years the workers' libraries were mostly the only public libraries. But most of these—about 300 libraries—cannot cope any longer with the minimum standards as to holdings, buildings, and staff. On the other hand, the pioneering merits of the Library Section should be mentioned in the fields of training librarians (see below), publication of a current selective bibliography of Hebrew books for public libraries (*Kuntres Bibliografi*, 1952–1970), and the publication of a Hebrew translation of the abridged edition of the Dewey Decimal Classification, adapted to special needs of Jewish and Israeli literature (4th edition, the translation of the 10th edition of the Abridged Dewey is under preparation).

If even before the establishment of the State of Israel the existing public libraries did not answer the demands of a steadily growing population with a strong need for reading material—analphabetism practically did not exist—the lack of central initiative and planning was unbearable after 1948. The mass-immigration from more than twenty countries was directed to new development areas. Development-towns and development-areas were founded and populated within a short time. In these new settlements one could not rely on the initiative of the new population, who had to solve first their problems of economic absorption.

In 1962 a section for public libraries was established within the Ministry of Education and Culture. The first and most important task of the section was the foundation and maintenance of libraries in development areas and other concentrations of new immigrants, where severe problems of analphabetism and the need for

the education of the culturally deprived were acute. The section acts through the authorities of local self-government (municipality, local council) or in purely rural areas through the regional councils. It is the Anglo-American concept of the public library that was of strong influence. The Library Section acts today (1971) in forty-two municipalities and local councils and in ten regional councils, i.e., in 165 settlements, with 155 libraries and branch libraries and nineteen bookmobile stations. The aid given to the library extends—according to local circumstances—to three-fourths of the budget. Special mention should be made of the donation by the James Edward de Rothschild Memorial Foundation of two joint libraries with their centers in Lod and Kirvat Gat, both including one local council and three regional councils.

The establishment of these networks is the first step in the realization of a master plan to set up larger administrative units which will make maximal and effective use of the resources in manpower, physical conditions, and holdings. These achievements have to be evaluated with respect to the fact that Israel does not yet have a library law; the law has passed its first reading in Parliament (*Knesset*) and has been discussed by the House Committee for Education and Culture. The law now awaits final approval.

The Advisory Committee for Public Libraries

In 1963 the Minister of Education and Culture—then Mr. Abba Eban—appointed a committee whose main task was to prepare the draft of the Library Law. With the completion of this work, the present minister, Mr. Yigal Allon, appointed in 1971 a new Advisory Committee for Public Libraries comprised of twenty-one members, whose function is to deal with development programs of public libraries, sponsored by the ministry's Library Section, and with proposals for promoting and improving these services.

The Guidance Centre for Public Libraries

The Centre was established in 1964 jointly by the mentioned Section for Public Libraries in the Ministry of Education and Culture, the Graduate Library School of the Hebrew University (see below) and Israel Library Association (see below), in order to provide the librarians with the necessary tools for the efficient organization of the library. It was shaped according to the pattern of the Danish "Bibliotekscentralen."

The Central Cataloguing Project of the Israeli Library Association founded in 1963 was transferred to the Centre which enlarged and improved this service, currently subsidized by 258 libraries. Cataloging is done in accordance with new Anglo-American rules, and the classification is based on the abridgment of the Dewey Decimal System modified to meet the specific needs of libraries in Israel, especially in the field of Judaica.

The center has added a special project of central cataloging of rabbinical literature, which supplies catalog cards to both rabbinical and public libraries. A selected collection of book reviews which appear in dailies and magazines are photocopied and sent to 320 libraries.

Under the auspices of the Ministry of Education and Culture, the Graduate Library School of the Hebrew University has prepared a *Standard Catalog* covering books published during the period 1948–1963, so that the Central Cataloguing Project will be complete. This *Standard Catalog* lists 7,000 items. Most of the titles are in Hebrew on all subjects. Several hundred books are in Yiddish. The remainder are basic reference books in other languages.

In addition to the cataloging services, the Centre has produced basic publications in the field of librarianship. The most ambitious publication to date is an annotated bibliography, *20 Jews of the State of Israel*, compiled by Assia Neuberger under the auspices of the Graduate Library School. A 5-year supplement will follow on the occasion of Israel's twenty-fifth anniversary.

Other bibliographical publications comprise an annotated bibliography on *Books and Articles on Children's Books* and *Original Hebrew Plays Presented in Israel 1948–1970*. The Centre's manuals include filing rules and indexing. The Centre also publishes the proceedings of the Israeli professional library association.

In 1970 the Centre started a book processing service and in 1972 a **Book Bank**—a kind of clearing house—for exchange of surplus material between the libraries.

Information Services

The Centre of Scientific and Technological Information (OSTI), with headquarters in Tel-Aviv, was founded in 1961 by the National Council for Research and Development, a department of the prime minister's office. It has the following tasks:

1. Collection, classification, and publication of data about local sources of information, such as research in progress, libraries and their holdings, publishing media, scientific institutes, and professional associations.
2. Identification and recording of existing and potential needs for information; the establishment and maintenance of profiles of users' interests; the anticipation of future demands; and the selective dissemination of information to users in the fields of science, technology, management, and government administration.
3. Better utilization of the experience of information scientists and special librarians, through recognition of information science as a profession by the appropriate authorities; inauguration of training programs, both formal and informal; encouragement of cooperation among workers in the field, and provision of professional guidance.
4. Development of a national information network commensurate with local conditions.

The Centre comprises the following departments: Documentation, Field Services, Information Systems Research, and Training in Information Science.

Since 1966 the Centre has been Israel's National Member of the FID (Fédération Internationale de Documentation), and it now chairs the National Committee for FID.

The Centre published a series of *Guides to Services of Information in Israel*. Among its volumes is a *Directory of Special Libraries in Israel* (2nd edition, 1966), listing 315 associating research institutes and laboratories. The Centre has been a co-sponsor of the *Union List of Serials in Israel Libraries*. Its latest important publication is a Hebrew translation of the Abridged UDC with a computer-produced index (1969).

Library Education

Librarians for the public libraries, especially the smaller and the medium sized, are trained in courses held by various institutions. The above-mentioned Library Section of the Cultural Department of the General Labour Federation has done pioneer work in this respect. The students of its courses were mostly members of rural settlements who served as librarians and received their inservice training in these courses. In the last years the courses of the Guidance Centre have gained more importance, while the Centre for Scientific and Technological Information trains librarians for special libraries and information offices. Until 1964 there were no officially recognized examinations and certificates for nonacademic librarians. In 1964 the Israel Library Association published its examination regulations and syllabus, and from that year it has administered the professional examinations. The syllabus has since been revised, and the first examination on the basis of the new syllabus was taken in 1973.

The examination is taken in two levels. The Level-I examination is common to academic, public, and special libraries. The certificate of completion of senior high school is a prerequisite. For the Level-II examination practical work in a library during at least one year is required. On passing Level-I examination, the examinee receives the title of library assistant; Level-II examination, the title of librarian. The certificates are officially recognized by the government and by municipalities.

The Graduate Library School of the Hebrew University

The Graduate Library School of the Hebrew University in Jerusalem was opened at the beginning of the academic year 1956/1957 (November 1956). Its program was set out in detail by Professor Leon Carnovsky, professor at the Graduate Library School at the University of Chicago as a consultant on behalf of UNESCO. According to the American pattern it is a graduate school, but Professor Carnovsky recommended that the school should initially grant not a Master's degree but a Post Graduate Diploma of a Qualified Librarian. His reasons were the need of recruiting a faculty of full-time lecturers, who could replace the part-time teachers—heads of

departments and other senior librarians of the Jewish National and University Library and other librarians in Israel—and who would devote all their time to teaching, research, and guidance of students in research. Another reason for Professor Carnovsky's recommendation was that "it will take time for a sound research programme to be developed. Since a thesis is recommended as a degree requirement the writing of a thesis should not be encouraged until the School has clearly formulated areas for investigation."

Professor Carnovsky considered his recommendations as a temporary solution. Meanwhile the school has reached a level which justifies the Master's degree and has a staff of full-time lecturers in the core subjects. Moreover, the library situation in Israel has developed and improved steadily, and thus, in June 1972 the Senate of the Hebrew University granted the school the right to give a Master's degree in Library Science (M.L.S.). Starting with the academic year 1973, the school will prepare for both the Master's degree and the diploma. The Master's course has a 2-year program, whereas the diploma course may be completed in 1½ years.

The school, which is a department of the Hebrew University, is vitally connected to the Jewish National and University Library, which serves as a workshop for the students. Until 1968 the director of the library was also the director of the school, and only after the retirement of Dr. C. Worman did the School get a director of its own.

In 1963 the school was recognized by UNESCO as an associate library project, a fact that encourages specialization and professional research. The first steps toward these wider aims were made in 1969 by a reform in the curriculum according to the American pattern. Courses are now divided into required and elective. The comparatively high total of lectures to be attended (about 450 hours of required courses and 330 hours of elective courses in the Master's program, and 360 and 180 hours respectively for the diploma course) may be explained by the complicated problem of integrating specific Jewish subjects rooted in Jewish cultural and literary heritage into the general scheme of study based on modern Western civilization.

In the new curriculum greater care has been taken for the education of special types of librarianship—academic, public, special, and Judaic—in spite of the fact that in this small country mobility and the need of shifting from one type to another has to be taken into account. Basic and advanced courses in information science are given, and as of 1972, 325 students had graduated from the school.

The Centre of Scientific and Technological Information, in collaboration with the Weizmann Institute, has offered two postgraduate training courses for documentalists and information scientists, the first in 1968/1969 and the second in 1970/1971.

Other Library Schools

Since 1970 the Graduate Library School of the University of Haifa has been preparing for a Postgraduate Diploma. A section for Bibliographic Studies and

Library Science was opened in 1973 within the Faculty of Humanities of Bar-Ilan University; it will specialize in Judaic studies.

Professional Organizations

The Israel Library Association (ASI) was founded in 1952; it is a member of the International Federation of Library Association (IFLA). The association is comprised of four sections: university, public, Judaic studies, and special librarians, and has about 1,200 members. It is affiliated to the Union of Clerks, which is a part of the General Labour Federation. As such it deals with the professional interests of its members. Lately, academic librarians have been represented professionally by the Union of Academic Workers within the General Labour Federation.

The association administers examinations for nonacademic librarians (see above). Some of its activities—the publication of the library periodical *Yad la-Koré*, the central cataloging project, and a considerable part of continued education programs for librarians—have been transferred to the Guidance Centre and the Graduate Library School.

The Israel Society of Special Libraries and Information Centres (ISLIC) was founded in 1966; its objectives are:

to encourage and promote the utilization of information through special libraries and information centres; to promote professional standards in Israel . . . to facilitate written and oral communication among members; to organise lectures and symposia of professional interest among members; to publish professional literature; to cooperate and affiliate with other boards with similar or allied interests in Israel and abroad" (From the Articles of the Society).

The younger society has developed rather dynamic activity during the last years.

SELECTED BIBLIOGRAPHY IN NON-HEBREW LANGUAGES

Adler, Israel, "The Standing Committee of the National and University Libraries in Israel." *ISLIC Bull.*, 3, 6-9 (August 1971).

Avni, Hanan, "Information Centers in Israel." *Ibid.*, 3, 23-26 (August 1971).

Ben-Menahem, M. N., "A Complete Hebrew Bibliography." *UNESCO Bull. Lib.*, 17, 196-197 (May-June 1963).

Carnovsky, Leon, *Report on a Programme of Library Education in Israel* (UNESCO Technical Assistance Reports, no. 1). UNESCO, Paris, 1956.

Carr, J., ["Tel-Aviv Public Libraries"]. *Lib. Rev.*, 21, 49-50 (Spring 1967).

Center for Public Libraries in Israel. *Aims and Activities*. Jerusalem, 1967.

Deligdisch, Y., "Public Library Development in Israel." *Lib. Assoc. Record*, 67, 434-439 (December 1965).

Deligdisch, Y., and R. Cohen, "Reader Survey at the Kiryat-Hayovel Public Library." *UNESCO Bull. Lib.*, 15, 194-197 (July-August 1961).

Delougaz, N., "Library Training in Israel." *Ibid.*, 11, 82-83 (April 1957).

- Elgad, R., "Computerization of Information Activities in Israel," *ISLIC Bull.*, **3**, 27-32 (August 1971).
- Foster, B., "Some Israeli Libraries," *Int. Lib. Rev.*, **5**, 471-481 (October 1973).
- Harvey, J. F., and B. Lambert, "Librarianship in Six Southwest Asian Countries," *Ibid.*, **3**, 15-34 (January 1971).
- Hay, D., "The Jewish National and University Library," *Lib. Assoc. Record*, **46**, 24-27 (1944).
- "Hebrew University. Graduate Library School," *UNESCO Bull. Lib.*, **21**, 35-37 (January 1967).
- Holloway, M. F., "Patterns of Library Service in the Middle East," *Lib. Trends*, **8**, 192-208 (October 1959).
- Hovne, Clara, "Towards the Automation of the Union List of Serials in Israel Libraries," *ISLIC Bull.*, **3**, 13-15 (August 1971).
- Israel. Centre for Scientific and Technological Information, *Director of Special Libraries in Israel (Excluding Humanities)*, 3rd ed., The Centre, Tel-Aviv, 1969.
- Israel Library Association, "Report for 1967-68," in International Federation of Library Association, *Actes du Comite. Conference 1968*, Nijhoff, Frankfurt on Main, 1969, pp. 235-238.
- Jerusalem. Hebrew University, *The Hebrew University of Jerusalem 1969, The Graduate Library School*, pp. 47, 243-251; *Jewish National and University Library*, pp. 268-285.
- Kaplan, A., "Israel: Libraries in a State of Siege," *Wilson Lib. Bull.*, **44**, 1046-1053 (June 1970).
- Keren, C., "Closing the Information Gap Toward a National Network in Israel," *ISLIC Bull.*, **3**, 19-22 (August 1971).
- Kies, C. N., "Major Israeli Academic Libraries," *J. Lib. History*, **2**, 259-263 (July 1967).
- Lebowitz, A., "Cooperation in Developing the Science and Technology Collections and in Mechanization in the Libraries of the Institutions of Higher Learning in Israel," *ISLIC Bull.*, **3**, 10-12 (August 1971).
- "Microfilming Hebrew Manuscripts," *UNESCO Bull. Lib.*, **20**, 152-153 (May-June 1966).
- Rothschild, J., "Israel," in *Library Development in the Middle East and North Africa 1967-1972*, ALA's International Relations Round Table, **15**(2), 7-8 (August 1972).
- Rothschild, J., "Bibliotheks- und Büchereiarbeit in Israel," *Bücherei und Bildung*, **22**, 13-21 (January 1970).
- Schur, H., "Post-graduate Science Information Course in Israel," *UNESCO Bull. Lib.*, **25**, 251-265 (September-October 1971).
- Sellers, R. Z., "Israel's Library School," *Wilson Lib. Bull.*, **34**, 589-590 (April 1960).
- Sever, S., "Some Social Aspects of Public Library Development in Israel," *Lib. Quart.*, **38**, 388-405 (October 1968).
- Vilenchuk, I., "Training in Librarianship and Information Science in Israel," *ISLIC Bull.*, **3**, 43-51 (August 1971).
- Weil, A., "Publishing and Printing in Israel," *Ibid.*, **3**, 38-42 (August 1971).
- Wellisch, H., "The Catalogue Card Service of the Israel Library Association," *Lib. Assoc. Record*, **68**, 166-168 (May 1966).
- Wellisch, H., "What They Read and Why—Israeli Version," *Aslib Proc.*, **15**, 323-332 (November 1963).
- Wormann, C. D., "Education for Librarianship: Israel," *Lib. Trends*, **12**, 211-226 (October 1963).
- Wormann, C. D., "The Scientific Libraries of Israel," *UNESCO Bull. Lib.*, **8**, E1-E5 (January 1954).

ITALY, LIBRARIES IN

Italy has been a unified country for about a century. For most of the years between the fall of the Roman Empire and the unification, Italy remained a group of autonomous states. The first Italian Parliament meeting in Turin in March 1861 proclaimed Victor Emmanuel II the first King of the unified Italy. Italy remained a limited constitutional monarchy with strong executive power in the hands of the King until World War II, when King Victor Emmanuel III abdicated and his son Humbert II became regent. In 1946 a national referendum voted in favor of a republic under a president and replaced the monarchy that had ruled for 85 years.

The country is administratively divided into twenty regions, including the regions of Abruzzi and Molise that are indicated as one in Table 1. These regions, recognized as legal and geographical entities, are subdivided into ninety-one provinces and 7,804 municipalities. The provinces have jurisdiction over local matters, subject to supervision by a state appointed prefect. The head of the state in Italy is the

TABLE 1
Population of the Administrative Regions of Italy^a
(Census of 1971)

Regions	Resident population census, 1971	Density per square kilometer (1971)
Piedmont	4,434,802	175
Valle d'Aosta	109,252	33
Liguria	1,848,539	341
Lombardia	8,526,718	358
Trentino-Alto Adige	839,025	62
Bolzano-Bozen	411,334	56
Trento	427,691	69
Veneto	4,109,787	224
Friuli-Venezia Giulia	1,209,810	154
Emilia Romagna	3,841,103	174
Marche	1,359,063	140
Toscana	3,470,915	151
Umbria	772,601	91
Lazio	4,702,093	273
Campania	5,054,822	372
Abruzzi	1,163,334	108
Molise	319,629	72
Puglia	3,562,377	184
Basilicata	602,389	60
Calabria	1,962,899	130
Sicilia	4,667,316	182
Sardegna	1,468,737	61
TOTAL	54,025,211	179

^a From "Italy," *The Statesman's Year-Book, 1973-1974*, p. 1083.

TABLE 2
Comparison of the Population in Italy with Other
Western European Nations^a

Country	Population	Population per square mile of arable land
France	49,000,000	600
Italy	52,000,000	860
United Kingdom (England, Wales, Northern Ireland, Scotland)	54,000,000	1,890
West Germany	59,000,000	1,790

^aFrom Morris L. Ernst and Judith A. Posner, eds., *The Comparative International Almanac*, Macmillan, New York, 1967, pp. 54, 78, and 153.

President of the Republic who is elected by Parliament for 7 years. He appoints the prime minister (the head of the government) and his relationship to the President is similar to that of the British Prime Minister to the Queen.

With 52 million people, Italy is comparable in size to France, Western Germany, and the United Kingdom (see Table 2). The per capita income is low—\$1,525 (1969) compared with \$2,783 (1969) in France, \$3,790 (1971) in West Germany, and \$2,000 (1972) in the United Kingdom. From 1861 to 1961 the population increased from 26,328,000 to 50,624,000, an average of 2.4 million persons each decade (1). The estimated population for 1969 was 54,003,494, an increase of approximately 3 million since the last official census (1961) (2). The population growth has been relatively stable because of large scale emigration to the United States, Latin America, and other areas.

The population of the rural areas has been migrating to the cities with the farm population decreasing at the rate of five million between 1951 and 1966 (3). By 1980, if the present trend continues, 37% of the Italian population will be concentrated in the eight urban centers of Bologna, Florence, Genoa, Milan, Naples, Palermo, Rome, and Turin (4).

The Italian economy is increasingly less dependent upon agriculture. However, there is a distinction to be made between the much more industrialized north of Italy and the south. In climate, natural resources, and economic structure, the north resembles Central Europe. A major portion of Italy's export materials are produced in the cities of Turin, Milan, and Genoa, the most industrially advanced areas of the country. The south with its semi-arid climate, limited resources, and continued dependence upon agriculture, is finding it difficult to change. The north has enjoyed the fruit of its socioeconomic development for many years.

However, the south is making strides toward industrialization with the assistance of the Development Fund for the South established by the central government in 1950. Loans have been negotiated through the International Bank for Reconstruction

and Development to finance not only the infrastructure but industry itself. Also through the fund both national and international private investment have been attracted for industrialization and agricultural rehabilitation. Progress is being made. An indication of this is the large number of new automobiles being purchased in the south (5).

Italian life varies from one region to another, and this is to be expected with the diversity of economic development, the geographical differences, and the variation in population density. The national literacy rate is much higher in the central and northern parts of the country. However, with the establishment of popular schools (for adult illiterates and semi-illiterates), reading centers (where reading skills are taught), mobile libraries, and the television school, much of the problem of illiteracy is being resolved. In 1911 the census figure for illiteracy was 27.5% (6); in 1951 it was 14.1%, and in 1961 it was 8.4% (7).

Italy as a whole has been making considerable economic progress with help from the European Economic Market. Coupled with this has been the enactment of legislation on December 31, 1962 founding the single middle school for students between the ages of 11 and 14, ending the double ladder system of education (8). Italy is now the only European country with a single middle school in which Latin no longer serves as the only entry to higher studies (9). Eighty percent of the elementary school students now continue their education into the middle school and the number of students entering upper secondary school has almost doubled (see Table 3). Compulsory education to age 14 decreed in 1923 and reaffirmed by the Constitution after World War II has become an actuality for the first time.

The improved socioeconomic conditions indicate that Italy will have a larger percentage of its population ready for a higher level of education and for libraries and library services comparable to those of other Western European and Anglo-American countries. In the projected plans for the years 1971-1975 the central government has provision for reading services for the nation to comply with the most modern standards (10). The 1965 Italian public library standards recognize

TABLE 3
Lower and Upper Secondary Enrollment, 1950-1965^a
Growth Indices (1955: 100)

Year	Number of students in lower secondary (middle school)	Index	Number of students in upper secondary	Index
1951/52	795,720	89	412,349	70
1955/56	905,768	100	585,379	100
1960/61	1,414,177	156	746,044	127
1965/66	1,790,790	198	1,223,688	209

^aFrom Organization for Economic Cooperation and Development, *Development of Secondary Education: Trends and Implications*, Paris, 1969, p. 52.

the dynamic social and educational role of the public library in collecting all types of library materials for the various members of the community and aggressively reaching out into the community to bring books and readers together. These factors have influenced the expansion of the existing national library system as well as the development of new libraries and more comprehensive services.

Virginia Carini-Dainotti, outstanding promoter of library services for all in Italy, explained that a new type of popular library was being created by the development of the National Network of Reading Centers. It is projected that the fully implemented network will provide library services in 7,050 rural communes with populations of less than 10,000 people where services have been inadequate or completely lacking. There are 30 million people in these communes, almost half the population of Italy (11) (see Table 4).

The plan provides for a network of libraries in each of the ninety-two provinces, with the main library in the capital city of each province acting as the central library. The provincial libraries are already a part of a national network with interlibrary loan access to all the government resources in the national and university libraries. Within each province the central library is responsible for serving all the communes within the province. If a commune does not have a library, the central library creates a reading center staffed by a teacher-librarian. Where a library does exist, the central library provides new books, newspapers, and journals on a regular basis. The commune pays for the materials supplied. The central library supplies centralized purchasing, processing, professional consultation, a bulletin of new acquisitions, and a catalog of selected holdings in the central library. Material may be borrowed from the central library, and if it is lacking there it will be requested from the two national central libraries.

A broader tax base is provided by the province to which all the communes may contribute. This makes it financially feasible to provide national public library services to the most remote areas in the country (12).

In 1950 Lombardy was the first province to experiment with the National Network of Reading Centers. The Cremona government library in that province now serves sixty communes of the total of 114 in the province and it plans to enlarge its service to others as they join the plan (13). In 1955 there were fifteen provinces with network plans in operation: Turin, Cremona, Montova, Gorizia, Modena, Reggio Emilia, Bologna, Forli, Ravenna, Pisa, Chieti, l'Aquila, Naples, Avellino, and Salerno. Six others are in the process of initiating the plan—Brescia, Ferrara, Parma, Pieti, Lecce, and Cagliari (14).

In Fall 1963 "Plan L." Plan for Books and Reading, was inaugurated. It is considered an approximation of the 1956 Library Services Act in the United States. It provides support for the future expansion and development of the provincial network library system in accordance with innovations in the field (15).

Another important innovation for Italian librarianship was the publication of the first public library standards in 1964 by the Italian Library Association (*La Biblioteca Pubblica in Italia: Compiti Istituzionale e Principi Generali di Ordinamento e Funzionamento* (A.I.B., Rome, 1964)). The Italian Library Association

TABLE 4
Communes With and Without Libraries Open to the Public, 1965*

	Communes			Population		
	With libraries	Without libraries	Totals	Of communes with libraries	Of communes without libraries	Totals
Communes with populations up to 10,000 inhabitants	1,715	5,509	7,224	6,115,024	14,043,084	20,158,108
Communes with populations over 10,000 inhabitants	664	161	825	30,588,186	2,184,300	32,772,486
TOTALS	2,379	5,670	8,049	36,703,210	16,227,384	52,930,594
	Percentual distribution			Percentual distribution		
Communes with populations up to 10,000 inhabitants	21.4	68.9	90.3	11.1	26.9	38.0
Communes with populations over 10,000 inhabitants	8.3	1.4	9.7	58.1	3.9	62.0
TOTALS	29.7	70.3	100.0	69.2	30.8	100.0

*From Italy, Istituto Centrale di Statistica, "Statistica delle Biblioteche Italiane, 1965," *Supplemento Straordinario al Bollettino Mensile di Statistica*, n. 11, November 1967, p. 8.

commission worked a year on its compilation and it represents an important milestone (16).

This article describes the current position of government library services in Italy with no attempt to be comprehensive in coverage or to record the complete history of libraries in Italy. Education for librarianship is not included.

There are two general categories of libraries in Italy: those under government control and those which are not. Libraries at every level of government control are coordinated into a state public library system with a centralized administrative organization. The government exercises greater supervision over some libraries than others; those most under direct government control are the national, communal, provincial, school, and popular libraries (17). Nongovernment libraries may include ecclesiastical, society, popular, institute, university, and those associated with industrial organizations.

Government and nongovernment Italian libraries may also be designated as scholarly or popular libraries. The former are used mainly for study and research and contain an in-depth collection of reference books, whereas the latter are maintained for population groups with more limited education. Although the collection of material in popular libraries is kept current and primarily meets the recreational needs of its users, it also provides supplementary professional and educational reading. The following outline indicates how Italian libraries fit into the general grouping of scholarly and popular libraries.

- I. Scholarly Libraries
 - A. National Government Libraries
 1. Public Libraries (i.e., State Public Library System)
 2. Nonpublic Libraries
 - B. Local Government Libraries
 1. Communal and Provincial Libraries
 2. Ecclesiastical Libraries
 3. Society, Institute, or University Libraries
 4. Private Libraries (18)
- II. Popular Libraries
 - A. Communal Libraries
 - B. Ecclesiastical Libraries
 - C. Libraries associated with work groups, political parties, or benevolent societies
 - D. Private Libraries (18a)
 - E. School Libraries (18b)

Government libraries are staffed with civil service personnel, and examinations are held when positions need to be filled.

The autonomous states that joined to form a unified Italy (the process of unification required more than 10 years, 1859–1870) had many well developed private, university, and state libraries. Many became part of the new country's State Public Library System. The year 1970 marked the 100th anniversary of Italian unification as well as law that established this system within the administrative responsibilities of the Ministry of Public Instruction.

The state national libraries became a part of the Public Library System. They are the basis for the superintendency or agency in the Bureau of Academies and Libraries that exercises indirect central government control over the local government libraries. There is, in effect, a network of libraries throughout the nation. There are some 7,000 libraries included in the national network open to the public and some 8,000 middle school and secondary school libraries. The libraries open to the public are grouped as follows:

1. National and government libraries: national libraries and government libraries which depend on the Minister of Public Instructions, libraries for government officials, and libraries for central government organizations.
2. University libraries: all university libraries and the various faculty and institute libraries on campus;
3. Local government libraries: the communal, provincial, and regional libraries;
4. Other libraries: libraries of institutions—public, religious, and other miscellaneous organizations—as well as libraries of academies, foundations, cultural societies, parochial, and popular libraries.

TABLE 5
Summary Table of Libraries in Italy Open to the Public, and
Middle School and Secondary School Libraries, 1965^a

Type of library	Libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Libraries Open to the Public				
National and government libraries	612	19,076,085	3,185,769	465,019
University libraries	1,164	13,596,299	5,620,311	707,008
Local government libraries	1,138	18,898,313	4,819,838	2,649,218
Other libraries ^b	4,078	21,603,331	4,428,420	3,377,291
TOTAL	6,992	73,174,028	18,054,338	7,198,536
Middle and Secondary School Libraries				
Middle school libraries	5,480	5,701,177	1,549,440	4,612,180
Secondary school libraries	2,533	6,915,052	1,124,148	1,473,123
TOTAL	8,013	12,616,229	2,673,588	6,085,303
GRAND TOTAL	15,005	85,790,257	20,727,926	13,283,844

^a Adapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, p. 7.

^b Included here are libraries of institutions—public, religious, etc.—and also libraries of academies, foundations, cultural societies, and parochial and popular libraries.

TABLE 6

Number, Distribution, Printed Resources, and Lending Statistics of
National and Government Libraries Open to the Public, 1965^a

Region	Number of libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Piedmont	32	874,262	172,080	20,631
Valle d'Aosta	1	857	240	300
Liguria	17	102,396	31,995	21,603
Lombardia	46	1,179,585	226,055	43,115
Trentino-Alto Adige	12	13,730	9,796	6,637
Veneto	31	732,130	291,719	23,836
Friuli-Venezia Giulia	14	223,267	16,079	11,838
Emilia Romagna	50	1,321,591	215,379	59,054
Marche	32	79,210	27,525	6,264
Toscana	54	4,889,943	388,644	38,675
Umbria	9	13,021	6,383	3,542
Lazio	90	6,303,521	1,187,077	138,932
Campania	47	2,480,307	255,143	31,634
Abruzzi and Molise	22	49,278	32,357	2,284
Puglia	42	257,764	115,697	17,587
Basilicata	13	9,544	26,589	8,427
Calabria	29	26,349	37,061	10,820
Sicilia	46	485,003	106,288	11,899
Sardegna	25	34,327	39,662	7,943
TOTALS	612	19,076,085	3,185,769	465,021

^a Adapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, pp. 9-10.

Within the 6,992 libraries open to the public in 1965 there are comprehensive resources of 73,174,028 printed books and pamphlets, with library users requesting 18,054,338 items for study and reference use within the library and 7,198,536 items for circulation outside the library.

Within the 8,013 school libraries in 1965 there are comprehensive resources of 12,616,229 printed books and pamphlets, with library users requesting 2,673,588 items for study and reference use within the library, and 6,085,308 items requested for circulation outside the library. Seventy-six percent of the material circulated outside the library is requested by students in the middle school (see Tables 5-11 for the distribution, printed resources, and lending statistics for the national network libraries open to the public and the middle school and secondary school libraries).

Although there are some 7,000 libraries included in the national network, the official State Public Library System consists of forty-seven libraries divided into the following five categories: (1) national, (2) university, (3) libraries with special duties,

TABLE 7
 Number, Distribution, Printed Resources, and Lending Statistics of
 University Libraries, 1965^a

Region	Number of libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Piedmont	58	352,698	142,395	25,251
Valle d'Aosta	—	—	—	—
Liguria	78	426,437	39,756	83,859
Lombardia	140	3,550,135	760,414	99,490
Trentino-Alto Adige	—	—	—	—
Veneto	92	1,083,533	617,040	70,643
Friuli-Venezia Giulia	56	309,923	255,391	12,916
Emilia Romagna	183	1,022,131	645,376	73,140
Marche	15	195,943	77,038	14,285
Toscana	134	3,100,596	661,867	105,349
Umbria	3	300,150	223,200	26,650
Lazio	98	1,207,504	883,008	83,257
Campania	66	570,082	324,644	15,647
Abruzzi and Molise	1	30,329	4,000	500
Puglia	54	376,048	270,537	16,875
Basilicata	—	—	—	—
Calabria	—	—	—	—
Sicilia	94	670,993	441,906	44,827
Sardegna	92	399,797	273,739	34,319
TOTALS	1,164	13,596,299	5,620,311	707,008

^a Adapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, p. 11.

(4) libraries with music sections, and (5) libraries annexed to national monuments (19).

The eight national libraries are the following: National Central Library, Vittorio Emanuele II, Rome; National Central Library, Florence; National Library Sagariga-Visconti Volpi, Bari; National Braidense Library, Milan; National Library Vittorio Emanuel III, Naples; National Library, Palermo; National University Library, Turin; and the National Marciana Library, Venice.

Two of the national libraries (Rome and Florence) have special functions and are designated as the national central libraries. They have the responsibility for collecting and preserving all that is published in Italy which they receive through legal deposit; for completely documenting Italian culture; for collecting publications about foreign cultures; and for coordinating and initiating bibliographical services at the national and international levels.

The National Central Library, Rome, distributes its bibliographical publication,

TABLE 8

Number, Distribution of Printed Resources, and Lending Statistics of
Local Government (Commune, Province, Region) Libraries, 1965^a

Region	Number of libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Piedmont	94	1,512,289	386,770	313,919
Valle d'Aosta	6	33,883	8,641	12,307
Liguria	60	633,316	142,182	50,189
Lombardia	182	2,914,115	1,063,521	673,098
Trentino-Alto Adige	15	430,909	68,626	27,120
Veneto	51	1,669,758	225,267	88,799
Friuli-Venezia Giulia	44	797,640	165,499	54,464
Emilia Romagna	128	2,998,652	619,223	560,710
Marche	35	1,339,982	169,694	43,131
Toscana	93	1,418,932	451,072	184,983
Umbria	18	559,615	60,037	23,508
Lazio	103	592,332	108,913	195,451
Campania	46	459,909	164,037	29,437
Abruzzi and Molise	29	752,786	196,183	41,272
Puglia	74	827,578	398,121	106,028
Basilicata	7	118,851	33,705	9,248
Calabria	41	276,984	104,115	29,732
Sicilia	84	1,374,947	342,378	134,991
Sardegna	28	185,835	111,874	70,831
TOTALS	1,138	18,898,313	4,819,858	2,649,218

^a Adapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, pp. 12-13.

Il Bollettino delle Opere Moderne Straniere, 1886-, to all public, faculty, and university libraries. The National Central Library, Florence, in cooperation with the National Center for the Union Catalog of Italian Libraries, edits and publishes the Italian national bibliography, *Bollettino delle Pubblicazioni Italiane Ricevute per Diritto di Stampa*, 1886-.*

In 1968 a 71 year (1886-1957) cumulation of the *Bollettino* in thirty-nine folio volumes was published (*Il Catalogo-Cumulative 1886-1957 del Bollettino delle Pubblicazioni Italiane Ricevute per Diritto di Stampa dalla Biblioteca Nazionale Centrale di Firenze (Il CUBI)*). Published by Kraus-Thomson, its format and purpose is comparable to the published catalogs of the British Museum and the Library of Congress.

*For rather comprehensive information on Italian national and trade bibliography, see Annette Barnes Parsons. "Italian National Bibliography, 1861-1960." [Unpublished dissertation]. M.S.L. University of North Carolina, Chapel Hill, 1962.

TABLE 9
 Number, Distribution, Printed Resources, and Lending Statistics of
 Other Libraries^a Open to the Public, 1965^b

Region	Number of libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Piedmont	381	1,454,415	225,006	778,560
Valle d'Aosta	9	40,001	5,036	5,528
Liguria	90	493,136	99,003	52,452
Lombardia	723	3,486,697	834,179	732,615
Trentino-Alto Adige	196	424,050	115,054	131,076
Veneto	411	2,201,427	422,712	265,382
Friuli-Venezia Giulia	164	1,235,904	149,011	322,686
Emilia Romagna	377	1,665,950	359,331	289,749
Marche	137	533,208	152,883	96,323
Toscana	269	1,227,124	135,079	147,816
Umbria	73	252,904	56,515	11,222
Lazio	364	5,957,815	535,751	235,078
Campania	169	837,712	667,140	88,220
Abruzzi and Molise	95	235,591	78,522	23,828
Puglia	151	495,148	114,327	38,708
Basilicata	39	53,475	50,168	11,612
Calabria	70	161,692	62,155	18,427
Sicilia	269	638,851	282,547	87,448
Sardegna	91	208,231	84,001	40,831
TOTALS	4,078	21,603,331	4,428,420	3,377,561

^aIncluded here are libraries of institutions—public, religious, etc.—and also libraries of academies, foundations, cultural societies and parochial and popular libraries.

^bAdapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, pp. 14–15.

The other six national libraries collect materials to document Italian culture on a regional basis. These libraries enjoy legal deposit only of the publications printed in their regions, and they assume and promote bibliographical matters of interest on a regional basis, in cooperation with the respective bibliographical superintendents.

Italian universities may be privately or state controlled. Those that are state controlled are administered through the Division of Higher Education within the Ministry of Public Education, and twelve of them have libraries that are a part of the State Public Library System: University of Bologna Library; University of Cagliari Library; University of Catania Library; University of Genoa Library; University Library of Messina; University of Modena Library; University of Naples Library; University of Padua Library; University of Pavia Library; University of Pisa Library; University of Rome Alessandrina Library; and University of Sassari Library.

TABLE 10
 Number, Distribution, Printed Resources and Lending Statistics of
 Middle School (Grades 5-8) Libraries, 1965^a

Region	Number of libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Piedmont	425	659,005	319,813	487,126
Valle d'Aosta	13	11,200	2,000	9,487
Liguria	193	354,379	53,498	160,724
Lombardia	764	781,036	236,240	843,059
Trentino-Alto Adige	119	130,197	34,004	93,216
Veneto	518	580,114	120,065	527,670
Friuli-Venezia Giulia	145	166,496	51,456	181,978
Emilia Romagna	425	411,518	104,126	478,195
Marche	181	157,457	61,713	132,968
Toscana	344	440,530	121,059	293,643
Umbria	133	92,099	23,753	79,299
Lazio	398	331,879	83,244	245,406
Campania	430	335,135	63,408	235,715
Abruzzi and Molise	204	188,661	30,249	126,231
Puglia	341	326,171	79,920	232,367
Basilicata	76	55,550	16,633	41,111
Calabria	200	132,271	36,657	77,020
Sicilia	374	370,194	78,862	244,861
Sardegna	197	177,465	32,740	122,104
TOTALS	5,580	5,701,357	1,549,440	4,612,180

^aAdapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, pp. 16-17.

University libraries have the responsibility for supplying the study, teaching, and research needs of the faculty and students and for coordinating the many faculty and institute libraries, particularly with respect to the compilation of a union catalog. In cities lacking a satisfactory public library, the university library also functions in that capacity.

The libraries with special duties and functions are fourteen in number: State Library of Cremona; Marucelliana Library of Florence; Medicea Laurenziana Library of Florence; Riccardiana Library of Florence; Isontina State Library of Gorizia; State Library of Lucca; Estense Library of Modena; Palatina State Library of Parma; Angelica Library of Rome; Casanatense Library of Rome; Institute of Archeology and History of Art Library of Rome; Institute of Modern and Contemporary History of Rome; State Medical Library of Rome; and Vallicelliana Library of Rome. With their specialized collections they supplement the national and university libraries in the cities in which they are located.

TABLE 11
 Number, Distribution, Printed Resources and Lending Statistics of
 Secondary School (Grades 9-13) Libraries, 1965^a

Region	Number of libraries	Printed resources	Material lent for use in library	Material lent for circulation outside library
Piedmont	180	540,641	185,418	149,017
Valle d'Aosta	5	8,200	—	5,200
Liguria	87	285,936	23,541	56,598
Lombardia	311	1,038,789	224,822	285,507
Trentino-Alto Adige	46	133,895	23,600	42,822
Veneto	174	476,634	81,933	114,112
Friuli-Venezia Giulia	78	236,038	38,894	50,995
Emilia Romagna	189	520,489	91,653	149,097
Marche	94	241,390	82,357	31,773
Toscana	179	426,221	64,624	116,516
Umbria	60	123,797	10,173	20,912
Lazio	252	613,336	72,948	130,697
Campania	217	512,567	73,185	93,029
Abruzzi and Molise	98	413,144	23,178	40,346
Puglia	156	387,621	43,656	73,748
Basilicata	30	54,790	6,118	9,492
Calabria	59	142,992	16,600	15,325
Sicilia	254	569,477	86,296	107,818
Sardegna	64	189,095	25,162	30,126
TOTAL	2,538	6,915,052	1,124,158	1,473,130

^a Adapted from Italy, Istituto Centrale di Statistica, *Statistica delle Biblioteche Italiane, 1965*, pp. 18-19.

There are two libraries with music sections: the Conservatory of Saint Cecilia in Rome and the Palatina Library in Parma.

The following are the eleven National Monuments to which libraries are annexed: Casamari, Cava dei Tirreni, Farfa, Grottaferrata, Montecassino, Montevergine, Gerolomini of Naples, Saint Giustina of Padua, Praglia, Subiaco, and Trisulti.

As enumerated above, there are eight national libraries, twelve university libraries, fourteen libraries with special duties and functions, two libraries with music sections, and eleven libraries annexed to national monuments, making a total of forty-seven libraries in the State Public Library System. Table 12 enumerates the resources of thirty-six of these libraries that are directly under the administration of the Bureau of Academies and Libraries. Because the eleven libraries annexed to national monuments are only indirectly under this bureau, they are not included.

The Minister of Public Education has the overall responsibility for the administration of the State Library System. As a part of his powers he may create special libraries, administratively unite minor libraries with major ones in the same city, and establish separate sections in libraries (20). Most of the past Ministers of Public Education have chosen not to exercise this power often and the number of public

TABLE 12
Resources of the Italian State Public Libraries in 1967^a
(Administrated by the Bureau of Academies and Libraries)

Location and type	Name	Total holdings ^b	Manuscripts	Periodicals currently received
National Libraries				
Florence	National Central	3,623,692	24,696	17,307
Rome	National Central	1,974,286	6,181	18,566
Naples	National	1,511,224	12,594	3,592
Milan	National Braidense	767,718	1,640	2,848
Turin	National	658,375	3,611	5,266
Venice	National Marciana	644,010	12,437	800
Palermo	National	497,004	1,797	3,322
Bari	National	206,104	450	543
University Libraries				
Rome	University and Estense ^c	807,040	365	6,003
Naples	University	678,305	118	747
Bologna	University	611,135	7,481	3,791
Modena	University	496,326	10,746	1,178
Cagliari	University	453,655	562	2,460
Padua	University	448,392	2,507	697
Pavia	University	395,093	1,829	677
Genoa	University	352,471	1,853	1,116
Pisa	University	299,741	1,042	484
Catania	University	245,404	390	658
Messina	University	159,552	1,256	541
Sassari	University	123,140	187	592
Libraries with Special Functions				
Florence	Marucelliana	392,667	2,130	981
Lucca	State	374,002	4,203	430
Parma	Palatina ^d	366,007	4,904	448
Cremona	State	355,207	1,078	1,587
Rome	Casanatense	302,754	5,694	331
Rome	Institute of Archeology	187,275	484	1,016
Rome	Angelica	172,366	2,648	222
Gorizia	State	159,437	470	548
Rome	Modern and Contemporary History	159,113	22	316
Rome	Medical	85,091	—	309
Florence	Medicea Laurenziana	68,911	10,748	130
Rome	Vallicelliana	61,703	2,428	83
Florence	Riccardiana	58,885	4,189	42
Libraries with Music Sections				
Parma	Biblioteca Palatina ^d	—	—	—
Rome	Conservatorio St. Cecilia	161,730	833	33
TOTAL		17,860,814	131,573	77,664

^aAdapted from Italy, Istituto Centrale di Statistica, *Annuario Statistico Italiano*, 1968, p. 100.

^bThis category includes all the printed materials and manuscripts in the library collection.

^cThe statistics for the Modena University and Modena Estense Special Library are combined.

^dThe statistics for the music section are combined with those for the Parma Palatina Library.

state libraries has remained relatively fixed. Comparison of the 1907 listing of these libraries (21) and the 1967 listing (22) shows only a few changes: The Brancacciana, San Giacomo, and Lucchesi-Palli merged with the Naples National Library and the later enumeration includes five new libraries: National Library Sagarriaga-Visconti Volpi, Bari; Isontina State Library, Gorizia; Institute of Archeology and History of Art Library, Rome; Institute of Modern and Contemporary History, Rome; State Medical Library, Rome.

From 1869 to 1926 several bureaus administered library matters in the Ministry of Public Education, but in 1926 the Direzione Generale per le Accademie e Biblioteche (Bureau of Academies and Libraries) was created (23). Within the Ministry of Public Education, it is the Bureau of Academies and Libraries which is responsible for technical and professional library problems, library training problems, library inspection, budgets, and personnel. The bureau has worked toward development of library education programs and standardized practices in Italian libraries.

In 1926 the Minister of Public Education, Pietro Fedele, appointed Francesco Alberto Salvagnini, an official in the central administration offices of the ministry, as the first director of the bureau. His 6-year report of his term of office (1926-1933) covering the events during the first 6 years of the bureau's existence documents the period (24). One important event was the start of the official journal for the bureau, *Accademie e Biblioteche d'Italia* (25), a bimonthly that replaced the defunct Florence publication, *Rivista delle Biblioteche e degli Archivi* (1883-1926). Edoardo Scardamaglia succeeded Salvagnini for the period 1933-1946. Although his report, *Le Biblioteche d'Italia dal 1932 al 1940* (Palombi, Rome, 1942) thoroughly delineates library development to 1940, the Istituto Centrale di Statistica, *Annuario*, also provides more recent information. Another of the important events during his term of office was the creation in 1938 in Rome of the Istituto di Patologia del Libro (Institute for the Pathology of the Book) (28). This institute specialized in research and development of methods for the care and restoration of rare, valuable books and incunabula. Because Italian libraries have a wealth of such material, book care and restoration is an important aspect of library work. Research on the preservation and restoration of graphic materials is reported in the Institute's quarterly periodical, *Bollettino dell'Istituto di Patologia del Libro*, issued since 1939.

Directors for the succeeding 27 years include the following: Gaetani d'Aragona, 1946-1947; Guido Arcamone, 1948-1960; Attilio Frajese, 1961-1962; Nicolo Mazaracchio, 1963-1966; Salvatore Accardo, 1967 (27)-1973; Oreste Lepore, 1973-. Issues of the *Accademie e Biblioteche d'Italia* (the Italian library journal) report developments in librarianship and libraries as well as the activities of the bureau (28). The article by Virginia Carini Dainotti, "La Politica della Direzione Generale delle Biblioteche dal 1926 al 1966," is an excellent summary of the bureau's aims, activities, accomplishments, and inadequacies for the entire period (29).

In summary, the Italian national library network is well coordinated and operational. Research and study needs are met with in-depth collections and services at

the national and university libraries. These are supplemented with an effective interlibrary loan system. Unfortunately, on the university campus the central library and the many departmental libraries do not often coordinate or cooperate as they should. Library funds are inefficiently used, resources are duplicated, and bibliographical control is limited. However, there is a definite awareness of university library problems in Italy and both the government and the Italian Library Association have been conducting studies to resolve the situation. There is the additional need to improve service in communes that have inadequate facilities and to initiate service in the many communes where libraries are completely lacking. Government appropriations have been made to strengthen the collections in ten provincial libraries that are to serve as local resource centers. Additional appropriations are available for the construction and staffing of 200 new communal libraries (30).

REFERENCES

1. [Italy] Istituto Centrale di Statistica, *Sommario di Statistiche Storiche dell'Italia, 1861-1865*, Rome, 1968, p. 13.
2. "Popolazione, Bilancio Demografico Nazionale," *Bollettino Mensile di Statistica*, [N.S.] 44(5), 11 (1969).
3. "Population on Italy's Farm Falls 5 Million in 15 Years," *New York Times*, February 10, 1967, p. 6.
4. Italy, Ministero del Bilancio e della Programmazione Economica, *Progetto 80, Rapporto Preliminare al Programma Economico Nazionale 1971-1975*, Libreria Feltrinelli, [Milan, 1969], p. 48.
5. *Newsweek*, January 26, 1970, p. 50.
6. Luigi Volpicelli, *La Scuola in Italia e il Problema Sociale*, Armando Editore, [Rome], 1969, p. 10.
7. "Illiterate Population and Percentage of Illiteracy, Consensus of Surveys since 1945," *UNESCO Statistical Yearbook, 1965*, UNESCO, [Paris, 1966], p. 43.
8. Robert Giannerelli, *Compendio di Leggi e Regolamenti sull'Istruzione Secondaria: Coordinati e Commentati* (undicesima edizione ampliata e aggiornata), Felice le Monnier, Florence, 1967, p. [85].
9. Antonio S. Ruggiu, "The Evolution of the Italian Educational System," *Comparative Educ. Rev.*, 11, 348 (1967).
10. Italy, Ministero del Bilancio e della Programmazione Economica, *Progetto 80*, p. 129.
11. Virginia Carini-Dainotti, *La Biblioteca Pubblica in Italia tra Cronaca e Storia (1947-1967): Scritti, Discorsi, Documenti*, 2 vols.; Leo S. Olschki, Florence, 1969. Vol. 2, pp. 270-273.
12. Virginia Carini-Dainotti, "Il Servizio Nazionale di Lettura," *La Parole e il Libro*, 37, 149-153 (1954).
13. Ref. 11, Vol. 2, p. 321.
14. Ref. 11, Vol. 2, p. 387.
15. Attilio Frajese, "Il Piano 'L,'" *Accademie e Biblioteche d'Italia*, 31, 195-197 (1963).
16. Luigi Balsamo, "I Primi Standard Italiani della Biblioteca Pubblica," *Bibliofilia*, 76, 209-211 (1964).
17. For a description of the organization and functioning as well as a summary of the history of the development of Italian governmental libraries, see Ugo Costa, *Codice delle Biblioteche Italiane*, A. Mondadori, Milan, 1937, and the second edition published by Istituto Poligrafico dello Stato, Rome, 1949.
18. These are not small personal collections, but collections which are important to the artistic, literary, and political history of Italy. The national government exercises supervision and

- some control over these collections, and sometimes includes them in its official statistics. For example, Italy, Direzione Generale della Statistica, *Statistica delle Biblioteche*, Vol. 2. Pt. 1, Tipografia Nazionale di G. Bertero, Rome, 1894.
- 18a. These are private collections which are open to the public a few hours a week. They sometimes receive a slight government subsidy. These also are included in the official government statistics. For example, Italy, Direzione Generale delle Accademie e Biblioteche, *Le accademie e le biblioteche d'Italia nel sessennio, 1926/7-1931/2*, Istituto Poligrafico dello Stato, Rome, 1933.
- 18b. Adapted from Lewis A. Bilancio, "The Italian State Public Library System down to 1935," Unpublished Master's dissertation, University of Chicago, 1949, pp. 1-2. The two references above are from Bilancio.
19. "Decreto del Presidente della Repubblica, 5 Settembre 1967, n[umero] 1501; Regolamento Organico delle Biblioteche Pubbliche Statali," *Repubblica Italiana, Supplemento Ordinario alla Gazzetta Ufficiale*, number 116, May 8, 1968.
20. "Regio Decreto 24 Ottobre 1907, numero 733," in Ugo Costa, *Codice delle Biblioteche Italiane*, 2nd ed., A. Mondadori, Milan, 1949, pp. 131-132.
21. Ref. 20, pp. 130-131.
22. "Decreto del Presidente della Repubblica 5 Settembre 1967, numero 1501," *Supplemento Ordinario alla Gazzetta Ufficiale*, number 116, May 8, 1968.
23. Ref. 20, p. 12.
24. Italy, Direzione Generale delle Accademie e Biblioteche, *Le Accademie e el Biblioteche d'Italia nel Sessennio, 1926/1927-1931/1932*, Istituto Poligrafico dello Stato, Rome, 1933.
25. *Accademie e Biblioteche d'Italia; Annali della Direzione Generale*, I Rome, July/August, 1927-.
26. Ref. 20, p. 426.
27. "Elenco dei Direttori Generali della Direzione delle Accademie e Biblioteche dal 1926 ad oggi," typewritten report received from the Direzione Generale delle Accademie e Biblioteche, November 1969.
28. For detailed information about the organization, function and administration of the Bureau see Italy, Direzione Generale delle Accademie e Biblioteche, *Ruolo di Anzianità*, Ministero della Pubblica Istruzione, Rome, 1966, pp. 6-23.
29. Virginia Carini-Dainotti, "La Politica della Direzione Generale delle Biblioteche dal 1926 al 1966," *Accademie e Biblioteche d'Italia*, 25, 396-418 (1967) (also reprinted).
30. Salvatore Accardo, "Accademie e Biblioteche per la Diffusione della Cultura," *Ibid.*, 37, 89 (1969).

BIBLIOGRAPHY

- Accardo, Salvatore. "Accademie e Biblioteche per la Diffusione della Cultura," *Accademie e Biblioteche d'Italia* 37, 89-99 (1969).
- Balsamo, Luigi. "I Primi Standard Italiani della Biblioteca Pubblica," *Bibliofilia*, 76, 209-211 (1964).
- Bilancio, Lewis A., "The Italian State Public Library System Down to 1935," Unpublished Master's thesis, University of Chicago, 1949.
- Carini-Dainotti, Virginia, *La Biblioteca Pubblica in Italia tra Cronaca e Storia, 1947-1969*. Leo S. Olschki, Florence, 1969.
- Carini-Dainotti, Virginia. "La Politica della Direzione Generale delle Biblioteche dal 1926 al 1966," *Accademie e Biblioteche d'Italia*, 25, 396-418 (1967).
- Carini-Dainotti, Virginia. "Il Servizio Nazionale di Lettura." *La Parole e il Libro*, 37, 149-153 (1954).
- Costa, Ugo. *Codice delle Biblioteche Italiane*. A. Mondadori, Milan, 1949.

"Decreto del Presidente della Repubblica. 5 Settembre 1967. Numero 1501; Regolamento Organico delle Biblioteche Repubbliche Statali." *Italy. Gazzetta Ufficiale*, May 1, 1968.

"Decreto del Presidente della Repubblica, 5 Settembre, 1967. Numero 1501." *Supplemento Ordinario alla Gazzetta Ufficiale*, No. 116, May 8, 1968.

"Elenco dei Direttori Generali della Direzione delle Accademie e Biblioteche dal 1926 ad Oggi." Typewritten report received from the Direzione Generale delle Accademie e Biblioteche. November 1969.

Ernst, Morris L., and Judith A. Posner, eds., *The Comparative International Almanac*, Macmillan, New York, 1967.

Frajese, Attilio, "Il Piano 'L,'" *Accademie e Biblioteche d'Italia*, 31, 195-197 (1963).

"Illiterate Population and Percentage of Illiteracy. Censuses or Surveys Since 1945." *UNESCO Statistical Yearbook, 1965*, UNESCO, Paris, 1966, p. 43.

Italy, Direzione Generale delle Accademie e Biblioteche, *Le Accademie e le Biblioteche d'Italia nel Sessennio, 1926/7-1931/2*, Istituto Poligrafico dello Stato, Rome, 1933.

Italy, Istituto Centrale di Statistica, *Annuario Statistico Italiano, 1968*, Rome, 1969.

Italy, Istituto Centrale di Statistica, *Sommario di Statistiche Storiche dell'Italia, 1861-1965*, Rome, 1968.

Italy, Istituto Centrale di Statistica, "Statistica delle Biblioteche Italiane, 1965." *Supplemento Straordinario al Bollettino Mensile di Statistica*, n. 11, November 1967.

Italy, Ministero del Bilancio e della Programmazione Economica, *Progetto 80. Rapporto Preliminare al Programma Economico Nazionale 1971-1975*, Libreria Feltrinelli, Milan 1969.

New York Times, "Population on Italy's Farms Fall 5 Million in 15 Years." February 10, 1967.

Organization for Economic Cooperation and Development, *Development of Secondary Education: Trends and Implications*, Paris, 1969.

Parsons, Annette Barnes, "Italian National Bibliography, 1861-1960," Unpublished Master's thesis, University of North Carolina, Chapel Hill, 1962.

"Popolazione, Bilancio Demografico Nazionale." Tav. 2-1. Repubblica Italiana. Istituto Centrale di Statistica, *Bollettino Mensile di Statistica*, [N.S.] 44(5), 11 (1969).

Rugiu, Antonio Santoni, "The Evolution of the Italian Educational System, 1956-1966," *Comparative Educ. Rev.* 11, 348-359 (1967).

The Statesman's Year-Book 1973-74, St. Martin's Press, New York, 1973.

Volpicelli, Luigi, *La Scuola in Italia e il Problema Sociale*, Armando, Rome 1959.

SAVINA A. ROXAS

ITALY, LIBRARY EDUCATION IN

University level library education was first offered in Italy in 1865, but it was not until the 1920s that formal library schools were established. The seven schools in Italy that were founded between 1924 and 1952 offer postgraduate university diploma programs on a continuing basis. The following article, devoted primarily to

these institutions, also reviews the independent courses and programs that are offered both within and outside the university sphere.

Provisions for education for librarianship were included in government legislation in 1869, 1876, 1886, and 1908. The first laws were abortive attempts. It was not until 1924 that the first postgraduate library school was finally established, fully implementing the 1908 law. Until 1924, training had consisted of on-the-job apprenticeship for all types of library work.

Historical Development

The first library education courses in Italy were offered in the city of Naples. In 1816, King Ferdinand annexed the National Giocchina Library to the University of Naples' library and established a chair of literary biography and bibliography (1). The university librarian, Luigi Federici, was the first to hold the chair and teach the course. A similar course was offered in 1818 at the Ferdinand Library newly founded by the king (1). The records do not indicate how long the courses continued or whether there was a causal relationship between them and library education taught later at the University of Naples.

In 1865 Tommaso Gar received the appointment as librarian at the University of Naples. As part of his responsibilities he taught bibliology with the training of librarians as its expressed objective (2). The course consisted of practical and theoretical aspects of paleography, history of printing, history of libraries, cataloging, administration, rare books, the commercial book trade, and other subjects. In Gar's opinion, training by apprenticeship no longer served the profession. It was time for librarians to receive university level library school education that would enable them to convert the mausoleum-type libraries into dynamic institutions and so enrich the entire public (3).

The next important library education innovation occurred in 1869. A law established the State Public Library System and also provided for a 2-year library training program at the national libraries (4). However, the course for library training was never put into practice. To remedy the situation, on January 20, 1876, another law was passed providing for 2 years of technical training for library personnel at some of the national libraries. Again, the provisions of the law were not implemented. Another law passed February 20, 1886, provided for library schools at the two National Central Libraries in Rome and Florence (5). This too never materialized and the law was abrogated in 1889 (6). In its place an apprentice system was organized for the preparation of library personnel. It established eligibility norms for various positions within libraries (7).

Lack of implementation of library education laws up to this time was due to several reasons. Although the necessary legislation was in existence to create library education programs, financial appropriations for them did not materialize. Another important reason was the 1862 law that prohibited state employees from teaching in universities. This effectively prevented the staffing of library education

TABLE 1
Chronological List of Italian Library Schools

Legal date established	Name of institution	Location
1923	Postgraduate School for Librarians and Archivists	University of Bologna
1924	Historical-Philological School of the Three Venices (Venezia Tridentina, Venezia Giulia, and Veneto)	University of Padua
1925	Postgraduate School for Librarians and Archivists- Paleographers	University of Florence
1926	Postgraduate School for Archivists and Librarians	University of Rome
1934	Vatican Library School	Vatican Apostolica Library
1951	Postgraduate School for Archivists, Paleographers, and Librarians	University of Milan
1952	Postgraduate School for Librarians and Archivists	University of Naples

schools. Luigi Rava, Minister of Public Instruction, was aware of the need for library schools and he realized that the 1862 law was a major impediment (8). Under his leadership legislation was passed in 1908 granting library directors the right to teach in an official capacity in universities and special schools (9). Most of Minister Rava's recommendations for founding university level library schools were accepted. Librarians were now free to accept teaching positions. However, Rava fell from power when war with Libya was declared, so the law did not go into effect until 1915. The first two librarians to hold university teaching positions were Guido Biagi, librarian of the Mediceo-Laurenziana, and Albano Sorbelli, librarian of the Communal Archiginnasio Library. Biagi was at the Florence Institute of Higher Studies and Sorbelli at the University of Bologna.

Library Schools, Their Founding, Distribution, and Enrollment*

It was not until 1923, however, that the first university level library school was officially founded fully implementing the 1908 law. By 1952 (see chronology, Table 1) there were seven library schools in Italy (including the Vatican Library School) located in the major cities of Milan, Padua, Bologna, Florence, Rome, and Naples, an adequate geographic spread of the country. By 1980, if present population trends continue, 37% of the population will be concentrated in such metropolitan areas. By the year 2000 the figure is expected to rise to 45% (10). Except for the southernmost part of the country, library schools will be located in the populous areas.

Today, all of the schools have university post-graduate programs for librarians and archivists except the Vatican Library School that is open to secondary school graduates.

* For detailed statistics and discussion, see Roxas (19).

Of the six university postgraduate library schools founded to the present time, four were established between 1923 and 1926. The first, the Postgraduate School for Librarians and Archivists, University of Bologna, founded September 20, 1923 by Royal Decree number 2102, offers a 2-year course that awards a composite diploma for librarian-archivist.

The second, the Historical-Philological School of the Three Venices, University of Padua, founded October 25, 1924 with legal approval of the Minister of Public Education, offers a 2-year course that qualifies its graduates for positions in libraries, archives, galleries, or museums according to the diploma earned (11).

The third, the Postgraduate School for Librarians and Archivist-Paleographers, University of Florence, founded October 29, 1925 by Royal Decree number 1968, evolved from the 1880 School of Paleography of the Institute of Higher Studies in Florence. Two distinct diplomas are awarded after the 2-year course of study; one for librarian and one for paleographer-archivist. Another diploma is offered for an additional year of study and specialization.

The fourth, the Postgraduate School of Archivists and Librarians, University of Rome, founded October 14, 1926 by Royal Decree number 2319, awards three diplomas, one for librarian, one for archivist-paleographer, and one for conservator of manuscripts.

The fifth and sixth postgraduate library schools in Italy were founded in the 1950s. The Postgraduate School for Archivists, Paleographers, and Librarians, University of Milan, founded October 27, 1951 by Presidential Decree number 1825, awards one of three diplomas after a 2-year course of study depending on the area of specialization. The Postgraduate School for Librarians and Archivists, University of Naples, founded September 19, 1952 by Presidential Decree number 4551, awards two distinct diplomas depending on the area of specialization.

The seventh library school, the Vatican Library School, that was founded as a part of the Vatican Apostolica Library in 1934, offers a 1-year program of study for librarianship. Although it is open to students completing secondary school, many of its enrollees are university graduates from many parts of the world. The school has a vigorous well attended program.

Librarianship in Italy on a university postgraduate diploma level has not been a growing profession. The Italian postgraduate diploma program has had relatively few graduates (see chronology in Table 2). From 1924 through 1968, only 196 of the 1,783 enrollees in these postgraduate schools, or 11%, have earned a diploma.

Administration, Faculty, and Directors

The postgraduate library schools are part of the Faculty of Letters and Philosophy at each of the universities with the exception of the University of Rome which achieved the status of a separate university faculty in 1952 (12). The University of Florence Library School is the only one founded directly by the government. The others were initiated locally by the universities (13). All the legislative norms, rules,

TABLE 2

Postgraduate Library School Enrollment and Diplomas Awarded 1924-1968

School	Years	Total enrollment	Diplomas awarded
Historical-Philological School of the Three Venices, University of Padua	1924-1968	1,011	119
Postgraduate School for Librarians and Archivists, University of Bologna	1925-1968	82	35
Postgraduate School for Librarians and Archivist-Paleographers, University of Florence	1926-1967	202	15
Postgraduate School for Archivists and Librarians, University of Rome	1927-1968	359	22*
Postgraduate School for Archivists, Paleographers, and Librarians, University of Milan	1951-1968	89	0
Postgraduate School for Librarians and Archivists, University of Naples	1955-1968	40	5
		<u>1,783</u>	<u>196</u>

* Figures for number of diplomas awarded are not available until 1948.

and regulations of the university apply to the postgraduate library school and its offerings.

The library school faculty and directors receive their appointments in accordance with the general university regulations that govern other schools in the university. Each year a faculty member is nominated director of the school by the Faculty Council composed of professors with tenure in the Faculty of Letters. The director is eligible for renomination.

Although there are general rules concerning courses, the faculty may make its own arrangements concerning the duration of the course and the class hours in accordance with the specialized requirements a faculty member deems necessary. Professors who receive annual appointments are often specialists. For example, the directors of important libraries teach courses in librarianship. In all Italian universities, specialists who receive teaching appointments usually earn a *Libera Docenza*, a degree approximating the United States Ph.D.

Classes for librarians-archivists are held in the same area in which the faculty of letters meets. The faculty collection of books and materials is used by the students as the library school library.

Admission and Diploma Requirements, Plan of Studies

A university degree is required for admission to all the postgraduate library schools. The University of Florence and the University of Rome will also admit upperclassmen to the program, thereby reducing the two-year graduate program to

one year. The usual library school admission prerequisite of a classical secondary school diploma was replaced at the University of Rome by a qualifying examination in Greek.

All the postgraduate library schools have a two-year program of studies (the University of Florence offers a third year for specialization after a student has earned a two year diploma). Both the University of Rome and the University of Florence admit upperclassmen into the program in addition to university graduates. The upperclassmen are then able to complete the graduate library school program in one year instead of two.

The usual plan of studies consists of required courses and complementary courses. The following are examples of the required courses: (1) general and special bibliography with practical exercises; (2) librarianship, comparative legislation, and library service with practical exercises; (3) Latin paleography; (4) bibliography and history of libraries; (5) history of the book and book decorative arts; (6) general archives; and (7) cataloging and classification and practical exercises.

The following are examples of complementary courses: (1) French language and literature, (2) English language and literature, (3) German language and literature, (4) Spanish language and literature, (5) Russian language and literature, and (6) Slavic language and literature.

After passing the required written and oral examinations and receiving a certificate of satisfactory class attendance, students are required to present and defend a written dissertation before a seven member faculty committee. As a part of the 2-year program, students are assigned to libraries by the library school director for 3 months of practical experience. The library director oversees the student and submits a written report on his work to the library school. In most of these library schools final examinations include work with English, French and German bibliographical tools and an exercise in cataloging material in a slavic or oriental language.

Scholarships and financial support are available for needy students.

Research and Publications

University library school professors in Italy write and publish actively. The University of Rome, Postgraduate School for Librarians and Archivists, has published a bi-monthly journal since 1960, *Annali della Scuola Speciale per Archivisti e Bibliotecari dell' Università di Roma*. Processed material for course outlines and for student information is available from most of the library schools. Faculty papers and the annual proceedings of library association conferences are published in the official journal for the Italian Bureau of Academies and Libraries, *Accademie e Biblioteche d'Italia*. Faculty publications also appear in *Bibliofilia*, *Bollettino del Istituto di Patologia del Libro*, and other library and book oriented journals.

Special Courses

The Ministry of Public Instruction has offered a Course for Preparation of Personnel for Popular and School Libraries since 1936. Course duration is approximately one academic year. Examinations are based upon the theoretical and practical course work. A certificate is awarded to those who pass. From 1945 to 1969, 396 courses were offered with 28,923 participants of whom 21,077 sat for the examination (12).

Since 1952, courses for continuing education of librarians, patterned after those in the United States, have been offered by the Postgraduate School for Archivists and Librarians, University of Rome. Between 1967 and 1969 a total of 237 librarians attended the eight course offerings (13).

The Alfonso Gallo Institute for the Pathology of the Book established in Rome in 1938 by the Bureau of Academies and Libraries serves as a training and research center for the preservation of library materials. The Institute was the first of its kind in the world (14). Dr. Emerenziana Vaccaro, Director of the Institute, is a graduate of the University of Rome, Postgraduate School for Archivists and Librarians. Starting in 1948, the Institute has offered 1 to 3 year courses for librarians and for rare bookmen from many parts of the world. Short courses on book restoration are also a part of the instruction program.

Documentation courses in Italy are offered by both private and governmental institutions. The Committee for National Productivity (CNP) sponsored its first courses in 1956. CNP also sponsored two national congresses on problems related to the training of documentation and technical center personnel. These were held in Rome in 1960 and 1962 (15).

In 1968 the CNP educational activities became the responsibility of the Italian Institute for Increased Productivity. Each year an average of forty students attend the course on the techniques of documentation. The 14-day session includes 100 hours devoted to practical and theoretical class work.

The Research and Documentation Laboratory founded in 1968 as an agency of the National Research Council offered two courses for training documentalists assigned to the National Industrial Stations (16). These are research and development centers for new products and marketing innovations.

In 1963 the Organizational Study and Application Center (CSAO) in cooperation with the Politechnical Institute of Turin organized a documentation course. Professor Silvio Ceccato, Director of the Automation Linguistics Analysis Center, University of Milan, directed the course. Various documentation centers in the Milan and Turin area were visited by the students (17).

The University of Rome and the University of Pisa offer a course of training for information science specialists: the University of Rome since 1962 in the field of statistical, demographic and actuarial sciences (18). The University of Pisa since the academic year 1969/1970 has offered an undergraduate degree in information science and there has been a Center of Electronic Computer Studies since 1955.

Summary and Current Developments

Most libraries in Italy fall within the national network of libraries under the State Public Library System. Civil service appointments fill most positions in these libraries. Because specialized training is not prerequisite for admission to library civil service examinations, few students have been attracted to postgraduate library school programs. Apprenticeship training and attendance at supplementary short courses sponsored by the government are the methods used for preparing librarians for professional work. This system is not adequate according to the directors of major government libraries. More than 50% of the directors who replied to a questionnaire expressed the view that employees are inadequately prepared for their work. In their opinion apprentice-type training and supplementary short courses simply do not suffice (19). The time has come for mandatory formalized library school education for librarians. But library schools cannot command the necessary quota of students until the specialized education represented by the library school degree is made prerequisite for civil service examinations and for professional employment. An additional impetus to recruit students would be education for librarianship on an undergraduate level similar to that for other professions in Italy. Because the undergraduate degree (the *Laurea*) has prestige and recognition, the library profession would then be as attractive to prospective students as are other professions. So the logical solution is to place librarianship on a par with other professions by establishing a new *laurea*, one for an undergraduate library degree. This would replace the present postgraduate library diploma. Any further specialization for librarianship could then be offered at the postgraduate level.

In 1972 the Italian Library Association committee on the professional training of librarians under the direction of Francesco Barberi, Olga Marinelli, and Nereo Vianello presented a set of proposals to the Italian government to train librarians (20). The proposals were presented at the International Federation of Library Associations' meeting of that year. Included in the proposals is a recommendation to adopt an undergraduate degree in librarianship as a prerequisite for admission to library civil service examinations. It is hoped that the government will act on this proposal to help meet the need for fully trained professional librarians in Italy.

REFERENCES

1. M. Giuseppina Castellano Lanzara. "Un Centenario: il Corso di Bibliologia di T. Gar nell'Universita di Napoli." *AIB Bollettino d'Informazioni*, 5(5), 130 (1965).
2. Tommaso Gar. *Lecture di Bibliologia fatte nella Regia Universita degli studi di Napoli durante il Primo Semestre del 1865*. Unione Tipografico-Editrice, Turin, 1886, pp. [x]-xii.
3. Ref. 2, p. 17.
4. Giuseppe Fumagalli. *La Bibliografia*, 4th ed., riveduta e arricchita da G. Fumagalli e Olga Pinto, Ulrico Hoepli, Milan, 1935, p. lxxxiii.
5. Italy Ministero della Pubblica Istruzione. "Regolamento per la Scuola Tecnica Bibliografica." *Bollettino dell'Istruzione*, April 1886, p. [i].
6. Albano Sorbelli. *L'Insegnamento della Bibliologia e Biblioteconomia in Italia con Notizie sull'Insegnamento all'estero. Note e Considerazioni*. Cooperative Tipografica Azzonidi, Bologna, 1926, p. 12.

7. Ugo Costa, "Regio Decreto 25 Ottobre 1889, n. 6483," in *Codice delle Biblioteche Italiane*, A. Mondadori, Milan, [1937], p. 20.
8. "Scuola di Biblioteconomia," *Giornale della Libreria della Tipografia e delle Arti e Industrie Affini*, **21**, 304 (1908).
9. Ugo Costa, "Legge 24 Dicembre 1908, n. 754," in *Codice delle Biblioteche Italiane*, A. Mondadori, Milan, [1937], p. 412.
10. Italy, Ministero del Bilancio e della Programmazione Economica, *Progetto 80, Rapporto Preliminare al Programma Economico Nazionale 1971-1975*, Libreria Feltrinelli, [Milan], [1969], p. 48.
11. Vittorio Lazzarini, *La Scuola Storico-Filologica delle Venezie negli Anni 1924-1937*, Tipografia del Seminario, Padua, 1939, p. 6.
12. Italy, Bureau of Academies and Libraries, "Courses Preparing Personnel for Service in Popular and School Libraries: Number of Participants and Number of Diplomas Awarded, 1945-1969." Unpublished Report by the Bibliographical Superintendencies.
13. Italy, Bureau of Academies and Libraries, Professor Francesco Barberi, Superior Bibliographical Inspector, Unpublished Report, May 20, 1970.
14. Emerenziana Vaccaro, "Vita e Attività Istituzionale dell'Istituto di Patologia del Libro 'Alfonso Gallo,'" *Accademie e Biblioteche d'Italia*, **35**, 462-463 (1967).
15. Bruno Balbis, *Professional Training for Documentation Theorists*, Consiglio Nazionale delle Ricerche, Rome, 1963, p. [3].
16. Maria Pia Carosella, "Scientific and Technical Policy Group; Recent Developments in National Information Policy, Italy," Report to CNR, Rome, 1968, Mimeographed.
17. *Lezione Svolte nel 1° Corso di Aggiornamento sulle Tecniche Documentarie ed Informative*, Centro di Studi ed Applicazione di Organizzazione Aziendale delle Produzione e dei Trasporti, Turin, 1936, pp. i-v.
18. Ref. 15, p. 4.
19. Savina A. Roxas, *Library Education in Italy: An Historical Survey, 1870-1969*, Scarecrow, Metuchen, New Jersey, [1971], p. 144.
20. Nereo Vianello, *Proposte per la Formazione Professionale*, Associazione Italiana Biblioteche, [Rome], [1972?], pp. 1, 7.

BIBLIOGRAPHY

- Apolloni, Ettore, "I Corsi di Preparazione per le Biblioteche Popolari," *Accademie e Biblioteche d'Italia*, **11**, 39-41 (1937).
- Apolloni, Ettore, "Il Secondo Esperimento dei Corsi per Dirigenti di Biblioteche Popolari," *Ibid.*, **12**, 142-148 (1938).
- "Appunti dalle Lezioni di Bibliotecologia, Bibliotecnica e Bibliografia," Università di Firenze, Scuola Bibliotecari e Archivisti Paleografi, Anno Accademico 1955-1956, Mimeographed.
- Ascarelli, Fernanda, "Il Codice Italiano di Regole per la Catalogazione I Problemi più Dibattuti della Catalogazione per Autori Secondo I Punti dello Statement of Principles, Corsi di Aggiornamento per Restauro," Università di Roma, Scuola Speciale per Archivisti e Bibliotecari, 1967, Mimeographed.
- Ascarelli, Fernanda, "Lezioni di Bibliografia Guida alle Bibliografie Generale e Speciali 1945-1958; Corso di Aggiornamento per Bibliotecari," Università di Roma, Scuola Speciale per Archivisti e Bibliotecari, 1967, Mimeographed.
- Ashby, Robert F., "Training Librarians: an Italian Experiment," *Lib. Assoc. Record*, **56**, 477-479 (1954).
- "Atti del Convegno dei Restauratori Tenutosi all'Istituto di Patologia del Libro dal 29 al 31 Maggio 1967," *Bollettino del Istituto di Patologia del Libro*, **26**, 81-137 (1967).

Balbis, Bruno, "L'Insegnamento della Documentazione in Italia: Esperienze e Problemi Relativi alla Pubblica Amministrazione," *Formazione e Aggiornamento alle Tecniche Documentarie*, Centro di Studi ed Applicazioni di Organizzazione Aziendale, Turin, [1966].

Balbis, Bruno, *Professional Training for Documentation Theorists*, Consiglio Nazionale Delle Ricerche, Roman, 1963.

Barberi, Francesco, *Bibliografia e Bibliotecnica*, cura di Francesco Barberi. Laura De Felice, Tommaso Bozza, Collana "Realta," 11, [Lasalliana. Rome, 1957?].

Barberi, Francesco, "La Catalogazione del Libro Antico. Corso di Aggiornamento per il Restauro," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1958, Mimeographed.

Barberi, Francesco, "La Catalogazione per Autori Anteriormente alle Regole Italiane, Corso di Aggiornamento per il Restauro," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1968, Mimeographed.

Barberi, Francesco, "La Catalogazione Per Soggetti, Corso di Aggiornamento per il Restauro," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1968, Mimeographed.

Barberi, Francesco, "Cataloghi Collettivi, Corso di Aggiornamento per I Candidati all'Esami di Direttore di III Classe," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1968, Mimeographed.

Barberi, Francesco, "La Formazione del Bibliotecario," *Accademie e Biblioteche d'Italia* 25, 18-27 (1957).

Barberi, Francesco, "Per un Corso di Laurea in Biblioteconomia e Bibliografia," *AIB Bollettino d'Informazione*, 2, 72-74 (1962).

Barberi, Francesco, "Preparazione, Specializzazione, Utilizzazione del Personale delle Biblioteche." *Accademie e Biblioteche d'Italia*, 27, 463-472 (1959).

Barberi, Francesco, "Problemi Attuali della Catalogazione. Corso di Aggiornamento per I Candidati all'Esame di Direttore di III Classe," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1967, Mimeographed.

Bartolini, Franco, "Corsi di Aggiornamento per Bibliotecari." *Accademie e Biblioteche d'Italia*, 24, 295-305 (1956).

Battisti, Carlo, "Le Scuola per Bibliotecari a Firenze." *Leonardo*, 154-155 (June 20, 1926).

Battisti, Carlo, "La Scuola per i Bibliotecari in Italia." *World Congress of Libraries and Bibliography, 1st, Rome and Venice, 1929, Atti Pubblicati a Cura del Ministero della Educazione Nazionale*, Vol. 5, Rome: La Libreria dello Stato. Rome, 1931-1933.

Biagi, Guido, "Gli Esame per i Bibliotecari." *Rivista delle Biblioteche e degli Archivi*, 1, 80-85 (1888).

Biagi, Guido, "Questioni Urgenti di Biblioteconomia." *Ibid.*, 9, 113-125 (1898).

Biagi, Guido, [Temi del Corso de Bibliologia dato presso R. Biblioteca di Firenze l'anno 1883]. [Florence, n.p., 1884?].

Biagi, Guido, and Giuseppe Fumagalli. *Manuale del Bibliotecario*, Milan, [n.p.], 1894.

Bishop, William Warner, "La Scuola del Libro at Milan." *Lib. J.*, 29, 189 (1904).

Bisogno, Paolo, *Programma di Sviluppo dei Servizi di Documentazione ed Informazione delle Stazioni Sperimentali per l'Industria*, Consiglio Nazionale delle Ricerche, Rome, 1969.

Bottasso, Vincenzo, "Per un Corso di Laurea in Bibliologia." *Annali della Scuola Speciale per Archivistici e Bibliotecari dell'Università di Roma*, 7, 111-125 (1967).

Bottasso, [Vincenzo]. "La Preparazione Professionale dei Bibliotecari delle Biblioteche di [nti] Locali]." Unpublished report presented to the Congress for Italian Libraries. [1968?].

- Bottasso, Vincenzo, "Sulla Formazione Professionale dei Bibliotecari." Unpublished report presented at the Congress of the Association of Italian Libraries, 1969.
- Bravi, Lamberto, "Per una Facoltà di Biblioteconomia e di Archivistica." *Burocrazia*, 51-59 (February 1959).
- Bravi, Lamberto, "Le Scuole di Biblioteconomia e di Archivistica." *Accademie e Biblioteche d'Italia*, 26, 3-4 (1958).
- Camerani, Vittorio, "Lezioni di Biblioteconomia." *Bibliofilia*, 62, 300-301 (1960).
- Camerani, Vittorio, "La Scuola Speciale per Archivistici e Bibliotecari dell'Università di Roma." *Almanacco dei Bibliotecari Italiani, 1956*, Fratelli Palombi, Rome, [1957?].
- Carbone, Gregorio, *Norme per il Governo delle Biblioteche Militari*, Turin, [n.p.], 1862.
- Carini-Dainotti, Virginia, "La Biblioteca Popolare e la Cooperazione, Corso di Aggiornamento per i Candidati All'Esame di Direttore di III Classe," università di Roma, Scuola Speciale per Archivistici e Bibliotecari 1967, Mimeographed.
- Carosella, Maria Pia, "Scientific and Technical Policy Group; Recent Developments in National Information Policy, Italy." Report to CNR, Rome, 1968, Mimeographed.
- Castellano Lanzara, M. Giuseppina, "Un Centenario: il Corso di Bibliologia di T. Car nell'Università di Napoli," *AIB Bollettino d'Informazione*, 5, 129-146 (1965).
- Castiglioni, Elena, and Ezio Chichiarelli, *La Biblioteca Pubblica, Manuale ad uso del Bibliotecario*, Federazione Italiana delle Biblioteche Popolari, Milan, 1968.
- Caterino, Antonio, *Libro e Biblioteche Lezioni di Bibliografia e Biblioteconomia*, Cressati, Bari, [1961].
- Centro Didattico Nazionale di Studi e Documentazione, *Il Segnalibro, Manuale del Bibliotecario per Ragazzi*, [Giuntina], Florence, 1965.
- Cerulli, Emidio, "Descrizione degli Incunaboli, Corso di Aggiornamento per i Candidati all'Esame di Direttore di III Classe," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1967, Mimeographed.
- "Commissione di Studio per la Formazione Professionale del Bibliotecario," Unpublished report presented at the Congress for the Italian Library Association, Bolzano-Merano, 1965.
- "Concorso al Posto di Vice-Direttore della Biblioteca Malatestiana e Direttore dell'Archivio Storico di Cesena." *AIB Bollettino d'Informazione*, 9, 66-67 (1969).
- "Corsi e Conference del British Council per Bibliotecari." *Accademie e Biblioteche d'Italia*, 22, 379-380 (1954).
- "Corso di Aggiornamento per Bibliotecari di III Classe." *AIB Bollettino d'Informazione*, 6, 72-75 (1966).
- "Corso di Biblioteconomia Organizzato dal British Council." *Ibid.*, 9, 64 (1969).
- "Corso Elementare per Bibliotecari." *Libri D'Oggi*, 6, 33-40, 49-56 (1950).
- "Corso sul Restauro del Libro per Bibliotecari delle Biblioteche Pubbliche Statali, 29 Aprile-11 Maggio 1968." *Bollettino del Istituto di Patologia del Libro*, 27, 77-141 (1968).
- Cossar, Giuseppe, "Problemi e Prospettive di Documentalistica nell'Archivio di un Giornale." Unpublished doctoral dissertation, University of Milan, 1968-1969.
- Costa, Ugo, *Codice delle Biblioteche Italiane*, A. Mondadori, Milan, [1937].
- Costa, Ugo, *Codice delle Biblioteche Italiane*, 2nd ed., Istituto Poligrafico dello Stato, Rome, 1949.
- Cutolo, Alessandro, *Lezioni di Bibliografia e Biblioteconomia*, Raccolte a cura del Dott. Luigi Banti, La Goliardica Edizioni Universitarie, Milan, [1950?].

D'Amato, Beniamino, *La Biblioteca Moderna Lezioni per il Corso di Preparazione agli Uffici e ai Servizi delle Biblioteche Popolari e Scolastiche*, Alfredo Cressati, Bari, 1952.

Donati, Lamberto, "Catalogazione degli Incunabuli; Corso di Aggiornamento per il Restauro," Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1968, Mimeographed.

"Elenco dei docenti della Scuola Speciale per Archivistici e Bibliotecari per l'Anno Accademico 1968/69," Minutes of Faculty Meeting, 1969, Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1969.

Fabietti, Ettore, *La Biblioteca Popolare Moderna Manuale per le Biblioteche Pubbliche, Popolari, Scolastiche, per Fanciulli, Ambulanti, Autobotteche, ecc.*, 4th ed., Antonio Vallardi, Milan, [1933].

Ferrari, Carola, "Corso di Aggiornamento per Bibliotecari," *Accademie e Biblioteche d'Italia*, 24, 193-197 (1956).

"Formation des Bibliothécaires en Italie," *International Congress of Libraries and Documentation Centres*, 2, 105-111 (1955).

"La Formation Professionnelle des Bibliothécaires en Europe," *Libri*, 16, 282-311 (1966).

"La Formazione del Bibliotecario," *Accademie e Biblioteche d'Italia*, 25, 18-27 (1957).

Fuiano, Michele, *Appunti di Bibliologia*, Libreria Scientifica, Naples, [1969].

Fuiano, Michele, *Bibliografia e Biblioteconomia*, Libreria Scientifica, Naples, [1967?].

Fumagalli, Giuseppe, *La Bibliografia*, 4th ed., riveduta e arricchita da G. Fumagalli e Olga Pinto, Ulrico Hoepli, Milan, 1935, p. lxxxiii.

Fumagalli, Giuseppe, *Il Primo Anno del Corso di Bibliografia Pratica per i Commessi, Librai*, Tipografia Pagnoni, Milan, 1891.

Fumagalli, Giuseppe, "Utilità, Storia ed Oggetto dell'Insegnamento Bibliografico," *L'Università-Rivista dell'Istruzione Superiore*, 1-25 (November-December 1890).

Gar, Tommaso, *Lecture di Bibliologia; Fatte nell'Università degli Studi di Napoli Durante il Primo Semestre del 1865*, Unione Tipografica, Turin, 1868.

Giordani, Igino, "La Scuole Vaticana di Biblioteconomia," *Lib. Quart.*, 12, 495-503 (1942).

Gnoli, T., "Mancanza di Bibliotecari e di Scuole Bibliografiche," *Il Secolo*, (1926).

"Gruppo di Studio per la Formazione dei Bibliotecari Speciali e di Documentalisti," *AIB Bollettino d'Informazione*, 6-7, 67-68 (1966-1967).

Guerreiri, Guerriera, *Costituzione, e Vita di Una Biblioteca; Corso di Preparazione all'Ufficio di Bibliotecario*, Leo Lupi, Naples, 1963.

Henriot, Gabriel, "La Formation Professionnelle des Bibliothécaires," *Revue des Bibliothèques*, 39, 121-154 (1929).

Hodgson, James G., "The Library Schools of Italy," *Lib. J.*, 573-575 (June 1, 1927).

Ignotud, "Le Sorti delle Biblioteche e la Preparazione dei Bibliotecari e dei Librai," *Il Marzocco*, (May 16, 1926).

Inaugurazione delle Scuola del Libro (XIII Marzo MCMIV), Allegretti, Milan, 1904.

Institut International de Coopération Intellectuelle. *Rôle et formation du Bibliothécaire: Etude Comparative sur la Formation Professionnelle du Bibliothécaire*, Société des Nations, Institut International de Coopération Intellectuelle, Paris [1935].

"L'Istituto di Cooperazione Intellettuale a la Preparazione Professionale dei Bibliotecari," *Accademie e Biblioteche d'Italia*, 8, 388-390 (1934).

Italy, Bureau of Academies and Libraries. "Courses Preparing Personnel for Service in Popular and School Libraries: Number of Participants and Number of Diplomas Awarded, 1945-1969," Unpublished report by the Bibliographical Superintendencies.

Italy, Ministero del Bilancio e della Programmazione Economica. *Progetto 80, Rapporto Preliminare al Programma Economico Nazionale 1971-1975*. Libreria Feltrinelli. [Milan]. [1969].

Italy, Ministero della Pubblica Istruzione. "Regolamento per la Scuola Tecnica Bibliografica." *Bollettino dell'Istruzione*, 1-10 (April 1886).

Lazarini, Vittorio. *La Scuola Storico-Filologica delle Venezie negli Anni 1924-1937*. [University of Padua], Padua, 1939.

Lezioni Svolte nel 1° Corso di Aggiornamento sulle Tecniche Documentaire ed Informative, Centro di Studi ed Applicazione di Organizzazione Aziendale della Produzione e dei Trasporti, Turin, 1963.

Ludington, Flora B. "The American Contribution to Foreign Library Establishment and Rehabilitation." *Lib. Quart.*, 24, 192-204 (1954).

Marinelli, A. V. "Seminars on United States Libraries and Librarianship in Italy." *Library of Congress Information Bull.*, 11, 19-23 (1952).

Milkau, Fritz, and Georg Leyh. *Handbuch der Bibliothekswissenschaft*, 2nd ed., Harrassowitz, Wiesbaden, 1955.

Miola, Alfonso. *L'insegnamento della Paleografia nella Biblioteca Nazionale di Napoli*, Tipografia dell'Accademia Reale delle Scienze, Naples, 1885.

Mira, Giuseppe. *Manuale Teorico Pratico di Bibliografia*. Palermo. [n.p.], 1861-1862.

Nobili, Maria Nennella. "I Corsi per Dirigenti delle Biblioteche Popolari." *Accademia e Biblioteche d'Italia*, 12, 242-247 (1938).

Nobili, Maria Nennella. "I Nuovi Corsi per Dirigenti delle Biblioteche Popolari." *Ibid.*, 13, 405-406 (1939).

Nofri, Luisa. *Corsi di Preparazione per gli Uffici e i Servizi delle Biblioteche Popolari*, Paravia, Turin, 1937.

Olivieri, Laura De Felice. "La Distribuzione e l'Arredamento dei Locali Nella Biblioteca Moderna, Corso di Aggiornamento per I Candidati all'Esame di Direttore di III Classe." Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1967. Mimeographed.

Olivieri, Laura De Felice. "Struttura della Biblioteca Moderna nei Suoi Vari Tipi, Corso di Aggiornamento per I Candidati all'Esame di Direttore di III Classe." Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1967. Mimeographed.

Ortiz, Maria. "Scuola Pratica di Formazione e Perfezionamento per gli Impiegati delle Biblioteche dello Stato." *Word Congress of Libraries and Bibliography, 1st, Rome and Venice, 1929, Atti Pubblicati a Cura del Ministero della Educazione Nazionale*, Vol. 5, La Libreria dello Stato, Rome, 1931-1933.

Ottino, Giuseppe. *Manuale di Bibliografia*, Milan. [n.p.], 1885.

Pagetti, Renato. "L'Albo Professionale per i Bibliotecari." Unpublished report presented at the Congress of the Association of Italian Libraries, Fiuggi, May 1967.

Panella, Antonio. "La Nuova Scuola per Archivistici e Bibliotecari." *Il Marzocco*, 31, 1 (1926).

Paratore, Gaetano. "Legislazione delle Biblioteche, Corso di Aggiornamento per I Candidate all'Esame di Direttore di III Classe." Università di Roma, Scuola Speciale per Archivistici e Bibliotecari, 1967. Mimeographed.

Paretti, Linda, "Esperienze Italiane sulla Formazione ed Aggiornamento Professionale nelle Tecniche Documentaire ed Informative," *Formazione e Aggiornamento alle Tecniche Documentaire*, Centro di Studi ed Applicazioni di Organizzazione, Turin, [1966].

Per una Scuola del Libro da Instituirsi a Milano sotto il Patrocinio della Società Umanitaria, Tipografia degli Operai, Milan, 1902.

Pinto, Olga, "L'Informazione Bibliografia, Corso di Aggiornamento per I Candidati all'Esame di Direttore di III Classe," Università di Roma, Scuola Speciale per Archivisti e Bibliotecari, 1967, Mimeographed.

Pinto, Olga, *Manuale del Bibliotecario delle Piccole e Medie Biblioteche*, Signorelli, Rome, 1936.

Pinto Vecchi, Elena, "L'Educazione Professione del Bibliotecario," *Accademie e Biblioteche d'Italia*, 5, 394-423 (1931-1932).

Piquard, Maurice, "The Training of Librarians in Europe," *UNESCO Bull. Lib.*, 21, 311-316 (1967).

Pirani, Emma Coen, *Manuale del Bibliotecario*, 3rd ed., Società Tipografica Editrice Modenese, Modena, [1955].

Pirani, Emma Coen, "Il Nuovo Programma di Preparazione agli Uffici e ai Servizi della Biblioteca Pubblica," *Accademie e Biblioteche d'Italia*, 31, 56-73 (1963).

R. Università degli Studi di Padova, Scuola Storico-Filologica delle Venezie, "Verbale delle Adunanze," January 17, 1925-October 22, 1942, Handwritten.

"Relazione della Commissione di Studio per le Biblioteche delle Università," Unpublished report presented at the Congress for the Association of Italian Libraries, Venice, May 1968.

Rostagno, Enrico, "Le Scuole per i bibliotecari in Italia," *World Congress of Libraries and Bibliography, 1st, Rome and Venice, 1929, Atti Pubblicata a Cura del Ministero della Educazione Nazionale*, Vol. 5, La Libreria dello Stato, Rome, 1931-1933.

Roxas, Savina A., *Library Education in Italy: An Historical Survey, 1870-1969*, Scarecrow Press, Metuchen, New Jersey, 1971, p. 144.

Russi, Luciano, "Problemi Bibliografici Connessi con l'Organizzazione di una Moderna Biblioteca, Corso di Aggiornamento per il Restauro," Università di Roma, Scuola Speciale per Archivisti e Bibliotecari, 1968, Mimeographed.

Rutgers, The State University of New Jersey, Graduate School of Library Service, "Seminar on American Library Service for Eleven Italian Library Specialists, July 2-27, 1956." Mimeographed.

Santovito Vichi, Nella, "Avviamento ai Corsi di Preparazione per il Personale addetto alle Biblioteche Popolari," *La Parole e il Libro*, 93-99 (March-April 1952); 236-241 (July-August 1952).

Sartori, Claudio, "Musica Fondi Principali-Conservazione: Corso di Aggiornamento per il Restauro," Università di Roma, Scuola Speciale per Archivisti e Bibliotecari, 1968, Mimeographed.

"Scuola per Bibliotecari ed Archivisti Paleografi." R. Università degli Studi di Firenze, *Attività Didattica e Scientifica nel Decennio 1924-1934*, [The University, Florence, 1935?].

"Scuola di Biblioteconomia," *Giornale della Libreria*, 21, 303-304 (1908).

"Scuola Speciale per Bibliotecari." *Bibliofilia*, 54, 160 (1952).

Il Segnalibro, Manuale del Bibliotecario per Ragazzi, Centro Didattico Nazionale di Studi e Documentazione, Florence, 1965.

Sorbelli, Albano, *L'Insegnamento della Bibliologia e Bibliologia e Biblioteconomia in Italia con Notizie sull'Insegnamento all'Estero. Note e Considerazioni*, Azzoguidi, Bologna, 1926.

Sorbelli, Albano, "Nuovi Insegnamenti: Corso di Bibliologia e Biblioteconomia all'Università di Bologna." *Università Italiana*, 25, 7-8 (1916).

Sorbelli, Albano, "La Preparazione dei Dirigenti e Funzionari delle Biblioteche del Popolo." *Accademie e Biblioteche d'Italia*, 8, 600-608 (1934).

Stendardo, Guido, "Conservazione e Tutela del Materiale Librario: Corso di Aggiornamento per I Candidati all' Esame di Direttore di III Classe." Università di Roma. Scuola Speciale per Archivisti e Bibliotecari, 1967. Mimeographed.

Tisserant, Eugene, "Le Cours de Biblioteconomie de la Bibliothèque Vaticane." *Archives et Bibliothèques*, 1, 42-45 (1935).

Università di Bologna, "Verbale della Seduta della Scuola di Perfezionamento in Biblioteconomia ed Archivistica. Tenuta dal 1959 al 13 Giugno 1969." Handwritten and Typewritten.

Università di Bologna, *Annuari 1923-1966*.

Università di Firenze, *Annuari 1924-1967*.

Università di Milano, *Annuari 1924-1967*.

Università di Napoli, *Annuari 1861-1968*.

Università di Padova, *Annuari 1924-1968*.

Università di Roma, *Annuari 1869-1968*.

Vaccaro, Emerenziana, "La Conservazione e il Restauro del Materiale Bibliografico, Corso di Aggiornamento per I Candidati all'Esame di Direttore di III Classe," Università di Roma, Scuola Speciale per Archivisti e Bibliotecari, 1968, Mimeographed.

Vaccaro, Emerenziana, "I Corsi Presso l'Istituto di Patologia del Libro." Unpublished report, 1969.

Vaccaro, Emerenziana, "Vita e Attività Istituzionale dell'Istituto di Patologia del Libro 'Alfonso Gallo'," *Accademie et Biblioteche d'Italia*, 35, 462-463 (1967).

Valente, Angela, *Corso Ufficiale di Bibliografia e Biblioteconomia*, Libreria Scientifica, Naples, 1945-1946.

Vatican, *L'Attività della Santa Sede 1934-1967*.

Vianello, Nereo, *Proposte per la Formazione Professionale*, Associazione Italiana Biblioteche, [Rome], [1972?], pp. 1, 7.

Volpi, Gaetano, and Paolo Maria Paciaudi, *Il Bibliotecario Diretto nel Formare, Classare e Continuare una Pubblica Biblioteca*, Rome, [n.p.], 1863.

OTHER SOURCES

Italy, *Gazzetta Ufficiale del Regno d'Italia*. Number 200. July 24, 1869; Number 340, December 13, 1869; Number, 25, February 1, 1927.

Italy, *Gazzetta Ufficiale delle Repubblica Italiana*. Number 28, December 1, 1952; Number 303, December 5, 1967; Supplemento Ordinario, Number 116, May 8, 1968.

Personal interviews with library experts in Italy. April 15-August 15, 1969.

SAVINA A. ROXAS

ITINERATING LIBRARIES

Itinerating libraries were the invention of Samuel Brown, 1779–1839, a Scottish ironmonger who devised them for his fellow inhabitants in the county of East Lothian, adjacent to Edinburgh. Brown was a minor intellectual whose claim to fame lies in the local cultural activity he pursued in a period when Scottish culture flowered and achieved international renown. His itinerating libraries idea was a consequence of his having observed the limited usefulness, in small centers of population, of small static libraries, local interest in whose contents was soon exhausted. Brown's solution was a scheme whereby collections of fifty books were circulated at 2-year intervals to the small towns and villages of his native county, the largest of which had then about 5,000 population.

Samuel Brown was thus a public library pioneer and indeed proposed the extension of his scheme on a national and even international scale. In Great Britain his administrative methods were re-employed in the twentieth century when legislation provided for the county library. There is evidence that his idea was transported to the United States and applied there in the late 1820s.

He was the son of John Brown, 1722–1787, the eminent self-taught nonconformist theologian, famed for his *Self-interpreting Bible*, who died when Samuel was seven. Samuel was put in the care of his uncle, an ironmonger in Haddington, the county town of East Lothian. Soon after this his uncle withdrew him from school to employ him as an apprentice in his ironmongery. Although deprived of formal schooling, he found himself with more leisure than most apprentices of his day, and this he used to pursue his own self-education by reading and scientific experiment. His interest in science eventually led him to a crisis of religious faith which he resolved by reading. Thereafter he sought to provide the means for others to sustain their faith, to receive enlightenment, and to discover the practical utility and economy of the applications of science in everyday life.

Brown married in 1806 shortly after his uncle had made him a partner in the ironmongery. Immediately following his marriage, Brown was struck gravely ill. His life was at first despaired of but gradually he recovered. Having to spend a year or so prostrate while convalescing turned his thoughts to others imprisoned, and as an act of thanksgiving when he was able to go out again, he made weekly visits to the local jail to read to prisoners. He also encouraged prisoners who could read to their illiterate fellows and teach them to read that they too might receive enlightenment in matters spiritual and natural. The jail in Haddington later became a station for an itinerating library, its jailer acting as voluntary librarian.

The itinerating libraries idea had occurred to him during his convalescence, but it was some years before he put it into practice. Also following his recovery he founded a Sunday School for boys, and a close friend began a similar school for girls. Each Sunday School built up a small library, but Brown was soon responsible for these combining in 1816 when it was decided to make their books available to anyone who could make use of them. It was on this library that the itinerating libraries scheme

was based when Brown began his experiment late in 1817, the year following his uncle's death and Brown's inheritance of the ironmongery. During the Napoleonic Wars his uncle had added a Militia Insurance Society to his business and some unclaimed money from this provided Samuel Brown with the initial finance for his venture. Here the record left by a son may provide the detail:

... he procured two hundred select volumes, about two-thirds of which were of a moral and religious tendency, while the remainder comprised books of travels, agriculture, the mechanical arts, and popular sciences. With a view to effect the most sparing economy, and at the same time secure the greatest possible amount of benefit in the disposal of these, he divided them into four assorted sets of fifty volumes each. These he stationed respectively in the villages of Aberlady, Salton, Tynninghame, and Garvald, under the superintendence of gratuitous librarians, accompanied by the intimation that each of them should be removed at the end of two years, and its place supplied by one of the other three successively. He meant in this way to supply those villages, for eight years, with all the advantages of four standing libraries of two hundred volumes each, *at one-fourth of the expense of four such libraries*. But he found that he really effected something more ... the certainty of their removal after two years combined with the novelty of the fresh arrivals at the biennial terms [served] to keep alive the interest of the population in the itinerating books. In this way the invaluable habit of reading was not only developed, but fostered and kept alive. Accordingly during 1817-19, the total issues of the two hundred volumes were, for the first year, 1461; for the second, 733; and, during 1819-20 (after the first exchange) for the first year, 1313, for the second, 928; there having been a very marked falling-off in the second years of the terms, but none in the sum total of the books taken out during the second term, as compared with the whole number taken out during the first term of two years;—a result which the experience of subsequent years almost uniformly confirmed.

The returns of these two first biennial terms at once increased his expectations and enlarged the scope of his design. It was evident, at first sight, that in the directly inverse proportion of the number of exchanging stations would be the comparative economy of the device. If four stations could be furnished by it with more than the advantages of a standing library, at one-fourth of the expense of four such standing libraries, for eight years; then eight stations could be supplied with 400 volumes, at one-eighth of the proportional expense for sixteen years; sixteen with 800 volumes, at one-sixteenth, for thirty-two years; and so forth to any extent.

Moreover, taking thirty-two years as the average reading term of human life, sixteen villages having such a provision made for them could, at this easy rate, enjoy the privilege of a constant standing library of 800 volumes; inasmuch as, before the circulation of thirty-two years should be performed, an entirely new reading population should have arisen; and the revolution of the simple mechanism would never need to stop. Now supposing the villages of a county were divided into five sections of sixteen each, with its centre of egress and return, these sections might make mutual exchanges to any desirable extent; and an intestinal movement might thus be kept up, which would furnish the equivalent benefits of a standing library of 4000 volumes, at every point of the county, at one-eightieth of the ordinary expense, with all the additional advantages, not easily calculable, of sustained novelty and motion. What may be said of a county may of course, and only with greater force, be affirmed of a country; and indeed the Projector laboured at his task, ever after he first seriously entered on it, under the influence of the

brilliant hope that his plan might actually become one of the agents of the ultimate illumination of the world . . . (1).

Samuel Brown devoted considerable time and money to promoting his idea which early in the 1820s came to the attention of Lord Brougham. Brougham gave his advocacy to the idea (2) and suggested Brown should devote all his time to it. This Brown was unable to do, but he thought that by his demonstration by private enterprise a government might be persuaded to apply the scheme nationally, or, failing that, other individual philanthropists or any concerned for the education of all classes in the nation would inspire similar local schemes elsewhere.

Brown advertised his activity by printing biennial reports and brochures about his East Lothian itinerating libraries (3). In consequence several schemes were started in Scotland, elsewhere in the British Isles, and in the United States and Canada. In the United States the idea was adopted and modified by Joseph Holbrook for the American Lyceum in the 1820s (4) and later, in the 1830s, the Rev. Gorham D. Abbott, secretary of the American Society for the Diffusion of Useful Knowledge, wrote to Brown indicating that his society was intending to use it (5).

By the early 1830s Brown had received sufficient money from well wishers to take on the role of a one-man agency for the bulk purchase and supply in itinerating library units of fifty books in a box, each box including a printed catalog and issue record book. They were supplied at low cost to anyone willing to undertake the task of local "manager." In all he supplied nearly 100 such libraries not only to Scotland and England, but to Ireland, Russia, South Africa, and the West Indies (6). In respect of the latter territory it was through his brother William, then secretary of the Scottish Missionary Society, that eight libraries were supplied to missionaries in Jamaica (7).

About this time Brown had decided to introduce a small charge for borrowing the books in his East Lothian scheme. One penny per book borrowed was levied in the first year an itinerating library was at a station, but no charge was made for the second year. He had earlier introduced what would now be called a "pay collection" service for middle and upper class readers in the three largest towns of the county, Haddington, Dunbar, and North Berwick. The books purchased for these subscribers eventually passed into the itinerating library collections. From this experiment of a small charge for reading Brown developed his own economic theory of "self-production" which he saw as the basis of providing itinerating libraries for the whole world. His brother William gave substance to his ideas in a pamphlet, *Memoir Relative to Itinerating Libraries* (8), which is remarkable for the rather extraordinary actuarial calculations therein. These perhaps reflect the burgeoning of insurance activity of the time, Brown himself having become an agent for an insurance company in addition to his ironmongery. The pamphlet was widely circulated and an edition was published in New York by D. Fanshaw, 150 Nassau St., in 1836. It was also translated into German and French. Among Brown's ideas in the pamphlet was the formation of a British and Foreign Itinerating Libraries Society, comparable to the British and Foreign Bible Society, and perhaps incorporating something of Brougham's Society

for the Diffusion of Useful Knowledge in that a publishing activity by the proposed society was also envisaged. No such society was formed but the itinerating libraries idea was taken to St. Petersburg by Brown's eldest son, John Croumbie Brown, who served as pastor to a joint Anglo-American Congregational mission there from 1833–1839. This son later gave evidence about his father's itinerating libraries to the House of Commons Select Committee on Public Libraries in 1849 (9). Samuel Brown claimed that the idea was also taken to Tasmania by Sir John Franklin when he was appointed governor of the colony in 1837 but no record appears to survive. The itinerating library idea was more certainly an influence on Karl Preusker, 1786–1871, who was responsible for "Wander-büchereien" or "Wanderbibliotheken" in Germany (10).

Apart from his own scheme in East Lothian and the export of the idea to the United States, where the local term "Travelling Libraries" became substituted, there was not a great deal of contemporary success. At its height in East Lothian a circulation of 10,000 was reported from some 2,000 volumes at a time when the population of the county numbered about 35,000 (11). Brown estimated that if he created sixty itinerating libraries, then no one in the county would be further than a mile and a half from one, but he was only able to provide forty-seven. The idea was kept alive in England, however, by the Yorkshire Union of Mechanics' Institutes (12) adopting and operating an itinerating library scheme from 1852 into the twentieth century, when—as has been referred to already—Brown's administrative methods were thus to hand for the newly legislated-for county libraries to adopt (13). The Yorkshire Union of Mechanics' Institutes scheme was in fact absorbed into the West Riding (of Yorkshire) County Library in the 1920s.

Reference to the wider social historical background may here be introduced in that Samuel Smiles of "Self Help" fame was another advocate of Brown's itinerating libraries idea and claimed to have had responsibility for the Yorkshire Union of Mechanics' Institutes' adoption of it. Smiles recorded his own debt to Samuel Brown to whose Haddington books of the East Lothian Itinerating Libraries he had access as a youth (14). Tribute to Samuel Brown was also paid by Alexander Somerville in his *Autobiography of a Working Man* (15).

Samuel Smiles and Mechanics' Institutes demand reference to Samuel Brown having been responsible for the founding of the Haddington School of Arts—a Mechanics' Institute—in 1822, one of the earliest to be established. Brougham reported that the School of Arts "grew out of" the itinerating libraries (16), and it appears that about the time Brown began them he was also a leading light in a small society of fellow townsmen interested in science gathering at intervals to share their mutual interest—a small-scale "invisible college," in fact—which led to the School of Arts. Brown was to be its president all its active, and his remaining, life. The records of the school which survive indicate a concern for its library which grew to some 225 volumes within 10 years and included a set of the *Encyclopaedia Britannica* among its purchases. The library was housed for most of its existence in Brown's shop, along with the Haddington itinerating library books and the "pay collection" for that town (17).

Samuel Brown was also (like many another public library pioneer to follow) concerned for social reform. He was active in the contemporary campaign for the abolition of slavery. He served for 3 years as provost of Haddington from 1833 to 1836, having been elected following a reform of local government in Scotland. During his tenure of this office his sense of public accountability was such as to lead him to publish reports on his intentions and how far he had succeeded or failed to persuade his fellow town councillors to adopt them (18). This may serve to identify him in his time as one of the lesser intellectuals who lent support to Benthamite ideas of efficiency in administration in what was soon to become an "age of reform" in Britain. It is also relevant to add that his itinerating libraries idea was included in the manifesto of the Chartist movement (19).

Education stands out as one of his main concerns, and there is modern interest in the fact that in one of his last published brochures he included an appeal for all kinds of specimens—rocks, seeds, etc.—to be sent to him by any "friends" of the itinerating libraries at home or abroad. The intention, which he does not seem to have realized, was to create small itinerating museum collections—primitive "learning resource centers"—to accompany the itinerating libraries. His awareness of contemporary progressive educational ideas is evident in a reference to Joseph Mayo, disciple of Pestalozzi (20).

Brown's last years were spent in declining health and recurrent debilitating illness, which limited his achievement at a time when the means for expansion were beginning to come to hand. After his death his eldest daughter attempted to carry on the East Lothian scheme in part of the county (21). Something still remained when his eldest son gave evidence to the House of Commons Select Committee on Public Libraries in 1849, and even up to 1856 when his son and namesake wrote the privately printed memoir of his father on which most of this contribution is based, but not, apparently, for long after. One book and an original book box is preserved by the Edinburgh Public Library, others were recently reported in the possession of a descendant in South Africa. One book from the Haddington School of Arts library is preserved in the National Library of Scotland.

The scale of Samuel Brown's itinerating libraries venture may now seem miniature, but in his day fifty books were many books when generally there were few books publicly available, and few, very few, large libraries. His was a pilot project, a small-scale model for the regional and national public library services becoming familiar today. The mobile library may surely be regarded as an indirect descendant. His pioneering venture at least helped identify some of the criteria on which effective public library services needed to be based. Among these was the need for regular and assured finance. Brown found that donations and subscriptions were not enough, and his eldest son considered that even the small charge acted as a deterrent to use. Brown excluded books likely to arouse political and religious controversy, and this together with some Mechanics' Institutes libraries' similar policy led to a realization of the need for catholicity in book selection. Finally, something was demonstrated of the need for professional organizers, by the rapid decline following the removal of Brown and his enthusiasm.

In conclusion, it may be observed that Brown's scheme was only possible in the climate of optimism which the early industrial age generated. A scheme of itinerating libraries for all the world then could only be conceived in optimism. The optimism was that of radical evangelical nonconformity, perhaps best illuminated by Joseph Priestley's view of history teaching us "to see the past and the present as stages in a glorious scheme of amelioration" (22). Why not help the millenium to arrive by providing access to knowledge and the means of sustenance of faith?

REFERENCES

1. Samuel Brown, Jr., *Some Account of Itinerating Libraries and Their Founder*, [private printing], Edinburgh, 1856, pp. 58-61.
2. First in the *Edinburgh Review*, 96-122 (October 1824), where under the pseudonym William Davis was printed "Hints to Philanthropists. . . ." Second, in a pamphlet, Henry Peter Brougham, *Baron Brougham and Vaux. Practical Observations upon the Education of the People. . .* The reference is on pp. 7-8 of the edition published by Archibald Prentice, Manchester, 1825.
3. There is no complete archive of these. No copies of the first four reports appear to have survived. Some idea of their contents may be gleaned from the *Edinburgh Christian Instructor*, 1820-1826, from notices published therein. A copy of the 5th report is in the Edinburgh Public Library, the 6th is in the Library of University College, London, and the 7th is in the National Library of Scotland. The latter has copies of the brochures referred to.
4. Samuel H. Ranck, "Forgotten Travelling Libraries." *Lib. J.*, 26, 261-265 (1901). Acknowledgment is made to Prof. Haynes McMullen, Graduate Library School, Indiana University for this reference.
5. Ref. 1, p. 74.
6. Eighty-five are listed on pp. 4-5 of *First Report of the Itinerating Libraries in Edinburgh, Leith and Midlothian, under the Superintendence of Mr. Samuel Brown, Haddington*, [n.p.], 1834. Brown took over the running of this scheme which others had begun in 1826.
7. Scottish Missionary Society, Letterbooks in the National Library of Scotland's Department of Manuscripts, Ms 8984 and Ms 8985.
8. William Brown, *Memoir Relative to Itinerating Libraries*, A. Balfour, Edinburgh, 1831.
9. House of Commons, *Report from the Select Committee on Public Libraries Together with the Proceedings of the Committee, Minutes of Evidence, and Appendix*, 1849. J. C. Brown's evidence is in Minutes 1769-1837 on pp. 111-116. Itinerating libraries are also referred to by Edward Edwards in Minutes 307-312 on pp. 22-23, and by Samuel Smiles in a letter appended after Minute 2020 on p. 130.
10. Karl Preusker, *Über Öffentliche, Vereins- und Privatabibliotheken . . .*, Leipzig, 1839-1840. This reference is derived from an unpublished Library Association Fellowship thesis, *Short History of German Public Libraries from the Early Nineteenth Century to the Present Day*, J. D. Young, 1969, p. 34.
11. Ref. 9, Minute 1813, p. 114. J. C. Brown also stated (quoting one of his father's reports) that some books were issued as many as thirty times in a year. Samuel Brown, Jr. gives the total stock as 3,850 volumes but he was including the books in the Edinburgh scheme mentioned in Ref. 6. For this reference, see Ref. 1, p. 63.
12. J. F. C. Harrison, *Social Reform in Victorian Leeds: The Work of James Hole, 1820-1895*, Thoresby Society (Publications, no. 100) Leeds, 1952 [1954].
13. The legislation concerned was the Education Act (Scotland), 1918, and the Public Libraries Act (England and Wales), 1919.

14. Samuel Smiles, *Autobiography*, J. Murray, Edinburgh, 1905, pp. 29–30. The reference to his advocacy, of the itinerating library idea to the Yorkshire Union of Mechanics Institutes is on pp. 142–143, and is also noted in Ref. 12.
15. Alexander Somerville, *Autobiography of a Working Man*, McGibbon & Kee, London, reprint, 1967, p. 60. The original was published in 1848.
16. Ref. 2, p. 19.
17. The early Haddington School of Arts' reports were published but no complete archive apparently survives. A copy of the 3rd report is in the Scottish Record Office, Edinburgh, which also possesses a Sederunt Book of the managing committee. The entries in this begin February 1828, and among them are annual reports subsequent to the 4th which were not published. A copy of the 4th report, together with a *Catalogue of the Library and List of Apparatus*, published in 1830 are in the library of University College, London.
18. Two of these are in the National Library of Scotland, as is a pamphlet by Brown on Haddington Schools.
19. William Lovett and John Collins, *Chartism: A New Organization of the People*, 1840. Pages 25 and 34–35 of Leicester University Press, Victorian reprint series edition, 1969. Acknowledgment is made to Mr. D. R. Bartlett for this reference.
20. The brochure is entitled *Itinerating libraries in East and Mid-Lothian, under the superintendence of Mr. Samuel Brown, Haddington, [1836?]* A copy is in the National Library of Scotland. The reference is on the last page.
21. The British Museum library has a copy of *East Lothian Itinerating Libraries, Western District, Catalogue of new books . . . , 1846–1848*, 1848. She was probably responsible for this.
22. Basil Willey, *Eighteenth Century background*, Penguin Books, 1940, p. 191.

L. G. DURBIDGE

IVORY COAST, LIBRARIES IN

The plan for economic, social, and cultural development in the Ivory Coast, called the quadrennial plan, stresses cultural development as an essential factor in economic development.

The principal emphasis is on improvement of the production and transmittal of information. A legal framework of national education has been established. The Minister of National Education is making the development of libraries one of the principal means of improving the production of information.

In October 1967 the Direction des Affaires Culturelles created a Service of Libraries and Publications. The ministerial decree of September 1967 specified the functions of this Service:

1. To plan and organize the development of libraries: national library; libraries of institutions of primary, secondary, and higher education; public libraries; and specialized libraries and information centers.
2. To centralize the administration of personnel and the study of all technical and professional problems concerning libraries.
3. To encourage the development of the book industry in the Ivory Coast.

It should be noted that this is the first time that an institution responsible for libraries is gathering all types of libraries under its authority. This centralized organization is made possible by the almost total absence of libraries in the Ivory Coast. The inconveniences of decentralized and multiple responsibilities in the library area have been proclaimed many times, which encouraged the Ivory Coast to centralize the organization of libraries from the start.

The uniformity of administration is a great source of economy, since it avoids senseless establishment and duplications of functions.

State Libraries

LIBRARIES CONNECTED TO THE MINISTRY OF NATIONAL EDUCATION

Libraries Under the Authority of the Service of Libraries and Publications

The Bibliothèque Centrale de Lecture Publique (Central Library for Public Reading), established in 1964 with the aid of UNESCO, and lodged since then in insufficient and temporary quarters.

The Bibliothèque Nationale (National Library), established April 8, 1968, which also occupies very poor quarters (the construction of new buildings is underway).

The Bibliothèques d'Établissements Secondaires (Libraries of Higher Education), numbering seventy-six, and reorganized in 1968 with a teaching function.

A regional library for public reading at the heart of a Cultural Center which opened its doors in October 1971.

The University Library

The university library is on the university campus, which moved into new quarters in 1966. Because of the university's organizational charter, it will be connected with the Service of Libraries and Publications at a later date.

LIBRARIES CONNECTED WITH STATE BODIES

The library of the National School of Administration.

The library of the Cultural Center of Treichville (Ministry of Youth, Sports, and Common Education).

The library of the Economic and Social Council.

The library of the Supreme Court.

The information center of the Ministry of Information.

The information center of the Ministry of Agriculture.

The information center of the Ministry of Planning.

The information center of the Ministry of Economy and Finances.

Municipal Library

The library of the City Hall of Abidjan which was organized in 1969 and is a public reading Library.

Private Libraries

The library of the French Cultural Center which has just moved to new quarters.
The library of the American Cultural Center.
Several libraries of research centers and specialized bodies.

These libraries are almost all in Abidjan.

The plan for the development of libraries in the Ivory Coast, formulated at the core of the legal framework established by the Ministry of National Education, anticipates:

The creation in each prefecture of a regional library for public reading at the heart of a Cultural Center also including a theatre and probably a museum. These will be connected, in due course, with libraries in subprefectures and other administrative subdivisions.

The creation of libraries for elementary education districts, including a School Library section for the primary schools connected to each district, which will have a system of circulating libraries. Two pilot projects are currently underway in two districts not far from Abidjan.

The construction of a central library for public reading at Abidjan for which a remarkably well-situated piece of land has been retained at Treichville.

The creation of libraries for public reading in neighborhoods of Abidjan (five are anticipated).

Although dates were indicated in the plan, these have not been established firmly, nor have the cities selected been announced in advance. It seems better to retain great flexibility in order to ensure an even greater success.

The creation of libraries is anticipated preferably in the prefectures or subprefectures which manifest a desire for them. A time sequence of establishment, one per year, was to be followed. But to date limited budgets and insufficient numbers of personnel have prevented adherence to these provisions.

The National Library

ORGANIZATION

The Service of Libraries and Publications works closely with the National Library. The Service and the National Library have been placed under the same authority, which assures full coordination of action.

As specified in its charter and in the presidential decree of September 1971 which reorganized it, the National Library has the following characteristics:

- To receive, keep, and disseminate all productions printed in or about the country.
- To constitute a National Documentation Center and to furnish readers and researchers with as varied and complete documentation as possible.
- To be a general information center on all the library collections in the country and to publish a national bibliography based on legal deposit.

To provide support for the coordination of the development of libraries assigned to the Service of Libraries and Publications.

The centralization of administration and of cataloging for all libraries in the country will be assured by these actions. The National Library also supervises the National Bureau for the Exchange of Publications, which is one of its services.

A realistic view of the difficulties encountered in recruiting qualified personnel has given impetus to this centralization, in addition to the internationally recognized necessity for a uniform cataloging system.

The National Library was created April 8, 1968 by the transfer of the National Center for Documentation, which was the former Bibliothèque de l'I.F.A.N. d'Abidjan and which, connected to the Center for Natural Sciences, was primarily a scientific library, with important holdings on Africa.

The National Library currently has holdings of 7,500 works and 800 periodical titles, of which 500 are current.

Legal deposit was assigned to it in January 1969 with a retroactive clause; it receives, for exchange purposes, six or seven copies on legal deposit. The National Library has been publishing the *Current National Bibliography of the Ivory Coast* since 1970, based primarily on legal deposit, but also announcing works on the Ivory Coast appearing in any country or in any language. The bibliography is annual, but in the future is scheduled to appear three times per year. Numbers 1 and 2, for 1969 and 1970, have been published. Number 3 is close to completion. The National Library next plans to establish a union catalog of all periodicals received in the Ivory Coast.

The National Library is open to all readers who are at least 16 years of age; registration is free.

CONSTRUCTION

Since 1964, the development of libraries in the Ivory Coast has received the support of UNESCO, and it was through this initiative that Canadian aid for the construction of the National Library quarters was obtained.

A program was established by the Service of Libraries and Publications and adopted by an interministerial commission (March 1969) at which the Ministries of National Education, Construction, Planning, and Economic and Financial Affairs were represented.

The program indicated the functions of the National Library, the plan for its development up to 1980, and the budgetary requirements for its functions.

In addition, there is information for the architect, including a plan for the building; details of the quarters to be constructed; and all the equipment.

This plan will require an estimated 648 million francs CFA, three-fifths to be financed by a nonreimbursable grant from the Canadian government and the remainder by the Ivory Coast. Construction began in March 1972 and should be

completed in April 1973. In its new quarters, in addition to internal and technical services, the National Library will provide, for use by the public:

- one public reading room with a capacity of about 50,000 volumes.
- two study rooms of fifty to 100 seats.
- one periodical room of fifty seats.
- a record collection, a film collection, and a room for maps and charts.
- one conference room of 250 seats.

It will have a capacity of 300,000 volumes, with a planned extension to 600,000 volumes.

PERSPECTIVES

In order to increase its efficiency and to ensure integrated administration for all Ivory Coast libraries in the future, a study currently underway should encourage automation in the management and processing of documents in the National Library. It is especially important to adopt modern methods of management and modern information procedures for:

The provision of documents (supervision of subscriptions, book purchases, distribution in the various libraries).

The conception and application of a uniform method of analysis and classification of documents, useful to all libraries and information centers in the Ivory Coast.

The establishment of a model for automatic, documentary research, leading to the framework for a national data bank of general, economic, scientific and technical documentation, which will be in existence at the end of the decade—an indispensable instrument for all developing countries.

The two major problems conflicting with the development of libraries are the shortage of personnel and the lack of funds for operations and for investment.

Personnel

Recruitment and training have been affected by the existence of a special statute for personnel. The project, established by the Service of Libraries and Publications, was changed by the Ministry of Public Works and was the subject of a June 1971 decree.

Currently in the Ivory Coast there are: in service: one curator and six librarians; in training: one curator, three librarians, and one documentalist. The developmental needs of libraries will require, by 1975, the training of eight curators, thirteen librarians, and two documentalists.

Finances

The Ivory Coast will not escape the common problem that funds allocated to libraries are always insufficient. In the case of a developing country, this situation becomes even more difficult because of the almost total absence of basic arrangements; thus the necessity for important investment credits and for sharp increases in budget for services.

In spite of the importance accorded the development of libraries and the authorized financial efforts, and in spite of the priority accorded to education, the needs in this area are such that the budgetary limits are quickly strained. Therefore new formulas for financing these operations must be found.

LIGUER-LAUBHOUET K-L
(Translated by Mildred Myers)



JACOBS, JOHN HALL

John Hall Jacobs, librarian, teacher, bookman, and building consultant, was born in Bolivar, Tennessee on November 27, 1905. His parents were Romal Henry Lee and Lou Donnie (Hammons) Jacobs. In 1936 he married Frances Stamps and they had one daughter, Nina Frances, who is currently a librarian in the Air Force. During World War II, he was on active duty with the U.S. Naval Reserve, serving as Commanding Lieutenant, Louisiana Polytechnic Institute, 1943–1944 and Commanding Officer, Dubuque, Iowa, 1945.

Mr. Jacobs received his B.S. degree from Memphis State College in 1928. He continued his education by taking classes at Peabody College, University of Akron, and the University of Tennessee in the summers of 1929, 1930, and 1932, respectively. In 1932 he entered Emory University Library School as a Rosenwald Scholar, receiving his A.B. in Library Science in 1933.

While in college, Mr. Jacobs served as a library assistant and thus librarianship became his major interest at an early age. After completing work on his undergraduate degree, he became a teacher librarian at the Collierville (Tennessee) High School. This experience was to be invaluable in his public library career as he never lost his awareness of the vital need for school library–public library cooperation.

In 1934 Mr. Jacobs became director of the Shelby County Tennessee libraries and his long career as a public librarian was begun. Four years later, in 1938, he moved to New Orleans as the director of that city's public library. During the following 22 years he was instrumental in developing public library services in New Orleans to a high degree. The present central building was completed during his tenure and is indicative of his interest in and concern for efficiency of services as well as esthetics and functions of library buildings.

In 1961 he made his last move to become director of the Atlanta and Fulton County Public Library System. During this period he built five new branches.

reorganized and expanded many services, plus supervising a major renovation of the Central Library.

During his professional career, Mr. Jacobs taught classes in library administration in library schools at Florida State University, University of Illinois, Syracuse University, and Emory University. His varied interests and excellent background as a bookman resulted in wide demand for his services as a speaker and teacher of short courses, e.g., night courses (noncredit) at Emory University on such subjects as Modern Drama and The Novel.

Mr. Jacobs was also in demand as a library consultant on services and buildings. Some of the public libraries benefitting from his abilities include those in Madison, Wisconsin; Salt Lake City, Utah; Dallas, Texas; Jacksonville, Florida; and Tampa, Florida. Numerous small libraries were indebted to him for his guidance and expertise.

Mr. Jacobs not only served the library employing him, but he served the profession of librarianship with total dedication. He was the mentor and friend of hordes of young librarians and was never too busy to counsel with them individually. Collectively he worked diligently on committees on local, state, regional, and national levels. He was on the Executive Board of ALA from 1958 to 1962 and served on the Headquarters Building Committee at the time the ALA Headquarters was constructed at 50 E. Huron Street in Chicago. He served as chairman of the Board of ALA Personnel Administration and the Library Binding Committee. He was president of the Tennessee Library Association, the Louisiana Library Association, and the Southwestern Library Association. At the time of his death in 1967, he was president of the Southeastern Library Association and the City of Atlanta Department Heads Association.

Mr. Jacobs was vitally interested in library research and literature, and encouraged his colleagues to develop their abilities along these lines. He served as editor of the *Louisiana Library Association Bulletin* and as assistant editor of the *Southeastern Librarian*, the official bulletin of the Southeastern Library Association. The entries under his name in *Library Literature* underline his versatility and strong beliefs in a variety of subjects (see bibliography).

John Hall Jacobs died on July 27, 1967 after a long illness. At the Southeastern Library Association meeting in Atlanta on November 6, 1970, Dr. Robert Downs delivered the John Hall Jacobs Lecture in his memory. Prior to the lecture Hoyt Galvin paid tribute to Mr. Jacobs, summarizing his career and his contribution to librarianship. The following quote is excerpted from his remarks:

John Hall Jacobs was a librarian—a great American public librarian—a librarian's librarian—one to whom all could turn for sound advice. I first knew him in Tennessee in 1935; roomed with him at conferences; watched libraries become great under his leadership; saw four library associations thrive under his presidency; observed library systems and buildings evolve from his wise consultantship; and knew him as a reader and book collector of first and autographed editions. . . . He had a sincere concern for people—all who came within his orbit—and this was particularly apparent to his staff, professional associates, and the people of the

communities he served as librarian and administrator, and for this concern he was loved by all who had the privilege of knowing him.

BIBLIOGRAPHY

John Hall Jacobs—Subject

Andrews, R. M., "Tribute to John Hall Jacobs," *Southeastern Lib.*, **17**, 136 (Fall 1967).

Anon., "Portrait," *Lib. J.*, **73**, 855 (June 1, 1948).

Anon., "Biographical Sketch," *Southeastern Lib.*, **14**, 56 (Spring 1964).

McNeal, A. L. "John Hall Jacobs: In Memoriam," *Ibid.*, **17**, 135 (Fall 1967).

John Hall Jacobs—Author

"Questionnaire for Librarians and Supervisors," *Reading and the School Lib.*, **3**, 201-202 (May-June 1937).

"Unanswerable Questions," *Lib. J.*, **65**, 935 (November 15, 1940).

"Reorganization of the New Orleans Public Library, 1937-41, a report," *Louisiana Lib. Assoc. Bull.*, **5**, 5-8 (September 1941).

"Valuable Old Books," *Ibid.*, **6**, 8-11 (September-December 1942).

"Organizes Special Service," *Lib. J.*, **71**, 395-396 (March 15, 1946).

"Personnel Administration in the Public Library," *Louisiana Lib. Assoc. Bull.*, **10**, 34-36 (January 1947).

"Welcome Evidence," *Lib. J.*, **72**, 208-209 (February 1, 1947).

"[Review of] NYPL-1946; Report of the N. Y. Public Library," *Ibid.*, **72**, 823-824 (May 15, 1947).

"Keeping Archives Widens Library's Community Service," *Ibid.*, **72**, 950 (June 15, 1947).

"Expanding Horizons," *Louisiana Lib. Assoc. Bull.*, **11**, 8 (November 1947).

"Realism in Our Regionalism," *Lib. J.*, **73**, 855-858 (June 1, 1948).

"Challenge of Change," in *Southwestern Library Association [Conference, 12th, 1948, New Orleans; Proceedings]*, pp. 7-8.

"Public Library Building," *Louisiana Lib. Assoc. Bull.*, **12**, 42-44 (January 1949).

"New Orleans Library to Open Music Collection," *Lib. J.*, **74**, 673 (April 15, 1949).

"What Sort of Library Service Can Texas Have?," *Texas Lib. J.*, **27**, 66-70 (June 1951).

"[Review of] Report of a Survey of the Kirkwood Public Library," *Lib. J.*, **76**, 1911 (November 15, 1951).

"Libraries. Leaders, Liberty: Our Heritage and Our Challenge," *Spec. Lib.*, **43**, 11-15 (January 1952).

"[Review of] Public Librarian," *Lib. J.*, **77**, 962-963 (June 1, 1952).

Survey Report of the Free Public Library, Jacksonville, Florida. The Library, 1958. 66 pp.

"Yesterday's Charm with Today's Functional Beauty," *Pioneer* (Library Bureau of Remington Rand), **22**, 3-9 (March 1959).

"Tested Tenets for Trustees," *Alabama Lib.*, **10**, 51-54 (July 1959).

"Gist before Jazz." *Louisiana Lib. Assoc. Bull.*, 26, 109-111 (Fall 1963).

F. C. Palmer. "Now That You're Asking Me, Binders Answer Librarians' Questions," *Southeastern Lib.*, 13, 67-78+ (Summer 1963); 13, 221-228 (Winter 1963).

MARY LOUISE RHEFAY

JAMAICA, LIBRARIES IN

General Background

Jamaica is a self-governing territory within the British Commonwealth of Nations. An English speaking country, it has a rapidly growing population of 1.86 million people occupies an area of 4,400 square miles, and is the largest of the group of islands formerly known as the British West Indies. Situated in the Caribbean Sea between latitudes 17°43' and 18°32' N, and longitudes 76°11' and 78°21' W, Jamaica forms part of the archipelago which extends from the Florida Channel (North America) to within 7 miles of the coast of Venezuela (South America).

Jamaica, described as "a land of hill and gully," has a main mountain range running like a backbone through its center, and rivers, small and large, cascade from several ridges in all directions to the sea. This presents a picture of many contrasts. Approximately half a million of the population are closely packed into 45 square miles of the coastal plains of the capital city, Kingston, while the rest of the population may be found spread out by white sand beaches or clustered in small fishing villages; scattered beside dry river beds or dotted on the edge of unreclaimed swamp lands; and perched in pockets overlooking picturesque cliffs or nestled between green hills and rugged mountains which reach up toward the majestic peak of the Blue Mountains, 7,402 feet above sea level. This tropical terrain reflects a range of temperature from 86°F on the plains to 40°F on high mountain slopes, and there are extreme variations from periods of drought to periods of severe flood rains.

The composition of the population also echoes variety and reflects the many cultural influences brought to the island since it was discovered by Christopher Columbus in 1494. The influence of the aboriginal Arawak Indians; the periods of early occupation by the Spaniards (1509 to 1655) and the English (1655 to 1962); the periods of slave trade, of indentured labor, and of free migration from Africa, India, Syria, Israel, China, and Europe; all these have assisted in making Jamaica a multiracial society albeit one with a preponderance of persons of African descent. The national motto, "Out of Many One People," fittingly captured the spirit of the country when it gained political independence in 1962.

With adult suffrage (1944), complete internal self-government within the framework of The Federation of the West Indies (1959), and independence within the

British Commonwealth (1962) have come increasing national awareness; political maturity rooted in a stabilized two-party system; new emphasis on educational, social, and cultural programs; and bold new economic policies for accelerating industrial expansion. The diversification of the economy, which was based previously on agriculture, is proceeding rapidly, and while the cultivation of sugar and bananas (9% of national income) remains important, new industries such as bauxite mining (12%) and tourism (11.5%) have become major contributors to the island's economic growth during the last 10 years.

The Early Libraries

During the first 3 centuries after Jamaica's discovery in 1494, there were no education programs for the masses. The population then consisted of a minority of land owners and planters, educated overseas, and a majority of slave workers whose owners found education for slaves unnecessary and incompatible with their objectives. The planters later accepted Protestant missionaries to work on their estates, and the Moravian Missionary Society was the first to start missionary schools in the island. After the emancipation of the slaves in 1834, the missionary societies expanded their programs with some financial assistance from a British Colonial Grant, but it was not until the end of the nineteenth century that an organized educational system began to emerge. The mid-twentieth century brought rapid strides, and today the structure embraces a variety of educational institutions providing advancement from basic or infant schools through the university level. The year 1973 brought further reforms with the government's decision that from September 1973 the payment of school fees at secondary and university levels would be abolished and these facilities would be free of cost to all students attending government-aided institutions.

The current system, however, is deeply affected by the earlier centuries of educational neglect, and one result is the high rate of illiteracy which now exists among the island's population. It is against this background, therefore, that the development of libraries in Jamaica should be examined.

In the earliest days libraries were the perquisites of the affluent educated minority, and the wide-scale establishment and use of libraries followed only on the improvements in the country's educational and economic programs. Proof of the existence of such libraries comes from the library collections of the Legislative Council and House of Assembly which were established before 1806 for the use of the governors of the island and persons "connected with the Legislature." There is evidence that in 1780 a commercial library operated by one William Aikman existed in Kingston, the capital city. In 1798 the Kingston Medical Society established a library which was supervised by a librarian, and this marks the earliest of several subscription libraries established in different parts of the island during the nineteenth century by societies, clubs, and individuals. These libraries were designed to serve a limited and specialized clientele. Of these many subscription libraries, the

St. George's Library Society established in Buff Bay (Portland) in 1824 had the highest paying subscription rate (£5.6.8 entrance fee, £2.6.8 annual subscription) but in return it maintained the most active and continuous service to a local community. It functioned for over half a century until it transferred its remaining stock of 900 books to the Institute of Jamaica in 1880.

The most important of the early libraries were:

Pre-1779	A commercial library operated by William Aikman, defunct 1781.
1798	The Kingston Medical Society, defunct 1832.
Pre-1806	The libraries of the Legislative Council and House of Assembly (stock transferred to the Institute of Jamaica in 1874).
1824	The St. George's Library Society in Buff Bay, defunct 1882 (balance of stock given to the Institute of Jamaica in 1880).
1825	A circulating library operated by Messrs. Smith and Clarke.
1825	The Jamaica Society Library, defunct 1850 (balance of stock given to the Colonial Literary and Reading Society).
1836	The Athenaeum Club Library, Kingston.
1837	The St. Elizabeth Library Society.
1839	The St. James Library Association.
1849	The Colonial Literary and Reading Society later merged into The Kingston Literary and Reading Society.
1850	The Trelawny Literary Society.
1852	The St. Catherine Literary Society in Spanish Town.
1856	The St. Ann's Literary and Reading Society in St. Ann's Bay.
1864	The Library of the Royal Society of Arts and Agriculture (stock transferred to the Institute of Jamaica in 1878).
1867	The Port Royal Literary and Mechanics' Institution.
1868	The Kingston Literary and Reading Society, defunct 1878.
1874	The First Public Library, Date Tree Hall, Kingston (stock from the libraries of the Legislative Council and House of Assembly).
1879	A Law Library in a Department of Government (best of the small department libraries).
1879	The Public Library of the Institute of Jamaica.
1899	The Kingston Athenaeum Library.

The first half of the twentieth century saw a further increase in the number of subscription libraries formed by literary and debating societies as well as by clubs and stationery shops. By 1940 almost every parish (local government division) could claim to have had a subscription library at some time, but most of these libraries existed for brief periods only, as enthusiastic pioneers soon discovered it was impossible to finance a circulating library merely by subscription from members. Some of the better known subscription and commercial libraries of this period included: The Victoria Institute in Kingston; The Kingston Athenaeum Circulating Library; The St. Catherine Literary and Reading Society; The Spaldings Literary and Social Club; The St. Thomas Subscription Library; The St. James Subscription Library; The Phoenix Library in Kingston; The Falmouth Library and Stationery Shop; The Falmouth Credit Union Free Library, St. Ann Athenaeum; The Christiana Social and Literary Clubs; The Bluefields Progressive Society; and the Annotto Bay Social and Literary Clubs.

These early libraries all failed to survive owing to lack of sufficient and regular funds for their maintenance, but their very existence highlighted the need and created favorable public interest which paved the way for the establishment of the government-funded Institute of Jamaica.

The Libraries of the Institute of Jamaica

The year 1874 is significant in the history of libraries in Jamaica as it marks the birth of the first public library. The books from the government-owned libraries of the Legislative Council and the House of Assembly were brought from Spanish Town (the old capital) and used to establish this first public library in Kingston (new capital) at Date Tree Hall. Legislation was later enacted and this collection, together with that of the Royal Society of Arts and Agriculture and later, the remaining stock from the defunct St. George's Library Society, and the Kingston Athenaeum formed the nucleus of the stock for the Public Library of the Institute of Jamaica founded in 1879. Today the Institute of Jamaica remains the only one of the nineteenth century subscription libraries which has survived and which over the years has expanded and developed with sufficient literary impact to initiate accelerated growth of library activities throughout the island during the mid-twentieth century.

The institute was founded under the Institute of Jamaica Law 1879 with specific duties to promote the pursuit of literature, science, and art

by establishing and maintaining in Kingston an Institution comprising a Public Library, Reading room, Museum and collection of works and illustrations of science and art; by providing for the reading of papers, and the delivery of lectures and courses of instructions, and the holding of examinations on subjects connected with literature, science and art; by providing and awarding premiums for the encouragement of literary, scientific and artistic work in Jamaica; by providing for the holding from time to time of exhibitions illustrative of the Arts, Crafts and Industries of Jamaica.

A statutory Board of Governors consisting of twelve members is responsible for this work, and continuously for the last 94 years the institute has expanded its program based on its original responsibility toward the encouragement of literature, science, and art in Jamaica. It should be appreciated, therefore, that the management of the libraries formed only a part of the overall program. The law was amended in 1889, 1909, and 1930 but the basic responsibilities remain the same.

During the first 70 years of its existence the institute placed emphasis on lending and reference library facilities for the main city, Kingston, and to a lesser extent for the entire island. The original library at Date Tree Hall, East Street, was destroyed by fire after the earthquake of 1907, and a new building was constructed on the same site in 1911. Additional structures were built on adjoining sites in 1940 and in 1966, and further building accommodation is now needed to meet developing needs.

The main source of revenue was through annual grants from the government, but membership and deposit fees were charged to help to supplement this grant, thus providing eight types of membership; honorary, complimentary, corresponding, life, subscribing, affiliated, juvenile (free), and temporary users who deposited one pound (£1). The Board of Governors, however, accepted the principle of a free library service and subscriptions were later reduced to five shillings (5/-) per year and formed only a minor part of the total revenue. In 1959 this residue of the subscription concept for library services was finally removed and the libraries are today completely financed by government.

The library program was implemented through the establishment of a main general and reference library in Kingston and the provision of branch libraries, loan collection of books to literary societies and community centers, borrowing privileges to members of affiliated societies, and free postage service to individuals (approximately 1,500). In addition, deposit collections were circulated to elementary schools, secondary schools, and training centers with the help of funds from the Carnegie Foundation and Jamaica Welfare Limited.

By 1944 the institute libraries were circulating 208,000 books to 8,000 of the island's population of 1,237,000. However, the most significant and far-reaching contribution was the assistance which the institute gave to the maintenance of the early voluntary libraries and later to the establishment of an all-island public library service in 1948. Although well aware of the importance of island-wide free libraries, the Board of Governors was unable to provide this from their limited financial resources. The board instead gave assistance in the stimulation of public thought toward the provision of such libraries; gave invaluable encouragement and support to every emerging library organization; and with assistance from the British Council took the initiative in obtaining from Colonial Development and Welfare (Great Britain) funds to meet the costs for a survey of public library needs made by Miss Nora Bateson in 1945. The Bateson Plan later became the basis for the modern public library movement in Jamaica.

Over the years the institute continually restructured its own library programs and built up book collections to meet the changing needs of the society. There were three distinct development periods. During the Frank Cundall Period, 1891-1938, this secretary/librarian formulated policies which led to the establishment of the largest lending library in the island and placed emphasis on the collection of West Indian reference material which today forms the most valuable treasures of Jamaica's National Library. The Sir Philip Sherlock Period, 1939-1945, was brief but had dramatic impact in expanding the General Library, in motivating the spread of the free library movement throughout the island, and in establishing the first two free libraries for children. The Bernard Lewis Period, 1950 to date, has brought further improvements with the accent on expanding, upgrading, and modernizing the institute's library facilities and in changing the emphasis from lending to one of research, reference, and documentation.

At present the libraries of the Institute of Jamaica consist of five separate collections:

The West India Reference Library.
 The General Library.
 The Science Museum Library.
 The Junior Centre at East Street.
 The Junior Centre at Half-Way-Tree.

The West India Reference Library (WIRL) has the most important and valuable collection of books, manuscripts, newspapers, and original documents needed for historical research on Jamaica and the West Indies. This collection is not only the best in the West Indies but is known to be the largest and the most complete on the subject in this hemisphere. Over the years, research scholars from many parts of the world have come to Jamaica to use this unique collection. This library was established in 1894 by Frank Cundall, who served over 46 years as secretary/librarian of the institute. At present the main aim and function of the WIRL is to collect, preserve, and disseminate all recorded information on, by, and about Jamaica and Jamaicans, thus carrying out an important function of a national library. To a lesser extent the library also collects material concerning other West Indian Islands, Guyana, Belize, certain Central American countries, and West Indian Territories, but the French, Spanish, and Dutch regions are also well represented. The collection on West Africa is maintained as an important and necessary background to the history of the West Indies.

The treasures of this collection include many out-of-print and unobtainable books on the topography as well as the social, cultural, economic, and political aspects of life in the region. Some interesting items are:

The Isolario of Benedetto Bordone, published in Venice in 1547, an Atlas with descriptive text which includes the newly discovered islands of the West Indies.

Sir Hans Sloane's Voyage to Jamaica, 1707-1925 edition, with hand-colored illustrations of Jamaican plants and animals.

The Nugent Manuscripts, which consist of several hundred letters (including correspondence to and from General Sir George Nugent) while he was Governor of Jamaica 1801-1806, a period of great activity in war and trade in the West Indies.

The Marcus Garvey Collection, which includes the acquisition of copies (microfilm, etc.) of Garvey Material in libraries of other countries. Marcus Garvey (1887-1940) is one of Jamaica's national heroes.

The Letter Books of the Marquis of Sligo (1834-1836), covering the period of his governorship just before the Emancipation of Slavery.

The Letter Book of Roger Hope Elletson (1737-1775) a Jamaican planter who became lieutenant governor of Jamaica in 1766.

An almost complete set of a valuable annual publication, *Jamaican Almanac* from 1776-1880.

The Journals of Assembly from 1663-1826 and the *Votes of Assembly*, 1784-1865.

Files of early Jamaican newspapers including the most complete run of *The Daily Gleaner* from 1865 to date.

Invaluable collections of early maps, prints, engravings, portraits, pictures, and clippings. The printed map collections include maps by all the well-known cartographers of the seventeenth to the nineteenth century who worked in the Caribbean area, e.g., Visscher, van Keulan, Bellin, Moll, Jefferys, and Robertson.

These priceless collections are available to the public for reference and research free of cost, but are protected by closed access and all materials used must be signed for by the reader and may not be taken from the building.

The West India Reference Library is now housed in a modern air-conditioned building constructed in 1966. The ground floor contains a permanent Exhibition Gallery of Jamaican and West Indian materials from the library. The second floor provides a reading room, research carrels, and accommodation for books, pamphlets, photographs, prints, records, clippings, and staff work rooms. The third floor houses newspapers, periodicals, maps, manuscripts, microfilms, additional research carrels, another public reading room, and staff working area.

Apart from its reference and research facilities, the activities of the West India Reference Library have included photocopying and photographic services, the publication of bibliographies, and the abstracting and indexing of its holdings. The most important of these publications are:

A bibliography of Jamaica entitled *Bibliographia Jamaicensis*, compiled by Frank Cundall and published in 1902.

A supplement to *Bibliographia Jamaicensis*, compiled by Frank Cundall and published in 1908.

A bibliography of the West Indies (excluding Jamaica) compiled by Frank Cundall and published in 1909.

A bibliography of Jamaica entitled *The Jamaican National Bibliography*, 1964-, compiled by the staff of the WIRL and published annually. This bibliography, originally known as *Jamaican Accessions* (1964-1967), changed its title in 1968. It includes the holdings of the WIRL, as well as those of the libraries of the University of the West Indies and the Jamaica Library Service.

A List of Books on West Indian Federation, compiled by the staff of WIRL, 1957, 2nd ed. by Anne Benewick, 1962.

A Guide to Jamaican Reference Material in the West India Reference Library, by Rae Delattre, 1965.

Caribbean Fiction: 1900-1969; in WIRL's collection (English and American Imprints only).

Caribbean Languages, a bibliography from WIRL's collection published 1970.

Caribbean Economic Integration, a short reading list 1970.

Jamaica Government publications, a bibliography compiled from the periodicals collected in WIRL, 1971.

The Jamaica Journal, a quarterly magazine of great national interest published by the Institute of Jamaica since 1967.

Important bibliographic indexing and research projects now being undertaken by the WIRL are not yet completed for publication but are useful even in their present format. The most significant of these are:

The Historical Research Project, which is the abstracting for computer storage and printouts of information on Jamaica's development in 1937-1962, the period of the most significant changes leading up to Independence in 1962. This project is being carried out in collaboration with IBM.

An Index to the Marcus Garvey Collection. Marcus Garvey (1887-1940) is one of Jamaica's national heroes and has been recognized internationally as a pioneer of the Black Peoples Movement in America.

The Catalogue of Jamaican Maps in the WIRL map collection. This includes maps which appear in books as well as those published separately.

An Index of West Indian News in *The Daily Gleaner* starting from 1950.

The Catalogue of Prints in the WIRL collection. This includes valuable subject references.

The Indexing of Estate Plans in the WIRL collection which has over 20,000 items.

The Microfilming of Old Newspapers (delayed through lack of funds).

The Catalogue of the Manuscripts Collection in WIRL.

In addition to performing reference services when requested by other libraries in the Caribbean, the WIRL is the agent in Jamaica for the acquisition project to collect gifts or purchases for member libraries of The Association of Caribbean University and Research Institute Libraries (ACURIL) and also contributes entries to *Current Caribbean Bibliography*, published by the Caribbean Regional Library in Puerto Rico.

A staff of twenty persons maintains the services and holdings of this library which are listed in Table 1.

TABLE 1
Holdings of the West Indies Reference Library

Books	15,560	Photographs	9,800
Pamphlets	7,090	Negatives	3,000
Periodicals	2,366	Microfilms	680
Manuscripts, maps, and plans	20,000	Newspapers	
Prints	950	Current titles	57
		Bound volumes	2,700
		Clippings	

The General Library of The Institute of Jamaica was until recently the most important library in Jamaica. For 75 years, 1879–1954, it served citizens of the largest towns as well as others living in rural areas, operating from a main library in Kingston with part-time branch library services (twenty-three branches in 1911), and the use of a free postage service. It carried out the main library functions as stated in the Institute of Jamaica Law 1879. Thus in the first half of the twentieth century it was the largest circulating library having the best provision of books, periodicals, and newspapers in addition to reference reading room facilities with exhibition and lecture hall amenities for the encouragement and promotion of library activities. During that period the institute was the focal point for the island's cultural programs.

Mid-twentieth century Jamaica then experienced rapid educational and cultural growth, and many new organizations and institutions were established with special responsibilities to expand and develop areas previously maintained by the institute. It should be noted, however, that the institute encouraged and actively participated

in the creation of many of these new institutions, e.g., The University of the West Indies (1947), The Jamaica Library Service (1948), The Jamaica Archives (1953), and The Scientific Research Council (1960). As the new organizations developed, the institute kept adjusting its own library programs to meet the changing needs of the country. In 1954 The General Library ceased its island-wide postal reader lending services which were taken over by the new statutory parish libraries established under the Jamaica Library Service Law and, later, when the city library service for Kingston and St. Andrew was established in 1955, the institute handed over 2,500 books and further curtailed its lending functions.

In recent years The General Library has again changed emphasis. It still maintains some lending activities to 7,400 registered members from a total stock of 30,000 books but now gives priority to its reference functions. The scope of the library has been reduced to concentrate on areas of special interest and activity within the present overall structure of the institute. These areas have been identified as the Arts, History, and Literature, and the book and periodicals acquisition policy has been revised to relate to these and complementary subjects. By tradition, certain other special collections continue to be included in The General Library. The most important of these are, (1) The United Nations Publications repository collection; (2) A music collection (no phonograph records), including books from the old British Council music library donated to the institute in 1959; (3) The Alexander Hamilton Library collection consisting of a selection of books about The United States of America, maintained by The United States Information Service (U.S.I.S.).

The newspaper and magazine collections and the reading room facilities continue to be useful to those who work in the central area of the city. The library maintains its own bindery and book repair department, and initiates exhibitions such as A Schools' Travelling Exhibition of Books. Recent events indicate, however, that The General Library is on the eve of another period of change as the government of Jamaica is currently formulating a new national library program.

The Science Museum Library is, as its name implies, a collection built around the Science Museum of The Institute of Jamaica. This valuable collection was established by C. Bernard Lewis in 1944 while he was curator of the Science Museum. Today the holdings consist of 8,800 books and 8,000 pamphlets, journals, and reports which include some rare books believed to be the only extant copies in this hemisphere. The main aim of the library is to collect and preserve for reference and research, material on the natural sciences which is particularly relevant to Jamaica and the West Indies. In addition to Natural History, the collection is strong in Geology, Archaeology, and allied subjects. The library serves as a reference collection for scientists working in the Science Museum, but its stock is available to other scientists, research workers, students, and the general public.

In recent years the museum has been concentrating on developing a most important collection of plants in the area. The herbarium contains over 87,000 specimens, and the botanical coverage in the library has been strengthened to facilitate this work. A fine collection of taxonomic literature is housed in the herbarium section of the museum, and the library now has the Gray Herbarium Card Index of

over 25,000 cards published by Gray Herbarium of Harvard University, providing basic bibliographical information on every plant described in the Western Hemisphere since 1885. Valuable acquisitions include:

Charles Plumier, *Description des plantes de l'Amerique*, 1693, folio, 108 plates.
Traite des fougères de l'Amerique, 1705, folio, 170 plates.

F. A. von Humboldt and A. Bonpland, *Monographia Melastomacearum* . . . Vol. 1, *Melastomae*, 1816, Vol. 2, *Rhexiae*, 1823, folio, 120 plates in color.

G. L. C. F. D. Cuvier and Valenciennes, *Histoire naturelle des poissons*, Ouvrage contenant plus de 5,000 especes de ces animaux, decrits d'apres nature, 22 vols., Paris-Strassbourg, 1828-1849.

Charles B. Cory, *The Birds of Haiti and San Domingo*, Estes and Lauriat, Boston, 1885.

Report on the Scientific Results of the Voyage of H.M.S. Challenger during the Years 1873-76, under the Command of Captain George S. Nares and Captain Frank Tourle Thomson, Prepared under the Superintendence of Sir C. Wyville Thomson, Zoology, Vols. 1-32, H.M.S.O., London, 1880-1889.

F. Sander, *Reichenbachia. Orchids Illustrated and Described*. 5 vols., royal folio, numerous plates in color, 1880-1890.

Much of the holdings of the library is acquired on an exchange basis and *The Science Series Bulletin*, comprising 21 issues to date published by the museum, is distributed by the library in return for the publications of other institutions. The library and the specimen collection of the museum together with the assistance given freely by subject specialists combine to provide a useful and unique service to research workers in Jamaica. However, the resources are not being fully exploited because of extremely limited accommodation and library facilities.

The Junior Centres of the Institute of Jamaica are significant historically as the first public libraries for children in Jamaica. Until 1940 the only free library provision for children consisted of a case of books in the adult section of the institute's general library which was available to children between the ages of 13 and 16. In 1940 the Board of Governors established the first Junior Centre in premises on East Street opposite The General Library. This proved to be so successful that within a year a second Junior Centre was established on a part time basis in another section of the city, Half Way-Tree. Each Junior Centre has used its library as the focal point around which other cultural activities have been developed. The aim is

to seek through the medium of its library and activity groups to awaken and release potential talents in young people. This is done by making it possible for them to participate actively in a creative way in various forms of cultural expression, and in doing this to help each participant become a well integrated human being.

During the pioneer period, Robert Verity was instrumental in formulating and directing an imaginative program of activities around the East Street Library which still remains a model on how to generate interest in books among the young.

For a number of years, from 1940-1952, The East Street Centre also organized and maintained "a box of books collection" to a number of schools in the city and

some rural areas. This function was performed with the financial assistance of a Carnegie Foundation Grant, but this service was terminated in 1952 when the Jamaica Library Service assumed responsibilities for the supply of library books to primary schools.

Both centers are located in two storey buildings with the ground floor accommodating the library and the upper floor providing a lecture hall and group activity facilities. The activities at the East Street Centre include Art classes; Music—Recorder groups, Violin, Guitar, Singing, Drumming, Steel Drums, and Music making group; Nature Study Group; Spanish classes; Pottery classes; Home Economics Group; and a Teenage Club. The activities at the Half-Way-Tree Centre are the Dance Group; Percussion Band and Musical Appreciation Group; Hobby Time Group; and Story Time Group. The Half-Way-Tree Centre is housed in temporary quarters but the East Street branch was established in a specially designed building. Constructed in 1940 through the generosity of the late Denzil Callahan, M.D. and the Jamaica Welfare, the building was extended 1 year later with funds donated by the British Council and recently was further expanded to provide additional activity rooms on the ground floor.

Membership is open to any child 8 to 18 years old but of necessity the total membership is limited by the bookstock and accommodations available. The East Street Library with a stock of 14,600 books serves 5,000 readers while the Half-Way-Tree Library with a stock of 11,800 books serves 3,000 readers. However, during their 33 years of existence these Junior Centres have had a tremendous influence on the lives of many young Jamaicans through dynamic cultural programs focused on libraries, and today the long waiting list of children requesting membership bears testimony to the worth of these centers.

The Free Library Movement in Jamaica

The period 1938–1948 has been identified in Jamaica's history as embracing the most far-reaching reforms in the island's political, social, and economic structure. Educational reforms were essential, and these years witnessed the spontaneous growth of a free library movement which expressed the people's desire for adult education for the masses.

The movement was pioneered by the Rev. Walter L. Lewis, a Welsh Presbyterian minister, who called the first public meeting in 1937 and started several free libraries based on voluntary contributions from the public. The movement spread from The Manchester Free Library (pioneered by Walter Lewis and Mrs. Francis M. Goldsworthy) in 1938 to The Portland Free Library (pioneered by Horace Edwards) and The St. Elizabeth Public Library (pioneered by Walter Lewis) in 1943; to The St. James Public Library (pioneered by Mrs. Joan Ewing) and The Westmoreland Public Library (pioneered by the Rev. Canon Henry Cope) in 1946; to The St. Ann Lending Library (pioneered by Louis and Elsie Byles) in 1947. Attempts were made in other areas but these did not survive. In addition, the Rev. Lewis and Mrs.

Goldsworthy established in Mandeville The Jamaica Parish Libraries Auxiliary which became the island's headquarters for collecting gifts of books from England and for circulating these as loan collections to boost the meagre bookstock of the free libraries and educational institutions in various parts of the island. The Institute of Jamaica and the British Council gave invaluable assistance in stimulating and maintaining these libraries through regular gifts of books as well as financial and professional aid. Public support grew as subscription and commercial libraries were superseded by the Free Libraries which later became the nucleus for the establishment of a national public library service for the island.

The Jamaica Library Service

In 1942, while Jamaica was still a British Colony, the British Council established offices in Kingston and immediately embarked on a program of cultural activities. The first representative of the council, Hugh Paget, working in close collaboration with The Institute of Jamaica, gave financial support and technical advice to the Free Libraries. Through Mr. Paget's efforts, the institute obtained a grant of £2,700 (J\$5,400.00) from the Colonial Development and Welfare Fund (Great Britain) which enabled Miss Nora Bateson, Director of Libraries, Nova Scotia, Canada, to make a survey of existing facilities and submit recommendations for public library development. These recommendations are contained in a report *A Library Plan for Jamaica*, published in 1945. However, the cost of implementation was considered to be beyond the financial resources of Jamaica at that time. In 1946, again through the untiring efforts of Hugh Paget, the British Council took the initiative in establishing this island-wide public library service by offering to contribute the sum of £70,000 (\$140,000.00) over a 10-year period, provided the Jamaica Government would contribute a similar amount to implement the scheme and would accept financial responsibility for maintaining the service thereafter on a permanent basis. The Government of Jamaica accepted the challenge and The Jamaica Library Service was established.

The Jamaica Library Service began operation in May 1948 under A. S. A. Bryant, the first director appointed by the British Council. Mr. Bryant drafted a program for development called "The Organisation of the Jamaica Library Service" which was based on the Bateson Plan, and with the assistance of a Provisional Library Board prepared the legislation for the new service. The entire island was organized as one integrated library unit by incorporating into the structure all the existing Free Libraries and by using their stock and facilities to form the nucleus of the branch libraries for the central service. Priority was given to augmenting and upgrading the bookstock of these free libraries and to introducing a uniform system of operation. The five libraries incorporated into this island program were:

The Manchester Free Library, established since 1938, which became The Manchester Parish Library in 1948. Assets consisted of 11,000 books, 3 part-time branch libraries, a small postal service, and a total of 4,240 members.

The St. Elizabeth Public Library, established since 1943, which became The St. Elizabeth Parish Library in 1948. Assets consisted of 2,034 books and a postal service making a total of 250 members.

The St. James Public Library, established in 1946, became The St. James Parish Library in 1948. Assets consisted of 2,550 books and 600 readers.

The Westmoreland Public Library, started in 1946, became The Westmoreland Parish Library in 1948. Assets consisted of 700 books and 70 members.

The St. Ann Lending Library, established in 1947, became The St. Ann Parish Library in 1948. Assets consisted of 3,000 books and 380 members.

Emphasis was next placed on establishing Parish Libraries in those parishes which had no existing free libraries but had been trying to reorganize old programs. The St. Catherine and The St. Thomas Parish Libraries were started in 1948; The Trelawny Parish Library in 1949; The Portland Parish Library and The Hanover Parish Library in 1950; The Clarendon and The St. Mary Parish Libraries in 1951; and The Kingston and St. Andrew Parish Library in 1955.

The Jamaica Library Service Law of 1949 established a body corporate known as The Jamaica Library Board with responsibilities "to establish, maintain, manage, conduct and operate a library service." The law also provided for the establishment of local statutory authorities (Parish Library Committees) to advise and assist in administering the local service within the framework of the board's policies with sufficient freedom to determine priority programs and stimulate local interest. The central board consists of nine members while parish library committees consist of five appointees of the Jamaica Library Board and three appointees of Parish Councils—all of whom must be residents of the parish.

The law clearly created the basis for the firm and continuous financial support of public libraries by enabling library authorities to utilize the resources of both central and local government through annual subventions while at the same time leaving the structure flexible enough to stimulate growth and development through local initiative and the use of incentives. Over the years, amendments have been made in 1951, 1953, 1956, and 1961, but the original law of 1949 still provides the framework for the organization of the island service and ensures its maintenance and growth.

ORGANIZATION

This centralized service, structured on the local government units of "Parishes," is organized through an administrative headquarters in Kingston and a network of 444 service points and 850 school libraries scattered throughout the country. The present service points are listed in Table 2.

The headquarters is responsible for the coordination of the work throughout the island. A centralized system is used for purchasing, processing, and distributing books, stationery, and equipment to the Parish Libraries. A union catalog of the adult bookstock is maintained and, through an interlibrary loan service operated from headquarters, urgently needed books circulate to all libraries, irrespective of the permanent allocation. The resources of the 795,000 books in all the public

TABLE 2
Service Points of the Jamaica Library Board

Service	Books
13 Parish libraries	31,000–175,000
36 Branch libraries (full-time)	3,000– 20,000
73 Branch libraries (part-time)	1,000– 3,000
74 Book centers	500– 2,000
248 Bookmobile stops	2,000– 4,000

libraries are exploited further by the use of the free postage system. In addition, "duty free" purchasing amenities have been granted to the service by the government.

The rebinding of the island's bookstock is centrally serviced through a commercial bindery. The acquisition of a Xerox-Rand camera, Multilith machine, and a Flexowriter enables the maintenance of a small reproduction center for the printing and/or publication of catalog cards, reading lists, brochures, annual reports, etc. for the various service points. Headquarters has the direct responsibility for capital development programs involving the construction of library buildings throughout the island—eighteen buildings valued at \$1,500,000.00 have been constructed and for the acquisition and maintenance of thirteen bookmobile units and twenty-one delivery vans.

The staff structure provides for two island-wide traveling officers, a director, and a deputy, to coordinate the program, and since 1961 all professional staff have been centrally appointed by the Jamaica Library Board. The headquarters coordinates the recruitment and employment of the staff of over 715 persons employed in the public library service as well as another fifty in the Schools Library Service and is responsible for organizing annual in-service training programs at various levels. A central staff library of 2,500 books and other professional literature for students of librarianship is also maintained.

Parish Libraries. The service to the public is organized through Parish Libraries established in the capital towns of Jamaica's thirteen local government units. Each library is identified by the name of the parish in which it is situated and which it serves. The year 1955 marked the completion of the first phase of the development program for a national public library service. This major landmark of all-island coverage was reached with (1) the establishment of the last parish library in Kingston, the island's capital city; (2) the transfer of responsibilities to Parish Library Committees for the supervision and exchange of stock for the Book Centres previously serviced from headquarters; and (3) the transfer of responsibilities for the maintenance of the postal reader service previously operated by the Institute of Jamaica. The Parish Libraries, which had started as small part-time branches with untrained volunteers, now had grown into influential full-time institutions responsible for

establishing and maintaining branches, book centers, and the free postal reader service.

The parishes of Jamaica vary in size from Hanover, with 178 square miles, to St. Catherine, with 483 square miles. This, coupled with factors such as density of population and availability of sufficient financial support from each local Parish Council, has generated the growth of libraries at varying standards within the Jamaica Library Service. Consequently, in 1960 all parish libraries were classified and graded according to size and activities, and a uniform system for the grading and allocation of professional staff was introduced. In addition, parishes were required to make competitive claims for the limited capital grants available for constructing library buildings and for larger allocations of books from the central fund. These claims are assessed on the merits of parish demands as shown by the number of readers, of books circulated, and of library programs maintained annually. These incentives have stimulated communities to improve and upgrade their library facilities and intensified local interest in maximizing the use of their library resources. Parish Library Committees have taken the initiative in acquiring library sites, and have embarked on fund-raising projects for the construction of branch libraries. In many areas "self-help" programs have been developed which have enabled the parishes to advance more rapidly than would have been possible with the normal provision in the annual budget.

In the early stages all parish libraries were housed in temporary accommodation but, between 1950 and 1968, twelve acquired modern and functional buildings designed for their needs. The remaining parish, St. Catherine, has recently completed negotiations for the construction of its parish library at a cost of J\$200,000. These libraries are constructed through a cooperative scheme whereby the local library committee provides a suitable site and at least one-quarter of the construction cost while the Government of Jamaica, through the Jamaica Library Board, provides the remaining three-quarters of the cost as well as the new bookstock. Most parish committees have been able to obtain part of the capital costs from their local Parish Councils and in some cases have received donations of excellent sites from private citizens.

The Kingston and St. Andrew Parish Library is the largest lending library in Jamaica, maintaining a rapidly growing stock of over 120,000 books for its 98,000 registered readers. The service began in 1955 in rented premises with a modest stock of 15,000 books, and its growth was so spectacular that membership had to be closed within 1 month of the opening. In 1958 a permanent library was constructed at a central location—Cross Roads—where the major traffic routes of the city converge. In 1973 a further extension, doubling the size of the original building, was added to accommodate the growing membership and expanded services. This two story, modern library building now provides separate facilities for:

An adult lending library of 65,000 books serving 60,000 readers.

An adult reference library of 15,000 books and 10,000 pamphlets with seating for fifty readers.

An exhibition and lecture hall to seat 400, a section of which is used as an adult reading room equipped with a stock of 470 periodicals and magazines and twenty-one current newspapers.

A children's lending and reference library with a stock of 40,000 books for 38,000 registered readers.

A children's activities room for ages 4 to 11 years old.

A roof garden, film lecture patio to accommodate 800 persons.

Workroom, stacks, and staff facilities.

The site has been economically utilized, as the parish library building forms part of a larger complex which houses the Headquarters of the Jamaica Library Service and the Schools Library Service. The entire complex costing \$450,000 was constructed in stages and is designed to accommodate future building extensions when necessary and as funds permit.

Although this parish service is only 18 years old, the library has been assembling special collections of interest to its readers. Foremost among these are:

A Drama Collection of 5,000 books from which groups or individuals may borrow multiple copies for play readings, etc. A mimeographed catalogue is available.

The Young Adults Collection.

The Gunter Memorial Horticultural Collection of books and slides.

The Barrister Campbell Law Collection. Donated.

Books for the Blind Collection. Talking books housed and maintained on behalf of the Jamaica Society of the Blind.

The West Indian Collection.

The Mahatma Gandhi Collection. Donated.

The "Special Adults" Collection of large print materials for the visually handicapped and new graduates from adult literacy classes.

Foreign Language Collections in German, French, and Spanish. Donated.

The International Affairs Collection. Donated.

A very active Parish Library Committee has worked assiduously to develop the library service in the parish and to attract maximum financial support for recurrent expenses from the City Council, known as The Kingston and St. Andrew Corporation. Consequently, in addition to the main library there are at present thirty-one other service points comprising six full-time branches, nine part-time book centers, and sixteen bookmobile stops serviced by two bookmobiles. A staff of 134 persons work in this parish, opening the full-time libraries until 7:00 P.M. and maintaining extracurricular activities to stimulate continuous interest in the resources of the library. The library committee and staff also receive valuable assistance from volunteers through The Friends of The Kingston and St. Andrew Parish Library (started in 1968), The Art Exhibition Sub-Committee, and other ad hoc committees. Book and art exhibitions are regular features and there is a constant program of lectures, radio broadcasts, film shows, and musical programs for adults as well as story hours and hobby groups for children.

The library building is used as a cultural center after library hours and many related organisations such as The P.E.N. Club, The International Club, The Parish

Festival Committee, and The Extra Mural Department of the University of the West Indies make use of the library premises for their activities.

Other Parish Libraries. The scope and activities of the Kingston and St. Andrew Parish Library are reflected on a varying scale in the programs of all the other parish libraries which make up the Jamaica Library Service. It is noteworthy that the current vitality of this national library program is still gathering momentum. The impact of the service is reflected in statistics which show that in 1954, one citizen in every sixty-seven was a registered reader in a public library, whereas in 1959 the ratio was one in eighteen and in 1972 it was one in five. Almost half a million readers borrowed over 2.2 million books from public libraries during 1972, and financing and maintaining suitable bookstocks to meet the demands of these readers is a major challenge to Parish Libraries. Membership in all children's libraries must be controlled periodically in keeping with the book supply, and each junior reader is permitted to borrow only one book at a time. Some parishes have been able to expand their services to special areas. For example, Portland and Trelawny provide a hospital service; Kingston and St. Andrew, St. Catherine, and St. Ann have established book centers in prisons. From one parish to the other there is the same indication of dramatic expansion, and the current position in each parish can be best assessed from an examination of the latest statistics as shown in Table 3.

Regional Libraries

In 1964 the rapid growth of the service necessitated the decentralization of certain administrative functions which were previously performed by the director and deputy director. These officers were then controlling a service involving 187 libraries scattered across the 4,400 square miles of mountainous land. The island was therefore divided into four regions, each consisting of three or four Parish Libraries, and the largest and most developed library in each region was designated the regional headquarters (Table 4).

The post of parish librarian at the regional headquarters was redesignated regional librarian, later principal librarian (1968), and the duties were redefined to include supervision of the work of the smaller parish libraries within the region. This improved communication between all libraries and the headquarters, and facilitated the smoother introduction of new policies. It also became possible for professional standards to be implemented on a more uniform basis throughout the system.

Branch Libraries rank next in size and importance to Parish Libraries. The parish is considered as a unit and the Parish Library as the main library, with its branch libraries, book centers, and bookmobile stops being supervised by the Parish Librarian. There are 109 branch libraries which are divided into thirty-six full-time and seventy-three part-time branches. Full-time branches (1) have bookstocks varying from 3,000 to 20,000 books, (2) serve a reading membership of 1,000 to 12,000, and (3) open for a minimum of 54 hours per week with paid staff in charge. Part-time branches (1) have a bookstock varying from 1,000 to 3,000, (2) serve a reading

TABLE 3
Distribution of Public Libraries in Jamaica 1972/1973

Parish libraries	Population	Book stock	Readers	Book circulation	Number of service points, 444 ^a					
					Total	P.L.	Br.	B.C.	B/m.	Staff
Kingston and St. Andrew	550,100	175,521	148,855	407,136	32	1	6	9	16	134
Clarendon	176,700	64,941	37,987	288,116	66	1	11	1	53	54
St. Catherine	186,000	59,575	31,778	157,052	22	1	9	12	—	43
St. Ann	121,300	70,917	20,015	194,893	64	1	7	4	52	52
Manchester	123,500	70,162	35,848	197,766	19	1	12	6	—	77
St. James	103,700	67,000	31,848	176,608	16	1	11	4	—	53
Westmoreland	113,200	36,630	18,371	130,855	65	1	7	2	55	38
St. Mary	100,000	43,534	12,998	126,147	16	1	7	8	—	32
Portland	68,500	39,766	24,239	105,643	16	1	8	7	—	34
St. Elizabeth	126,600	40,453	23,191	109,615	50	1	7	2	40	31
St. Thomas	71,400	38,700	16,629	141,308	17	1	6	10	—	31
Trelawny	61,300	47,096	16,425	108,148	49	1	13	3	32	33
Hanover	59,000	31,559	13,051	88,593	12	1	5	6	—	27
Headquarters	—	9,714	120	943	—	—	—	—	—	76
TOTAL	1,861,300	795,568	431,355	2,212,823	444	13	109	74	248	715

^aP.L., parish libraries; Br., branches; B.C., book centers; B/m., bookmobile stops.

TABLE 4
Regional Libraries

Regions	Parishes	Regional headquarters
Region I	Kingston and St. Andrew St. Catherine St. Thomas	Kingston and St. Andrew Parish Library, Kingston
Region II	St. James Trelawny Hanover Westmoreland	St. James Parish Library, Montego Bay
Region III	Manchester Clarendon St. Elizabeth	Manchester Parish Library, Mandeville
Region IV	St. Ann St. Mary Portland	St. Ann Parish Library, St. Ann's Bay

membership of 500 to 1,000, and (3) open for 15 to 30 hours per week with a paid staff in charge.

Branch libraries usually retain at least one-half of their bookstock permanently, and the remainder may be changed by the Parish Librarian when necessary. Most branches have voluntary local committees who help to stimulate community interest and support and provide guidance on local matters affecting the development of the branch. Many committees have given invaluable assistance in relocating branch libraries as they outgrew their original accommodation. It has been the policy of the Jamaica Library Board not to embark on the construction of branch library buildings until the Parish Library building program has been completed. However, the enthusiasm and determination of some branch library committees have enabled the service to construct a number of branch library buildings independent of assistance from the central government. Significant recognition of the importance of public libraries to rural communities was acknowledged in 1965 when the Citizen's Association of Santa Cruz (St. Elizabeth), a small town which lacks several amenities, decided to give priority to raising funds to construct their own branch library. In 1964 the Library Service received its largest single donation of \$8,000.00 for the construction of the Highgate Branch Library. Mrs. Alene Parker, an American citizen resident in Jamaica, donated this building in memory of her husband, the late Georgia Parker, and the furniture and equipment were added through community effort. In 1967, the Clare McWhinnie Memorial Library was constructed at Race Course (Clarendon) through donations from the McWhinnie family and public subscriptions. In 1973 the local parish library committee constructed the Spaldings Branch Library (Clarendon). Sir Donald Sangster Memorial Library in Chapelton (Clarendon) is now being constructed as a memorial to a former prime minister. This cost is being met from public subscriptions.

The impact of the provision of suitable physical facilities for branch libraries may be assessed from an examination of comparative statistics. One year after its opening, the book circulation of the Santa Cruz Branch Library increased by 18,000, that of the Highgate Branch increased by 18,500, and that of the Clare McWhinnie Branch increased by 40,000.

The involvement and enthusiasm of local citizens have been so great that eleven additional branch library sites have been acquired free of cost, the currently fourteen communities are engaged in fund-raising efforts to provide permanent and suitable accommodation for what is now regarded as an important cultural center.

Book Centres are part-time libraries established in the small towns and villages and maintained by volunteers. These minilibraries, carrying a rotating stock of 500 to 2,000 books changed every 3 months, are located in community centers, church halls, schools, shops, offices, or even private homes; any satisfactory location, free or rented, in which the local community can guarantee the free access of the public, proper protection of the books, and the voluntary assistance of someone suitable to serve as book center librarian. The bookstock includes adult and junior lending books and a small quick reference collection. The membership of each center varies from 200 to 800 readers and the opening hours are extended progressively up to 40 hours per week to facilitate demand. Many of the most successful branch libraries started as book centers while in recent years some of the smaller centers have been converted into bookmobile stops.

At present, 86 volunteers give generously of their time to maintain 74 centers which are opened two to four times per week. These volunteers are trained and supervised by parish librarians who visit the centers once per month. In 1972 over 247,500 books were circulated from these centers with the assistance of these voluntary workers. This figure represented 14.5% of the books borrowed from the public libraries and significantly illustrated how community involvement enabled the Library Service to stretch its limited resources.

The Book Centres vary in standards with the level of voluntary help available; however, they have provided the foundation for the island's rural library development. These centers have been invaluable in encouraging reading habits and in serving remote areas which would otherwise have been without books—both factors of vital importance to Jamaica which is currently engaged in a dynamic program to reduce its high rate of illiteracy. Research has shown that many school leavers with low reading levels later lapse into illiteracy when books are not readily available for the continuous practice of reading skills, and it is in this area that book centers make their most significant contributions in Jamaica.

Bookmobile Stops. The expansion of the bookmobile program is the most recent area of development in the Jamaica Library Service. A total of thirteen bookmobiles are now in operation and two others are on order. The program is organized on three levels with (1) schedules of daily and weekly stops in urban areas, (2) fortnightly visits to rural stops, and (3) term visits to schools. Seven bookmobiles serve as public libraries and six maintain the Schools Library Service.

The Urban Bookmobile carrying a stock of 4,500 books was introduced in 1958 to serve the suburbs of the capital city of Kingston. The service has been helpful in assessing reading needs and in deciding the priority areas for establishing branch libraries. So far six city branches have developed from bookmobile stops of which there was heavy and sustained usage. In 1968 a second unit was added in the parish but there is still a long waiting list of requests from various communities.

The Rural Bookmobile Service was introduced to upgrade the service to remote rural areas by providing trained staff and a more comprehensive bookstock than was available from book centers. The pilot scheme, inaugurated in the parish of St. Ann in 1964, demonstrated that fifty-two communities visited once per fortnight resulted in a circulation of 60% more books per year than that of the main parish library in St. Ann's Bay. The outstanding success of this program stimulated further investments and currently six parishes operate bookmobile services. The Jamaica Library Service now aims to provide at least one unit in each parish and to attain full island coverage as quickly as funds permit.

Free Postal Service

Jamaica with its mountainous terrains has no well-developed rural transportation system to facilitate ready access to main libraries in the towns. While the bookmobile service has helped to relieve the problems of rural citizens in obtaining reading materials, the Postal Service also has been playing a vital role.

The Postal Service was provided to help readers living in the most remote areas to borrow books by post, free of cost, from their local Parish Library. The free postage facility, which was an initial feature of the Jamaica Library Service, is used annually by over 40,000 readers. Individual citizens welcome this facility and last year, in one particular parish, St. Elizabeth, 4,000 readers out of a total of 11,500, i.e., 35% of the members, borrowed books by post. The rapidly developing bookmobile program is likely to change this figure but the need for this special service will still continue.

The Schools Library Service

The expansion of the educational system in Jamaica in the 1940s increased the awareness of the need for libraries in schools. The Jamaica Library Board, recognizing this need, agreed to administer a school service on behalf of the Ministry of Education. The scheme, which has resulted in the establishment of the Schools Library Service as an integral part of the public library system, has increased the responsibilities of the Jamaica Library Service, but has also created a unique partnership for maximizing the use of scarce finances and limited manpower resources.

The Schools Library Service, offering an island-wide service to all government-owned infant, primary, and senior schools in Jamaica, was inaugurated in 1952.

Since then, the service has progressively expanded from the establishment of a small static collection in each school to the provision of a central circulating service with book exchanges made by delivery vans, to the present scheme of a bookmobile service. The organization of the bookmobile system is based on the division of the island into five convenient regions. The schools are supplied with books by six bookmobiles which are based at the Regional Libraries. This facilitates complete coverage of the island and an exchange is effected at each of the 847 schools three times per year.

There is a clear policy that the bookstock for the Schools Library Service should only consist of supplementary and recreational reading and that no textbooks should be included. The total stock of the service now consists of 497,000 books circulated to 470,000 registered pupils of schools, and because of the heavy use of the stock, efforts to increase the bookstock are hampered by the high rate of withdrawals each year. The current book/reader ratio of 1.06 books per student has improved considerably when compared to the ratio of 0.63 books per student only 5 years ago, but the inadequacy of this provision is a source of constant concern. The provision in each school varies according to the available space and the number of registered pupils. The present scheme is for schools with less than 500 students to receive 200 to 300 books which are usually housed in bookcases in a classroom, schools with over 500 students to receive 500 to 1,000 books accommodated either in classroom bookcases or in small library rooms, and for junior secondary schools with 1,200 students to receive a minimum of 2,000 books.

The Junior Secondary School Programme, which began in Jamaica in 1968, heralded a new era for school library development. Housed in modern buildings, these 64 schools now have furnished library rooms providing seating facilities for scheduled class visits supervised by Teacher/Librarians. Most of these Teacher/Librarians, though trained teachers, are not trained librarians. The government has given some attention to this aspect of the problem, and in 1972 two teacher training colleges added library science as an optional subject to their curricula. Approximately 75% of the bookstock in the Junior Secondary Schools is permanently allocated and a reference collection has been established in each school.

The usual pattern of service to primary schools is for the bookmobile to visit two schools per day and to serve each school once each term. The supply of books for the term is then selected by teachers and pupils. The replacement stock of new books is supplied from the central headquarters in Kingston to each of the five regional public libraries which are responsible for housing the bookmobile, storing the regional stock, and maintaining the local operations. Although the bookmobile is based at the regional library, it does not necessarily return to that library each night as the schedule is planned to allow the vehicle to be housed at the nearest parish library at the end of each day's run. In this way, each parish librarian also has some responsibilities for the bookmobile and its staff and works closely with the regional librarian in supervising the operations of the bookmobile within the parish.

The present coverage of schools by bookmobiles is given in Table 5.

TABLE 5
Coverage of Schools by Bookmobiles

Established	Unit	Regions	Schools
1957	Bookmobile I based in Kingston	The Parishes of Kingston, St. Andrew, and St. Thomas	193
1959	Bookmobile II based in Montego Bay	The Parishes of St. James, Hanover, and Westmoreland	160
1960	Bookmobile III based in Mandeville	The Parishes of Manchester, St. Elizabeth, and Clarendon	159
1961	Bookmobile IV based in St. Ann's Bay	The Parishes of St. Ann, Trelawny, and St. Catherine	177
1962	Bookmobile V based in Port Antonio	The Parishes of Portland and St. Mary	158
1972	Bookmobile VI	Relief unit for all regions	

This organizational structure, which integrates The Schools Library Service with the Jamaica Library Service, has utilized the professional skills of staff as well as the physical resources of buildings and equipment provided by the older and better established public library system. This union has reduced waste and duplication of effort in all phases of the administration, and substantial economies have been achieved from bulk ordering and the centralization of book processing and distribution. For example, the purchasing power of the schools' book vote of J\$185,000 is considerably increased when it is combined with the public library's book vote of J\$385,000 since better prices are negotiated; transport, freight and storage costs are reduced; and accounting procedures are minimized.

Other School Libraries. Most secondary schools in Jamaica are owned by churches and trusts and are administered by independent school boards. Although many of these schools receive large grants-in-aid annually from the government, the final budgetary allocation for the library is determined by the school board and the standards of libraries in secondary schools in Jamaica are relatively low. As long ago as 1839, Rusea's High School (Hanover) was recorded as having a library, but most secondary school libraries have remained under-developed, consisting mainly of an ad-hoc collection of books. During the last 10 years there has been increasing awareness of the need, and many parent/teacher organizations have been engaged in fund-raising projects to provide and upgrade library facilities in schools. The island has some fifty grant-aided secondary schools with just over 50% providing independent library rooms and eleven supervised by qualified or trained library personnel. The government has now decided to make a grant of J\$3 per student for the secondary school libraries, but this is not adequate to upgrade and maintain these libraries, and the lack of a regular and adequate supply of books remains the greatest obstacle to their progress. However, there are some good school libraries, and others are in the process of improving their current facilities.

The Alpha Academy-Convent of Mercy in Kingston has been foremost in maintaining a well-stocked and organized library. This started as a small collection in 1948 and has been developed over the years. In 1963 the library was completely remodeled and the stock of 8,000 books was classified by the Dewey Decimal System. The facilities have been extended further to provide seating accommodation for thirty-six students in the junior library and seventy-six in the senior library. A stock of 17,000 books now serves 900 students. The library is also a visual aids center, well equipped with 3 overhead projectors, 6 record players, 2 television sets, 2 film strip projectors, a slide projector, and a comprehensive stock of film strips and slides covering many aspects of education. Immaculate Conception High School (Kingston), with a seating capacity of ninety readers, has maintained over the years a very active library program, well integrated with curriculum development. St. George's College (Kingston) also has a well-stocked library with an effective reading center program. However, some of these books were recently destroyed by fire. Excelsior College, one of the largest coeducational secondary schools, is in the process of expanding into a new educational complex known as The Excelsior Educational Centre (EXED) serving 3,700 students with levels of school programs from kindergarten to senior high school. This School Board has approved plans for the construction of a large modern Library and Resource Centre which, when realized, will bring new dimensions to the concept of school libraries in Jamaica. Knox College (Clarendon) is also in the vanguard with the construction of a building for a Learning Centre which includes a well-equipped library seating forty-five senior students. A separate junior library seats thirty students.

The concern for improved school libraries has been further stimulated through the newly formed Schools Section of The Jamaica Library Association and through The Jamaica Reading Society which was formed in 1969. In addition, the long-standing recommendations made by the Jamaica Library Board to the Ministry of Education to expand the facilities of the Schools Library Service to include secondary schools have been accepted and will be implemented in the next financial year. The government's recent decision to extend free education to students of secondary schools and the university, as of September 1973, should accelerate the program for adequate school libraries in all secondary schools. The more active secondary school libraries are listed in Table 6.

Finance—Public and School Libraries

During the first 11 years, 1948–1959, the public library service was financed jointly by The British Council, the central government, and 13 local Parish Councils. In 1959 the British Council's contribution came to an end, and since then the service has been maintained entirely by central and local government with a division of expenses as incorporated in The Jamaica Library Service Law, 1949. The Jamaica Library Board, through an annual grant from the central government, provides the entire bookstock for all libraries and pays the staff to process this stock

TABLE 6
Secondary Schools with Active Library Programs

Schools	Enrollment	Books	Other
Alpha Academy-Convent of Mercy	900 (girls)	16,900	112 Seats 35 Periodicals 125 Pamphlets Several film-strips
Ardenne High School	700 (girls)	2,500	36 Seats
Camperdown High School	650 (coed)	2,500	45 Seats
Campion College	560 (boys)	9,000	30 Seats
Clarendon College	1,100 (coed)	2,750	120 Seats 17 Periodicals
Dinthill Technical High School	600 (coed)	2,500	40 Seats
Excelsior High School	1,300 (coed)	5,438	96 Seats 33 Periodicals
Happy Grove High School	450 (coed)	2,800	40 Seats
Immaculate Conception High School	1,000 (girls)	7,000	85 Seats 15 Periodicals
Jamaica College	760 (boys)	6,100	45 Seats
Kingston Technical School	1,400 (coed)	5,000	50 Seats
Knox College	500 (boys)	4,800	30 Seats 43 Periodicals
Morant Bay High School	650 (coed)	3,500	40 Seats 25 Periodicals
St. Andrew High School	800 (girls)	4,000	70 Seats
St. Elizabeth Technical High School	800 (coed)	2,500	45 Seats
St. George's College	1,000 (boys)	5,000	48 Seats 82 Periodicals
St. Hilda's High School	400 (girls)	2,000	40 Seats
St. Hughes High School	800 (girls)	5,000	120 Seats
St. Jago High School Spanish Town.	1,050 (coed)	4,000	32 Seats 32 Periodicals
Queen's High School	600 (girls)	5,200	36 Seats 48 Periodicals
Wolmer's Boys School	800 (boys)	4,000	48 Seats 150 Pamphlets
Wolmer's Girls School	800 (girls)	4,000	
York Castle High School	450 (coed)	3,000	36 Seats

and to coordinate the program throughout the island. The Parish Library Committees, through annual grants from Parish Councils, pay the salaries of local staff and the recurrent costs for the maintenance of the libraries within their respective parishes. The Schools Library Service is financed separately by an annual grant from the Ministry of Education.

The current expenditure of J\$0.89 per capita for public libraries is far below accepted standards although there have been outstanding improvements in recent years. For example, in 1959 the expenditure was J\$288,000 or J\$0.17 per capita whereas in 1972 the expenditure was J\$1,700,000. To this could be added J\$400,000 for The Schools Library Service, making a total of J\$2.1 million or just over J\$1.00 per capita for both services. The immediate target is to improve the present ratio of 1.84 books per reader to a minimum of 3 books per reader in the next 3 years. This will require considerably increased financing to upgrade library provision for the island.

Staff

Lack of sufficiently trained and qualified staff remains a major problem. When the Jamaica Library Service was established in 1948, all professional staff had to be recruited from overseas. Sidney Hockey, the second British Council appointed director, established in 1955 the first formal training program involving scholarships to library schools overseas. This method continued until 1971 when a Department of Library Studies was established in Jamaica at the University of the West Indies. As might be expected, in spite of in-service training programs and scholarships to library schools abroad and in Jamaica, the public and schools library services are still inadequately staffed. There are only forty-two qualified librarians out of a total staff position of 765. Approximately 350 are engaged in professional work, and several positions requiring experienced professional staff are filled by unqualified library assistants. The Jamaica Library Board is now concentrating all its efforts on solving this problem which severely restricts the development program.

Libraries of the University, and of Other Institutions of Higher Learning

The University of the West Indies is a regional institution maintained by contributions from fourteen English-speaking West Indian territories, the largest of which is Jamaica. There are three campuses—Mona in Jamaica (1948), St. Augustine in Trinidad (1960), and Cave Hill in Barbados (1963). The University Library at the Mona Campus is the only one which falls within the scope of this article since it is located in Jamaica. Similarly, while technically it is a regional library functionally, it performs the duties of a university library of Jamaica. This is significant since it has the most scholarly collection of books in the English-speaking West Indies.

The current stock includes 150,000 books, 18,000 pamphlets, 15,000 bound periodicals, and 87,000 microtexts, with the greatest emphasis being placed on the fields of the arts, education, the social sciences, medicine, and the natural sciences—the main disciplines in which teaching and research are being undertaken on the Mona campus. Collections of special interest are as follows:

The Rare Book Collection consisting of rare or scarce books of West Indian content or interest; manuscripts, mainly those of West Indian authors; and theses relating to the West Indies.

A Government Serials Collection including 4,700 bound and 150,000 unbound parts of the official publications of West Indian Governments and their departments as well as their laws and parliamentary papers. The UWI library was granted legal deposit status during the period of The West Indies Federation (1958–1961) and has continued to receive this material although the federation was dissolved.

A Periodicals Collection including 3,400 current titles, 15,000 bound volumes, and 400,000 unbound parts. This is one of the strongest sections and includes material exchanged with some 600 institutions.

Microfilm and Other Microtext Collection consisting chiefly of back issues of standard journals in all fields; West Indian Archival material; manuscripts; thesis material copied from original sources in the West Indies, the United Kingdom, the United States, and Canada.

A Map Collection of over 900 items.

The Mona Library was first established in 1948 in temporary accommodations and moved into permanent buildings in 1952. It was extended in 1957 to provide total accommodation for 200,000 books and seating for 300 readers. This library serves 3,800 readers, and the growth of the university now necessitates additional library expansion.

Two branch faculty libraries are under construction and will be completed shortly. A Medical Library (40,000 books) will serve clinical medicine and a Science Library (48,000 books) will serve the natural sciences and preclinical medicine. Both libraries are sited in immediate proximity to their respective faculty buildings. This expansion will allow a much needed relocation of the greater part of the arts and social science material in the main library. It is envisaged that after the removal of the collections of medicine and natural sciences, a Special Collections Department will be created with responsibilities for book selection, cataloging, and reference work in the West Indies.

There are three other campus libraries associated with the University of the West Indies but operated independently of the university library. The oldest of these, The Library of the Institute of Social and Economic Research, was established in 1948 and now has a specialized collection of 11,000 books and 7,500 pamphlets. The Library and Documentation Centre of the School of Education was established in 1967 and has special interest in teacher training programs in the West Indies. The Library of the Department of Library Studies was established in February 1973 but already has a most significant collection of books and periodicals on librarianship.

In 1972 a special library committee was set up to consider and report on the desirable development of library facilities to meet the proposed expansion of the university up to 1981. The committee has now presented a comprehensive report for all the campuses and University Centres. This includes proposals and recommendations for further substantial development of the Mona library during the next 10 years and these proposals are now under study within the university.

The United Theological College of the West Indies, which is an affiliate college of the University of the West Indies, was established in 1964 as successor to a number of theological seminaries. The library of this college has a very valuable collection of 12,000 books on theology with special emphasis on archival material related to the history of the various religious denominations in Jamaica.

The most active of the other academic libraries is the Library of the College of Arts, Science and Technology in Kingston. This started as a small part-time library when the college was established in 1958, and although it later became full-time in keeping with the college's needs, it was not until 1971 that a qualified librarian was appointed. In 1972 a permanent building was constructed as part of the overall development of the college. This building has stock capacity for 25,000 books and seating for 100 readers, and although the library is still in an embryonic stage, rapid progress has been made. An extension with provision for an audiovisual center has been planned as part of the development program.

The Library of the Jamaica School of Agriculture started as far back as 1910 but remained undeveloped for a long time. It was recently reorganized, however, and housed in a permanent building designed to accommodate 16,000 books and to seat seventy students.

There are eight teacher's colleges in Jamaica. All have library collections which are inadequately housed and maintained. The stock varies from 11,000 books in the largest to 4,000 in the smallest, and only three have qualified librarians in charge. During the last 3 years the Ministry of Education has been concerned about the lack of suitable libraries for teacher's colleges as well as the need for trained teacher librarians to operate school libraries. Government has recognized the importance of including library science in the curricula of teacher's colleges and has agreed that this will first necessitate substantial improvements to the library facilities in the colleges. So far two colleges, Church Teacher's College in Mandeville and St. Joseph's Teacher's College in Kingston, have obtained the minimal facilities which enabled them to introduce librarianship in their 1972 courses. Other development programs are still in the planning stage, but the present course of action seems most likely to produce immediate improvements in the budgetary provisions which are needed to upgrade libraries in teacher's colleges.

Table 7 gives further details of the collections of academic libraries.

Government and Special Libraries

Government departmental libraries are largely underdeveloped and in many instances neglected. There are small collections of books in most departments, but very few are organized and only four libraries have qualified librarians in charge.

The oldest library, The Supreme Court Library, dates from the eighteenth century, but it was not until 1969 that a professional librarian was appointed and a process of reorganization implemented. Its stock of 15,000 books now attracts many users. The Library of the Ministry of Agriculture and Lands was first established in

TABLE 7
Libraries of the University and of Other Institutions of Higher Learning

Libraries	Books	Periodicals	Other	Seats	Clientele
Bethlehem Teachers College	11,000	24	40 pamphlets	30	160
Church Teachers College	5,500	38	40 pamphlets	35	250
College of Arts, Science and Technology	15,000	120	200 pamphlets	90	2,200
Institute of Social and Economic Research (UWI)	11,300	800	7,480 pamphlets 75 maps 40 manuscripts 400 theses	20	300
Jamaica School of Agriculture Library and Documentation Center, School of Education (UWI)	8,370	195	400 pamphlets 260 slides 96 gramophone records	68	180
Library Studies, Department of (UWI) Mico College	4,800	40	200 pamphlets	40	74
Moneague Teachers College	7,100	64	500 pamphlets	30	600
St. Joseph's College	11,100	75	100 studies	50	330
Shortwood College	8,000	35	200 pamphlets	50	250
United Theological College of the West Indies	9,300	66	300 pamphlets	50	450
University of the West Indies (Mona)	12,000	125	200 pamphlets	30	200
	148,200	14,450 (bound) 391,660 (unbound)	18,010 pamphlets 880 maps 1,530 microfilms 89,000 microfiches and microcards	265	3,790
West Indies School of Public Health (Ministry of Health)	4,000	254	100 pamphlets	30	110

1879 under the Department of Public Gardens and Plantations with a stock of botanical and historical books. It was reorganized in 1935 and again in 1943 when it acquired a new building and expanded its facilities to serve twelve divisional libraries. It is now a depository for FAO publications. The present building is overcrowded, and the facilities are inadequate to meet the needs of the 700 members of staff.

In 1938 The Survey Department of the Ministry of Agriculture and Lands established a Records and Library Section which was expanded in 1960 and now provides the largest and most comprehensive library of cadastral maps, planimetric maps, aerial photographs, government plans, and technical data relevant to the island. The 2,300 aerial maps are the most valued holdings of the collection. On the same block of buildings is another rapidly developing collection, The Library of the Department of Statistics has grown to a collection of 21,000 items over the last 10 years. The close location of these two collections is very convenient. The Library of the Ministry of Communications and Works has a valuable collection of 15,000 plans, and The Library of the Jamaica Information Service has a useful collection of films and photographs illustrating Jamaica's development since independence in 1962.

Business, industrial, and professional organizations have also been building up library collections in recent years. One of the most active of these is The Alcan Technical Information Centre. The main library was established by Alcan Jamaica Ltd. (Bauxite Co.) at its headquarters in Mandeville, and since 1967 this has been developed to provide "sub-centres" in three other parts of the island where the company operates. A very useful Subject Index to Technical Reports is published as well as a Technical Information Centre Bulletin. The Industrial Development Corporation is a semi-government body established to promote industrial development and to attract the investment of foreign capital into industries in the island. A library was established in 1955 and, although inadequate, it provides the nucleus of a Special Industrial Reference and Information Service.

In recent years a growing awareness of the role of special libraries has been evident. An increasing number of government departments have requested the Jamaica Library Service to give professional assistance in organizing their collections and in training staff, but development has been retarded by the lack of qualified staff and adequate budgetary provision.

The current holdings of the active libraries are listed in Table 8.

The Jamaica Library Association

A survey of libraries in Jamaica would not be complete without a recognition of the contribution of The Jamaica Library Association to library development during the last 20 years. The association was formed in 1950 to unite all persons engaged in or interested in librarianship in Jamaica. At that time there were only six qualified librarians working in libraries in Jamaica compared to 90 in 1972. It was therefore

the major task of the association to awaken public awareness to the specialist services which qualified librarians provide.

Library training was given priority in the association's program which started with the organization of part-time lectures for members sitting the professional examination of The Library Association (Great Britain) and climaxed with the establishment of a library school at the University of the West Indies. For 12 years the association persevered in making representations to the government, to the university authorities, and to international foundations and in seeking the support of librarians and library associations in the other territories. As a result of this initiative and sustained effort, UNESCO was persuaded to send J. Periam Danton, Professor of Librarianship, University of California, to carry out a study which recommended the establishment of a library school at the University of the West Indies.

Other projects of the Library Association have included the publication of the annual *Jamaica Library Association Bulletin*, the quarterly *Newsletter*, a *Directory of Libraries in Jamaica* and *Standards for Schools Libraries*; the sponsoring of the publication of *A Union List of Serials in Jamaica* now being prepared; and the sponsoring of conferences and seminars on librarianship at national and international levels. One of the highlights was the association's sponsorship of the 1972 International Library Conference on "Libraries and the Challenge of Change" which attracted 260 participants from eighteen countries overseas. The association's vitality is reflected also in the fact that in 1972 the Commonwealth Library Association (COMILA) selected Jamaica as the site for its secretariat and also as the venue for its 1975 conference.

The Department of Library Studies, University of the West Indies

A library school was established in October 1971 as the Department of Library Studies, within the faculty of General Studies, University of the West Indies, Mona, mainly based on the recommendations made in the Danton Report to UNESCO. In 1968 Professor Danton submitted his report for consideration, and UNESCO followed up the matter by offering a grant for staff and scholarships over a 4-year period. The supporting governments of the university accepted the offer and with it the commitment to provide a building, a number of staff, and to continue the project after the UNESCO contribution ceased. The school has been established as an integral part of the University of the West Indies.

The school offers professional training at undergraduate and graduate levels. The undergraduate program, which is a 3-year degree course leading to a Bachelor's degree, started in 1971 while the graduate program, which is a 1-year postgraduate diploma course, started in October 1973.

However, the intake of thirty students per year is insufficient to meet the rapidly growing demands for qualified librarians in the region, as in Jamaica alone there are currently over fifty vacancies and the projected needs for the next 3 years involve another 120 qualified personnel.

TABLE 8
Active Government and Special Libraries in Jamaica

Libraries	Books	Periodicals	Other	Clientele
Alcan Technical Information Center (Bauxite)	2,400	300	2,630 pamphlets 1,700 technical reports 250 standards	320
Bank of Jamaica	1,000	70	2,000 pamphlets	250
Bureau of Standards	700	80	40,000 standards	80
Department of Statistics	11,000	205	10,000 pamphlets	100
Forestry Department	600	63	350 pamphlets	30
Gordon House (Parliamentary Library)	4,100	24	200 pamphlets	80
Jamaica Broadcasting Corporation	100	12	5,120 tapes 1,800 films 3,200 photos 4,000 phonograph records	200
Jamaica Industrial Development Corporation	6,000	250	10,500 pamphlets	200
Jamaica Information Service	1,500	150	3,000 tapes 70 phonograph records	14,400
Ministry of Agriculture and Lands	9,000	900	3,000 film negatives	700
Ministry of Education	6,000	30	2,000 pamphlets	1,500
Ministry of Finance	3,800	63	150 pamphlets	100
Ministry of External Affairs	1,000	80	50 pamphlets	300
Ministry of Mining and Natural Resources	2,600	180	3,000 pamphlets 4,000 pamphlets 1,000 maps	300

Ministry of Communications and Works	8,000	3,000	3,000 pamphlets 15,000 plans 1,000 standards	800
Police Training School	2,500	90	50 pamphlets	160
Salvation Army School for the Blind (Braille)	700	12	—	100
Scientific Research Council	2,500	1,500	Maps Patents	100
Supreme Court	15,000	30	—	400
Survey Records and Library	350	99	3,680 manuscripts 10,000 government plans	75
			123,866 survey records	
			38,000 microfilms	
			2,300 aerial photos	
United States Information Service	950	40	Many U.S. documents 400 films	5,300

Conclusion

Jamaica's educational and political development has, quite naturally, influenced the pace of library development. Hampered by late educational reform and a high rate of illiteracy, the library movement was slow in gathering momentum. However, during the last 10 years the pace has quickened considerably.

Recently, two major national programs have been established which will once more accelerate the pace of development. The first is the National Adult Literacy Campaign launched in 1972 with the aim of eradicating illiteracy by 1976, and the second is the decision of the government to provide free education up to university level for all Jamaican students. These programs will generate a far-reaching educational development which must of necessity place greater emphasis on the role of libraries.

In April 1972 the prime minister of Jamaica appointed "an exploratory committee on arts and culture to assess the cultural situation and to recommend action." The report of the committee has been approved by the government, and this includes a comprehensive program for the national development of libraries. Priority has been given to the need for:

1. The establishment of a National Council on Libraries and Archives responsible for providing a national plan for the systematic development of all types of libraries.
2. The establishment of a National Library of Jamaica through relevant legislation and provision for copyright deposit. The West India Reference Library is to be reorganized to fully embrace these functions.
3. The systematic upgrading of all government funded libraries with special emphasis on adequate book provision.

The stage is now set for further advancement. Libraries in Jamaica are on the threshold of greater development.

BIBLIOGRAPHY

Baa, Enid M., "Library and Bibliographic Activities in the Caribbean." Working paper No. 10, Submitted for the Eighth Seminar on the Acquisition of Latin American Library Materials, University of Wisconsin, Madison, July 11-13, 1963.

Bateson, Nora, *Library Plan for Jamaica*. Government Printer, Kingston, 1945, 10 pp.

Baxter, Ivy, *The Arts of An Island: The Development of the Culture and of the Folk and Creative Arts in Jamaica 1494-1962 (Independence)*, Scarecrow Press, Metuchen, New Jersey, 1970.

Bennett, Hazel E., "The Jamaica Library Service: Its Foundations and Development." M.S. thesis, Graduate School of Southern Connecticut State College, New Haven, 1966, 127 pp., Typescript.

Bennett, Hazel E., "Private and Subscription Libraries before 1879," *Lib. History*, 2(3), 242-249 (July 1967).

Black, Clinton, *History of Jamaica*, 3rd ed., Collins, London, 1965.

Brebner, Mary A., "The Libraries of the Institute of Jamaica," *Lib. Assoc. Record*, 60(10), 310-312 (October 1958).

Bryant, A. S. A., *A Report on the Organization of the Jamaica Library Service*, Jamaica Library Board, Kingston, 1948, 45 pp. Mimeographed.

Collings, Dorothy, *History of the Library School*, Presented at the opening of the new building for the Department of Library Studies, University of the West Indies, Kingston, on March 22, 1973, 6 pp., Mimeographed.

Collings, Dorothy, "Library Education in the English-Speaking Caribbean," *UNESCO Bull. Lib.*, 27(1), 12-17 (January-February 1973).

Collings, Dorothy, "University of the West Indies Library School: Progress Report 1971-72," *Jamaica Lib. Assoc. Bull.*, 30-37 (January 1973).

Cundall, Frank, "Library Work in Jamaica," in *Transactions and Proceedings of the Second International Conference held in London, July 13-16, 1897*, The Library Association, London, 1898, pp. 173-178.

Danton, J. P., *Jamaica: Library Development*, UNESCO, Paris, 1968, 56 pp.

Delattre, Rae, *A Guide to Jamaican Reference Material in the West India Reference Library*, Institute of Jamaica, Kingston, 1965, 76 pp., Mimeographed.

Delattre, R., J. Richards, and G. Robertson, "The New West India Reference Library," *Jamaica Lib. Assoc. Bull.* 2(3), 15-22 (January 1967).

Donovan, David G., "Report of Visit to Jamaica, November 14-18, 1967" (Report to the United States A.I.D. Mission on a Survey of Library Development in Jamaica), International Relations Office, American Library Assoc., Washington, D.C., 1968, 12 pp., Mimeographed.

Dunn, Patricia Y., and Rae Wright, "Library Resources for Research in the Caribbean: Caribbean Literature in English" Working paper No. VII-B, Conference of the Association of Caribbean University and Research Libraries, Caracas, Venezuela, November 7-12, 1971, 20 pp., Mimeographed.

Flood, Roy, *Public Libraries in the Colonies* (Library Assoc. Pamphlets No. 5). The Library Assoc., London, 1961.

Fray, C. P., "Co-operation in Government Libraries," *Jamaica Lib. Assoc. Bull.*, 2(1), 1-13 (January 1965).

Gocking, W. E., "The University of the West Indies Library and Its Regional Collections," Working paper No. 25, Submitted for the Twelfth Seminar on the Acquisition of Latin American Library Materials, Los Angeles, University of California, June 22-24, 1967.

Hall, Douglas, *Free Jamaica 1838-1865: An Economic History*, Yale Univ. Press, New Haven, 1959.

Holdsworth, Harold, "University College of the West Indies Library," *Lib. Assoc. Record*, 55(9), 278-281 (September 1953).

The Handbook of Jamaica, 1881, Government Printer, Kingston, 1882.

The Handbook of Jamaica, 1935, Government Printer, Kingston, 1935.

The Handbook of Jamaica, 1939, Government Printer, Kingston, 1939.

The Handbook of Jamaica, 1967, Government Printer, Kingston, 1967.

The Handbook of Jamaica, 1971, Government Printer, Kingston, [1971].

Hentschel, Cedric, and others, "The Jamaica Library Service," *British Council Staff J.*, 7, 13-21 (April 1965).

The Institute of Jamaica, *Annual Reports*, 1931–1955. Kingston. *Annual Reports*, 1960–1971. Mimeographed.

Jamaica, *Five Year Independence Plan 1963–1968: A Long Term Development Programme for Jamaica*, [Government Printer], Kingston, 1963.

Jamaica, Laws, "The Institute of Jamaica Law 1879," in *The Laws of the Island of Jamaica*. Vol. 8, rev. ed., Government Printer, Kingston, 1913, pp. 303–307, Amendment Laws, 1889, 1909.

Jamaica, Laws, "The Institute of Jamaica Law 1930," in *Laws of Jamaica*, Government Printer, Kingston, 1930, Chap. 162, pp. 2093–2097.

Jamaica, Laws, "The Jamaica Library Service Law 1949," in *Laws of Jamaica*, Government Printer, Kingston, Chap. 175, pp. 2238–2248, Amendment Laws, 1951, 1953, 1956, 1961.

Jamaica, Prime Minister's Office, "Report of the Cultural Committee on the Arts, Appointed by the Prime Minister of Jamaica to Make Recommendations for the National Development of the Arts, Including the National Development of Libraries, Prime Minister's Office, Kingston, 1972, 51 pp., Mimeographed.

Jamaica, Town Planning Department, *A National Physical Plan for Jamaica 1970–1990 Prepared by the Town Planning Department of the Ministry of Finance and Planning and the United Nations Development Programme Project*, Town Planning Department, Kingston, 1971. (*National Atlas of Jamaica, companion volume to National Physical Plan.*)

Jamaica Library Association, *Libraries and the Challenge of Change: Papers Presented at the International Library Conference, Kingston, Jamaica, April 24–29, 1972*, Mimeographed.

Jamaica Library Service, *Annual Reports*, 1949–1962, Kingston. *Annual Reports*, 1963–1971, Mimeographed.

Jamaica Library Service, *Annual Reports of Individual Parish Libraries*, 1963–1972, Mimeographed.

Jamaica Library Service, *Five Year Development Plan 1968–1973*, Jamaica Library Board, Kingston, 1968, 64 pp., Mimeographed.

Jordan, Alma, *The Development of Library Service in the West Indies Through Inter-Library Co-operation*, Scarecrow Press, Metuchen, New Jersey, 1970.

Moss, Sylvia G., "A History of the Library of the University of the West Indies (1948–1966), F.L.A. thesis. The Library Association, 1969, 156 pp., Typescript.

Nelson, Carlos I. H., "Clientele Relations Progress in a Technical Information Centre," *Spec. Lib.*, 62(3), 147–150 (March 1971).

Richards, Judith, *Directory of Jamaican Libraries: Compiled for the Jamaica Library Association Research and Publications Working Party*, Jamaica Library Assoc., Kingston, 1967, 99 pp.

Robertson, Amy, "School Libraries," Paper presented at the inauguration of the International Association of School Librarians (WCOTP) held in Kingston, Jamaica, August 1971, 18 pp., Mimeographed.

Robertson, Glory, "The West India Reference Library of the Institute of Jamaica," *Jamaica J.*, 6(1), 15–20 (March 1972).

Robinson, Joyce L., "Problems and Strategies: A Case Study of the Jamaica Library Service." Paper presented at the British Council Workshop on The Role of the Public Library in National Development and Its Implementation, Sheffield, England, July 3–21, 1972, 19 pp., Mimeographed.

Robinson, Joyce L., "Rural Library Development in Jamaica." Article Prepared for *UNESCO Bull. Lib.*, 1973, 13 pp., Typescript.

Robinson, Joyce L., "Schools Library Service in Jamaica," *UNESCO Bull. Lib.*, 21(4), 190-195 (July-August 1967).

Savage, Ernest A., *The Libraries of Bermuda, the Bahamas, the British West Indies, British Guyana, British Honduras, Puerto Rico and the American Virgin Islands: A report to the Carnegie Corporation of New York*, Library Assoc., London, 1934.

Stewart, Verna, "The Library of the Institute of School and Economic Research," *Jamaica Lib. Assoc. Bull.*, 2(5), 17-20 (January 1965).

University of the West Indies, Brochure of the Department of Library Studies, Kingston, 1972. 21 pp., Mimeographed.

University of the West Indies, *Report of the Committee on Library Development* (includes proposals and recommendations for the expansion of the library of the Mona Campus, 1972-1981 and other libraries of UWI). Kingston, 1972.

University of the West Indies, *Report on the Library, 1948-1972*, annual, Kingston.

Warmington, Cynthia M., "The Library Movement in Jamaica," in *The Daily Gleaner*, Jamaica Library Service Supplement, December 29, 1969.

Warmington, Cynthia M., "Library Planning in Jamaica," in *The Planning of Library and Documentation Services*, 2nd ed. (C. V. Penna, ed.), UNESCO, Paris, 1970, pp. 152-155.

Warmington, C., J. Robinson, and R. McLaughlin, *Jamaica Library Service: 21 Years of Progress in Pictures 1948-1969*, Jamaica Library Service, Kingston, 1972.

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JAPAN INFORMATION CENTER OF SCIENCE AND TECHNOLOGY

Background

The Japan Information Center of Science and Technology (JICST) was established on August 16, 1957 by the "Act of the JICST" as a special institution, nonprofit in nature. The JICST is under the executive control of the Science and Technology Agency, Prime Minister's Office. The aim of the JICST is to provide scientific information as the central organization for the advancement of science and technology in Japan.

The purposes of the JICST are:

1. To collect scientific and technological information worldwide and nationwide and to process it systematically to meet the needs.
2. To disseminate information quickly and appropriately to organizations and individuals, regularly or upon request.
3. To offer more thorough and detailed services to encourage scientific information activities of individual organizations and to assist them in solving problems too difficult or too complicated for them to handle individually.

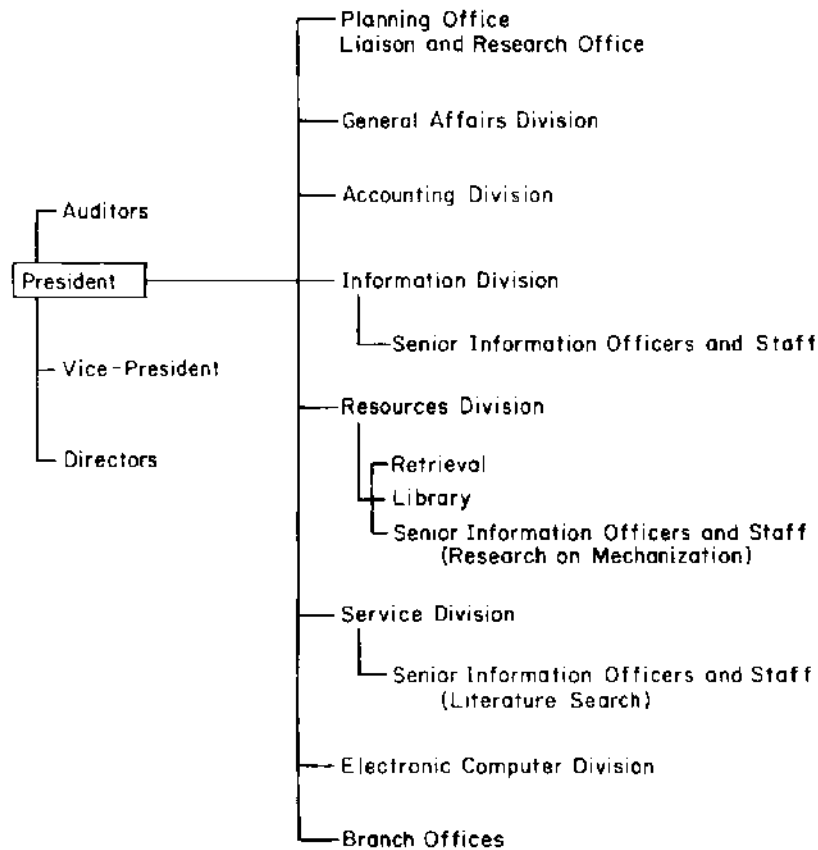


FIGURE 1. Organization structure of the Japan Information Center of Science and Technology, 1972.

In order to realize these purposes, the JICST performs the following activities: (1) publication of abstracting journals to cover current literature in science and technology, (2) copying service, (3) translation service, and (4) research service.

The JICST is financed mainly by two sources: the government (1,038 million yen in fiscal 1971) and subscription and service charges (887 million yen in fiscal 1971). Support from other sources was 30 million yen in fiscal 1971.

Organization

The organizational structure of the JICST is given in Figure 1.

The permanent staff, based on the approved budget of 1971, numbers 336 (Table 1).

Besides the staff members, there are about 130 consultants and part time workers. Key punching, photoduplication, and bookbinding operations are carried out by subcontract.

TABLE 1
Permanent Staff of JICST

Boards	
President	1
Vice President	1
Directors	2
Auditors	2
Planning Office	6
Technical Coordination Office	2
General Affairs Division	28
Accounting Division	17
Information Division	125
Resources Division	24
Service Division	77
Computer Division	35
Branch Office	16

Activities and Services

The JICST performs various activities and provides services for its clients by disseminating current information and to promoting study and research of information in the field of science and technology.

The working collection of the JICST, which constitutes the basis for its services, contains about 7,000 periodicals, of which 4,700 titles are from foreign countries and 40,000 are technical reports. Patent specifications of several kinds (48,000 in 1971) also play an important role. In addition, 460 medical journals were added to the collection in 1971. The working collection is used not only as the source documents for abstracting, indexing, and copying, but also for retrospective literature searching and research.

Other activities are directed toward development of the computerized systems which are mentioned later.

PUBLICATION

The JICST's main line of business is to prepare and publish the abstract journal *Kagaku Gijutsu Bunken Sokuho* (*Current Bibliography on Science and Technology*—CBST) and to disseminate foreign patent news and other publications useful for technical and industrial organizations.

CBST

The JICST's abstract journal *CBST* covers the major fields of science and technology and some of the life sciences. The journals for *CBST* are composed of the domestic journals (34%) and the foreign journals (66%) which come from the

TABLE 2
Abstracts Processed in Fiscal 1971

Series	Abstracts
Mechanical Engineering (semimonthly)	71,216
Electrical and Electronic Engineering (semimonthly)	36,868
Chemistry and Chemical Engineering (3 times a month) Covers foreign journals only	110,777
Earth Sciences, Mining and Metallurgy (semimonthly)	43,852
Civil Engineering and Architecture (semimonthly)	28,759
Pure and Applied Physics (semimonthly)	49,700
Atomic Energy (monthly) Isotopes and Radiation Chemistry Series	15,943
Management and Administration (monthly)	19,695
TOTAL	376,810

United States (20%), the United Kingdom (11%), Germany (10%), Russia (5%), France (5%) and the remaining 15% from other countries.

Upon receiving source documents, about 100 information officers with scientific and technical backgrounds select the articles to be abstracted. Abstracts are prepared by some 4,000 abstractors working outside of the JICST. The abstractors occupy such positions as scientists and engineers in universities and research laboratories.

After the abstracts are prepared, information officers check each abstract in its subject content, terminology, wording, and bibliographic references. For indexing and retrieval purpose, keywords extracted from each abstract are assigned to the abstract and are encoded according to the JICST Classification Scheme. On the average, four keywords are selected from each abstract. There were 352,244 abstracts processed in 1970. The average length of an abstract was 300 Japanese letters, equivalent to 100 English words.

The JICST Classification Scheme is divided into thirty-four major classes in nine disciplines. These major classes are arranged in hierarchical order. Each item included in a class of a different level is assigned a unique classification code which represents a defined concept. The number of items or codes totals about 15,000.

CBST is issued in eight series. The number of abstracts processed in fiscal 1971 in each series are listed in Table 2.

Approximately 500 Japanese characters are prepared especially for the series on Atomic Energy (Isotopes and Radiation Chemistry Series) informative abstracts. The index is prepared according to INIS Indexing Rules, based on the INIS Thesaurus. INIS is the International Nuclear Information System, a suborganization of the International Atomic Energy Agency (IAEA).

CBST is also available in card form by special request. It is recommended that clients, whose use of abstracts is limited to one or a few specific subjects, obtain the

card form abstract by indicating the classification codes corresponding to the subjects.

OTHER PUBLICATIONS

Complete Chemical Abstracts of Japan (Nippon Kagaku Soran). A monthly publication covering Japanese journals and patents exclusively. The number of items abstracted and cited was about 28,000 in 1971.

Foreign Patent News (Chemical Patents). To meet the needs of industrial organizations, the JICST publishes this to cover chemical patents of the United States, West Germany, and Great Britain. It is issued weekly.

Bibliography of Environmental Pollutions. To meet the serious social needs of controlling environmental pollution, the JICST started to publish an abstract journal on the subject in 1971. The source documents examined consist of over 7,500 periodical titles and 30,000 reports in science and technology, including medical and agricultural sciences. Articles related to the subject are scanned manually, utilizing the abstracts already processed for the CBST series. Approximately 20,000 items are cited a year. The bibliography is issued bimonthly.

Technical Highlights. To develop information activities effectively, it is necessary to acquire and absorb information of recent changes in technology and management science. This is especially true for those who concern themselves with planning, research and development, and technological innovation. The JICST selects and compiles readable articles useful for the review of recent developments in technology and for knowledge of the new products in the world. Its vast source materials (about 5,200 titles of periodicals from 48 countries) are used for this purpose. The news is published on a monthly basis, and is used by smaller scale industries.

Annual Index to Japanese Patents. A comprehensive index of Japanese patents is issued annually by the JICST. This index is composed of two parts: by patent classification codes and by applicants (divided by Japanese juridical persons, Japanese individuals, and foreign individuals).

Literature on Surface Process Technology of Metals. This is a collection of abstracts selected from CBST and issued for specialists. Five volumes have been published. The editing approach is from the point of view of basic theory, process techniques, and industrial applications.

Holding List of Periodicals. This publication consists of three parts: (1) foreign periodicals, (2) domestic periodicals, and (3) foreign special documents. It includes information for ordering copies.

Collected Papers of Annual Study Meeting for Information Science and Technology. This publication includes original papers and the record of discussions among reporters and floor members at the annual meeting (starting in 1964) sponsored by JICST.

Contents Service. This service is offered to fill the gap between the time periodicals are received and the time abstracts and indexes are available.

KWIC Title Index in Physics. This is issued biweekly and covers sixty important journals.

COPYING, TRANSLATION, AND ABSTRACTING SERVICE

Copying Service. The JICST offers copying service not only of periodical articles and reports in its holdings but of documents in other libraries and research organizations both domestic and foreign. The number of copies processed in 1971 reached a little more than 400,000.

Translation Service. As the use of Japanese language is limited in the world, researchers and technologists have difficulty finding foreign literature and reporting research results. In this respect, the JICST has been trying to assist them by offering translation services.

Translations are provided from foreign languages (fifteen major languages and others) into Japanese and from Japanese to foreign languages. These are prepared through a network of cooperating specialists. The number of translated items was about 6,100 in 1971.

Abstracting Service. As mentioned before, CBST is a sort of ready-made service, but the abstracting service described here is a customized service, including abstracts in translated form. The number of items abstracted was approximately 1,200 in 1971.

Research Service. It goes without saying that literature searching is of the utmost importance in planning research and development or in designing new products. The JICST offers literature searching and research services through the cooperative efforts of subject specialists and documentalists. About 2,000 research works were carried out in 1971.

OTHER ACTIVITIES

Library Service. Libraries are open 6 days a week for public use in the Tokyo headquarters and in the Osaka and Nagoya branches. Documents collected by the JICST in the past 5 years, patent literature, and JICST publications are provided.

Training Courses for Scientific Documentation. The JICST, in order to promote the methodological development of information processing and the techniques of documentation, offers various training courses at various levels in Tokyo, Osaka, and local areas. Consulting services are also made available through these courses.

Magnetic Tapes Offering Service. The JICST's magnetic tapes are edited to meet the retrieval demands resulting from the contents of CBST. The service enables clients to have access to the prepared abstracts about a month earlier than the time the printed CBST reaches them, and it also helps them to facilitate simplified information retrieval systems. As its first tape service, the JICST started the selective dissemination of information and retrospective search service in October 1972 with tapes on which the condensed information of abstracts is stored. The information for each abstract is: authors of the paper, abstract number, kind of language, stack

number, keywords, and classification code. These data on tape are recorded in BCD (Binary Coded Decimal) or EBICDIC (Extended Binary Coded Decimal Interchange Code) for the facilities of the users.

Computer System

OUTLINE OF THE JICST COMPUTER SYSTEM

In December 1967 the JICST installed an electronic computer with a main memory capacity of 65 thousand words (1 word = 36 bits) manufactured in Japan. The purpose of the computerized system is to handle the rapid and versatile dissemination of voluminous information and to make precise information retrieval and a more integrated service system possible.

The following points are considered important in system design:

1. To reduce manual handling to a minimum through the total system, including input/output processing.
2. To utilize input data in as versatile a fashion as possible.
3. To use the Japanese language in "natural" form with Kanji (Chinese character), Hiragana and Katakana (both Japanese syllabary) as well as alphanumeric characters throughout the system.

This system is unique in using Kanji, Hiragana, and Katakana with alpha numeric characters. For this purpose a high-speed Kanji line-printer (JEM 3800) was recently developed as an output device to be used in combination with Kanji teletypewriters as input devices.

The computer system, now in operation or definitely to be used at the JICST, is divided into the following five categories:

1. Automatic Editing and Photocomposition of Current Bibliography on Science and Technology (CBST)

The system is designed to prepare original printing plates as output for every issue and annual index of CBST. Manuscripts of abstracts (in Japanese) are punched onto paper tape and made machine readable using Kanji teletypewriters and transferred to magnetic tape. The tape is utilized as the master in the total information processing system of JICST.

The master tape stores the whole texts of abstracts in Kanji codes (the coding form represents one Chinese character by 12 bits), and translated titles, original titles, keywords, and bibliographic notes as well as classification codes in the same manner. These are necessary for preparing abstract journals and various indexes and in handling the retrieval services. This system is now in operation and processes more than 30,000 abstracts a month.

2. Terminology Control System

The system is designed for keyword control and for preparing a Japanese thesaurus.

3. Information retrieval system

Using the above-mentioned magnetic tapes, a selective dissemination of information (SDI) service will be available in the Japanese language or in binary coded decimal form. The software for this aspect has been completed, and experiments for providing varied kinds of information retrieval (IR) services are now being carried out. An on-line, real-time IR service system and linkage with an international system for technical information exchange are under examination.

4. Source Documents Control

The computer system will be applied to control library processing of source documents and to facilitate identification and location of the ever-growing collection.

5. Office Management

The system can handle many aspects of routine, time-consuming office work, such as control of copying jobs, receiving orders for publications, shipping work, and maintenance of payroll.

INPUT SYSTEM

As was mentioned before, all data in Japanese are input using the Kanji teletypewriter, but a Flexowriter is used for inputting alphanumeric data in this system.

The Kanji teletypewriter has a special keyboard designed for processing Kanjis with 192 letter keys, thirteen shift function keys, and fifteen special function keys capable of handling superscript, subscripts, and composing special codes or symbols.

The following numbers of characters, letters, signs and symbols are generated in this system: 1861 of Kanji, 81 Katakana, 77 Hiragana, 65 Roman alphabet, 66 Russian alphabet, 33 Greek alphabet, 10 Arabic numerals, 20 Roman numerals, 199 special symbols, and 84 reserved for addition.

An input datum on paper tape may be represented by a character code of 6 or 8 bits. In the JICST input system, two different codes are used; that is, in the Kanji teletypewriter, one character is represented by a pair of 6 bits, and 1 byte in the Flexowriter.

After the data punched onto the paper tape are input, both coding forms are united and converted to inner Kanji code in the computer.

In the succeeding computer processes, starting from the final data recording on the master tape for the CBST, to the output by the Kanji line-printer, the Kanji code of the inner form is utilized. The Kanji code consists of function bits and main bits.

The main bits are used for the Kanji characters, and the function bits are used to instruct the Kanji line-printer in the letter spacing, superscript, subscript, and letter composition of the characters for output.

One word is composed of 36 bits in the main computer and 16 bits in the Kanji

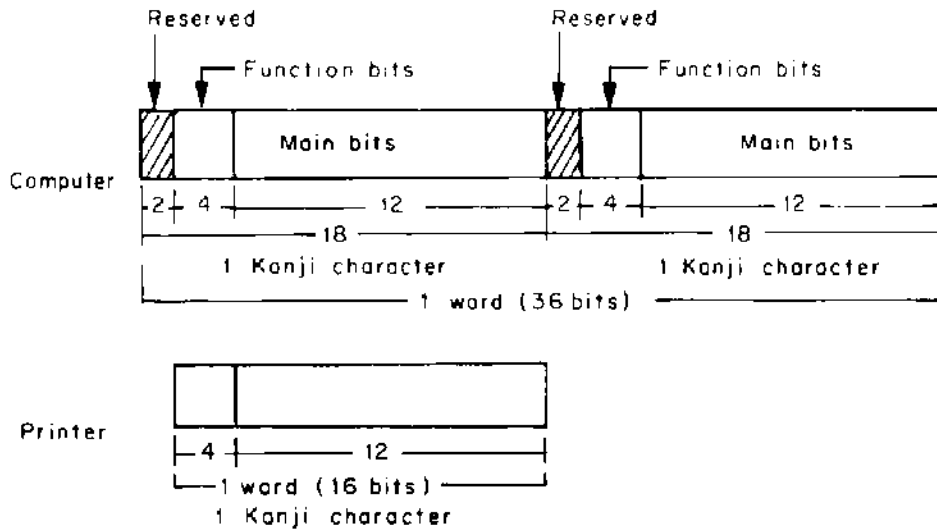


FIGURE 2. One word in the computer and printer.

line-printer, the former representing two characters for one word and the latter representing one character for one word (see Figure 2).

AUTOMATIC EDITING AND PHOTOCOMPOSITION OF CBST

As mentioned in the section about CBST, abstracts are prepared by abstractors and checked by information officers. All descriptions and abstracts are written on manuscript forms specially designed to be used as data sheets for key-punching with the necessary signs and instructions for punchers.

One item of abstract is divided into nine categories (segments) according to the kind of information, and each category is again divided into a certain number of records, each of which has an information area to contain forty characters of Kanji code and a flag area for eight words of BCD code. A record is a minimum unit of file on magnetic tape (see Figure 3).

The data of each abstract on tape are divided into nine segments (B, C, D, E, F, G, H₁, H₂, I) corresponding to the categories which carry definite information.

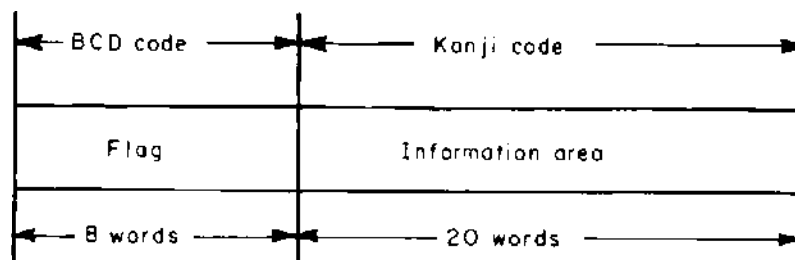


FIGURE 3. A record on magnetic tape.

Flags are recorded in the BCD mode and are used for sorting and merging. The data in the flag area are the kind of segment and a description of a segment such as record number, abstract number, signs indicating proofreading processes, and classification code. The data in the information area of the record are information contained in the abstract.

The contents of this area are, by segment,

B	Bibliographic data, abstract number, kind of language, etc.
C	Classification code, UDC number
D	Pages of the document in the periodical
E	Author(s)
F	Title of the document
G	Title in Japanese
H ₁	Keywords
H ₂	Japanese syllabary for sorting
I	Abstract in Japanese (~700 characters)

The transaction master files of the JICST abstracting journal are produced and separately input to each master file of nine disciplines. Universal Decimal Classification (UDC) numbers corresponding to the JICST classification codes are assigned to each abstract in the editing process. Any specific subject (e.g., Heat Transmission, Welding by Electronic Beam) is arranged and placed according to the JICST hierarchical classification scheme under one of the nine disciplines. Each abstract is given its particular number (serial number through a year). The data on tape for producing the abstract journal are rearranged, and the layout necessary for printing is made. This layout is in two steps: (1) individual abstract, and (2) page format and pagination, division of words, justification, and insertion of a headline. The Kanji line-printer, which is capable of printing out Kanji at a speed of 600 characters per second, can read in the data on magnetic or paper tape. The printing prototype and positive roll films are produced by the Kanji line-printer connected with the computer on-line.

This device is composed of a unit for the control part, a unit for the character generator, and two sets of the printing part. One set makes the film output for offset printing and the other produces soft print for making galleys.

The principle of the character generation device is that the characters on the character plate made of film undergo scanning by means of a flying-spot cathode ray tube (CRT), and the beam of light goes through the secondary-electron multiplier tube and the video signals from the tube modulate the light output of the CRT for printing. The result is shown in Figure 4.

TERMINOLOGY CONTROL SYSTEM

Since 1969, the JICST has been using a provisional thesaurus (standardized keywords described in the section entitled Thesaurus Preparation) for indexing and retrieving within the JICST information processing system, and the completion of a

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Коллективная Гиромангнитное отщепление g_K четного-нечетных ядер. Магнитные и электрические свойства ^{133}Tm

БАЛОДИС М. К., НЕКЕР Л. К., ПРОКОФЬЕВ Л.

Т.: 45 Извест. Акад. Наук СССР Сер. физ. 30(18)

1330-1333 '66

奇奇核の集団磁気回転比 $g_K(^{133}\text{Tm})$ の磁気及び電気的特性

(a) A

奇奇核の g_K については $K^{\pi} = 0^+, I^{\pi} = 0^+, I^{\pi} = 0^-$ で $\mu = g_K I, ^{133}\text{Tm}_{(101)}$ 及び $^{133}\text{Am}_{(101)}$ の場合にしかその値が得られてないが、 $^{133}\text{Tm}_{(101)}$ の場合にも偶然の事情によって g_K が得られる。すなわち、 ^{133}Tm の $p_{1/2}(411), n_{3/2}(52)$ $K^{\pi} = 1$ の $I^{\pi} = 1, 2$ 及び 3 の回転準位間の内部変換電子の測定から $(114 \text{ keV} \cdot 3^+ \rightarrow 1^- : I_{12} \sim 45, I_{13} \sim 40, 740, 775 \text{ keV} \cdot 3^- \rightarrow 2^- : I_{12} \sim 20, I_{13} \sim 20)$ これらの準位間の $B(M1) \sim 0$ なること、したがって $B(M1) = 3e\hbar/2Mc^2/4\pi K^2 < I, 1 | K | I, k >^2 \sim 0$ より $g_K \sim g_K$ 、したがって $\mu = K^2 (g_K - g_K) / 1 + I g_K - I g_K = g_K$ ^{133}Tm の基底準位 から $g_K \sim +0.247 \sim g_K$ が得られる。以上の3種の核の g_K について $^{133}\text{Lu} : g_K = 0.318 \pm 0.002, ^{133}\text{Am} : g_K = 0.381 \pm 0.002$ 議論した。(図1表1参17)

669.017:541

541.135.62

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On the kinetics on the anodic passivation of iron, cobalt and nickel. EBERSBACH U., SCHWABE K., RITTER K. : B535 Electrochim Acta 12(8) 927-938: 67.

鉄、コバルトおよびニッケルの陽極不動態化の動力学 (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r) (s) (t) (u) (v) (w) (x) (y) (z) (aa) (ab) (ac) (ad) (ae) (af) (ag) (ah) (ai) (aj) (ak) (al) (am) (an) (ao) (ap) (aq) (ar) (as) (at) (au) (av) (aw) (ax) (ay) (az) (ba) (bb) (bc) (bd) (be) (bf) (bg) (bh) (bi) (bj) (bk) (bl) (bm) (bn) (bo) (bp) (bq) (br) (bs) (bt) (bu) (bv) (bw) (bx) (by) (bz) (ca) (cb) (cc) (cd) (ce) (cf) (cg) (ch) (ci) (cj) (ck) (cl) (cm) (cn) (co) (cp) (cq) (cr) (cs) (ct) (cu) (cv) (cw) (cx) (cy) (cz) (da) (db) (dc) (dd) (de) (df) (dg) (dh) (di) (dj) (dk) (dl) (dm) (dn) (do) (dp) (dq) (dr) (ds) (dt) (du) (dv) (dw) (dx) (dy) (dz) (ea) (eb) (ec) (ed) (ee) (ef) (eg) (eh) (ei) (ej) (ek) (el) (em) (en) (eo) (ep) (eq) (er) (es) (et) (eu) (ev) (ew) (ex) (ey) (ez) (fa) (fb) (fc) (fd) (fe) (ff) (fg) (fh) (fi) (fj) (fk) (fl) (fm) (fn) (fo) (fp) (fq) (fr) (fs) (ft) (fu) (fv) (fw) (fx) (fy) (fz) (ga) (gb) (gc) (gd) (ge) (gf) (gg) (gh) (gi) (gj) (gk) (gl) (gm) (gn) (go) (gp) (gq) (gr) (gs) (gt) (gu) (gv) (gw) (gx) (gy) (gz) (ha) (hb) (hc) (hd) (he) (hf) (hg) (hh) (hi) (hj) (hk) (hl) (hm) (hn) (ho) (hp) (hq) (hr) (hs) (ht) (hu) (hv) (hw) (hx) (hy) (hz) (ia) (ib) (ic) (id) (ie) (if) (ig) (ih) (ii) (ij) (ik) (il) (im) (in) (io) (ip) (iq) (ir) (is) (it) (iu) (iv) (iw) (ix) (iy) (iz) (ja) (jb) (jc) (jd) (je) (jf) (jg) (jh) (ji) (jj) (jk) (jl) (jm) (jn) (jo) (jp) (jq) (jr) (js) (jt) (ju) (jv) (jw) (jx) (jy) (jz) (ka) (kb) (kc) (kd) (ke) (kf) (kg) (kh) (ki) (kj) (kk) (kl) (km) (kn) (ko) (kp) (kq) (kr) (ks) (kt) (ku) (kv) (kw) (kx) (ky) (kz) (la) (lb) (lc) (ld) (le) (lf) (lg) (lh) (li) (lj) (lk) (ll) (lm) (ln) (lo) (lp) (lq) (lr) (ls) (lt) (lu) (lv) (lw) (lx) (ly) (lz) (ma) (mb) (mc) (md) (me) (mf) (mg) (mh) (mi) (mj) (mk) (ml) (mm) (mn) (mo) (mp) (mq) (mr) (ms) (mt) (mu) (mv) (mw) (mx) (my) (mz) (na) (nb) (nc) (nd) (ne) (nf) (ng) (nh) (ni) (nj) (nk) (nl) (nm) (nn) (no) (np) (nq) (nr) (ns) (nt) (nu) (nv) (nw) (nx) (ny) (nz) (oa) (ob) (oc) (od) (oe) (of) (og) (oh) (oi) (oj) (ok) (ol) (om) (on) (oo) (op) (oq) (or) (os) (ot) (ou) (ov) (ow) (ox) (oy) (oz) (pa) (pb) (pc) (pd) (pe) (pf) (pg) (ph) (pi) (pj) (pk) (pl) (pm) (pn) (po) (pp) (pq) (pr) (ps) (pt) (pu) (pv) (pw) (px) (py) (pz) (qa) (qb) (qc) (qd) (qe) (qf) (qg) (qh) (qi) (qj) (qk) (ql) (qm) (qn) (qo) (qp) (qq) (qr) (qs) (qt) (qu) (qv) (qw) (qx) (qy) (qz) (ra) (rb) (rc) (rd) (re) (rf) (rg) (rh) (ri) (rj) (rk) (rl) (rm) (rn) (ro) (rp) (rq) (rr) (rs) (rt) (ru) (rv) (rw) (rx) (ry) (rz) (sa) (sb) (sc) (sd) (se) (sf) (sg) (sh) (si) (sj) (sk) (sl) (sm) (sn) (so) (sp) (sq) (sr) (ss) (st) (su) (sv) (sw) (sx) (sy) (sz) (ta) (tb) (tc) (td) (te) (tf) (tg) (th) (ti) (tj) (tk) (tl) (tm) (tn) (to) (tp) (tq) (tr) (ts) (tt) (tu) (tv) (tw) (tx) (ty) (tz) (ua) (ub) (uc) (ud) (ue) (uf) (ug) (uh) (ui) (uj) (uk) (ul) (um) (un) (uo) (up) (uq) (ur) (us) (ut) (uu) (uv) (uw) (ux) (uy) (uz) (va) (vb) (vc) (vd) (ve) (vf) (vg) (vh) (vi) (vj) (vk) (vl) (vm) (vn) (vo) (vp) (vq) (vr) (vs) (vt) (vu) (vv) (vw) (vx) (vy) (vz) (wa) (wb) (wc) (wd) (we) (wf) (wg) (wh) (wi) (wj) (wk) (wl) (wm) (wn) (wo) (wp) (wq) (wr) (ws) (wt) (wu) (wv) (ww) (wx) (wy) (wz) (xa) (xb) (xc) (xd) (xe) (xf) (xg) (xh) (xi) (xj) (xk) (xl) (xm) (xn) (xo) (xp) (xq) (xr) (xs) (xt) (xu) (xv) (xw) (xx) (xy) (xz) (ya) (yb) (yc) (yd) (ye) (yf) (yg) (yh) (yi) (yj) (yk) (yl) (ym) (yn) (yo) (yp) (yq) (yr) (ys) (yt) (yu) (yv) (yw) (yx) (yy) (yz) (za) (zb) (zc) (zd) (ze) (zf) (zg) (zh) (zi) (zj) (zk) (zl) (zm) (zn) (zo) (zp) (zq) (zr) (zs) (zt) (zu) (zv) (zw) (zx) (zy) (zz)

FIGURE 4. Recording states of an abstract divided into many segments on the master tape for CBST.

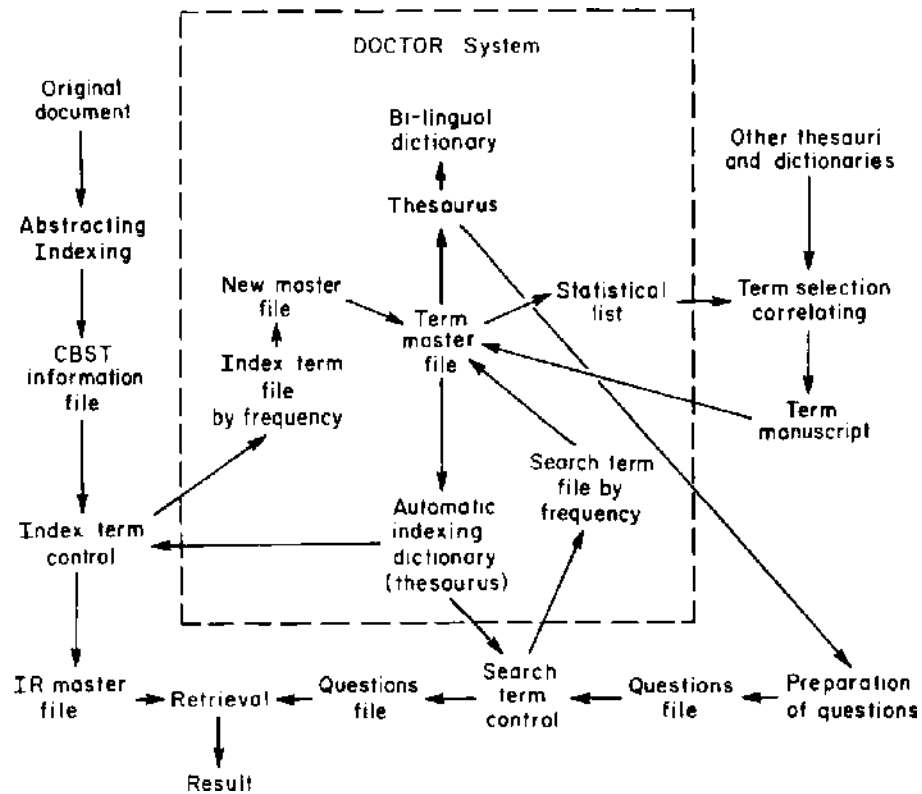


FIGURE 5. Vocabulary control system for IR.

fairly usable thesaurus is now expected in 1973. The terminology control system is needed for compilation and revision of the thesaurus, and for automatically extracting keywords or descriptors corresponding to the keywords in the thesaurus from the titles and/or the texts of abstracts.

Under the circumstances a Dictionary Operation and Control for Thesaurus Organization (DOCTOR) has been developed as a computer-based terminology control system.

This DOCTOR system is independent of any specific IR system and is connectable to any system through an interface. The system has the following functions:

1. To organize a set of words for the thesauri.
2. To prepare a bilingual keyword list.
3. To prepare various indexes to the thesauri.
4. To be hospitable to existing thesauri.
5. To make it possible to use Kanji or alphanumeric symbols or Kana representation by preference.
6. To arrange keywords in conventional order.
7. To support an IR system by controlling index and search terms through an interface (see Figure 5).

The following products are produced through this system: a thesaurus, a bilingual dictionary, an entry term dictionary, and indexes to thesauri (by subject, by category, hierarchical, permuted, and statistical in form).

INFORMATION RETRIEVAL SYSTEM

The central part of the JICST integrated IR system consists of the Kanji and BCD mode IR system.

1. The master file of the Kanji system is made from an automatically edited Kanji mode master file of CBST. The file format of both master files are the same, except for minor differences in covered data-elements caused by the differences of their purposes. The data-elements of the file are segmented as mentioned before.
2. The master file of the BCD system is compiled by using files of the Kanji mode IR system. In other words, the data-elements in the Kanji mode file are automatically transmitted to those in the BCD mode. The abstracts, however, are omitted for economy of file size (see Figure 6).

The data elements are all used as searchable data. The logical retrieval, truncation method, and weighted retrieval can be adopted as searching procedures. Al-

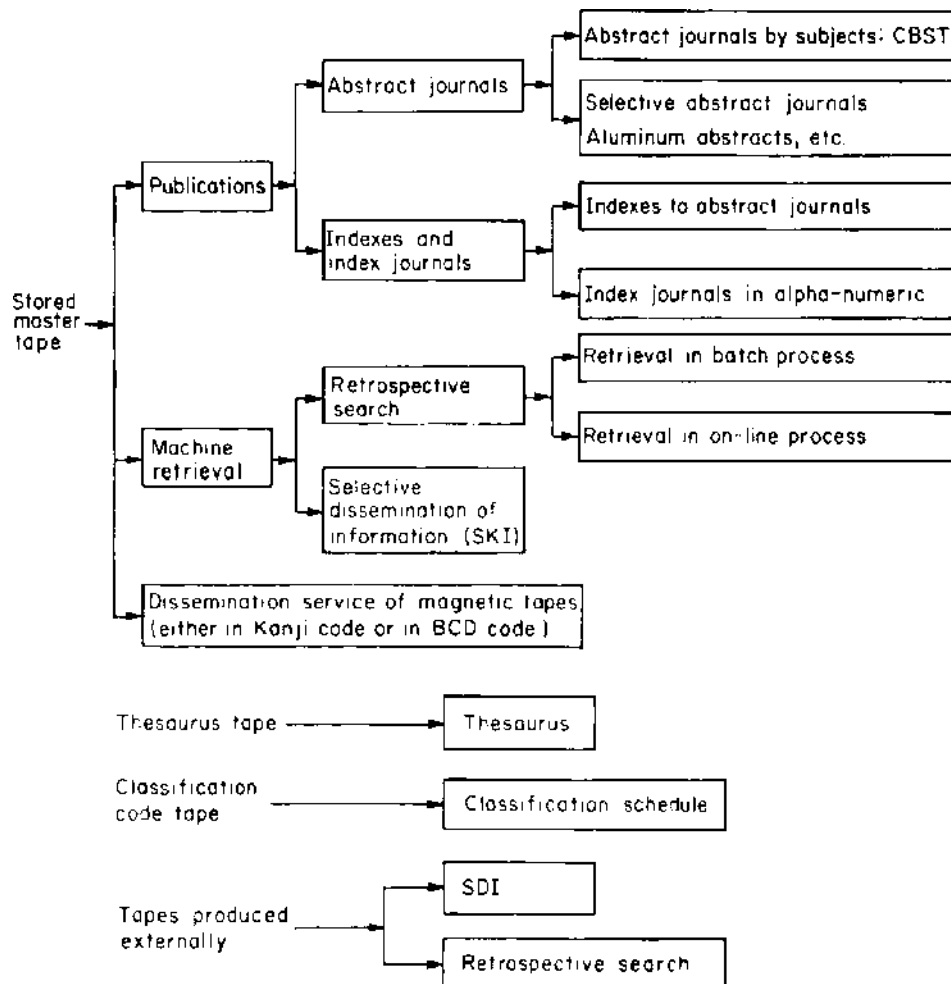


FIGURE 6. Information retrieval system.

though the vocabulary used in this IR system is supported by the DOCTOR system, the system is designed to be operational with any vocabulary system.

The reason why the JICST developed the IR system both in the Kanji and BCD modes is to handle the supply service of output data in Kanji for Japanese users and to supply machine readable BCD mode IR data files to users, both domestic and foreign, where output devices for Kanji characters are not available.

The IR system is expected to be developed to a system equipped with the following functions:

1. Multidata-based system supported by the DOCTOR system.
2. On-line conversational IR system through terminal devices.
3. IR system connected with automated document dissemination services.

At present, as has been mentioned above, the IR master files for the IR service are prepared by rearranging the data in the flag area of record of each abstract filed in the master file of the JICST abstracting journal.

The tag terms play a role in the information retrieval of documents. The following tag terms are filed in records of each abstract in the IR master tape by the code for tag searching or identification:

01	Abstract number
03	Periodical number on the stack
05	Stack number
07	Division of materials
09	Language used in periodicals
13	Year of publication
15	Country of publication
17	Volume number
19	Issue number
21	Classification code
32	UDC number
43	Author
54	Keyword

Question and answering (Q-A) services, selective dissemination of information (SDI) services, and retrospective search (RS) services provided by the JICST are carried out by the batch system. For the Q-A services, the JICST prepares users' profiles which contain their names, residences, conditions, and demands of each user.

When a theme for retrieval is indicated by a user, its content is analyzed and separated into some important subjects (technical terms or phrases) and, if necessary a weight factor can be put on these subjects according to their relative importance. Answers will be derived from the master file when a part of or all text words of each subject (indicated by terms or phrases) coincide with the technical terms in each abstract or with keywords. Searches will be conducted on a character by character basis.

THE JICST TOTAL COMPUTER SYSTEM

The JICST has a plan to integrate and computerize its main tasks and jobs, and by now has accomplished its aim to a large extent, excepting some part related to keyword control and on-line IR service.

The following publications are produced through the JICST computer system:

1. *Annual Index to the JICST Abstracting Journal CBST*

This index is derived from the master file of the CBST. CBST is issued in nine disciplines, and the index is compiled and published in three parts as follows:

Subject Index: Articles abstracted are arranged according to the JICST classification code, and the document number is assigned to each article.

Author Index: The list of authors of abstracted articles.

Periodical List: The list of periodicals where abstracted articles appear.

2. *KWIC Index*

An index to titles in pure and applied physics was published from April to September 1971.

3. *The JICST Periodicals List*

This contains title, specific code number, name of publishing body, and country of each title acquired by the JICST. The list is compiled and revised by the Source Document Control System of the JICST.

The journal collection in 1971 is given in Table 3.

SOURCE DOCUMENT CONTROL SYSTEM

This system is aimed at building up the bibliographic master file and at mechanizing library routine procedures. The complete bibliographic data for documents received in the JICST are recorded in the bibliographic master tape file to facilitate identification and location of any specific journal title and issue. The library routine system processes the complete flow of source documents, such as ordering, acquisition, check in, weeding, stacking, and binding. Any list or statistical table or data needed for document control will be available through this system.

THESAURUS PREPARATION

As mentioned in the section about the DOCTOR system, in the JICST the study of thesauri has been continued for about 7 years to standardize Japanese scientific and technical terminology for abstracting and indexing purposes. To accomplish standardization, the JICST has been trying to extract some keywords which seem to represent the subject of each abstract in CBST since its automatic compilation started. The number of keywords thus extracted reached about 530,000 in 1969

TABLE 3
Journal Collection in 1971

Foreign journals	4,657
Japanese journals	2,342
TOTAL	6,999
Subject area	
General	372
Physics	285
Earth sciences	258
Management	535
Machinery	791
Chemistry	1,727
Electricity	652
Metals	243
Mining	146
Civil engineering	423
Architecture	
Atomic energy	176
News	27
Investigation (research) section	148
Library section	733
Others	482
Country (53 in total)	
United States	1,380
United Kingdom	772
Germany	716
France	361
USSR	333
Netherlands	153
Italy	113
Canada	108
Switzerland	103

and 800,000 in 1970. The staff chose about 20,000 keywords as the first stage standard words according to the order of priority of frequency of appearance out of 40,000 words, and now the possibility of limiting the number of keywords by integrating the DOCTOR system into the IR system is being examining. The staff is scheduled to compile a definitive edition of the JICST Thesaurus of about 40,000 keywords in 1975.

Medlars Service

The JICST concluded an exchange arrangement by a memorandum of cooperative agreement with the National Library of Medicine (NLM) to provide resources and activities and to exploit the system known as Medical Literature Analysis and Retrieval Systems (MEDLARS) in all possible ways to improve the health programs of both the NLM and the JICST. According to this agreement, the JICST provided experimental service and tested the usefulness of the MEDLARS tape service through an inquiry survey to some groups of researchers in universities and to hospital professionals. Good results were obtained, and the JICST started MEDLARS SDI and RS services from June 1972.

The SDI consist of two kinds of service: standard SDI and request SDI. A RS (retrospective search) service is offered to respond to a client's specific demand through searching the past MEDLARS tapes. A copying service of original documents will be offered by cooperating with the Japan Medical Libraries Association and other organizations.

Future Program

The JICST is now tackling the problem of changing the method of processing and disseminating information and of offering nearly all information services by replacing the traditional and conventional method with a mechanized one.

As stated before, the JICST is now editing and photocomposing the abstract journals with the computer system, and it has started to disseminate the results in machine-readable form. It is anticipated that a large portion of the information services will be provided on a magnetic tape base.

In the future the core documents will be processed in the Japanese language as in the past, and to this core information will be added available external data bases. As a more effective system, it is planned to build up a national file consisting of the JICST master data base and available data bases in machine-readable form prepared by other information service organizations.

The JICST also has a plan to offer a clearinghouse service which will consist of three kinds of informational referral: to experimental and research organizations, to information service organizations, and to individual researchers. These guides will be published in listings together with lists of reports difficult to obtain and of research projects in process. The subject area will be limited to science and technology, medical sciences, and agriculture.

KINZO TANABE

JAPAN, LIBRARIES AND INFORMATION CENTERS IN

See also *Japan, National Diet Library; Japan Information Center of Science and Technology; Japan Library Association*

History

Three major world civilizations have influenced Japanese culture: the Chinese, which was first introduced through Korea, Buddhistic Indian, and that of the Western world.

The earliest trace of libraries in Japan may be found in Horyuji Temple at Ikaruga near Nara. Horyuji was built by Shotoku-Taishi (574–622) about A.D. 607. Shotoku-Taishi became prince regent to Empress Suiko in 593 and was a leader in the early cultural and political life of Japan. He studied Buddhism, Confucianism, and government administration as taught by priests and scholars from Korea (including Kokuri, Shiragi and Kudara). In 603 he established the twelve rank hierarchy for government officials and in 604 promulgated the first Japanese constitution (the so-called Seventeen Articles Constitution). He studied in the Yumedono, an octagon building attached to Horyuji Temple. (The Prince's portrait and the Yumedono are featured on the Japanese 10,000 yen note.) Thus the Yumedono is sometimes said to be the first library in Japan. Recognizing that the indirect transfer of culture from China via Korea to Japan was declining, he sent Japanese scholars and priests directly to Mainland China, to study and absorb Chinese culture including the study of government administration. He sent Ono-no-Imoko as envoy to China in 606 and 607, and Inugami-no-Mitasuki in 614. According to Chinese official records of the Sui Dynasty, however, the first Japanese envoy was reported to have visited China in 600. After the T'ang replaced the Sui, the Japanese Scholar-Envoys were resumed in the second year of Emperor Jomei in 630 and continued with not less than ten groups being sent by 834. However, these envoys were suspended after Sugawara-no-Michizane (845–903) rejected his appointment as envoy to China in 894.

Toward the end of the Asuka period, a coup d'état and the subsequent Taika Reforms of 645 were initiated by Prince Nakanooe and Nakatomi-no-Kamako. The capital was moved from Asuka (in Nara) to Settsu (now in Osaka and Hyogo prefecture) and the government was centralized around the emperor, being patterned after the system of the T'ang Dynasty in China. Nakanooe (626–671) became Emperor Tenji in 662 and Nakatomi-no-Kamako became Fujiwara-no-Kamatari (614–669), the founder of the very influential political family Fujiwara.

The completion of the Taika Reform can be seen in the Taiho-Ritsuryo (Laws

and Ordinances promulgated in the Era of Taiho) which was promulgated in the year of 701 by Emperor Monmu. One of the offices within the Bureau of Nakatsukasa-Sho (i.e., concerning the royal family's affairs) described in Taiho-Ritsuryo was named as "Zusho-ryo," literally translated as "Office of Drawing and Script (Books)." It was actually a governmental agency which aimed to compile histories of the state and the royal Family, to copy manuscripts and bind books, and also to supply good quality paper, China ink, and writing brushes. This agency later maintained a paper mill for the production of durable paper. But in any case, this agency "Zusho-ryo" facilitated the production and maintenance of books. *Kojiki* (*Record of Ancient Matters*) and *Nihon-Shoki* (*Chronicle of Japan*), the two oldest literary works in Japan, came into being in 712 and 720, respectively. This office came to have a function similar to a national archives or library after a few generations as records and books were accumulated.

The first library open for public use in Japan is acknowledged as the "Un-Tei," which existed at the end of the eighth century in Nara prefecture. Isonokami-Yakatsugu (729-781) converted his former residence into a study room about 770, collected non-Buddhistic literature, and opened it to young nobles who were willing to study.

Because of the relative scarcity of non-Buddhistic literature, the study room "Un-Tei," where one could freely read Confucian scriptures such as the *Analects*, played a significant role as an educational agency. However, it is said that this first public library did not exist long after Isonokami-Yakatsugu's death (781).

The move of the capital from Nara (then called Heijo) to Kyoto (then called Heian) in 794 by Emperor Kanmu ushered in the Heian Period which ended with the establishment of the feudal government in Kamakura by Minamoto-no-Yoritomo in 1185. During this Heian Period, especially after the official cultural exchange with China had been discontinued, Japan was forced to develop a culture of her own, or at least adapt the introduced culture to her own circumstances. As it was a "period of aristocracy," the nobles established private institutions to educate their sons to be future government officials. There were libraries attached to those institutions as well as private collections for their own use, e.g., Kangaku-In (Fujiwara-no-Fuyutsugu), Shugei-Shuchi-In (Priest Kukai), and Fumikura (Fujiwara-no-Yorinaga). Kangaku-In was established in 821 and existed for over 460 years. The imperial family also continued to erect temples with attached libraries containing Buddhist scriptures. As the second oldest library open to the public in Japan, it is often mentioned as the "Kobai-Den" (red plum blossoms residence) of Sugawara-no-Michizane. One can sympathize with how the patron, Sugawara-no-Michizane, lamented because of the lack of public concern for the use of the books and other facilities according to his essays in *Shosai-Ki*. The Heian Period was also the age in which the simplification of Chinese characters and the use of symbols as phonograms, namely the introduction of *Hiragana* and also of *Katakana*, took place. This was very influential in making reading and writing easier and in popularizing the arts in general. The production of literary works as well as of arts and crafts were enormous during this period.

Library Materials after the Eighth Century

Although printed materials concerning Buddhism and Confucianism had been known from China directly or via Korea for a long time, the main method of reproducing literary works was by hand copying, a very time-consuming process. Such a situation can only be understood through the religious belief that every word or character copied would be counted toward assurance of eternal bliss, and that the mind and heart of the copyist would be cleansed for a better life in the future. A similar belief also existed for the copying of the writing of the sages, especially Confucius. Though troublesome, copying was seen worthwhile if undertaken with sincerity and cautiousness. The printing process became popular in Japan in the eleventh century, and then only moderately. The only exception to earlier printing in Japan was of "Hyakumando-Dharani" (Dharani-Sutra in the million towers) in 770. Together with the Prayer of Empress Koken to the Buddha, four kinds of Dharani-Sutra totaling one million paper rolls (5.5 cm by 17–50 cm) have been printed and housed in the cones of the towers. They are distributed all over Japan through ten major temples, such as Horyu-ji, Kofuku-ji, and Todai-ji. The copies of these Dharani-Sutra, a sacred formula for incantation consisting of 15–45 lines of five characters each, are the oldest printed work in Japan still in existence. However, it is not certain whether they were printed with wood or metal blocks.

While the nobles were enjoying a culturally refined life in Kyoto, warrior classes (*bushi* or *samurai*) were gradually gaining power, especially in the provinces. Two *samurai*, Taira-no-Masakado in the East, and Fujiwara-no-Sumitomo in the West, revolted against the central government almost simultaneously around 936–940. The rebellion, known as "Zyohei-Tengyo-no-Ran," was suppressed only with the help of other *samurai* leaders. This resulted in diminishing the authority of the central government, and in 1185 the Minamoto family took over administrative power over Japan after it suppressed the Taira family. The next 400 years of the Shogunate, located in Kamakura and later in Kyoto (Muro-Machi), is referred to as the first feudalistic period, in contrast to the second feudalistic period in which the Shogunate was located in Tokyo (then Edo). Feudalistic leaders, as well as their retainers, pursued the military arts which emphasized courage. Loyalty and filial piety were also highly esteemed values. However, they soon felt the need to acquire more aesthetic values. The result was that the culture of Kamakura began to flourish. The third Shogun of Kamakura, Minamoto-no-Sanetomo, was a famous poet who composed Manyo style poems. Zen doctrine, a Buddhist sect imported from China, also influenced the intellectual and *samurai* classes at that time because its doctrines concerned life and death. Kanazawa-Bunko was established near Kamakura around the end of the thirteenth century by Hojo-no-Sanetoki and functioned as a library. Ashikaga-Gakko (Ashikaga School) was established at Ashikaga in Tochigi Prefecture in 1432, where Chinese classics, military arts, and medicine were taught. The school library was later supported by Tokugawa-Ieyasu, the first Shogun in Edo. The Edo Shogunate was established in 1603 by Tokugawa-

Ieyasu, a bibliophile Shogun. Though the period of the Tokugawa Shogunate is referred to as the second feudal period, Japan underwent a transition from feudalism to the modern age. The Tokugawa family encouraged the establishment of schools and libraries, and other Daimyo (feudal lords) followed suit. The core collection of the present Naikaku-Bunko (now one of the branches of the National Diet Library) was originally a private library of Ieyasu. Shoko-Kan-Bunko in Mito and Sonkei-Kaku-Bunko in Kanazawa are among other famous libraries. During this period, classes* other than the aristocracy and *samurai* also had their own share of peace and economic prosperity: education spread far and wide; publishing flourished; and scholars and rich merchants set up libraries. Moreover, from the mid-eighteenth to the mid-nineteenth centuries, libraries gradually became accessible to the general public at various places in Japan and a book lending service was set up among the people of the merchant class. But the use of books was not widespread because of a narrow and specialized selection, and because of the extraordinary value placed on books which burdened the borrower with heavy responsibility in handling them. The size of the collection itself was not so significant. For example, Momijiyama-Bunko, perhaps the largest library then in Japan, is recorded to have contained 4,738 titles, 78 scrolls, and 4,615 unbound quires of materials in Chinese, and 592 titles and 200 scrolls in Japanese.

Access to the books, which were housed in Momijiyama-Bunko (formerly called Fujimi-Tei-Bunko), was a very troublesome procedure. This library was often called the "Momijiyama Secret Pavilion." The merchant class lending library like that of Taiso in Nagoya at the end of the Tokugawa Period, charged lending fees but was, however, exceptionally popular. Taiso kept its holdings in three warehouses. Its lending service was very popular, not only among the common people, but also among the aristocratic and *samurai* classes. Because of the fact that the lending fee for 10 days was nearly one-sixth of the purchase price, one can conjecture that circulation was not very high. The other lending libraries in Edo or in Osaka charged still higher fees, and were mostly used for recreational reading.

So it was no wonder that Yukichi Fukuzawa (1835–1901),[†] then the most progressive leader in education in Japan, was quite impressed and surprised when he saw national and public libraries in the United States and Europe in 1860 and 1863, respectively.

The Meiji Restoration and Library's Role in the Democratization of Japan

The Meiji Restoration, beginning with the restoration of administrative power to the emperor in 1867, brought about a very radical change in Japanese society, so that one often speaks of a "revolution" instead of a "restoration."

*During the Tokugawa Period, society was composed of four social classes: *samurai* (Shi), farmer (No), artisan (Ko), and merchant (Sho), in which the *samurai* class held the highest social status and the merchant the lowest.

[†]Fukuzawa describes European libraries in his *Seiyō-Jijō (Cultural and Social Conditions in the West)*, published in 1866.

To abolish the traditional feudalistic system completely, conscription for military service (January 1873) and new assessments of land taxes (October 1873) were introduced. Some social class distinctions were abolished gradually until 1876, paving the way for democratization. Accordingly, a new library system was introduced. In 1872 the Shojaku-Kan (later the Imperial Library) was set up at Yushima (Tokyo) as the first modern library open to the public. The library introduced the collection of domestic publications through copyright deposit after 1875. Following the establishment of a national library, local governments followed suit in establishing modern prefectural libraries. In 1892 the Japan Library Association was organized and the Library Act was passed by the Imperial Parliament in 1899. In 1902 there were sixty-seven libraries open to the public in Japan; after a quarter of a century there were 4,306. But there is some reason to believe that the increases in the number of public libraries does not necessarily reflect the increase of library use among the people. This has resulted in a vicious cycle of meager public support, both moral and financial, and inadequate service to the public.

Nevertheless, the Imperial Library and hundreds of public libraries showed a steady growth until 1936 when Japan entered into war. The Imperial Library holdings totaled 294,344 volumes at the end of 1891, and showed steady growth after that: 463,000 in 1906; 670,000 in 1926; and 1,047,000 volumes by 1948, a year before it was merged with the National Diet Library. The increase in the number of users, however, is not so significant because the reading-room capacity remained extraordinarily small and the seat turnover rate was low. Even for the Imperial Library, the readers in a year totaled 35,346 (1886), 74,034 (1896), 206,061 (1907), 239,930 (1917), and reached its maximum of 428,888 in 1933. Because the libraries almost completely prohibited the lending of books, readers had to wait in long lines outside the library before opening time. Some libraries, however, such as the Osaka Prefectural Public Library, have several times extended the reading room capacity in accordance with the increase in readers. Academic libraries offered more services than public libraries. The Imperial Universities in Tokyo and Kyoto and a dozen other university libraries offered extended services which were, however, often restricted to the faculties of the universities and did not apply to students.

There were also some very good reference libraries, established by the government or industry, in various subject fields. In these libraries the number of users were limited, and individualized services were possible. Two governmental agency libraries, organized in 1928, contain complete statistics and legal materials dating back to 1871.

Teikoku-Gakushi-In (an academy organized in 1879 as Tokyo-Gakushikai-In, with Yukichi Fukuzawa as the first president) and the Council of Scientific Research organized in 1919 both maintained reference libraries. The latter was reorganized as the "Science Council of Japan" after 1949 and has developed a reference library for scholars.

Toyo-Bunko, a research library of Oriental Studies established in 1917, developed a fine reference service under prominent librarians such as Mikinosuke

Ishida and Taimei Iwai. These five libraries are now all branch libraries of the National Diet Library. There are also some other special libraries: Tenri Library, specializing in religion, history, and bibliography, established in 1912; Ohara Memorial Library in Social Studies, established in Osaka in 1919, but attached to Hosei University in Tokyo since 1949; and Fujiwara Memorial Library in Technology, established in 1927, which became the nucleus of the Technology Library of Keio University in 1949.

Professional librarians in university and special libraries allied with the public librarians and established The Japan Library Association in 1892 for the advancement of librarianship and also for mutual understanding and co-operation.

Postwar Revival of the Library World

The postwar reconstruction of war-devastated libraries continued smoothly for 10 years. To replace the National Library (Imperial Library), under the Ministry of Education, the more influential and powerful National Diet Library was established in 1948. The [Public] Library Law was enacted in 1950. It stressed the principle of a free public library and the professional qualifications of librarians. Japan Information Center of Science and Technology was established in 1957 to make available current information materials for a fee. Library advisers and consultants from the United States, who set up model information libraries (CI&E libraries) in Japan, made significant contributions toward the improvement of the library world in Japan. U.S. Education Missions to Japan in 1946 and in 1950 also promoted the cause considerably. Many Japanese librarians studied new librarianship abroad, especially in the United States. The administration of libraries became more and more user oriented. Users were no longer the privileged few, but the common people on the street. Open access and loan of books could be seen almost in every public library. The mobile library became widely used in remote villages. Students are now playing a more significant role in acquisition and services.

Standardization of technical services and also the publication of standard tools are now growing gradually in Japan through the continuous effort and cooperation of Japan Library Association, Special Libraries Association, and Nippon Documentation Society.

General View of the Present Library and Information Situation in Japan

INFORMATION MEDIA

Japan is among the most productive publishing countries in the world. Statistics show that it has produced over 20,000 titles annually from 1897 until 1917.*

*The only exceptions were 1900 (18,170 titles) and 1901 (18,963 titles), from the *White Book on Science and Technology*, 1971, issued by the Science and Technology Agency.

However, in those days the distinction between monographs and periodicals was not so clear, and governmental publications were also counted. In 1926 the number of titles of nongovernmental publications alone reached 20,000 titles, and 7,600 titles of magazines and newspapers were published in 29,290 issues. This level of production continued until 1942, with a maximum of 31,996 books (1936) and 13,268 titles of magazines and newspapers (1937). At the cessation of World War II in 1945, only 878 books and 932 titles of magazines and newspapers were published. In 1953 the publishing industry again reached publication of 20,000 titles (nongovernmental publications). Though the number of titles published fluctuates year by year, the number of copies published and sales* have grown steadily from 140 million books (25 billion yen, \$69 million) in 1955 to 394 million books (137 billion yen, \$380 million) in 1966 (Table 1).

The number of titles of magazines published in 1966 was 2,304. This does not include 1,245 titles of academic journals, and 409 titles of governmental serial publications and other public relations journals. One estimate of the number of copies of magazines published is 1,366 billion and sales of 140 billion yen (\$388 million), 3 billion yen more than the sales of books.

In addition, 30 million copies of daily newspapers are subscribed to or purchased regularly. The number of TV sets reached 17 million in 1965 and 23 million in 1971.

TABLE 1
Published Books: Breakdown by Subject

	1955	1960	1965	1971	
				Titles	%
General works	405	307	347	526	2.0
Philosophy and religion	1,004	657	740	1,486	5.6
History	866	705	982	1,848	6.9
Social sciences	2,592	2,579	2,872	5,230	19.7
Natural science	1,327	893	1,012	1,931	7.3
Engineering	1,468	1,356	1,606	2,300	8.6
Industry	900	812	806	1,079	4.1
Arts	1,127	698	900	1,949	7.3
Language	703	368	341	626	2.3
Literature	5,815	2,792	2,869	6,057	22.8
Juvenile	3,260	1,176	1,161	2,238	8.4
Examination guidebook	2,186	779	602	1,325	5.0
Total	21,653	23,682	24,203	26,595	100.0
Average price per book (in yen)	274	352	625	1,198	

*Sales are estimated by the Japan Book Publishers Association on the basis of the rate of returned books.

TABLE 2
Number of Educational Institutions and Students

	Institutions	Students
Junior colleges	468	255,262
Colleges and universities	377	1,270,189
Graduate schools: Master	348	23,950
Doctor	270	13,711
Other institutions including correspondence courses	93	161,517

USERS

As of March 1968, there were 1,847,000 students graduated from Middle School (compulsory education), of which 73.4 and 3.4% went on to full-time or part-time higher education, respectively. There were 1,601,000 graduates from High School, of which 37,000 (23%) entered universities and junior colleges (Tables 2 and 3).

In 1970, 172,002 were engaged in research work. Of these, the largest share 53% (94,000) are in private companies, 34% in universities, and 13% in other (mainly governmental) research institutes. A breakdown by major disciplines is given in Table 4.

Data Problems by Kinds of Libraries

PUBLIC LIBRARIES

As already stated, an increase in the number of public libraries (Table 5) does not reflect the demands of the citizens. However, it is clear that more service points are

TABLE 3
Breakdown of Graduate School Students

	Master		Doctor
Engineering	5777	Medicine	4595
Humanities	3680	Engineering	1652
Natural science	2075	Humanities	1344
Science-technology	1732	Natural science	1319
Jurisprudence	1328	Science-technology	554
Agriculture	1315	Agriculture	509
Economics	1051		
Pharmaceutics	677		

TABLE 4
Number of Research Workers by Major Disciplines

Chemistry	38,562
Mechanical engineering, shipbuilding, and aeronautics	26,728
Electric and electronic engineering	25,692
Medicine and dentistry	21,857 ^a
Mathematics and physics	14,484 ^a
Agriculture	11,130 ^b
Humanities and social sciences	996

^aMainly engaged in universities.

^b59% (6,516) are in research institutions, mainly governmental or public supported.

needed throughout the nation as institution for social life and adult education. We must set up more service points. These need not necessarily be independent libraries, but rather branches or other units which function in a well-coordinated network with a main library.

According to *Libraries in Japan, Statistical Survey of 1970*, 842 out of a total of 881 public libraries reported that they purchased 1,945,000 volumes (less than 0.4% of the estimated total Japanese book production) with 1,499 million yen. With total holdings of 28,578,000 volumes, they circulated 14,932,000 volumes to registered borrowers. In addition, 4,891,000 volumes were loaned via bookmobiles, bringing the total circulation to 19,823,000 volumes. Annual circulation per capita is less than 0.2 books and the number of circulations divided by the number of holdings is only 0.7. However, there are many public libraries which have recently developed a good library system. Hino City Library circulated 5.7 volumes per capita in 1970 and a few dozen city libraries have circulated more than 1.00 volume per capita. Such libraries are, of course, provided with a far greater budget than the average of 12 yen per capita as shown in Table 6.

COLLEGE AND UNIVERSITY LIBRARIES

College and university libraries should be set up on a scale corresponding to the size of the parent institution. Though the library may have an independent building, it should be an essential, indispensable part of the college or university. For a long time this was recognized only by the library staff, and professors and administrators have exhibited this understanding only recently.

Prof. Hiroshi Kawai, the associate librarian of Tokyo University until 1950, was very pleased when he was asked by an American professor for help in constructing a curriculum. Kawai used to say to young librarians, "I was never asked by my Japanese colleague professors in that way. But this is really the function of the library profession. Let that be a challenge to you all." Prof. Kawai knew

TABLE 5
Growth of Public Libraries Since 1956

	1956	1960	1965	1970				Private
				Total	Perfec- tures	Cities	Towns, etc.	
Number of libraries (total)	725	780	778	881	81	526	240	34
Main	644	670	—	805	57	475	240	34
Branch	81	110	—	75	24	51	—	—
Not reported	—	—	—	39	—	—	—	—
Holdings (in thousands)	16,697	16,175	21,678	28,578	9,610	15,850	1,909	1,213
Annual accession withdrawal	764 122	1,026 92	1,277 320	2,396 392	711 177	1,499 191	148 21	38 3
Registered borrowers	709,460	942,031	731,411	1,613,826	403,761	1,064,297	130,487	15,281
Number of users (in 1000 man-days)	18,889	21,957	28,800	—	—	—	—	—
Number of circulated volumes (in thousands)	8,458	10,774	8,757	19,823	4,536	13,673	1,734	179
Number of staff (total)	4,358	3,699	4,988	5,497	1,942	3,258	206	91

TABLE 6

Statistical Survey of Libraries in Japan^a

Libraries	Population (in 1000 persons)	Registered borrowers (%)	Annual circulation per capita, volumes	Annual circulation divided by holdings	Book budget per capita, yen
Hino City	101	18.2	5.2	5.7	80
Fuchu	161	8.3	1.6	3.9	49
Machida	210	6.7	1.3	5.7	51
Kochi	242	15.3	1.7	2.5	42
Toyama Prefecture	1,030	4.2	0.5	0.6	37
Japan	104,536	1.2	0.2	0.7	12

^aFrom *Libraries in Japan; Statistical Survey of 1970*.

the university library situation in the United States from pre-war days, and he was very eager to establish a real professionalism in Japan also. He played a large part in building the library-science collection in Tokyo University Library by obtaining a donation from the Rockefeller Foundation. Inspired by his faith in librarianship, he organized institutes for the staff of college libraries. Although he was invited to become a director of another library, he chose the law profession and left Tokyo University in 1950.

Estelle Brodman once pointed out, "since the librarians are theoretically responsible for all lost books and their salaries are extremely low, it is understandable that some of them are more interested in the safekeeping of their collection than its use" (1). This was true in Japan for nearly every college library until 1950. Even in the 1960s there existed many college libraries or departmental libraries which locked up their books and regarded students with "special permission" as unwanted intruders because of the lack of a modern concept of a college library by academic administrators in general and by traditional scholars.

When the new educational system of higher education was introduced in 1947, with its emphasis on liberal education, the position of the library nominally changed (Table 7). But until it develops into an indispensable part of the college or university, much discussion and many experiments and consultations, such as Tokyo University Library has been carrying on since 1961 and which Keio University is now attempting, will be necessary.

SPECIAL LIBRARIES AND INFORMATION CENTERS

The term "Special Library" is not a well-defined concept in the Japanese library world. It is rather an agglomeration of various types of libraries which do not belong to public, school, or college libraries in the usual way, namely:

TABLE 7
Growth of University Libraries* Since 1956

	1956	1960	1965	1970			
				Total	Prefec- tural	Private	City
Number of libraries (total)	462	448	571	684	285	47	352
Main	221	243	320	387	75	33	279
Branch	241	234	251	297	210	14	73
Not reported	—	11	29	67	16	1	50
Holdings of books (in open access)	23,546	28,631 (3,563)	42,391 (7,121)	56,321 (12,763)	29,715 (6,688)	3,628 (980)	22,978 (5,095)
Annual accessions	1,017	1,259	2,247	3,295	1,432	234	1,629
Number of periodicals currently received (total)	123,822	205,136	324,190	—	—	—	—
In Japanese	75,491	132,361	202,761	—	—	—	—
In foreign languages	48,331	72,775	121,429	—	—	—	—
Number of users (in 1000 man-days)	6,704	6,486	13,473	17,215	6,715	1,019	9,482
of circulated volumes (in thousands)	—	—	5,200	7,060	2,926	454	3,681
Number of staff	3,510	3,226	4,864	5,317	2,303	346	2,668

*Number of junior college libraries (346 main and 9 branch) and their holdings (3.9 million books) and annual circulation ($\frac{3}{4}$ million) are excluded.

(1) The special subject library serving students and professional groups on a given subject.

(2) The special organization library, serving (a) a corporation, (b) a nonprofit organization, (c) a government body, etc., and maintained by the (serving) organization.

(3) The general library, serving special kinds of people.

As already mentioned, some of the professional librarians of special subject libraries have contributed much of the Japan Library Association for the mutual understanding and advancement of librarianship of Japan in general. The Japan Library Association set up a Division of Special Libraries in 1952. The Special Libraries Association was organized in March 1952 with the Branch Libraries Section of the National Diet Library as the key office. Itsuaki Hatsukade, then the director of the Division for Interlibrary Service of the National Diet Library, once classified the libraries of the Special Libraries Association as follows:

(1) Libraries of central government offices and their affiliated research institutions.

(2) Libraries of prefectural assemblies.

(3) Libraries of private firms.

(4) Libraries of research organizations.

One contribution of the National Diet Library to the association was the distribution of full sets of government publications to the seven District Centers of the association, where member libraries could have free access.

The association is now composed of 500 institutional members (libraries and information bureaus) from all over Japan and is affiliated with Aslib in the United Kingdom and SLA in the United States. Its bulletin is the *Special Libraries Association—Japan* (four issues annually). More urgent announcements are often communicated through the monthly journal *Biblos* of the Inter-Library Service Division of the National Diet Library.

The association keeps up-to-date with information about resources and services of special libraries in Japan through a questionnaire.

Directory of Special Libraries (2nd ed.) was published in 1969 and has 1,354 entries. Only a hundred of them are staffed with more than ten full-time personnel. The Institute of Asian Economic Affairs, Japan Atomic Energy Research Institute, Japan Broadcasting Corporation (NHK), and Nomura Research Institute, among others, maintain well-organized libraries. On October 26, 1972, the association celebrated its 20th anniversary and held a general conference with Dr. F. E. Mackenna of SLA from the United States as guest speaker.

The Japan Medical Library Association was organized in 1927 and demonstrated how cooperation among libraries can be effective. The Pharmaceutical Library Association and Agricultural Library Association are following suit. The Japan Information Center of Science and Technology (JICST), founded in 1957, is the strongest information center in Japan.

Many special libraries and information bureaus are also affiliated with the Japan Documentation Society, which as the associate member of Federation Internationale de Documentation (FID) publishes the UDC (Japanese version and others), and offers regular institutes to provide first-hand knowledge to beginners in documentation activities. Though there are only about 800 personal members of the society, 200 supporting members (including organization members) provide a strong financial backing, enabling the society to carry out its work smoothly. As a result, the society was able to hold an FID Convention in Tokyo in 1967. The medical libraries are the most advanced among the special libraries in Japan. Estelle Brodman's article (*J*) was rather objective with the exception of some exaggeration in "Relation of Faculty and Students to the Library." In the last 10 years, especially after the 1964 Olympic games in Tokyo, buildings and facilities in Japan generally improved dramatically. No fewer than nineteen of the forty-seven member libraries have gotten new buildings, and now more than half of the medical libraries are centrally heated and some of them are also air-conditioned. Holdings have grown so rapidly that nine of the member libraries contain over 100,000 volumes, twenty-two libraries contain 50,000–100,000 volumes, and sixteen libraries contain less than 50,000 volumes. The union catalog for monographs (supplement) is kept in card form in the Keio Medical School Library at Yotsuya in Tokyo. The Union List of Serials held in member libraries (1967–1972) have entries of 3,717 Japanese and 6,651 foreign titles. Interlibrary loan has increased

from 37,256 (1962) to 87,797 (1970) while borrowed material also increased from 23,462 to 57,793, and now about ten libraries have introduced telex (TWX) for interlibrary loan communication. All this explains how Japanese medical librarians were successful in establishing special librarianship.

So long as the special librarians shut the door to others and remain self-satisfied because of the uniqueness of their resources or services, no advancement can be expected in library administration. Because the need for securing materials and exchanging information has been strongly felt in every field of science and discipline, cooperation among special libraries to systematize their activities has become an urgent necessity.

It was a natural and logical outcome that a powerful clearinghouse for all medical libraries was established in March 1972 as the "International Information Center for Medicine." It is located on the campus of Keio Medical School and offers all bibliographical services concerning medical and related sciences, which are partly carried out by the Medical Library Association. It is staffed with sixty full-time personnel, and has programs as follows:

1. Bibliographic service, including comprehensive retrospective and current awareness searches.
2. Translations.
3. International cooperation, service, or liaison for MEDLARS, APTIC (Air Pollution Technical Information Center) and INIS (International Nuclear Information System).
4. Publication of abstracts and indexes.
5. Presentation and offering of retrieved information or publications.
6. Research, instruction, and professional training.

General Problems

EDUCATION AND TRAINING OF LIBRARIANS AND INFORMATION SPECIALISTS

It is needless to stress the importance of recruiting new manpower into the profession. How and in what way librarians must be trained and educated has always been a subject of discussion among our leading librarians. According to Mr. T. Sawamoto's report at the Library Education and Training in Developing Countries in 1966 at Honolulu, short-term courses were held about thirty times during 1903-1940, averaging less than once a year, sponsored by the national government or the Japan Library Association. It can also be noted that the librarian and professor of Tokyo Imperial University, Dr. Mankichi Wada, initiated in 1917 a course for librarianship in the Faculty of Literature. He continued this until his retirement in 1922.

In 1921, Ueno Library Training School was opened. The requirements for admission were the same as for the other professional schools; namely, six (elementary school) plus five (middle school) years of schooling. The Ueno Library

Training School gave only a 1-year course, while the other professional schools in Japan usually extended to 3 years. This distinction left the impression that librarianship was only subprofessional work. Directors of main libraries were usually appointed from a circle of university graduates who had studied such subjects as law, sociology, administration, history, and bibliography.

With the end of World War II (1945) came a far greater need for training and education of librarians than ever before. The National Diet Library, created in 1948 at the recommendation of the American Library Mission, was required by law to provide services of a scope and quality which could hardly be achieved without a highly trained staff. The [Public] Library Law (enacted in 1950) and the School Library Law (1953) also gave impetus to the recognition that some degree of education and training was essential for the library profession.

Workshops and Institutes. Beginning with a 1-week course in Kyoto, sponsored by the Kyoto Library School, limited training courses for in-service librarians were held several times. The IFEL Program conducted two 3-month institutes for "educational leadership in library science" in 1950 and 1951, with the participation of the distinguished American librarian, Dr. Susan Grey Akers. Further, based on a "provisional" measure of the Library Law of 1950, the so-called "Fifteen Credits Institute for Public Librarians" was held many times after 1951, sponsored by the Ministry of Education.

In 1964, after several reorganizations, the Ueno Library Training School became the [National] Junior College for Librarianship.

LIBRARY EDUCATION AT THE UNIVERSITY LEVEL

The Japan Library School,* as an integral division of the Faculty of Letters, Keio University, was founded in 1951, initially with the help of the American Library Association and later with grants from the Rockefeller Foundation. It is now completely in the hands of Keio University, the oldest Japanese private university. It has a full-scale professional program. There have been 835 graduates from this division, and fourteen have completed the masters course of the graduate school which opened in April 1967.

There are more than fifty colleges and universities where one can acquire the so-called fifteen (or recently increased to nineteen) credits for public librarians required by the [Public] Library Law. Of those, Tokyo University has the most extensive program, so that students can major in librarianship at the Division of Applied Sociology in the Faculty of Social Sciences.

From Keio University and the [National] Junior College for Librarianship, 60 and 120 prospective librarians graduate annually. Approximately 1,500 graduating students receive certificates for public librarian by fifty or more colleges and universities annually. The so-called "Nineteen Credit Institute for Public Li-

*Because of the development of the graduate program, the school has changed its name to the School of Library and Information Science.

brarians," a provisional measure of the Library Law (1950) are still held annually and bestow over 1,000 certificates for public librarians. It is not known whether the holders of the certificates are working as librarians.

There is now an urgent need to raise the level of librarianship and to foster real professionalism among librarians. The Japan Library Association seeks to have the government increase the National College for Librarianship to a 4-year college level and also to discontinue the so-called "Nineteen Credits Institute for Public Librarians."

The university or college programs for the education for librarianship must be coordinated with the real needs of the library world and be carefully reorganized with long-term perspectives.

UNION CATALOGS AND INTERLIBRARY LOAN

As already mentioned in connection with the Medical Library Association, medical libraries in Japan are enjoying the full benefits of their organized cooperation. The Association sets a good example to other special library associations, such as those for pharmaceutical and agricultural libraries. However, not only the special libraries but also the general libraries and university libraries must follow suit. The United States Education Mission to Japan in 1946 suggested: "to make available to all students the resources of the country, we suggest that each university consider unifying and consolidating its collections preparing a single union catalogue" (2). This suggestion should not be nominally or superficially followed but purposefully demonstrated. The Japanese library world has been familiar with the union catalogs in book-form for a long time. Union lists are published often, but few are used enough to justify the effort.

It must be stressed once more that the Japan Medical Library Association has shown its success through conscientious cooperation with the interlibrary loan system. It is the workable union catalog which accelerates interlibrary loan within Japan and also the international exchange of information (materials). Active transfer of information, which can be traced in interlibrary loan statistics, justifies most effectively the costs of union catalogs, and inspires the efforts to compile and to maintain them.

REFERENCES

1. E. Brodman, "Japanese Medical Libraries," *Med. Lib. Assoc. Bull.*, 51(1), 16-25 (1963).
2. Louis Watanebe Tung, "Library Development in Japan. II," *Lib. Quart.*, 26(3), 196-223 (1959).

BIBLIOGRAPHY

Bonn, G. S., "Japanese Documentation Organization and Facilities," *Spec. Lib.*, 50(10), 482-487 (1959).

Chandler, George, *Libraries in the East*, Seminar Press, London, 1971, pp. 126-159.

- Chandler, George, "Libraries in Japan," *Times Literary Supplement*, August 20, 1971, p. 1008f.
- Gitler, Robert L., "Education for Librarianship Abroad: Japan," *Lib. Trends*, 12(2), 273-294 (1963).
- Hatsukade, Itsuaki, "The Special Libraries Association in Japan," *Spec. Lib.*, 57(1), 51-52 (1966).
- International House of Japan, Library, *A Brief Guide to Japanese Library Resources*, Tokyo, 1960, 23 pp.
- Japan Documentation Society, *Science Information in Japan*, 2nd rev. ed., Tokyo, 1967, 192 pp.
- Kagaku Gijutsu-chō [Japan. Science and Technology Agency], *Kagaku Gijutsu Hakusho [White Book on Science and Technology]*, 1971, Tokyo, 1972, 354 pp.
- Nagai, N., "Problems of the Public Libraries in Metropolitan Tokyo," in *Lib. Trends*, 14(1), 68-74 (1965).
- Nippon Toshokan Kyōkai [Japan Library Association], *Nippon no Toshokan [Libraries in Japan]*, 1952-, annual, statistical survey of public and college libraries.
- Sawamoto, Takahisa, "Recent Japanese Library Developments," *College and Research Lib.*, 24(5), 213-218 (1963).
- Senmon Toshokan Kyōgikai [Special Libraries Association], *Directory of Special Libraries*, 2nd ed., 1969, 379 pp., text in Japanese.
- Tung, Louis Watanabe, "Library Development in Japan," *Lib. Quart.*, 26(2), 79-104 (1959).

HATSUO NAKAMURA

JAPAN LIBRARY ASSOCIATION

History

The Japan Library Association (JLA) is the first library association with a nationwide scope in Japan. It was founded in 1892 to promote library service and librarianship in Japan, and had the name "Nippon Bunko Kyokai." Some far-sighted librarians such as Inagi Tanaka, who returned from his study-tour of Europe and the United States and became the director of Tokyo Library (afterwards Imperial Library), Chikken Nishimura, Tadashi Seki, and Muneshige Ohshiro met and agreed to form an association of librarians. It is recorded, however, that the first open meeting at which the association was announced was attended by less than thirty Tokyo librarians and there were no librarians from other parts of the country. Although some leaders in the Japanese library world were enthusiastic and devoted to library development, the way to nationwide activities or cooperation was not so obvious. The association had for the time being to satisfy itself only with holding regular quarterly meetings to exchange experiences and technical knowledge.

The Association's record shows that the All-Japan Librarians Conference held

in May 14, 1898, was attended by only fifteen members and thirteen nonmembers. Following the publication of the association's bulletin *Toshokan Zasshi* (*Library Journal*, at first three issues a year) in October 1907, membership showed a steady increase, and when the General Assembly in March 1908 changed the articles of the association and the Japanese name Nippon Bunko Kyokai to Nippon Toshokan Kyokai (the Japanese words "Toshokan" and "Bunko" both mean "Library," but the former is used more for the larger collections and also for modern facilities), the total membership reached ninety-nine persons, of which twenty were librarians from outside of Tokyo.

Meanwhile the Tokyo Library became the Imperial Library (Teikoku Toshokan, 1897), the Library Act (1899) was promulgated, and some workshops or institutes for training of librarians were initiated, though on an experimental basis. JLA continued its initiative with its far-sightedness and perseverance. In 1913, when the twentieth anniversary of the association's foundation was celebrated, the association's membership reached 324 and showed a distinctively nationwide character. JLA succeeded in obtaining a grant from Marquis Rairin Tokugawa, who was also ready to participate in person as honorary president for the improvement and extension of the association's activities. The campaign for the increase of membership under Marquis Tokugawa was very effective, and the association's membership increased to 1,039 by May 1923.

In the meantime, the first permanent institute for the training of librarians was instituted by the Ministry of Education in 1921.

During the great earthquake in the Tokyo area, September 1, 1923, twenty-eight libraries were entirely destroyed by fire and over 1,200,000 volumes from library collections were lost. The "Library Week" program was nevertheless set up in the same year as one of the regular activities of JLA. It was held every year in November for the purpose of developing book-reading habits and an understanding of library functions. Beginning in January 1924, JLA decided to publish its bulletin (*Library Journal*) more frequently, i.e., 10-12 issues a year instead of 3-4. It also began a campaign to raise funds to restore library services. The real damage to the cultural and library situation caused by the earthquake, was made public through foreign and local library associations, and the needs for cooperation and the establishment of central libraries in every prefecture were stressed. A contest was held in May 1924, with the slogan winning the highest prize: "Even the largest country is smaller in scope than its libraries."

It was brought home to the Japanese library world that the sharing of intellectual assets to gain information and knowledge was more important than individual library facilities. This applied at both local and international levels.

Donations from philanthropic organizations were made to Japanese libraries, notably by the Rockefeller Foundation to Tokyo University Library and by Naritasan to JLA. When the ALA held its fiftieth anniversary meeting in 1926, Mr. Kiichi Matsumoto was present representing JLA. When the Library Association of Great Britain held its fiftieth anniversary in the following year, Mr. Masataro Sawayanagi and Mr. Kosaku Hamada represented JLA. This resulted in the early

participation of JLA on the International Library and Bibliographical Committee (now International Federation of Library Associations) in 1929. Mr. Izumi Morimoto represented JLA at the 2nd Conference of the committee in Rome, 1929.

The association's efforts to standardize library techniques, e.g., the adoption of the Nippon Decimal Classification for the items represented in selected lists of current publications (beginning with the *Library Journal*, August 1930) and the establishment of the Study-Committee of Cataloging Rules, were welcomed by its members. Local library associations are organized gradually, prefecture by prefecture. The emperor's visit to the prefectural library in Shizuoka and Mr. Kiichi Matsumoto's lecture in the imperial presence in the palace gave strong impetus to the library movement.

In November 1930 the association was acknowledged legally as a corporate juridical body and its membership increased steadily from 1,283 (1930) to 2,585 (1944), but the extraordinary situation of the emergency connected with the last stages of World War II eventually made meetings and conferences impossible, and JLA was forced to change its articles and became a foundation entirely controlled by the government through the Ministry of Education. It had to suspend the publication of *Library Journal* with Volume 38, No. 5 in September 1944.

Reorganization of the association into a foundation was completed in March 1945, with government officials as executive officers. This reorganized JLA was in existence at the end of World War II.

At the request of the General Headquarters of the Allied Powers in April 1946, JLA arranged, through prefectural central libraries, the preparation of survey reports on library services. The president of JLA was, in accordance with the foundation's articles, Mr. Yoshishige Abe,* Minister of Education; the Chairman and Executive Officer was Mr. Toshio Eto, who was an experienced librarian from pre-war times.

The association's bulletin, *Library Journal*, resumed publication on June 1, 1946. Qualified librarians in Japan met several times, encouraged by American library specialists, and agreed to reorganize the association to its former status. JLA once more became acknowledged as a corporate juridical body in August 1947, and JLA began its activities afresh with its newly registered 996 members and the aim of advancing the Japanese library effort. Many senior librarians who personally experienced the amazing advancement after the great earthquake in 1923 looked forward once more to the revival of library services in Japan, and they gave a strong impetus to the younger librarians and the library world in general. Another strong impetus to librarianship in Japan was the establishment of the National Diet Library (NDL). Although the House of Representatives and the House of Councillors both had a library inside the Diet building, the holdings and services were nevertheless far from satisfactory.

After several discussions on the possibility of adopting the system used in the U.S. Library of Congress to the Japanese situation, library committees of both

*Mr. Y. Abe was also well known as a philosopher and an educator from pre-war times.

houses agreed, in a joint meeting on July 12, 1947, to request the Supreme Commander for the Allied Powers General D. MacArthur, to assist their efforts "by inviting some American expert to advise us during the initial stages of planning." The request was granted. The American advisors, Verner W. Clapp, chief assistant librarian of the Library of Congress and Charles H. Brown, former president of ALA, arrived in Tokyo on December 14, 1947, and made very effective recommendations. Japanese librarians had never envisioned a library on such a grand scale, with 10,000,000 volumes, seats for 3,500 readers, and a staff of 1,500 persons. After lively debates within the committees and stormy exchanges between the committees and other authorities, the NDL bill was passed by both houses with unanimous votes in February 1948, and Mr. Tokujiro Kanamori, who had worked untiringly as the minister responsible for introducing the New Constitution, was appointed as the first National Diet librarian.

The preamble of the National Diet Library Law states: "The National Diet Library is hereby established as a result of the conviction that truth makes us free and with the object of contributing to international peace and the democratization of Japan as promised in our Constitution." That is why the words "Truth makes us free" in Japanese and Greek are carved over the main circulation desk of the library, directly facing its front entrance.

Mr. Tokujiro Kanamori, the National Diet Librarian was elected president of JLA at the General Assembly on June 13, 1948. He held the post until his death on June 16, 1959. The next problem for JLA was the amendment of the [public] Library Ordinance. The names associated with this arduous work are Toshio Eto, Masakazu Nakai, chairmen of JLA successively, and Takashi Ariyama, executive secretary of JLA.

The Association's Aims and [Public] Library Law of Japan, Enacted in 1950

Like any other library association in the world, JLA has the aim of promoting library services in the country specifically and to contribute to the development of librarianship in general. Constituent members are all quite aware of the fact that only through cooperative spirit can effective library service exist. In 1952, JLA entered once more into the International Library and Bibliographical Committee (now IFLA) as a national member, recognizing in full the importance of international cooperation. There are many problems and issues: research in, and development of, library theory and practice; public and community consciousness of various library services; obtaining support for library planning and maintenance; building sound professionalism; and making requests to political and governmental bodies for library improvements.

According to the articles of the association, JLA is expected to pursue the following program:

1. Research in and survey of library administration, management, and technology. Support or promotion of such surveys.
2. Education and training of librarians and efforts to improve the librarians' salaries and status.
3. List recommended books in subject fields, as book selection aids.
4. Promote reading habits in general and reading courses in particular.
5. Edit and publish a professional bulletin, serials, monographs, and other materials.
6. Standardize library supplies and encourage use of such standardized supplies.
7. Organize and operate a special library in librarianship and a model library.
8. Give advice and instruction in planning and administration of a library.
9. Be associated with foreign and international library organizations.
10. Other activities as required to fulfill the association's aims.

The extent to which these objectives are realized by the association is open to discussion. The amendment of the [Public] Library Ordinance of Japan, which was enacted in 1899 and revised in 1933, was considerably advanced by the activities of JLA. The result of this was the [Public] Library Law of 1950.

The new Library Law has several significant points of view compared to the former Library Ordinance: Article 1 defines the purpose of the Law more clearly as "to provide for necessary matters concerning the establishment and operation of libraries, and to promote a sound development thereof, and thereby to contribute to the enhancement of the education and culture of the nation, in accordance with the spirit of the Social Education Law (enacted in 1949)". Article 3 enumerates more concrete contents of library services which should be offered to the public, "taking into consideration local situations and the general public's needs, and also paying attention to school education. Article 4 and 5 are concerned with definitions and qualifications of librarians, stating that the following persons should be recognized as qualified librarians:

1. Graduates of universities who have completed the short course for training librarians under the provisions of Article 6.
2. Graduates of universities who had completed the prescribed course of study concerning library science [in the universities].
3. Those who have had three or more years experience as assistant librarians (including the personnel of the NDL or libraries attached to universities corresponding to assistant librarians) and who have completed the short course for training librarians under the provisions of Article 6.

Article 6 provided that the short courses for training librarians and assistant librarians were to be conducted by universities with a Faculty of Education or a Faculty of Liberal Arts and Education which are recognized by the Ministry of Education. The courses of study, credits, and other necessary matters concerning the short courses for the training of librarians and assistant librarians were to be regulated by the Ministry of Education Ordinance. This provided that the number of credits to be acquired should not be less than fifteen. The number of credits was raised to nineteen in 1968.

Article 13 stated that the chiefs of the libraries established by the local public bodies which received promotional subsidies from the state in accordance with the provisions of Article 20 should be qualified as librarians; they must have had experience in serving as chiefs of libraries or librarians (including such personnel of the NDL or the libraries attached to universities as correspond to them) for 3 or more years in the case of libraries established by prefectures as well as those established by the cities under Article 252, provision 19, paragraph 1, of the Local Autonomy Law (Law No. 67 of 1947) (hereafter referred to as "designated cities") and for 1 year or more in the case of libraries established by cities other than the designated cities.

Article 17 stipulated the principle of free public use of libraries in saying that public libraries shall not charge any admission fee or receive any other compensation for use of library materials.

Article 18 stated that the Minister of Education shall, in order to promote the sound development of libraries, formulate desirable standards for the establishment and the operation of public libraries and make them available to the Boards of Education for guidance and, in addition, make them known to the general public.

Article 20 stipulated that the state shall, within the limits of budgetary appropriations, grant subsidies to meet part of the expenses required for the facilities and equipment of the libraries and other necessary expenses, to the local public bodies that establish the libraries.

Organizational Structure as of 1972

JLA has its headquarters in Ueno Library (former Imperial Library and now National Diet Library-Ueno Branch), Ueno Park, Tokyo. The headquarters office is an organ for executing the resolutions which are made by the General Conference, the Board of Trustees, and the Board of Directors. In addition to its president, it has a chairman who presides over the Board of Directors (twenty-eight in number), including executive directors. The Board of Trustees consists of 125 representatives from local organizations and functional sections. Total membership is 4,420, of whom 3,381 are personal members and 1,039 corporate members.

The highest resolutionary organ of JLA is the General Conference of members which is held at least once a year. Elections are organized by a special Committee in Headquarters who also arrange prefectural library association elections. To keep abreast of the general needs and trends of the library world, since 1906 JLA has sponsored an annual All-Japan Librarians Conference which includes nonmember librarians. The headquarters office is staffed with twenty-eight full-time persons with an executive secretary in charge. The office has been playing an important role as the "spokesman" for the library world in promoting a better understanding and recognition of library functions among the public. The office has also to ensure that the activities of each division as well as of the committees are carried out smoothly.

JLA is organized in five divisions to carry out the various activities concerning library work and other specialized problems:

Public Library Division
University Library Division
School Library Division
Special Library Division
Education [for Librarianship] Division

There are specialized sections within some of the divisions. For example, the Public Library Division has four sections: Reference Work, Children's Service, Audiovisual Materials, and Bookmobile Section.

There are also the following committees in JLA:

Toshokan Zasshi (Library Journal) Editing Committee
Publication Committee
Book Selection Committee
Classification Committee
Cataloging Rules Committee
Subject Headings Committee
Library Survey Committee
Library Building and Equipment Committee
Documentation Committee
Liaison Committee
Library Terms Committee

Activities

Since the functions of JLA, carried out by its governing organization, conference, divisions, or committees, cover a very wide range of activities, only typical ones are discussed below.

For the extension of library activities a "Reading of Books Campaign" is one of the significant activities of public libraries, inspired and coordinated by JLA. In the Nagano prefecture, for example, books are distributed regularly to homes by school children, because housewives are usually occupied every day with farm work or household chores. Meetings for reading books are also held for them. Over 200,000 mothers have joined such reading clubs in the Nagano prefecture, and enjoy the pleasure of reading. In the Kagoshima prefecture, a campaign "Mothers and children read together for twenty minutes a day" has become very popular since 1960. Now the campaign has developed into a movement of over 85,000 mothers and children. The achievement was soon recognized in the community and prefectural authority, and a special budget for children's literature was introduced. The Kagoshima Prefectural Library now has by far the largest collection of children's literature (70,000 vols.) in any prefectural library.

JLA publishes an annual survey of Japanese libraries. Statistical data of 800 general and public libraries and also of 1,000 college libraries (including 300

junior college libraries) has been published annually since 1953 as *Nippon no Toshokan (Statistics on Libraries in Japan)*.

A more detailed special report on the actual conditions of city libraries with service population ranging from 50,000 to 200,000 is also published. This publication has helped many librarians to compare their own services with others and to solve existing problems in medium-sized public library provision.

A Manual of Analysis on University Library Services and also the more general *Library Handbook* are the products of continuing surveys done by the association itself or by its suborganizations. Publication of *Nippon no Sankotosho (Reference Books in Japan)*, the English version of which is published by ALA) in 1962 and its quarterly supplement is a useful tool for reference librarians. *Gendai no Toshokan (The Modern Library, quarterly)* helps to keep Japanese librarians up-to-date with modern trends in the library world.

The Book Selection Committee holds regular meetings once a week to select books suitable for public and school libraries. The list of selected items has been published as *Sentei-tosho Somokuroku* since 1950.

Although the benefits of standardization of processing were often discussed and proposed before World War II, the first actual step was taken when the Nippon Decimal Classification (NDC) was published in its sixth revised edition in 1950. Editorial responsibility was in the hands of the JLA with the Classification Committee under the chairmanship of Mr. Shuko Kato. Mr. Kato was the strongest advocate of the use of NDC as the standard for Japanese general and public libraries. According to a survey in 1964, 92% of public libraries and 78% of college libraries were using NDC. The eighth edition is now in preparation. The next step was the compilation and publication of *Nippon Cataloging Rules (N.C.R.) 1952*, in 1953. The rules were revised in 1965 in accordance with the IFLA International Conference Cataloging Principles memorandum.

Though the concept of the dictionary catalog was introduced very early into Japan, the reference tool of subject headings in the Japanese language was very limited. Since 1953–1954 there has been, however, an increase in subject headings lists and thesauri in library and information services in Japan, especially in school libraries and in individual special libraries. JLA published *Basic Subject Headings List* in 1956, which was revised and enlarged in 1971.

The Education [for librarianship] Division was organized in May 1959, and is mainly concerned with training and education of librarians to raise the whole professional status. It holds regular workshops which provide the opportunity for contact and discussion between teachers in librarianship and library administrators. It cosponsors various surveys and meetings with other divisions or committees of JLA.

The All-Japan Librarians Conference was held regularly from 1906 to 1939. After a 9-year break, it was resumed in 1948. A number of resolutions and representations were made which have helped to shape the minds of professional librarians in Japan. One of them was proclamation of "Freedom [from Governmental Control] of Libraries" in 1954. Conferences held recently in Hiroshima

(1970) and Gifu (1971) were attended by over 1,000 librarians and several hundred library-users.

Affiliated or Related Organizations in Japan

Japan Institution for Library Science. 1947-. (Tenri, Nara Precture)
 Japan School Library Association. 1950-.
 The Japan Documentation Society. 1951-.
 Japan Special Libraries Association. 1952-.
 Japan Society of Library Science. 1953-.
 Mita Society of Library and Information Science. 1963-.

Growth of Membership and Appropriation

The growth of membership in JLA and appropriations are shown in Table 1. The distribution of the membership is shown in Table 2.

TABLE 1

Year	Member		Appropriation (in 1,000 yen)	
	Regular (personal)	Corporate	Regular	Extended activities
1947		996	243	1,880
1957	1779	517	8,488	8,619
1967	2688	878	23,496	103,269
1971	3204*	1029	30,910	(138,072)
1972	3381	1039	(33,696)	(155,400)

*Of the 3204 personal members, more than 500 received awards for service of over 20 years at the eightieth anniversary celebration of the association's founding.

TABLE 2

Distribution of Personal Members to Libraries
 as of March 31, 1972

Type	Number
National Diet Library	144
Public libraries	1,396
College libraries	827
School libraries	171
Special libraries	199
Others	644
TOTAL	3,381

BIBLIOGRAPHY

- Chandler, George, *Libraries in the East*, Seminar Press, London, 1971, pp. 126-159.
- Nippon Toshokan Kyokai, *Libraries in Japan*, 1957, 76 pp.
- Nippon Toshokan Kyokai [Japan Library Association], *Libraries in Japan 1968/69*, Annual Report for IFLA, 1969, typescript, 7 pp.
- Nippon Toshokan Kyokai, *Minna ni Hon o: toshokan hakusho 1972* [*Books for All: A Survey Report on the Library Situation in Japan, 1972*], 1972, 56 pp.
- Nippon Toshokan Kyokai, *Nippon Toshokan Kyokai 80-nenshi nenpyo* [*History of Japan Library Association Chronology 1892-1971*], 1971, 72 pp.
- Nippon Toshokan Kyokai, *Teikan to Shokitei* [*Articles and Regulations of JLA*], 1971, 27 pp.
- Zenkoku Toshokan Taikai [All-Japan Librarians Conference 1971], *Toshokan Zasshi* [*Lib. J.*], 66, 56-81 (1972).

HATSUO NAKAMURA

JAPAN NATIONAL BIBLIOGRAPHY

Woodblock printing became general in Japan during the early decades of the seventeenth century. As printed books grew in number, the government assumed control of publication, so that by the eighteenth century, no new book could be published without government permission. No catalog of new publications was issued at the time, yet records of a considerable number of applications for permission to publish filed during the eighteenth and first half of the nineteenth centuries have survived and have been published recently. Moreover, fifteen catalogs of books in print published privately by bookshops during the seventeenth, eighteenth, and first half of the nineteenth centuries have recently been reprinted. The record of books published during this period may therefore be considered fairly complete.

Although no national bibliography was compiled in Japan until the middle of the nineteenth century, the *General Catalog of Japan Books* (*Kokusho sōmōkuroku*) published in eight volumes between 1963 and 1972 by Iwanami Publisher, may be considered a national bibliography of Japanese writings from the earliest period of recorded history to the mid-nineteenth century. The *General Catalog*, based on the collections of old writings and books in 426 Japanese libraries, lists approximately 500,000 titles, including manuscripts, which were authored, compiled, or translated by the Japanese up to 1867. This was the year of the Meiji Restoration, which marked the end of Japanese feudalism and the beginning of Japan's history as a modern nation. Modernization reached into every corner of society, and book publishing, like everything else, was affected: woodblock printing was gradually replaced by moveable type; and both the number of books published and the number

of copies in a printing rapidly increased. The new government maintained control of publication, initiating for purposes of censorship a system of compulsory submission of newly published books. From 1870 the government published a catalog of new publications which had been submitted. This continued until 1887. Thereafter, until 1891, the catalog was published by a private publishing house. Books published between 1893 and 1948 are cataloged in *Books in Print* and *Annual Catalogue* issued more or less regularly by both the Tokyo Publishers' Association and various private publishing houses. In addition, from 1927 to 1943, the government published a monthly catalog of government publications.

After World War II, with the democratization of Japanese society, the system of compulsory submission and censorship was abolished. However, the National Diet Library Law of 1948 required publishers to submit at least one copy of new publications to the National Diet Library (NDL); and the NDL was responsible for publishing regularly a national bibliography. The NDL opened in June 1948, and began in September of the same year to issue a national bibliography. Originally this was published monthly, but from June 1955 it became a weekly called *Current Publications* (*Nōhon Shūho*). In 1951 the NDL initiated an annual cumulation, beginning with the year 1948, called *Japan National Bibliography* (*Zen Nihon Shuppanbutsu Sōmokuoku*).

Both *Current Publications* and the *Japan National Bibliography* are in two parts: books (including pamphlets and maps) and serial publications. These parts are further divided into government publications and nongovernment publications, the former being listed according to the Government Office of Publication, the latter according to the Nippon Decimal Classification system. Newspapers are listed under several headings, i.e., general papers, trade papers, and news service reports.

Although Japanese libraries in general use the Nippon Cataloguing Rules (NCR) based on the Statement of Principles of the International Conference on Cataloguing Principles, entries in *Current Publications* are by title instead of author. This is because the reading of personal names in the Japanese language is extremely difficult. All family names, and most first names and organization names, are written with Chinese characters; and arranging entries according to Chinese characters, while not impossible, is troublesome. Moreover, looking up an entry in Chinese characters can be a vexatious task. Accordingly, Japanese libraries make a practice of transcribing the reading of the Chinese characters either in *kana* (Japanese phonetic script) or *romaji* (Roman letters), and arranging entries according to this transcription. The difficulty is that most Chinese characters may be read in two or more ways, so that the only means of verifying the proper reading of a personal name is to ask the author which of the several possible readings he uses. But to take time with each book to research the proper reading of the author's name would seriously delay publication of the *National Bibliography* and diminish its value as an aid to book selection. Since it is never as difficult to read a book title as an author's name, and since the Japanese are accustomed to the title entry, the NDL uses title entries in its *Current Publications*, and then issues a catalog card in accordance with the NCR, that is, with main entries. The yearly *Japan*

National Bibliography is compiled from the entries on these catalog cards. However, entries in the *Japan National Bibliography* do not include tracing.

An enormous number of Chinese characters are used in Japanese bibliographic data, and a processing system for these thousands of characters is a crucial problem in Japanese library automation. Since 1970 the NDL has been at work on solving this problem and has already installed a system. A system to convert the *Japan National Bibliography* to machine readable form is currently being developed.

BIBLIOGRAPHY

Guide to Japanese Reference Books, American Library Association, Chicago, 1966.

YASUMASA ODA

JAPAN NATIONAL DIET LIBRARY

It was in 1872, 4 years after the Meiji Restoration, that the National Library named "Shojakkan" was born. The Meiji Restoration proclaimed the end of hundreds of years of the feudalistic and the exclusive isolation policy enforced by the Shogunate regime. Then, Japan was opened to the world and there was no discrimination of classes among the people. As the natural result of such revolution, the country on the whole needed new knowledge and study of fresh foreign information in order to prepare for the elastic jump out of the older stage. In these circumstances, the National Library was established by the new government and survived for about 80 years until it was absorbed into the National Diet Library in 1949. The National Library, although it had some institutional changes in its long life, had been popularly called "Ueno Library" as it was located in the Ueno Park.

Apart from the National Library, the birth of a parliamentary library had been sought ever since 1894, when the Secretary-General of the House of Peers, after he returned from the United States, recommended to the Cabinet the need to have a library just like the Library of Congress. In the meantime libraries were established in both Houses, but the opportunity to have a single parliamentary library had not matured until 1948, when the National Diet Library Law came into existence.

The character of the Japanese National Diet went through a radical transformation after the Pacific War to adjust itself to the democratic principles expounded in the new Japanese Constitution. This led to the realization that the establishment of a parliamentary library with an effective research function was of paramount importance for the deliberation of national affairs by Diet members. In December 1947, in response to a request made by the Diet, the U.S. Library Mission, consisting of two distinguished librarians, the late Messrs. Verner M. Clapp and Charles H. Brown, came to Japan and gave their advice for the establishment of such a parliamentary

library. On the basis of their recommendations, a newly-drafted National Diet Library Law was promulgated in 1948. The library is thus a product of postwar Japan.

"The National Diet Library is hereby established," the preamble of the law announces, "as a result of the firm conviction that truth makes us free and with the object of contributing to international peace and the democratization of Japan as promised in our Constitution." The library's activities were to be carried out in response to the requirements of the new Constitution which proclaims that sovereign power resided with the people.

The law prescribes the purposes of the library, stating, "The National Diet Library shall collect books and other library materials for the purpose of assisting the members of the National Diet in the performance of their duties and also for the purpose of providing certain library services as hereinafter specified for the executive and judicial branches of the national government and for the people of Japan." The law, with thirty-one articles, regulates the functions and services of the library.

They may be summarized in four categories. The first is naturally to serve the Diet. The service is to respond to the needs of Diet members and includes the analysis or evaluation of any subject matter before presenting to the Diet. It is further to gather, classify, analyze, translate, index, digest, and compile into bulletins or reports data having bearing upon legislation.

Second, the National Diet Library renders library service to the executive and judicial agencies of the national government, most libraries of which are organized as branches of the library. There exists between the library and the branches close cooperative relations such as interlibrary loan of materials and mutual assistance in research activities.

The third function is to serve other libraries and the general public. The library's collections are offered for their free use either directly or indirectly. Reference inquiries are received from every corner of Japan and answered. The library pays special attention to its function as a national and central library of the country. Its bibliographical services are also of importance to the national interest.

Fourth, as the representative library of Japan, the library maintains active international cooperation with libraries and learned institutions abroad. Copies of the government publications legally deposited are partly used for international exchange.

Building

At its establishment the library was housed in the former Akasaka Detached Palace. Then in 1953 it was decided that a new library building should be constructed, and the ground north of the Diet building was selected as its site. A public competition for the design of the building was held at the end of that year. The basic design was finished in 1955, and it was decided that the construction should be divided into two periods. The first period of the construction was started in 1955 and completed in July 1961. The library moved into this new building in August of

the same year, and public services were resumed in November. The building was expanded in the second period of construction, started in December 1966 and completed in August 1968. Altogether, the total cost of construction was 4,800 million yen.

The present building (see Figure 1) is square in form with each side 90 meters long, and has a total floor area of 49,587 square meters. It is divided into two parts, one for stacks and the other for offices, reading rooms, and other facilities.

The stacks section, in the center of the building, is also square, with each side 45 meters long. It consists of six floors including two basements. The first floor above ground is largely for public service, containing the public catalogs, central delivery counter, and a lobby. The other floors are divided into three levels each by steel decks, and the total of fifteen decks cover 30,375 square meters. The total length of the book shelves is 172.5 km. The stacks have a capacity of 4,500,000 volumes.

The part surrounding the stacks has one floor in the basement and six floors above, containing offices and reading rooms as well as such facilities as photoduplication laboratory, bindery (1st floor), computer room, medical clinics (5th floor) auditorium, language laboratory, and dining hall for staff and visitors (6th floor).

The columns are arranged regularly at 7.5 meters of spacing in both directions. The floor-to-floor height in the reading rooms and offices is about 4 meters and the



FIGURE 1. *The National Diet Library. Because the building is built on a slope, the bridge at the front leads to the third floor. The upper, white part is the stack area.*

deck-to-deck height in the stacks about 2 meters. The natural light coming in through the large windows, supplemented by fluorescent lamps, keeps the average illumination inside at 250 luxes or more. Ventilation ducts are installed in the space above the ceiling throughout the building.

In the center of each deck of the stacks is the control booth containing elevators, dumbwaiters, vertical conveyers, and pneumatic tubes, making it possible to send books speedily from the stacks to the delivery counter.

The stacks are equipped with asphyxiators. Fire, if it happens, will be extinguished without water.

Organization and Staff

The National Diet Library is under the control of the Diet. The librarian is appointed by the Presidents of both Houses with the approval of the Diet after consultation with the Standing Committees for House Management of the Houses. His status is equal to that of a Minister of State.

The library consists of the Main Library, thirty-two branch libraries, and the Detached Library in the Diet.

The Main Library has one department and six divisions as follows: Administrative Division, Research and Legislative Reference Department, Acquisitions Division, Processing Division, Circulation Division, Reference and Bibliography Division, and Division for Interlibrary Services.

Among the branches of the National Diet Library, the Tokyo Bunko (Oriental Library) is noted for its remarkable collection of oriental classics. The former National Library, or Ueno Library, is also now a branch library, although a large part of its collections have been transferred to the Main Library. All the rest of the branch libraries are in the executive and judicial agencies of the government.

Libraries in this last category, numbering thirty in all, include the Library of the Supreme Court and libraries of the executive agencies of the government. The librarians of these branch libraries are appointed by the librarian of the National Diet Library. This system, unique in the world, makes it possible for constituent libraries to improve their services and eventually to enhance the functions of the Diet, government agencies, and the Supreme Court, through their cooperation with the Main Library and among themselves.

The Detached Library is in the Diet building and serves the immediate demands of Diet members.

On June 5, 1948, when the National Diet Library was opened to the public, the number of staff was 182. Currently it is 845, including the librarian and the deputy librarian. The breakdown of the number is: 172 for Administrative Division, 155 for Research and Legislative Reference Department, 89 for Acquisitions Division, 86 for Processing Division, 126 for Circulation Division, 136 for Reference and Bibliography Division, 40 for Division for Interlibrary Services, and 39 for others. Of

the total staff, 37% is female, with nearly 50% being university graduates. In addition, the library employs 63 part-time staff.

The staff is recruited through open competitive examination held in autumn each year. A professional background in librarianship is not always a requirement for recruitment. Necessary training has been undertaken for newcomers to the field.

Acquisitions and Collections

The library acquires materials through legal deposit, purchase, exchange, gift, and transfer from other government agencies.

Under the National Diet Library Law, a certain number of copies of publications issued by national and local government agencies and other official organizations is deposited with the library for official use and for international exchange. For non-governmental publications, a single copy is demanded for deposit. Gramophone records are also subject to legal deposit. For nongovernmental publications deposited according to the law, the library pays the equivalent of the cost price for their production (in most cases 50–60% of the retail price). A punishment clause is provided if the publisher fails to furnish copies, but it has never been imposed. The legal deposit system has nothing to do directly with copyright registration.

Materials purchased are mostly foreign publications not obtainable through international exchange or gift. In addition, Japanese duplicate copies, back numbers of periodicals, out-of-print books, and old documents and manuscripts are also purchased within budgetary limitations.

Acquisition by international exchange plays an important role in building up the library's collection of foreign materials. In its exchange program, the main emphasis is placed on official publications. The library, being the exchange center of Japan, sends sets of this type of publications to foreign organizations and receives in exchange full or partial sets of official publications of the respective countries.

Besides such comprehensive exchange, the library maintains selective exchange with about 644 institutions in 101 countries. The government publications deposited pursuant to the provisions of the National Diet Library law constitute the richest source of materials for carrying on international exchange.

The library is designated as the depository library for the United Nations, its specialized agencies, U.S. Atomic Energy Commission, the Rand Corporation, the European Communities, and the Organization for Economic Cooperation and Development (OECD).

Under special arrangements, the library purchases and sends nonofficial Japanese publications to exchange partners abroad, who reciprocate with similar services principally on an equivalent-value basis. In 1972 the exchange partners of this type numbered 109 in twenty-eight countries.

As the sole depository library in the country, the National Diet Library receives the deposit of at least one copy each of all the domestic publications, be they govern-

ment or nongovernmental publications, for preservation in perpetuity. Together with the collections of the Ueno Library which was transferred to the Main Library in 1949, the library boasts a huge collection of domestic publications acquired since the Meiji Era.

Although the scope of the collections of the library is, as a principle, encyclopedic, service to the Diet as its primary function necessitates that great emphasis be laid on politics, law, economics, and other branches of social sciences. Much attention is paid to publications of foreign governments and of international organs obtained through exchange and gift, and collections of this kind are considered the most complete in Japan. Books of law, parliamentary records, and official gazettes of the major countries of the world are also extensively collected.

The Constitutional collection, consisting of about 170,000 items of materials concerning the Meiji Constitution, including the documents related to the post-Restoration statesmen, such as Sanjo Sanetomi, Iwakura Tomomi, Yamagata Aritomo, Inoue Kaoru, Ito Hirobumi, Ito Miyoji, Kido Takayoshi, is one of the most remarkable collections of the library, being materials of primary importance on the modern political history of Japan.

The collection of classic Chinese books, in which the collections of the former Ueno Library, the Fujiyama Collections, and the Chinese collections of the former Toa Kenkyujo are incorporated, is one of the biggest of the kind in Japan. It is known especially for the large number of books of the Ch'ing Dynasty, and its richness in local histories and genealogical records.

The library's collection of materials related to science and technology has been quickly reinforced over the years to meet the growing demand from the public, and has become one of the best in Japan. The form of the materials ranges over microfilms, microprints, microfiches, and monographs, apart from books and periodicals. Current foreign periodicals number nearly 9,000 titles. In addition, there are materials on nuclear science (such as the reports of the U.S. Atomic Energy Commission), technological materials (chiefly consisting of U.S. government and nongovernment reports on research and development), foreign aerospace reports, doctoral dissertations in the fields of physics, chemistry, and technology, and special materials such as the Rand Corporation Reports.

Books concerning Japan with foreign authorship have been given high priority in the acquisition policy since the Ueno Library days. Books in this category now number about 8,000, and include reports by early Christian missionaries written in the sixteenth century as well as studies by contemporary scholars and historians in the United States, Europe, and elsewhere.

The library has a complete collection of doctoral dissertations presented according to the Doctorate Regulations, dating back to the great earthquake in the Tokyo area in 1923.

The materials on the Rangaku or Dutch learning formerly owned by the Bureau of Western Books of the Shogunate Government, which have since been transferred to the National Diet Library, consist of about 3,600 volumes, and are invaluable for the study of modern history of Japan.

TABLE 1.

Japan National Diet Library Holdings as of March 31, 1972

Books	2,691,000 volumes (of which 660,000 were foreign)
Maps	119,000 pieces
Phonograph records	122,000 pieces
Microfilms	39,826 reels
Serial publications	25,400 titles (of which 11,000 were foreign)
Doctoral dissertations	118,500 items

The collections as of March 31, 1972 are given in Table 1. The increase of the collections in the 1971 fiscal year ending March 1972 was: 152,000 volumes of books, 6,500 pieces of maps, 10,500 pieces of gramophone records, 3,000 reels of microfilms, etc.

Eventually, the following acquisition policy of the National Diet Library was recently confirmed and authorized by the librarian.

Acquisition Policy

The National Diet Library is a library whose primary function is to assist Diet Members in their investigation and research activities, but at the same time it has the aim of serving the executive and judicial branches of the government as well as the Japanese nation. To fulfill these objectives and functions satisfactorily, the Library is expected to endeavor to strengthen its collection of books and other library materials according to the guidelines given below.

1. Materials directly needed for the current deliberation of national politics should be acquired without delay, and materials in other fields likely to be taken up for deliberation in future should be actively collected.

2. Effort should be made to maintain the most complete collection in Japan of laws, statutes and parliamentary documents of Japan and foreign countries.

3. Materials representing the cultural achievements of the Japanese nation should be collected exhaustively and without fail, and those of the principal achievements of foreign nations should be collected extensively. In case there are valuable materials whose dispersion or exodus from Japan might be regretted, the Library should pay attention to preventing such an eventuality.

4. The Library should collect domestic and foreign bibliographies of all kinds so that it might be the last resort for bibliographical information in Japan.

Technical Services

CATALOGING

The library uses, for Japanese and Chinese books, the Japanese Cataloging Rules compiled by the Japan Library Association in 1965, and the Anglo-American Cataloging Rules of 1967 for books in Western languages. The National Diet

Library List of Subject Headings is used for subject headings, without regard to languages in which books are printed.

The public card catalog had been maintained in the form of a dictionary catalog until June 1960, when, considering the increasing number of cards and the heavy work of filing, the public catalog was divided into three catalogs, namely, author-title, subject, and classified, and remains so up to now. As for the serial publications, a title catalog has been maintained both for periodicals and newspapers.

CLASSIFICATION

At its establishment in 1948, the library adopted the Nippon Decimal Classification (NDC) for Japanese and Chinese books, and the Dewey Classification (DC) for books in European languages. However, from its experience in subsequent years, the Library found it necessary to compile a new classification system for its own use. The decimal system, needless to say, has many merits. Because of its simplicity, its clear notations, and its mnemonic quality, the system has been widely used. On the other hand, as it divides all knowledge into nine classes numbered by digits, the scheme is of necessity artificial and is sometimes lacking in rationality. Its notations frequently tend to be of unwieldy length.

The new scheme, the National Diet Library Classification, was compiled after several years of study and preparation, and has been in use since January 1969. Its outline is as follows:

A	Politics, Law and Administration
B	Parliamentary publications
C	Legal materials
D	Economics and Industries
E	Social affairs and Labour
F	Education
G	History and Geography
H	Philosophy and Religion
K	The Arts, Language and Literature
M-S	Science and Technology
U	Libraries and Bibliographies
W	Old and Rare books
Y	Special materials
Z	Serial publications

This is nondecimal and commonly applicable to books in Japanese and foreign languages. It is also capable of indefinite expansion and constant revision to meet the library's needs.

Legislative Reference Service

The service to the Diet is the primary function of the National Diet Library, and always has precedence over other services of the Library. All the divisions of the

library cooperate in this service, but it is primarily the responsibility of the Research and Legislative Reference Department.

The functions of the Department may be summarized as follows:

1. At the request of either House or of any Standing Committee or Member of the Diet, to advise and assist in the analysis or evaluation of any subject matter before presentation to the Diet and to furnish data likely to be helpful in the deliberation by the Diet.
2. At the request of the Diet, or in anticipation of such requests, to collect and analyze legislative and other related source materials to make them available to Diet Members.
3. When so requested by any Standing Committee or any Member, to provide bill-drafting services.
4. Where the needs of the Diet so permit, to make such materials available to the executive and judicial branches of the government and to the general public.

At its beginning in 1948, the library had forty-nine legislative reference service staff and answered 209 legislative questions. In 1971, 9,269 questions were answered by 155 staff members. The answers have been arranged by the specialists who major in certain subjects. The noteworthy trend currently carried out in this service is to have interdisciplinary surveys of political importance such as on excessively and sparsely populated areas, on megalopolis problems, and on environmental pollution in certain areas. The legislative inquiries have been so far arranged by the sections respectively limited to certain subjects, but inquiries of present day complexity require a broader and more intensive structure of research activity. An interdisciplinary approach is needed in response to such conditions.

Apart from research activities in response to request from the Diet, the Department also conducts research work on its own initiative to prepare for possible inquiries from the Diet or to carry out basic studies in particular fields. Some of the results of this preparatory research work are published in the monthly *Reference*, the bimonthly *Foreign Legislation*, and the occasional *Research Material Series*, edited by the Department. A *Historical Index to the Japanese Laws and Regulations Since Meiji Era* is now being compiled.

Public Services

Readers may use the collections of the National Diet Library only in the reading rooms. No loan is made to private individuals for use at home. Access to reading rooms is not permitted to persons under 20 years of age, except for university students. The reading rooms are opened at 9:30 A.M. and closed at 5:00 P.M., with some exceptions for specific rooms which are opened until 8:00 P.M. The library may be used throughout the year except Sundays, national holidays, and the last day of each month.

There are twenty-one reading rooms which are divided mostly according to the collections used. They are:

Main reading room (576 seats).

General reference room (seventy-six seats), containing about 7,000 volumes of reference books—dictionaries, encyclopedias, yearbooks, manuals, and bibliographies.

Library science materials room (thirty-two seats), with books and magazines, Japanese as well as foreign, on library science and bibliography.

United Nations (UN) and government materials room (twelve seats), where UN documents and government publications, Japanese and foreign, are available.

Newspaper reading room (eighty seats), for Japanese and foreign newspapers.

Microform newspaper reading room (eleven seats), equipped with microfilm readers.

Newspaper clippings room (twenty-four seats), with clippings of news articles in the important Japanese newspapers, dating back to 1947.

Special study room (112 seats), where seats may be reserved for serious researchers.

Science and technology materials reading room (fifty-nine seats), with reference books of science and technology, including abstracts, indexes, abstract journals.

Rare books reading room (twelve seats), for manuscripts, letters, old printed books, picture scrolls, prints, old maps.

Music library (fourteen seats), with records issued since 1949 in Japan. Four sound-proof listening rooms and six seats with headphones.

Diet members' reading room (sixty-seven seats), with selected reference works and periodicals that may be of immediate help to Diet Members. In a corner of this room is a collection of the writings of Diet Members, mostly donated by the authors.

Diet members' study rooms (eighty-four seats)—thirty-seven cubicles for individual members and three study rooms for group discussion.

Asian and African materials room (thirty-two seats), with reference books on Asia and Africa, newspapers, and magazines from the same area.

Constitutional materials room (seventeen seats), with documents on modern political history of Japan, especially on prominent statesmen related to the Meiji Imperial Constitution.

Map room (ten seats), with maps accessioned after 1948, including Japanese official maps and maps of the U.S. Army Map Service.

Statutes and parliamentary documents room (forty-four seats), with domestic and foreign official gazettes, official bulletins, decrees, regulations, treaties, parliamentary records, and proceedings.

Shidehara Peace Library (four seats), with books on international politics and diplomatic relations donated by the Shidehara Peace Foundation.

Special reading room A (fourteen seats), for access to special materials.

Special reading room B (fourteen seats), where magnetic tapes originally attached to books are used as well as typewriters and other noisy machines.

Special reading room C (ten seats), for photoreproduction of library materials with readers' own cameras.

Apart from the legislative reference services to the Diet, the National Diet Library provides reference service to government agencies, to other libraries, universities, and research institutions, and to the general public.

Such reference service is handled mostly by the Reference and Bibliography Division, and includes such duties as: (1) assisting readers in the use of the library; (2) locating specific literature; (3) investigating bibliographical data; and (4) preparing lists of books or bibliographies concerning specific subjects.

In the fiscal year 1971, 142,000 reference enquiries were handled by the division. There are 120 reference librarians in the division who work in their specialized subjects such as general reference, humanities, law and politics, economic and social affairs, science and technology, and Asian and African affairs.

The library compiles and publishes nearly fifty kinds of bibliographies, catalogs, accession lists, and indexes, mostly in Japanese.

The legal deposit system enables the library to acquire all the publications produced in Japan, official and nonofficial. For prompt information on its acquisitions the library issues the weekly *Current Publications*. Based upon this weekly list, and supplemented by further investigation, the annual *Japan National Bibliography* has been compiled and published since 1948.

The *National Diet Library Catalog* is published annually. There is also a 10-year cumulation. Two serials catalogs have been prepared: The *Catalog of Serials in Foreign Languages* which was compiled by computer, and the *National Diet Library List of Japanese Serials* published in 1969.

Apart from the *Current Publications* mentioned above, there are four accession lists prepared by the library. These are the semimonthly *Accession List: Foreign Language Publications*; the bimonthly *Accession List: Chinese and Korean Language Publications*; the semimonthly *Accession List of Foreign Government Publications*; and the monthly *Materials on Asia and Africa*.

The *Japanese Periodicals Index* is an index to main articles that appeared in about 3,000 important periodicals of Japan. Published monthly, it is divided into two parts: one for humanities and social sciences, and the other for science and technology.

The *General Index to the Debates at the National Diet* is an annual index to all the speeches and debates at each session of plenary meetings and committees of both Houses of the Diet. This index is now compiled by computer solely in Japanese.

The *Index to the Japanese Laws and Regulations in Force* is issued annually.

The library has also compiled and published various bibliographies on special subjects, including: *Catalog of Materials on Japan in Western Languages in the National Diet Library*, *Bibliography on Economic Planning*, *Bibliography of Biographical Literature*, *Bibliography of Literature in Japanese on the Constitution of Japan*, *Annotated Catalogue of the Rare Books in the National Diet Library*, *Catalog of Books Printed in the Meiji Era*, *Catalog of Children's Books*, *Selected Catalog of Japanese Government Publications*, and *Union Catalogue of Chinese Local Gazetteers*.

Several bibliographies and accession lists in the field of science and technology have been compiled and distributed either monthly or annually.

Through the interlibrary loan arrangement, public libraries, local assembly libraries, university and college libraries, and libraries of institutes and research

organizations can have access to the collections of the library. Newspapers, periodicals, and special materials are excluded.

The international loan service was started in 1960, according to the pattern set down by the International Federation of Library Associations. The library lends its holdings to foreign libraries which offer full reciprocity to the library.

The library, on request, makes microfilm and Xerox copies of materials in its possession, at reasonable charges. Demands for this service from foreign countries are constantly increasing.

Also, under a contract with the Japanese Newspaper Association, the library is currently preparing microfilms of fifty-nine titles of domestic newspapers, retaining one copy each of the negative and the positive in its stock.

The use of materials by the readers and for photocopy is becoming more frequent and consequent damage to materials is becoming more serious. Newspapers, in particular, cause difficult problems in the library because they are used frequently and because of the physical quality of the paper used as well as their large size; these cause difficulties in handling and storage. National Diet Library owns some 300 titles of old newspapers published since the Meiji Restoration (1868). In the light of this situation, the library in 1965 started microfilming these invaluable papers of the older periods. About one million frames have been produced since then.

The library prepares printed catalog cards for current Japanese publications to be distributed to subscribing organizations and individuals as well as for the library's own use. The cards are also sent to some major libraries in foreign countries.

Computerization

In order to cope with the present information explosion and to provide more efficient library services, the basic principles of automation, its applicability and consequence had been studied in the Library since 1965. After such careful examination, an electronic data processing system was installed in January 1971. This was a Japan-made computer system, originally a rather tiny set of HITAC 8400. Now the system has been developed into a substantially medium size set, consisting of 131 KB central processing unit, eight magnet tape decks, and a mass disc pack drive (7 module random access). The system is also connected on an output machine of the Chinese characters, JEM 3800B, and a recently developed *kanji* processing system, JEM 3100. The latter has two display terminals which are very useful to efficient input business of such characters. The HITAC 8400 central processing unit is capable of extending up to 262 KB with additional memory units.

As mentioned above, the library compiles numerous bibliographies on a national basis. For many reasons they are not always perfect, although they are expected to be so. Introduction of MARC II (Machine Readable Cataloging) tape produced by the Library of Congress stimulated consideration that it was a means for rationalization of bibliographic service of the western materials in this library. Being a computer system primarily for western alphabets and numerals, there was no difficulty in this connection.

This computerization stimulated the development of a system for processing the Japanese language in addition to the western alphabet. The Japanese language is rather complicated in its composition. It is usually mixed with Chinese characters or *kanji* (although completely Japanized, they are still so called because of their origin) and phonetic letters of *kana*, which have two different types numbering fifty each. The phonetic letters can be changed to mechanic signs and easily adopted to computer processing. The problem with Chinese characters is more serious. It is said that there are 50,000 or more characters, including historic and little used ones. A device had been developed to process 1,850 characters by Teletypewriter and printer, but it was not enough for the service of the National Diet Library.

After intensive study, the computer maker with cooperation of the library successfully developed the pattern input systems. Chinese characters are analyzed into forty-five patterns by their structural elements. The elements are punched by order of the pattern of the required character so as to process a character in question. Thus, the newly developed device can process nearly 4,000 different characters which, according to the frequency survey, cover not only those currently used but some 2,000 characters of classical use.

An automated pilot project of processing Chinese characters was studied in compiling *General Index to the Debates at the National Diet*, which can be consulted both from speakers and subjects. A program of about 35,000 steps for the project was developed. The result was satisfactory. The device was really a challenge to transplant the Japanese language into the imported mechanism of the computer. The *General Index* thus compiled was printed in June 1972 in one volume with 790 pages completely in Japanese. It is expected to be so compiled for successive sessions of the National Diet.

A catalog of some 17,000 titles of serials in foreign languages collected in the library was already compiled and published by the computerized method. Now the library is attempting to computerize the catalog of all Japanese serial publications in hand. The monthly *Japanese Periodicals Index*, the cumulation of which has been long expected without being realized, is hoped to be compiled in this way also.

The library technique of the National Diet Library, which was once instructed by Western wisdom and has been so far developed, now seems to be on an assimilation stage of its own.

Computerization in the National Diet Library, like that in library service in the western countries, has two objectives: bibliographic control and information retrieval. For the time being, emphasis has been given to bibliographic service in the library. However, because it is so important, retrieval service is now being studied and adopted for the interdisciplinary surveys in the legislative reference service.

SELECTED BIBLIOGRAPHY (in English)

Downs, Robert B., *National Diet Library: Report on technical processes, bibliographical services and general organization*. National Diet Library, Tokyo, 1948. 31 pp.

"The Electronic Data Processing System in the National Diet Library," *N.D.L. Newsletter*, 33 (December 1971).

"Kanji and Computer; The Method of Input and Output of Chinese Characters Used by the National Diet Library," *N.D.L. Newsletter*, 32 (June 1971).

National Diet Library, *The National Diet Library—Organization, Functions and Activities*, Tokyo, 1970, 37 pp.

Report of the United States Library Mission to Advise on the Establishment of the National Diet Library of Japan, U.S. Dept. of State, Washington, D.C., 1948, 41 pp.

Suzuki, Heihachiro, *The National Diet Library: Problems Involved in Its Development* (Library and Information Science, No. 9), Univ. Keio, 1971, pp. 143–152.

HEIHACHIRO SUZUKI

JAPANESE BOOK PRODUCTION (HISTORY)

The written word and the basic means of reproducing it—paper, ink, and the writing brush—were introduced into Japan from China, via Korea, perhaps as early as the third century A.D. Actual books first appeared as part of the wholesale adoption of Chinese culture which followed the conversion of the country to Buddhism in the late sixth century. The Chinese and Korean missionaries brought with them handwritten sutra scrolls which were studied and presumably recopied in Japan. The invention of printing was a welcome aid to the spread of Buddhist doctrines. Woodblock printing was used in China from the end of the sixth century, at first primarily for Buddhist works. Prior to that, multiple copies were made by taking rubbings from stone or metal carvings. Such rubbings were valued as a method of preserving fine calligraphy and of obtaining standardized, correct versions of important texts. The techniques of block printing did not reach Japan until the eighth century, by which time the art was well advanced in China and was beginning to be used for secular works as well as religious ones. The oldest surviving Japanese manuscripts also date from that period.

There are in Japan certain stone inscriptions and copper tomb markers from the sixth and seventh centuries, which may have been used for rubbings as in China. Seals with engraved characters were also used at least as early as 629, and bits of printed silk dated 734 and 740 have been preserved at Nara. The first surviving example of printing on paper originated shortly before 770. The Empress Koken, called Shotoku during her second reign, was pious to the point of attempting to set up a Buddhist theocracy in Japan. During her struggles with rivals in the government in 764, she ordered the making of one million miniature wooden pagodas, in each of which was enclosed a short charm (Sanskrit *dharani*) from the *Mu-ku Jo-Jo* Sutra. The charms were in Sanskrit, transliterated into Chinese characters.

Four different *dharani* were printed, and, as the blocks must have worn out with the repeated printings, several different blocks of each text were used. None of the blocks have survived, so it is uncertain whether they were of wood, stone, or metal. The work was completed some time before 770 and the offerings were distributed among the ten most important temples. A number of the charms and pagodas are still kept at Horyuji in Nara.

It would obviously have been possible to produce printed books at this time. There are a few references to printed Buddhist books of the eighth century, but they are not well documented. Printing is not mentioned again until 987 when the term *suri-hon*, "printed book," is used to describe a Buddhist text brought from China; but the use of the term shows that such books must have been familiar at the time. The lull in printing activities is perhaps partly due to the decrease in influence of the church after the capital was moved away from monastery-dominated Nara in 784. Individual temples continued to make block prints of charms and pictures of divinities as souvenirs for pilgrims. Wooden statues were often filled with printed representations to bring the total of divinities up to some mystically significant and efficacious number. These small prints are usually quite crude but are of great interest in the history of woodcut illustration.

Despite the dearth of printing in the Heian period (794–1175), it was hardly an illiterate era or one lacking in books. The intellectual life of the country was concentrated in a small group of aristocrats living in the capital, Kyoto. This leisured class was able to devote a great deal of time to literary pursuits. A truly Japanese literature, written in the Japanese phonetic script (*kana*) rather than the original Chinese characters (*kanji*), began to appear in the form of poems, diaries, and stories, culminating with the great novel *Genji Monogatari* (*The Tale of Prince Genji*) in the early eleventh century. Much time and care was also devoted to the development of beautiful calligraphy and to the physical embellishment of hand-made books. During the Nara period, especially fine sutra scrolls were written in gold or silver ink on blue or purple paper, and kept in elaborate wrappers and storage boxes. This custom continued into the Heian period for, although the Buddhist hierarchy ceased to dominate the government and the official Bureau of Sutra Copying was abolished, wealthy believers continued to commission or to make themselves elegant copies of favorite sutras as offerings for the salvation of their souls. In the late Heian period a new type of decoration appeared which was used both for sutra scrolls and for secular works. Light-colored paper was ornamented with background designs of small birds, butterflies, and plants, either drawn or printed with stamps. Still later, bits of gold and silver leaf were used to make an especially gorgeous background.

Book illustration also began to develop during this time. The Nara-period Sutra Copying Bureau copied a number of illustrated scrolls from Chinese models. The best preserved is a *Sutra of Cause and Effect* (*Kako-Genzai-Inga-Kyo*) from about 750, in which narrative scenes are placed in the top half of each section with the text below them in the lower half. Other sutras had frontispiece illustrations. As Japanese painting styles developed in the late Heian period, the blue and

purple scrolls were given frontispiece illustrations in the same gold and/or silver ink as the texts. Works of fiction were also illustrated; mention is made in *Genji Monogatari* of illustrations for such novels as *Taketori*, *Utsubo*, and *Ise*. The earliest surviving example of such illustration is a set of scrolls with pictures from *Genji* itself, done in the early twelfth century, some hundred years after the book was written. The style of these paintings is highly developed and quite different from anything in China. The selections from the text which alternate with the pictures are also beautifully and elaborately done. This style of secular illustration carried over into the religious works commissioned by members of the court.

The scroll was no longer the only form of book, although it continued to be favored for the most elegant productions. Buddhist scriptures intended for practical use were often folded accordion-style for ease in handling. These were known as *ori-hon*, "praying books," from the resemblance of the folded pages to hands folded in prayer. The folded books were sometimes stitched together along one side, resulting in something very like a modern Western binding. A similar type of album was made by folding sheets of paper in half and pasting together the folded edges. Albums made in this way provide interesting examples of early illustration. A set at Shitenno-ji in Osaka has fan-shaped sheets with sutra texts written over scenes from contemporary life.

The artistic tradition which began with the illustrated sutra scrolls and the *Genji* illustrations reached its height during the twelfth and thirteenth centuries. The picture scroll (*e-maki-mono*) was in fact the characteristic art form of the period. Some have pictures alternating with sections of text, as in the *Genji* scrolls; others are composed entirely of pictures. The subject matter includes temple legends, scenes from Buddhist hells, novels, and historical stories. The war stories which became popular in the Kamakura period (1185–1333) made for spectacular illustrations showing the excellence of Japanese painting techniques. Devout believers continued to make elaborately decorated sutra scrolls; in a few examples from the late thirteenth century, the characters and the background design are painstakingly embroidered in silk.

The real importance of the Kamakura period with respect to book production was the resurgence of printing. Toward the end of the Heian period printed books begin to be mentioned again. It was perhaps because Buddhism had now spread to the lower classes as well as the upper ones that mass production of scriptures was once again desirable. In 1172 the monks of San-zen-in at Ohara printed the *Seventeen Laws of Shotoku Taishi*. Nara, as the center of the Buddhist church, was also the center of printing activities. An edition of the *Jo-yuishiki-ron* in 1195 was the first of the *Kasuga-ban*, Buddhist books printed in Nara. Throughout the 1200s, scriptures continued to be printed; between about 1278 and 1288 the entire Buddhist canon was reproduced. Many printings were commissioned by royal personages as works of merit. The manuscript used as a cutting guide for the wooden blocks was often the autograph of the donor. In the Ashikaga period (1336–1573), five Zen mountain temples near Kyoto and Kamakura began printing books known as *go-zan-ban*, "five-mountain blocks." The *go-zan-ban* books in-

cluded not only Buddhist works but, for the first time, works of Chinese literature, especially neo-Confucian moral texts and poetry collections. Chinese histories and dictionaries also appeared during the next two centuries.

Some of the *Kasuga-ban* books were illustrated with woodcut frontispieces. The few illustrations found in *go-zan-ban* books are rather crude, but the eventual high development of wood engraving in medieval Japan is shown by the printed copies made of some of the picture scrolls. The scrolls copied in this way were those with religious subjects; the copies were to be distributed throughout the country to help spread the faith. Scrolls reproduced by block printing include the *Koya Daishi Gyojo Zuga* (*Pictures of the Life and Works of the Great Master of Koya*) in 1596 and the *Yuzu-nenbutsu Engi* (*A History of the Yuzu-nenbutsu Sect*) in 1390 and 1414. The latter work is particularly notable; the calligraphy is in a beautiful cursive style and the fine engravings are colored by hand. However, the ultimate replacement of the painted scroll was not the printed scroll but the painted book. The lavishly illustrated volumes known as *Nara-e-bon*, "Nara picture books," reached the peak of their development in the seventeenth century. The style of the illustrations is traceable to the fans and other secular works done on the side by Buddhist artists in Nara. It seems likely that the Nara picture books originated in the early fifteenth century although very few were produced at that time. Certainly the civil wars of the fifteenth and sixteenth centuries, in which many temples and palaces with their libraries were burned, were not conducive to book production.

At the end of the sixteenth century a new stimulus to printing appeared in the form of movable type. This invention was introduced simultaneously from two sources: the Europeans who began to arrive in 1543 and the Japanese soldiers returning from an expedition to Korea in 1592–1596. In 1590 the Jesuit missionary Valignani returned to Japan from Europe, bringing with him a font of European type. The Jesuits developed a system for representing Japanese with Roman letters and used it to produce Japanese books at their mission press. The first of these was a life of the saints, published in 1591 at Katsusa in Takaku county of Hizen province. A romanized copy of the *Heike Monogatari*, "made easy for those wishing to learn the language and history of Japan," and a translation of Aesop's fables appeared in 1592, together with another religious text, *Fides no Doxi*. All were published at the Jesuit college in Amakusa. Grammars and dictionaries in Latin and romanized Japanese followed. In 1598 books began to be printed in Chinese characters and Japanese *kana*, using movable type. In the *Guiado Pecador* of 1599, the printer also introduced pseudo-Chinese characters for the names of God, Christ, and Jesus. Rodriguez's vocabulary and grammar of Japanese, in Portuguese, appeared in 1602 and 1609. The year 1610 marked the end of the mission press in Japan. Thereafter Christianity and other such dangerous foreign influences were banned. The persecution was so thorough that Christian books disappeared from Japan; the extant copies are nearly all in European libraries. In any case, it seems that the European influence on the development of movable type was not nearly as strong as the Korean.

Movable types of clay or wood had been known, but not extensively used, in China since the eleventh century. In the fifteenth century the Koreans took over and further developed the invention. Metal types were cast by the Korean government on some ten occasions, starting in 1403. Many books were printed from each font. By the mid-sixteenth century, printing in Korea was on the decline, but when the Japanese invaders ransacked Korean monasteries in the 1590s, they found many of these metal types. Hideyoshi's generals brought back examples of movable type and books printed with it. Almost immediately books began to be printed in Japan using either the Korean type or close imitations of it. Probably the first to appear was the *Hokke-gengi-jo*, a basic document of the Nichiren sect, printed by a priest of the Nichiren temple Honkoku-ji. The connection may perhaps be traced to Kato Kiyomasa, an ardent Nichiren member active in the Korean campaign. A copy of the *Mokyu* printed by a private individual named Hoan Ose followed in 1596. In 1597 the emperor ordered the printing of the *Kin-shu-dan*. The type made for it was subsequently used for a number of other imperial publications, including the 1599 *Nihon Shoki* (*Chronicles of Japan*), the first purely Japanese work ever printed in Japan. During the next several decades nearly all major publications were printed with movable type. Dictionaries, with their many extra characters, as a rule continued to be printed from blocks, but the attraction of movable type was so great that in 1625 it was used for a thirty-eight-volume Chinese dictionary, necessitating the making of thousands of extra types.

Hideyoshi's reuniting of the country in 1590 had brought about conditions under which printing could once again flourish. But the real patron of printers was Hideyoshi's successor Ieyasu, founder of the Tokugawa shogunate which ruled from 1600 to 1867. After his retirement Ieyasu spent much effort gathering together old manuscripts and having them reproduced by printing. He provided the priest San-yo with several large type fonts and set him up at a college in Fushimi, where for the next 20 years many Buddhist and Chinese books were printed. Ieyasu himself gave special orders for the printing of some of his favorite titles. He also gave a tract of land in Takagamine to the painter and calligrapher Honnami Koetsu. At Takagamine, Koetsu set up an entire village devoted to printing. Some of his publications used his own calligraphy and illustrations; these are known as *Koetsu-ban*. For other works he used movable wooden types and embossed paper. These types were also used for the *Saga-ban* books which Koetsu produced in collaboration with the rich merchant's son Suminokura Soan. The *Saga-ban* books were noted for their beautiful paper and bindings as well as the quality of the printing. The best known is the illustrated *Ise Monogatari* of 1608, printed on paper of several different colors. The printing activities started by Ieyasu continued after his death in 1616 and were supplemented by other, private enterprises. The college at Fushimi was eventually removed to Kyoto, which became, together with the great mercantile city Osaka, the publishing center of the country. On Koetsu's death in 1637 his property reverted to the Shogunate, but at Saga, near Kyoto, production continued.

The Saga books, together with the handmade Nara picture books mentioned

above, are the finest examples of early Tokugawa book production. However, the books which were the most common and the most typical of the Tokugawa period were the cheap printed editions of popular books, especially novels. The new stability of the government brought about a great increase in the prosperity of the cities and the tradesmen who inhabited them. Reading was considered a necessary skill for any sort of business activity and the literacy rate was therefore very high. It was probably the demand for popular literature which led to the abandonment of movable type in the mid-seventeenth century. Customers were attracted by cursive script and numerous illustrations, both of which had to be printed with blocks anyway. The demand for reprints was also high. Furthermore, for this appreciative but unscholarly audience, Chinese characters had to be glossed with readings in the *kana* syllabary. Since each character had several different readings depending on context, it was impossible to achieve a neat, well-spaced appearance for the glosses by using movable type.

With the return of block printing, woodcut illustrations became increasingly important. The popular books often had half of each page devoted to pictures. The quality as well as the quantity of the pictures improved steadily. By 1630 book illustration had become a respectable activity for talented artists, and the name of the illustrator began to appear either on the title-slip or final page of the book. The most important figure in the early development of artistic woodblock illustration was Hishikawa Moronobu, whose works began to appear around 1660. Moronobu was extremely prolific and was famous not only as a book illustrator but as a painter and designer. He also developed the *e-hon* or picture book, an album consisting simply of a series of related pictures with little or no text. It was perhaps his example which inspired the students of other artists (notably Korin and Itcho), who had not themselves made prints, to reproduce their masters' works posthumously by this new method. Somewhat later, block prints were used for mass reproductions of famous Chinese paintings.

Some of Moronobu's works were hand colored, like the earlier printed scrolls. A few experiments in color printing seem to have been made during the seventeenth century. Around 1710, Torii Kiyonobu began to produce theatrical posters and portraits of actors which were printed in black, red, and green. This marked the real beginning of the *ukiyo-e* color prints which were to become the Japanese art form best known in the West. The history of these prints is inseparable from the history of book illustration, as nearly all of the major popular artists worked in both media. In fact, such items as the picture-books and the illustrated broadsides with stories of current (usually scandalous) events make it difficult to draw a clear-cut line between the two. Kiyonobu and his successors did many illustrations for the novellettes known as *kusa-zoshi*, in which each page typically consists of a picture of some of the characters with labels identifying them and with all the spaces in the picture completely filled with cursive text. In addition to novels, the most popular subjects for illustrated books were histories, guidebooks to famous places with pictures of the most scenic spots, and stories from popular dramas which could be used as guides during the show. The ballad-dramas known as

Joruri were especially common in book form. Famous landscapes and portraits of actors were also favorite subjects of *ichimai-e* (single-sheet pictures) as were representations of famous courtesans and their quarters. Albums of high-quality pornographic prints were also widespread despite official efforts to suppress them.

The upper classes shunned, at least officially, the popular culture which produced the theater, the colored prints, and the illustrated books. However, they themselves made almost no original advances in literary production. Aside from the popular literature, printed books of the Tokugawa period were primarily reproductions of works which had existed in manuscript form for centuries. The truly active culture of the period was that of the *chonin* or city people. By the late eighteenth century this popular culture centered in the Shogun's capital, Edo (later Tokyo). Book production increased steadily and printing techniques advanced. Printing was used to decorate fans, umbrellas, and letter paper. The *ichimai-e* prints were perhaps the most typical examples of the art and showed the greatest variety, but the technically best-printed works were usually books and *surimono*, New Year's cards, which came into fashion in Edo at the end of the eighteenth century.

During the nineteenth century woodblock printing began to decline in artistic quality. At the same time, the idea of printing with movable metal type was gradually reintroduced from the West. The only foreigners allowed any contact with Japan were a small group of Dutch traders who were permitted to carry on a limited business from a small island in the harbor of Nagasaki. The ban on nonreligious foreign books had, however, been lifted in 1720. The official interpreters at Nagasaki were joined by scholars who studied the Dutch language in order to gain access to Western science and technology. In the early nineteenth century the results of their investigations began to appear. Some experiments were made with engraving on copper. The founder of modern typography in Japan was Motoki Shozo, born in 1824. Motoki was a government interpreter at Nagasaki and hence was exposed to many Dutch books printed with movable metal types. After great perseverance he finally succeeded in constructing his own types and printed a Dutch-Japanese dictionary with them in 1861. He resigned his government position to open a printing business, moving to Tokyo in 1873.

The Meiji Restoration of 1868 was followed by an intensive program of modernization which shortly removed all remaining barriers to European-style printing. Paper began to be made and books to be bound in the European manner. The printing of newspapers and of the cheap popular books which continued to form the bulk of production was soon done entirely by machine. By the end of the century block-printed books had disappeared, although the production of *ichimai-e* as an art form continued. The success of modern printing in Japan paralleled the spectacular rise of the country's economy in general. By the 1930s Japan was among the top book-producing nations of the world, averaging over 20,000 titles yearly. Literature formed the single largest class of these books, as it had since the seventeenth century. In the past decade book production has increased steadily, although it now appears to be leveling off. Japan's present publication rate ranks

with those of the United States, the Soviet Union, West Germany, and Great Britain as among the highest in the world. In 1969 Japan published 26,424 different books, with a total of 488 million copies. Of these titles, 17,833 were new titles and 8,591 were reprints, continuing a trend toward the proliferation of new titles. Some 23.2% of the books published were literary in content.

BIBLIOGRAPHY

- Anderson, William, *Japanese Wood Engravings*, Seeley, London, 1895.
- Carter, Thomas Francis (revised by L. Cassington Goodrich), *The Invention of Printing in China*, Ronald Press, New York, 1955.
- Nippon: A Charted Survey of Japan* [Tsuneta Yano Memorial Society (Yano-Tsuneta Kinenkai, ed.), under the supervision of Ichiro Yano], 1971.
- Reischauer, Edwin O., and John K. Fairbank. *East Asia: The Great Tradition*, Houghton Mifflin, Boston, 1960. For historical background and general information.
- Rumpf, F., "Japanisches Buchwesen," in *Lexicon des gesamten Buchwesens*, Vol. 2 (Karl Löffler and Joachim Kirchner, eds.), Hiersemann, Leipzig, 1936, pp. 137-142.
- Satow, Ernest, "On the Early History of Printing in Japan," *Trans. Asiatic Soc. Japan*, 10, 48-83 (1882).
- Satow, Ernest, *The Jesuit Mission Press in Japan, 1591-1610*, Privately printed, 1888.
- Shimizu, Yutaka (trans. Richard Zumwinkle), *Nara Picture Books*, Dawson's Book Shop, Los Angeles, 1960.
- Toda, Kenji, *Japanese Scroll Painting*, Univ. Chicago Press, Chicago, 1935.

SARAH E. THOMPSON

JAPANESE WRITING SYSTEMS

Japan had no writing system until one was introduced from China some time before the fifth century, perhaps as early as the third century A.D. The Chinese language and script were brought to Japan by the Koreans, who had already adopted both for their own use. Chinese teachers shortly thereafter began to give instruction in language and writing. The study of Chinese was well established by the time Buddhism was introduced in 538, and the Buddhist missionaries and their pupils greatly increased the knowledge of Chinese in Japan. Chinese became the official language used for all governmental purposes. The intensive borrowing from Chinese culture, which took place from the seventh to the ninth century, was carried out using the Chinese language. Japanese Buddhist texts and government documents were written in fairly good Chinese.

The Chinese script had already undergone some 2,500 years of development at

the time that it was introduced into Japan. The characters had progressed from recognizable pictograms to partially phonetic symbols to almost completely arbitrary ideograms. The Chinese language was, and is, basically monosyllabic. Each character represented one word, hence one syllable. For each of the thousands of characters there was not only a regular printed form but a standardized script form. The forms in use at that time were the same as those used until the middle of this century (and still used on Taiwan, although both Japan and the People's Republic of China have officially simplified many characters). Older forms were occasionally used for their decorative value. These older forms, together with all other elements of the system, were imported to Japan where they were used, for instance, in seals or as background designs for texts in modern characters. The so-called seal characters (*tensho*), the immediate predecessors of the modern characters, were especially favored for decorative purposes.

The difficulty of learning a foreign language with a particularly complex writing system well enough to carry out all the business of the government must certainly have been very great. Many more problems were involved in attempting to use the Chinese system for writing Japanese; the development of viable methods for writing Japanese was consequently rather slow. The earliest known inscription in which Chinese characters are used phonetically to represent a Japanese name is on a sword from a tumulus in Kumamoto prefecture, dated about 438. The inscription is in Chinese except for the name of the swordsmith. The name of the calligrapher is given as Chang An, which may be either Chinese or Korean. A metal mirror of about 503, from a tumulus in Wakayama prefecture, also includes a few phonetically written Japanese words in an otherwise Chinese inscription. Similar names and words occur in seventh and eighth century temple inscriptions. The longest and most important such inscription is from a stone in the Yakushi-ji in Nara, dated about 753. It consists of twenty-one short poems in phonetically transcribed Japanese, known as the *Bussokuseki no uta* (*Poems on the Buddha's Footprint Stone*).

Phonetic transcription was by no means the only possible way to represent Japanese with Chinese characters, but any method was certain to present many difficulties. Japanese differs greatly from Chinese in both phonology and syntax. Japanese words, unlike Chinese, are polysyllabic and are either inflected or have grammatical particles attached to denote their function. These devices are not widely used in Chinese and are not adequately provided for in the writing system. An attempt to write a Japanese sentence using the Chinese characters for their meaning only would indicate the things and actions which were involved but would give only the vaguest idea of what was supposed to be happening. A phonetic representation would seem to be preferable, but here again difficulties arise. Japanese lacks not only the distinctive tones of Chinese but many of the vowels and consonants; thus many different Chinese syllables (with a different character for each syllable) might all correspond to a single syllable in Japanese. Conversely, since the correspondence is not exact, a given Chinese character might be represented equally well by two different Japanese syllables.

Fortunately, there had been previous experiments in using the Chinese characters phonetically. The Buddhist scriptures had originally been translated into Chinese from Sanskrit. Such items as the names of divinities, technical terms, and magic charms were not translated but simply transliterated. The Koreans had also made some attempts to write their language using the Chinese system, and Korean is similar in many respects to Japanese. Many Korean song texts were written with Chinese characters in the period from 579 to 879. The earliest Japanese works making extensive use of such techniques are the *Kojiki* and *Nihon Shoki*, two largely mythological histories compiled in the eighth century. The *Kojiki* was composed in 712, partly in Chinese and partly in Japanese written with Chinese characters used both phonetically and semantically. The *Nihon Shoki* of 720 is written primarily in Chinese but includes some proper names and poems in Japanese. The main source of examples of Chinese characters used to write Japanese is the *Manyoshu* (*Collection of Myriad Leaves*), a collection of poems from the preceding century compiled in 760. The characters used in it and similar documents are known as *manyogana*. In the *manyogana* system there are several different Chinese characters used interchangeably for each Japanese syllable, although careful inspection of the *manyogana* has shown that the Japanese language of that time had more different syllables than it does at present. Alongside the system of phonetic representation, characters continued to be used to represent the Japanese word of the same meaning. Another common technique involved the use of Chinese characters, read as the semantically identical Japanese words, but with the meaning of another, homophonous Japanese word or words. All of these methods had been used in transcribing the Korean songs, so it would seem that Korean teachers were instrumental in the development of a means of writing Japanese.

It is the phonetic type of *manyogana* which are of particular interest in the further development of the Japanese writing system. As mentioned above, the characters imported from China included not only the regular "square" forms, but also more graceful cursive forms. There were two main varieties of the latter, known as "running hand" and "cursive" or "grass hand," with a complete continuum of artistic possibilities between them. The *manyogana*, like other characters, were written in the hand appropriate to the occasion. In dictionaries and grammars where Chinese and Japanese expressions were compared, both the Chinese and the *manyogana* were written in the formal, square style. Official documents continued to be written in Chinese. Poems and personal notes, for which Japanese *manyogana* were primarily used, were written in one of the cursive styles. Because of the division of function, the *manyogana* used in this way gradually became further simplified to the point that no Chinese would have been able to identify them. It is at this point, slightly after the year 900, that they may begin to be called *hiragana*.

The precise development of the *hiragana* is somewhat difficult to trace as the square forms continued to be used in formal contexts. During the Heian period, three types of writing were recognized: *otokode* or "men's hand," consisting of

square Chinese characters and *manyogana*; *so* or "grass writing," the standard cursive form; and *onnade* or "women's hand," the altered cursive forms which were the original *hiragana*. This terminology reflects the educational system of the time. All members of the upper classes were taught to read and write Japanese using the new simplified script, but only men were expected to continue to the study of Chinese and Chinese characters proper. The ironic result was female authorship of the best examples of the native literature which began to flourish at this time. Although both sexes devoted much time to Japanese-style literary and calligraphic pursuit—indeed, the continuing unnecessary complexity of the writing system may be partly attributable to the desire of this extremely leisured group to fill their time amusingly—the men seem to have saved their best efforts for compositions in a Chinese which worsened steadily as contact with the mainland decreased.

A second syllabary, known today as *katakana*, developed at about the same time from a somewhat different source. As knowledge of Chinese among the Buddhist clergy declined, it became useful to add glosses to the Chinese texts. The signs developed for this purpose consisted of a single portion of the character whose sound they represented rather than a cursive representation of the entire character. The use of a part of a character to represent the whole was known in China and may have been employed there for similar glosses of difficult characters. The *katakana* were originally somewhat smooth and flowing, similar to the *hiragana* in appearance, but they quickly became stylized and acquired a squared appearance. Both syllabaries are traditionally attributed to the priest Kobo Daishi, who was active around 810; the *hiragana* has also sometimes been credited to the eighth century statesman Kibi no Mabi. But the *kana*, as they are collectively referred to, seem actually to have been the result of gradual development rather than the invention of any one person.

Both syllabaries were far from standardized. As in the original *manyogana* system, there were a number of symbols for each syllable of the language. However, the specific syllables represented were universally agreed on. The syllabary could be recited in either of two basic orders: *i-ro-ha* order, based on a Buddhist poem of the early tenth century in which each syllable was used exactly once, beginning "*i-ro-ha. . .*" (modern *iro wa*); and *go-ju-on-jun*, "fifty sound order," in which the five vowels were listed together, followed by the syllables made by combining them with each of the nine basic consonants. The consonants are arranged in an order based on that of the Sanskrit *siddham* script; presumably some Indian phonological knowledge as well as Sanskrit words spread to other Buddhist countries. Although this format provided for fifty possible syllables, not all of the combinations actually occurred and several more have disappeared during the past thousand years. In addition, modern Japanese has many syllables beginning with palatalized consonants which have resulted from changes in pronunciation since the invention of the *kana*; they are now indicated by standardized combinations of *kana* symbols. Certain other syllables were excluded from the original syllabary although they do seem to have been present in the language at the time of its invention. A symbol was

later added to each set of *kana* for the syllabic nasal *n*, which appears in many Chinese loan words; it is the only consonant which can occur finally (i.e., without a following vowel) and may simply have been borrowed from Chinese, although phonological borrowing is an unusual occurrence. The original syllabaries made no provision for the voiced equivalents *g*, *z*, *d*, and *b* of the consonants *k*, *s*, *t*, and *p* (modern *h*). This has led to the suggestion that voicing was not distinctive in Old Japanese but was determined strictly by context. However, as there is little additional evidence for this hypothesis, the omission may be considered equivalent to the common practice, when using semantic Chinese characters with *manyogana*, of leaving out some very obvious syllable which was necessary to complete a phrase. Somewhat later the voicing was indicated by two small dashes (*nigori-ten*) to the upper right of the *kana* symbol. Another late addition to the *kana* system was the small circle in the upper right corner used to indicate syllables beginning with *p* after it had become differentiated from *h*; this device seems to have been invented by the Jesuit missionaries at the end of the sixteenth century.

Despite the development of more efficient ways of writing Japanese, the prestige of the Chinese language was such that it continued to be used. Various ingenious systems were used to make the Chinese texts more intelligible to Japanese readers. It became customary to read Chinese sentences in Japanese word order. Special signs known as *keriten* "return points" indicated the order in which the characters should be rearranged to be read in this way. The particles grammatically necessary in Japanese were also inserted. One method for doing so involved an imaginary square around each character: a dot in a particular position on the imaginary square indicated a particular particle. Another method, of course, was to write in the particles in *kana*. Standard readings for the characters were often written beside them in *kana*. The hybrid Japanese-Chinese literature, or *kanbun*, which developed in this way was in fact largely unintelligible to native Chinese.

With the adoption of the Chinese writing system, a large number of Chinese words were borrowed into the Japanese language itself. Even in a *kana* text like the famous eleventh century novel *Genji Monogatari*, occasional Chinese words appear, written with regular Chinese characters in a compatible cursive style. The way in which Chinese characters, whether in *kanbun* or as loan words in a basically Japanese text, were supposed to be read differed from time to time and from word to word. The Japanese reading of a character, that is, the Japanese word corresponding to the meaning of the character, was called the *kun* reading. Imitation Chinese readings were called *on*. The originally imported Chinese pronunciation, *go-on*, was replaced in the eighth century by *kan-on*, pronunciation reflecting the current speech of the Chinese capital. Many Buddhist terms, however, retained their original pronunciation, as did the very old *wa-on* loan words which by the eighth century were almost completely naturalized. A later set of borrowings are pronounced with *toson-on*: these are mostly words brought back by members of the Zen sect in the fourteenth century.

As a result of the *kana* glosses in Chinese texts and the Chinese loan words in *kana* texts, a system of writing Japanese with both types of symbols came into use.

This system was the one used for the popular literature which formed the bulk of literary production during the Tokugawa period (1600–1867). It is the basis of modern written Japanese. Most nouns and roots of verbs and adjectives are written with Chinese characters (*kanji*). For native Japanese words the *kanji* are usually chosen on the basis of meaning although a few of the rebus-type constructions known as *ateji* (*kanji* read with Japanese semantic equivalents but indicating a Japanese homophone) have survived to the present day. The *kana* used after verbs and adjectives to indicate their inflections are called *okurigana*. Particles are written with *kana*. Each character has different readings depending on whether it is used in a Chinese loan word or a native Japanese word; in fact, most characters have several different readings in both *on* and *kun*. *Kana* glosses, or *furigana*, are often desirable. Until the reforms of the late 1940s, newspapers and magazines used such glosses for almost all *kanji*. The *okurigana* and *furigana* are usually written with *hiragana* symbols. *Katakana* are used mainly to spell out foreign words and occasionally to indicate the kind of strong emphasis that italics do in English texts. Because their squared forms are slightly easier to perceive, *katakana* often replace *hiragana* in advertisements and children's books.

The study of classical Chinese continued to be a prestigious educational accomplishment. Two basic methods of reading Chinese developed. *Boyomi* was a straight, word-for-word reading in either *go-on* or *kan-on*. *Kundoku* meant re-arranging the Chinese word order and reading as if the text were actually Japanese. An even more complicated method, called *monzenyomi*, was popular in the early Tokugawa period; it included a *kan-on* reading and a Japanese gloss for each phrase. The specific *kun* readings varied greatly from school to school but were standardized during the nineteenth century. Perhaps because of the degeneration of Chinese language skills after the Heian period, Chinese gradually ceased to be used for official documents. Its place was taken by *bungo*, a "literary language" based on fossilized classical forms. The *bungo* inflections were based on those of late (i.e. twelfth century) Old Japanese; usually as many Chinese style words as possible were also included. A specialized variant of *bungo* was *sorobun*, an epistolary style characterized by special verb endings, particularly the expression *soro* used as a multipurpose highly polite auxiliary verb.

Contact with the West brought exposure to alphabetic writing, but by then the system of *kanji* and *kana* was firmly entrenched. Because of the relatively simple phonological system, Japanese can easily be represented with letters of the Roman alphabet. The first to do so were the Jesuits, who invented a system of romanization and used it to print books with European type starting in 1591. Their romanizations are of great interest in studying the pronunciation of the period. As the number of converts increased and the missionaries themselves became better acquainted with written Japanese, they began to print books in the Japanese writing system instead. In any case, the persecution of Christianity in the early seventeenth century wiped out all traces of this first attempt at writing Japanese alphabetically. During the late Tokugawa period, some Japanese scholars gradually became familiar with Western (specifically, Dutch) books and writing methods, but no real efforts to

apply these methods to Japanese were made until after the official opening of Japan to the West in 1854. When foreigners began to study Japanese, they invented romanization systems for their own use. The standard system was established by Dr. J. C. Hepburn, a Presbyterian missionary, who published a Japanese-English dictionary in 1869. Since then other systems have been invented which correspond more closely to the native Japanese orthography. The main differences between romanization systems are found in the representation of long vowels and palatalized consonants. Examples of the word *romaji*, "Roman letters (used to write Japanese)," in three different systems are:

Hyōjun-shiki—Standard System (Hepburn)	romaji
Shin-kunrei-shiki—New Official System	rōmazi
Nippon-shiki—Japanese System	rōmadi

In practice, elements from the different systems are often mixed. *Romaji* has consistently failed to find widespread acceptance in Japan; today, aside from their use in foreign language works, they appear most frequently in eye-catching advertisements.

The writing system with which Japan entered the twentieth century was an extremely complex one. The number of *kanji* in common use was large enough to present a problem in itself, especially when each character had so many different possible readings. A standard prewar dictionary (Ueda's *Daijiten*) included 14,924 different characters, while a recent unabridged dictionary (Morahashi's *Dai Kanwa Jiten*) list 48,902 different characters which may be used in writing Japanese. The "educated reader" of the early twentieth century was expected to know about 5,000 characters. Newspapers commonly stocked about 8,000 characters but added *furigana* to most of them. There were irregularities in *kana* usage as well; for instance, syllables which had come to be pronounced in the same way since the invention of *kana* were spelled differently according to their etymological origins. There were also a number of variant *kana* symbols, called *hentaigana*, which were used more or less arbitrarily together with the more common symbols. Some standardization of *kanbun* and of Japanese literary style was achieved through the issuance of government textbooks during the Meiji period. However, the writing system was so much a part of Japanese culture that, although major changes were discussed, none were actually carried out until the period of American occupation which followed a shocking defeat in World War II.

After the war various groups and individuals, both in Japan and among the Occupation personnel, were in favor of abolishing the *kanji* system entirely and switching to *kana* or even to *romaji*. This proposal was not universally acceptable but it was agreed that some sort of reform was needed. In November 1946 the Japanese Cabinet and Ministry of Education together issued a list of 1,850 *toyo kanji*, "*kanji* to be used for the time being." The list included many simplifications of characters, called *shinjitai*, "new character forms." Often these were merely official versions of cursive forms which had existed for centuries. Rules were

given for *gendai kanazukai*, "modern *kana* usage." Basically, all words pronounced alike were now to be spelled in the same way regardless of etymology. These regulations were originally intended as a temporary measure pending more thorough reforms, but no such reforms have been forthcoming. The *toyo kanji* have become the basis of compulsory education; the first 881 are taught in grades 1 through 6. Newspapers limit themselves to the *toyo kanji*, with an unofficial substitution of twenty-eight characters considered more useful than twenty-eight of the officially approved ones. Scholarly writings, which use many technical terms based on Chinese roots, generally ignore the limitation. Novels as well often use as many as 5,000 characters. The Sino-Japanese technical and artistic words, many of which are homophonous, are now the main obstacle to the use of a completely phonetic system. However, such a system no longer seems particularly desirable. The orthography of *kanji* and *kana* is unwieldy but durable; certainly Japanese society at large does not seem to be suffering any ill effects from it.

BIBLIOGRAPHY

Reischauer, Edwin B., and John K. Fairbank. *East Asia: The Great Tradition*, Houghton Mifflin, Boston, 1960.

Sansom, George B., *An Historical Grammar of Japanese*, Oxford Univ. Press, Oxford, 1928.

Wang, Fang-yii, *Introduction to Chinese Cursive Script*, Institute of Far Eastern Languages, Yale Univ., New Haven, Connecticut, 1958.

SARAH E. THOMPSON

JOHN CRERAR LIBRARY

See *Crerar, John, Library*

JOHN F. KENNEDY LIBRARY

The John F. Kennedy Library is one of six presidential archival depositories administered by the National Archives and Records Service of the General Services Administration. Since September 1969 the Library has occupied temporary quarters in the Federal Records Center in Waltham, Massachusetts. A permanent museum-archives complex will be constructed on a 12-acre site adjoining the Charles River in Cambridge, Massachusetts.

The rationale for the Kennedy Library, as for all presidential libraries, was the need for a facility to house, and a trained staff to service, the millions of letters,

memoranda, and other documentary materials which had accumulated in the White House during the presidential term. These materials comprise a unique and fundamental source for the study of the American presidency and government.

The papers of the presidents have had a varied and curious history. Unlike files originating in federal departments and agencies, which constitute the official archives of the United States government, the papers of the presidents are their personal property, to be disposed of as they and their heirs determine. George Washington set the precedent, which has been questioned but never seriously challenged, when he took his papers with him upon his retirement to Mount Vernon in 1797. For almost a century and a half the papers of presidents were assigned somewhat randomly to attics, auctions, furnaces, and, in certain fortunate instances, to historical societies, museums, and libraries. Although preservation of presidential documents was haphazard, the historical and cultural value of the papers was understood very early in the nation's history by historians, scholars, and the political leadership of the country. In the nineteenth century, the Congress of the United States took steps to ensure that at least a portion of the papers of the presidents would be permanently preserved. Funds were appropriated for the purchase of the papers of a number of American presidents, including those of George Washington, James Madison, James Monroe, and Andrew Jackson. All of these collections are housed in the Library of Congress. Despite these continuing efforts to preserve part of the nation's heritage, countless presidential documents have simply been lost. Substantial portions of the papers of Andrew Johnson, Millard Fillmore, Martin Van Buren, and Ulysses S. Grant are among those which were lost or destroyed, either by accident or by design.

Two forerunners of the modern presidential library are the Rutherford B. Hayes Library and the Hoover Institution of War, Revolution, and Peace. The family of President Hayes faithfully cared for his papers and eventually presented them to the State of Ohio, which constructed a memorial library on the Hayes family estate. Herbert Hoover deposited his papers in the special library bearing his name on the campus of Stanford University in California.

The presidential library system as it is known today owes much to the foresight and imagination of Franklin Delano Roosevelt. His appreciation of history, books, documents, and historic artifacts led him, early in his presidential term, to consider the establishment of a special institution to house the mass of material which he had accumulated throughout a long and varied career as state legislator, assistant secretary of the Navy, candidate for the vice-presidency in 1920, governor of New York, and president of the United States. As a result of his initiative, Congress passed legislation in 1939 which provided for the acceptance of, and operation by, the federal government of a library constructed on the Roosevelt family estate at Hyde Park, New York. President Roosevelt and his mother donated the land; funds for the construction of the library and museum were raised by private subscription.

The 1939 legislation provided only for the Roosevelt Library. President Harry S. Truman's efforts resulted in general enabling legislation in 1955 which permitted

the United States to accept and operate later presidential libraries. The government accepted the Harry S. Truman Library at Independence, Missouri in 1956 and the Dwight D. Eisenhower Library at Abilene, Kansas in 1960. Substantial portions of the Hoover presidential papers were transferred from the Hoover Institution at Stanford to the Herbert Hoover Library at West Branch, Iowa, which became part of the federal presidential library system in 1962.

The origins of the John F. Kennedy Library can be traced to the days immediately following the election of November 1960. In December, the Archivist of the United States wrote to President-elect Kennedy offering space in the National Archives Building for the storage of papers and other materials which were not scheduled for transfer to the executive offices of the White House. At the same time, facilities were offered for the preservation of those papers which would accumulate during his presidential term. President Kennedy reacted promptly and affirmatively to the Archivist's proposal. His prepresidential files began to be assembled in the National Archives in Washington shortly after his inauguration in January 1961.

President Kennedy's interest in history and historical studies was amply demonstrated early in his career by the publication of his Harvard thesis, *Why England Slept*, and 15 years later by his Pulitzer Prize-winning book, *Profiles In Courage*. His awareness of the value of the artifacts of history was exemplified in his words: "Documents are the primary sources of history; they are the means by which later generations draw close to historical events and enter into the thoughts, fears, and hopes of the past."

At the president's initiative, a committee was formed in September 1961 to consider the establishment of a presidential library. Two months later, the White House issued a formal statement announcing that consideration was being given to Cambridge as the site for "a library and museum for the permanent deposit of papers and other materials relating to the Administration." Preliminary planning continued into the fall of 1963. The president retained an active interest in these negotiations throughout his administration and personally inspected possible library sites in the Spring of 1963.

The assassination in November 1963 brought about immediate efforts by the president's family and associates to formulate plans both for financing the construction of a library and for collecting documentary and other historical materials relating to the Kennedy Administration. Within 2 weeks of the president's death, the John Fitzgerald Kennedy Library Corporation was organized. Its primary purpose was to plan for the construction and the equipping of a library which, upon completion, would be donated to the United States to be maintained as a presidential archival depository. Eight million people contributed more than \$18 million in a fund-raising campaign for the library. In December of 1964 the noted architect I. M. Pei was retained by the Corporation to prepare plans for the design of the library and related buildings.

A tentative site for the library had been approved by President Kennedy in

1963. Soon after his assassination it became apparent, for a variety of reasons, that the site was impractical. A new and more appropriate location was made available by the Commonwealth of Massachusetts. A special commission had been created by the State Legislature for the purpose of making a study relative to a suitable memorial to President Kennedy. It recommended that "the funds allocated by the Commonwealth . . . should be used to make possible a gift to the Government of the United States of the land on which the archive and museum of the Library will stand." A parcel of land, occupied by the Massachusetts Bay Transportation Authority, was selected as the site and donated to the United States by the people of the Commonwealth of Massachusetts.

A primary goal of the Kennedy Library is to serve as a major center for the study of American politics and government. To this end, the library's resources are both varied and comprehensive. The core of the collection consists of some 15 million documents constituting the prepresidential and presidential papers of John F. Kennedy. Within weeks of the assassination, an acquisitions program was begun to ensure that the president's papers would be supplemented by those of his personal and political associates and contemporaries. The library's resources include the papers of cabinet officers, agency heads, ambassadors, senior officials in the administration, members of the president's personal staff, personal friends, and others who have contributed significantly to the making of recent political history, including the late Senator Robert F. Kennedy. Further documentation of the history of the Kennedy Administration was achieved by an extensive micro-filming program involving the records of scores of federal departments and agencies.

An important segment of the library's resources consists of transcripts of over 1,000 oral history interviews. A serious problem in writing recent history has been the lack of written documentation of verbal discussions, consultations, and negotiations leading to important decisions. In a major effort to overcome this deficiency, the library embarked on a program to interview in depth hundreds of individuals involved in the processes of government and political decision-making. Oral history has resulted in the accumulation of invaluable information and insights which otherwise would not be preserved.

President Kennedy's life and career are further documented by an audiovisual collection which includes 65,000 still photographs, 2,000 sound recordings, and 1,500,000 feet of motion picture film. The library's printed resources include John F. Kennedy's own writings, and books, periodicals, and dissertation literature about the president and his administration. Hundreds of specially bound and inscribed books, including many presented by heads of states and visiting dignitaries, are preserved.

The museum is a major division of the library, and one which distinguishes it from most research institutions. In addition to the president's personal mementoes, thousands of items which were presented to him are represented in the collection. Included among the gifts are 177 objects from heads of state and hundreds of literary and artistic compositions dedicated to the president or given in his memory

to the library. Exhibits of these museum objects, along with films, recordings, and other documentary materials, will contribute to an understanding of the issues, achievements, and atmosphere of the time.

While service to scholarship is a major goal of the library, use of its resources is actively encouraged on a broad educational front. At the secondary and elementary school levels, original source materials are used to enrich history and social studies programs. At the adult level, seminars, lectures, forums, and exhibits are sponsored to increase public understanding of vital contemporary issues. Monographic and bibliographical studies based on the library's holdings are planned. Through all of its programs, the John F. Kennedy Library proposes to bring together the world of scholarship and the world of political affairs.

ROBERT E. STOCKING

THE JOHNS HOPKINS UNIVERSITY LIBRARIES

University libraries, in their organizational structure, in the programs and policies to which they give emphasis, and in the scope and nature of their collections and services, generally reflect the corporate personality of the university they serve. All universities share similar purposes and common objectives, but each reveals distinctive personality traits.

Before describing some of the distinguishing features of The Johns Hopkins University Libraries, it may profit us to speculate briefly concerning the larger academic society all university libraries are designed to serve.

It requires little imagination to suggest that the areas of knowledge pursued in universities, and that the universities themselves, are currently in a state of flux. We live in a highly pluralistic age, pregnant with a vast variety of scholarly interests and subcultures. The interplay of these many special interests helps explain the difficulties involved in governing our universities during the past 5 or 10 years. The survival of our universities may hinge, in part, upon their ability to achieve and maintain some sort of sensitive and flexible balance among the ever-shifting academic interests that characterize their campuses.

To the service-oriented library administrator, the library needs of these pluralistic interests frequently appear to exert conflicting pressures upon the operation he oversees.

These conflicting interests are readily apparent, but a rational solution to these conflicts is much less obvious. For example, (1) there appears to be a growing need for specially trained and highly knowledgeable library managers, both at the top and in the middle-range of management, at a time when the credibility gap between management and the society it serves is widening, not only in universities but in the

larger world; (2) there are certain inherent elitist tendencies in our universities while, at the same time, student and other groups press for more egalitarian governance structures in these institutions; (3) it appears to be a time when the insights resulting from a century of attention to specialized knowledge press us to develop a more generalized intelligence, to seek meaningful configurations and patterns if we are to improve the human condition and better understand the universe around us; and (4) it is a time when university libraries face increasing demands to add to the services they contribute to the ever-growing educated community outside their campuses when the financial resources of our universities are more limited than they have been for several decades.

For these and other reasons, university research libraries, as we have come to know them over the past 100 years, probably face revolutionary changes in the next 30 years. A revolution in the scope, nature, and structure of these organizations will probably be necessary if they are to serve as reasonably effective instruments in service to scholarship.

The knowledge explosion since World War II has been phenomenal, a new experience to man, posing him new problems as well as new opportunities. The output of data, of information, in a vast variety of highly specialized areas of knowledge has taken on the characteristics of an avalanche. This accumulating mass of particularities must continue to be identified, organized, and made available to the inquiring mind, whether it be in the form of books, journals, computer tapes, microforms, or formats yet to be devised by our technology.

No single library, even the largest and richest, is now capable of acquiring more than a selected number of these materials and, even though our large research libraries, Hopkins included, have been doubling their collections every 15 or 20 years, they are less capable today of satisfying the scholarly hungers of their academic communities than they were 15, 30, or even 50 years ago.

It appears reasonably clear that the future will force libraries into state, regional, national, and even international cooperative communication networks. This movement is already well underway. Increasingly, research libraries will need to supplement their resources by procuring copy of pertinent materials from locations near and far. Some of this copy will be ephemeral, appearing on a console screen for one time use by a scholar and then fading from view into its tape data bank. Increasingly, in addition to their traditional services, our libraries will serve as switching points, transmitting and receiving needed data as members of these networks. Hence, libraries will increasingly become involved in cooperative machine-based systems that will carry them well beyond the bounds of their individual campuses. These libraries of the future will differ from those we have found familiar. For example, one may speculate that the competitive race for size in respect to collections may slacken. During the past 100 years, the library accumulating the largest percentage of the available mass of scholarly materials annually has generally been regarded as the more progressive and successful library. It may be that within 20 or 30 years the reverse will be true, and the most successful library will be the one adding the least number of permanent additions to its collections, having made the most

effective use of these cooperative networks in bringing items of interest to individual scholars on its particular campus.

The most recent organization charts of some of our universities reveal a growing awareness of the changing role of libraries as universities gear up to face these new demands of scholarship. For example, we find titles for library positions that were uncommon or even nonexistent 5 or 10 years ago: Vice-President and University Librarian; Dean of Libraries; Systems Analyst; Data Control Officer; Librarian, Collection Development; Business Affairs Officer; etc.

Traditionally, library staffs have been organized in definitely vertical patterns, and careers in librarianship have largely been achieved by gradual or rapid movement up the administrative ladder. Within the last 10 years staff structures have undergone some major additions and revisions. Certain traditional administrative positions have been examined and modified. Financial and Planning Officers (Business Affairs Officers), for example, have in some institutions replaced the traditional Associate or Assistant Director, Administration. In addition, library staff structures have assumed a more horizontal configuration. These changes reflect a growing awareness of a need to develop and reward a variety of nonadministrative as well as administrative specialists in a highly complex age. The number of subject specialists, bibliographers, and computer specialists (ranging from data control personnel through programmers and system design experts) are merely examples of this trend.

The organization chart of The Johns Hopkins University Library (see Figure 1) gives some indication of these changes. For example, the position, Librarian, Collection Development, is a relatively new position, initiated in 1970. The incumbent works directly with faculty members, chosen by each academic department, in planning and building collections designed to serve these distinctive interests. He works with a small core of subject bibliographers, regardless of the library department in which they are employed, in seeing that standard works and special reference materials are acquired by the library. He supervises the operations of the Rare Books and Special Collections Department, Gifts and Exchanges, and is an active officer in The Friends of the Library organization. He is thus in a position to study, interpret, and guide the overall acquisitions program.

To the tasks traditionally performed by the Librarian, Technical Services, have been added the responsibility that in larger systems falls to a Systems Analyst. He oversees the design, programming, and data collection and control required by a growing number of computer-based library operations.

The Librarian, Business Affairs, is also trained in computer techniques as well as in accounting practices, and works closely with the Librarian, Technical Services, in designing budgetary practices aimed at achieving a greater degree of accountability in respect to the expenditure of all library funds than was required 10 or more years ago. He accompanies the librarian to all budgetary meetings.

The Librarian, Building Management, oversees the library physical plant in its entirety, and he works directly with the University's Plant Manager to assure proper maintenance and security for the library. He oversees the selection, ac-

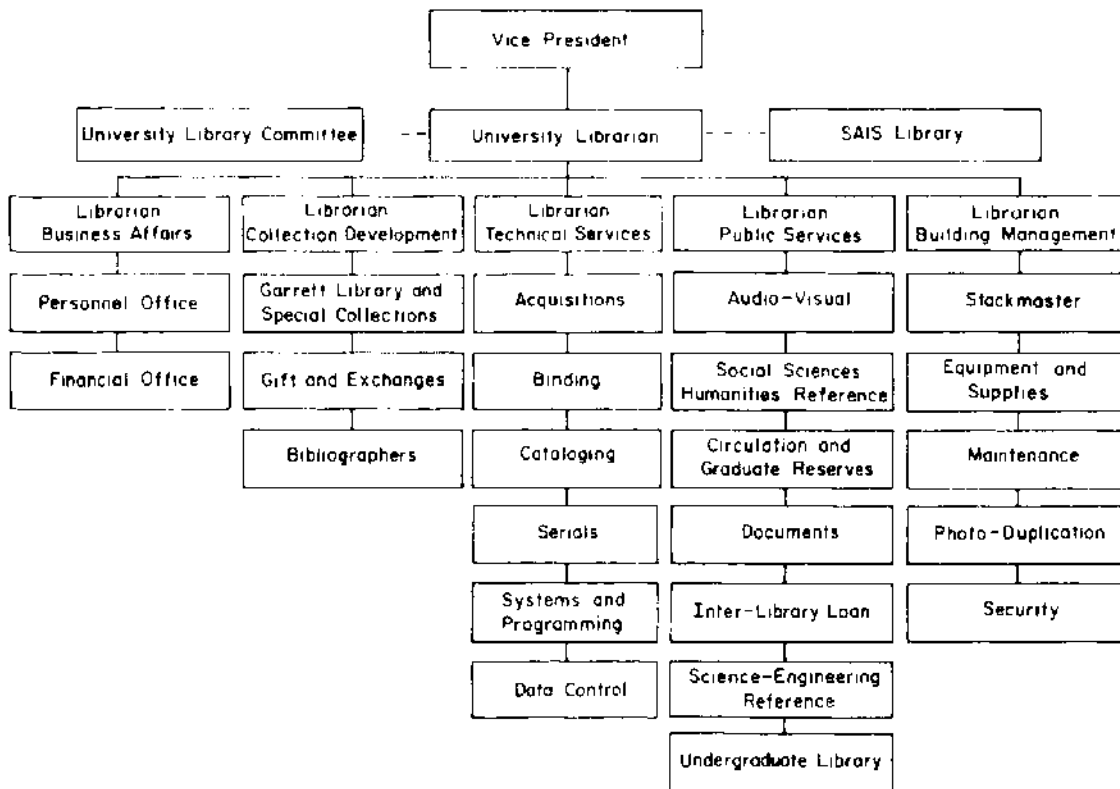


FIGURE 1. *The Johns Hopkins University Homewood Campus Libraries, 1971/1972.*

quisition, and distribution of all supplies and equipment. Through his deputy, the Stackmaster, he supervises all photoduplication activities, and all book-filers, messengers, and mail clerks employed by the library, and from this pool of employees provides temporary assistance to departments of the library facing peak loads or shortages in staff resulting from illness or emergency requests for leaves of absence.

The Librarian, Public (Readers') Services, is responsible for the daily operation of all the other library units that serve the public directly. All of these officers assist the librarian in developing short- and long-range plans and in seeking ways to improve the operations and services of the library.

There is nothing particularly original about the staff organization of The Hopkins Library. It has, hopefully, increased career opportunities for a wider range of talents than was true in earlier years. It represents the effort of one medium-large research library to begin to face up to future requirements and to make somewhat better use of a staff of modest size.

Having ventured into speculation concerning the future of libraries, let us turn backward in time and describe, in somewhat more detail, one of the institutions that introduced the "new" scholarship to this country approximately a century ago.

The Johns Hopkins University has, since its founding in 1876, given special attention to graduate education and individual research. It was the first university

in the country to offer doctoral programs throughout the full spectrum of its curriculum.

The librarians of the Johns Hopkins University have been

Thomas C. Murray	1876-1879
Alexander D. Savage	1879
William Hand Browne	1879-1891
Nicholas Murray	1891-1908
M. L. Raney	1908-1927
John C. French	1927-1943
Homer C. Halvorson	1943-1953
Sidney Painter	1953-1954 (Acting Librarian)
John H. Berthel	1954-

The year 1876 probably serves, better than any other, as a point in time marking off a new departure in American scholarship. Until the last quarter of the nineteenth century, American scholarship had been largely the domain of the amateur. The institutionalization of scholarship occurred during the last 25 years of the century.

The introduction of graduate education in this country, bringing with it, as it did, interest in research and specialization, necessitated the development of a new type of library, one capable of catering to special subject field interests in depth, and equally capable of providing more sophisticated services and collections than had been the custom (1).

The interest of The Hopkins in doctoral studies and individual research as revealed by its founding in 1876 continues to this day, even though the university maintains an Undergraduate College of approximately 2,000 students and an Evening College of approximately 6,000.

The library collection, over the years, has been tailored to accommodate these sophisticated research interests and gives evidence of this in special subject collections of strength. Less apparent in the collections are general and standard works that usually are found in a library of 2,000,000 or more volumes. In recent years attention has been given to achieving a more obvious balance in the collection.

The Hopkins, unlike the majority of universities today, maintains five separately administered library systems: (1) the University Library, in which a major proportion of the collections are housed; (2) The William H. Welch Medical Library; (3) The Library of the School of Hygiene and Public Health; (4) The Libraries of the School of Advanced International Studies, Washington, D.C., and Bologna, Italy; and (5) the Libraries of the Applied Physics Laboratory, near Columbia, Maryland. (Recently, the author was appointed university librarian at the John Hopkins University to advise top management on library service and to develop cooperative programs between the five libraries, particularly in the areas of acquisition and cataloging.) Some statistics are presented in Table I.

TABLE 1

Statistics of the Johns Hopkins University Libraries,
June 30, 1971

Total volumes in the libraries	1,969,133
Serial titles currently acquired	16,065
Microforms	539,508
Professional staff	45.5
Supporting staff	111

The University Library itself is divided into three parts, which are centrally administered. (1) The vast bulk of the collection, containing in excess of 1,000,000 volumes and more than 500,000 microforms, is housed and serviced in The Milton S. Eisenhower Library which opened its doors in November 1964. (2) A specially selected collection to support the interests of lower-college students, both in the college and the evening school, is provided by The Albert D. Hutzler, Jr. Reading Room, located in Gilman Hall across a quadrangle from the Eisenhower Library. (3) The John Work Garrett Rare Book Library, which is located in Evergreen House, 1 mile north of the main campus.

The Milton S. Eisenhower Library was designed as a research library and serves all arts and science departments. It contains 230 private studies reserved for the use of faculty and doctoral candidates, and some 400 study carrels for the use of graduate students in addition to reading lounges and other unassigned seating facilities. It is heavily used by upper-college and graduate students, postdoctoral fellows, and faculty members, as well as by the scholarly community of Baltimore. It is an open stack collection available to users from 8:00 A.M. to 12:00 midnight, 365 days a year (see Figures 2 and 3).

The Albert D. Hutzler Reading Room, for lower-college undergraduates, is open 24 hours a day, 5 days a week, and 15 hours a day on Saturdays and Sundays during the academic year.

The John Work Garrett Rare Book Library is open from 9:00 A.M. to 5:00 P.M., Monday through Friday throughout the year.

The University Library, as described above in respect to its physical facilities, attempts to support the curricular and research interests of twenty-six major subject fields in the arts and sciences, each of which offers academic programs ranging from the undergraduate through the doctoral level. The library attempts to collect materials in depth in these twenty-six areas of knowledge. It does not collect, in depth, materials in law, library science, genealogy, hobbies, journalism, home economics, agriculture, dentistry, religion, Japanese language and literature, and the less common languages and literatures.

The library maintains collections of special strength in art history, the history of architecture; Bibles; general bibliography; sixteenth and seventeenth century French drama; modern German drama; classical economics; Icelandic, Manchurian, and



FIGURE 2. *The Milton S. Eisenhower Library.*

Mongolian literature; English, German, and Scandinavian literature; materials on slavery, and late nineteenth and early twentieth century trade unions. It is also strong in the physical and biological sciences.

The William H. Welch Medical Library, located 3 miles to the east of the Homewood Campus in The Hopkins medical complex, is the central facility serving The Johns Hopkins University Medical Institutions. It provides the traditional reference services and its Division of Information and Communication provides direct line access (on-line and off-line) to computer-based biomedical information sources. Its collection of bound volumes numbers in excess of 200,000 and contains special collections in the history of medicine, the history of hygiene and public health, and the history of nursing.

The Library of the School of Hygiene and Public Health gives emphasis to materials in the behavioral sciences, epidemiology, international health, medical care and hospitals, and mental hygiene and public health administration.

The Libraries of the School of Advanced International Studies, Washington, D.C. and Bologna, Italy, provide collections in diplomacy and international politics, and in social and economic development.

The Libraries of the Applied Physics Laboratory, located near Columbia, Maryland, provide reference, translation, and conventional as well as mechanized information retrieval services for the laboratory's staff. Special collections are maintained in both the published and technical report literature in the fields of mathematics, physics, and electronics. Its collections are supplemented through the



FIGURE 3. *Entrance and Bibliographic Center of the Milton S. Eisenhower Library.*

utilization of governmental services, commercial data bases, and by its sponsorship of a program for sharing the journal collections of fifty other libraries in the area.

This then is a brief description of one university and its library and the view it has of itself in the world of scholarship.

REFERENCE

1. John H. Berthel. "Twentieth Century Scholarship and the Research Library: A Marriage of Convenience," in University of Tennessee. *Library Lectures*, #20; University of Tennessee, Knoxville, [1969].

BIBLIOGRAPHY

The titles that follow are not quoted in the article but they represent a selection of books that the writer firmly believes are valuable sources of ideas for anyone involved in the complex effort of managing an academic library.

Barzun, Jacques, *The House of Intellect*, Harper, New York, 1959.

Barzun, Jacques, *Science: The Glorious Entertainment*, Harper & Row, New York, 1964.

- Barzun, Jacques, *Teacher in America*, Little, Brown, Boston, 1945.
- Becker, Carl L., *The Heavenly City of the Eighteenth Century Philosophers*, Yale Univ. Press, New Haven, Connecticut, 1932.
- Burnet, John, *Essays and Addresses*, Macmillan, New York, 1930.
- Curti, Merle E., ed., *American Scholarship in the Twentieth Century*, Harvard Univ. Press, Cambridge, Massachusetts, 1953.
- Curti, Merle E., *The Growth of American Thought*, Harper, New York, 1951.
- Drucker, Peter F., *The Age of Discontinuity: Guidelines to Our Changing Society*, Harper & Row, New York, 1968.
- Feuer, Lewis, *The Conflict of Generations*, Basic Books, New York, 1969.
- French, John C., *A History of the University Founded by Johns Hopkins*, The Johns Hopkins Press, Baltimore, 1956.
- Gilman, Daniel Coit, *University Problems in the United States*, Century Co., New York, 1898.
- Hagstrom, Warren O., *The Scientific Community*, Basic Books, New York, 1965.
- Hofstadter, Richard, and C. DeWitt Hardy, *The Development and Scope of Higher Education in the United States*, Columbia Univ. Press, New York, 1952.
- Hofstadter, Richard, and Wilson, Smith, eds., *American Higher Education: A Documentary History*, Univ. Chicago Press, Chicago, 1961, 2 vols.
- Hutton, Ernest H., *The Ideas of Physics*, Oliver and Boyd, Edinburgh, 1967.
- Keeley, Emily A., "Four Scientific Information Centres in Europe," *Spec. Lib.*, 56(2), 103-106 (February 1965).
- Leary, Lewis, *The Unity of Knowledge*, Columbia Univ. Press, New York, 1955.
- March, Arthur and Ira M. Freeman, *The New World of Physics*, Vintage Books, New York, 1962.
- Matson, Floyd W., *The Broken Image; Man, Science and Society*, Doubleday, New York, 1964.
- Randall, John Herman, Jr., *The Making of the Modern Mind; A Survey of the Intellectual Background of the Present Age*, Houghton Mifflin, Boston, 1940.
- Rothstein, Samuel, *The Development of Reference Services, through Academic Traditions, Public Library Practice, and Special Librarianship* (ACRL Monographs, #14), ACRL, Chicago, 1955.
- deSolla Price, Derek J., *Science Since Babylon*, Yale Univ. Press, New Haven, Connecticut, 1961.
- Teilhard de Chardin, Pierre, *The Phenomenon of Man*, Harper & Row, New York, 1965.
- Tullock, Gordon, *The Organization of Inquiry*, Duke Univ. Press, Durham, North Carolina, 1966.
- Whitehead, Alfred North, *Adventures of Ideas*, Macmillan, New York, 1937.
- Whitehead, Alfred North, *The Aims of Education and Other Essays*, Macmillan, New York, 1929.

JOHN H. BERTHEL

JOINT UNIVERSITY LIBRARIES, NASHVILLE, TENNESSEE

The Joint University Libraries of Nashville represent a cooperative enterprise which includes the joint ownership, control, and management of all of the library resources and services of George Peabody College for Teachers, Scarritt College for Christian Workers, and Vanderbilt University. These resources and services have been pooled for the benefit of the students and faculties of these schools and researchers of the Nashville area.

Organization and Support

Legally this cooperative enterprise is based upon a "trust indenture" between George Peabody College, Scarritt College, and Vanderbilt University adopted in December 1938 by the three institutions. It provides that the administration of these resources shall be centralized under a director of the Joint University Libraries, with one Board of Library Trustees, including its Executive Committee, one treasurer, and one annual budget for all library purposes. This trust indenture received the approval of the General Education Board and of the Carnegie Corporation as a sound legal basis for this joint project which was financed in part with substantial gifts from these two foundations. Their gifts were used to help provide for the original endowment and the construction of the first unit of the General Library building.

Some of the significant provisions in the trust indenture are: (1) Ownership of all joint library properties, including the General Library building and its furniture and equipment (original building 1941, Graduate Wing added in 1969), of all books acquired since September 1939, of endowment funds, and of current operating funds. This ownership is vested in the two corporate trustees—George Peabody College and Vanderbilt University for the benefit of the three constituent institutions, George Peabody College, Scarritt College, and Vanderbilt University.

The title of ownership of books in the libraries of the constituent institutions as of September 1, 1939 remains vested in said institutions unless transferred by them to the Joint University Libraries.

(2) Control is vested in a Board of Library Trustees selected from the boards of trustees of the three constituent institutions, including the three chief administrative officers who constitute the Executive Committee of the Board. Under this Board at present, management is executed by a treasurer, a comptroller, and a director of libraries. The director, in policy matters, is assisted by an advisory Joint (Faculty) Library Committee.

(3) In scope, organization, and activities, the Joint University Libraries include the total library resources and services of George Peabody College, Scarritt College,

and Vanderbilt University, and those created and developed on a joint basis since September 1, 1936.

(4) The costs of providing housing, repairs, maintenance, heat, light, and house-keeping service for the college, school, and departmental library units are met by the institutions of which these units are a part. All costs of operating and maintaining the General Library building, as well as the costs for books, periodicals, binding, supplies, salaries, and student help in operating the libraries of the three cooperating institutions, are met out of the income of the Joint University Libraries. However, the libraries are reimbursed for one-half of the service costs of departmental libraries, including those now combined in the new Science Library.

(5) Annual income for support of operations of the Joint University Libraries is derived primarily from the following sources.

(a) The libraries have endowment funds, the book value of which was \$1,567,525.56 on June 30, 1972. Income from these funds for 1971/1972 was \$114,304.36, as a part of a total income of \$2,206,500.54.

(b) Formula I, as provided in the trust indenture, required each institution to pay \$25 per full time equivalent (FTE) student enrolled throughout the academic year. This was increased to \$27.50 in 1955/1956 to provide a reserve fund of about \$5,000 annually for depreciation and obsolescence with which to meet extraordinary costs of maintenance.

(c) Formula II supplements Formula I and is based upon the number of graduate programs each institution has leading toward degrees. Amounts contributed under this formula are flexible and the formula is a device for balancing the budget. When this formula was adopted in the 1952/1953 budget it required approximately \$500 for each subject in which the Master's degree was awarded and \$1,000 for each Ph.D. subject to balance the budget. Accepting these amounts, George Peabody College's share amounted to approximately one-third and Vanderbilt University's to two-thirds of the amount required to balance the 1952/1953 budget. The present allocation is that Peabody pays one-fourth and Vanderbilt three-fourths.

(d) Vanderbilt University pays the full cost of operating its professional libraries in Law and Medicine, as does Scarritt for its library and Peabody for its Demonstration School libraries, because these are specialized library units benefiting chiefly the schools they serve. However, budgets for these specialized units are included in the annual budget of the Joint University Libraries.

(e) Income from operations constitute another source. It is chiefly derived from fines and reproduction of library materials.

(f) A number of restricted book funds have been given by individuals and families either to establish a memorial or to provide a fund for a special collection of interest to the donor.

(g) Special financing of new projects and subjects chiefly of interest to any one of the institutions often provides a supplementary source of operating income.

1962-1972: An Extraordinary Period for Growth in Educational Programs and Funding

The period of 1962-1972 proved to be an extraordinary one for curricular expansion and for more adequate funding and development of the resources of the libraries. Between 1962 and 1965 intensive and extensive planning took place at Peabody, Scarritt, and Vanderbilt. Each institution engaged in a self-study of its offerings and in planning their expansion to help meet the needs of higher education in this center and to prepare for evaluation by the Southern Association of Colleges and Schools. In addition, Vanderbilt concluded its monumental *Planning Study* in 1965 for each of its schools and departments including a separate volume on *The Libraries, 1964*, prepared by a committee of eighteen faculty members representing the several schools and divisions. The *Planning Study* led to a marked expansion of graduate programs which in turn called for a retrospective purchasing program of library materials.

Following these studies, and in part as a result of them, Vanderbilt University has adopted two important programs to build up the resources and services of the libraries: (1) In 1964/1965 the university projected a million dollar program for retrospective purchases distributed over a period of seven years. Chancellor Alexander Heard authorized that a part of this fund could be spent for personnel for ordering and cataloging and the balance for the cost of the materials. (2) Further, a unique program for improving the resources of the libraries was adopted in 1971 and expanded in 1972.

On July 20, 1971 Vanderbilt University adopted a plan to establish The Vanderbilt Library Excellence Fund (VLEF). The basic goal of this fund is better libraries. "It seeks this goal through enlarged donations to Vanderbilt for library purposes and by emphasizing the sharp objective of excellence in library collections."

Further, on July 28, 1972, the Executive Committee of the Vanderbilt Board of Trust approved Chancellor Heard's recommendation that the one million dollar unrestricted grant received by the University from the Andrew W. Mellon Foundation in December 1971 be used to encourage contributions to the VLEF, to which unrestricted gifts will earn equal matching sums for endowment from the Harold S. Vanderbilt Challenge, as do unrestricted gifts to any one of the eight schools of the university.

Further, as a matching incentive for gifts to the VLEF, every dollar contributed to the fund would be matched by three dollars from the Mellon gift to the university.

To implement and to administer this program, the chancellor has appointed a university-wide committee of ten faculty members to perform two functions: to spearhead fund raising and to serve in an advisory role to the director in developing the resources of the libraries.

Moreover, for 8 consecutive years (1960-1961 through 1967/1968) Peabody received substantial grants for improving resources in the Peabody Division and

Vanderbilt received grants for improving resources in the Central Division of the libraries. The latter were used to support Russian, Slavic, and Latin American programs at Vanderbilt.

The U.S. Office of Education, in administering grants under the NDEA, placed a premium upon cooperative planning and programs and hence the Joint University Libraries also fared well in their requests for aid under the Title IIA program. The reports of the libraries' comptroller for the four years ending June 30, 1971 show that Peabody College Library received \$119,568.51 and the Central Division of the Libraries received \$262,776.00 from the U.S. Office of Education under these programs.

In addition, Peabody received generous grants from the U.S. Office of Education for resources in its Music Library under what was known as Music Institutional Assistance Grants. For the 3 years ending June 30, 1962 grants totaled \$31,800 and for the 2 years ending June 30, 1968 they totaled \$30,000.

Further, to improve the resources of the libraries some grants were also received by Vanderbilt from "Friends" and several foundations, notably from the Ford Foundation over a period of 6 years, 1960/1961 through 1965/1966.

Situation Out of Which the Libraries Grew as a Cooperative Enterprise

In the genesis and development of the Joint University Libraries of Nashville, several influences are discernible.

(1) Geographically, a favorable physical setting was provided for this enterprise when in 1910 George Peabody College for Teachers received \$1 million from the Peabody Education Fund and moved from the old south campus to its present location, "in proximity to Vanderbilt" so that its students might use the facilities at Vanderbilt in liberal arts subjects, and Vanderbilt students might receive their professional preparation for teaching in courses offered at Peabody. Also, in 1924 Scarritt College moved from Kansas City to a site adjacent to Peabody and to Vanderbilt in order that its students might get part of their academic instruction at these schools. Thus the three schools have adjacent campuses separated only by a city street. The site which was given and deeded by Vanderbilt University for the Joint University Libraries' General Library building represents the intersection point of the three campuses and lies within a 7-minute walk to the farthest removed classroom building on any of the campuses. Hence, geographically the three campuses present a favorable setting for pooling and sharing of the library resources of the three schools for instructional and research purposes.

(2) Library cooperation among the three institutions grew out of a local and regional need. It dates back to 1930 when, because of pressing needs in their own institutions, the chief administrative officers of Peabody and Vanderbilt appealed individually to the General Education Board for help for their respective libraries. This led the General Education Board to have a survey made of the library needs

of Peabody, Scarritt, and Vanderbilt by the late Dr. William W. Bishop, then librarian of the University of Michigan, and Dr. Louis R. Wilson, then librarian of the University of North Carolina. These consultants recognized the pressing need in this university center for a general university library to serve the three schools. Unfortunately, a stalemate arose because the institutions were unable to agree on a plan of joint ownership, control, and management for a cooperative library project. This stalemate continued until 1935/1936.

In 1935/1936 a joint self-survey was made of the instructional and research programs and the library facilities and needs of the three institutions by their faculties and librarians. It was conducted under the joint chairmanship of the graduate deans: the late Dr. S. C. Garrison of Peabody and the late Dr. O. C. Carmichael of Vanderbilt. A. Frederick Kuhlman, then associate director of the University of Chicago Libraries, as consultant helped to initiate the survey and took special responsibility for determining the library requirements and for working out a plan for a joint library system, which was adopted by the heads of the three schools. This marked the beginning of a number of cooperative programs of Peabody, Scarritt, and Vanderbilt such as a common calendar and the exchange of course credits.

(3) Considerable impetus toward cooperation in this joint study was derived from the survey by the American Council on Education of the facilities for graduate work in America, published in the Spring of 1934. It was most revealing in that it brought to light the inadequacy of resources and facilities (teaching and research personnel, libraries, and laboratories) for doctoral work in the South and in certain other sections of the country. Thirty-five academic subjects were included in the rating. According to the report, out of a total of 660 departments in the United States recognized as adequate for offering work leading to the Ph.D. degree, only twenty-five were located in the eleven states constituting the Southeast Region. The only two subjects which qualified for recognition in Nashville were education and psychology at Peabody. Thus, in a region representing at that time nearly a quarter of the population of the United States and representing some of the most complex social, economic, and educational problems, in eight of the eleven southeastern states not a single department was considered adequate for offering the doctorate. This appraisal meant that in the entire Southeast Region not a single university of first rank was found.

This rating of American universities helped to focus the attention of southern and national leaders in education, especially the educational foundations, upon the necessity of strengthening the facilities for higher education in the South, especially on the graduate and professional school levels.

Specifically, the report of the American Council on Education provided a favorable climate for the joint self-survey of Peabody and Vanderbilt in 1935/1936. This survey made their faculties and administrative officers aware of many opportunities for increasing and improving the educational offerings and services of the three institutions through cooperative efforts. In this atmosphere the concept of Nashville as a regional university center, based upon voluntary cooperation of

Peabody, Scarritt, and Vanderbilt, emerged. As a result, a detailed program for the expansion of educational offerings, especially on the graduate level, the interchange of courses, the elimination of 280 quarter hours of course work which the faculties conceived to represent unnecessary duplication, and for a joint university library enterprise was projected and was submitted to the educational foundations in the Spring of 1936 for financing. The goal set in the projected program was that through cooperation and the pooling of resources this center might become competent to offer doctorate programs in sixteen fields.

Achievements through Cooperation

Among the achievements in establishing these libraries as a cooperative enterprise are the following:

First, two educational foundations, the Carnegie Corporation and the General Education Board, were favorably impressed with the proposal, growing out of the survey, to establish the Joint University Libraries. The latter, in 1936, made four annual grants of \$15,000 each with which to help finance a central administration for the project during its formative period and to acquire basic reference materials.

Second, in a special contract between Peabody and Vanderbilt, a preliminary or interim joint library organization was set up, with A. Frederick Kuhlman as director of libraries, beginning on September 1, 1936, to administer the library service of the three schools and to develop the cooperative library project.

Third, with a grant of \$18,650 from the General Education Board, the Union Catalog of Nashville Libraries and the Library of Congress Depository Card Catalog were completed and put into operation before the end of 1936.

The object in establishing the union catalog was twofold: (1) To prevent unnecessary duplication in acquisitions in the participating libraries, and (2) to expedite the maximum use of the resources and services available in these libraries in reference and research work.

The holdings of the libraries of the following institutions were included in the catalog as it was prepared in 1936: Fisk University, George Peabody College, Meharry Medical College, Nashville Public Library, Scarritt College, Tennessee State Library, and Vanderbilt University.

Since the original catalog was made in 1936, the participating libraries have supplied cards for the new additions to their collections. The catalog is set up in the Central Division of the Joint University Libraries and until recently this division has been responsible for filing all of the cards for new acquisitions and for reference and telephone service. Since July 1970 the Tennessee State Library on a federal grant has supplied assistance for filing in the Nashville Union Catalog and for telephone reference calls relating to it. Combined with the comprehensive collection of printed bibliographical and reference aids which show the location of books in libraries, the Nashville Union Catalog assists in making the Joint University Libraries a useful regional bibliographical center.

In recent years three additional institutions have sent cards for inclusion in the catalog of their current acquisitions: Methodist Publishing House, Tennessee Botanical Gardens, and Tennessee State University.

The record of cards in the Nashville Union Catalog on June 30, 1972 was 928,506.

Fourth, on November 1, 1938 the trust indenture, providing a legal basis for the Joint University Libraries as a permanent cooperative enterprise, was perfected and adopted by these schools and was approved by the two foundations mentioned above as a basis for their contributions. On December 8, 1938 the indenture was officially signed by the chief administrative officers of Peabody College, Scarritt College, and Vanderbilt University. It was recorded in the Register's Office of the State of Tennessee on January 6, 1939.

Fifth, the initial campaign for \$2 million for the joint library project was successfully completed in 1938 with splendid cooperation from friends of the three schools. More than 5,000 persons and Nashville business firms contributed. Many substantial pledges payable over a 5-year period were made. The General Education Board contributed \$1 million and the Carnegie Corporation a quarter of a million dollars in this campaign. These funds were intended for endowment and for the construction of the General University Library building.

Sixth, to improve the resources and services of the libraries, on September 1, 1939, the annual contribution of the three schools for library purposes was stepped up from \$15 to \$25 per student, per academic year. In the light of present-day inflated costs in operating a university library, \$25 per student to support the libraries seems incredible but in 1937/1938 Vanderbilt's tuition in the College of Arts and Science was only \$275 per academic year per student and at Peabody fees and tuition were \$250 per student per academic year. Moreover, it was not until at the March 1939 meeting that the Southern Association of Colleges and Schools, for accrediting purposes, required an annual expenditure of \$10 per student for college library purposes. In case graduate work and/or professional training were attempted, larger expenditures than \$10 per student were expected.

Seventh, in 1952 the second formula of library support that is based upon graduate programs (referred to above) was adopted to increase current operating income and to provide a flexible device for balancing the budget. It had been recommended by a committee of three outside experts called in by the Board of Library Trustees to survey the operations and the equity and adequacy of the financing of the Joint University Libraries.

Eighth, in the acquisition and organization of book resources and services the following plan was adopted. The Academic Library of Vanderbilt University and the libraries of its schools of religion and engineering were moved in August 1941 into the new General Library building, which became the Central Division of the system. Departmental libraries in such laboratory subjects as biology, chemistry, geology, and physics (except astronomy which was moved to the Arthur J. Dyer Observatory in 1953) at Vanderbilt were continued in the laboratory and classroom buildings in which they were located, but they were service units operated as a part of the Central Division. The Vanderbilt University Medical Library was

continued as the Medical Division in its quarters in the Vanderbilt University School of Medicine and Hospital building; and the Law Library was continued as the Law Division in Kirkland Hall. The Scarritt College Library was continued on its campus with special emphasis upon missionary materials. The Peabody College Library was left on the Peabody campus in its own building for purposes of specialization in education and those subjects that are taught only or primarily at Peabody, such as art, geography, home economics, industrial arts, library science, physical education, and music. A departmental Music Library was also established at Peabody. Reserve reading materials in content subjects offered as service courses in the preparation of teachers at Peabody are purchased for the Peabody College Division, but research materials in the content fields are, in the main, purchased in the Central Division.

Ninth, in 1941 the General Library building was completed, located on the intersection point of the three schools. It contained some distinctive features, such as: full air conditioning, fluorescent lighting of the large reading rooms, sixty faculty research studies, 220 graduate student carrels and individually assigned study desks, a fully equipped microphotographic laboratory and a separate library for the Vanderbilt School of Religion (now Divinity School).

Since 1960 substantial expenditures have been made in this university center to enlarge and completely modernize some of the library buildings and/or quarters.

The H. Fort Flowers Graduate Wing was added to the General Library and was dedicated in April 1969 (see Figure 1). It was built and equipped and the original building refurbished at a cost of over \$2½ million dollars. This means that the General Library building of 180,000 square feet now will house 900,000 volumes, provide seating for 1,600 persons including 960 individual desks and carrels for graduate students and 140 faculty research studies.

Further, under the trust indenture, the three constituent institutions are required to provide and maintain the library building and/or quarters located on their campuses. Under this requirement in 1962 Vanderbilt provided and equipped new quarters for the Law School Library in its new building for the School of Law. It also provided well equipped quarters for its Medical Library in the new Northeast Wing of the Medical Center in 1964. Scarritt provided and equipped its Virginia Davis Laskey Library in 1968. In 1970 Vanderbilt provided and equipped quarters for its Graduate School of Management in Alexander Hall. Finally, Vanderbilt completed the construction and equipping of its new Science Library in April 1972 as a part of the Stevenson Center for the Natural Sciences.

Tenth, on June 30, 1972 the accessioned resources of books and periodicals of the libraries totaled 1,197,932 volumes, distributed as follows: Central Division 714,355, Law Division 103,477, Medical Division 85,011, Peabody Division 262,640, and Scarritt Division 32,449.

In addition, the holdings of nonbook materials included: 16,882 microfilm reels, 88,605 microcards, 180,803 microprints, 263,604 microfiche units—a total of 549,894 units and 12,538 phonograph records and tapes.

In 1971/1972 the libraries received 7,512 periodicals.



FIGURE 1. *General Library of the Joint University Libraries.*

Eleventh, the usefulness of these resources has been enhanced by two developments. (1) On June 9, 1946 the Joint University Libraries were elected to membership in the Association of Research Libraries and since that date, they have participated in the cooperative programs sponsored by the association. (2) Also, when the Library of Congress decided to expand its printed *Author Catalog* into a National Union Catalog (NUC), beginning with 1956 imprints, the Committee on the NUC designated the Joint University Libraries as one of twenty-one regional university libraries to report to NUC. The libraries have assumed responsibility for reporting all of their current acquisitions of importance to research beginning with 1956 imprints.

Twelfth, the Joint University Libraries have used automated procedures to a limited extent. A system for acquisitions and accounting, inaugurated in 1965, has been refined and enlarged through the years to provide statistical data on both acquisition and cataloging activities and has been extended to encompass some work in the comptroller's office. A computer-produced list of scientific serials in the libraries appeared for the first time in January 1968, followed by a second edition in 1970. A supplement, which includes serials in all subject fields, came out in 1972. A systems librarian, a data processing supervisor, and two keypunch

operators have constituted the staff responsible for the work. A systems analyst has been added and studies are planned for possible application of automation to other areas of work.

Thirteenth, in December 1969 the Council on Library Resources awarded a grant to the Joint University Libraries, through Vanderbilt University, for the establishment of a model research and development unit within the library system. This grant will enable the libraries to employ a staff devoted to research and planning to improve current library operations.

Fourteenth, an effective system of cost accounting has been perfected by the libraries and has been in operation since May 1, 1967.

Fifteenth, the usefulness of the Joint University Libraries as a cooperative enterprise is reflected in part in its interlibrary loan activities through which they have served their own clientele and the clientele of other libraries. The record for 1971/1972 was as follows. In Nashville the libraries lent or supplied Xerox or microfilm copies of 956 items and borrowed or obtained xeroxed copies of 276 items. Outside of Nashville the libraries lent or supplied Xerox or microfilm copies of 5,424 items and borrowed or obtained Xerox or microfilm copies of 3,166 items.

More importantly, in the 1935/1936 Joint Program of Vanderbilt and Peabody the goal set was that through pooling of all the resources of the three constituent institutions this center might become competent to award creditable doctoral work in sixteen fields. As of 1970/1971 Peabody was offering Master's programs in sixteen fields, the Specialist in Education in eight fields and Doctorates in eight subjects. Scarritt was offering Master's programs in five areas, and Vanderbilt was offering Master's programs in forty-two disciplines and Ph.D. programs in thirty-five.

An even more convincing index to the service rendered by the Joint University Libraries is in the number of graduate degrees awarded by the three institutions since the founding of the libraries, 1937-1971—a span of 35 years. The registrars and graduate deans report that a total of 21,411 students were awarded the Master's degree in this university center: 16,453 at Peabody, 925 at Scarritt, and 5,033 at Vanderbilt. As for the doctorate degree Peabody awarded 1,065 in this period and Vanderbilt 1,327. In addition Peabody awarded the Specialist in Education degree to 746.

Sixteenth, the Joint University Libraries are also participating actively with the Nashville University Center (NUC). It was established with a grant from the Ford Foundation in 1969. Five institutions are members: Fisk University, George Peabody College for Teachers, Meharry Medical College, Scarritt College, and Vanderbilt University. Through cooperative study and action among these five institutions, the center seeks to examine and initiate ways of effecting operating economies and of strengthening academic programs. The Center operates a shuttlebus daily on weekdays which facilitates interinstitutional library usage as well as cross-registration of students. A standing committee of NUC on Library

Resources through study and planning is seeking to improve the resources and services of the libraries of the center.

Further, the Joint University Libraries have also participated in the work of the Southern College University Union (SCUU) of which Vanderbilt University is a member. This educational consortium was organized in 1968 and incorporated in Tennessee on June 19, 1969.

The Board of Directors of SCUU employed a professional librarian on a half time basis to coordinate a library cooperative program as of September 1, 1970. This coordinator has had her office in the Reference Department of the General Library of the Joint University Libraries. This has enabled her to provide bibliographic and reference service and facilitate interlibrary loan activities for and among the librarians of the institutions constituting the SCUU.

Since their founding in 1936, the Joint University Libraries have had three directors: A. Frederick Kuhlman, the first director, served from September 1, 1936 until his retirement June 30, 1960. David Kaser succeeded him and served until July 31, 1968. The present director, Frank P. Grisham, assumed the directorship August 1, 1968.

The size of staff of the Libraries for 1971/1972 was: professionals sixty-six, clerical seventy-seven, and student hourly help (FTE) thirty-nine.

SELECTED BIBLIOGRAPHY

- American Council on Education, "Report of Committee on Graduate Instruction," *Educ. Record*, 15, 192-234 (1934).
- Davidson, Philip G., and A. F. Kuhlman, eds., *The Development of Library Resources and Graduate Work in the Cooperative University Centers of the South: Proceedings of a Conference of Graduate Deans and Librarians Held at the Joint University Libraries, Nashville, Tennessee, July 12-14, 1944*, Joint University Libraries, 1944, 81 pp.
- Joint Faculty Committees of Vanderbilt University and Peabody College, *The Vanderbilt-Peabody Program as Developed by the Faculties and Approved by the Administrations 1936*, Nashville, Tennessee, 1936, 23 pp.
- "Joint University Library" (dedication issue with illustrations of the building), *Peabody Reflector*, 15, 1-37 (January 1942).
- Lowell, Mildred (Hawksworth), *College and University Library Consolidations*, State System of Higher Education, Eugene, Oregon, 1942, 136 pp.
- Nashville, Joint University Libraries, *The Development of University Centers in the South: Papers Presented at the Dedication of the Joint University Library, December Fifth and Sixth, 1941, Nashville, Tennessee*, edited with an Introduction by A. F. Kuhlman, Peabody Press and Vanderbilt Univ. Press, 1942, 128 pp.
- Russell, John Dale, R. E. Paty, and E. W. McDiarmid, *The Joint University Libraries: A Survey of the Equity and Adequacy of Their Financing and Operation*, Nashville, 1951, 11 pp., mimeographed.
- Vanderbilt University, Nashville, *Vanderbilt Planning Study: The Libraries*, Nashville, Tennessee, 1964, 116 pp.

A. FREDERICK KULHMAN

JORDAN, LIBRARIES IN

Introduction

The Hashemite Kingdom of Jordan is an Arab state of the Middle East with a total area of 96,610 km² and an estimated population of 2,250,000. It is bounded south by Saudi Arabia, north by Syria, east by Saudi Arabia and Iraq, and west by Israel. Jordan comprises two parts: the former British mandated territory of Transjordan, which became known as the Hashemite Kingdom of Jordan in 1946, and a part of eastern Palestine which was unified with Jordan after the Arab-Israeli war, in 1950. In 1967 Israel occupied eastern Palestine (since 1950 known as the west Bank of Jordan), including Jerusalem.

Until 1917 Jordan—along with the majority of other Arab countries—was a part of the Ottoman Empire. Since time immemorial the country was inhabited by Arab Semitic tribes. In A.D. 636 Jordan became part of the Islamic state at the center of the Arab world, and belonged successively to the Ommayyad, Abbassid, and Ottoman Empires. After the defeat of the Ottomans in World War I, Transjordan, which was part of the Ottoman Vilayet of Damascus, became a British mandated territory. In 1921 King Abdullah took over its government.

Jordan as a state is thus a development of the twentieth century. But as an integral part of the Arab world it shared the same heritage, language, religion, and culture which have prevailed in the area since the rise of the Arab-Islamic state. Historically speaking there is nothing such as an autonomous Jordanian culture. The people of Jordan and Palestine have had substantially the same cultural background as those of Egypt, Iraq or Tunis, and the rest of the Arab-speaking countries. In this vast area of West Asia and North Africa civilization and culture reached its highest development in the Middle Ages.

In as much as the Arabs prized highly the values of culture, they also accorded books and libraries the greatest interest. The religion of Islam itself made it a duty upon every believer to think and to seek knowledge wherever it may be. Mosques functioned as repositories for books. Through gifts and bequests libraries became especially rich in religious literature, and they soon became meeting places for scientific discussion and debate. Among the most remarkable libraries at the peak of Arab civilization were Bayt al-Hikmah (Home of Wisdom), the first significant public library in Islam. Established in Baghdad by caliph Harun al-Rashid, Beit al-Hikmah lived its finest days under his son al-Mamun (814–833), who spared no effort to provide it with books in Arabic and other languages, and to turn it into a real academy of sciences and a translation bureau which rendered hundreds of books of ancient culture into Arabic. Beit al-Hikma had its counterpart in Cairo in Dar al-Hikma (House of Wisdom) which was established in 1005 by the Fatimid al-Hakim, who instituted a fund whose income was to be spent on copying manuscripts, repairing books, and general maintenance. Dar al-Hikmah had a library

comprising some 100,000 volumes and special rooms for meeting and lectures. It was also an institution for teaching and research. These were only two examples among hundreds of libraries which flourished in the Islamic world in the Middle Ages.

In those days and indeed from the seventh century through the Middle Ages, al-Aqsa Mosque in Jerusalem developed into an important learning center and an academy for religious and linguistic studies attracting students from various Muslim countries. This "Islamic university of Jerusalem" had a rich library comprising several thousand volumes organized along the pattern of the grand libraries in various centers of learning in the large world of Islam.

Toward the end of the Middle Ages and until the eighteenth century a period of stagnation set in, and the Arab countries relapsed into insignificance under the rule of the Ottoman Turks. However, some glimpses of the old culture were chaotically preserved in the confused libraries of old mosques and the private collections of old families. Innumerable volumes had however perished through the negligence and ignorance of the dark ages. A lesser proportion was saved through the efforts of some learned people who struggled to preserve culture and religion.

The nineteenth century saw the beginnings of cultural revival in Egypt and Syria (including Palestine and Jordan). Under the impact of the French expedition led by Napoleon Bonaparte (1798) and the temporary occupation of Egypt and part of Syria, the winds of change blew on the East. Educational institutions were established or reformed, and cultural contacts with Europe began. The change covered all aspects of life. A new generation of educated people arose. Under these circumstances the cultural scene in this country began to change. In Palestine (including what is now known as the western bank of Jordan) many private libraries were established or reorganized by some learned people, mostly in the circles of old families. Notable among those who strove to preserve the old culture through the collection of manuscripts and rare books and cataloging them was Shaikh Khalil al Khalidi (d. 1954). This Jerusalemite bibliophile and scholar visited Syria, Turkey, Spain, Egypt, and Austria to collect manuscripts or study the catalogs and contents of old libraries. Among the family libraries established or organized in the nineteenth century or shortly before were al-Khalili library, established 1725 (7,000 volumes) and Khalidiyya library, established 1900 (12,000 volumes). Several private libraries in Jerusalem, Nablus, Hebron, Salt, etc. still exist awaiting the diligence of scholars, but many others have perished or disappeared.

In addition to such Muslim family libraries some denominational libraries managed to exist for several centuries in Jerusalem. The oldest among these is the Saint Saviour Library established in 1558. In 1947 it comprised some 25,000 volumes in Latin, French, Italian, Hebrew, and Arabic. During the nineteenth century and under the British mandate over Palestine (1917-1948) several other libraries were established in the Holy Land mainly through the activity of the Christian missionaries. Among these were the Orthodox Patriarchate Library (established 1865, 5,000 volumes); *Bibliothèque de L'Ecole Biblique et Archeologique Fran-*

caise (established 1890, 50,000 volumes); The Library of the American School of Oriental Research (established 1907, 7,000 volumes); The Library of the Government Arab College (established 1920, 7,000 volumes); The Library of the Palestine Archeological Museum (established 1928, 30,000 volumes); Gulbenkian Library, Armenian Patriarchate, Jerusalem (established 1929, 60,000 volumes of which 20,000 are in Armenian); the YMCA library, Jerusalem (established 1933, 25,000 volumes); and the library of the Aqsa Mosque, which contained some rare manuscripts of the Koran and various religious manuscripts and publications (established 1927). The first library to publish a printed catalog was the library of the Greek Orthodox Patriarchate which published its catalog comprising 400 manuscripts and 10,000 printed volumes in 1847.

Around the middle of the nineteenth century printing presses were introduced for the first time in the Holy Land. In 1847 the Franciscan Fathers established their printing press. The Greek Orthodox founded their own in 1851. Others followed suit. Between 1892 and 1909 a single printing press printed 281 titles in Arabic and European languages. Printing presses were satisfying the demand for knowledge. They were, so to speak, a by-product of the new schools which were established by French, German, Russian, British, and Italian missionaries in various parts of Palestine in the middle of the nineteenth century.

Under the British Mandate over Palestine and Jordan (1917–1948) little progress was made as far as the development of the modern library was concerned. The more important libraries established during this period have already been noted. Up to 1948 not a single public library was founded. Some social clubs were established during this period with little more than token libraries. Many schools in 1920 were actually without reference works, and the building up of a modest library in each school was a very slow process. The books were partly issued by the Department of Education and partly bought from pupils' small contributions. Cash collections at school ceremonies were quite frequently used to buy books for the library, and many notables and authors used to send gifts of books to favorite schools. In Palestine a small village school library during the third decade of the mandate contained about 200 reference books, a full elementary school about 600, a secondary school about double that number. The library of the largest academic institution, the Government Arab College, contained 7,122 books in 1946. In Transjordan, where the development of public education was much slower, school libraries were still poorer. In most cases they did not exist at all.

Jordan and the Development of the Modern Library

Strictly speaking the modern library started in Jordan only in the 1950s; before that, classification and cataloging, scientific bibliography, documentation, indexing of scientific material, in short the form and the content that make a modern library were practically unknown. In 1955 a delegation of educated young men, representing various cultural and sports clubs in Amman, called upon responsible

officials in the Ministries of Education and Social Affairs and stressed the necessity of establishing public libraries in Jordan. The Ministry of Education soon invited a UNESCO expert to study the library situation in the country and prepare a report to the Ministry, embodying recommendations for the development of library service. In 1956 the Ministry sent the first Jordanian to study library science in Great Britain. This was the start. The development was soon to affect all aspects of library service in Jordan and to run at a good pace, in view of the limited resources of the country.

SCHOOL LIBRARIES

Primary and secondary schools in Jordan are of three types: state, private, and those of the United Nations Relief and Works Agency (UNRWA). Education begins at 6 years of age. In 1972 there were 671,600 students in both banks of Jordan, i.e., 28% of the population. Despite the campaign against illiteracy it is estimated that about 60% of the population above 15 years of age are still illiterate.

Until 1958 school libraries in Jordan were small collections of books with little effective organization. They were run on traditional lines. Financial allocations were very small and mainly consisted of contributions from the students. No clear acquisition procedures, classification systems, or loan regulations were existing. Although these features still exist in a number of schools, library service has undergone a big change.

In 1958 a libraries section was established by the Ministry of Education. Staffed by some qualified librarians, the section has effectively contributed to the development of the school library: visits to schools were regularly made by members of the section, summer and in-service library courses were annually organized, a mobile library service was introduced with the aim of supplementing the poor collections especially in elementary and preparatory schools, and a whole set of regulations for the proper administration of school libraries was made.

As far as library service is concerned, secondary schools are much better off than elementary and preparatory schools. Latest figures indicate that there are 117 secondary schools in Jordan, holding about 200,000 books. The average number of titles per student is eight. The majority of these schools have teacher librarians with some sort of library training. Only about 16% of the librarians are without training. On the other hand elementary and preparatory schools could make little headway in improving their library services. In the great majority of these schools libraries, if any, are without special rooms and without librarians. In some cases libraries do not exist at all. It is said that the large extension in compulsory education, which entailed the opening of many new schools every year, coupled with the limited financial resources of the Ministry, are the main reasons for the inadequacy in most fields of extracurricular activity, including library services.

Largest among the libraries belonging to the Ministry of Education is the library of the Teachers' Institute in Amman. Established in 1954 this library now has

about 25,000 volumes. It is the central library of the Ministry, and in a sense it is a specialized library with a good collection of books on education and related subjects. The library is still suffering from a shortage of professional staff, a common phenomenon in Jordanian libraries. However, experience attained by the library has helped to develop many school libraries in Jordan.

PUBLIC LIBRARIES

The public library, in the wide sense of the word, is an old institution in the Arab-Islamic history. It mainly grew and prospered as part of the mosque and it included among its collection not only religious books but also books on language, law, literature, and history, i.e., mainly humanities, and to a lesser extent scientific books. In addition to mosque libraries there were at the height of Arab civilization public libraries sponsored by the state. In the Middle Ages, it is said that there were seventy such libraries in Granada alone.

In the modern sense of the word public libraries are mainly a creation of the nineteenth century. In the Arab world of today they are a very recent creation.

The first public library in Jordan was established in 1957 in the city of Irbid. In the following 10 years ten other libraries were established in various Jordanian cities, the majority of them in the years 1960, 1961, and 1962.

The system of public libraries now includes thirteen libraries, with eight of them in the East Bank (in Amman, Irbid, Salt, Zarqa, Ma'an, Karak, Aqaba, and Wadi-Seer) and five in the West Bank (in Jerusalem, Nablus, Ramallah, Hebron, and Jenin).

Public libraries in Jordan are under the supervision of and are supported by the municipalities. Three of them, viz., Amman, Nablus, and Irbid, have a library council, or a council of trustees, composed of five members and headed by the Lord Mayor. The council decides major policy questions as well as the annual budget.

Public libraries in Jordan are still in the stage of formation. Like most similar libraries in the developing countries they are handicapped by shortage of funds. As a result there is a shortage of trained staff, a poverty of collection, and an inadequacy of library premises and equipment. Although the majority of the forty public library employees received a measure of training in Jordan or abroad none of them is professional. The collection of books in all thirteen libraries taken together does not exceed 80,000 volumes, and their premises are in general small and modestly equipped, none being originally designed and built for use as libraries.

The largest of public libraries in Jordan is the public library of Amman Municipal Council. Established in December 1960 the public library of Amman municipality has a collection of some 28,000 volumes, housed in a three-story wing of the Municipality House. The library consists of a general reading room, a children's library, an arts exhibition hall, and a lecture hall. Among the activities of the library is the organization of cultural seasons and art exhibitions, and the conducting of an exchange of publications program with libraries abroad. In 1970 the library had 8,000 members. The daily number of visitors averaged 350.

The important thing about the system of public libraries in Jordan is that it was created. The libraries continue to grow, and a healthy spirit of competition is developing among them. No doubt this was an outcome of movement in a changing society where people gain an increasing awareness of the role of culture in the modern world.

SPECIAL LIBRARIES

By special libraries is meant libraries which are maintained by a body, a society, or an institution, public or private, governmental or nongovernmental, and which usually specialize in one field of study and are designed to serve primarily members of the body or institution. The number of such libraries has largely increased in the last 10 years. Several ministries, government departments and private bodies, companies, etc., have established or begun to establish their own libraries. There is a growing understanding that a library is a vital part of any large well-run enterprise which wants to maintain itself successfully in an age of challenge. A number of such special libraries have been established, and many others are now in the making. Among the more important of these special libraries are: The Library of the Royal Scientific Society, whose main field of specialization is applied and pure science; The Library of the Natural Resources Authority, specializing in geology and allied sciences; The Library of the Central Bank, with a stress on economics, finance, and banking; The Library of the Department of Scientific Research; and The Library of the Teachers' Institute in Amman, specializing in education and pedagogy.

Of governmental libraries mention can be made of those maintained by the Ministry of Foreign Affairs, Ministry of Health, Ministry of Agriculture, Department of Antiquities, and the recently established library of the Ministry of Information and Culture.

The Library of the Royal Scientific Society was established in 1970 with a view to providing scientists working with the society with the material they need for research on various aspects of study pertaining to Jordan. In 1972 its holdings included 750 foreign periodicals and 120 Arabic periodicals, about 10,000 volumes, 200 dissertations, and 900 papers and reports prepared by the ministries and governmental institutions. The annual budget for acquisition in 1972 was 70,000 Jordan dinars.

The Natural Resources Authority has a library of about 12,000 titles and some 300 scientific periodicals. The library has an information center which is designed to serve researchers and answer questions. Total budget: J. D. 20,000. Members of staff number thirteen.

The Library of the Central Bank was established in 1963 as a branch of the Banks' Department of Economic Research. Its collection includes about 5,000 volumes, sixty periodicals, and a large number of documents and pamphlets.

Among the libraries of foreign cultural missions mention may be made of the oldest and largest: the library of the British Council in Amman, which was established in 1950. Its holdings include about 15,000 volumes and 120 periodicals.

The library specializes in British publications, which constitute about 50% of its collection, and organizes various exhibitions of cultural interest.

THE LIBRARY OF THE UNIVERSITY OF JORDAN

The University of Jordan, the only university in the country, was established in 1962. It has now five faculties, for arts, science, economics and commerce, medicine, and religious law. Number of students in 1973 was about 4,000. The library of the university is now the largest in Jordan. Established in 1962 it grew at the rate of 10,000 volumes a year. Total number of books is 127,000. It subscribes to about 850 foreign periodicals, mainly English, and about 300 Arabic periodicals. Although primarily designed to serve the curricula, the university library contains books on various extracurricular material. It is also a depository library for United Nations documents, and has a complete set of microfilming equipment.

In July 1972 the university library moved to a modern three-story building on the campus which can house about 400,000 volumes and has a seating capacity for 600 readers. Total cost of the building, furniture, and equipment was about \$1 million. Administratively the library is divided into two departments, one for readers' services and another for technical services. The present number of employees is sixty. Services at the university library are fully centralized. There are no departmental or faculty libraries, but there are reading rooms at some of the faculties. Library facilities are open to the public.

JORDAN LIBRARY ASSOCIATION

The Jordan Library Association was established in Amman in December 1963, as a professional association to unite the efforts of librarians in the service of their profession and help the development of all aspects of library life in the country. Registered members in 1972 were 300, representing all types of libraries and including nonlibrarians interested in library work. In 1965 the association started to establish a series of branches in a number of districts. It is worthwhile noting that at least one half of the association members are in the West Bank of Jordan, which has been under Israeli occupation since 1967. The Jordan Library Association has been a member of the IFLA since 1967.

Activities and Achievements

Despite the meager financial resources and the small number of professional librarians among its members, the association succeeded in laying some foundations for the development of library work in the country. Among its achievements were the publication of its quarterly review *Risalat al-Maktabah (The Message of the Library)* which has appeared regularly since October 1965. Containing various contributions about libraries in Jordan and abroad, this journal is a valuable record of the history of the library movement in Jordan and is one of two or three such journals which have appeared so far in the whole Arab world. The journal contains

abstracts of its articles in the English language, and some articles in English. Among the other publications of the association are a pamphlet entitled *Jordan Library Association in 6 years 1964–1969* and *A Palestinian-Jordanian Bibliography 1900–1970*, published consecutively in 1970 and 1972, both in Arabic.

In response to the urgent demand for trained librarians in Jordan, the association organized seven annual training courses. About 300 trainees have so far received practical and theoretical training for about 50–60 hours. There was a steady increase in the numbers of participants since 1964. All lectures were given by members of the association free of charge.

In addition to the annual meetings held by the association where annual reports were presented and discussed, the association organized some general conferences on library matters, and provided opportunity for its members to attend lectures delivered under its auspices by eminent librarians from Jordan and abroad.

Present Library Situation: General Features and Problems

It will appear from the above that libraries in Jordan fall into three main categories: school and teachers' institutes' libraries, which are under the supervision of the Ministry of Education; special libraries, which are maintained by various governmental and nongovernmental bodies and institutions and cater to their needs; and public libraries, which are supervised by the municipalities. Most of these libraries are small in size and limited in resources. One cannot fail to notice that public libraries are still few in number with the result that only a part of the urban population can enjoy their services. Many towns are so far deprived of public libraries. It has been noted with regret that the average acquisition budget for a municipal public library does not exceed JD 1,000. A city like Amman, with a population approaching 600,000, has only one public library, containing less than 30,000 volumes. In villages, library service is practically nonexistent.

One will also notice at once the absence of a national library at the head of the library system which will act as a center for research and coordination, regarding all affairs and questions that interest librarians, be they in the field of training, bibliography, documentation, classification, or other fields.

TRAINING OF LIBRARIANS

There are two kinds of short training courses in Jordan. One is organized by the Jordan Library Association. It is annual and has an average of forty trainees per year. At these courses the rudiments of librarianship are taught in sixty condensed lectures of 1 hour each. The other kind of training is shorter summer or in-service courses conducted by the Ministry of Education. Such courses, which have been attended so far by several hundred teachers, have an average duration of only 1 week.

These training courses are only a temporary expedient, an attempt to meet an

urgent need. But in a country where the shortage of professional librarians is so great, it is an urgent necessity to start regular schooling in librarianship either at the university or some other institute in Jordan. Perhaps a reasonable alternative would be the establishment of a regional school for the training of librarians somewhere in the Middle East.

Both the University of Jordan and the Ministry of Education are considering now the inclusion of courses on library education in their curricula.

All professional librarians in Jordan—there are only nine—received their training either in Great Britain or the United States. In the last years the Ministry of Education granted nine scholarships for the study of library science at the University of Cairo. It is hoped that with the help of the existing professional librarians some sort of advanced library training will be introduced into the country.

CLASSIFICATION AND CATALOGING

There is a feeling of uneasiness among librarians in Jordan and other Arab countries about the systems of classification to be used. Most libraries in Jordan—in fact all but two—use the Dewey Decimal Classification, but DDC has never been translated in full into Arabic. There are only mere abridgements in translation. And DDC, with respect to Arabic-Islamic subjects, is neither comprehensive nor appropriate. Hence the necessity for modification. And these modifications have been made differently in different countries, and in many cases in different ways in different libraries in the same country. In view of this some librarians pose the question whether it is not time for Arab librarians to try to work out a new system which will better answer the needs of Arabic culture.

As far as cataloging is concerned the Anglo-American code is applied, with modifications with regard to Arabic names. But these modifications are often hastily made and in various ways.

Another important question is that of subject headings. Both Sears list and the Library of Congress list are variously used in Jordan. However there is again no uniformity in the Arabic terms used.

A similar difficulty arises with regard to entries of Arabic names. Some libraries, following the western usage, adopt entry under the surname or last name, others adopt the first name. Some restrict the first method to classical authors. A concerted effort has to be made in order to achieve a common formula.

BIBLIOGRAPHY AND DOCUMENTATION

Very small amount of work has been done in this field in Jordan. So far there is no national bibliography. As a temporary expedient the Jordan Library Association publishes in its organ *Risalat al-Maktabah* at the end of each year a bibliographic list of works written by Jordanian authors. As many Jordanian works are published in other Arab countries, e.g., Lebanon, which do not have their own national bibliography, such a list can only be approximate.

A good effort in bibliography was made by an individual librarian, Mr. M. Akhras, in his *Palestinian-Jordanian Bibliography* (1900–1970) which was published by the JLA.

There is moreover some bibliographic materials in certain books on language and literature by various Jordanian authors, such as those of Dr. N. Assad and Dr. A. Yaghi. Accession lists are issued by many libraries such as the library of the University of Jordan, the Library of the Royal Scientific Society, and the Library of the Authority of Natural Resources.

The Council for Scientific Research is now sponsoring a project for the preparation of a union catalog for all principal libraries in the country. A law in this respect is expected to be promulgated soon.

As far as documentation is concerned there has been an increasing awareness of the necessity for the creation of a national documentation center in Amman. Various libraries and institutions have recently increased their efforts to collect and organize documents pertaining to their fields of activity. A section for documentation was established several years ago at the Ministry of Education and is primarily interested in educational subjects. The library of the University of Jordan was designated a depository library for United Nations documents in 1970. The university library is now organizing its collection of documents on Jordan. The library of the royal scientific society has also started collecting documents on Jordan from various governmental agencies.

LIBRARY LEGISLATION

Library legislation is practically nonexistent in Jordan. However, some steps are now being taken in this direction. The Jordan Library Association has prepared a draft law for legal deposit and is working on a draft law for libraries. Reference has been made to the union catalog. The Council for Scientific Research has seized the opportunity to prepare a draft law for "The Union Catalogue and the Libraries," which is due to be submitted to parliament soon.

These are the general features of the library movement in Jordan; what has been achieved must be judged in the perspective of the short life of the movement and the conditions of a developing country with limited resources. A lot of work has still to be done. A large step forward could be taken if a national library were established in Jordan, which will patronize and organize the growth of the movement and try to solve its problems in the various directions. Some of these problems could be solved locally but some others, such as those of classification and cataloging, bibliography, interlibrary loan, exchange of publications, training and education of librarians need the concerted action of librarians in different Arab countries. Several conferences on library development were held so far for this purpose. UNESCO held three seminars (Damascus, 1955; Beirut, 1959; Cairo, 1962), librarians of Arab universities held a seminar in Baghdad in 1972, and the Arab Organization for Education, Science and Culture organized a conference in Damas-

cus in 1971. This last organization is now envisaging a program for the publication of a general Arab Bibliography, the standardization of classification and cataloging, and other urgent problems. There are still many things to be done in these fields in the future.

The general trends of development—economic, social and cultural—which brought forth the library movement in Jordan will continue to press for its growth and development.

There are grounds for encouragement in the fact that there is an increasing awareness of the role of the libraries in social progress. The present stand points to a healthy and relatively quick future development embracing various aspects of library life in the country.

BIBLIOGRAPHY

- Al-Aref, Aref, *Al-Mufassal Fi Tarikh al-Quds (A Detailed History of Jerusalem)*, Jerusalem, 1961.
- El-Akhras, M., *Al-Bibliografia al-Falastiniyya al-Urduniyya 1900–1970 (Palestinian-Jordanian Bibliography)*, JLA, Amman, 1972.
- El-Akhras, M., "Libraries in Jordan," a paper prepared in 1972.
- El-Akhras, M., and H. Sharayha, *Jamiyyat al-Maktabat al-Urduniyya fi Sitt Sanawat 1964–1969 (JLA in Six Years 1964–1969)*, JLA, Amman, 1970.
- Husri, S., *Hawliyyat al-Thaqafa al-Arabbiyya*," (*Annual of Arabic Culture*), Vols. 3, 5, 6.
- Jordan Library Association, *Risalat al-Maktaba (Message of the Library)*, quarterly organ of the JLA, 1965–.
- Library of University of Jordan, *Dalil al-Maktaba (Guide to the Library)*, Amman, 1972.
- Ministry of Education, Amman, *Statistical Annual Bulletin*, 1965/1966, 1966/1967.
- Royal Scientific Society, *Al Jamiyya al-Ilmiyya al-Malakiyya (Royal Scientific Society)*, Amman, 1971.
- Tibawi, A. L., *Arab Education in Mandatory Palestine*, Luzac, London, 1956.
- Yaghi, A., *Hayat al-Adab al-Filistini al-Hadeeth (Life of Modern Palestinian Literature)*, Beirut, 1968.

K. J. ASALI

JOSEPHSON, AKSEL GUSTAV SALOMON

Aksel G. S. Josephson was born October 2, 1860 in Uppsala, Sweden, one of the children of Jacob Axel and Hilda Schram Josephson. The father, a graduate of Uppsala University, was a well-known concertmaster. From an early moment, through the university and intellectual background of the family, the son became

deeply interested in books and bibliography, and gravitated at first into the antiquarian book trade, spending a year at the well-known firm of Bernard Quaritch, London, England, perfecting his knowledge of English and becoming well acquainted with a wide range of bibliographical reference works as well as a most unusual and varied stock in the international antiquarian book trade. Returning to Sweden, he established and maintained the Josephson Antiquariat in Uppsala about 1885, but the location in Sweden did not offer the wide range of material and the market that Quaritch had developed in London, and consequently he became more and more absorbed in Swedish bibliographical work. In 1889, he prepared and published the systematic retrospective index of the Uppsala Scientific Society proceedings (1), followed in 1891 by a modest contribution to Swedish dramatic literature (2), and in 1893 by the first part (alphabetical) of the record of theses and programs at Swedish and Finnish universities, 1855-1890 (3), the second part not appearing until 1897, with a preface from him at the John Crerar Library, Chicago, where he was then located.

In the second half of 1893, Aksel G. S. Josephson departed from Sweden for the United States, enrolled as student no. 149 at the New York State Library School, Albany, New York, and studied there from October 1893 to March 1894 (4). After 2 years in New York City, he was appointed in March 1896 as chief cataloger of the John Crerar Library, Chicago, Illinois which, as a privately endowed institution with collections emphasizing sciences, industry, and social sciences, opened to readers on April 1, 1897. In 1898 he became a naturalized United States citizen, and on April 27, 1899 he married Lucia Engberg of a Chicago publishing family.

From the beginning in 1896 of Josephson's long service with the John Crerar Library in its locations adjacent to the Chicago Public Library, catalog cards had been printed at a small press in Western Illinois and made available to a certain number of depository libraries. As chief cataloger he was responsible for the form, accuracy, and effectiveness of these entries within the scope of the library, which contained both American and foreign materials, as well as for the development of the tripartite catalog [(1) alphabetical author, (2) classified, and (3) alphabetical subject] (5). With his bibliographical background and linguistic equipment, Josephson seconded Clement W. Andrews, librarian of the John Crerar Library, in taking an active and vital interest in the discussion in the development of the *A.L.A. Catalog Rules*, published in 1908 and made substantially effective nationwide through the printing and distribution of catalog cards by the Library of Congress, the first stress always being on the coverage of American copyright books. Thus, for a good quarter of a century with his international point of view, he actively maintained not only the high standard of the John Crerar Library printed catalog cards and its catalogs, but had his reflection on the Library of Congress printed catalog cards as the national standard for library use and service in the United States.

At the same time, Josephson's keen interest in bibliography and the history of printing soon led to his being selected and serving as chairman of a committee to

organize the Bibliographical Society of Chicago, which came into being on October 23, 1899. In his introductory remarks on that date, he expressed his "hope that the organization of this Society may lead to the founding of a national bibliographical society" (6). Indeed, the number of nonresident members as reported in the Society's 1st *Yearbook* had more than doubled in the 4th (1902–1903). Josephson edited the *Yearbook*, served as the president of the Bibliographical Society of Chicago in 1903–1904, and was the compiler of the *Bibliographies of Bibliographies* (7), which attracted wide attention.

In 1904, at the time of the St. Louis Conference of the American Library Association, the Bibliographical Society of America was organized, continuing and extending the work of the Bibliographical Society of Chicago, and having as its objects "to promote bibliographical research and to issue bibliographical publications." As stated by Henry B. Van Hoesen in 1941, "So far as any one person may be designated as founder, the honor belongs to Aksel G. S. Josephson" (8). Josephson served the Bibliographical Society of America as secretary 1909–1912; as councillor 1904–1909, 1912–1916, 1918–1935; and as editor 1916–1918. With his restless and active mind, he not only contributed papers himself, but encouraged others in the making of important contributions. Personally, he was much interested in the history of printing, was a member of the Gutenberg Gesellschaft from the beginning, but the lack of original material in Chicago prevented him from devoting as much attention as he had hoped to that field.

Then, from the collecting activity and reference service in the fields of the John Crerar Library and from his own discerning cataloging activity, he developed two very substantial bibliographies on the history of science and on the history of industry that have both been reprinted (9) since his death. He also made various lesser contributions.

Another not too well known aspect of Josephson's activity was planning for library education. Sarah K. Vann called attention to this in 1961 (10). First, she mentions his proposal, made as early as 1896, of a new plan for library education that emphasized the need for a school of bibliography and librarianship or library science as a part of one of the universities, and thus he stressed librarianship as a learned profession. Next, she mentioned his having drawn up a schedule of a curriculum for a 2-year program of studies in 1901. Then she drew attention to his having emphasized the need for stress on bibliographical training in 1910. Finally, Miss Vann refers to his having made a final proposal in 1917 referring to his original plan.

"Precursor" is the characterization of Aksel G. S. Josephson by Donald D. Foos in a 1971 paper (23 sheets, typed, unedited) for the Fourth Library History Seminar (11) at the School of Library Science, Florida State University at Tallahassee. Foos described Josephson as "the unsung and unproclaimed hero of library education," and analyzing in detail the points made above, came to the conclusion that "his work and efforts were incorporated and established by [the Board of Education for Librarianship] as a rule for the measure of quality in education for librarianship."

In April 1923, due to oncoming blindness, Josephson retired and moved from Chicago to Fairhope, Alabama. Even in retirement his exceedingly active and restless mind produced, with the assistance of Mrs. Josephson, *A List of Swedish Books, 1875-1925* (12), a work of more than fifty printed pages. In 1928 the John Crerar Library appointed Josephson the consultant cataloguer because of his long and outstanding service. Although Mrs. Josephson died in 1929 and he moved to Mobile in 1934, his restless mind continued its activity. He learned the touch system of typewriting, and in 1941 he contributed a brief printed article "A Prelude to Librarianship" (13), as well as producing some unpublished work before he died at Mobile on December 12, 1944 (14).

REFERENCES

1. *Catalogue méthodique des Acta et Nova Acta Aegiae Societatis Scientiarum Uppsaliensis, 1744-1889, redigé par Aksel G. S. Josephson*, Josephsons Antikvariat, Uppsala, [1889], 2 pp. 1. [36] pp. "Ce catalogue est tiré en 500 exemplaires, dont 25 sur papier de Hollande."
2. *Bidrag till en förteckning över Sveriges dramaturgiska litteratur. Bibliografiskt försök*, [Uppsala, 1891], 15 pp.
3. *Avhandlingar och program utgivna ved Svenska och Finska akademier och skolor, 1855-1890*, Uppsala, 1893-1897, 2 parts (343 pp.).
4. New York, State Library School, *Library School Register 1887-1896*, Albany, cover-title, pp. 73-117 (*State Library Bulletin*, Library School, no. 2).
5. John Crerar Library, Chicago, *The John Crerar Library, 1895-1944. An Historical Report, Prepared under the Authority of the Board of Directors, by the Librarian*, [J. Christian Bay], Chicago, [1945], 214 pp.
6. *Year-book of the Bibliographical Society of Chicago, 1899-1900 - 1902-1903*, Chicago, 1900-1903, 4 vols.
7. *Bibliographies of Bibliographies, Chronologically Arranged with Occasional Notes and an Index . . .*, Chicago, 1901, 45 pp. (Bibliographical Society of Chicago, *Contributions to Bibliography*, 1), 156 entries. Second ed., assisted by Selma Nachman, Chicago, 1910-1913, 38 pp., Reprinted from the *Bulletin of the Bibliographical Society of America and Its Papers*, 1910-1913, 251 entries.
8. *The Bibliographical Society of America—Its Leaders and Activities, 1904-1939* [in *The Papers of the Bibliographical Society of America*, 35, 177-202 (1941)].
9. *A List of Books on the History of Science, January, 1911*, The John Crerar Library, Chicago, 1911, 297 pp.; Reprinted, Gale Research Co., Detroit, 1966. *A List of Books on the History of Industry and Industrial Arts, January, 1915*, The John Crerar Library, Chicago, 1915, 486 pp., Supplement, 1917. Reprinted, Kraus Reprint Corp., New York, 1966-1967.
10. Sarah K. Vann, *Training for Librarianship before 1923*, ALA, Chicago, viii, 242 pp.
11. Fourth (1971) Library History Seminar, *Proceedings*, Issued only in microfiche.
12. ALA, Chicago, 1927, 58 pp.
13. *School and Society*, 52, 466-467 (1941).
14. *Who's Who in America*, 8, (1914-1915)-23, (1944-1945). *John Crerar Lib. Quart.*, 11(4), 5-8 (January 1945).

JAMES BENNETT CHILDS

JOURNAL OF CHEMICAL DOCUMENTATION

The *Journal of Chemical Documentation*, issued quarterly by the American Chemical Society (ACS), is dedicated to the publication of high quality papers reporting on research and development, new concepts, and new programs, services, and systems in all areas relevant to the scientific literature and to the information needs of scientists. The *Journal* is unique in its high pertinence to the daily activities and needs of scientists and engineers, literature chemists, information scientists, librarians, computer scientists, and others whose work involves using, handling, or producing scientific literature.

History

Although chemistry has a long past as an art, it has a relatively short history as a science. Until about 200 years ago chemistry was submerged in science, and science was essentially a part of philosophy. It is not coincidental that chemistry had difficulty progressing beyond alchemy and the phlogiston theory until a language of chemistry evolved during the first half of the eighteenth century that was universally accepted. The genesis of the language of chemistry was the Avogadro hypothesis of 1811, the introduction of chemical symbols by Berzelius in 1813, the elucidation of atomic weight and equivalent weight by Cannizzaro in 1858, and Kekule's introduction of the concept of valence in 1858 and the benzene ring in 1865.

The evolution of the language of chemistry, however, was anything but linear. It can not be sharply drawn by a series of enumerated events. The process was slow and contributed to by hundreds of scientists in England, France, Italy, Germany, Sweden, and other European nations. The most noteworthy result was the addition of structural formulas to the language. When structural formulas became a method of communication, chemistry evolved rapidly into a major science. The language of chemistry, specifically the symbols and nomenclature of chemistry, has made it unique among the sciences, and no other science, except for mathematics, matches chemistry in ease and conciseness of communication and in the high semantic content of its vocabulary.

Just as language is necessary for communication, classification concepts are necessary for the understanding and teaching of knowledge. Classification is the science of similarities and differences. An excellent example of a classification system in science was the family-genus-species concept that Linnaeus published in 1738—the impact of this classification system being such as to initiate modern systematic botany.

Classification of knowledge has been of considerable importance in chemistry. Since Dumas introduced the concept of homology for organic chemistry in 1851,

many organic chemists have made homology a meaningful tool in research and in teaching. Homology tells a chemist that the chemical properties of a series of chemicals with the same functional group, such as the hydroxyl group of aliphatic alcohols, are very much alike and that their physical properties have a definite relationship. Homology allows chemists to correlate chemical structures with properties and synthesis methods and to predict potential uses and applications of chemicals. It has played an important role in the rapid growth of the chemical and pharmaceutical industries.

Another outstanding example of the power of classification in chemistry was the introduction of the periodic table by Mendeleev in 1869. Mendeleev's periodic table not only pointed out errors of existing information, but predicted the discovery of new elements. In addition to advancing and motivating research, the periodic table has been a powerful teaching concept.

Chemistry is not only unique for its language of communication and for its classification systems, it is also unique for its abstracting, indexing, and information systems.

Abstracting, indexing, and information systems are not new to chemistry. *Chemisches Zentralblatt* was introduced in 1830 and *Chemical Abstracts* in 1907. The current edition of Beilstein's *Handbuch der Organischen Chemie* was issued in 1918, covering the literature of organic compounds thoroughly up to 1910. These are but a few of the products of chemists who were concerned with harnessing and controlling their literature. These products constitute the reference section of all chemical libraries.

During the eighteenth century and well into the nineteenth, chemistry was barely a profession. The chemist of this period was more of a hobbyist or part-time devotee. He was usually a man of means or, at least, he did not depend on chemistry for his livelihood. Chemistry was mostly an intellectual pursuit, a diversion, in which the devotee might study some interesting problems, much as some people today are bridge, crossword puzzle, or cryptogram fans. During the nineteenth century, however, chemistry emerged first as an occasional necessity for some, notably educators, physicians, and apothecaries. Full-time professional chemists appeared on the scene during the second half of the nineteenth century, most of them as college teachers or government employees.

The first national meeting of American chemists was held in 1874 at Northumberland, Pennsylvania, to celebrate the centennial of Priestley's discovery of oxygen. Seventy-seven chemists from sixteen states attended. These attendees conceived the idea of forming the American Chemical Society (ACS), which became a reality in 1876 with 133 charter members. By 1900 there were about 1,500 ACS members; in 1930 about 18,000; in 1945 about 43,000; in 1960 about 92,000; and today there are about 110,000 ACS members. Since the first national meeting in 1890, the ACS generally has had at least two national meetings every year. At the 1904 meeting in Philadelphia, attendance had grown to the point where separate sections met for specialized parts of the program, which subsequently evolved into divisional status. These divisions, which now number

twenty-seven, mirror pretty much the various disciplines of chemistry which have evolved and in which chemists work professionally.

One of these divisions is the Division of Chemical Literature which was formed in 1948. As illustrated above, since the emergence of chemistry as a science, many chemists have been intimately involved in the various aspects of chemical documentation, such as linguistics, nomenclature, and symbolism; indexing, abstracting, and information systems; classification systems; methods of correlating chemical structures with synthesis, properties, uses, and applications of chemicals; and others. Searching, reading, digesting, and evaluating the chemical literature have been traditional activities of chemists, and they have always regarded the chemical library as an essential research facility. But as chemistry matured into a science, the size, growth, and complexity of the chemical literature reached the point where it was necessary for a new discipline of chemistry, chemical documentation, to emerge. The chemists who worked in this new discipline became known as literature chemists. Educationally, literature chemists are B.S., M.S., or Ph.D. chemists (organic, physical, analytical, polymer, etc.) or chemical engineers; they are literature chemists by interest, adoption, and for the most part, self-education. Whereas most chemists and chemical engineers are concerned with the chemical literature only occasionally in connection with laboratory and plant assignments and avoidance of technical obsolescence, literature chemists are concerned with one or more areas of chemical documentation on a full-time basis.

With the advent of chemical documentation as a discipline of chemistry, and literature chemists as full time scientists committed to various aspects of the discipline, a need arose for a forum where literature chemists could meet to exchange views via technical meetings and papers. This forum for discourse became a reality with the formation of the ACS Division of Chemical Literature in 1948, and soon thereafter an important body of technical papers were presented at the ACS national meetings by a developing group of responsible authorities.

Only a few of these technical papers, however, could find a medium for publication. A few were published in the *Journal of Chemical Education* and in *Chemical and Engineering News*, and some were published as chapters in books, such as *Punched Cards* by Perry and Casey (Reinhold, New York, 1951) and in the *ACS Advances in Chemistry* series. The bulk of the papers remained unpublished, and it became increasingly difficult to know the evolving literature of chemical documentation even if one attended every meeting of the Division of Chemical Literature.

Consequently, the Division of Chemical Literature appointed a Journal Study Committee in 1957. A careful evaluation of the papers presented before the division indicated that most merited publication. The committee surveyed potential media, but were unable to find one that was suitable, and finally recommended that a new journal be established. A Publication Committee, appointed to act on this recommendation, consulted with ACS staff and officers, who were sympathetic with the objective and guided the committee toward presenting its case before the ACS Board of Directors. The Board approved the publication of the

Journal of Chemical Documentation and, with advice of the ACS Council Publications Committee, appointed the editor in 1960.

Initially, when the journal was introduced in 1961, the plan was to have two issues per year. The flow of excellent papers was such, however, as to warrant expansion to three issues in the first year and four issues in subsequent years.

Administration Office

The ACS, 1155 Sixteenth Street, N.W., Washington, D. C. 20036, administers all business matters that pertain to the *Journal*, including subscription pricing, subscription fulfillment, printing operations, page charges, and reprint orders. The *Journal of Chemical Documentation*, among others, is under the administration of the Director of the ACS Books and Journals Division.

Editorial Office and Policy

Dr. Herman Skolnik, Hercules Incorporated, Hercules Research Center, Wilmington, Delaware 19899, has been the editor since the beginning of this *Journal*. The *Journal* invites new (not previously published) and original contributions which, if accepted, are not to be published elsewhere.

Each manuscript received is first examined by the editor to establish its potential suitability for the *Journal*. If deemed suitable, the manuscript is sent to two or three reviewers whom the editor considers expert and knowledgeable in the subject area of the paper. The editor and reviewers examine each paper primarily for its value as a contribution to the art and science of chemical documentation. Each paper is also examined carefully for its technical and interpretative soundness, for its being a new contribution, and for its clarity of presentation.

The editor is assisted in policy matters by an advisory board consisting of ten members, three of whom are newly selected every year by the editor for a term of 3 years. A continuing cooperative relationship is maintained between the *Journal* and the Division of Chemical Literature by appointing each newly elected chairman-elect of the division for a 3-year term and the chairman of the division's Program Committee for a term concomitant with the chairmanship to the advisory board. The division's bylaws specify the editor as a member of the Executive Committee.

All members of the advisory board have not been members of the Division of Chemical Literature. Because chemical documentation is relevant to the needs of all practicing chemists and chemical engineers to some degree, the editor has involved practitioners as members of the advisory board.

Although the publication need of the Division of Chemical Literature was the primary force in establishing this *Journal*, and its papers dominated the early issues, this situation is no longer true. For example, in 1972 only one-fifth of the

papers published in the *Journal* was based on papers presented at a division meeting; one-fourth was based on papers presented at other meetings; and the remainder, the majority, was not associated with any meeting. One-fifth of the papers in 1972 came from outside of the United States, viz., Canada, Denmark, England, France, Germany, and Japan.

Scope and Content

The *Journal* is primarily research and development oriented in all phases of information science that are relevant to the using, handling, and producing of scientific literature. The emphasis on accepting papers is that they be new and original contributions to the art and science.

Subject fields covered in past issues include: nomenclature, technical writing, and linguistics; notation systems and their applications; information storage and retrieval systems; computerized information and data systems, data correlations, and other applications of computers; indexing and classification systems; information sources and services; microfilm, photocopy, and other communication media and equipment for the storage and transfer of information; and, in general, those aspects of literature, information, and library sciences that contribute to the solutions of problems associated with the scientific literature.

HERMAN SKOLNIK

JOURNAL OF DOCUMENTATION

As its subtitle indicated, the *Journal of Documentation* at its inception was "devoted to the recording, organization and dissemination of specialized knowledge." That is still broadly its aim, though the jargon has now changed somewhat. It was conceived by Theodore Besterman in the war years of shortages and technical difficulties and sponsored both as an act of faith and a gamble by Aslib. From the first issue, which appeared in June 1945, Besterman edited and carried the whole load of a quarterly periodical which aimed at setting high standards of production and content, "not limited by national boundaries or by the artificial segregation of the sciences and humanities." The conditions at the time were such that it required the aid of the Department of Scientific and Industrial Research and the British Council to get permission from the Paper Controller to launch a new periodical. Besterman resigned in 1947 when he left the United Kingdom to take up a position as Counsellor for Bibliography at UNESCO in Paris.

In a sense the *Journal* came into being at the beginning of a new era in traditional

librarianship and so the somewhat foreign concept of documentation, for which Bradford had so devotedly campaigned, thus became formally acknowledged. It was the first important postwar periodical in the continental tradition of documentation. Its scope was rather wider than that of special libraries (which goes back to 1910) though that was in some ways its American precursor. The coverage is essentially bibliography, classification, abstracting and indexing, photo-mechanical methods of reproduction, and the control of the literature through learned societies, information bureaus and libraries. As a result of its initial success it probably set the pattern for a number of other national periodicals in the field, notably *Nachrichten für Dokumentation* and *American Documentation*, which both appeared in 1950. (Eighteen years later the publisher had second thoughts and the latter periodical became the *Journal of the American Society for Information Science*.)

Part of the *Journal's* strength has been that editorially it has always been an independent periodical not tied to Aslib policy, though of course reflecting the fields of Aslib's interests. With the departure of the original editor it became necessary to improvise a more formal organization. The director of Aslib, Miss E. M. R. Ditmas, became managing editor with an editorial board consisting of F. C. Francis (British Museum), D. J. Urquhart (Science Museum Library), and G. Woledge (British Library of Political and Economic Science, L.S.E.), conceived broadly as representing the humanities, natural sciences, and the social sciences respectively. Soon Woledge began to act as chairman of the board, a position which he held until 1965. In this capacity he contributed greatly to building up and maintaining high standards in the *Journal*. The editorial board was increased in size and scope in the years that followed. It now (1972) consists of eleven members, covering a wide range of competence and including the editors of the *Journal of Librarianship* and *Program*. The editorial management has not suffered from too many changes.

1945-1947	Theodore Besterman
1947-1962	E. M. R. Ditmas
1962-1965	Barbara R. F. Kyle
1965-	Herbert Coblans

From almost the first number its main features have been consistently maintained—articles, letters, reviews of books, and a quarterly documentation survey. In accepting articles for publication the emphasis has been on final accounts of completed research in all aspects of information handling. Reviews by preference are critical and extensive rather than just informative and should aim, as far as possible, to be in themselves contributions to the subject. The documentation survey provided abstracts of papers in the current periodicals in the field and was prepared by members of the Aslib staff. However from 1969, when Aslib became responsible for producing abstracts of papers on documentation for the new joint venture with the Library Association, *Library and Information Science*

Abstracts, the survey was discontinued. In its place there is now the section Progress in Documentation, in which a specialist analyzes in depth the actual situation in a specific field—a sort of state-of-the-art review.

The *Journal of Documentation* can look back on a continuous and stable history of more than a quarter of a century. In this period it has mirrored current fashions with a certain lag as compared with the United States. It has always concentrated on the aspects of librarianship directly concerned with the contents and use of books, but there has been a marked shift from traditional bibliography to information retrieval, especially by computer-aided methods, and above all the problems of index languages. However there are a few areas which it has mastered, for example Bradford's Law of Scattering, classification (particularly the work of the Classification Research Group), and certain aspects of bibliometrics.

BIBLIOGRAPHY

Besterman, Th., "Introductory Note," *J. Doc.* 1, 1 (1945).

Le Maistre, C., "The Editor Resigns," *Ibid.*, 3, 1-2 (1947).

HERBERT COBLANS

JOURNAL OF EDUCATION FOR LIBRARIANSHIP

The Journal of Education for Librarianship is the official publication of the Association of American Library Schools (AALS) (see Vol. 2, pp. 1-10). It began publication as a quarterly journal with the Summer 1960 issue, replacing three association publications: the *Reports of the Meeting of the Association of American Library Schools*, the *AALS Newsletter*, and the *AALS Directory*.

The *Reports of the Meeting* had existed since 1914 as an annual compilation. Its title varied in the early years and there were occasional gaps in publication, but over the years it was the most detailed record available of the association's activities. The *Directory* of members first appeared in 1944, with later editions in 1949, 1953, and 1958. The *Newsletter*, a semiannual, began in 1948 and its establishment focused attention on the desirability of a journal devoted exclusively to education for librarianship.

It was the constitutional reorganization of the association in 1947 which saw the establishment of a standing committee on publications. One of its first acts was the creation of the *Newsletter* in June 1948 under the editorship of Donald E. Strout. The Princeton Conference on Library Education, in December 1948, recommended further extension of the *Newsletter*, an idea which was examined and explored through the 1950s. In 1955 the association proposed a quarterly

journal to be sponsored by itself and the Library Education Division of the American Library Association (ALA).

Discussions between AALS and the Library Education Division of ALA did not come to fruition, and AALS next approached Beta Phi Mu, the library science honor fraternity (Vol. 2, pp. 347-350). The key figure in the negotiations which followed between AALS and Beta Phi Mu was Harold Lancour. Lancour was one of the founders and executive secretary of Beta Phi Mu. In his presidential address to AALS in 1956, Lancour proposed "that we push for inauguration of a quarterly journal of library education to ensure the regular publication of research and discussion of all aspects of library education" (1).

The original request from AALS to Beta Phi Mu was for a jointly sponsored journal to which Beta Phi Mu would contribute a payment of \$1,000. In response, Beta Phi Mu offered a \$1,000 interest free loan for an indefinite period so that AALS could found its own journal. At first the association took no positive action on this offer. Beta Phi Mu decided then to start its own journal in which it would offer space to both AALS and the Library Education Division of ALA. This stimulated AALS to action and after canvassing its members, both individual and institutional, it voted in favor of discontinuing its existing three publications, named above, and replacing them with a quarterly journal.

Members of the subcommittee responsible for establishing the *Journal of Education for Librarianship* were E. J. Humeston, Jr. (Drexel), Frederic J. Mosher (Berkeley), Richard H. Shoemaker (Rutgers), Harold Lancour (Illinois), Maurice F. Tauber (Columbia), Helen M. Focke (Western Reserve), David K. Berninghausen (Minnesota), and Howard Winger (Chicago). When the *Journal* first appeared in Summer 1960 it was edited by an editorial committee of Thelma Eaton (Illinois), Harold Lancour, and Howard Winger. With Vol. 2, no. 1, Harold Lancour became editor with a publication board to assist him. William A. Katz (Kentucky, later Albany) succeeded Lancour with the Winter 1964 issue (Vol. 4, no. 3). In 1966 the Publications Committee became the Editorial Board, the title it holds today.

Membership of the Editorial Board is now a 4-year appointment, made by the president of AALS; the appointment is renewable. The chairman of the Editorial Board is the editor who now serves for a 5-year period, which again may be renewed. This appointment is also made by the president of the association. Norman Horrocks (Dalhousie) was appointed editor for 1972-1977, beginning with Vol. 12, no. 1. Janet Phillips has been with the *Journal* as editorial assistant from the first issue, becoming assistant editor with Vol. 2, no. 1, a position she holds in conjunction with being the association's executive secretary.

The *Directory* was incorporated in the *Journal*, appearing annually as one of the four quarterly issues from 1960 to 1969. In 1971 the *Directory* appeared as a special issue of the *Journal*, thus making the four quarterly issues available for editorial material. The 1970 decision of the association to admit into membership associate institutions combined with an increased number of full members (i.e., accredited programs) added extra complexity to the production of the

Directory. This led to delays in its appearance and a consequent reevaluation of its aims and objectives. As a result, after the 1972 edition the information contained in the *Directory* will be modified to ensure that publication occurs in January of each year.

Vol. 1, no. 1 of the *Journal* declared its purposes in the following terms:

- What do they teach in library schools?
- How do they teach it?
- Who are the teachers?
- Who are the students?
- What do they know and do about research?
- What does the AALS think, and do, and say?
- What are related problems of education in other professions?
- What are the problems of education for librarianship abroad?
- How do the changing needs of libraries affect the education of librarians?

These are the questions. *The Journal of Education for Librarianship* will seek to present answers in the following ways:

- By signed articles exploring different aspects of library education.
- By a directory of the faculties in accredited library schools in each Winter issue.
- By official reports of activities of the AALS.
- By statistics of library school faculties and students.
- By publishing the annual report of the Committee on Accreditation of the American Library Association.
- By surveys of writings about education for librarianship.
- By reviews of dissertations and other research projects connected with library schools.
- By a quarterly chronicle featuring short items, summaries of workshops and institutes, and a calendar of events.

Although *The Journal of Education for Librarianship* is the official publication of the AALS, the editors will consider for publication articles from any source that falls within the scope of interest of the journal. They invite contributions from individuals. They will also consider substantial reports from other associations concerned with education for librarianship. The report of the Committee on Accreditation is an example of the material for which we offer our journal. Associations and individuals outside the United States and Canada are also invited to submit material for consideration.

A final function of *The Journal of Education for Librarianship* hopes to perform is to provide a forum for people interested in education for librarianship (2).

These declared objectives have been modified over the years. After 1963 the summarized records of annual meetings ceased to appear in the *Journal* and the treasurer's report last appeared in 1965. Donald Davis observes,

In short, the *Journal* has been largely an independent enterprise since the mid nineteen sixties, responsible only through the editor to the Executive Board. It has continued to appear each quarter regardless of the status of the Association's leadership and program of activity. Where meetings held the AALS together prior to 1960, the *Journal* filled the need in the nineteen sixties (3).

At its January 1973 meeting the Editorial Board recommended that the treasurer's report be reintroduced and that a factual summary of the annual meeting should be included in future issues of the *Journal*.

An evaluation of the first 10 years of the *Journal* was undertaken by Donald J. Lehnus in an analytical study which was published in the Fall 1971 issue (4).

The idea of a periodical which is the only one dedicated to a specialized field brings forth several questions about the nature of its contents and the sources on which the authors base their material. Is *JEL* a self-citing publication? Are the authors citing books or periodicals? Who are the authors being cited by the contributors of *JEL* articles? Is there a core literature that is quite often cited? Each of these questions brings to mind others, until one is confronted with a whole series of questions about the make-up of the periodical. Is there a small group of authors who contribute a large percentage of the articles? How old is the cited material? Whence come the cited articles? . . .

It is the opinion of this author that if the present trend in *JEL* articles is continued the journal will not be a major factor in fulfilling such a need for serious studies on library education. It is not the journal which is to blame, but rather we in the field who are doing the necessary research and using *JEL* to transmit it to our peers in the field of library education.

Column editors were introduced in 1966 for certain sections (see issues of the *Journal* for details). In 1972 the *Journal* became a refereed journal with the editor obtaining at least two readers' reports before accepting an article for publication. Members of the Editorial Board and column editors serve as referees for much of this advance reading, but other experts may be consulted by the editor as he deems necessary. The news sections on Association Activities and Calendar of Events are maintained by the assistant editor who is also responsible for seeing the individual issues through the press.

In 1959 the circulation of the *Newsletter* stood at around 400. The *Journal* circulation has grown steadily and by 1973 stood at 1,936 of which 714 are member copies and 1,222 are subscriptions.

REFERENCES

1. Harold Lancour. "Presidential Address," *Association of American Library Schools, Report of Meeting*, February 1956, pp. 3-8.
2. *Journal of Education for Librarianship*, 1, 3-4 (Summer 1960).
3. Donald Davis, "The Association of American Library Schools: An Analytical History." Unpublished Ph.D. Dissertation, University of Illinois, 1972, p. 139.
4. Donald J. Lehnus, "JEL, 1960-1970: An Analytical Study," *J. Educ. Lib.*, 12, 71-83 (Fall 1971).

NORMAN HORROCKS

JOURNAL OF LIBRARY HISTORY, PHILOSOPHY, AND COMPARATIVE LIBRARIANSHIP

The idea for *Journal of Library History, Philosophy, and Comparative Librarianship* (JLH) came from a recommendation of participants in the second Library History Seminar, held at Florida State University in 1965. Louis Shores was dean of the Florida State University School of Library Science at the time and he became the *Journal's* first editor. In the initial issue, January 1966, Dr. Shores verbalized the aims of all those involved with the nascent publication:

. . . provide a distinguished medium for communicating to the profession and to scholarship at large one of the neglected aspects of our profession and one of the minimized divisions of our discipline of the Library Art.

At the time of its inception, there was no journal published which dealt primarily with the history of librarianship.

Six hundred and fifty preliminary announcements of the new publication were mailed to various libraries and individuals; 646 charter subscriptions resulted. Some included notes such as, "It's about time." With this mandate, the Editorial Board announced its *raison d'être* in the first issue:

It is the aim of the editors . . . to provide . . . a continuing stream of readable, authoritative material in the subject areas of library history, philosophy, and comparative librarianship. The *Journal* will also strive to be an information medium on the state of the library history art, will encourage discussion on pertinent issues, and will review books which deal with all facets of library history.

The original issue contained six articles and five departments: Epitome (the editor's column), Of Librarians and Historians, Vignettes of Library History, Libraries Abroad, and JLH Bookshelf. With the exception of Epitome, these departments remain an integral part of the *Journal's* contents. Two departments have been added: Oral History and Sources.

The *Journal* is published quarterly (January, April, July, and October) by the Florida State University School of Library Science. Editorial Board members represent all facets of librarianship and many parts of the United States, from California to New York to Florida. In addition, there has been since the beginning an international advisory board representing twelve to twenty-two countries throughout the world.

Volume III (January 1968) carried the name of a new editor on the masthead, Dr. Harold Goldstein. Dr. Shores, who had become dean emeritus and editor emeritus, continued for several years to write his column and to watch the publication he guided into existence grow and expand under the direction of the board and the new editor.

In spite of being "another journal" to some, support remained at a satisfactory level. The Editorial Board, deciding to expand the horizons of the *Journal*, spearheaded two more Library History Seminars (3rd and 4th, 1968 and 1971) as a practical means to improve the quality of library historical study—through instruction, through critical repartee with a knowledgeable and interested audience, through demonstration before the next generation of library historians, library school students.

The board continued to seek new avenues of service to the profession. In January 1970 the first of a series of state library history bibliographies began to appear within the regular issues of the *Journal*. Each bibliography includes published materials about libraries in a single state—public, state, elementary and secondary school, special, college, university, and private libraries, as well as works on library systems, library developments, and state laws.

Through individual issues, the library history seminars, and the state bibliography series, *The Journal of Library History, Philosophy, and Comparative Librarianship* attempts to focus interest in historical studies, maintaining steadfastly that such material can be both scholarly and readable.

HAROLD GOLDSTEIN

JUDAICA LIBRARIES AND LITERATURE

Jewish literature reflects the creativity of the Jewish spirit. It has been written over half of the recorded time of human history in nearly all the lands of the globe, covering all aspects of intellectual and artistic activity. The bulk of this vast output is in the Hebrew language, though the latter's use as a popular medium for daily communication had been discontinued at about the beginning of the third century C.E. Hebrew was revived as a spoken national language at the beginning of the current century. It is used now in Israel by some 3 million people.

Since earliest times, Jews who settled outside the Land of Israel habitually adopted the language of the host country for their personal and occupational needs. Hebrew remained in use as a sacred tongue in worship and study, thousands of works being produced in it, including commentaries on Scriptures, legal discourses, chronicles, philosophical treatises, liturgical compositions, belles lettres, and other types of materials which make up a national literature. Regardless of the countries in which they lived, the cultural requirements of Jews in a non-Jewish milieu called for translations of Hebrew texts. Thus was the Bible translated into Greek around the beginning of the third century B.C.E. for Alexandrian Jews. Allegedly seventy-two scholars participated in the project of translation, hence its name *Septuagint*. Even in the Land of Israel, Aramaic, a Semitic language, displaced Hebrew as the

daily language of the masses. Aramaic translations of the Bible, known as *Targumim*, became popular as early as the first century C.E.

The rise of Arabic culture in the early Middle Ages had a decisive impact upon Jewish literary activity, especially in North Africa and Spain where some of the foremost Judaic works, e.g., Hebrew linguistics, Bible and *Talmud* commentaries, and studies in philosophy, were authored in Arabic.

In special groups are works in dialects created by Jews through blendings of a particular tongue, e.g., Arabic, Persian, German, etc., with elements from Hebrew, with the Hebrew alphabet being used in the writing of these media, thus adding to their distinctive character. Such works were produced in Judeo-Arabic, Judeo-Persian, Judeo-Tartar, Judeo-Spanish known as *Ladino*, Judeo-German, and other less popular dialects in lands where Jewish communities flourished for a time. Judeo-German developed into a second national Jewish language, Yiddish, which was the daily medium of Jewry in Central and Eastern Europe for several centuries up to the Nazi holocaust. A magnificent literature is extant in Yiddish in all branches of endeavor: belles lettres, criticism, sciences, and devotional works.

Judaic studies by means of modern scientific methodology was one of the by-products of the struggle of Jews in Western Europe for their emancipation since the beginning of the nineteenth century. This *Wissenschaft des Judenthums* covers many disciplines, e.g., Jewish history, literary criticism, bibliography, Bible, law, and related areas, important works having been produced in many European languages, especially German and English, as well as in Hebrew and Yiddish. This type of literature in European languages is usually classed by librarians under the term *Judaica*, while works in any language using the Hebrew alphabet are listed as *Hebraica*. However, the term *Judaica* may sometimes encompass all literary works pertaining to Judaism.

We thus perceive the broad scope of Jewish literature—multilingual, though based upon Hebrew origins, covering all aspects of a national culture, growing in volume and variety of themes with the passage of time.

As the title of this article indicates, two objectives will be attempted on the following pages: (1) a description of existing *Judaica* libraries and major collections of *Judaica* library materials (*Judaica* in the broader sense) in Israel, Western Hemisphere and Europe, and (2) a description of the major categories of Jewish literature.

Libraries in Israel

(a) The Jewish National and University Library of the Hebrew University in Jerusalem has a collection of approximately 2 million titles, 25% of which are *Hebraica* and *Judaica*. Its collection of *Hebraica* manuscripts numbers over 10,000 items. As an archive library it systematically collects everything pertaining to Jews and Judaism, everything printed in the Hebrew alphabet, and everything printed in

Israel (Palestine up to May 14, 1948). The library receives two copies of every Israeli publication under the Legal Deposit Law of 1953. Its bibliographical quarterly review in Hebrew, *Kirjat Sepher*, published regularly since 1924, lists all publications in Israel (formerly Palestine) as well as *Hebraica* and *Judaica* appearing elsewhere.

Of special interest among this library's Jewish materials are the Schocken collection of Hebrew incunabula, the Friedenwald collection on Jews in medicine, the Schwadron collection of Jewish portraits and Jewish autographs, the Jacob Michael collection of Jewish music, the Yahuda collection of *Judaica* and Orientalia, and the private archives of Ahad Haam, Martin Buber, Joseph Klausner, Stefan Zweig, and Samuel J. Agnon.

The library's Institute of Microfilms of Hebrew Manuscripts endeavors to assemble photocopies of all *Hebraica* manuscripts. Of the estimated 60,000 manuscripts extant, and the one quarter of a million *Genizah* fragments (documents of sundry sizes retrieved from an old synagogue attic in Cairo, which include valuable resources of early medieval Jewish history and Rabbis), about half of the former and 50,000 of the latter have been copied and cataloged as of the academic year 1972/1973. Together with the viewing equipment and bibliographical tools, these materials are available to the student in a special study hall.

In an effort to assemble information for a comprehensive listing of all printed *Hebraica*, this library sponsors the Institute of Hebrew Bibliography jointly with the Bialik Institute in Jerusalem (a Hebrew publishing house), and the Ministry of Education and Culture of Israel. According to estimates by competent bibliographers, approximately 100,000 titles were produced in Hebrew since the advent of print, and 25,000 more in other languages using Hebrew alphabet, e.g., Yiddish, Ladino, Judeo-Arabic, Judeo-Persian, etc.

(b) Mosad Harav Kook in Jerusalem, a research center in Rabbis and a publishing house, numbers in its library over 75,000 volumes, 80% of which are in Hebrew, and about 3,000 Hebrew manuscripts. Among its special collections are archives of some of the leaders of religious Zionism (*Mizrachi*), the Jerusalem Library—a large collection of titles printed or published in Jerusalem—research materials of the Institute of Maimonides Studies, the Institute of Hasidic Studies, and the Institute on the Holocaust.

(c) Three other research centers located in Jerusalem have significant libraries of *Hebraica* and *Judaica*:

The Schocken Library of the Jewish Theological Seminary of America holds over 60,000 volumes, including incunabula, rare prints, and artistic liturgical works from the Middle Ages, 200 manuscripts, and over 20,000 photostats.

Yad Harav Herzog library has a collection of over 40,000 volumes and 10,000 microfilms of Talmud texts and commentaries.

The library of Makhon Ben Zevi includes some 7,000 titles, 2,100 manuscripts, and over 30,000 fragments on the histories and cultures of Jewish communities in the Near East.

(d) The collection of Rabbis at Hechal Shelomo in Jerusalem holds many valuable manuscripts and thousands of books saved from the Holocaust and assigned to it by the Jewish Cultural Reconstruction.

(e) The library of Yad Vashem, Israel's National Monument to the Six Million Jewish Victims of Nazism, specializes in the history of the period spanning the two world wars. Its collection includes over 40,000 volumes and 1,000 periodicals. Yad Vashem's research and documentation departments have major collections of relevant archival materials, e.g., trial proceedings against war criminals, records and protocols of German governmental agencies, records of extinct Jewish communities, personal testimonies of eye witnesses, etc. Yad Vashem Museum houses millions of documents in nearly all European languages.

(f) Among the close to half a million volumes of the municipal library of Tel Aviv are many special Judaic collections, e.g., Hebrew Journalism, Haskalah Literature, the Levinski collection of Jewish folklore, Faitlovitch archives (concerning Falashas in Abyssinia), the private libraries of Ahad Haam, M. J. Berdichevsky, S. Horodezky, and a group of works in Ethiopic and Amhari.

(g) Maimonides Library in Tel Aviv, which specializes in Judaic materials only, numbers over 60,000 volumes and 300 manuscripts. It is known for its collection of portraits and signatures.

(h) Two private collections are of special interest:

Israel Mehlman in Jerusalem collects first editions, rare books, materials pertaining to historic controversies in Judaism, and books with unusual bibliographic features.

The collection of Gershom Scholem in Jerusalem comprises over 10,000 items in the fields of mysticism, Kabbalah, and Hasidism—books, brochures, leaflets, letters, etc.

Libraries and collections of Judaic materials in the Western Hemisphere may be grouped into five major types.

1. Libraries of institutions of higher Jewish learning.
2. Collections at universities and colleges.
3. Special collections.
4. Private collections.
5. Libraries of community institutions and synagogues.

1. LIBRARIES OF INSTITUTIONS OF HIGHER JEWISH LEARNING

(a) The library of the Jewish Theological Seminary of America in New York City comprises over 200,000 volumes, 10,000 manuscripts, 1,500 Genizah fragments and 150 incunabula in nearly all the languages that Jews ever used—Hebrew, Aramaic, Yiddish, Arabic, Ladino, Persian, Provencal, Turkish, Tataric, Maharati, and the European languages. Among its holdings are the library and private correspondence of the renowned bibliographer Moritz Steinschneider (1816–1907), the library and notebooks of the Seminary's second president Solomon Schechter

(1847–1915), the Elkan Adler collection of rare Hebrew manuscripts, described in the *Catalog of Hebrew Manuscripts in the Collection of Elkan Nathan Adler*, Cambridge University Press, 1921, the Solomon collection of Anglo-Jewry materials, 620 Latin dissertations on Bible and Jewish themes, files of the Inquisition, documents from the French Revolution, and various other treasures. Its Rabbis division includes over 3,300 volumes of codes and over 1,800 volumes of responsa. Among its liturgical materials are 1,300 *Haggadahs* for Passover (story of liberation from Egyptian bondage narrated at festive family gatherings on the night of the festival), some of which are renowned as objects of art. Its Yiddish collection, including some of the rarest extant materials, includes 90% of all the titles published in the sixteenth to eighteenth centuries. The Louis Ginzberg Microfilm Memorial Library assembles copies of *Hebraica* manuscripts available in other collections. Though severely damaged by a disastrous fire in 1966, this library has since been restored to full effectiveness.

The University of Judaism, West Coast branch of the Jewish Theological Seminary of America, operates its own library of some 70,000 volumes and 25,000 pamphlets. Close to 50% of these materials are *Hebraica*.

(b) The Klau Library of the Hebrew Union College, Jewish Institute of Religion in Cincinnati, Ohio, includes 230,000 volumes, 500 manuscripts and 140 incunabula. Among its special holdings are fifty-nine ancient manuscripts of the Jewish community in Kai-Fung-Foo, China, in Hebrew, Judeo-Persian, and Chinese, an extensive collection of Samaritan manuscripts, the Spinoza collection, the Birnbaum collection of synagogue music with an index of 10,000 melodies composed in Europe in 1700–1910, and the library of the historian-bibliographer Aron Freimann (1871–1948). This library has a printed card catalog: *Dictionary Catalog of the Klau Library*, Hall, Boston, 1964, 32 vols.

The Emil Hirsch and Gerson Levi Library of the Hebrew Union College, Jewish Institute of Religion in New York City has over 110,000 volumes, 200 manuscripts, and 2,000 pamphlets. It includes first rate collections of Modern Hebrew Literature and Israeli literature.

The Frances Henry Library of the Hebrew Union College branch in Los Angeles, as well as the Olin Sang Library of this school's branch in Jerusalem, hold substantial collections of *Hebraica* and *Judaica*.

(c) The American Jewish Archives, operating under the auspices of the Hebrew Union College in Cincinnati, in addition to its holdings of original documents, registers, and correspondences, assembled many photocopied materials from public and private collections in America and abroad which bear upon the subject of American Jewish history. A complete listing of these materials is available in the *Manuscript Catalog of American Jewish Archives*, Hall, Boston, 1971, 4 volumes.

(d) The Mendel Gottesman Library of Yeshiva University in New York City holds over 170,000 volumes, including some 10,000 received from the Jewish Cultural Reconstruction, 600 manuscripts, and forty-one incunabula. It is strong in Rabbis, liturgy, homiletics, Israeli materials, Yiddish materials, and his-

toriography. Of special interest in the last genre are forty *Pinkasim* ("registers and chronicles of Jewish communities in many lands"). This library sponsors the Eli Michael Microfilm Center of Genizah studies.

(e) The library of Dropsie University in Philadelphia, Pennsylvania reflects that school's specialization in advanced Hebrew and cognate learning. Its collection of some 100,000 volumes and 300 manuscripts includes titles in Arabic, Coptic, Ethiopic, Himyaritic, Persian, Sabeian, Sanskrit, and Turkish. It also holds a collection of cuneiform tablets and Assyrian seals. Nearly all the materials described in B. Halper's *Descriptive Catalog of Genizah Fragments in Philadelphia*, Dropsie College, Philadelphia, 1924, are now in this library.

(f) Among the over 40,000 volumes of *Hebraica* and *Judaica* in the library of the Hebrew Theological College in Skokie, Illinois, is a special collection of Yiddish publications.

(g) Hebrew College in Boston, Massachusetts, holds 60,000 volumes, 50% of which are *Hebraica*, including sixty manuscripts in Kabbalah and Hasidism.

(h) The library of Spertus College of Jewish Studies in Chicago, Illinois has over 55,000 volumes, including the Jacob Mann Collection of rare books and first editions from the sixteenth to eighteenth centuries. About 65% of its holdings are *Hebraica*.

(i) Telshe Rabbinical College in Cleveland, Ohio, Lubavitcher Yeshiva in Brooklyn, New York, Ner Israel Yeshiva in Baltimore, Maryland, and other orthodox Rabbinical Yeshivot have large collections of Rabbinics for the use of students and faculty. Also teachers' colleges for Jewish schools, e.g., Herzliah-Jewish Teachers Seminary in New York City and Gratz College in Philadelphia, Pennsylvania, hold sizable collections of *Hebraica* and *Judaica*.

2. COLLECTIONS AT UNIVERSITIES AND COLLEGES

(a) The Jewish Collection at Harvard University, Cambridge, Massachusetts, comprising some 50,000 *Hebraica* and a like number of *Judaica*, is internationally known as one of the major research centers in Jewish studies. Among its holdings are the Lee M. Friedman collection of materials in Jewish history in Western Europe and the United States, Israeli governmental materials, collections of belles lettres in Hebrew and Yiddish, and contemporary periodica. This collection is described in the *Harvard University Library Catalog of Hebrew Books*, Harvard Univ. Library, Cambridge, Massachusetts, 1968, 6 vols. The Lee M. Friedman Bibliographer in *Judaica* at Harvard is the only endowed post at an American university devoted to librarianship in *Judaica*.

(b) The library of Brandeis University in Waltham, Massachusetts, includes 42,000 volumes of *Hebraica*, 35,000 volumes of *Judaica*, and forty manuscripts. It specializes in materials about Jewish resistance to Nazism in World War II, and in archival materials on and by Jewish personalities.

(c) The Theodore E. Cummings collection at the University of California in Los Angeles comprises 50,000 *Hebraica*, 30,000 *Judaica*, and sixty Hebrew manu-

scripts. These materials form part of the University Research Library, while smaller collections of Judaica are located in some of the special libraries, e.g., works on Jewish law in the law library and Jewish music scores in the music library. The Spinoza collection of 1,500 titles is housed in the Special Collections Department.

(d) The Jewish collection at Columbia University in New York City includes over 25,000 volumes, 1,000 Hebrew manuscripts, and twenty-eight incunabula.

(e) The library of Yale University in New Haven, Connecticut, holds about 20,000 Hebrew volumes, 150 Hebrew manuscripts, and thirty-one incunabula.

(f) The collection of the Jewish Culture Foundation at New York University in New York City includes 25,000 *Hebraica* and 150 Hebrew manuscripts.

(g) Jewish collections of note exist at some of the universities and colleges which established programs of Jewish studies in recent years, e.g., Brown University at Providence, Rhode Island; Cornell University in Ithaca, New York; Denver University in Denver, Colorado; Ohio State University in Columbus, Ohio; University of Texas in Austin, Texas; York University in Downsview, Ontario; and many others.

3. SPECIAL COLLECTIONS

(a) Foremost in this group is the Hebraic section of the Library of Congress in Washington, D.C. with some 95,000 titles of *Hebraica* and 150 Hebrew manuscripts. Scores of thousands of works in all areas of Jewish learning and belles lettres in non-Hebrew alphabets are dispersed among the *Semitica* collections. The *Hebraica* section includes a collection of Bibles from the sixteenth century to the present, many *Talmud* editions, American *Hebraica*, rare liturgical titles, and Yiddish materials produced in Soviet Russia.

The section compiles records for the Union Catalog of Hebrew books, forty-two libraries, including Hebrew Union College, regularly supplying information about their holdings. Over 325,000 cards are currently in this catalog. The section also maintains an International Union Catalog of Microfilms of Hebrew materials with over 6,000 cards in its present records.

(b) The Jewish Division of the New York Public Library numbers well over 120,000 volumes, including an unsurpassed collection of newspapers and periodicals, most sixteenth century Hebrew prints from Venice, and collections concerning Jewish sects. Its printed card catalog is available: *Dictionary Catalog of the Jewish Collection of the New York Public Library Reference Department*, Hall, Boston, 1960, 14 vols.

(c) The library of YIVO Institute for Jewish Research in New York City represents a merger of the American with the prewar European collection of Vilna, Poland. Among its 300,000 items are many rare Hebrew and Yiddish titles, materials on Jewish theater, materials reflecting the fate of Soviet Jewish literary creativity, newspapers, and periodicals. Its special interest, both in terms of the library and the archival collections, is in Jewish history, sociology, and demography of the last century.

(d) The library of the American Jewish Historical Society in Waltham, Massachusetts specializes in Jewish history on the American continent. It holds over 42,000 books and pamphlets, 2,000 periodicals, thousands of bulletins and reports of national and local Jewish organizations, synagogues and community centers, newspaper issues with reference to Jews and Jewish problems, art items, music scores for the Jewish theater, photos, posters, paintings, etc. Its collection of manuscripts comprises about 2 million items, source material which circumscribes the whole gamut of American Jewish history.

(e) The library of the Leo Baeck Institute in New York City includes 40,000 volumes and 800 pre-World War II periodicals dealing with the history and literatures of German speaking Jewries in Central Europe—Germany, Austria, and Switzerland. Many documents of these communities, dating from the eighteenth to twentieth centuries, are stored in its archives.

(f) The Zionist Archives and Library in New York City hold some 45,000 volumes, pamphlet materials, periodicals, and newspapers relating to Zionism, Palestine, Israel, and other phases of national Jewish endeavor.

(g) The Blaustein Library of the American Jewish Committee in New York City has large collections of books and vertical file materials dealing with intergroup problems, e.g., Jewish rights, prejudice and discrimination, civil liberties, church-state issues, interreligious affairs, files of materials by anti-Semitic groups, both domestic and foreign.

(h) The library of the Board of Jewish Education in New York City specializes in materials dealing with Jewish education. Its extensive collection of books and pamphlets includes Jewish education journals in Hebrew, English, and Yiddish, children's literature in these languages, and textbooks published since 1900 for Jewish schools.

(i) Sizable collections of *Hebraica* and *Judaica* exists in many public and semi-public research libraries, e.g., Boston Public Library, Cleveland Public Library, Brooklyn Public Library, Chicago Public Library, Los Angeles Public Library, Philadelphia Public Library, Sacramento, California State Library, and State Historical Society in Wisconsin.

4. PRIVATE COLLECTIONS

(a) Rabbi Leonard C. Mishkin in Chicago, Illinois owns over 60,000 volumes of Judaic materials in many languages, covering all aspects of Jewish scholarship. Of special interest in his collection are bibliographic and periodical materials, and Yiddish titles published in U.S.S.R.

(b) Rabbi Solomon B. Freehof of Pittsburgh, Pennsylvania owns a comprehensive collection of Rabbinic Responsa, the largest of its kind in any private library.

(c) Dr. Salo W. Baron in New York City specializes in Jewish history. His library of over 30,000 works include complete sets of leading Jewish periodicals. Of

unusual interest in this collection are censored books in which the erased original print is visible together with the censor's changes.

(d) The private library of the renowned rabbinic scholar Dr. Saul Lieberman in New York City includes among 15,000 titles all first editions of commentaries and novellae on *Talmud*, first editions of Codes, first editions of Rabbinic Responsa through the sixteenth century, and complete sets of scholarly Jewish periodicals in many languages.

(e) The collection of the late Mordechai M. Kosover in Elmhurst, New York specializes in Jewish history, folklore, and sociology. It includes many rare Yiddish prints, books of unusual appearance in format and size, and an index of 100,000 cards to the fields of Jewish folklore and philology.

(f) Jacob M. Lowy in Montreal, Canada assembled an extensive library of incunabula in Bible, *Talmud*, Hebrew linguistics, Jewish philosophy, Josephus, Thomas Aquinas, rare Bibles in various languages from the sixteenth to the seventeenth centuries, unusual liturgical materials, unusual titles in Rabbinics and mysticism, and translations of Josephus in all European languages.

(g) The library of Manfred Lehmann in Cedarhurst, New York, in addition to 10,000 titles of Rabbinics, Jewish history, and archeology, includes 400 Hebrew manuscripts, which date from the thirteenth to the middle of the nineteenth centuries, and Pinkasim from the Jewish communities of Hagenau, Hamburg, Halberstadt, and Venice.

(h) Rabbi William A. Rosenthal of New York City specializes in collections of Jewish graphic art, such as engravings, prints, etchings, woodcuts, lithographs, books with pictorial representations, newspaper and magazine illustrations, commemorative medallions, paintings, and postcards.

5. LIBRARIES OF COMMUNITY INSTITUTIONS AND SYNAGOGUES

In keeping with an age-old Jewish tradition to provide public facilities for learning, synagogues, temples, community centers, boards of Jewish education, etc., organize and maintain libraries. The Jewish Book Council of America aids in such efforts with guidance, program materials, book lists, citations of merit, and sponsorship of the Annual Jewish Book Month. The Council has been publishing the *Jewish Book Annual* since 1942, a reference work with listings of Judaica in English, partial listings of Hebraica, biographical data, write-ups of significant anniversaries, and scholarly essays on Jewish literature and booklore.

Local libraries are usually small, ranging in size between 1,500 and 3,000 titles, 75% of which are in the *Judaica* group. Some of the larger collections are:

The Jewish Community Library in Los Angeles, an agency of the Jewish Federated Council, holds over 65,000 volumes.

The Jewish Public Library in Montreal has over 55,000 volumes, half of which are Yiddish titles. The Bronfman Collection of Jewish Canadiana, which includes nearly every work about and by Jews in Canada, is in this library.

The Jewish Public Library in Toronto numbers over 25,000 volumes evenly divided between Hebraica and Judaica.

Several Judaic libraries function in Mexico City, e.g., the Sport Center Library with 20,000 volumes, the Fanny Wishniak Library of Kehilla Nidje Israel with 10,000 volumes, the J. B. Tafelow Library of Israelita de Mexico with 9,000 volumes.

The Temple Library in Cleveland holds over 20,000 volumes. Among its archival materials are the Abba Hillel Silver Memorial Archives, which contain important historic data on the Zionist Movement and the creation of the State of Israel.

The library of Temple Beth El in Providence, Rhode Island, has over 17,000 volumes, including a collection of periodicals and a collection of illustrated Haggadahs.

A number of libraries are operated by the Jewish community in Buenos Aires, e.g., Iwo Instituto Cientifico Judio with 70,000 volumes, mostly older books in Hebrew and Yiddish, Hamidrasha Haivrit with 30,000 volumes, about 50% of which are in Hebrew, Seminario Rabinico Latinoamericano with 12,000 volumes, 75% of which are *Judaica*.

Judaic library collections exist in Rio de Janeiro, Sao Paulo, Montevideo, and several other cities in South America which have larger centers of Jewish population.

Judaic Library Collections in Europe

Up to the tragic era of World War II Judaic libraries existed in hundreds of communities all over Europe. Most were operated by the organized Jewish community or sociocultural agencies active in the community. Their resources were either destroyed in the Nazis' systematic attempt to obliterate all aspects of Jewish life, or confiscated and shipped to Germany. According to a well prepared plan, the latter materials were to be eventually made use of to prove the hostility of Jews to the non-Jewish world, and thus justify the policy of their annihilation.

At the end of the war, over a million of the plundered books were rescued by the previously mentioned Jewish Reconstruction Committee, an international voluntary agency of Jewish scholars and librarians created for this specific task under the direction of the bibliographer Shelomo Shunami of the Hebrew University Library. While many of the titles were returned to their rightful owners, most of these rescued materials were distributed among Jewish libraries in Israel and America.

Hebraica and *Judaica* collections exist at present in Europe mainly at university, national, and municipal libraries, Great Britain leading with the following depositories:

(a) The Bodleian Library in Oxford holds approximately 30,000 Hebrew titles, including sixty-seven incunabula, handwritten Bibles, rare works from the Hebrew presses of Constantinople and Salonica, and first editions of the works of the famous rabbinic scholar, philosopher, and physician Moses Maimonides (1135-1204). This collection includes also some of the famous Elephantine papyri.

Two catalogs are available for the Hebrew books at Bodleian: A. E. Cowley, *Concise Catalog of Hebrew Printed Books in the Bodleian Library*, Oxford, 1929, and M. Steinschneider, *Catalogus Librarum Hebraeorum in Bibliotheca Bodleiana*, Berlin, 1931.

In addition to the printed Hebrew works, Bodleian holds 3,100 Hebrew manuscripts, including bound volumes with about 10,000 Genizah documents. These materials are described in the Neubauer and Cowley, *Catalog of Hebrew Manuscripts in the Bodleian Library*, Vol. 2, Oxford, 1906.

No statistics are available for the many titles of *Judaica* in the general collection of Bodleian Library.

(b) The library of the British Museum in London holds about 30,000 Hebrew titles, including most of the works printed in Italy in the sixteenth century, and 150 incunabula. Among its collection of 3,000 Hebrew manuscript codices are seventy-five illuminated copies of Bibles, *Mahzorim* ("prayerbooks for holidays") and *Haggadahs*, which depict the high level of Jewish ecclesiastical artistry in the Middle Ages.

The *Hebraica* of the British Museum are described by Joseph Zender in *Hebrew Books in the Library of the British Museum*, London, 1867.

(c) Cambridge University Library includes in its collection of over 3 million volumes some 7,000 Hebrew books and 1,000 Hebrew manuscripts. The priceless *Nash Papyrus*, dating from the first or second century C.E., famous for its variant reading of the *Decalogue*, is in this collection. The library of Cambridge also holds about half of the Genizah from Cairo, approximately 100,000 fragments.

(d) The university libraries of Leeds, Manchester, and Southampton have substantial holdings of *Hebraica* and *Judaica*.

(e) In addition to its collection of 60,000 volumes, including first rate reference materials, the library of Jews' College in London holds 700 manuscripts, 20,000 pamphlets, a complete set of Jewish *Festschriften* and a collection of portraits of Jewish notables.

Valuable resources of *Hebraica* and *Judaica*, especially manuscript materials, exist in Soviet Russia. Following are some of the better known collections:

(a) The Friedlander collection of the Oriental Institute of the Academy of Sciences in Leningrad comprises rare works in Hebrew linguistics, rare titles in Jewish mysticism, Bible commentaries, materials relating to the histories of Russian and Oriental Jewish communities, and a large group of *Karaite* literature. (*Karaites* separated from the mainstream of Rabbinic Judaism sometime in the eighth century C.E. and, while accepting as religiously obligating only the written text of the Bible, created a literature in Bible exegesis, philosophy, and law which reflected their conceptions of the nature and content of Judaism).

(b) The public library in Leningrad holds the Firkowitsch collection of parchment and leather scrolls with numerous Hebrew and Arabic manuscripts, and the Antonin collection of Genizah documents. Much archival material of renowned Hebrew scholars and writers is preserved in this library.

(c) The Lenin Library in Moscow holds the Guenzberg collection of 6,000 manuscripts in the fields of Hebrew lexicography, Bible commentaries, medieval Hebrew literature, legal responsa, liturgy, mysticism, and *Karaite* materials.

Many of the above listed materials are described by Abraham I. Katsh, president of Dropsie University, in *Ginze Russiyah (Treasures in Russia)*, New York University Library of Judaica and Hebraica, 1957-1958, 2 parts.

Judaic collections of note exist at present in:

Austria at the Austrian National Library. Also the Jewish community in Vienna has a library of about 15,000 volumes.

Denmark's Royal Library includes among its holdings the Bibliotheca Simoneniana of over 50,000 volumes, 400 manuscripts, and fifty-five incunabula.

Finland has Judaic materials at the University Library in Helsinki.

France has two important Jewish libraries which are operated under the auspices of the Jewish community: Bibliothèque de L'Alliance Israelite Universelle, and Bibliothèque du Seminaire Israelite, both in Paris. France's National Library includes Judaic holdings of considerable value. Its Hebrew manuscripts are described in *Catalogue des Manuscrits Hébreux et Samaritains de la Bibliothèque Impériale*, Paris, 1866. Also the library of Strasbourg University has many Judaic materials.

In Germany the municipal library of Munich, Bayerische Staatsbibliothek, has a priceless collection which includes a number of manuscripts in mysticism from South Arabia, 450 rare Hebrew titles from the presses of Fuerth and Salzburg, and the sole extant, nearly complete, manuscript of the Babylonian Talmud.

Other important collections of Hebraica and Judaica are maintained by the libraries of Heidelberg University and Frankfurt a/M University.

Holland's Bibliotheca Rosenthaliana at the University of Amsterdam, which is described in *Catalog der Hebraica und Judaica*, Amsterdam, 1875, 2 vols., by Mayer Roest (1821-1890), includes 60,000 volumes, 420 manuscripts and twenty-seven incunabula.

The University Library in Leiden has a collection of Judaic works described by Moritz Steinschneider in *Catalogus Codicum Hebraeorum Bibl. Acad. Lugdano, Bataviae*, 1850, and a number of Hebrew manuscripts including the sole extant complete copy of the Palestinian Talmud. Ets Haim Bibliothek in Amsterdam has 15,000 volumes, 140 manuscripts, and two incunabula.

Hungary's famous Kaufman collection of Hebrew manuscripts and rare prints is housed in the Oriental Library of the Hungarian Academy of Sciences in Budapest. According to the Academy's *Micro-Card Catalog of the Rare Hebrew Msc. Codices*, 1959, this collection includes 594 manuscripts, about 1,600 rare prints, many bibliographic works, periodicals, and pamphlets.

Magyar Israelitak Országos Könyvtára in Budapest, the National Library of Hungarian Jews, has 60,000 volumes, 400 manuscripts, and eleven incunabula.

In Italy the Bibliotheca Palatina of Parma holds the priceless de Rossi collection of 1,550 Hebrew manuscripts. Other manuscript materials are in the Vaticana Library in Rome and in the archives of the Jewish communities in Ferrara, Florence, Padua, Rome, and Torino.

In Poland the library of the Jewish Historical Institute in Warsaw, Biblioteka Żydowskiego Instytutu, holds 60,000 volumes and twenty-two incunabula. Among its archival materials are the writings and notes of Emanuel Ringelblum (1900–1944), historian-martyr of the Warsaw ghetto under the Nazi regime.

The Swedish Mosaiska Forsamlingens Bibliotek in Stockholm holds 20,000 volumes.

Switzerland's Bibliothek der Israelitischen Kultusgemeinde in Zurich numbers about 15,000 works. Its unpublished catalog *Zentralkatalog der Judaica und Hebraica in den Schweizerischen oeffentlichen Bibliotheken* lists all Judaic materials in other libraries in Switzerland.

Yugoslavia has only two smaller libraries operated by the Jewish communities of Belgrade and Zagreb.

In South Africa the Landau Collection in the library of the University of the Witwatersand in Johannesburg has over 5,000 titles covering various aspects of Jewish culture and history.

SUPPLEMENTARY BIBLIOGRAPHY

- Fraenkel, Joseph. *Guide to the Jewish Libraries of the World*, World Jewish Congress, London, 1959.
- Freidus, A. S., *A Scheme of Classification for Jewish Literature in the New York Public Library*, New York, 1901.
- Goodman, Philip, ed., *Essays on Jewish Booklore*, Ktav, New York, 1971.
- Haberman, A. M., *Toledot ha-Sefer ha-Ivri (History of the Hebrew Book)*, Mass, Jerusalem, 1945.
- Kahle, Paul E., *The Cairo Geniza*, Blackwell, Oxford, 1959.
- Marx, Alexander, *Essays in Jewish Biography*, Jewish Publication Society, Philadelphia, 1947.
- Marx, Alexander, *Studies in Jewish History and Booklore*, Jewish Publication Society, Philadelphia, 1944.
- Muriel, Emanuel, ed., *Israel and Bibliography*, St. Martin's Press, New York, 1971.
- Pearson, D., ed., *Oriental Manuscripts in Europe and North America*, AG Zug, Switzerland, 1971.
- Rabinowicz, Harry M., *The Jewish Library Treasures of England and America*, Yoseloff, New York, 1962.

Jewish Literature

Jewish literature is described here in terms of thematical developments. Its various types are grouped in major categories, chronologico-geographic data being limited to essentials without which the presentation may appear blurred. Attention given to a particular category logically indicates its relative importance in the spectrum of the entire subject, as well as its impact upon Jewish life. However, brevity of treatment of a given category does not necessarily indicate lesser impor-

tance. It only reflects the fact that a given subject or subjects, for whatever reason, did not claim the vigor and attention devoted by writers and scholars to other themes.

Features of special interest, especially bibliographic information, are noted. Whenever a work is cited, it is preferably either its critical edition or its latest reprint. Non-English titles quoted in their respective original languages are followed in parenthesis either by a literal translation thereof, or by an English title quoted from a title page. Transliterations of the Hebrew alphabet are according to Library of Congress rules, except for few minor occasions.

In many instances, especially in cases of works originally written in European languages, their English translations are cited in preference to the original.

Categories are presented in the following order, each concluding with a listing of a supplementary bibliography of works not mentioned in the text of this article:

Bible

- Traditional Bible Exegesis
- Modern Bible Criticism
- Apocrypha, Pseudoepigrapha, Dead Sea Scrolls
- Rabbinics
- Midrashe Halakhah
- Midrashe Aggadah
- Mishnah
- Talmud
- Geonica
- Talmud Commentaries
- Responsa
- Codes
- Jewish Philosophy
- Jewish Mysticism
- Ethical Literature
- Liturgical Literature
- Polemics
- Jewish Historiography
- Belles Lettres in the Middle Ages
- Modern Hebrew Literature
 - Haskalah Period
 - Reaction to Haskalah
 - Palestinian-Israeli Period
- Reference Materials

BIBLE

Jewish literature begins with the Bible. Like an inverted pyramid, it spreads from that base upward and outward. The Hebrew Bible consists of twenty-four books, divided into three parts:

1. *Torah*, the *Pentateuch*, also known as *Hamishah Humshe Torah*, the *Five Books of Moses* includes: *Bereshit (Genesis)*, *Shemot (Exodus)*, *Vayikra (Leviticus)*, *Bamidbar (Numbers)*, and *Devarim (Deuteronomy)*. Accounts of creation, the pre-

historic background of the people of Israel, and the Mosaic Code constitute the major themes of *Torah*.

2. *Neviim (Prophets)* includes eight books subdivided into two sections:

Neviim Rishonim (Former Prophets) consist of *Yehoshua (Joshua)*, *Shoftim (Judges)*, *Shemuel (Samuel One and Two)*, and *Melakhim (Kings One and Two)*. These four books contain the records of Jewish history since Joshua, ca. 1250 B.C.E., up to the destruction of the First Temple and the Kingdom of Judah by the Babylonians in 586 B.C.E.

Neviim Aharonim (Latter Prophets) include *Yeshayah (Isaiah)*, *Yirmyah (Jeremiah)*, *Yehezkel (Ezekiel)*, and *Tere Asar (The Twelve)*, that is, twelve small collections of prophecies identified by the names of their respective authors: *Hoshea (Hosea)*, *Yoel (Joel)*, *Amos*, *Ovadyah*, *Yonah (Jonah)*, *Mihkah*, *Nahum*, *Habakuk*, *Zefanyah*, *Hagai*, *Zekharyah (Zakariah)*, and *Malakhi*. This section contains messages by the prophets of Israel, which spell out their views of God, the world, and the role of Israel among the nations of the world.

3. *Ketuvim (Hagiographa)* consists of eleven books: *Tehilim (Psalms)*, *Mishle (Proverbs)*, *Iyov (Job)*, *Shir Hashirim (Song of Songs)*, *Ruth*, *Aykhah (Lamentations)*, *Koheleth (Ecclesiastes)*, *Ester*, *Daniel*, *Ezra-Nehemyah*, and *Divre Hayamim (Chronicles One and Two)*.

Shir Hashirim, *Ruth*, *Aykhah*, *Koheleth*, and *Ester* are listed together frequently under the title *Hamesh Megillot (Five Scrolls)*.

In terms of contents, *Hagiographa* include three major themes: (a) Poetry in *Psalms*, *Song of Songs*, and *Lamentations*; (b) Wisdom Literature in *Proverbs*, *Job*, and *Ecclesiastes*; (c) History and legend in *Ruth*, *Ester*, *Daniel*, *Ezra-Nehemyah*, and *Chronicles*.

According to some opinions, the number of books in the Hebrew Bible should be figured as thirty-nine—five in *Pentateuch*, six in *Former Prophets* counting *Samuel Two* and *Kings Two* separately, fifteen in *Latter Prophets* counting *The Twelve* as entities, thirteen in *Hagiographa* counting *Nehemyah* and *Chronicles Two* separately.

TaNaKH, the Hebrew name of Scriptures, is derived from the initial letters of the three described parts T, N, K.

All books of *TaNaKH* are in Biblical Hebrew, except for parts of *Daniel* and *Ezra*, and scattered expressions in a few other places, which are in Aramaic, a Semitic language similar in sound and structure to Hebrew. At various points in Jewish history, the literature of *TaNaKH* was canonized, that is declared as *Kitve Kodesh* ("Holy Writings"), therefore looked upon with religious reverence, and accorded special cultic status.

The consonantal texts of *Scriptures* are known from archeological finds to have been extant in their present form as early as the beginning of the Common Era. Hebrew grammarians and lexicographers in Tiberias, known as the *Palestinian Masora*, formulated the system of vowels, accents, and cantillation symbols which have been in vogue since approximately the tenth century C.E. Many "pre-Masora" manuscriptal materials, fragments, and complete books of Scriptures, attest to the

existence and labors of other *Masora* schools and traditions, e.g., *Prophetarum Posteriorum Codex Babylonicus Petropolitanus*, Petropol, 1886, editio Hermann Strack, and *The Pre-Masoretic Bible Discovered in Four Manuscripts—I. Codex Reuchlinianus; II. Parma Pentateuch; III. Parma Bible; IV. London Bible*, Alexander Sperber, Copenhagen, 1956–1959.

Bible texts recited at public religious services, especially Torah scrolls, are handwritten in accord with specific ritual requirements.

TaNaKH had been translated into all the languages and dialects that Jews have ever used, e.g., Yiddish, Ladino, Judeo-Arabic, Judeo-Persian, Judeo-Romance, and Judeo-Tartar, and into all the languages of the world, including some which have long since disappeared. Anglo-Jewish translations, based upon the King James Version, have been in use since the latter part of the eighteenth century. A new, modern translation into English, edited by a team of Jewish scholars in America, is currently programmed by the Jewish Publication Society of America.

Bible translations of antiquity, e.g., *Septuagint*, *Targumim*, *Peshita* (Syriac), *Vulgate* (Latin), as well as the Samaritan text of the *Pentateuch*, are of special interest in comparative text studies.

Traditional Bible Exegesis

Study and interpretation of Scriptures, exegesis, is as old as the text itself. In addition to commentaries on the respective books, exegetical materials abound in homiletical, linguistic, and philosophical treatises written independently of the text.

Traditional Jewish exegesis in antiquity and the Middle Ages dogmatically recognizes three premises: a) the sacredness of every letter and particle of the text; b) the historicity of events as related in the respective accounts; c) the alleged authorship of each of the twenty-four books. These premises inhere in the conception of Orthodox Judaism looking at *TaNaKH* as a divinely revealed book.

Over the centuries, four methods were developed in traditional exegetical literature:

- PESHAT*—literal interpretation
- REMEZ*—allegorical interpretation
- DERASH*—interpretation by inference
- SOD*—mystical interpretation

These methods were not mutually exclusive. Frequently, they were used interchangeably and in combinations. Nor does their order of listing here indicate a chronologically developmental sequence. Some of the well known works in this group of Jewish literature will now be described.

The most eminent scholar of Franco-German Jewry, Rabbi Shelomo Yizhaki (1045–1105), applying the literal method, wrote commentaries on almost all books of *TaNaKH*. His works, known by the acronym of his name as *Rashi*, became universally popular and spurred the writing of countless supercommentaries. *Rashi*

on *Pentateuch* was among the first books printed in Hebrew, Reggio 1475, a sole copy of which is extant in the Bibliotheca Palatina in Parma.

Rashi's grandson, Rabbi Shemuel ben Meir (1080–1158), used *Peshat* in his commentaries on Bible, *Rashbam*, even more thoroughly than his grandfather.

Philological exegesis is akin to literalism. The renowned scholar in Rabbinics and philosopher Saadiah ben Joseph Gaon (882–942) in Babylonia, made use of philological insights in Bible exegesis to polemicize against *Karaism*. He thus helped initiate the scientific study of Hebrew linguistics which eventually reached prominence in Spain. Bible commentaries *Ibn Ezra* by one of the eminent Spanish scholars and poets, Abraham ibn Ezra (1092–1167), are a prime example of the philologico-literal methods in exegesis.

Alexandrian Jewish scholars, assuming that the basic tenets of Greek thought must have been anticipated in the sacred texts of Judaism, methodically read allegorical meanings into such texts. This is called *Remez* ("hinting" at an implied idea), the meaning of which may not even be compatible with the literal sense of the given Biblical narrative, or the given law in the Mosaic code. Philo, the most talented and most prolific writer of the Alexandrian community (ca. 20 B.C.A.–ca. 50 C.E.), used this method with great ingenuity, though he never suggested that any of the Bible stories, or any of the provisions of the Law of Moses are devoid of literal meaning.

In like manner, some of the philosophers of Judaism in the Middle Ages, especially Moses Maimonides, interpreted Bible terms and Bible stories with a view to incorporate Aristotelian ideas and harmonize them with basic premises of Judaism. Bible commentaries by Rabbi Levi ben Gershon (1288–1344), *Ralbag*, make consistent use of that method.

Derash represents a number of interpretative rules and procedures which focus attention on the specific position of a given statement, or word, or even single letter within the context of a subject. Special meanings are inferred from the juxtaposition of such statements. Notice is taken of identical forms with parallel terms elsewhere, and appropriate conclusions are drawn accordingly. Unique stylistical features and editorial sequences are commented upon, implying that they include meanings which are not stated explicitly. Rules of logic are used extensively. Elaborations are suggested on the basis of general statements being followed by particularizing differentiations, and or vice versa.

Derash rules were formulated in the early developmental stages of the Rabbinic tradition. Some of them can be traced to Pentateuchical origins. The large corpus of Rabbinics based upon the method of *Derash* will be described next in this essay. Suffice it to mention at this point that many of the Bible exegetes incorporated in their comments much of the relevant material and used *Derash* rules imaginatively on their own initiative.

Sod ("mystical exegesis") is concerned with the esoteric traditions of Judaism. The commentary on *Pentateuch* by Rabbi Moses ben Nahman (1194–1270), *Ramban*, best illustrates that method.

Certain exegetical works, while offering a unique approach of their own, may

not fit any of the described methods, e.g., Bible commentaries by Isaac Abarbanel (1437–1508), known by the title *Abarbanel*, reflect the author's experiences and perceptions as statesman-philosopher.

The cited works, *Rashi*, *Ibn Ezra*, *Ramban*, etc., together with many other commentaries and supercommentaries, appear in editions of the "Rabbinic Bible," known as *Mikraot Gedolot*, the first edition of which was printed by Bomberg, Venice, 1516–1517. *Mikraot Gedolot*, with thirty-two commentaries, Warsaw, 1860–1868, 12 vols., has been reprinted many times with addenda and revisions.

Modern Bible Criticism

Baruch Spinoza (1632–1677) initiated the trend of Bible criticism with his *Theologico-Political Treatise*, published anonymously in 1670. While questioning the premises of orthodox exegesis, he argues that some of his doubts were hinted at by *Ibn Ezra's* commentaries. Whether right or wrong on this particular issue, Spinoza's criticism eventually led to a new orientation toward Scriptures. Rather than records of absolute, divinely revealed truths, Bible texts came to be looked upon as source materials of history, folklore, anthropology, etc., subject to critico-historical analysis like other literary documents.

Johann G. Eichhorn (1752–1827) presented in *Einleitung in das Alte Testament (Introduction to the Old Testament)*, Goettingen, 1823, a summary of eighteenth century Bible criticism. His records are of only peripheral interest within the context of Jewish literature. Of direct concern in this connection, however, are the many studies and schools of thought in the nineteenth and twentieth centuries. Relevant basic data of the latter are now summed up with brief statements about three schools of modern Bible criticism:

1. The Graf-Wellhausen *Documentary Hypothesis of Hexateuch* maintains that *Pentateuch* and the *Book of Joshua*, in their present form, represent fusions of several earlier documents, which can be identified by unique stylistical and conceptual characteristics. Those earlier documents allegedly reflect the evolutionary development of Israel's religion from animistic primitivism in prehistoric times to prophetic ethical monotheism in the eighth century B.C.E. Basic data of this school are presented by Julius Wellhausen (1844–1918) in *Die Composition des Hexateuchs und der historischen Buecher des Alten Testaments (Composition of the Hexateuch and of the Historical Books of the Old Testament)*, Walter de Gruyter, Berlin, 1963, and in *Prolegomena to the History of Ancient Israel*, Meridian, New York, 1957.

2. The *Form Critic* school, most clearly formulated by Hermann Gunkel (1862–1932) in *The Psalms: A Form-Critical Introduction*, Fortress Press, Philadelphia, 1967, is based upon the theory that typical forms of Biblical literature, *Gattungen*, are of great antiquity, extant written texts having been predated by fixed oral forms. Anthropological investigations of Biblical data, e.g., *Lectures on the Religion of*

the Semites, Ktav, New York, 1969, by W. R. Smith (1846–1894), offer supporting evidence for this theory.

3. The *Religionsgeschichte* (religio-historical) school places in the center of its investigations not the Biblical text per se, but Biblical ideas and their relationship to ancient cultures in whose milieu they flourished. Comparative studies with older Near-Eastern cultures, supported by archeology, help to recognize the originality and significance of Biblical religion. Thus Rudolf Kittel (1855–1929) in his *History of the Hebrews*, Williams, London, 1895–1896, and Ernest Sellin (1867–1945) in *Geschichte des israelitisch-juedischen Volkes (History of the People of Israel-Judah)*, Leipzig, 1924, conceive of Israel's distinctive religious ideas in terms of the sublime ethico-monotheistic concepts taught by Moses. Challenges to these concepts, arising in the course of history as a result of pagan Canaanite influences, were ultimately overcome thanks to the prophets' uncompromising efforts in their behalf. *Ancient Judaism*, Glencoe, 1952, by Max Weber, contains much sociological material in support of this view of Israel's history.

Modern Bible criticism has a wealth of materials, e.g., histories, introductions, commentaries on Bible books, concordances, atlases, journals, commemorative volumes, etc.

Modern Jewish scholarship, in its search to comprehend the Bible scientifically, has been making substantive contributions in the various disciplines of Bible criticism. Some of the works by Jewish scholars manifest a deliberate tendency to refute allegations by Christian theologians that the Hebrew Bible (Old Testament) represents an inferior level of ethical evolution.

Among works of note are: *Mikra ki-Peshuto (Scriptures Literally Explained)*, Ktav, New York, 1969, and *Randglossen zur hebraeischen Bible (Marginal Notes on the Hebrew Bible)*, Leipzig, 1908–1914, both by Arnold Ehrlich (1849–1919), methodically using critical criteria in text analysis and interpretation; the series *Mikra Meforash (Scriptures Explained)*—commentaries on the books of *TaNaKH* by leading Bible scholars under the editorship of Abraham Kahana (1874–1946), which make extensive use of Wellhausen, Semitic philology, comparative religion, anthropology, etc.; *Peshuto shel Mikra (The Literal Meaning of Scriptures)*, Jerusalem, 1962–1968, by N. H. Tur-Sinai (1886–) similar in scope and methodology to the preceding series, but more up to date.

Umberto Cassuto (1883–1951), while appreciating the contributions of modern Bible criticism, seriously questions Wellhausen's documentary hypothesis in his *Commentary on the Book of Genesis*, Jerusalem, 1961–1964, 2 vols., and *Commentary on the Book of Exodus*, Jerusalem, 1967.

While rejecting the validity of modern Bible criticism, some orthodox exegetes utilize aspects of its methodology to reaffirm the position of historicity of all Biblical events, as well as the traditions of authorship of the various books. A good illustration of this approach are the works by the scholar in Rabbinics David Hoffmann (1843–1921), *Das Buch Leviticus*, Berlin, 1905, and *Das Buch Deutor-*

onomy, Berlin, 1913. With an identical approach in mind, Mosad Harav Kook recently began publication of a new series of Bible commentaries, *Daat Mikra* (*Knowledge of the Scriptures*).

SUPPLEMENTARY BIBLIOGRAPHY

- Bowker, John, *The Targums and Rabbinic Literature. An Introduction to Jewish Interpretations of Scriptures*, Cambridge Univ. Press, London, 1969.
- Casper, B. M., *Introduction to Jewish Bible Commentary*, Yoseloff, New York, 1961.
- Enziklopedya Mikrait* [Bible Encyclopedia], Bialik, Jerusalem, 1950-.
- Gersh, Harry, *The Sacred Books of the Jews*, Stein & Day, New York, 1968.
- Ginsburg, Christian, *Introduction to the Massoretico-critical Edition of the Hebrew Bible*, Ktav, New York, 1966.
- Hahn, Herbert F., *The Old Testament in Modern Research*, Fortress Press, Philadelphia, 1966.
- Hebrew and English Lexicon on Old Testament* (based on lexicon of Wm. Gesenius), Clarendon Press, Oxford, 1962.
- The International Standard Bible Encyclopedia*, Eerdmans, Grand Rapids, Michigan, 1939, 5 vols.
- Kaufman, Yehezkel, *Toldot ha-Emunah ha-Yisraelit [History of the Jewish Religion]*, Jerusalem, 1955-1960, 8 vols. Condensed English translation of this work: Greenberg, Moshe, *The Religion of Israel*, Univ. Chicago Press, Chicago, 1960.
- The Macmillan Bible Atlas*, Macmillan, New York, 1968.
- Mandelkern, Solomon, *Bible Concordance*, Shulsinger, New York, 1955, 2 vols.
- Rand McNally Historical Atlas of the Holy Land*, Rand McNally, New York, 1959.
- Sefal, N. H., *Mavo ha-Mikra [Introduction to the Bible]*, Kiryat Sefer, Jerusalem, 1955-1964, 4 vols.
- Sandmel, Samuel, *The Hebrew Scriptures*, Knopf, New York, 1963.

APOCRYPHA, PSEUDEPIGRAPHA, DEAD SEA SCROLLS

Jewish literature of the Second Jewish Commonwealth comprises many materials which, according to the judgment of the scholars determining what books should be included in *TaNaKH*, were not deemed suitable. Identified in the history of literature by the terms *Apocrypha* and *Pseudepigrapha*, these works are alluded to in Talmudic literature as *Sefarim Hizonim*, which are "outside," that is, excluded from the frame of Holy Writings. Since the *Apocrypha* are incorporated in *Septuagint*, they were eventually also included in the Old Testament Canon of the Catholic Church.

Apocrypha contains thirteen historical and ethical works: (1) *Esdras I*, (2) *Tobit*, (3) *Judith*, (4) *Additions to Esther*, (5) *Wisdom of Solomon*, (6) *Ben Sira*, (7) *Epistle of Jeremiah*, (8) *Song of the Three Holy Children*, (9) *Susanna*, (10) *Bel and the Dragon*, (11) *Prayer of Menasseh*, (12) *Maccabees I*, and (13) *Maccabees II*.

Only *Ben Sira* is mentioned in the Talmud by name and quoted respectfully as a teacher of wisdom. Hebrew fragments of its original were discovered by Solomon

Schechter in the *Genizah*, and published under the title *The Wisdom of Ben Sira*, Cambridge, 1899. Other fragments were found in Masada and described by Yigal Yadin in *The Ben Sira Scroll from Masada*, Jerusalem, 1965.

Pseudepigrapha are identified by this title due to the fact that all works in this group are attributed to ancient authors, e.g., Adam, Enoch, the patriarchs, Moses, Elijah, etc. Among the well known titles in this collection are *Enoch*, *Jubilees*, *Letter of Aristeas*, *Assumption of Moses*, *Testaments of the Twelve*, and *Barukh*. In terms of subject matter, *Pseudepigrapha* deal with themes of creation, cosmic conflicts between good and evil, and problems not discussed explicitly in *TaNaKH*, e.g., immortality, reward and punishment in the hereafter, and Messianism.

Most of these works were originally composed either in Hebrew or in Aramaic, while some indicate Greek origins. However, all the above listed titles survived only in translations: Greek, Ethiopic, and Syriac. It is of interest that some motifs encountered in this literature, though hardly ever mentioned in Talmud, appear in Jewish literature of the Middle Ages.

The Apocrypha and Pseudepigrapha of the Old Testament in English, R. H. Charles, ed., Clarendon, Oxford, 1963–1965, is comprehensive and scholarly most competent. A new critical edition in English is currently programmed by Dropsie University. The Hebrew translation by Abraham Kahana *Ha-Sefarim ha-Hizonim*, Jerusalem, 1970, is notable for thoroughness.

Dead Sea Scrolls are included in this part of Jewish literature because these recently discovered works, according to generally accepted scholarly opinion, also hail from the closing period of the Second Jewish Commonwealth (ca. 100 B.C.E.-ca. 100 C.E.). Among their varied materials in Hebrew and Aramaic are Bible texts, Bible commentaries, homiletic tracts, chronicles, and other items similar in substance or form to *Apocrypha*.

The writings of the Dead Sea Scrolls shed much light on conditions in Jewish life, especially on the complex aspects of sectarianism during that fateful period in Jewish history. As such they are of considerable interest in the history of early Christianity. However, Solomon Zeitlin, one of the contemporary leading historians of the Second Jewish Commonwealth and the literature of the Talmudic period, maintains that the Scrolls were written in much later times. Evidence for this divergent opinion is based upon the fact that Scrolls use terminology and literary forms not encountered anywhere before the fourth century. Zeitlin's arguments on the subject appeared in numerous essays in the *Jewish Quarterly Review*.

Dead Sea Scrolls are housed in Israel as a national treasure in a specially designed structure, The Shrine of the Book, which is part of the National Museum in Jerusalem.

SUPPLEMENTARY BIBLIOGRAPHY

Torrey, Charles, *The Apocryphal Literature: A Brief Introduction*, Yale Univ. Press, New Haven, 1965.

Travers, Herford R., *Talmud and Apocrypha*, Ktav, New York, 1971.

Vermes, G., *The Dead Sea Scrolls*, Heritage Press, New York, 1967.

Wilson, Edmund, *Dead Sea Scrolls, 1948-1969*, Fontana, London, 1971.

RABBINICS

The group of Jewish literature known as *Midrashim* comprises a number of works, mostly commentaries on *TaNaKH*, in which the inferential methods of interpretation (*Derash*) are used extensively. For centuries, in accord with an ancient religious tradition, all instructions not stated explicitly in the canonized written texts—*Torah shebi-Khetav*—were transmitted by word of mouth. This entire corpus of the oral tradition—*Torah shebe-al-Peh*—was considered complimentary to the former, therefore sacred and binding, though serious differences of opinion have prevailed among scholars-Rabbis on given issues before a final ruling was arrived at through majority vote.

At certain crucial points in Jewish history, the sages deemed it necessary to assemble the orally transmitted teachings, organize them systematically, and establish definitive records. Two types of such records, essentially labors of *Derash*, were thus created: (1) *Midrashe Halakhah*, works pertaining to law and ritual; (2) *Midrashe Aggadah*, ethico-homiletic works which include elements of folklore, legend, myth, etc.

Midrashe Halakhah

According to conclusions by David Hoffmann, two schools of interpretation of Biblical texts produced systematic commentaries on the legislative portions of *Exodus*, *Leviticus*, *Numbers*, and *Deuteronomy*. These schools are identified by the names of two Rabbinic sages of the second century C.E., Rabbi Akiba and Rabbi Yishmael, each following specific methods which distinguished it from the other. As a matter of fact, Hoffmann claimed to have established the origins of a number of anonymous ancient texts on the basis of said criteria.

To the school of Rabbi Akiba belong: *Mekhilta of Rabbi Shimon ben Yohai on Exodus*, Epstein (ed.), Jerusalem, 1955; *Sifra on Leviticus*; Finkelstein (ed.), New York, 1956; *Sifre Zuta on Numbers*, Horovitz (ed.), Jerusalem, 1966; and *Sifre on Deuteronomy*, Finkelstein (ed.), New York, 1969.

With the school of Rabbi Yishmael are identified: *Mekhilta on Exodus*, Lauterbach (ed.), Philadelphia, 1949; *Sifre on Numbers*, Horovitz (ed.), Jerusalem, 1966; *Midrash Tannaim on Deuteronomy*, Hoffmann (ed.), Berlin, 1909; and fragments of a commentary on *Leviticus*.

Midrashe Aggadah

These works contain records of homiletic discourses, usually delivered at Sabbath and festival gatherings, in order to inspire faith and sustain the people's courage. Also these discourses were transmitted by word of mouth until the need

arose to assemble and compile records. Following is a brief description of the major homiletic and exegetical collections:

(a) *Midrash Rabbah (Large Midrash)*, New York, 1952, 2 vols., is an extensive commentary on *Pentateuch* and *Five Scrolls*, of which an English translation is available, Soncino, London, 1948, 10 vols.

(b) *Tanhumah*, Buber (ed.), New York, 1946, is a commentary on *Pentateuch* of which three versions are extant. Its name is derived from the frequently quoted narrator Tanhum ben Abba (fourth century C.E.). Its characteristic formula *Yelamdenu* ("may we be instructed") usually introduces a discussion on an issue of law, to be followed by corroborations on matters of ethics.

(c) *Pesikta de-Rav Kahana*, Mandelbaum (ed.), New York, 1962, and *Pesikta Rabbati*, Jerusalem, 1963, include homilies on selections from *Pentateuch* and *Prophets* which are read and expounded at public worship on certain Sabbaths and festivals.

(d) Existing fragmentary collections of *Midrashe Aggadah* on *Psalms*, *Proverbs*, and *Samuel* indicate that similar works were once extant on other books of *TaNaKH*.

(e) *Midrashe Aggadah* also includes nonhomiletic works. Of special interest in this genre is *Pirke de-Rabbi Eliezer*, New York, 1946, due to its treasury of legends. However, most of these texts are in form of short tracts. Many collections of such short *Midrashim*, being of great significance to cultural history of Judaism, were published in recent decades, e.g., *Agudat Aggadot (Assembly of Aggadot)*, H. M. Horowitz (ed.), Berlin, 1881; *Sefer ha-Likutim (Book of Selections)*, L. Gruenhurt (ed.), Frankfurt, 1898–1903, 6 vols.; *Ozar Midrashim (Treasury of Midrashim)*, J. D. Eisenstein (ed.), New York, 1915, 2 vols.; *Bate Midrashot (Houses of Study)*, A. J. Wertheimer (ed.), Jerusalem, 1950, 2 vols.; and *Bet ha-Midrash (House of Study)*, A. Jellinek (ed.), Jerusalem, 1967, 6 vols.

While *Midrashe Halakhah* require intellectual concentration, and sustain consistent interest of scholars only, *Aggadic* materials with their diversity of parable, folktale, proverb, etc., have been popular as recreational reading. This explains the phenomenon that soon after the appearance of the various cited works (between the sixth and twelfth centuries), anthologies were compiled which deserve note as sources of widespread cultural influence:

Midrash Lekah Tov (Midrash of Good Instruction) on *Pentateuch* and *Five Scrolls*, Vilna, 1884, compiled by Tobias ben Eliezer (eleventh century) of Bulgaria.

Midrash ha-Gadol (The Great Midrash) on *Pentateuch*, Jerusalem, 1967, compiled by David ben Amram Adani (thirteenth century) of Yemen.

Yalkut Shimoni (The Selections of Shimon) on all books of *TaNaKH*, Jerusalem, 1966–1967, compiled by a scholar of Germany.

Yalkut ha-Makhiri (The Selections of Makhir) also on all books of *TaNaKH*, Jerusalem, 1902, compiled by Makhir ben Abba Mari of Spain.

En Yaakov (The Well of Jacob), an annotated compilation of all *Aggadic* materials in Talmud, Jerusalem, 1967, 4 vols., compiled by Jacob ben Shelomo ibn Habib (1460–1516) of Salonica.

Sefer ha-Aggadah (Book of the Aggadah), Jerusalem, 1960, compiled by two modern Hebrew writers—H. N. Bialik and Y. H. Rawnitski.

The renowned modern scholar in Rabbinics, Louis Ginzberg (1873–1953), made *Aggadic* materials accessible in English in *The Legends of the Jews*, Jewish Publication Society, Philadelphia, 1909–1938, 7 vols. This selection is organized according to Biblical times and Biblical personalities, and is especially valuable because of its annotations and index.

Mishnah

Simultaneously with the interpretative activities of Bible texts, Jewish law was subject to intensive study in abstract form. That means that units of legal-ritual traditions dealing with a specific subject were studied, as such, without linking them organically with their origins in Biblical sources. This type of abstract study continued for at least five generations from the end of the first to about the third centuries C.E., its exponents and leading scholars being known by the title *Tanna* (plural, *Tannaim*). Evidence exists that some of the scholars unofficially, probably for their private use, put together collections of abstract *Halakhot*. Those and other sources were used by Judah ha-Nasi (ca. 135–ca. 220) to compile a comprehensive compendium in lucid Hebrew of abstract Jewish law which is known as *Mishnah*. As president of the Rabbinic Academy and head of the civil authority over the Jewish community in Palestine, he was able to assure acceptance of this work as an authoritative code.

Mishnah is divided according to subject matter into six *Sedarim* ("Orders"): (1) *Zeraim*—laws pertaining to the land and agriculture, preceded by a tractate detailing the traditions of prayers and blessings; (2) *Moed*—laws on Sabbath, holidays, and festivals; (3) *Nashim*—laws about the rights and responsibilities of women; (4) *Nezikin*—the civil and criminal codes of Judaism, and jurisdictional administration; (5) *Kodashim*—laws pertaining to Temple matters of the Temple in Jerusalem, e.g., offerings, cultic services, and regulations pertaining to the daily dietary regimen; and (6) *Toharot*—laws about ritual purity and ritual impurity. Each of these six major units is divided into *Masekhot* ("tractates"), which further subdivide into *Perakim* ("chapters"). The latter consist of *Mishnayot* ("paragraphs") the smallest part in the editorial structure of *Mishnah*. Sixty-three tractates comprise the entire text.

Tosefta is another collection of abstract *Halakhot*, paralleling *Mishnah* in editorial organization.

Baraitot are *Halakhic* statements not included either in *Mishnah* or in *Tosefta*, but known to be subject of study in the period of *Tannaim*.

Talmud

The *Mishnah* soon became the focal point of study in the Rabbinic Academies. New ones were established by the disciples of Judah ha-Nasi in Babylonia where

Jewish communities existed since the destruction of the First Temple in 586 B.C.E. With the organization and intensification of Rabbinic learning in their midst, these communities soon achieved a position of eminence in the Jewish world not to be eclipsed for a millenium. Just as Bible texts heretofore, those of *Mishnah* were henceforth studied in painstaking detail, their seeming contradictions clarified, sequences explained, parallels commented upon, etc. The process continued orally for many generations.

Study and interpretation of *Mishnah* is known by the special term *Gemara* ("concluding"), for its purpose and ultimate goal were conceived of as final stages in the codification of the oral tradition. Scholars of this post-*Mishnah* period are identified by the term *Amoraim* ("recorders"). A decision was eventually made that the orally transmitted materials should be assembled and coordinated into a coherent system. Single *Mishnayot* were thus combined textually together with the relevant explanatory portions of *Gemara*, and the new text became known as *Talmud* ("learning par excellence").

There are two *Talmud* collections: *Talmud Bavli*—Babylonian *Talmud* and *Talmud Yerushalmi*—the Palestinian *Talmud*. Both are in the respective dialects of Aramaic, as spoken in the two localities. *Yerushalmi* was edited around 400 C.E., seemingly in haste and under conditions of stress. It includes *Gemara* on thirty-nine tractates. *Bavli* was edited a century later, and has *Gemara* on thirty-seven tractates. Both include *Aggadic* materials, e.g., proverbs and legends, as well as information on current medical practices, astronomical data, and references to natural sciences. Both abound in practical advice for wholesome daily living. However, *Bavli* is superior in editorial efficiency. Its discussions are recorded more thoroughly, materials at hand analyzed in greater detail, and decisions clearly formulated. Whenever *Talmud* is alluded to, either in literature or from a speaker's platform, unless stated otherwise, it is *Talmud Bavli*.

The *Talmud* spells out the world view of Judaism on God and man, history and ethics, and life and death. It elevates learning as the noblest goal in a Jew's daily endeavor. If Bible is the foundation of the structure of Judaism, *Talmud* is the home within which Jews lived. As such, it sustained and nurtured the spirit of those dwellers, but at the same time suffered from the merciless blows so often directed against them. *Talmud* burning was one of the barbaric features in the programs of vicious anti-Jewish excesses in the Middle Ages. Consequently, except for small parts, few *Talmud* manuscripts survived.

The first edition of *Talmud*, Bomberg, Venice, 1520–1523, established the pattern for the external form of future editions, pagination being numbered by folios of two pages each, and commentaries printed on the inner and outer margin of the text. *Talmud* edition of Vilna, 1860, with its numerous commentaries and supercommentaries, became a widely followed model for reprints and revised augmented editions this past century. A new Israeli edition with marginal notes of variant readings and digest of commentaries since earliest times through the sixteenth century, is currently programmed by Yad Harav Herzog in Jerusalem. This institute is simultaneously pursuing research on critical-scientific editions of

Mishnah and *Talmud* with all extant variant readings.

The first edition of *Talmud Yerushalmi*, Bomberg, Venice, 1523–1524, used as model in the *Krotoshin* edition, 1866, numbers pagination by folios divided into four columns each, and is usually used for references in research.

Complete *Bavli* translations are available in English by I. Epstein, Soncino, London, 1935–1952, and in German by L. Goldschmidt, Berlin, 1930–1936. There is also available a complete translation of *Mishnah* by H. Danby, Oxford University Press, London, 1933.

Concise surveys of Talmudic methodology are offered by Samuel ha-Nagid (993–1056) in *Mavo ha-Talmud (Introduction to the Talmud)*, and by Hayyim Benveniste (1603–1673) in *Kelale ha-Talmud (Rules of the Talmud)*, both usually printed in standard editions of the first Talmudic tractate, *Berakhot*.

Geonica

The Talmudic Academies in Babylonia functioned close to a thousand years as spiritual centers of world Jewry, their heads, known by the exalted title of *Geonim*, offering guidance to far flung communities in matters of law, ritual, liturgy, theology, and text studies. Such guidance was usually in the form of *Teshuvot* (“responsa”) which were written in reply to *She-elot* (“inquiries”). *Geonic* responsa constitute a significant component of post-*Talmud* literature in the eighth through eleventh centuries. B. M. Lewin (1879–1944) published some of these materials in *Ozar ha-Geonim (Treasury of the Geonim)*, Haifa, 1928–1943, following the *Talmud* in organizational sequence tractate by tractate. Other anthologies of *Geonica* were published, usually according to subject matter, under the general heading *She-elot u-Teshuvot ha-Geonim (Inquiries and responsa of the Geonim)*.

Two other types of Rabbinics originated in the *Geonic* period: codes of Jewish law and *Talmud* commentaries.

Ahai ben Shabha (ca. 680–762) compiled *She-iltot (Questions)*, Mirski (ed.), Sura, New York, 1960–, which is a code in Aramaic in the form of a commentary on *Pentateuch*.

Yehudah Gaon (eighth century) authored *Halakhot Pesukot (Decided Laws)*, Jerusalem, 1967, a concise digest of decisions omitting quoting of sources.

Halakhot Gedolot (Great Laws), Jerusalem, 1963, is a *Geonic* code organized according to the tractates of *Talmud*, and quoting sources.

Hai ben Sherira Gaon (939–1038), one of the most prolific scholars of the *Geonic* period, authored commentaries on some of the *Talmudic* tractates. He is also known to have written codes on specific topics of commercial law. Some of his writings came to light from *Genizah* archives in recent years.

Nathan ben Yehiel of Italy (1020–1106) compiled the first complete dictionary of *Talmud*—*Arukh*, Tel Aviv, 1968. This work is so thorough and so competent that one of the modern scholars identified with the *Wissenschaft des Judenthums*,

Alexander Kohut (1842–1894), used it as a base for his lexicography of *Talmud, Arukh Completum*, Vienna, 1926–1937, 9 vols.

Scholars through the ages made their respective contributions to Rabbinics in three areas: *Talmud* commentaries, responsa, and codes. Representative selections of these works, in each of the three areas, will now be described with some detail.

Talmud Commentaries

Gershom ben Judah (Rabbenu Gershom Me-or ha-Golah ca. 960–1040), founder of the Talmudic Academy in Mainz, Germany, exerted a lasting influence upon Jewish communities in Central Europe with his far-reaching *Takkanot* (“legislative regulations”) pertaining to communal affairs as well as personal conduct. His efforts to correct *Talmud* texts, together with his fragmentary commentaries, prepared the ground for the commentator par excellence two generations later, the famous Rashi.

Rashi’s commentaries on nearly all tractates of *Talmud*, due to their brevity, lucidity, pedagogic skills to interpret obscure statements, made that work accessible to any student with a fair knowledge of Hebrew.

Rashi’s grandsons, especially Jacob ben Meir (Rabbenu Tam 1100–1171), and their associates and disciples for a century thereafter, developed an “in depth” method of interpreting *Talmud* which is known by the special term *Tosafot* (“additions”). The two major commenting-interpretative works, *Rashi* and *Tosafot*, are standard features in editions of *Talmud*.

Additional marginal notes, glossaries, corrections, brief elucidations, references to parallels, etc., which are printed on each page of *Talmud* indicate the preoccupation of scholars with the material at hand at all times and in all lands.

Other commentaries and supercommentaries are printed in large *Talmud* editions at the end of each tractate. In addition to explanatory commentary, studies in depth on the model of *Tosafot*, and *Hidushim* (“analytical novellae”) on single tractates, or larger sections of *Talmud*, were enthusiastically pursued by many scholars, e.g., *Hidushe ha-Rambam*, Jerusalem, 1963, by Moses Maimonides; *Hidushe ha-Rashba*, Jerusalem, 1962, 3 vols., by Solomon ben Abraham Adret of Barcelona (1235–1310); *Beth ha-Behirah*, Jerusalem, 1959–, by Menahem ben Solomon Meiri of Provence (1239–1306); *Pene Yehoshua*, Jerusalem, 1969, by Jacob Joshua Falk of Frankfurt a/M (1680–1759); *Hidushe ha-Gera*, brief critical annotations on almost every page of *Talmud*, by Elijah ben Solomon (Gaon of Vilna 1720–1797); *Hidushe Hatam Sofer*, Jerusalem, 1969, 4 vols., by Moses Schreiber of Pressburg, Slovakia (1762–1839); and *Hidushe Rabbi Hayyim*, Bnai Braq, 1964–, by Hayyim Rabinovitz of Telshe, Lithuania (1868–1930). Hundreds of such titles of *Hidushim* fill the library shelves of Rabbinics, while many are extant in manuscripts.

Among the widely used commentaries on *Mishnah* are: *Perush ha-Mishnayot le-Rambam*, by Moses Maimonides, which is printed in large size *Talmud* editions at

the end of each tractate; *Perush Rabbenu Obadyah Bartinoro*, by Obadyah Bartinoro of Italy and Palestine (ca. 1450–ca. 1510); *Tosafot Yom Tov*, by Yomtov Lippmann Heller of Cracow, Poland (1579–1654); and *Tiferet Yisrael*, by Israel Lipschutz of Danzig (1782–1860). The latter three are usually printed in bulky editions of *Mishnah*, e.g., Vilna, 1922.

Hanoch Albeck (1890–), a prominent contemporary scholar in Rabbinics, is author of a concise, critico-scientifically oriented commentary on *Mishnah* titled *Shishah Sidre Mishnah Meforashim*, Bialik, Jerusalem, 1952–1958. Among the advantages of this work are careful vocalization of the *Mishnah* text and summary review-introductions to the six *Sedarim*.

No comprehensive commentary on *Talmud Yerushalmi*, comparable with Rashi on *Talmud Bavli*, has been produced so far. The earliest efforts in that field are from the eighteenth century: *Korban ha-Edah*, by David ben Naphtali Fraenkel of Berlin (1707–1762), and *Pene Moshe*, by Moses Margolies of Kaidan, Poland (ca. 1707–1781). Both are printed in large editions of *Yerushalmi*, e.g., New York, 1959. More recently, Jacob David Willowski of Slutsk, Lithuania (1845–1913) authored *Perush ha-Ridbaz* and *Tosafot Rid*, both published in the aforementioned edition.

Much attention has been given to studies on *Yerushalmi* by modern scholars. An outstanding illustration of this interest is *Perushim ve-Hidushim bi-Yerushalmi*, a comprehensive commentary by Louis Ginzberg, of which only three volumes were published on tractate *Berakhot*, Jewish Theological Seminary, New York, 1941. A fourth volume of this work was edited posthumously by David Halivni, Jewish Theological Seminary, New York, 1961.

Saul Lieberman, head of the Rabbinics Department of the Jewish Theological Seminary, published several volumes of his commentary-series *Ha-Yerushalmi Ki-pshuto*, Jerusalem, 1934–. He has been working simultaneously on a new edition of *Tosefta* with extensive commentaries, *Tosefta Ki-fshutah*, Jewish Theological Seminary, New York, 1955–.

Responsa

Jewish communities functioned through the ages as autonomous entities, their internal affairs being administered according to precepts of Jewish law and custom. Though the Talmudic principle prevailed since the middle of the third century that the civil law of the land was binding upon all of its inhabitants, jurisdictional problems among Jews were often adjudicated by the Rabbinic Court of the community. Of course, these courts exercised complete control in matters of cult and ritual. In cases of doubt or hesitancy and the resultant inability to resolve a problem, local authorities turned to higher judges—Rabbis or scholars in other communities reputed for their scholarship, wisdom, piety, and experience. This procedure describes the background of the literature of *She-elot u-Teshuvot* (“inquiries and responsa”) which offer a “view from inside” of Jewish life in its sundry aspects,

personal, communal, social, cultural, etc. Responsa materials are extant in larger and smaller collections, most in the Hebrew language, while others are known from quotations and references in related sources.

Boaz Cohen (1899–1968) compiled a bibliography of printed Hebrew responsa up to 1930, *Kuntras ha-Teshuvot (Book of Responsa)*, Budapest, 1930, which lists about 2,000 titles. Solomon B. Freehof (1892–) published in *Bibliography and Booklore*, 5, 30–41, (1961) (Hebrew section), Cincinnati, Ohio a supplement of 500 additional titles printed from 1930 to 1960.

The Institute of Law Studies at the Hebrew University sponsors a program of computerized indexing of opinions and decisions in the literature of responsa regarding civil, criminal, and administrative law. About a quarter of a million records will be examined for this purpose.

Following is a limited listing of titles which reflect the broad scope, historically as well as geographically, of this branch of Rabbinics:

Teshuvot ha-Rambam, Jerusalem, 1957, 3 vols., by Moses Maimonides; *Teshuvot Baale Tosafot (Responsa of the Tosafists)*, (I. A. Agus, ed.), New York, 1954; *Teshuvot Maharam me-Rotenburg*, by Meir ben Barukh of Rotenburg, Germany (ca. 1220–1293), Jerusalem, 1957–1962, 3 vols.; This work is also available in English, (I. A. Agus, ed.), Ktav, New York, 1970, 2 vols.; *Teshuvot ha-Rashba*, by Solomon ben Abraham Adret of Barcelona, Jerusalem, 1958–1959, 4 vols.; *Teshuvot ha-Rosh*, by Asher ben Yehiel of Germany and Spain (1250–1327), New York, 1954; *Teshuvot ha-Rivash*, by Isaac ben Sheshet of Spain and Algiers (1326–1408), Jerusalem, 1967; *Teshuvot Maharil*, by Jacob ben Moses ha-Levi Moellin of Germany, Tel Aviv, 1963; *Teshuvot Rashbaz*, by Simon ben Zemah Duran of Algiers (1361–1444), Tel Aviv, 1964; *Teshuvot*, by Israel Bruna of Germany (1400–1480), Jerusalem, 1960; *Teshuvot Maharik*, by Joseph ben Solomon Colon of Italy (1420–ca. 1480), New York, 1958; *Teshuvot Maharem Alashkar*, by Moses Alashkar of Cairo (1466–1542), Jerusalem, 1959; *Teshuvot*, by Elijah Mizrahi of Turkey (ca. 1455–1526), Jerusalem, 1938; *Teshuvot ha-Radbaz*, by David ben Solomon Ibn Abi Zimra of Cairo (1479–1589), New York, 1967, 2 vols.; *Teshuvot Mabit*, by Moses di Trani of Palestine (1505–1585), Brooklyn, 1960; *Teshuvot meha-Rashdam*, by Samuel ben Moses de Medina of Salonica (ca. 1506–1589), New York, 1959, 2 vols.; *Teshuvot ha-Rema*, by Moses Isserles of Cracow (1520–1572), New York, 1970; *Sefer Devar Shemuel*, by Samuel Aboab of Venice (1610–1694), Jerusalem, 1966; *Noda bi-Yehudah*, by Ezekiel Landau of Prague (1713–1793), New York, 1966, 2 vols.; *Hatam Sofer*, by Moses Schreiber of Pressburg, Jerusalem, 1970, 3 vols.; *Divre Hayyim*, by Hayyim Halberstam of Sanz, Galicia (1793–1876), New York, 1967, 2 vols.; *Shoel u-Meshiv (Inquirer and Respondent)*, by Joseph Saul Nathanson of Lwow, Galicia (1808–1875), Jerusalem, 1944, 5 vols.; *Melamed le-Ho'il (Instructor for Usefulness)* by David Hoffman, New York, 1954; *Mishpat Kohen (Judgement of a Priest)*, by Abraham Isaac Kook of Jerusalem (1865–1935), Mosad Harav Kook, Jerusalem, 1966; and *Igrot Moshe*, by Moses Feinstein of New York (1892–), New York, 1959–.

Codes

Unlike *responsa*, which reflect the evolving stages of Jewish law, codes present its definitive formulations. They have been compiled in many lands and in many periods, often mirroring the sociocultural conditions of the milieu.

Different types of codes exist. Some cover the entire spectrum of Jewish law, including the strata for the existence of which circumstances have definitely passed, e.g., the tribal period in Jewish history. Most deal with legal-ritual aspects which are of concern to Judaism and Jewish life as they developed following the destruction of the Temple in 70 C.E. This excludes the areas of the sacrificial Temple cult and ritual purity. Still others are limited to specific subjects, e.g., dietary laws, liturgy, Sabbath, etc.

Following are examples in this genre:

Halakhot, by Rabbi Isaac Alfasi of Spain and North Africa (1013–1103) is a compendium of the operative, post-Temple areas of Jewish law. It is arranged as a running commentary on the respective tractates of *Talmud*, explicating and paraphrasing the relevant texts. *Halakhot* are printed in large editions of *Talmud* following each tractate, or in sets separate from the texts of *Talmud*. Sometimes called RIF (acronym of the author's name) or *Alfasi*, this work inspired the writing of numerous supercommentaries which proved of great importance in the further development of Jewish law.

Mishneh Torah, by Moses Maimonides, also known by the title *Ha-yad he-Hazakah* (*The Mighty Hand*), presents in fourteen books the entire corpus of Jewish law. Its purpose, as stated explicitly by the author, was to provide a definite code and spare the student the necessity to study sources. This clear expression of intent provoked a reaction by the great contemporary Talmudist Abraham ben David of Posquieres (Ravad 1125–1198), who feared that Maimonides' opus might altogether supplant the study of *Talmud*. His detailed strictures on some of Maimonides' decisions, known as *Hasagot ha-Ravad*, are printed in all editions of *Mishneh Torah* as critical annotations on the relevant statements, e.g., *Mishneh Torah*, Jerusalem, 1964, 6 vols. Next to *Talmud*, *Mishneh Torah* had been the most widely studied work in Rabbinics, which stimulated the writing of some 180 commentaries.

Yale Judaica Series is programming an English translation of this work under the title *Code of Maimonides*, Yale University Press, New Haven, 1949–.

Mahzor Vitry, Brooklyn, 1960, 2 vols., by a disciple of Rashi, Simha of Vitry (eleventh century), is one of the earliest compendia of liturgy.

Sefer Mizvot Gadol (*Large Book of Mizvot*), Jerusalem, 1960–1962, 2 vols., by Moses ben Jacob of Coucy, France (thirteenth century), is a code of the 613 commandments of the *Torah*, 365 prohibitions, and 248 positive injunctions.

Mordekhay, by Mordecai ben Hillel of Germany (ca. 1240–1298), is a Talmudic compendium, usually printed following Alfasi's *Halakhot*, of historic-cultural interest because of its frequent references to other medieval authorities. It offers much information on social and cultural conditions of the times.

Piske ha-Rosh, by Rabbi Asher ben Yehiel, is also a Talmudic compendium printed at the end of each tractate, which includes a wealth of earlier materials, e.g., commentaries, responsa, codes.

Shibbole ha-Leket (Ears of Gleaning), Jerusalem, 1966, by Zedekiah ben Abraham Anav of Italy (ca. 1227–1300), is a code on holidays and festivals replete in references to Italian authorities.

Sefer ha-Hinukh (Book of Training), New York, 1952, 2 vols., highlights the educational aspects of the 613 commandments. Arrangement of the discussions is according to the weekly readings from *Pentateuch* at public worship.

Sefer ha-Turim (Book of Pillars), New York, 1959, 7 vols., by Jacob ben Asher (ca. 1269–1340), includes the entire corpus of Jewish law, except for the parts which became irrelevant in daily life after the destruction of the Temple. It is divided into four sections: a. *Orah Hayyim (Way of Life)* deals with laws and customs which pertain to daily living, e.g., liturgy, Sabbath, holidays, fast days; b. *Yoreh Deah (Instruction in Knowledge)* deals with dietary laws, restrictions on usury, provisions concerning certain ritual traditions, laws on mourning; c. *Even ha-Ezer (Rock of Help)* includes laws of marriage, divorce, legal status of women, their rights and responsibilities; and d. *Hoshen ha-Mishpat (Breastplate of Judgment)* deals with laws of commerce, inheritance, partnerships, organization, and functions of the judiciary.

Sefer ha-Turim is regularly printed with commentaries, e.g., *Bet Yosef*, by Joseph Caro (1488–1575), *Bayit Hadash*, by Joel Sirkes (1561–1640), *Derishah u-Ferishah*, by Jacob Joshua Falk, and *Darke Moshe*, by Moses Isserles.

Shulhan Arukh (Table Set) by Joseph Caro, New York, 1959, 7 vols., together with clarifying annotations to its text *Mappat ha-Shulhan (The Cover for the Table)* by Moses Isserles, constitutes the definitive code of Jewish law, paralleling *Sefer ha-Turim* in organizational structure. While Caro bases decisions on *Sephardic* ("Spanish") authorities, especially Alfasi, Maimonides, and Rosh, Isserles registers *Ashkenazic* ("Central and Eastern European") traditions and customs.

Like its predecessors, *Shulhan Arukh* stimulated and inspired the writing of more commentaries, novellae, digests, and abbreviations. In the last group, *Kizzur Shulhan Arukh*, by Solomon Ganzfried of Ungvar, Hungary (1804–1886) achieved great popularity, with numerous reprints, revisions, and translations of it having appeared since it was first published in 1864.

Otzar ha-Poskim (Treasury of Decisions), Jerusalem, 1955–, is a systematic digest, structured according to the pattern of *Shulhan Arukh*, of all extant Rabbinic responsa which bear upon Jewish law and ritual.

SUPPLEMENTARY BIBLIOGRAPHY

- Albeck, Hanoah, *Mavo le-Talmudim [Introduction to the Talmuds]*, Dvir, Tel Aviv, 1969–.
- Enziklopedyah Talmudith le-Anyane Halakhah [Talmudic Encyclopedia for Problems of Halakhah]*, Yad Harav Herzog, Jerusalem, 1951–.
- Epstein, Jacob Nahum, *Mavo le-Nusah ha-Mishnah [Introduction to the Text of the Mishnah]*, Magnes, Jerusalem, 1964, 2 vols.

- Frankel, Zacharias, *Darke ha-Mishnah* [*The Methods of the Mishnah*], Sinai, Tel Aviv, 1959.
- Frankel, Zacharias, *Mavo ha-Yerushalmi* [*Introduction to Palestinian Talmud*], Skutsch, Breslau, 1870.
- Feldman, David, *Birth Control in Jewish Law*, New York Univ. Press, New York, 1968.
- Freehof, Solomon B., *A Treasury of Responsa*, Jewish Publication Society, Philadelphia, 1963.
- Ginzberg, Louis, *On Jewish Law and Lore*, Jewish Publication Society, Philadelphia, 1955.
- Heinemann, Isaac, *Darke ha-Aggadah* [*Methods of the Aggadah*], Magnes, Jerusalem, 1970, 2 vols.
- Jastrow, Marcus J., *Dictionary of the Targumim, the Talmud Bavli and Yerushalmi, and the Midrashic Literature*, Pardes, New York, 1950, 2 vols.
- Kadushin, Max, *Worship and Ethics: A Study in Rabbinic Judaism*, Northwestern Univ. Press, Evanston, Illinois, 1964.
- Kasowski, Chayim J., *Concordance of Mishnah*, Massada, Jerusalem, 1956–1960, 4 vols.
- Kasowski, Chayim J., *Concordance of Talmud*, Jewish Theological Seminary, Jerusalem–New York, 1955–.
- Kasowski, Chayim J., *Thesaurus Thosephthas*, Jewish Theological Seminary, Jerusalem, 1932–.
- Kosovsky, Biniamin, *Ozar lashon ha-Tannaim* [*Treasury of Language of Tannaitic Literature*], Jewish Theological Seminary, Jerusalem, 1965–.
- Lauterbach, Jacob Z., *Midrash and Mishnah: A Study in the Early History of the Halakhah*, Bloch, New York, 1916.
- Margalioth, Mordechai, ed., *Enziklopedyah le-Hakhame ha-Talmud veka-Geonim* [*Biographical Dictionary of Tannaim, Amoraim, and Geonim*], Chachik, Tel Aviv, 1970, 2 vols.
- Margalioth, Mordechai, ed., *Enziklopedyah le-Toldot Gedole Yisrael* [*Biographical Dictionary of Jewish Sages and Scholars from the Ninth to the End of the Eighteenth Century*], Chachik, Tel Aviv, n.d., 4 vols.
- Mishnayot* (text of Mishnah with parallel English translation), Mishna Press, London, 1951–1956, 7 vols.
- Strack, Hermann L., *Introduction to the Talmud and Midrash*, Jewish Publication Society, Philadelphia, 1945.
- Urbach, Ephraim E., *Baale ha-Tosafot* [*The Tosafists, Their History, Writings, and Methods*], Bialik, Jerusalem, 1955.
- Zunz, Leopold, *Ha-Derashot be-Yisrael ve-Hishtalshelutan ha-Historit* [*Homiletics in Israel and Their Historical Development*], Bialik, Jerusalem, 1954.

JEWISH PHILOSOPHY

Biblical teachings represent the norms which affected Jewish thought since ancient times to our days. Though Biblical spokesmen were not speculative thinkers, their pronouncements concerning cultural, social, and political problems make them appear as metaphysicians and moralists in the accepted sense of those terms.

Three concepts form the structure of the Biblical world view: (a) God the Creator and Supreme Ruler; (b) His *Mizvot*—commandments which express the eternal laws of the divine order of things; and (c) Man, especially the people of Israel, to whom these *Mizvot* were conveyed to guide him in the achievement of the ideas of

justice and right. These ideals are not reflective of the laws of nature, but vice versa—the natural world serves as an instrument for their realization.

Rabbinic comments on the Bible elaborate and embellish the three concepts, though nowhere in *Talmud* or *Midrash* was an attempt made to construe a philosophic system. Such an attempt emerged in Alexandria as a concomitant of the confrontation between Judaism and Greek thought. Philo synthesized the two cultural mainstreams into a coherent system, interpreting Jewish religious concepts and Biblical narratives in terms of Greek philosophic categories. Philo's works, available in English translation by F. H. Colson and G. H. Whitaker, London, 1953–1963, 12 vols., make possible the reconstruction of Jewish Hellenistic philosophy. Philo did not exert much influence upon Judaism, except for the fact that his method to synthesize Jewish insights with elements from Greek culture prevailed up to modern times. In that respect, according to H. A. Wolfson (1887–) in *Philo Foundations of Religious Philosophy in Judaism, Christianity, and Islam*, Harvard Univ. Press, Cambridge, Massachusetts, 1948, 2 vols., religious philosophy from Philo to Spinoza is essentially Philonic.

Jewish thinkers of the early Middle Ages in the Eastern Mediterranean centers of learning, spurred by rationalistic trends in Islam and challenged by Karaite heresies, searched for clarity on the nature of Judaism, especially on the role of reason within the framework of its religious tradition. Saadiah Gaon was the eminent spokesman of that era. His *Emunot ve-Deot (Beliefs and Opinions)*, Tel Aviv, 1958, one of the most influential works in medieval Jewish philosophy, articulates the premise that Judaism demands an apprehension of its truths by means of reason. In fact, the rationality of *Torah* per se is proof of its divine origin. However, philosophic speculation alone is not sufficient to discover pure truth. The latter, including knowledge of the Creator and of redemption at the end of time was made known to us only through revelation. Thus reason itself leads to conclusions that not everything comprehended by the mind is subject to its rational deductions.

In line with his rationalistic approach, Saadiah divides *Mizvot* into two major groups: ethico-logical *Mizvot*, which are dictated by reason, self-evident and universal in scope, and ceremonial *Mizvot*, which must be observed on the basis of religious authority and pertain to the cult. He interprets divine attributes consistently in negative terms, stressing that adjectivic statements about God say actually nothing about His essence. They only state that He is not lacking in the relevant qualities and virtues. As an illustration, a statement "God is powerful" only expresses an affirmation that nothing could obstruct or interfere with God's limitless power.

Other insights into this important work deal with the character of man, the universe, and a host of problems which were of concern to contemporary philosophy. Saadiah showed the way how intellectual and spiritual influences of non-Jewish origin can be assimilated to enrich Judaism.

Jewish philosophic endeavor achieved high levels in Moorish Spain. Here all major schools of thought current in Islam made an impact upon Jewish thinkers.

Thus the renowned Hebrew poet Solomon ibn Gabirol (ca. 1020–1057) espoused Neo-Platonism, a system of speculation concerned with the seemingly irreconcilable conflict between the idea of an absolute, eternal, transcendental Creator and the finite, changeable, created universe. The theory of emanation, mediated through the dynamism of the Divine Will, is offered by this system as a solution of the dilemma. Gabirol's *Mekor Hayyim (Fountain of Life)*, Tel Aviv, 1961, better known by its Latin title *Fons Vitae*, exerted profound influence upon medieval Christian metaphysics.

A uniquely original interpretation of Judaism was offered by Judah ha-Levi of Toledo (ca. 1075–1141) in his *Kuzari*, Tel Aviv, 1969. The author's point of departure is with the phenomenon of prophecy. While other philosophers discussed prophecy in metaphysico-psychological terms, Halevi focused attention on its dimension in the history of the Jewish people, and beyond that in the history of all mankind, concluding that the prophet is to the Jews what they are to the peoples of the world. As the nation to whom the *Torah* was revealed, and its guardians, Jews are endowed with the special ability to apprehend the divine. The prophetic talent symbolizes the highest degree of refinement of that special ability. With this reasoning, *Kuzari* delineates the uniqueness of the historic experience of the Jewish people, and raises Judaism above the level of abstract philosophic monotheism. In addition to this metaphysical anthropology, it presents a geographical and philological theory to argue that the Land of Israel and the Hebrew language are conducive to a knowledge of God and prophecy.

Moses Maimonides formulated in his *Moreh ha-Nevukhim (Guide of the Perplexed)*, Mosad Harav Kook, Jerusalem, 1972, the foremost attempt in medieval Jewish philosophy to achieve a synthesis between faith and reason. His system embraces scientific data of Aristotelian physics, psychology, etc., together with Biblical and Rabbinic traditions. God in this system is infinite, eternal, incorporeal, all knowing, unique in His absolute oneness. All attributes about Him must be understood in the negative sense. At the same time, He is the God of Judaism, King and Ruler, concerned about His world, sanctioning exceptions in the order of nature.

Maimonides presented an intellectually and logically convincing solution to the problem of reconciling God's omniscience with man's free will. On the question of the world's eternity, an important postulate in Aristotelian philosophy, he argues that since no demonstrative proof has been offered in its behalf, Scriptures' creation story can be accepted on the basis of its traditional warrant. The phenomenon of prophecy involves, in addition to the prophet's physical, intellectual, and moral qualifications, an element of divine will which is beyond the ken of human comprehension. All *Mizvot*, including those of a distinctive ritualistic nature, are elucidated as rational in origin and purpose. Man's highest goal is the development of his intellectual faculty, which enables him to reach a true understanding of God.

Soon after its appearance, the *Guide* aroused a storm of controversies in many Jewish communities between adherents and opponents of the study of philosophy. On the other hand, countless studies and commentaries were written on it through the centuries, all of which attest to its influence. The great Christian scholastics of

the thirteenth century, Albertus Magnus, Thomas Aquinas, Duns Scotus, and others, saw in *Doctor Perplexorum*, the Latin title of the Guide, an example of positive faith which fuses harmoniously with universal knowledge. As an example of the way in which the challenge of scientific thought to religion can be met, this work is still of great importance.

The above described classics in Jewish philosophy were originally written in Arabic. The growing interest in speculative thought in Christian-dominated centers of learning, in Spain, France, and Italy, called for translations from Arabic into Hebrew. This task was accomplished with admirable skill by the Tibbon family in the Provence. One of its representatives, Samuel ibn Tibbon (1150–1230), in addition to a translation of the Guide executed with the author's approval, wrote a glossary thereto *Perush meha-Millot ha-Zarot* (*Discourse on Unknown Terms*), Vilna, 1914, which was indicative of the effort to create a philosophic terminology in Hebrew. These Hebrew works were eventually translated into Latin for the benefit of Christian scholars.

Following rationalistic Aristotelianism, Levi ben Gershom of Avignon (Ralbag) formulated in *Milhamot Adonai* (*Wars of God*), Jerusalem, 1960, a radical system of that philosophy going beyond Maimonides on such issues as providence and the limited scope of God's knowledge.

At the other end of the spectrum, Hasdai ben Abraham Crescas (ca. 1340–ca. 1410), using philosophic methodology in *Or Adonai* (*Light of God*), Jerusalem, 1970, refuted Maimonides and Aristotelian metaphysics. In his discussions concerning God, man, immortality, and reward and punishment in the hereafter—while articulating the moments of will and emotion rather than intellectual speculation—he concluded that love of God, not cognition of Him, is the highest goal man must aspire to. Since this goal is postulated by *Torah* and intended by its *Mizvot*, it follows logically that *Torah* is superior to philosophy.

The problem of religious dogmas—basic articles of faith—claimed the attention of medieval Jewish philosophers. Maimonides defined thirteen such articles. While Crescas reduced their number to eight, his friend and disciple Joseph Albo (ca. 1380–ca. 1440) in *Sefer ha-Ikkarim* (*Book of Principles*), Jewish Publication Society, Philadelphia, 1929–1930, further limited them to three primary principles: existence of God, revelation, reward and punishment. However, Isaac Abarbanel, in *Rosh Amanah* (*Foundation of the Faith*), Tel Aviv, 1958, argues that every detail of the *Torah*, without regard to principles and corollaries, is an article of faith.

Modern Jewish philosophies represent interpretations of and reactions to the tremendous changes in Jewish life, intellectual and sociopolitical, which occurred in the past 2 centuries. The impetus to modernism was given by Moses Mendelssohn of Berlin (1729–1786), an enthusiastic believer in the philosophy of Enlightenment, with his campaign to gain for Jews the rights of citizenship and cultural integration in European society. Mendelssohn's philosophic position was presented in *Jerusalem*, Schocken, New York, 1969. Starting from the premise of Enlightenment that a state is based upon a social contract with its citizens, he argues that any ecclesiastic authority, which is concerned solely with man's relationship to God, may

use its powers to "persuade." However, it has absolutely no power to "coerce," for neither state nor church can claim dominion over man's beliefs and opinions. God's eternal truths, such as His unity, providence, etc., are comprehensible by every rational person, Jew and non-Jew alike. Judaism teaches, in addition to those universal verities, particular historic experiences of the Jewish people, and postulates specific rules of conduct. Those help maintain the Jewish community and inspire a sense of personal worthwhileness in living as a Jew. Unless abrogated by divine command, Jews must abide by these rules, even at the expense of being denied civil rights. *Torah*, however, is not identical with the purposes of government, nor does it stipulate dogmas of faith.

Mendelssohn's reasoning had a far reaching impact in stimulating a reevaluation of the position of Jewish law in an emancipated Jewish community. Three schools of thought eventually crystallized on the subject, with concurrent attempts to formulate new directions in Jewish cultural endeavor.

Abraham Geiger (1810–1874), leading spokesman of Reform Judaism in Germany, in *Judaism and Its History*, Bloch, New York, 1911, advocates deliberate deemphasis of those elements in the religious tradition which foster a sense of national identity and group distinctiveness among Jews. He projects a philosophy of religion which accentuates the ethical and universalistic aspects of Judaism. This philosophy led to the theory of Jewish Mission with its pivotal concept that the Jewish people were destined to remain in exile, scattered among the nations of the world, to demonstrate patterns of high moral standards.

Reacting to Reform Judaism, Zacharias Frankel and many of the leading exponents of the *Wissenschaft des Judenthums* insist upon the continued validity of all aspects of Jewish law, the ethical-universalistic as well as ceremonial-cultic. To be sure, contemporary sociocultural conditions call for an analysis of the relevance of Jewish law, and for possible adjustments in various areas. Nachman Krochmal of Brody, Galicia, (1785–1840), author of the only major philosophic work of that period in Hebrew, *Moreh Nevukhe ha-Zeman (Guide for the Perplexed of the Times)*, London, 1961, offers cogent analytical interpretations of Jewish history, especially in the cyclic ascent, florescence, and decline of Jewish law, in support of the evolutionary approach.

Samson Raphael Hirsch (1808–1888) presented the reaction of Neo-Orthodoxy to Reform Judaism in his *Nineteen Letters*, Jerusalem, 1969. Jewish law is fundamental, unchangeable, and indispensable in all its details. For belief in God turns man into a human being, but only Jewish law turns him into a Jew. Man's freedom is manifest in his acceptance of the duty to serve God, and it has been the historic function of the Jewish people to instruct mankind in this sacred duty, a task better accomplished in exile than in the Land of Israel. On this point Neo-Orthodoxy concurs with the theory of Jewish Mission. Hirsch further insists that if *Torah* is to have a wholesome influence upon general culture, the latter must be thoroughly comprehended by the adherents of the former. Hence the approval of secular learning by Neo-Orthodoxy, a point on which its spokesmen in Western Europe seriously diverged from their colleagues in the East.

These three approaches to Jewish law are currently represented on the American scene by the three major groups of American Jewry—Reform, Conservative, Modern Orthodoxy.

Samuel Hirsch (1815–1889), rabbinic leader in Reform Judaism in Germany and America, following Hegelian speculative idealism, interpreted Judaism in *Die Religionsphilosophie der Juden (Philosophy of Jewish Religion)*, 1842, as an evolving system which is rooted in man's awareness of his sovereign will. For, man's capacity for freedom is a gift from a transcending source—God.

Hermann Cohen (1842–1918), Neo-Kantian and founder of the Marburg school, discussed in *Religion der Vernunft aus den Quellen des Judenthums (Religion of Reason in the Sources of Judaism)*, Darmstadt, 1966, the correlation between God and man, not in terms of Kantian abstract concepts but as manifestations of man's efforts to imitate God in the ways of holiness. Special emphasis is placed in this discussion on the teachings of Judaism concerning man's capacity to achieve atonement through his personal strivings.

Moritz Lazarus (1824–1903) defined Judaism in *The Ethics of Judaism*, Jewish Publication Society, Philadelphia, 1900–1902, 2 vols., as a system of religious ethics, God figuring as the author of the ethical imperative. Lazarus' philosophy reflects the influence of Kant concerning the authority of ethics.

Moses Hess (1812–1875) was the first among modern thinkers to present in *Rome and Jerusalem*, New York, 1958, a nationalistic philosophy of Judaism. Postulating an underlying unity to all manifestations of the universe, in nature as well as in the history of mankind, Hess identifies the purpose of the Jewish people to effect harmonizations of conflicting forces in society. Jews must return to their ancestral homeland, the only place in the world where their national genius can become regenerated, to project anew a moral view of life for all humanity. Elevating Jewish nationalism to a cosmic plane, Hess argues its cause for the sake of universalism. The theory of Jewish Mission is thus given here a direction altogether different from the one in Reform Judaism.

Zevi Hirsch Kalischer (1795–1894), an orthodox rabbi of the Eastern European school, issued a call in *Derishat Zion (The Demand of Zion)*, Jerusalem, Mosad Harav Kook, 1964, for a national reconstructive effort in the Land of Israel as a primary condition for the arrival of Messiah. Like Judah ha-Levi in *Kuzari*, Kalischer bases his thoughts on the concept that Judaism combines a series of units—one God, one people, one land and one Torah. Rebuilding the Land of Israel will bring about a revitalization of all aspects of Judaism for the benefit of all mankind.

Leon Pinsker (1812–1891) argued in *Autoemancipation*, New York, 1916, the cause of Jewish nationalism on psychological grounds. Jews must reestablish a position of normal nationhood with a national government in their homeland. Only in that way will they be able to dispel the notion of a wandering ghost among the nations of the world.

Theodore Herzl (1860–1904) pleaded the cause of Zionism and statehood for Jews in *The Jewish State*, Herzl Press, New York, 1970, on economic grounds.

Ahad Ha-am (pen name for Asher Ginzberg 1856–1927) formulated the philosophy of cultural nationalism. Concerned with the gradual undermining of Jewish national distinctiveness in the diaspora, he calls for the creation of a spiritual center in the Land of Israel which will strengthen the national consciousness of the Jewish people everywhere. His conception of the Jewish national ideal is rooted in the socio-psychological theory that every nation has a distinctive Ego which represents a sum total of its enduring historic experiences and its aspirations for the future. This Jewish ethos is identified as a passionate drive for absolute justice. A spiritual center will stimulate further advances in that direction, and exert eventually an invigorating moral influence upon all humanity.

Ahad Ha-am's *Selected Essays*, Tarbuth, New York, 1967, reflect the major insights of his philosophy.

Mordecai M. Kaplan (1881–) defined Judaism in *Judaism as a Civilization*, Reconstructionist Press, New York, 1957, as the evolving religious civilization of the Jewish people, each of the three terms connoting a specific meaning. The adjective "evolving" suggests that Judaism should be considered from a pragmatic, rather than philosophic point of view, focusing attention on the needs and challenges of the living Jewish people, more so than on its texts and metaphysical constructions. The additional specifying adjective "religious" implies that Jewish civilization manifests its genius primarily in clarifying the purposes of human existence. The noun "civilization" stipulates that Judaism embraces religious as well as secular elements of culture, specifically arts and sciences, as essential components within the broad context of Jewish spirituality.

Religious naturalism is the basis for Kaplan's definition of God as "the power in the universe on which man must rely in order to achieve his destiny."

An in-depth analysis of the nature of the relationship between man and the world was the point of departure for Martin Buber (1870–1965) in his *I and Thou*, Scribner, New York, 1970. This relationship is defined as a dialogue; either in the form of "I and Thou"—a dialogue of equals, based upon mutuality, directness, openness, and presentness—or in the form of "I and it"—a dialogue utilized by I to achieve ulterior objectives. As a rule, dialectical interaction exists in a normally functioning culture between the two relationships, the results of which are arts and sciences, and new forms of new "I and Thou" dialogues.

God is described as the "Eternal Thou" in Buber's philosophy. Man knows Him not through cognitive propositions, nor through metaphysical speculation, but through daily "I and Thou" encounters with the phenomena of life, while his encounters with the "Eternal Thou" experienced in the multiple "finite Thous" describe revelation. The Bible is an enduring record of such encounters, its laws symbolizing man's response to revelation. A religious attitude is essentially expressed in the manner man reacts to daily challenges, not through affirmations of religious beliefs. Judaism is unique among the religions of the world because it invested the concepts of God and man with so much spirituality. Buber's philosophy reflects influences of Hasidic mysticism. It made a profound impression upon contemporary Christian theologians.

Franz Rosenzweig (1886–1929), Buber's associate in a new German translation of the Bible, also elaborated the theme of relatedness in *The Star of Redemption*, Holt, Rinehart and Winston, New York, 1971. The analysis regards the three basic elements of the mind's experience: God, man, and the world. Unlike philosophic speculation, which treats the three either as isolated or as identical phenomena, the Bible perceives them in terms of relations: between God and the world, the relation of creation; between God and man, the relation of revelation; between man and God, and between man and the world, the relation of redemption. Revelation is the central category in this system, not as an historic event, but in terms of God's continuous entry into relationship with man. God's self-identification to man in love evokes man's response in the form of "love your neighbor." Man's search for the kingship of God expresses his desire for the reality of the revelatory experience. Some aspects of Rosenzweig's system are identical with themes expounded by modern existentialists, e.g., Martin Heidegger.

Abraham Joshua Heschel (1907–1972) defined religion in *Man is Not Alone: A Philosophy of Religion*, New York, 1951, and in *God in Search of Man: A Philosophy of Judaism*, New York, 1955, as the answer to man's ultimate questions. Attention is focused in these works especially on the basic existential questions to which Judaism addresses itself.

In Heschel's system, God is neither a metaphysical abstract concept nor a psychological projection. He is the God of the Bible, a living reality concerned and involved with His creatures' strivings and aspirations. Jewish ethics express man's ability to respond affirmatively to the divine imperative. In order to achieve that goal, Judaism stipulates fixed, regulatory norms of behavior—*Mitzvot*. At the same time, it allows for spontaneous reactions to God's reality.

Heschel elaborates the concept of hallowing time which is typified in Judaism by the eminent roles of Sabbath and the holidays. This is contrasted with tendencies in modern science and technology to consider time exclusively in spatial categories.

Abraham Isaac Kook (1865–1935), philosopher-mystic of Jewish restoration in the Land of Israel, projected a monistic view of the world and man which knows of no dichotomy between the sacred-religious and the profane-secular. Scientific discoveries and technological advances contribute to broadening of man's intellectual vision. Their apparent conflicts with religion in modern times only point at the latter's lack of commensurate growth in depth. But scientific research alone, which deliberately ignores ultimate objectives and alienates man from religious values, cannot offer direction to his life. Holiness, a religious category, is man's supreme goal in his personal life as well as in social endeavor, and in order to achieve it the sacred and the profane must be synchronized.

Kook maintains that mankind is moving toward universalism. The individual must strive toward it through evolutionary steps and within national units. Thus nationality is an essential and indispensable stage in the divine plan of universalism. The Jewish nation must strive with utmost devotion to further God's goals and purposes. As an indispensable requirement in the accomplishment of its functions, it must return to and restore its own home, the Land of Israel. This sacred connec-

tion between the Land and the people of Israel is not predicated upon socioeconomic factors. It is part of the mystery of the divine scheme for human history.

Kook's ideas are discussed sporadically in *Orot ha-Kodesh (Lights of Holiness)*, Jerusalem, 1963–1964, 3 vols., *Orot ha-Teshuvah (Lights of Repentance)*, Jerusalem, 1965, 2 vols., and in many places in his writings on Jewish law.

SUPPLEMENTARY BIBLIOGRAPHY

Blau, Joseph L., *Modern Writers of Judaism*. Columbia Univ. Press, New York, 1966.

Blau, Joseph L., *The Story of Jewish Philosophy*, Ktav, New York, 1971.

Efros, Israel I., *Ancient Jewish Philosophy*, Wayne State Univ. Press, Detroit, 1964.

Greenberg, Simon, *Foundations of a Faith*, Burning Bush Press, New York, 1968.

Guttmann, Julius, *Philosophies of Judaism: The History of Jewish Philosophy from Biblical Times to Franz Rosenzweig*, Holt, New York, 1964.

Heschel, Abraham J., *Torah min ha-Shamayim be-Aspaklaryah shel ha-Dorot [Theology of Ancient Judaism]*, Soncino, New York, 1962–1965, 2 vols.

Hirsch, Samson Raphael, *The Horeb; A Philosophy of Jewish Law and Observances*, Socino, London, 1962, 2 vols.

Husik, Isaac, *A History of Medieval Jewish Philosophy*, Meridian Books, New York, 1958.

Lewkowitz, Albert, *Das Judentum und die geistigen Stroemungen des 19 Jahrhunderts [Judaism and the Spiritual Trends of the Nineteenth Century]*, Marcus, Breslau, 1935.

Martin, Bernard, ed., *Contemporary Reform Jewish Thought*, Quadrangle Books, Chicago, 1968.

Rotenstreich, Nathan, *Jewish Philosophy in Modern Times*, Holt, New York, 1968.

JEWISH MYSTICISM

Like mysticism in general, its brand in Judaism (*Kabbalah*) denotes that area of religious perception which is based more on intuitive than reflective experiencing of the reality of the divine. According to Gershom G. Scholem (1897–) in his *Major Trends in Jewish Mysticism*, Schocken, New York, 1961, the following five major trends should be delineated in its development:

1. *Merkaba Mysticism*, which flourished from the first century B.C.E. to about the tenth century C.E. Its name is derived from the preoccupation of its adepts with the vision of Ezekiel's chariot (*Merkab*, vividly described in *Ezekiel*, chap. 1), and the accounts of creation at the beginning of *Genesis*. They practiced ascetism and engaged in ecstatic prayer, both of which helped them to experience as real the visionary journeys through heavenly chambers (*Hekhalot*). Some were even granted the bliss to glimpse the divine throne.

Jellinek's collection of smaller *Midrashim* includes a number of chapters with detailed information on journeys through the *Hekhalot*.

One of the very unusual tracts of this literature, known by the title *Shiur Komah*

(*Stature of the Height*), even offers information on God's physical dimensions. Only fragments of this document are extant.

Sefer Yezirah (*Book of Creation*), Jerusalem, 1965, another unusual work from this period, identifies the basic elements of the created universe as the ten elementary primordial numbers (one to ten), called in this book *Sefirot* ("numbers"), in combination with the twenty-two letters of the Hebrew alphabet. These thirty-two elements constitute the paths of wisdom through which the Creator called all existence into being. Mystics and philosophers, including Saadiah Gaon, looked at this work as a source of profound knowledge, and many commentaries were written on it.

2. Unlike *Merkaba* Mysticism, the school of *Hasidim* ("pietists")—mystics in the Rhineland communities of the twelfth and thirteenth centuries—was concerned primarily with problems of revelation, divine "indwelling," in this world, rather than with problems of creation and the worlds of the heavenly chambers. The principle "all being is in Him, as He is in all being," poetically describes the central concept of its contemplative insights. Not ascetism and other-worldliness, but altruism embracing all of humanity, humility, renunciation of physical delights, etc., lead to a comprehension of the divine presence.

Among the notable literary products of this group are *Sefer Hasidim* (*Book of the Pious*), Mosad Harav Kook, Jerusalem, 1960, by Judah ben Samuel he-Hasid of Regensburg (end of twelfth century), and *Sefer ha-Rokeah* (*Book of the Spice Dealer*), Jerusalem, 1967, by Eleazar ben Judah of Worms (1160–1238).

3. *Kabbalah* in Spain had a unique development which culminated in the appearance of *Sefer ha-Zohar* (*Book of Brightness*), Mosad Harav Kook, Jerusalem, 1966, 7 vols., in the latter part of the thirteenth century. Allegedly authored by a prominent *Tanna* of the second century, Simeon ben Yohai, this monumental work was made known by the Kabbalist scholar and author Moses de Leon (1250–1305), Gershom Scholem arguing on the basis of historical and textual evidence that he actually wrote the entire text.

As to its literary form, *Zohar* is a commentary on Pentateuch and parts of *Hagiographa*, consisting of four strata: a. *Midrash ha-Ne-elam* (*The Hidden Midrash*); b. *Zohar* proper; c. *Ra-aya Mehemana* (*Faithful Shepherd—Moses*); and d. *Tikkune Zohar* (*Supplements of Zohar*) which is usually published as a separate title. The entire work uses Aramaic similar in linguistic features and style to the dialect of *Talmud Bavli*. A complete English translation is available: *Zohar*, Soncino, London, 1931–1934, 5 vols.

Zohar, in keeping with fundamental premises of *Kabbalah* in Spain, offers little information about God, per se; He is in reality unknown, unknowable, infinite, *En Sof* ("without limit"). Who makes Himself comprehensible to the finite human mind through ten successive processes of emanation known by the term *Ten Sefirot*. *Zohar's* primary objective is to explain the working of the universe. Within that context, an understanding of the nature of the *Sefirot* and their inter-

relationship is essential. A simplified, most basic definition of their names and functions follows, it being understood that the subject is complex, open to other definitions, and varied interpretations.

1. *Kether*—Crown represents the first impulse of *En Sof* to become revealed
2. *Hokhmah*—Wisdom emanates from Crown as potential will to create.
3. *Binah*—Understanding symbolizes the actualization of creation
4. *Hesed*—Mercy is the channel of divine goodness effecting creation
5. *Gevurah*—Power controlling justice which, by its very nature, limits Mercy
6. *Tiferet*—Beauty symbolizes the process of fusion between Mercy and Power
7. *Nezah*—Endurance provides support for Mercy
8. *Hod*—Majesty provides complimentary support for Power.
9. *Yesod*—Foundation constitutes the source of all active forces in God, and conveys the elements of the preceding nine *Sefirot* to the Tenth *Sefirah*
10. *Malkhut*—Sovereignty, symbol of the creative principles at work in the finite world

The ten *Sefirot* are conceived of after a human pattern. For man in his totality, embracing his will, wisdom, emotions, and bodily structure, mirrors their reality. For that reason, *Sefirot* are sometime called *Adam Kadmon* (*Supernal Man*), and arranged in the form of a diagram of a human being, numbers 1, 2, and 3 symbolizing the head, 4 and 5 the arms, 6 the trunk, 7 and 8 the legs, 9 the organ of generation. Man not only mirrors the reality of the *Sefirot*; with his conduct he affects their balance, either positively or negatively. For through virtuous living he contributes to a state of *Tikkun* ("restoration") in the world of *Sefirot*, while his failings are bound to cause *Pegam* ("disturbance") with the result that the flow of divine goodness cannot continue harmoniously. The ideal of *Devekut* ("Cleaving to God") is of supreme significance in Zoharic mysticism.

Within 2 centuries after it became known, *Zohar* came to be regarded, next to Bible and *Talmud*, as an opus magnum in Judaism. Kabbalists and followers of *Hasidism* consider it as part of the divinely revealed *Torah*.

4. The trend of *Lurianic Kabbalah*, initiated by Isaac Luria Ashkenazi (Ari 1534–1572) in Safed, Upper Galilee, represents an extension of *Zohar* thought. Safed was at that time one of the great centers of Jewish learning and literary creativity, including masters of Jewish law, Kabbalists, poets, etc. Among the Kabbalists, Moses ben Jacob Cordovero (1522–1570), a writer and thinker of great stature, was preoccupied, especially in his *Pardes Rimonim* (*Garden of Pomegranates*), Korets, 1786, with a quasi-philosophic interpretation of the *Sefirot*, as well as a reconciliation of mystical pantheism with the monotheistic position of Judaism.

Unlike Cordovero's speculative tendencies, Luria's concerns focus on issues of world restitution and, more specifically, Israel's redemption. This must be understood against the background of the tragic and abrupt end of Spanish Jewry caused by the edict of expulsion in the summer of 1492, a cataclysmic event in Jewish history comparable with the Holocaust in the period of Nazi ascendancy.

Lurianic *Kabbalah* elaborates three doctrines: *Zimzum* ("withdrawal"), *Shevirat*

ha-Kelim ("fragmentation of the vessels"), and *Tikkun* ("restoration"). As in the case of ten *Sefirot*, only a brief simplified exposition can be offered here of this system: *En Sof*, in order to make room for creation, withdrew into Himself leaving primordial "empty space," into which eventually emerged the space-time physical reality which we experience with our senses. Since nothing can exist without God, *Kav* ("a line of divine light") streamed into that "empty space," which eventuated in creation of primordial man, lights of the *Sefirot* emanating from his "organs" and preserved in "vessels." This scheme of creation entails a number of stages, each having a special place in the total cosmic order. Some of the vessels, too weak to contain the beams of light streaming into them, "fragmented" with sparks of their light being strewn around in disorder and, as a result thereof, breeding evil. Through wholesome human endeavor, these sparks must be reassembled, the fragments restored, and the world of lights (*Sefirot*) brought into harmony. Thus a Jew who observes the *Mitzvot* meticulously in accord with Luria's detailed prescriptions of *Kavanah* ("thoughtful concentration") may effect the whole cosmological process and aid in hastening the Messianic era. The theories of Zimzum, etc., may have been difficult to comprehend, but the practical objective to help in the arrival of Messiah appealed to the imagination. Lurianic *Kabbalah* soon spread to many parts of the Jewish world where it made an impact causing profound changes in outlook and ways of living.

Because of Luria's pronounced emphasis on details of observance, Samuel A. Horodezky (1871–1957) in his monographs *Torat ha-Kabbalah shel Rabbi Mosheh Cordovero (Kabbalah System of Rabbi Moses Cordovero)*, Jerusalem, 1950–1951, and *Torat ha-Kabbalah shel Rabbi Yizhak Luryah (Kabbalah System of Rabbi Isaac Luria)*, Tel Aviv, 1947, elaborates the distinction between Cordovero's alleged theoretico-speculative and Luria's practical, quasi-magic working systems.

Luria also taught a complex theory concerning the transmigration of souls. He did not leave any written works, except for three Sabbath hymns and some marginal memos. All that is known about his teachings is from spontaneous oral communication to his associates and disciples, of which the most detailed record is by Hayyim Vital (1543–1620) in *Ez Hayyim (Tree of Life)*, Tel Aviv, 1959–1960. Other records contain differing views, which makes it difficult to reconstruct Lurianic *Kabbalah* accurately.

5. *Hasidic Mysticism* is heir to *Zohar* and Lurianic *Kabbalah*. Its literature, listed in Scholem, Gershom G. *Bibliographica kabbalistica*, Leipzig, 1927, comprises hundreds of items, including commentaries on Scriptures, lectures and discourses, novellae on *Talmud* and *Midrash*, expository pamphlets, and communications in letter form.

Hasidism was founded by Israel Baal Shem Tov (ca. 1700–1760), and soon became popular among the impoverished humble people in the provinces of Southeastern Poland as a way of life inspiring confidence in the efficacy of faith. Baal Shem's teachings are known from the legends about him in *Shivhe ha-Besht (Praises of the Baal Shem Tov)*, Indiana University Press, Bloomington, 1970, as well as from quotations by his disciple Jacob Joseph of Polonnoya (d. 1782) in

Toldot Yaakov Yosef, Tel Aviv, 1968, and others. His concerns were with social more than with cosmological problems. Consequently, *Hasidic* thought does not suggest new speculative or interpretative approaches. It reiterates earlier Kabbalistic concepts and practices, stressing that in a communal milieu or fellowship of *Hasidim* their meaning and purpose can be fully realized.

Hasidism insists that not only prayer and study of *Torah* but also every mundane and physical activity, including partaking of food, the sex impulse, and working for a livelihood, be utilized as opportunities to serve God. Abiding by the rules of humility in his day-by-day activities, and guided in matters of prayer and the performance of *Mizvot* by his teacher (*Zaddik*), a *Hasid* strives continuously to sublimate his life and thoughts for the sake of Heaven. He thus shares in the tremendous effort, speaking in Lurianic terms, to redeem the sparks of holiness from their imprisonment in the husks of the material world.

These and related thoughts are recorded in works by *Zaddikim* starting with *Maggid Devarav le-Yaakov* (*Conveying Teachings to Jacob*), Jerusalem, 1971, and *Or ha-Emeth* (*Light of the Truth*), Bnai Braq, 1966, both compiled by a *Hasid*-follower of Dov Ber of Mezhirich (*Maggid* of Mezhirich ca. 1710–1772) to register for posterity his master's inspiring insights. These two works are especially mentioned since the *Maggid* of Mezhirich, as successor in leadership of *Hasidism* to the Baal Shem Tov, was the first in the movement to attempt a systematization of new evolving ideas.

Among the influential works in this genre are: *Maor va-Shemesh* (*Light and Sun*), a mystic-*Hasidic* commentary on *Pentateuch* by Kalonymos Kalman Epstein (d. 1823); *Divre Emeth* (*Words of Truth*), 1966, N.Y., by Jacob Isaac Horowitz of Lublin (d. 1815); *Ilana de-Haye* (*Tree of Life*), Jerusalem, 1969, by Menahem Mendel of Rymanow (1745–1815); *Hidushe ha-Ramal*, Jerusalem, 1966, by Moses Loeb of Sasow (d. 1807); *Bene Yissakhar*, Tel Aviv, 1966, by Zevi Elimelekh Spiro (d. 1840); and *Emeth mi-Kock* (*Truth from Kock*), Bnai Braq, 1960, by Menahem Mendel of Kock (1788–1859).

Some *Hasidic* teachers articulate a specific aspect of thought or action, e.g., Shneur Zalman ben Barukh of Lyady (1747–1812) stresses in *Tanya*, New York, 1962–, intellectual contemplation regarding religious phenomena, which involves three phases: *Hokhmah* (“wisdom”)—initial comprehension; *Binah* (“understanding”)—reflective thought; *Daath* (“knowledge”)—reaction to ideas. This school of *Hasidism* is known by the name *HaBaD*, which is derived from the letters H, B, and D, of the described phases.

Levi Isaac of Berdichev (1740–1809) concentrates in *Kedushat Levi* (*Holiness of Levi*), Jerusalem, 1958, on the motif of love as the most meaningful approach in the service of God.

Elimelekh of Lezajsk (1717–1787) discusses in *Noam Elimelekh*, New York, 1955, the significance of the *Zaddik*'s personality in a *Hasidic* fellowship.

Israel of Kozenice (1745–1815) in *Avodat Yisrael* (*Service of Israel*). Shanghai, 1946, Hayyim Halberstam in *Divre Hayyim* (*Words of Hayyim*), New York, 1962,

and a number of other outstanding authors make extensive use of Kabbalistic ideas in their comments on Scriptures.

Nahman of Bratzlav (1772–1811) was not a writer, but one of his disciples recorded in *Likute Mahoran (Selections of Rabbi Nahman)*, New York, 1957, his master's philosophic ideas.

Hasidic Mysticism is also reflected in legends and folktales about *Zaddikim*. A number of collections with such materials are extant, similar in style and composition to *Shivhe ha-Besht*.

Novelists, poets, and essayists of modern Hebrew literature, which will be described in this article in the last category, use motifs of Hasidism for their artistic colorfulness.

SUPPLEMENTARY BIBLIOGRAPHY

Buber, Martin, *The Legends of the Baal Shem*, Schocken, New York, 1969.

Buber, Martin, *The Origin and Meaning of Hasidism*, Horizon, New York, 1960.

Buber, Martin, *Tales of the Hasidim*, Schocken, New York, 1947–1948.

Buber, Martin, *Tales of Rabbi Nachman*, Schocken, New York, 1947.

Franck, Adolphe, *The Kabbalah: the Religious Philosophy of the Hebrews*, University Books, New York, 1967.

Horodezky, Samuel A., *Ha-Hasidut vaha-Hasidim [Hasidut and Hasidim]*, Dvir, Tel Aviv, 1927–1943 4 vols.

Horodezky, Samuel A., *Ha-Mistorin be-Yisrael [Jewish Mysticism]*, Twersky, Tel Aviv, 1951–1961, 4 vols.

Scholem, Gershom, *Jewish Gnosticism, Merkaba Mysticism and Talmudic Tradition*, Jewish Theological Seminary, New York, 1960.

Scholem, Gershom, *The Messianic Idea in Judaism*, Schocken, New York, 1971.

Tishby, I., *Mishnat ha-Zohar [The Wisdom of the Zohar Translated Into Hebrew]*, Bialik, Jerusalem, 1961, 2 vols.

Uffenheimer, Rivka Schatz, *He-Hasidut ke-Mistokah [Quietistic Elements in 18th Century Hasidic Thought]*, Magnes, Jerusalem, 1968.

Weinstock, Israel, *Be-Maagale ha-Niglah vaha-Nistar [Studies in Jewish Philosophy and Mysticism]*, Mosad Harav Kook, Jerusalem, 1969.

ETHICAL LITERATURE

Ethical literature in Judaism comprises a group of workers which defines and offers guidance on issues of moral perfection, as *Halakhic* literature defines and offers guidance on the observance of *Mizvot*. Certain aspects of the human situation, such as freedom of will, questions about divine judgment, etc., are subjects of investigation in this literature.

In terms of forms, ethical literature includes systematic treatises, monographs on specific topics, commentaries on the Biblical book of *Proverbs* and tractate *Avot*

in the *Mishnah*, moralistic storybooks, poetic works, handbooks and guides on conduct, collections of epigrams, wills, and personal letters. Many authors use *Aggadic* lore and *Aggadic* style to popularize ethical ideals.

Ethical works in the Middle Ages authored by philosophers reflect the approach of the respective systems. Thus elements of Islamic Kalam and Neo-Platonism are traceable in the popular manual of religiously mandated ethics *Hovot ha-Levavot* (*Duties of the Heart*), Jerusalem, 1968–1970, by Bahya ben Joseph ibn Pakuda of Saragossa (eleventh century).

Maimonides in his introduction to the commentary on the tractate *Avot* of the *Mishnah*, known as *Shemone Perakim* (*Eight Chapters*), accepts the Aristotelian ideal of the mean between two extremes as conducive to ethical conduct. Only on the issue of humility, in keeping with Rabbinic ideals, does he urge a course of utter self-discipline.

The rationalist Jacob ben Aba Mari Anatoli (ca. 1194–1246) attempts in *Malmud ha-Talmidim* (*Goat for Students*), Lyck, 1866, an ethico-rationalistic interpretation of all *Mitzvot*. Opponents of the study of philosophy feared possible lessening of respect for religious ritual as a result of such rationalizations.

Works on ethics by writers steeped in the Rabbinic tradition generally emphasize that teachings on moral perfection, as propounded in *Talmud* and *Midrash*, suffice on that authority alone and do not require support from philosophic speculation, or from any other sources. Toward this end, Jehiel ben Jekuthiel Anav of Rome (second half of thirteenth century) assembled in *Maalot ha-Middot* (*Steps of the Rules*), Jerusalem, 1967, relevant quotations from Rabbinic sources and grouped them according to themes.

A contemporary Talmudist in Spain, Jonah ben Abraham Gerondi (d. 1263), limited his *Shaare Teshuvah* (*The Gates of Repentance*), Jerusalem, 1971, to the specific subject of repentance. This text continues in popularity among pious Jews up to our times.

A practical manual of wholesome conduct, in compliance with Rabbinic instructions, is offered by another Spaniard, Menahem ben Aaron ibn Zerah (d. 1385) in *Zeydah la-Dereh* (*Provisions for the Road*), Lublin, 1893.

Kad ha-Kemah (*Vessel of Flower*), Mosad Harav Kook, Jerusalem, 1969, by the Kabbalist Bahya ben Asher (d. 1340), lists ethical precepts in alphabetical order.

Menorat ha-Maor (*Candelabrum of Light*), Bloch, New York, 1929–1932, 4 vols., by Israel al-Nakawa ben Joseph of Toledo (d. 1391) has been the most popular work in this group since its appearance.

Ethical works produced by Hasidim-mystics in the Rheinland in the twelfth and thirteenth centuries frequently deal with moral challenges to Jews brought about by the Crusaders' persecutions. Their ideal of a normal life centers on the concept that a Jew's readiness to perform God's will, no matter how much he may suffer as a result, is the noblest manifestation of his ethnicity. For the more contradictory a given religious imperative appears to be with man's natural desires and inclinations, the greater its value. Consequently, offering one's very life for the sake of

God, an act often implicit in the ideal of *Kiddush ha-Shem* ("sanctifying the name of God") is taught in this literature as the most important among *Mizvot*.

Kabbalistic works on ethics elaborate the concept that man's deeds influence the cosmic order. In this sense, guides on behavior are offered by Moses Cordevoro in *Tomer Devorah (The Palm Tree of Deborah)*, Bnai Braq, 1964; in *Reshit Hokhmah (Beginning of Wisdom)*, Tchernowitz, 1859, by Elijah ben Moses de Vidas (1550–ca. 1587); and in *Kav ha-Yashar (Measure of Right)*, Jerusalem, 1967, by Hirsch Kaidanover (d. 1712). Isaiah Horowitz (1556–1630) presents in *Shene Luhot ha-Berit (Two Tablets of the Covenant)*, Warsaw, 1930, a unique ethical-mystical interpretation of the ritual code of Judaism. The poetic *Mesillat Yesharim (The Path of the Just)*, Jerusalem, 1969, by Moses Hayyim Luzzato (1707–1747) is likewise rooted in mysticism.

Literature of the various Hasidic schools of the past 2 centuries is predominantly oriented on ethics.

Israel Lipkin Salanter (1810–1883), a highly regarded scholar of Rabbinics in Lithuania, initiated systematic study of ethics in many *Yeshivot* which were opposed to Hasidism and its way of life. This innovation in the traditional curriculum of *Talmud*, Codes, etc., is known by the special term as the movement of *Musar* ("ethics"). Neither its founder nor any of its exponents produced notable literary works, through *Musar* studies had a definite impact upon Jewish life in some of the communities where they were pursued. Adepts of the movement made use of the existing resources, including some of the titles described in this article. In order to achieve desired effects, they engaged in certain mood creating techniques of studying, e.g., special sessions in the twilight hours, group singing, and sessions for self-introspection.

SUPPLEMENTARY BIBLIOGRAPHY

Abrahams, Israel, ed., *Hebrew Ethical Wills*, Jewish Publication Society, Philadelphia, 1926, 2 vols.

Glenn, Mendel Gershon, *Israel Salanter: Religious-Ethical Thinker*, Dropsie College Press, New York, 1953.

Jacobs, Louis, *Jewish Ethics, Philosophy and Mysticism*, Behrman, New York, 1969.

Katz, Dov, *Tenuat ha-Musar [The Musar Movement]*, Tzioni, Tel Aviv, 1946–1950, 2 vols.

Waxman, Meyer, *Judaism: Religion and Ethics*, Yoseloff, New York, 1958.

LITURGICAL LITERATURE

Few references are found in the Bible to prayer and prayer practices. Talmudic sources make it clear that regular prayer in Judaism, both daily and for special occasions, personal as well as communal, developed during the *Tannaitic* period.

Traditional liturgy includes three daily services: *Arvit* ("evening service"); *Shaharit* ("morning service"); *Minhah* ("afternoon service"). The latter two are

commemorative of the daily morning and late afternoon offerings in the Temple in Jerusalem.

Arvit and *Shaharit* include two basic themes: (1) A declaration of faith (*Shema Yisrael*)—Hear o Israel the Lord our God the Lord is One . . .—(*Deutoronomy* 6:4 ff.), which is preceded and followed by appropriate prayers and blessings; (2) Eighteen standard benedictions, known as *Tefilah* (“prayer *par excellence*”), the first three acknowledging God’s Omnipotence, followed by twelve petitions for personal, communal, national, and universal well being, and concluding with three expressions of thanksgiving. The *Minhah* service is limited to the eighteen benedictions, preceded by recitation of Psalm 145. On Sabbaths and holidays, in place of the twelve petitions, one special blessing is recited for the particular day, while the opening and closing units of three are the same as on weekdays. *Musaf* (“additional morning service”) is added on those days of the year when additional offerings were brought on the altar of the Temple in Jerusalem, e.g., the beginning of a new month, Sabbaths, the three Pilgrimage Festivals, New Year, and the Day of Atonement.

The basic frame of *Shema Yisrael* and the eighteen benedictions was expanded in the development of a more elaborate liturgical structure to include Psalms, selections from the Bible, *Talmud*, and *Midrash*, as well as poetic and narrative compositions. Eventually two *Nushaot* (“usages”) evolved: the Palestinian *Nusah Ashkenaz*, which includes much additional material by post-Talmudic authors, and the Babylon *Nusah Sefarad*, which limits to a minimum such additions. While the Palestinian usage became accepted (with local variations) in Italy, the Balkan countries, and in Central and Eastern Europe, Yemenite, Spanish, and Portuguese communities follow the Babylonian tradition (also with local changes).

Liturgical materials for the days of the year are assembled in prayerbooks known as *Siddur* (plural, *Siddurim*), of which the earliest draft was compiled by Amram Gaon (ninth century) and is identified in the history of Hebrew liturgy as *Seder Rav Amram Gaon*, Mosad Harav Kook, Jerusalem, 1971. About a century later Saddiah Gaon compiled a *Siddur* with annotations and instructions in Arabic. This work is also of historic importance and is called *Siddur Rav Saadiah Gaon*, Jerusalem, 1970. *Mahzor Vitri* was cited previously as the earliest liturgical code of Franco-German Jewry. In the course of time, numerous other *Siddurim* were compiled either for a given *Nusah* or for local communities. Those works contain much information about idiomatic traditions and the state of scholarship concerning liturgy.

Hasidic groups in the past 2 centuries, though of Eastern European origin, modified traditions of worship to incorporate teachings of Lurianic Mysticism. This development is known as *Nusah ha-Ari*.

Liturgical collections for the Pilgrimage Festivals and High Holy Days are known by the special term *Mahzor* (plural, *Mahzorim*). *Selihot* are collections of penitential prayers recited during the season of the High Holy Days and on the fast days of the year. *Kinot* are collections of dirges and lamentations for *Tishah be-Av* (“the ninth day of *Av*”) the annual anniversary of destruction of the First and Second Temple. The *Hagadah* (“story of the exodus from Egypt”) is also included in the category of liturgical literature.

Siddurim and *Mahzorim* are available in numerous editions and various formats. Some include commentaries, while others offer learned discourses and studies elucidating background, special insights, etc. All liturgical materials are available with translations into the vernacular used by Jews in various lands and times.

Reformist movements in the last 200 years produced modified revisions of the *Siddur* and the *Mahzor* which reflect their respective philosophic and theological conceptions of Judaism.

Before the invention of printing, scribes and copyists of liturgical materials, especially *Siddurim*, *Mahzorim*, and *Haggadahs* frequently enhanced their works with decorative illustrations. Also some Hebrew incunabula and early prints are decorated with artistic engravings. Such materials are of priceless value as art objects and documentary information sources on the history of Jewish art. Artistic motifs are seldom used in contemporary printed liturgical works, except for *Haggadahs*.

Following are listed the widely used *Siddurim* with English translations:

a. Conservative Ritual:

Siddur for Sabbath and Festivals, Prayer Book Press, Hartford, 1946.

Siddur for Week Days, Rabbinical Assembly, New York, 1966.

Mahzor for Rosh Hashanah and Yom Kippur, Prayer Book Press, Hartford, 1953.

Mahzor for High Holy Days, Rabbinical Assembly, New York, 1972.

b. Orthodox Ritual:

Daily Prayer Book, Rabbinical Council, New York, 1962.

Daily Prayer Book, editio Birnbaum, Hebrew Publishing Co., New York, 1949.

Mahzor for Festivals, editio Birnbaum, Hebrew Publishing Co., New York, 1971.

Mahzor for High Holy Days, editio Birnbaum, Hebrew Publishing Co., New York, 1951.

Mahzor . . . editio Adler, Routledge, London, 1924.

c. Reform Ritual:

Union Prayerbook, Union of American Hebrew Congregations, New York, 1945,
2 vols.

The Authorized Selihot for the Whole Year, Labworth, London, 1969.

Authorized Kinot for the 9th of Av, Labworth, London, 1970.

SUPPLEMENTARY BIBLIOGRAPHY

Arzt, Max, *Justice and Mercy: Commentary on the Liturgy of New Year and Day of Atonement*, Burning Bush Press, New York, 1963.

Dembitz, Louis N., *Jewish Services in Synagogue and Home*, Jewish Publishing Society, Philadelphia, 1898.

Elbogen Ismar, *Der juedische Gottesdienst in seiner geschichtlicher Entwicklung* [Jewish Worship in Historic Development], Kauffmann, Frankfurt a/M, 1931.

Idelsohn, Abraham Zebi, *Jewish Liturgy and Its Development*, Holt, New York, 1932.

Idelsohn, Abraham Zebi, *Jewish Music in Its Historical Development*, Holt, New York, 1929.

Jacobson, B. S., *Meditations on the Sidur*, Sinai, Tel Aviv, 1966.

Jacobson, B. S., *The Weekday Sidur*, Sinai, Tel Aviv, 1973.

Kievel, Herman, *The High Holy Days, A Commentary on the Prayers of Rosh Hashanah and Yom Kippur*, Burning Bush Press, New York, 1959.

Mahzor le-Yamin Noraim . . ., editio Goldschmidt, Koren, Jerusalem, 1970, 2 vols.

Petuchowski, Jacob J., *Prayerbook Reform in Europe*, World Union for Progressive Judaism, New York, 1968.

Roth, Cecil, *Jewish Art: An Illustrated History*, McGraw-Hill, New York, 1961.

POLEMICS

A number of topics are covered by this literary genre which mirror certain important developments in the life of Judaism. Many of these topics are alluded to elsewhere in this article, e.g., exegetic polemics between adherents of Rabbinic Judaism and Karaites, confrontations between students of philosophy and those opposed to it (especially after the appearance of Maimonides' *Guide*), attacks by *opponents of Hasidism (Mitnagdim)* against innovations in religious practices, and the ongoing philosophical and theological discussions between Reform Judaism and the elements representing traditionalism. Though at times the records of these discussions are not free of acrimony, generally they are within bounds of meaningful discourse, and as such reflect positive processes in the history of Judaism and the Jewish people.

The field of polemics includes a group of works which record religious attacks against Judaism by Christians and, to a lesser degree, by Muslims, as well as works written in defense thereof or attacking the attackers. Christian anti-Jewish polemics and arguments date back to the writing of the Church fathers. However, their high mark was reached in the Jewish-Christian disputes in the thirteenth to sixteenth centuries. As a minority group, Jews could hardly ignore the challenges, frequently directed at them by ex-coreligionists, apostates to Christianity, that the basic sources of Judaism—Bible, *Talmud*, and *Midrash*—contain evidence of its having been superseded by Christianity.

Toledot Yeshu (The Story of Jesus), a conglomerate of folktales about the birth of Jesus, his cleverness, magic tricks, etc., represents an anonymous popular Jewish reaction to persecutions at the time of the Crusades.

Sefer Nizahon Yashan (Book of Old Triumph) is an anonymous exegetic work, dating approximately from the thirteenth century, which systematically interprets the literal, as against the forced allegorical, meaning of Bible texts pointed at by Christian theologians as alleging or foretelling the dogmas of their religion.

Public disputations on matters of doctrine in the presence of royalty, church leaders, etc., using more refined language and more sophisticated argumentation, became fashionable as of the thirteenth century. Keenly aware of the perils of such displays to the physical welfare of their people, the spokesmen of Judaism held their own, often presenting learned rebuttals which inspired respect even among opponents. Of special historic interest in this connection are three famous dis-

putations: in Paris in 1240, in Barcelona in 1263, and in Tortosa in 1413–1414. English translations of those drama-laden proceedings with appropriate clarifying introductions are recorded in Morris Braude, *Conscience on Trial*, Exposition Press, New York, 1952.

Two polemical works are of unusual interest since they make use of the Gospels as source materials to prove the untenability of Christian doctrine that Jesus came to establish a new religion: *Kelimat ha-Goyim (Shame of the Gentiles)*, by Profiat Duran (ca. 1350–ca. 1415), and Hasdai ben Abraham Crescas, *Bittul Ikkare ha-Nozrim (Refutation of Christian Dogmas)*, originally written in Spanish.

Hizzuk Emunah (Strengthening the Faith) by a Karaite Jew from Lithuania, Isaac ben Abraham of Troki (1533–1594), which is available now in English under the title *Faith Strengthened*, Ktav, New York, 1970, presents the most cogent and most systematic refutation of Christianity. Its impact upon Christian scholars may be gauged by the fact that 3 centuries after the work appeared Herman L. Strack, one of the foremost authorities in Christian Biblical learning and expert on the literature of Rabbinic Judaism, yet a man sincere in his ideal of missionizing Jews, wrote: "I had hoped, more than 20 years ago to publish in . . . a series of articles written by a friend on the exposition and refutation of Chizzuk Emunah, but . . . I was able to issue only an introductory article . . . (*Nathaniel*, 1889, Vol. 5, pp. 52–59)" (Excerpt from Introduction by Trude-Weiss Rosmarin to *Faith Strengthened*, p. VII).

Some of the cited materials were published for the first time by Johann Christopher Wagenseil (1635–1705) in the original Hebrew with parallel Latin translations under the title *Tela ignea Satanae (Satan's Fiery Arrows)*, Altdorf, 1681. These and other documents with introductions, annotations, and index are also included in J. D. Eisenstein, *Ozar Vikuhim (Treasury of Polemics)*, Israel, 1969.

Jewish-Christian philosophical and theological polemics continue at present in a serious mood, the term "dialog" rather than polemics being used to describe the discussions. The level of arguments may be more profound, but the fundamental position of Christian spokesmen is still an articulation of the theology that Judaism had been superseded by and in the "New Israel" of Christianity. Consequently its thrust, with few notable exceptions, remains tendaciously missionary. This raises questions in the minds of discerning Jewish spokesmen whether a dialog is altogether possible, especially in the post-Auschwitz era, and even more especially in view of the deafening silence with which Christendom generally reacted to the threat of a new Holocaust in the closing days of May 1967. Nonetheless, the dialog continues.

SUPPLEMENTARY BIBLIOGRAPHY

- Berkovits, Eliezer. "Judaism in the Post-Christian Era," *Judaism*, 15, 74–84 (1966).
 Flannery, Edward H., *The Anguish of the Jews: Twenty-Three Centuries of Anti-Semitism*, Macmillan, New York, 1965.
 Grayzel, Solomon, *The Church and the Jews in the XIIIth Century*, Hermon Press, New York, 1966.

Heschel, Abraham J., "No Religion Is an Island," *Union Theol. Quart. Rev.*, 21, 117-134 (January 1966).

Isaac, Jules, *Jesus and Israel*, Holt, New York, 1971.

Neusner, Jacob, *Aphradat and Judaism: The Christian-Jewish Argument in Fourth Century Iran*, Brill, Leiden, 1967.

Niebuhr, Reinhold, *Pious and Secular America*, Scribner's, New York, 1958.

Parkes, James, *The Conflict of the Church and the Synagogue*, Jewish Publication Society, Philadelphia, 1961.

Rankin, Oliver S., *Jewish Religious Polemics of Earlier and Later Centuries*. Univ. Press, Edinburgh, 1956.

Schoeps, Hans J., *The Jewish-Christian Argument . . .*, Holt, New York, 1963.

JEWISH HISTORIOGRAPHY

The earliest events in Jewish history (specifically the patriarchal period; settlement in the Land of Israel; consolidation of the tribes into a national entity under Saul, David, and Solomon; histories of the kingdoms Israel and Judah; and restoration of the Second Temple) are described in the respective books of the Bible.

The Maccabean revolt against the Syrian ruler Antiochus Epiphanes in 166-164 B.C.E. and the ensuing wars for religious and political independence are subjects of the Apocryphal *Maccabees I* and *Maccabees II*.

Josephus Flavius (ca. 38-100 C.E.) is the competent historian of the Second Jewish Commonwealth. His *Complete Works*, Kragel, Grand Rapids, 1960, include: a. *The Antiquities of the Jews*, which presents Jewish history from its beginnings through the end of the Second Jewish Commonwealth, including detailed accounts of the Maccabean and Herodian periods; and b. *The Jewish Wars*, a thorough, though not completely objective record of the Jewish revolt against the Romans in 66-73 C.E. and the destruction of the Second Temple.

Two chronicles date from the *Mishnah* period: a. *Megillat Taanit (Scroll Concerning Fast Days)*, Mosad Harav Kook, Jerusalem, 1964, which lists the festive days of the Jewish calendar on which no mourning is permitted since they commemorate happy events; b. *Seder Olam (Order of the World)*, Jerusalem, 1970, allegedly written by Yose ben Halafta, a *Tanna* of the second century, contains a chronology from the time of creation to the revolt of Bar Kokhba about 130 C.E. Otherwise only rare references are found in Talmudic literature to factual historic events. Neither are reliable sources extant from the pre-Geonic period on matters of Jewish migration, demography, growth of new Jewish centers, etc.

A number of chronicles, listings of scholars, accounts of specific events and travelogs have come down from the Middle Ages, which represent valuable resources for the construction of Jewish history. However, for a broad comprehensive view of the period, non-Jewish governmental and municipal documents, particularly archives of the Inquisition, must be utilized. This is especially the case with regard to the tragic events which decimated Jewish communities in the

thirteenth to fifteenth centuries in Western and Central Europe, e.g., expulsions, ghettoization, havoc of the Black Death, etc.

Selected Jewish sources are now listed in chronological order and described briefly:

(a) *Igveret Rabbenu Sherira Gaon (Epistle of Sherira Gaon, 905–1006)*, Jerusalem, 1967, presents a careful chronicle of the development of the Oral Tradition, the sages of the *Talmud*, and the Geonim up to the middle of the tenth century.

(b) *The Chronicle of Ahimaaz*, AMS Press, New York, 1966, by Ahimaaz ben Paltiel (1017–ca. 1055), contains valuable information on the life and history of Jewish communities in Southern Italy in the ninth to eleventh centuries.

(c) Chronicle materials from the era of the Crusades, critically analyzed in *Quellen zur Geschichte der Juden in Deutschland (Sources on Jewish History in Germany)*, Berlin, 1892, Vol. 2, deal with the tragic events of the times, as well as their long range effects upon the growing process of undermining Jewish security in Christian controlled lands.

(d) Motivated by a determination to refute Karaism, Abraham ibn Daud the philosopher (ca. 1110–1180), authored a detailed chronology of the Bible, *Talmud*, and post-Talmudic sages, *Sefer ha-Kabbalah (Book of Tradition)*, Jewish Publication Society, Philadelphia, 1967. Much information is also available in this source on contemporary Jewish cultural life in Spain.

(e) The famous travels by Benjamin of Tudela and Petahyah of Regensburg (both of the twelfth century) depict vividly Jewish life in the lands they visited, e.g., Central Europe, Russian provinces, Caspian Sea lands, Armenia, Syria, Babylonia, Palestine, Persian Gulf area, Egypt. Both reports are available in *Masaot Rabbi Binyamin (The Travels of Rabbi Benjamin)*, Jerusalem, 1967.

(f) *Sefer Yuhasin (Book of Genealogies)*, Jerusalem, 1962, by Abraham Zacuto of Spain (ca. 1450–1515), presents a history of Rabbinic scholarship. Incidentally, Zacuto was an astronomer by vocation, and his astronomical tables were used by Christopher Columbus in his voyage to America.

(g) A contemporary of Zacuto, Solomon ibn Verga records in *Shevet Yehudah (The Rod of Judah)*, Jerusalem, 1946, the hardships Jews were subjected to during their expulsion from Spain, and some of the religious disputations they were compelled to attend.

(h) *Emek ha-Bakha (Vale of Weeping)*, Vienna, 1852, by Joseph ben Joshua ha-Cohen (1496–ca. 1575) is another important record of Jewish martyrology in the Middle Ages. The author is known for his keen interest in general history. His *Livre ha-Yamim le-Malkhe Zarfat ve-Otoman (History of the Kings of France and Turkey)*, Bialik, Jerusalem, 1955, sheds considerable light on the struggles between Christians and Muslims in the post-Crusades era of European history.

(i) *Shalshelet ha-Kabbalah (Chain of Tradition)*, Jerusalem, 1962, by Gedaliah ben Joseph ibn Yahia (1515–1587), presents a popular history of Jewish scholars.

(j) About the same time, a versatile scholar in Italy, Azariah ben Moses dei

Rossi (ca. 1511–1578), authored *Meor Enayim (Light for the Eyes)*, Vilna, 1863, which is one of the earliest critical studies in Jewish history. This work introduced the *Septuagint* and Philo of Alexandria to the Jewish reader. Its author also translated into Hebrew the *Pseudepigraphic Letter of Aristeas* thereby stimulating interest in extra-Rabbinic sources.

(k) David Gans of Prague (1541–1613), first Jewish historian in lands using German, authored a short Jewish and general chronicle down to his times under the title *Zemah David (Fruit of David)*, Jerusalem, 1966.

(l) Nathan Nata Hannover of Volhynia (d. 1683) recorded in *Yaven Mezulah (Abyss of Despair)*, Tel Aviv, 1966, the terrible Chmielnicki pogroms in 1648–1652 and their destructive effects upon Jewish life in South-Eastern Poland. Other source materials from that period in Jewish history were assembled by S. Bernfeld in the anthology *Sefer ha-Demaot (Book of Tears)*, Berlin, 1926, 3 vols.

(m) Of special interest is *Seder ha-Dorot (Order of the Generations)*, Brooklyn, 1969, by Jehiel ben Solomon Heilperin (ca. 1660–1746), because, in addition to a chronological index of authorities in the Talmudic and post-Talmudic periods, it includes a bibliography of Rabbinics.

Though Yiddish literature is not within the purview of this article, it should be briefly noted that materials in Yiddish started appearing in the sixteenth century, e.g., liturgical compositions, poetry, chronicles, and folksongs. The Yiddish memoirs by Gluckel of Hameln (1646–1724) portray vividly Jewish life in Germany, and include valuable historic information on the impact of the fake Messiah Shabbetai Zevi (1626–1676) upon Jews in her surroundings.

Two non-Jewish historians of the eighteenth century are notable for their contributions to Jewish history: Johann J. Schudt (1664–1722) described in *Juedische Merkwuerdigkeiten (Jewish Curiosities)*, 1714–1718, 4 vols., Jewish life in Frankfurt a/M and Hamburg; an American, Hannah Adams (1755–1832), wrote *The History of the Jews From the Destruction of Jerusalem to the Present Time*, London, 1840, 2 vols., including information on Jews in America.

Modern Jewish historiography is a product of the *Wissenschaft des Judenthums*, its chief architect, Leopold Zunz (1794–1886), having produced numerous works in the history of *Midrash*, liturgy, and medieval hymnology. His *Gottesdienstliche Vortraege der Juden (Jewish Homiletics)*, which was published in 1832, is still considered a basic work in the research of said subjects.

Isaac M. Jost (1795–1860) made the first efforts at systematization of Jewish history with his two major projects: *Geschichte der Israeliten (History of the Jews)*, Berlin, 1820–1828, 9 vols., which presents comprehensively the history of the Jewish people from the Maccabean period to the nineteenth century, and *Geschichte des Judenthums und seiner Secten (History of Judaism and its Sects)*, Leipzig, 1857–1860, 3 vols.

At the same time a first rate scholar in Galicia, Solomon J. L. Rapoport (SHIR, 1790–1867), produced several biographical studies dealing with the centers of Jewish learning in the beginning of the Middle Ages.

The history of Judaism since Biblical times through the fifteenth century *Dor Dor ve-Dorshav (Generations and Their Scholars)*, Jerusalem, 1964, 5 vols., by Isaac Hirsch Weiss (1815–1905), deserves special attention due to its systematic write-ups of the histories of *Halakhah*, *Aggadah*, Hebrew linguistics, and mysticism.

Adolphe Franck (1809–1893) was the first modern historian to devote attention to the history of Jewish mysticism.

Geschichte der Juden (History of the Jews) in eleven volumes by Heinrich Graetz (1817–1891), first published in 1853–1875, represents the most influential work of that entire period. Though concentrating on the literary heritage of Judaism, Graetz's approach reflects throughout the aspirations of a living people. As a rationalist, he was prejudiced against mysticism. Neither did he evince much understanding for the dynamism of economics in historic processes. His interest in the history of East European Jewry was at best limited. Yet despite these many inadequacies Graetz's accomplishment is unsurpassed in stimulating specialization and diversification of Jewish historiography. He was also the great master in the use of archival materials.

Toldot Yisrael (Jewish History), Jerusalem, 1955–1963, 14 vols., by Zev Wolf Yawitz (1842–1924), is unique in consistently articulating an orthodox-religious interpretation.

Unlike Graetz, Simon Dubnow (1860–1941) does consider the influence of economic factors in *Weltgeschichte des juedischen Volkes (World History of the Jewish People)*, Berlin, 1925–1930, 10 vols. He takes due cognizance of the roles of Jewish centers in Poland, Russia, and Lithuania. Dubnow's method of periodization is according to criteria of regional hegemony. He thus underscores his philosophy of spiritual autonomism, which is based upon the assumption that Judaism as a spiritual force depends neither upon a political state nor upon a commitment to religious doctrine, but mainly upon cultural autonomy of Jewish communities wherever they may exist.

Raphael Mahler (1899–) presents in *History of Modern Jewry, 1780–1815*, Valentine . . . , London, 1971, as well as in his other historical studies, a Marxist-materialistic interpretation of Jewish history. However, unlike doctrinaire materialists, he recognizes the creative potential of commitment to spiritual values.

A Social and Religious History of the Jews, Jewish Publication Society, Philadelphia, 1952–, by Salo W. Baron (1895–) represents an inclusive approach to consider all relevant forces and elements—social, economic, religious, and cultural—which bear upon the making of Jewish history. This monumental work, of which thirteen volumes already have appeared, is published jointly with Columbia University Press.

Two developments provided stimuli to the growth of Jewish historiography, qualitatively and quantitatively, since the middle of the nineteenth century:

1. The organization of commissions and learned societies to promote studies and publications in the many fields of Jewish history, e.g., Société des Etudes Juives in Paris (1880), Historische Kommission in Berlin (1885), Society for Study

of Jewish history in Bucharest (1886), Jewish Historical Society in London (1893), Jewish Historical Society in the United States (1892), and Historic Ethnographic Society in Petersburg (1908).

2. The growing number of periodicals, *Festschriften*, and commemorative volumes offering platforms for research in essay form, as well as lengthy monographs. Publications of this type are available in nearly all European languages and, of course, in Hebrew and Yiddish.

Specialization in modern Jewish historiography branched out into three major directions: a. studies in specific subjects, such as history of education, religious and cultural trends, economics, etc.; b. periodic units; c. geographical units, including monographs on local Jewish communities. Selected works of these various types of specialization are listed in the supplementary bibliography.

Ideological considerations beyond the scope of discussion of this article explain the fact that studies in history claimed the major share of scholarly Jewish energies in the nineteenth century. Jewish culture was conceived of in that period as a phenomenon of the past worthy of investigation for its erstwhile vigor and expired glory. Little did many of the talented scholars of the *Wissenschaft des Judenthums* anticipate that Jewish historiography would move into the center of attention in our times because Jewish culture has become a vibrant and invigorating factor in the constellation of intellectual forces of the twentieth century.

SUPPLEMENTARY BIBLIOGRAPHY

- Abrahams, Israel, *Studies in Pharisaism and the Gospels*, Ktav, New York, 1967.
- Baer, Yizhak, *Die Juden in Christlichen Spanien [Jews in Christian Spain]*, Berlin, 1929–1936, 2 vols.
- Balaban, Meir, *Dzieje Żydów w Galicji 1772–1868 [Jewish History in Galicia 1772–1868]*, Polish Book, New York, 1916.
- Balaban, Meir, *Le-Toldot ha-Tenuah ha-Ferankit [History of the Movement of the Frankists]*, Dvir, Tel Aviv, 1934, 2 vols.
- Ben-Gurion, David, *Jews in Their Land*, Doubleday, New York, 1966.
- Dimont, Max, *Jews, God and History*, Simon and Schuster, New York, 1963.
- Dubnow, Simon, *Toldot ha-Hasidut [History of Hasidism]*, Dvir, Tel Aviv, 1967.
- Elbogen, Ismar, *A Century of Jewish Life*, Jewish Publication Society, Philadelphia, 1944.
- Finkelstein, Louis, *Jewish Self-Government in the Middle Ages*, Feldheim, New York, 1964.
- Finkelstein, Louis, *The Pharisees*, Jewish Publication Society, Philadelphia, 1962, 2 vols.
- Guedemann, Moritz, *Geschichte des Erziehungswesens . . . [History of Education and Culture Among Western Jews]*, Philo Press, Amsterdam, 1966, 3 vols.
- Hilberg, Raul, *The Destruction of the European Jews*, Quadrangle Books, Chicago, 1961.
- Hoenig, Sidney, *The Great Sanhedrin*, Dropsie, Philadelphia, 1953.
- Karp, Abraham I., ed., *The Jewish Experience in America: Selected Studies from the Publications of the American Jewish Historical Society*, Ktav, New York, 1969, 5 vols.
- Klausner, Joseph, *Jesus of Nazareth*, Macmillan, New York, 1925.

- Klausner, Joseph. *From Jesus to Paul*. Beacon Press, Boston, 1961.
- Mann, Jacob. *Texts and Studies in Jewish History and Literature*. Ktav, New York, 1972, 2 vols.
- Marcus, Jacob R. *The Jew in the Medieval World. A Source Book 315-1791*. Harper, New York, 1965.
- Moore, George Foot. *Judaism in the First Centuries of the Christian Era*. Harvard Univ. Press, Cambridge, 1927-1930, 3 vols.
- Neuman, Abraham Aaron. *The Jews in Spain, Their Social, Political and Cultural Life During the Middle Ages*. Jewish Publication Society, Philadelphia, 1942, 2 vols.
- Neusner, Jacob. *A History of the Jews in Babylonia*. Brill, Leiden, 1965.
- Patai, Raphael. *Tents of Jacob: The Diaspora—Yesterday and Today*. Prentice-Hall, Englewood Cliffs, New Jersey, 1971.
- Ringelblum, Emanuel. *Kapiten Geshikhte fun amulikn Yidishn leben in Poylen [Chapters of History from Past Jewish Life in Poland]*. Zentral Farband fun Poylishe Yidn, Buenos Aires, 1951.
- Roth, Cecil. *The Jews in the Renaissance*. Jewish Publication Society, Philadelphia, 1959.
- Roth, Cecil. *Magna Bibliotheca Anglo-Judaica: A Bibliographical Guide to Anglo Jewish History*. Jewish Historical Society of England, London, 1937.
- Schipper, Ignaz. *Yidische virtschaftsgeshikhte [Jewish Economic History]*. Ahisefer, Warsaw, 1930, 4 vols.
- Schwarz, Leo W., ed. *Great Ages and Ideas of the Jewish People*. Random House, New York, 1956.
- Shatzky, Jacob. *Geshikhte fun Yidn in Varshe [History of Jews in Warsaw]*. Yivo, New York, 1947-1953, 3 vols.
- Steinschneider, Moritz. *Die Hebraischen Uebersetzungen des Mittelalters und die Juden als Dolmetscher [The Hebrew Translations in the Middle Ages and Jews as Translators]*. Akademische Druck, Graz, 1956.
- Teherikover, Avigdor. *Hellenistic Civilization and the Jews*. Jewish Publication Society, Philadelphia, 1959.
- Wigoder, Geoffrey, ed. *Jewish Art and Civilization*. Walker, New York, 1972, 2 vols.
- Zeitlin, Solomon. *The Rise and Fall of the Judean State*. Jewish Publication Society, Philadelphia, 1962-1967.
- Zeitlin, Solomon. *Who Crucified Jesus?*. Bloch, New York, 1964.

BELLES LETTRES IN THE MIDDLE AGES

Writings in this genre before the medieval period were incorporated in the Bible, *Midrashim*, and liturgical collections.

Hebrew belles lettres of the Middle Ages include many forms of artistic creativity, religious as well as secular, and flourished in many lands. Religious themes, reverting to national and moralistic motifs, drew inspiration from the Bible and *Agadah*, while poetry of the "wine, women, and love" type bore the stamp of foreign influences. Their high point in artistic achievement is represented by the Golden Age of Hebrew Poetry in Spain in the tenth to twelfth centuries.

Samuel ha-Nagid of Granada (993–1056), whose collection *Divan Shemuel ha-Nagid*, Oxford University Press, 1934, includes religious-national lyrics and moralistic epigrams as well as love poems in the style of contemporary Arabic models, was the first highly talented exponent of the Golden Age. Solomon ibn Gabirol, one of the greatest poets of the period, evokes admiration for his gift to express nuances of suffering and hope. In the area of religious poetry, his *Keter Malkhut (Royal Crown)*, Mosad Harav Kook, Jerusalem, 1950, fuses magnificently the description of nature with a stirring outpouring of praise to God.

Jurah ha-Levi, another master of the Golden Age, wrote colorfully, joyfully, and harmoniously. His love poetry is a veritable collection of gems. But his poetic genius reached heights in his lyrics expressive of yearnings for the Land of Israel and Zion. Ha-Levi's nature poems written during his journey to Palestine are among the most moving in Hebrew poetry of all times. *Shire Yehudah ha-Levi (Songs of Judah ha-Levi)*, New York, 1944, contains a selection of his poetry.

To the group of classicists of the Golden Age belong also Moses ben Jacob ibn Ezra (1060–1139) and the Bible commentator Abraham ibn Ezra. Selections of their poetry are presented in *Shire Moshe ben Yaakov ibn Ezra*, Dvir, Jerusalem, 1929, and *Abraham ibn Ezra, Hayav ve-Shirato (Abraham ibn Ezra, His Life and His Poetry)*, Tel Aviv, 1969.

The art of Hebrew poetic writing continued in Spain for a long time in various forms. Thus Joseph ben Meir ibn Zabara (ca. 1140–ca. 1200) authored *Sefer Shaashuim (Book of Delights)*, Columbia University Press, New York, 1932, a collection of proverbs, anecdotes, tales, etc., in the style of *Thousand and One Nights*.

Abraham ben Samuel ibn Hasdai (thirteenth century) translated the popular Greek novel *Barlaam and Josaphat* into rhymed Hebrew dialog bearing the title *Ben ha-Melekh vecha-Nazir (The Prince and the Hermit)*, Tel Aviv, 1950.

Tahkemoni (Apothekary), Mosad Harav Kook, Jerusalem, 1952, by Judah ben Solomon al Harizi (1170–1235), is a gay, satirical compendium of fifty *Makamot* ("narratives in rhymed prose") colorfully written, but without poetic depth. They relate the author's travel experiences in Europe, Asia, and Africa, and are of considerable value to Jewish cultural history.

Isaac ben Solomon ibn Sahula (thirteenth century), scholar and Kabbalist, authored *Meshal ha-Kadmoni (Parable of the Easterner)*, Tel Aviv, 1952, a collection of allegories, parables and rhymed fables.

Approximately at the same time, Berechiah ben Natronai ha-Nakdan of France compiled the popular collection of animal fables *Mishle Shualim (Parables of Foxes)*, Schocken, Jerusalem, 1946. Its materials are culled from ancient Hindu lore, Aesop, and *Midrash*.

In Italy, Immanuel ben Solomon of Rome (1260–ca. 1328), a prolific and versatile author, introduced the sonnet into Hebrew poetry. His main work *Mahbarot (Cantos)*, Mosad Bialik, Jerusalem, 1957, composed in the form of *Makamot*, is a collection of novelettes, satires, riddles, frivolous love and wine songs, including an imitation of Dante's *Divine Comedy* under the title *Hell and*

Heaven. His contemporary, Kalonymos ben Kalonymos (Maestro Calo 1286–ca. 1330), a well-known translator of philosophical and science works from Arabic into Hebrew and Latin, also wrote poetry on the theme of religious laxity among Jews in Italy.

Lurianic mysticism produced many precious gems of religious poetry, expressive of its deep yearnings for Messianic fulfillment. Israel ben Moses Najara (1555–1628), eminent poet among the brotherhood of mystics in Safed, authored *Zemiroth Yisrael (Songs of Israel)*, Tel Aviv, 1946. Another member of the group, Solomon ben Moses Alkabetz (ca. 1505–1584), composed *Lekha Dodi (Come My Beloved)*, the popular Sabbath hymn chanted in all worship rites on Friday night to welcome the “Sabbath Bride.”

Moses ben Mordecai Zacuto of Amsterdam and Mantua (ca. 1625–1697) pioneered in the genre of Hebrew drama with two works: *Yesod Olam (Foundation of the World)*, Livorno, 1877, and *Tophte Arukh (Hell Set)*, Berlin, 1922.

Leone Modena of Venice (1571–1648), a prolific writer with sundry interests, made serious attempts at literary criticism. His autobiography *Haye Yehudah (Life of Judah)*, Kiev, 1911, one of the earliest in Hebrew literature, is an important historical work shedding light on social conditions among Italian Jewry.

Moses Hayyim Luzzatto (his *Mesillat Yesharim* was mentioned earlier in ethical literature), a gifted poet, dramatist, and student of rhetoric, abandoned Arabic and Spanish verse in favor of modern Italian metric patterns. In his dramas, he introduced the themes of human love, nature, and conflicts between good and evil. With these themes, he heralded a new era in Hebrew belles lettres to be identified henceforth by the name modern Hebrew literature.

SUPPLEMENTARY BIBLIOGRAPHY

Davidson, Israel. *Ozar ha-Shirah vaha-Piyut* [Thesaurus of Medieval Hebrew Poetry]. Jewish Theological Seminary, New York, 1924, 4 vols.

Gabirol, Solomon Ibn. *The Kingly Crown, Newly Translated with an Introduction and Notes*, Vallentine, Mitchell, London, 1961.

MODERN HEBREW LITERATURE

The large volume of materials in modern Hebrew literature makes it impractical to single out works for description or analysis, no matter how great their impact. Primary attention will therefore be focused in this section on philosophical and or social trends, their creators, and the literary forms used to express new ideas.

Haskalah Period

Jewish literature identified by the term *Haskalah* (“Enlightenment”) made its appearance first in Berlin in the middle of the eighteenth century. It initiated in Jewish life the trends of humanism which swept through Europe about 3 centuries earlier in the era of the Renaissance. Man in his full human stature, with his personal

feelings, passions, needs, etc., rather than other worldliness and ascetism, is in the center of interest in the literature of humanism. Its endeavor in the sciences concentrated on factual phenomena rather than on theologico-speculative scholasticism.

Humanistic ideals promoted by *Haskalah* literature urged the Jew, heretofore isolated in his ghetto physically, spiritually, and intellectually, to leave its confines, learn to speak and think in the language of his milieu, and deliberately integrate himself in its culture. He would thus become a full fledged citizen of his country, culturally, socially, and politically an equal among peers in enlightened Europe, and cease languishing in the miseries of ghetto ostracism. In its naivete, *Haskalah* assumed that the main reason for anti-Jewish prejudices in Christian Europe was the Jew's willful self-isolation. With change in the manner of speaking from Yiddish (*Haskalah* called it "corrupt German") to German, French, Russian, Polish, etc., with corresponding broadening of educational efforts through introduction into the curriculum of secular subjects, with refinement in external appearance, and increasing mingling with non-Jews, the thus de-Judeized former ghetto dweller would henceforth share in the status of his fellow citizens.

The use of the Hebrew language, as a means of communicating their ideas of modernization, symbolized to *Haskalah* writers the onset of cultural emancipation. A group of poets, dramatists, and polemicists, admirers and/or coworkers of Moses Mendelssohn, made serious attempts toward the attainment of the sketched goals in the periodical *Ha-Meassef* (*The Gatherer*), Koenigsburg, 1784-1829. Among its participants were: Naphtali Herz Wessely (1725-1805), author of the epic poem *Shire Tiferet* (*Songs of Glory*), Warsaw, 1883; Isaac Satanow (1732-1805), author of the collection *Iggeret ha-Yakar* (*Epistle on Glory*), Berlin, 1799; Judah Leib ben Zev (1764-1811), grammarian, lexicographer, and translator; and Joel Brill (1760-1802), author of fables in prose and verse.

Ha-Meassef did not survive for long the Germanizing assimilationist tendencies of Mendelssohn's heirs. As a matter of record, it addressed itself, to begin with, to elements of German Jewry who, decades before its appearance, decided upon a course of rejection of their Jewish background and their identity. *Haskalah* experienced greater success among the compact masses of Eastern European Jewry, especially in Galicia and Russia.

Its foremost spokesman in Galicia, Joseph Perl of Tarnopol (1774-1839), consistently and relentlessly advocated modernizing changes in the daily ways of Jewish living, including changes in occupational pursuits. As a writer Perl is best known for his anti-Hasidic satires, recently republished in *Maasiyot ve-Iggarot mi-Zadikim* (*Hasidic Tales and Letters*), Jerusalem, 1969.

Another contemporary satirist, Isaac Erter of Brody (1792-1851), depicted in *Ha-Zofeh le-Bet Yisrael* (*Watchman of the House of Israel*), Tel Aviv, 1951/1952, moral defections under the guise of ghetto religiosity. As a keen observer of the Jewish scene, Erter submitted to criticism other aspects of his milieu, including some of the literary activities of *Haskalah*.

Lesser influence was exerted by Mendel Levin (1749-1826) with his works in Hebrew on natural sciences. Among his literary-artistic attempts is the translation

into Hebrew of Benjamin Franklin's *Poor Richard's Almanac* under the title *Heshbon ha-Nefesh (Self Scrutiny)*. Warsaw, 1894.

Solomon Loewisohn (a native of Hungary, 1789–1821) authored in *Melizat Yeshurun (Poetry of Israel)*. Tel Aviv, 1944, a serious study on the ars poetica of the Bible.

Shalom ha-Cohen, a native of Poland who eventually settled in Vienna (1772–1845), poet and dramatist, rendered an important contribution to *Haskalah* literature with the establishment of the annual *Bikure ha-Itim (First Fruits of the Times)*, 1820–1831. Many outstanding scholars, poets, and essayists published their works in this annual, e.g., the historian Solomon Judah L. Rapoport, the philosopher, Bible exegete, and historian Samuel David Luzzatto (1800–1865), and other eminent writers.

Two outstanding protagonists of enlightenment in Russia, Isaac Ber Levinsohn of Volhynia (1788–1860), and Mordecai Aaron Gunzberg of Lithuania (1795–1846), wrote extensively on philosophy, history, literature, and related subjects.

Among the *Haskalah* poets of note in Russia were: Abraham Dov Lebensohn (Adam ha-Cohen, 1794–1878), author of *Shire Sefat Kodesh (Songs in the Holy Tongue)*. Vilna, 1869, dealing with themes of nature, contrasts between light and darkness, and struggles between wealth and poverty; his son Micah Joseph Lebensohn (Michal, 1828–1852), translator into Hebrew of portions of Virgil's *Aeneid* and author of epics on historic themes, *Shire bat Ziyon (Songs of the Daughter of Zion)*, Vilna, 1902; and Judah Leib Gordon (1829–1892), the most gifted and most versatile among *Haskalah* poetic artists, whose selection *Shire Yehudah (Songs of Judah)*, Dvir, Tel Aviv, 1929, includes lyrics, satiric poems, fables, etc.

The first modern Hebrew novels of the *Haskalah* period were written in Russia by Abraham Mapu (1807–1867), two depicting life in ancient Israel, *Ahavat Zion (Love of Zion)* and *Ashmat Shomron (Guilt of Samaria)*, and the third, *Ayit Zavua (Painted Hawk)*, dealing with contemporary problems. Mapu's works are available in *Kol Kitve Mapu (All Writings of Mapu)*. Tel Aviv, 1947.

Peretz Smolenskin (1842–1885), novelist laureate of *Haskalah* literature, authored six novels, among which *Ha-toeh be-Darke ha-Hayyim (Astray on Life's Paths)*, describing Jewish life of the time with all its vicissitudes, frustrations, entanglements, etc., is the most impressive. Smolenskin's works were assembled in *Kol Kitve Perez Smolenskin (All Works of Peretz Smolenskin)*, 1901, 9 vols.

Kalman Shulman (1819–1899), though not an original writer, was popular with translations into Hebrew of fiction, history, and geography.

Important periodicals, instruments of popularization of *Haskalah* ideas, were founded in the middle of the nineteenth century: *Ha-Magid*, a weekly founded in Lyck, Prussia in 1856, specialized in news, political comments, Bible exegesis and history; *Ha-Karmel*, a weekly founded in Vilna in 1860, offered high quality scholastic essays; *Ha-Melits*, a weekly founded in Odessa in 1860, specialized in publicistic essays and write-ups on Jewish life and literature; *Ha-Tsefirah*, a weekly founded in Berlin in 1862, moved to Warsaw where it became an influential forum for popularization of sciences; *Ha-Lebanon*, a weekly founded in Jerusalem in 1863, moved

to Paris and specialized in informative editorials highlighting the point of view of Orthodoxy; and *Ha-Shahar*, a monthly founded in 1868, offered comprehensive surveys of Jewish life and write-ups by leading writers. These and other publications played an important role as forums stimulating and offering opportunities to rethink socio-cultural problems in Jewish life. They were also instrumental in the development of Hebrew literary criticism.

Reaction to Haskalah

Did *Haskalah* succeed in the attempt to modernize Jewish life and, at the same time, influence those who followed it to remain committed to a vibrant Jewish community? The answer is definitely in the negative. As Simon Halkin (1899–) expressed it in *Modern Hebrew Literature*, Schocken, New York, 1970, p. 65, “In the early sixties, *Haskalah* writers realized that they must declare their ideology bankrupt insofar as the effect of de-Judaized Humanism upon Jewish civilization was concerned. Less consciously, however, such misgivings had haunted the period all along as from time to time it checked the effect of cultural expansion upon Jewry.” Rather than enriching Jewish life and broadening its intellectual horizons, contacts with non-Jewish elements of culture soon resulted in rapid disintegration of Jewish loyalties, cringing self-denial, even apostasy from Judaism, whether in Germany, France, or Eastern Europe.

This sober realization of failure explains the trend of “penitential” romanticism distinctively noticeable in modern Hebrew literature since the 1870's. Ghettoism, so mercilessly castigated and satirized by *Haskalah* writers, was now glorified for its deeply moving values—solidarity, cohesion, ennobling religiosity. Hasidism and Hasidic leaders are depicted in an altogether different light, emphasizing their power to infuse invigorating self-confidence among the Jewish masses. Jewish physical and spiritual heroism to carry on, despite the superhuman odds that the people had to contend with, is one of the recurring motifs in this period.

However, if *Haskalah* failed in its didactic humanistic purposes, it played an important role in awakening of nationalistic, secularly oriented stirrings among the Jewish people in Eastern Europe. To be sure, the unprecedented rise of anti-Semitism, the pogroms in Russia in 1890–1891, as well as the tide of nationalism all over Europe in the nineteenth century, converged as important influences in the emergence of Jewish nationalism. Nevertheless the impact of poets and novelists who for close to a century romanticized the idyllic past of Biblical Israel, as some of the cited titles demonstrate, indeed the very effort to write in Hebrew because it once was the language of the Jew, were factors in the formulation of new aspirations. *Haskalah* literature, almost despite itself, helped to give birth to Zionism.

Modern Hebrew literature in its various forms—poetry, novel, short story, essay—reflects growing absorption in romanticism and nationalism since 1890 (the year of the pogroms) through the end of World War I. A marked division is discernible in this era between purely artistic and sociological publicistic writings. This was not the case in the *Haskalah* period when writers engaged in many types

of literary creativity, usually not discriminating in favor of or against a given form. This division is of interest for ideological reasons, rather than as a technical phenomenon. It relates to the substance and subject matter of the respective works.

To the artists—poets, novelists, short story tellers—who did not settle in Palestine, and for the greater part of their artistic creativity experienced personally the sensory world of Russia, or Poland, or Switzerland (wherever they resided) nationalism-Zionism remained an abstract idea which did not galvanize their artistic imagination. Jewish life as it was in their milieu, with its fantasies and miseries, its glories and hopelessness, its messianic dreams and uprootedness, etc., was the raw material which stirred them to weave a magnificent literary tapestry, either in Hebrew or in Yiddish.

The essayists, publicists, and journalists, however, concretely engaged in hammering out a philosophy and a program to rebuild the Land of Israel, where Jews will constitute a majority and eventually organize the instruments of statehood. This will normalize the national aspirations of the Jewish people, and create conditions for Zion rebuilt to become a spiritual center and mainspring of creative inspiration for World Jewry.

Agitated by different motivations, and addressing themselves to fundamentally different problems, the two groups of writers were divided in their modes of expression, but united in the ultimate objective to restore dignity and wholesomeness to Jewish life.

Shalom Jacob Abramowitsch (Mendele Mocher Sefhorim, 1836–1917), exponent of the school of realism, and the neoromantic Isaac Leib Peretz (1852–1915), are the two great novelists of this period. Both made an enduring impact upon Hebrew and Yiddish letters. Their respective works are assembled in *Kol Kitve Mendele . . .*, Dvir, Tel Aviv, 1951, and *Kol Kitve Peretz*, Dvir, Tel Aviv, 1952.

Micah Joseph Berdichevsky (Bin Gurion 1865–1921), though a romantic deeply interested artistically in *Aggadah* and Hasidism, is unique in advocating a revolutionary rejection of traditional Judaism with its emphasis upon the “spiritual.” His works were assembled in *Sipurim (Stories)*, Piotrkov, Warsaw, 8 vols., 1899–1902.

Other novelists whose writings are dominated by realism include Reuben Brainin (1862–1939) with *Kol Kitve . . .*, New York, 1922–1940, 3 vols.; Isaiah Bershadski (pseudonym for I. Domashewitzky 1871–1908) with *Ketavim Aharonim (Later Writings)*, Warsaw, 1910, 2 vols.; and Joseph H. Brenner (1881–1921) with *Kol Kitve . . .*, Tel Aviv, 1924–1936, 9 vols.

Among short story writers of note are David Frischmann (1862–1922) with *Kol Kitve . . .*, Mexico, 1951, 2 vols.; Mordecai Z. Feierberg (1874–1899), with *Kitve . . .*, Tel Aviv, 1940; Judah Steinberg (1865–1908), with *Kol Kitve . . .*, Tel Aviv, 1959; and many others who excelled in this genre.

Yizhak Dov Berkovitz (1885–1967), in addition to his short stories in *Kitve . . .*, Tel Aviv, 1951–, rendered an outstanding service to modern Hebrew literature with his masterful translations of the Yiddish works of Sholem Aleichem.

Hebrew poetry of this era includes lyrical song, idyll, nature poems, ballad, sonnet, and historical narrative. Hayyim Nahman Bialik (1873–1934), who delved into all the spiritual resources of Judaism and utilized artistically various poetical

forms, is recognized as the national poet of the Jewish people. For he has shown the people the mainsprings of its inner vitality, and expressed its feelings of joy and sorrow, hope and frustration, triumph and defeat, with unparalleled power and depth. His nature poetry reflects profound sensitivity to the finest shades of color and sound. He also translated into Hebrew many classics of European literature. Bialik's collected works are available in numerous editions, e.g., *Kol Kitve . . .*, Dvir, Tel Aviv, 1938.

Saul Tchernichowsky (1873–1934), whose Jewishness did not spring exclusively from traditional sources, represents the secular universalistic tendencies in Hebrew poetry, including elements of paganism. He translated the *Iliad*, the *Odyssey*, and the Finnish epic *Kalevala*. Yet for all his universalism, he is also the poet of Jewish martyrology in the Middle Ages. Jewish village life in the Crimea is depicted in his folk poetry. His works are available in *Kol Shire . . .*, Schocken, Jerusalem, 1937.

Also the poetry of the third classic of this era, Zalman Shneour (1887–1959), assembled in *Kitve . . .*, Tel Aviv, 1960, 2 vols., is dominated by secularism. Some of his lines reflect a spontaneous, almost prophetic, awareness of impending Jewish tragedy. His folk stories depict Jewish life in the Pale of Settlement.

Other notable poets in this group are David Frischmann; Mordecai Z. Manne (1859–1886) with his repertoire of love themes; and Naphtali H. Imber (1856–1909), author of the Israeli national hymn *Hatikvah*.

Turning now to a brief listing of some of the publicists, journalists, etc., who are credited with the formulation of the program for national restoration, Ahad Haam is the chief architect and most persuasive spokesman in this group.

Publicistic writings by Moses L. Lillienblum (1843–1910), *Kol Kitve . . .*, Krakow, 1910–1913, 4 vols., include historical studies, literary criticism, polemics against stringency in religious practices, studies on socioeconomic reforms, etc. However, his major literary contributions are the essays on Zionism in Hebrew, Yiddish, and Russian.

Nahum Sokolow (1861–1936), editor of the weekly publication of the World Zionist Organization, *Ha-Olam (The World)*, is recognized as the most versatile essayist of his time. Selections of his numerous contributions are offered in *Ha-Ani ha-Kibuzi (The Social Self)*, New York, 1930, and in *Ishim (Personalities)*, Tel Aviv, 1934, 3 vols.

Many of the authors mentioned before, e.g., Bialik, Frischmann, and Klausner, wrote on problems of literary criticism.

A broad survey of leading Hebrew writers since Mapu to Bialik is offered by Moshe Kleinman (1871–1947) in *Demuyot ve-Komot (Portraits and Statures)*, London, 1928.

Abraham A. Droujanoff (1870–1938) is author of the analytical study in wit and humor *Sefer ha-Bedihah voha-Hidud*, Dvir, Tel Aviv, 1938–1939, 3 vols.

Eliezer Isaac Perelman (Ben Yehudah 1858–1922), editor and journalist, made an enduring contribution to the cause of national restoration with his efforts to revive Hebrew as a living spoken language. His major scholarly contribution is his complete dictionary of the Hebrew language, *Milon ha-Lashon ha-Ivrit*, Yoseloff, New York, 1959, 8 vols., for which he utilized all resources of Hebrew writing.

Palestinian-Israeli Period

The movement of Jewish colonization in Palestine, began in the last quarter of the nineteenth century, reached mass dimensions after World War I. The ideal of *Haluziut* ("pioneering") captivated the imagination of tens of thousands of young men and women, who went to Palestine to build the land and "rebuild themselves." Their ultimate aim was to create a new Jewish society with a rejuvenated culture in Hebrew, and a social order along the lines of democratic socialism. As the tempo of rebuilding gained momentum, literary talent arrived on the scene—poets, essayists, novelists, scholars—to help shape the intellectual and spiritual landscape of the new Jewish community. Thus modern Hebrew literature began echoing the experiences, inspiring as well as frustrating, of the new life in *Kibuzim* ("communal settlements"), agricultural colonies, and cities.

Among the leading poets of this indigenous Palestinian literature of *Haluziut* are Abraham Shlonsky (1900–1973) with his representative selection *Yalkut Shirim*, Tel Aviv, 1967; Nathan Alterman (1910–1970) with *Ketavim (Writings)*, Tel Aviv, 1961–1963, 4 vols.; Leah Goldberg (1911–1970) with her selection *Yalkut Shirim*, Tel Aviv, 1970; and Uri Z. Greenberg (1894–) with the selection *Mivhar mi-Shirav*, Tel Aviv, 1968. These works generally relate to and articulate the commitment of a humanistic-socialistic ideology, except for Greenberg's which focus attention with quasi-mystical fervor on the historic vocation of the Jew.

Another enthusiastic representative of the pioneering ideal, S. Shalom (1904–), articulates in *Ketavim*, Yavne, Tel Aviv, 1966–1967, 6 vols., nationalistic dedication despite implacable Arab opposition to Jewish endeavor. Also David Shimoni (1886–1956) in his *Ketavim*, Dvir, Tel Aviv, 1925–1931, 4 vols., deals with nationalistic themes.

Isaac Lamdan (1899–1954) glorifies in *Massada*, Dvir, Tel Aviv, 1952, the spirit of pioneering heroism.

Among the leading fiction writers of this period are Samuel Joseph Agnon (1888–1971) with *Kol Sipuray (All the Tales)*, Schocken, Jerusalem, 1959–1962, 8 vols., and Hayyim Hazaz (1898–1972) with *Kol Kitve . . .*, Am Oved, Tel Aviv, 1968, 8 vols. Agnon depicts the world of the contemporary Jew, from the type in his native Galician town to the emerging new personality in the Land of Israel. Hazaz dwells on the life story of the Yemenite Jew.

Other novelists deal with themes of Jewish life in the communities from where they originally came: Jehudah Burla of Sephardic descent (1887–1969) describes in *Kitve . . .*, Tel Aviv, 1930, 4 vols., the life of Sephardim in Jerusalem and the Middle East; Devorah Baron (1887–1956), a native of White Russia; Asher Barash (1889–1952), a native of Galicia; and Jacob Steinberg (1887–1947), a native of Ukraine, use as themes the experiences of those communities.

Moshe Smilanski (1874–1953) offers in *Kitve . . .*, Jerusalem-Berlin, 1924–1930, 8 vols., a fascinating canvas of Arab life and Arab mentality in Palestine.

Avigdor Hameiri (1886–1970) fills his world in *Sipure ha-Milhamah (War Stories)*, Am Oved, Tel Aviv, 1970, with traumatic events from World War I.

Since the proclamation of the State of Israel in 1948, the literature of the

younger native writers reflects a perceptible transformation concerning the values and ideals of the generation of *Haluziut*. It seems that, for some as yet indefinable reason, the attainment of national independence and sovereign statehood brought on a mood of existential anxiety. Perhaps the politico-economic realities of the young struggling state tend to erode the faith in socialism on the part of the young soldier-writers. This mood is expressed in the introspective, individualistic, frequently alienating, poetry and prose of the 1950s. The Holocaust is a recurring theme in these works, many of the authors having fought personally against the Germans in World War II, and/or having subsequently visited the camps for displaced persons.

Among the prose writers who reflect these moods are S. Yizhar (1918–), Mosheh Shamir (1921–), Aharon Meged (1920–), and Hanoh Bartov (1928–).

Abba Kovner (1918–), Amir Gilboa (1917–), Haim Guri (1923–), T. Carmi (1925–), and Yehudah Amichai (1924–1972) are making an impact with their works of poetry.

Belles lettres in Yiddish require separate treatment, while works in this category in European languages, which deal with Jewish problems or with themes from the domain of Judaism, are discussed in studies of literature in the respective languages. In this connection three literary-critical essays in *The Jewish People Past and Present*, Vol. 3, Cyco, New York, 1952, are of special interest: *Jewish Literature in the U.S. and England*, by Harold U. Ribalow; *Jews and Jewish Problems in German Literature*, by Hugo Bieber; and *Jewish Literature in Russian*, by S. Dubnow-Ehrlich.

SUPPLEMENTARY BIBLIOGRAPHY

Blocker, Joel, ed., *Israeli Stories: A Selection of Best Contemporary Hebrew Writing*, Schocken, New York, 1962.

Klausner, Joseph, *A History of Modern Hebrew Literature*, Cullingold, London, 1932, 3 vols.

Lachover, Yeruham F., *Toledot ha-Sifrut ha-Ivrit he-Hudashah [History of Modern Hebrew Literature]*, Dvir, Tel Aviv, 1946–1948, 4 vols.

Mersand, Joseph, *Traditions in American Literature: A Study of Jewish Characters and Authors*, Kenikat Press, Port Washington, New York, 1968.

Mintz, Ruth, ed., *Modern Hebrew Poetry: A Bilingual Anthology Nineteenth and Twentieth Century*, Univ. California Press, Berkeley, 1967.

Rabinovich, Isaiah, *Major Trends in Modern Hebrew Fiction*, Univ. Chicago Press, Chicago, 1968.

Schwarz, Leo W., *The Jewish Caravan: Great Stories of Twenty-five Centuries*, Holt, New York, 1965.

Wallenrod, Reuben, *The Literature of Modern Israel*, Abelard, New York, 1957.

REFERENCE MATERIALS

Abrahams, Israel, *A Short History of Jewish Literature from the Fall of the Temple 70 C.E. to the Era of Emancipation 1786 C.E.*, T. Fisher Unwin, London, 1906.

- American Jewish Yearbook*, American Jewish Committee and Jewish Publication Society, New York, 1899–.
- Attal, Robert, *Les Juifs, d'Afrique du Nord*, Brill, Leiden, 1973.
- Berlin, Charles, ed., *Index to Festschriften in Jewish Studies*, Ktav, New York, 1971.
- Caplan, Samuel, and H. U. Ribalow, eds., *The Great Jewish Books and Their Influence on History*, Horizon Press, New York, 1952.
- The Encyclopedia of the Jewish Religion* (Werblowsky and Wigoder, eds.), Massada, Jerusalem, 1966.
- Encyclopedia Judaica*, Keter, Jerusalem, 1971, 16 vols.
- Finkelstein, Louis, *The Jews: Their History, Culture and Religion*, Harper, New York, 1960, 2 vols.
- Friedberg, Ch. B., *Bet Eked Sepharim: Bibliographical Lexicon Works in Hebrew Letters 1474–1950*, Bar-Juda, Tel Aviv, 1951–1954 (includes register of authors), 4 vols.
- Index of Articles on Jewish Studies* (quarterly), Magnes Press, Jerusalem, 1969–.
- Index to Jewish Periodicals: Author and Subject Index to Related American and Anglo Jewish Journals*, Cleveland, College of Jewish Studies, 1963–.
- The Jewish Encyclopedia*, Ktav, New York, 1964 (reprint of Funk and Wagnalls, New York, 1901–1906), 12 vols.
- The Jewish Year Book*, Jewish Chronicle, London, 1896–.
- Kaysersling, Meyer, *Bibliotheca Española-Portuguesa Judaica and Other Studies in Ibero-Jewish Bibliography*, Ktav, New York, 1971.
- Schneiderman, Harry, ed., *Who's Who in World Jewry*, McKay, New York, 1965.
- Shunami, Shlomo, *Bibliography of Jewish Bibliographies*, Magnes Press, Jerusalem, 1965.
- The Standard Jewish Encyclopedia* (Cecil Roth, ed.), Doubleday, Garden City, New York, 1959.
- The Study of Judaism: Bibliographical Essays*, Anti-Defamation League of B'nai B'rith, New York, 1972.
- Universal Jewish Encyclopedia*, Universal Jewish Encyclopedia, Inc., New York, 1939–1943, 10 vols.
- Waxman, Meyer, *A History of Jewish Literature*, Yoseloff, New York, 1960, 5 vols.
- Who's Who in Israel and in the Work for Israel Abroad*, Bronfman, Tel Aviv, 1972. New York, 1972.
- Who's Who in World Jewry 1972: A Biographical Dictionary of Outstanding Jews*, Pitman, New York, 1972.
- Zafren, Herbert B., *Selected List of Jewish Reference Books*, Vol. 28, Jewish Book Annual, New York, 1970–1971.
- Zinberg, Israel, *Di geshikhte fun der literatur ha Yidn (History of Jewish Literature)*, Vilna, 1929–1966 (this work is currently being translated into English), 9 vols.

RABBI SAI AMON FABER

JUNTA DE BIBLIOTECARIOS DE UNIVERSIDADES NACIONALES DEL PAIS

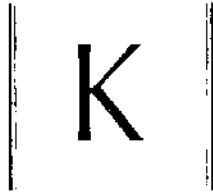
Each Argentinian National University has a Board of Librarians made up of the directors of the respective libraries of the schools of the central library, if such exists. Its goals and objectives are to coordinate and centralize the library activities of the university as, e.g., the technical services, the courses for the advancement of personnel, and interlibrary loans. Although the rules which govern these boards are not all the same, the goals are. Some of the boards meet every month and others at longer intervals. They meet to discuss and resolve problems related to the improvement of library functions.

The oldest board (junta) is that of the University of Buenos Aires, which was established in 1943. The other boards were created for the remaining national universities of the country over a period of time, and in 1963 the Board of National Argentinian University Libraries was founded. It is composed of the library boards of the national universities, represented by the president of each library board of the following eight national universities: Universidad Nacional de la Plata; Universidad Nacional de Tucuman; Universidad Nacional de Rosario; Universidad Nacional del Litoral Biblioteca de la Facultad de Ciencias Jurídicas y Sociales; Universidad Nacional de Cuyo; Universidad Nacional del Nordeste; Universidad de Buenos Aires; and Universidad Nacional del sur.

The presidency is rotated among the library directors for the several universities in chronological order, beginning with the oldest. The office of the vice-president is held by the library director who will be the next president.

The board's goals and objectives are to coordinate and promote library activities of Argentinian universities in the area of interlibrary lending; compile a guide to the university libraries in Argentina; develop a questionnaire to provide information for better library planning; cooperate in the purchase of bibliographical materials; and develop and encourage the teaching of library science courses, especially for the personnel working in the university libraries.

HANS GRAVENHORST
(Translated by Savina A. Roxas)



KANSAS CITY PUBLIC LIBRARY

The Kansas City Public Library represents a pattern of development similar to that of most metropolitan public library systems in that its history reflects in many ways the history of the community it serves. Its 100-year record of service, therefore, serves as a monument not only to the city's growth but its character as well.

The origin of the library can be found in a resolution adopted on December 5, 1873 by the Board of Education which read as follows:

Resolved, That there be established in connection with our schools a library for the use of officers, teachers and scholars of the public schools of this district, to be known as the Public School Library of Kansas City.

At an earlier meeting of the Board a resolution already had been adopted approving a series of six lectures to be held at Frank's hall, Fifth and Main streets, the purpose of which was to raise funds for the purchase of books for a public school library.

The course of lectures netted nearly \$100 and from this modest sum the public library was born. A bookcase was purchased for \$8 and placed in a room of the old high school building at 11th and Locust. A set of the new *American Encyclopedia* was ordered and placed on its shelves. The case and its contents thus represented the beginning of the library.

Following this first official action, little real progress was made in the immediate years to follow. The depression that preceded the panic of 1873 had begun to affect enterprise throughout the country and the library along with other Kansas City institutions suffered in turn. In fact, the agent handling deliveries of the new *American Encyclopedia* was ordered to suspend shipments following receipt of the tenth volume until sufficient funds were made available to pay for the books.

Throughout 1874 and 1875 the new library was frequently the subject of discussion at Board meetings but it was not until early in 1876 that the struggling project received a fresh impetus. A Ladies Centennial Association, which was organized in 1875 to represent Kansas City in Philadelphia, was disbanded for some unknown reason and one-half of the centennial fund, amounting to \$490, was diverted to the library.

A year later the library had attained sufficient size to command official recognition. J. C. Karnes, who was then president of the Board of Education, reported that the library had a balance of \$129, with outstanding orders for books to cost about \$100, and a subscription list of periodicals billed at \$39.60. He concluded that though the library's resources were scarcely sufficient to meet these needs, it was on a firm foundation and pronounced it ready for use. He recommended the adoption of certain rules to govern the library. In general they placed responsibility for the operations of the library with the Board. It was to appoint the librarian, determine the librarian's salary, and receive an annual report "respecting the number of volumes and their conditions."

During its formative period, the library was officially placed under the charge of James Craig, treasurer of the Board, and James Greenwood, superintendent of schools. It was only appropriate that Greenwood should share in this responsibility for it was he more than any other individual who provided the leadership and drive to establish the new library. Immediately upon taking over the duties of superintendent in 1874 he began and continued an effort to accumulate volumes for the budding institution, and to him must go the major share of credit for its growth.

In November 1876 the Public School Library, as it was then called, opened to its patrons who paid \$2 a year for tickets. In its early years the library operated on a subscription basis. The fee of \$2 a year entitled the borrower to one book for 2 weeks. A life membership was \$10 or \$12 paid over a period of 6 years.

By the 1880s the supply and demand of books reached such proportions that a full time public servant was required to oversee the operations. In 1881 Mrs. Carrie Westlake Whitney was appointed librarian at \$30 a month in salary, a capacity she was to serve in for the next 30 years.

The burgeoning collection also resulted in housing problems. In efforts to accommodate the expansion of materials, the library settled on several sites. However, each new opening created newer demands upon its services, and each, in turn, was soon outgrown. A permanent home was obviously needed at this stage of the library's development in order to stabilize its condition. Thus it was resolved by the Board that there be submitted to the voters of the school district of Kansas City a proposition authorizing the Board to borrow \$200,000 for the purpose of erecting a public library building and to issue bonds for that amount. The bonds were issued in 1894 and a site at Ninth and Locust streets purchased for \$30,000. The new building, a two-story structure situated on a lot 132 feet by 144 feet in size, opened to the public in September 1897.

Until its relocation to the new site, the library had been operating as a school

and subscription library; however, in January 1898 all subscribers surrendered their cards and it became a free public library in fact as well as in name. The new system of free distribution originated a further increase in patronage and by the turn of the century the library was well on its way to becoming the dynamic institution its founding fathers had hoped for.

As the library's services expanded so did its functions. Its role as a cultural center was underscored in 1901 when William Rockhill Nelson presented a collection of pictures in the Western Gallery of Art to the Board of Education, which the Board directed to be known as the Nelson Gallery of Art. It was exemplified further in 1904 when the Board assumed the trusteeship of the Daniel B. Dyer Museum and placed it under the control of the library. A few years later the museum was given to the Board "for the use and benefit of the people of Kansas City as a nucleus for a public museum, and as a testimonial of his (Dyer's) regard for said city and its people."

If the gallery and museum were indicative of the library's expanding role as a cultural center, its emerging role as a civic center was demonstrated in a much more unorthodox manner. In 1909 Colonel Thomas H. Swope, a famed Kansas City benefactor, died under what were termed mysterious circumstances. To enable local citizens to pay their final respects, it was decided to place the body in state in the rotunda of the library directly in front of the Ninth Street entrance. The casket stood between two marble columns connected at the top by a panel ceiling. The square was draped in black with streamers of black running from the columns to the entrance to the building on Ninth Street. The line of visitors entered at the Ninth Street door and left by a rear exit. Patrolmen stood at each entrance to direct the crowd. Mrs. Whitney prepared a bulletin which hung in the rotunda near the casket. It set forth what Colonel Swope's gifts were to the city and his bequests. A steel engraving of Mr. Swope was on the board alongside a copy of his own epitaph.

The combination of expanding roles and services and an expanding city heralded the development of the library's branch system. On February 22, 1898, following 5 years of negotiations and planning, the Allen Library opened in the town of Westport, Missouri. In 1893, Judge A. M. Allen had discovered a surplus of \$7,500 in taxes from construction of a horse railroad operating between Kansas City and Westport. He proceeded to secure these funds to build a public library at the corner of Westport Road and Wyandotte Avenue. After Kansas City annexed the town of Westport in 1898, the Allen Library with its 1,300 volumes became the Kansas City Public Library's first branch.

Over the period of the next 3 decades, close to twenty libraries were added to the branch network. Nearly all followed a school-library pattern of development wherein branches were housed in existing school facilities. This was the result of the prevailing philosophy of the day that called for a direct link between the schools and branch libraries. This pattern would not be broken for another 3 decades, when the library next undertook an expansion program of similar scope.

With the era of branch expansion having reached its peak in the 1920s and early

1930s, the library subsequently entered a period marked by an internal phase of development. The emphasis over the next 2 decades was concentrated in the service areas. There were several contributing factors behind this trend: first, the economic squeeze of the depression years curtailed any plans for costly building ventures; secondly, the advent of World War II altered drastically the public's reading habits; and finally, arbitrary political boundaries imposed strict limits on any school district expansion.

The library emerged from the war years nearly intact with few services having been crippled. In fact, several were inaugurated. In 1944 the Business and Technical and Young People's departments were opened. The library's rather extensive collection of materials in the business and technology fields was gathered from the reference room, book stacks, browsing room, and documents collection, and although not all materials were housed in a single room, they did become centralized in one area of the library. The Young People's Corner, serving ages 14 to 20, was opened in September 1944. This area housed about 1,200 books specifically selected for the personal interests of those falling within this age group.

Beginning in 1950 Kansas Citians had the services of a bookmobile. A 30-ft. library truck was purchased by the library through funds made available by a school levy increase voted that year. It was estimated that the bookmobile circulated at least 100,000 books its first year. The branch libraries were reporting an annual circulation of only 30,000 at this time and the operating cost of the mobile unit was substantially less than that of a branch.

The school levy that provided funds for the bookmobile operation also enabled the library to launch a \$115,000 renovation project beginning in 1950. As part of the improvements, an Art and Music Department was established, the Business and Technical Department rearranged, the bindery moved to a branch to provide more space and a browsing room opened complete with modern, cushion furniture, drapes, and small light-wood cases to house works of fiction, including all the best sellers.

A film library, which began operation in 1950, proved an immediate success. In 1951 a total of 535,537 persons viewed borrowed films. This fact, coupled with the report that over 15,000 records were loaned over a similar span of time, indicated the reception these two nonbook services received from the public.

Despite these improvements it was clear that the main library building, built in 1897, was being outgrown by its services. The most important development of the postwar era was the trend toward specialization. The establishment of departments in the business and technical and art and music fields was an effort by the library to accommodate this movement. However, proper specialization was not feasible in the 9th and Locust site both because of lack of space and unsatisfactory interior arrangement.

Plans for new facilities were taken under consideration by the Board of Education, and in August 1955 a tentative building program for the public library system that would include a new main building, two new branches and extensive

renovation of the present branches at a cost of nearly \$6 million was approved. The program was to be financed through a bond issue to be submitted along with a bond proposal for school construction. The package was placed on the ballot the following year at which time it received the voter's approval.

The site selected for the construction of the Main Library was on Twelfth Street between McGee and Oak Streets. It was part of an eleven-story structure with floors six through eleven assigned to the Board of Education. The lower floors (seven, including two basement levels) were allotted to the library itself. Ground breaking occurred on July 7, 1958 with the formal opening coming 2 years later in July 1960 (see Figure 1).

Not long after this milestone in the library's development became a reality, the Board took another major step toward expanding services. For some time it had wanted to locate a branch library on a site near the Country Club Plaza, long recognized as the cultural heart of the Kansas City area. Voters believed they had accomplished the job in 1956 by giving overwhelming approval to the library bonds. However, considerable confusion and delay arose from conflicting views on the locality of proposed sites. Finally, in 1965, one was agreed upon and the

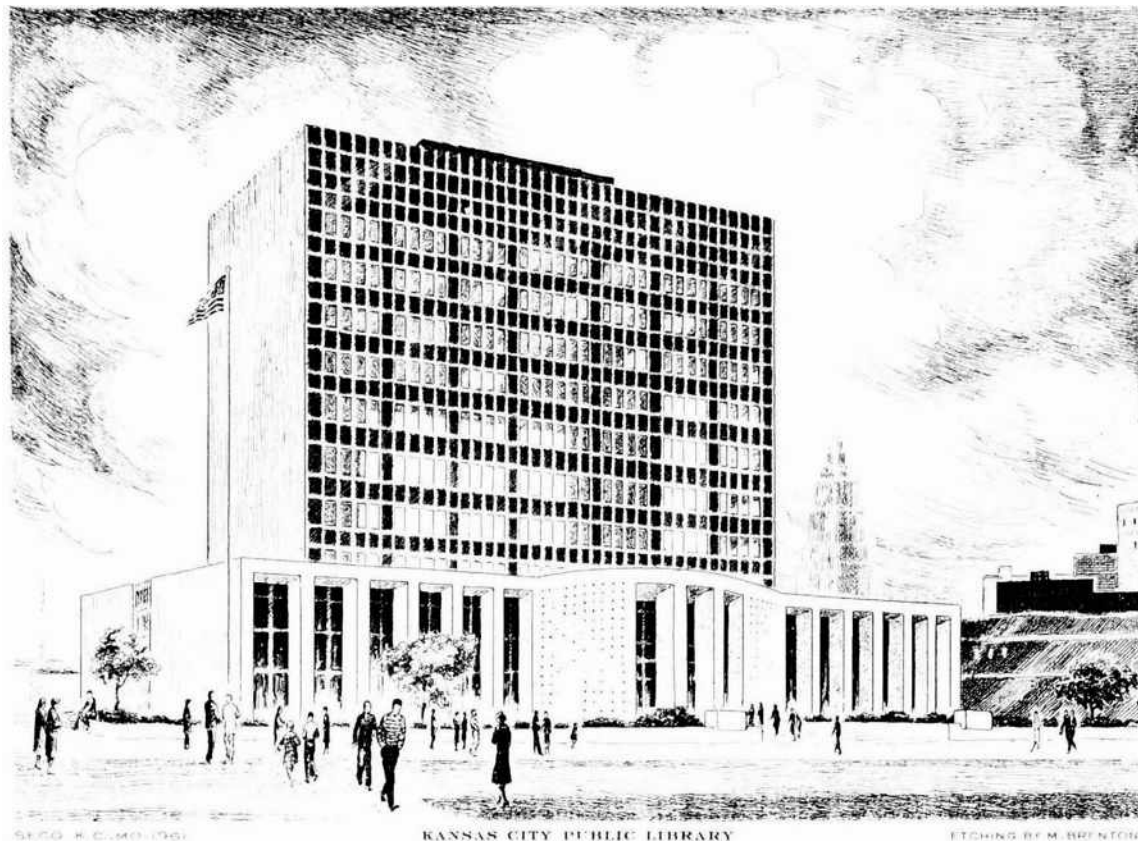


FIGURE 1.

Plaza Library was constructed on the corner of Brookside Boulevard and Main Street at a cost of \$875,000.

Opened in 1967, the Plaza Library was the first branch built by the Board of Education apart from a high school building. It marked a significant shift in the direction of services offered by the Kansas City Public Library system. The close bond with the public schools would continue, but future services were to be aimed at all segments of society, particularly the disadvantaged areas.

A review of the library's past clearly indicates the evolution of its philosophy of library service. It has been a pattern of steadily increasing community involvement, with the library through the years gradually abandoning its passive role in favor of a more active one.

In the late 1960s an Extension Services Division was formed that was designed to explore and meet the needs of the residents it served through innovative projects. As part of the division's efforts, book collections have been located in several boys' clubs as well as in various low-income community centers.

As recently as 1972, two new departments under the auspices of Extension Services were established: Adult Basic Education and Institutional Services. The latter has led to the formation of library services in nine nursing and retirement homes, two fire stations, two hospitals, and seven correctional facilities. The Adult Basic Education division is directed toward adult education classes, English as a second language, and citizenship classes in the area of the Kansas City, Missouri School District. The material center for these projects is located in the Main Library.

Projects of the Extension Services Division are by no means the only examples of the changing nature of the library's services. Another extension of the library has come through its curbstome movies, a summer film program sponsored by the Film Department, the purpose of which is to bring enriching entertainment to inner-city children.

For 10 weeks each summer, a lumbering rental truck is converted to a mobile projection booth—even to its own power plant. With a projector firmly mounted directly behind the driver and a huge rear screen just inside the back door, a show is ready to roll as soon as the truck stops and the back doors opened. The truck provides fifteen programs a week, using films from the library collection. Through instant movies the library offers a brief moment of quality entertainment to an area of the city where no other planned activity exists.

The changing concepts of library service have spawned numerous programs similar to the aforementioned film and extension services. They are only samples of the Kansas City Public Library's growing list of community contacts, a list that is potentially as endless as the educational needs of the populace it seeks to serve.

Undoubtedly, the proliferation of the community's needs in the years ahead will demand new types of services as well as revitalization of old ones. Confronting this continuing challenge was the essence of the Kansas City Public Library's past. It also looms as its challenge of the future.

BIBLIOGRAPHY

- Greenwood, James M., *A History of the Kansas City Public Library from 1873 to 1893*, Rigby-Ramsey Printing Co., Kansas City, Missouri, 1893.
- Jennings, Kathryn Lynn, "The Kansas City Public Library, 1873 to 1898: Its Historical Growth as Related to the Development of the Public School System of Kansas City," Research Paper Presented for School of Information and Library Science, University of Missouri, 1971.
- Kansas City, Missouri, Public Library, *Annual Reports*, 1939-1945.
- Kansas City, Missouri, Public Library, *Library Staff News*, 1954-1973.
- Kansas City, Missouri, Public Schools, *Report from Your Schools*, 1948-1968.
- Whitney, Carrie Westlake, *Kansas City, Missouri: Its History and Its People, 1808-1908*, S. J. Publishing Co., Chicago, 1908.
- Wright, Purd B., *Historical Sketch of the Kansas City Public Library, 1911-1936*, Lowell Press, Kansas City, Missouri, 1937.

WILLIAM H. HOFFMAN

KANSAS LIBRARY ASSOCIATION

The Kansas Library Association was organized December 27, 1900 when interested persons met in the State Library for the purpose of discussing the formation of a state organization. Margaret Hill McCarter, Topeka author, delivered the welcoming address that evening. A reception was held following the evening meeting and several hundred people were shown through the State Library. On December 28, 1900 the actual detail work of forming a state organization began when twenty-three librarians met and elected James L. King of Topeka president.

Over the years the Kansas Library Association has been an active organization and has sponsored many projects to extend library service to all citizens of the state. Membership in the association now totals almost 800 counting personal, institutional, and life members. The officers consist of a president, vice-president-president-elect, second vice-president, secretary, treasurer, past-president, nominating committee, and ALA councilor. The sections are: Children and School Library, College and University, Friends of Libraries, Public Library, Resources and Technical Services, Special Libraries, and Trustees. The committees are: Archives, Bookman's Lecture, By-laws and Parliamentarian, Exhibits, Intellectual Freedom, Legislative, Local Arrangements, Membership—ALA and KLA, National Library Week, Publications, Recruitment for Scholarship, ALA Washington Office Coordinator, Catholic Library Association, KASL, MPLA, SRRT, State Librarian and Public Relations, and KLA *Bulletin* editor. These all make up the council for the state organization.

Some of the activities of the association over the years have included the Victory book campaign, the WPA library service program, the William Allen White Book Awards, scholarships for libraryship, president's news letter, district meetings, workshops, regional meetings, and state conventions. KLA has cooperated with the State Library in library legislation, in developing regional systems, and in promoting library service to the blind and handicapped. KLA tries to keep up its archives by sending material to the Historical Society Library for preservation and use in research. Various library surveys have been taken covering many facets of library service.

The official publication of KLA is the *KLA Quarterly*. A *KLA Newsletter* is now published, and a membership *Directory* is published annually. In July 1972-1973 an effort was directed to promoting legislation for better service for all levels of libraries through the State Library.

MARGARET MEYER

KANSAS STATE TEACHERS COLLEGE, DEPARTMENT OF LIBRARIANSHIP

The first library program west of the Mississippi was established at Kansas State Normal, Emporia, in 1902 with a course "Library Management." Described in part as "The teacher's course . . . lectures . . . general and technical . . . as applied to school libraries with practical problems assigned after each lecture . . ." the course of 10 weeks duration was for seniors only. A course for public librarians was added in the summer of 1904. It included lectures on: order work and accessioning; principles and aids in book selection; mechanical preparation of books for the shelves; care of serials; the accession book; shelf arrangement, book numbers, labels, shelf list, inventory; loan charging systems, rules, statistics; binding, essentials of preparing books for the bindery, repair work; and bibliography and trade bibliography for the small library. All these areas and more were covered in "two hours in the classroom, two hours of practical work in the library and from four to six hours in preparation." The length of time for this course is not listed, but school catalogs indicate 10 weeks.

Since that time, with the exception of 3 years after World War I, there has been a continuous and expanding program in library education at what is now Kansas State Teachers College, Emporia (after July 1, 1974, Emporia Kansas State College).

The curriculum, ambitiously expanded to 30 hours in 1911, was later organized and rebuilt, so that by 1929 it consisted of a major of "thirty-three hours, thirty of which were required to be done in the senior year." This was consistent with

requirements of the American Library Association for a Class III library school. Library certificates were issued for successful completion of these programs. The scope of the program was expanded, as stated in the 1933 college catalog, "to prepare persons to become librarians in other types of library positions . . . in a one year Library School fully accredited by the American Library Association . . . and qualified to issue the American Library Association Library Certificate." In 1951, under the direction of Dr. Orville L. Eaton, a combined master's degree program was approved by the Graduate Council of the school. Eight semester hours of undergraduate credit in library courses were prerequisites for admission to the graduate program.

Although the program was denied accreditation by the ALA in 1955, the school continued on an unaccredited basis. Under the leadership of Dr. Robert E. Lee, who accepted the new position of Director of the Department of Librarianship in 1963, a new and stronger graduate curriculum was accredited in July 1966. Since 1955 when the faculty numbered four, it has grown to eleven full time, six cooperating, and five adjunct positions. Programs are offered for school library/media specialists for elementary and secondary levels, and academic, public, or special librarians in any area of service including systems analysis and planning. At the present time the library school library is becoming a work-study operation involving student participation.

The library school library, a sizable current collection of books, periodicals, micromedia, and bulletins, supplements the material readily accessible in the college library. Among the special collections of the William Allen White Library are government documents, extensive microfilm holdings, special research materials on human relations, and the May Massee collection of material in the field of children's literature.

The library school quarters, located in the campus library building, include private offices for all faculty, classrooms, laboratory space for cataloging and media practice, a three-room department administration area, and a large carpeted library school library with ample stack level adjoining.

Through the years the program profited by the strong leadership of such persons as Gertrude Shawan (1902-1912), Willis H. Kerr (1912-1926), Elsie Howard Pine (1922-1949), Evelyn Elliott (1934-1947), Beatrice Howard Holt (1928-1935), Inez King Cox (1947-1965), Irene Marie Hansen (1947-1969), and Robert E. Lee (1963-1970). Until September 1963, when Dr. Lee accepted the position of director of the Department of Librarianship, college librarians served also as heads of the library school.

The current program consists of 32 semester hours of graduate credit. A strong undergraduate program in liberal arts, courses in a modern foreign language, and a grade point average of B or better are basic considerations for all applicants. Field trips to nearby libraries and library oriented operations are features of many courses. A field trip to a large metropolitan area is required of all who plan to complete the program for the degree of Master of Librarianship. To date, group trips have been made to Chicago, to Washington, D.C., and to London, England.

As early as 1930 field trips were listed among the activities sponsored by the department.

Guest lectures, workshops, and seminars have long been a part of the programs at the School of Librarianship. Among the noted individuals who have participated in such affairs are Luther H. Evans, Lester Asheim, Ruth Warneke, Jesse H. Shera, Andrew D. Osborn, and Phoebe Hayes.

Future plans include an expansion of the information science program, strengthening of the program for the school media specialist, and continuing evaluation of the total curriculum to meet the ever changing needs of the profession.

MARJORIE WILLIAMS

KANSAS. UNIVERSITY OF KANSAS LIBRARIES

The University of Kansas Library system had its beginning in March 1865 when Judge J. S. Emery, a member of the first Board of Regents, was elected librarian. His responsibilities during a term which lasted until 1868 were minimal, because the new state university in Lawrence had no students until 1866, and no books nor funds with which to buy them. Emery's successor was also a regent, W. C. Tenney, who held the position in 1868 and 1869.

"The charge of the library then passed from the regents to the faculty," wrote Carrie M. Watson, who was appointed first full-time librarian in 1887, "Frank H. Snow, Professor of Natural History, was elected librarian December 1, 1869, and reelected December 7, 1870. He resigned September 3, 1873." Byron C. Smith, professor of Greek, succeeded Snow, who subsequently became Chancellor, and he was succeeded in 1875 by Ephraim Miller, who held the office, in addition to his professorship in mathematics, for 12 years, during which the library, as Watson later wrote, "began to assume form and reality."

The first recorded purchase was of "Thirteen Volumes of the United States Pacific Survey" for \$50 appropriated in 1871. Professor Smith succeeded in obtaining \$1,500 for books in 1874, and all during his tenure thereafter Professor Miller was unable to match this amount. In Miller's second year, 1876, no funds were provided.

The library was assigned space in 1866 in one of the rooms of North Hall, the first building, but its collections consisted (from Snow's description) of "a few Congressional books," and Miss Watson said that "This nucleus of a library was a standing joke among students, because they never saw it, until September 1877."

It was in the fall of 1877 that the library was moved into a first floor room in the large new building subsequently named Fraser Hall. This new library contained slightly over 2,500 volumes, and with a book fund of \$500 librarian Miller sub-

scribed to *North American Review*, *Atlantic Monthly*, *Harper's Monthly*, and *Scribner's Monthly*.

The following year Carrie Watson was assigned as Miller's assistant, and the library adopted regular hours from 9 A.M. to 1 P.M. and permitted students to borrow books, one at a time, for use at home. In 1882 Miller issued *A Catalog of Books in the State University of Kansas*, in which some 5,000 volumes were listed.

In April of 1877 Professor Miller resigned the librarianship, and Carrie M. Watson was made the first full-time librarian, and given one student assistant and \$1,000 for books. In 1889 she was able to increase this amount to an unprecedented \$5,000. By 1891 the library had almost 15,000 volumes and had moved to larger quarters in Fraser Hall with a separate bookstack "to which lower division students were not admitted." Although students could borrow only one book at a time, they were permitted to keep these for 3 weeks, a practice which continues to the present time.

The first branch library, serving the Law Department, was established when the Law Department moved to North College, taking with it 800 law books to which were added 1,000 volumes from the library of its first dean, J. W. Green.

In 1891 Miss Watson described the library in an essay published in *The Quarter Centennial History of the University of Kansas*:

At present the general library occupies all of the rooms on the first floor of the north wing of the main building and one room in the basement. It includes the reading room with the librarian's office adjoining it, and the two book rooms, besides the hall way between these rooms, which makes a separate room for the public documents. The basement room is used for storage, for unpacking new books and for packing books for binding.

All students have good library facilities for work in the reading room. This room is supplied with 140 American and foreign periodicals and sixty State newspapers. There is a good collection of cyclopaedias, books of reference, and dictionaries. When the lower classes are studying special topics, certain volumes may be placed upon reserve shelves for class use. These volumes are in no case to be removed from the reading room, as they are for the entire class. These students find what they want from the card catalogue, and are referred to books by the professors. Indeed we use whatever means we can to create a taste for reading among those who have never enjoyed the use of a library and to extend the taste for reading among those who already have the habit, so that when they reach the junior and senior years they will understand better the nature of their privilege of free access to the shelves. Under no circumstances should any one be allowed access to a library shelf who has not learned by personal experience what books are.

In the two book rooms the books are placed in alcoves arranged by subjects. Small tables are placed in the vacant spaces in these rooms, where the advanced students can work conveniently.

The Library is available more hours than heretofore. It was open from 9 A.M. to 1 P.M. from 1877 to 1885. Two hours in the afternoon were added in 1885. Then, in 1887 the hours were extended from 8 A.M. until chapel time, and from 9 A.M. to 6 P.M. except on Saturdays, when it was open only from nine until twelve o'clock. It was decided, in 1888, to open the library Friday evenings from

half past seven until ten o'clock. . . . Even during the Christmas recess many of the students do good work in the library. This habit of research, which is developing among the students, cannot fail to be considered a good sign.

The year 1891 was in several ways the beginning of an important period of development for the University of Kansas Library. In this same year the university received (as did Oberlin College) a substantial bequest from the estate of William B. Spooner, a Boston merchant and uncle of Chancellor Snow, the major part of which was for the construction of a new library building.

The Spooner Library was completed in 1894, and in August of that year Miss Watson supervised moving the university's 20,000 volumes to the handsome building, designed by Van Brunt and Howe, which still stands as an excellent specimen of the architecture of the period (now used as an art museum) dominating the steep eastern slope of Mount Oread. During the 30 years it occupied the Spooner building under Carrie Watson's administration the University of Kansas Library increased from 20,000 to 127,000 volumes, "the largest and most scholarly library in Kansas."

Not all of the university's library development during this productive period, however, took place in the Romanesque limestone building in William Spooner's memory. The university was developing rapidly at the turn of the century, and by 1917 (as reported by Robert Vosper, one of Miss Watson's most distinguished successors) there were seven substantial libraries in other locations on the campus, serving the School of Law (in the new Green Hall), Department of Chemistry, Departments of Philosophy and Mathematics, the Biological Sciences, Physics, and the School of Medicine.

When Earl N. Manchester succeeded Miss Watson upon her retirement in 1921 the university library had filled the Spooner building and flowed over (as has so frequently been the case in other institutions) into a growing complex of branches.

Manchester, a graduate of Brown University and the New York State Library School, with experience at Brown and at the University of Chicago, came to the University of Kansas to build a new library. Armed with a quarter-million dollar legislative appropriation, he collaborated with architect George Leland Chandler, a young alumnus of the university, in designing the building, named for Miss Watson, which has served as the central library for the last half century.

The Watson Library, a towering Gothic structure of Indiana limestone, was completed in September of 1924. For the time the university's 150,000 volumes were satisfactorily contained, but its reading rooms soon filled and the collections were growing at the rate of 8,000 volumes per year. Two years after the building was finished Manchester began to suggest the addition of one or more wings to enlarge it. He wrote, in the *Graduate Magazine* in April 1926:

. . . while we are much better off in the new building for accommodations for readers, having multiplied the capacity of Spooner by three, we have in no sense solved the problem of storage for our book collections. . . . We have six floors

instead of five, and the transfer of books from the Spooner stack with the additions received from departmental libraries have filled our stack and overflowed into the corridors adjoining the stack room, so that already room for the normal growth of the Library is at a premium.

The university library had achieved the stature in the mid-twenties to begin to attract significant gifts. Among these were a collection of his family's books presented by Charles Francis Adams, including a number bearing the bookplate and inscriptions of President John Quincy Adams, the Thayer art collection which included not only 2,000 volumes but a number of original works of art and antique artifacts, a large collection of bookplates, and another of early American maps, which provided the nucleus of today's substantial historical cartography collection.

During this period the library also established its Kansas history collection as a separate entity and received numerous gifts of Kansas books and some manuscripts.

In 1928 Manchester resigned, and Charles Melville Baker, assistant librarian and professor of library administration at the University of North Carolina, was appointed to succeed him. Baker, who received both his bachelor's and master's degrees from Harvard, was a graduate of the New York State Library School, and had taught English for 2 years at Syracuse University before becoming a librarian.

The library, in 1928, had just passed the 200,000 volume mark, and had a staff of thirty-six. During Baker's tenure as librarian, in spite of the difficulties of the Depression and World War II, the library reported a total of 413,000 volumes in 1950. In that year two additions to the building were completed, doubling the stack capacity and enlarging the space for reading rooms and offices by about 25%. When Charles M. Baker retired in 1952 the University of Kansas Library had its first half million volumes.

His successor was Robert Vosper, formerly assistant university librarian at UCLA, who presided, during the next 9 years, over a period of library development at KU which was unprecedented in the history of the institution. He was supported in this endeavor by Chancellor Franklin D. Murphy, at whose invitation he moved to Lawrence and whom he accompanied to UCLA in 1961. In this interval the size of the libraries doubled, and the majority of the special collections listed below were acquired, with imaginative expenditure of book budgets scaled to Murphy's determination that the University of Kansas libraries should be visible throughout the land.

It was a period in which a number of public university libraries were growing rapidly, among them that of the University of California at Los Angeles. Vosper built an exceptionally capable staff, established strong support from his faculty as well as from the university administration, and left the University of Kansas with just under a million volumes and both plans and funds for a substantial addition to the Watson Library.

His successor, not surprisingly drawn from his own staff, was Thomas R. Buckman, who had been head of the Acquisitions Department, and who for 7

years succeeded in sustaining the rate of growth which had been achieved during the previous decade. During this period the university grew rapidly; it had fifty doctoral programs by 1968, and a student body of over 15,000. The libraries partook of this growth: appropriations for books were doubled from 1960 to 1968, and the collections grew by more than a third.

In qualitative terms, the Department of Special Collections, with strong collections of European Renaissance books, British and American literature, ornithology, botany, and European history, grew substantially during the 1960s. Among other collections added during Buckman's directorship were important groups of Walpole, Rilke, Virgil, and typographia, as well as systematic collection of modern American poetry.

In 1968 Mr. Buckman resigned to accept the directorship of the Northwestern University Libraries, and was succeeded by David W. Heron, former director of libraries at the University of Nevada. Buckman's most important achievement was the Kenneth Spencer Research Library, completed late in 1968, a gift of Mrs. Kenneth Spencer of Kansas City in memory of her late husband. The library is a well-designed structure of over 90,000 square feet devoted to rare books, manuscripts, Kansas historical collections, and university archives.

The libraries (in 1972) have somewhat over 1,600,000 volumes, 21,000 current serials, 151,000 maps, 400,000 microforms, and 3,000 linear feet of manuscripts. These collections are distributed among the Watson Library, Spencer Library, and branch libraries serving law, the physical sciences, earth sciences, engineering and architecture, mathematics, and music. The Medical Library (at the KU Medical Center in Kansas City, Kansas) has 120,000 volumes. The libraries on the Lawrence campus are centrally budgeted and administered. The Clendening Medical Library is administratively a part of the Medical School.

Circulation on the Lawrence campus (1971-1972) was slightly over 1 million. The staff (Lawrence) includes fifty-four librarians, 110 other full-time staff members, and thirty full-time-equivalent student assistants.

Expenditures (1971-1972) were \$1,158,595 for salaries, \$148,804 for wages, \$37,000 for computing, \$802,920 for books and periodicals, and \$58,068 for binding. Total expenditure for the year was \$2,356,647.

The administrative organization of the libraries is somewhat traditional, with assistant directors having line responsibility for public services, technical services, and special collections. Representative bodies involved in governance of the libraries include the University Senate Libraries Committee, The Librarians' Conference, the Library Staff Association, and both standing and ad hoc committees of each of these bodies.

Each professional school and department of the College of Liberal Arts and Sciences has a library representative, designated by the dean or chairman, who authorizes expenditures from the book allocations and advises the library of service problems. Some schools and larger departments have their own library committees.

Librarians are not given faculty rank, but are eligible for tenure. Senate mem-

bership, and sabbatical leaves. Rank for librarians is designated numerically at present, although this may shortly be changed.

Computer applications (1972) include circulation records, an innovative serials record system (UKASE) which employs an optical mark reader for updating input, and an indexing service searching *Chemical Titles* with a program devised by the University of Kansas Computation Center.

Important collections include the Ellis Ornithology Collection, the Summerfield Renaissance Collection, The Aitchison Vergil Collection, the Edmund Curli Collection, the Richmond and Marjorie Bond Collection of Eighteenth Century Periodicals, collections of D. H. Lawrence, Rainer Rilke, W. B. Yeats, James Joyce, and H. L. Mencken, voyages and exploration, history of botany, and neurology. The Kansas collection includes a large number of books and manuscripts relating to Kansas and the Great Plains region.

The libraries publish (through the University Senate Committee on Scholarly Publications) a series of bibliographies and bibliographical essays in the *University of Kansas Publications: Library Series*, edited by L. E. J. Helyar. Number 33 of this series, published in 1972, is the first volume (A-B) of Robert M. Mengel's *A Catalogue of the Ellis Collection of Ornithological Books*, 259 pages, and the first of a projected eight volumes. *Books and Libraries at the University of Kansas* is a quarterly newsletter to the faculty published since 1952. *Bibliographical Contributions*, begun in 1969, is a part of the Library Series. *Guides for Readers* is published irregularly during the year and frequently revised to meet the problem of obsolescence in student and faculty handbooks.

The libraries have been supported regularly—principally in acquisition—by the Kansas University Endowment Association, and the KU Friends of the Library was formed in 1972, with a charter membership of 160.

D. W. HERON

KELMSCOTT PRESS

Arguably the most important of all private presses, the Kelmscott Press was run by William Morris in Hammersmith, London, from 1891 to 1897. Private printing was of little significance in England for the first 50 years of Queen Victoria's reign, despite the steady increase in the popularity of printing as a hobby, and the development of special presses for amateur use (*1*). Few of the amateurs were of any importance either for the texts they chose to print or the manner in which they executed the work. About the only Victorian amateur press of real stature in these respects was the Daniel Press (q.v.) operated at Worcester College, Oxford.

In commercial book production, the period was characterized by an extraordinarily rapid development in the mechanization of papermaking, typefounding, printing, illustration, and bookbinding, allied to a technical skill on the part of the craftsmen which was unequalled before or since. The expertise of the punchcutters and the wood-engravers in particular enabled the production of a few very fine books, and many more which were excellent in some respects.

Nevertheless, it was a period of steady deterioration in the standards of both book design and book production. During the middle years of the century the publisher William Pickering produced handsome books, in collaboration with Charles Whittingham of the Chiswick Press; the standards of the Chiswick Press and of a few other commercial printers remained high throughout the period. But the average in commercial work was low; not necessarily (as in previous periods of poor printing) because of technical deficiencies, although the technical quality of much Victorian work was poor. Nor was the prime cause the use of bad materials, although the quality of paper and ink often left much to be desired. It was aesthetic failure: "An average Victorian title-page . . . fails because it was produced, not in bad taste, but in no taste. There is no sign of any thoughtful intention at all in the arrangement of the type. It sprawls without coherence or plan . . . In short, the typical fault of Victorian book design was feebleness" (2).

The author-artist-craftsman William Morris (1834–1896), one of the most significantly ubiquitous figures in the applied arts, had first come into contact with the problems of book design in 1858, when his first book, *The Defence of Guinevere*, was printed at the Chiswick Press.

An interest in the appearance of books from early in his career is evident from his purchases of manuscripts and early printed books from the 1860s onward, and from some abortive essays of his own in book production. From 1866 until 1870 or thereabouts, in collaboration with Edward Burne-Jones and Philip Webb, Morris worked on plans for a monumental edition of his own *The Earthly Paradise*, for which many illustrations were designed and some cut on wood. Trial pages of type were set up at the Chiswick Press, but in the end the project was abandoned. A projected edition of a less ambitious work, *Love is Enough*, also came to nothing. The lack of unity between the type and the illustrations, so evident in much Victorian work, was too great for Morris to accept, and he had not yet thought his way through to the solution he found in the establishment of the Kelmscott Press (3).

In the closing months of 1888 the Arts and Crafts Exhibition Society, which had recently been formed in London by Morris, Cobden-Sanderson (q.v.), and other workers in the applied arts, held its first exhibition. As part of this, on November 15, 1888 Emery Walker (q.v.) gave a lecture on printing, illustrated with lantern-slides. Walker was a friend and neighbor of Morris at Hammersmith, and in the course of selecting pages from early printed books of which to make his slides, had many discussions with him on what constituted good printing, on the particular virtues possessed by various incunabula, and the like. Morris's latent interest in book design was rekindled. "Let's make a new fount of type," he

proposed to Walker as they walked home together after the lecture. It is from this moment that one can date the development of the "private press movement" and of the twentieth century typographical renaissance.

It is possible that Morris was also stirred by memories of an earlier article by Kegan Paul who, writing on "The production and life of books" in 1883 had said that "there could scarcely be a better thing for the artistic future of books than that which might be done by some master of decorative art, like Mr. William Morris, and some great firm of typefounders in conjunction, would they design and produce some new types for our choicer printed books." What is certain is that at first it was by no means clear in Morris's mind that he wanted a *press* of his own. To be sure, he at once embarked on designing his own typeface, but during 1889 and 1890 had two books printed to his own specifications at the Chiswick Press, using two versions of a typeface which had been modeled on a Basle typeface of the sixteenth century. For a time after its publication at least, Morris regarded the second of these, *The Roots of the Mountains*, as being "the best looking book issued since the seventeenth century."

For a time while these experiments at the Chiswick Press were in hand, Morris's intention seems to have been similar to that he had adopted in the case of his wallpaper designs. These he was content to have printed for him by Jeffery & Co., confident in their ability to satisfy him as to color and quality. To design the books in which he was interested, and then to have them printed for him by a reliable firm like the Chiswick Press would have made good sense; it was precisely this method which was adopted by two later presses of distinction, the Nonesuch Press (q.v.) and the Golden Cockerel Press (q.v.).

However, as Morris wrote in November 1889, "the difficulty of getting [the printing] really well done shows us the old story again. It seems it is no easy matter to get good hand-press men, so little work is done by the hand-press; that accounts for some defects in the book, caused by want of care in distributing the ink. I really am thinking of turning printer myself in a small way. . . ." To think of taking up the craft himself was characteristic: "When . . . first producing textiles, Morris was a practical dyer; when it was tapestry, he wove the first pieces with his own hand; when he did illumination, he had to find a special vellum in Rome and have a special gold beaten . . ." (4).

Before the Kelmscott Press got under way in 1891, Morris engaged in a thorough examination of all the elements in the making of books. Emery Walker was invited to become a partner in his new venture; despite his wise refusal of what would inevitably have been a very unequal partnership he remained an *éminence grise*; no important step was taken without his advice and approval.

For type, Morris decided that there was no face currently available which met his needs, and with Walker's assistance he redrew the design used by Nicholas Jenson at Venice in the 1470s. The design was cut by the punchcutter E. P. Prince, then at the height of his powers, and cast by the Fann Street Foundry. Named the "Golden" type because it was intended for an edition of Voragine's *Golden Legend*, the design (which had caused Morris a great deal of trouble and effort)

was far blacker and more gothic looking than its model, of which Prince subsequently cut far more faithful reinterpretations under Walker's direction for the Doves Press (q.v.) and the Cranach-Press. Morris was not worried about his type's greater gothicism, and it enjoyed enough prestige at the time to be imitated commercially by American typefoundries, but modern critics would agree with Bernard Newdigate's comment that it "lacks the suppleness and grace of the Italian types generally" (5).

For his printing surface Morris wished for a paper similar to a fifteenth century Bolognese paper, and after some experimentation Joseph Batchelor of Little Chart Mill at Ashford, Kent, was able to produce one which met the specification. Batchelor was to supply all the paper used at the Kelmscott Press. The vellum required for special work presented a problem: at the time the only source of supply was Rome, and the Vatican's needs took the total production. Eventually H. Band & Co. of Brentford, Middlesex, was able to produce vellum of the requisite quality—in fact it is now, 80 years later, the only satisfactory source of supply for printing, writing, or binding vellums. To find a satisfactory ink was more troublesome, the English manufacturers adopting a "take it or leave it" attitude. In the end Morris had to import from Jänecke of Hannover, whose ink was produced by an old-fashioned recipe and methods, and far superior to the native product as well as being less troublesome for Morris than turning ink-maker himself.

For a press, Morris found the cast-iron Albion hand-press perfectly met his needs. For the kind and quality of work involved, and the short runs required, it was a more precise and economical machine than the powered presses available. Morris's concern with printing is sometimes regarded merely as a wish to put the clock back to the sort of medieval craft-work he described, in a highly idealized manner, in his novel *News from Nowhere*. Alternatively he is at times considered an instance of the type of crank who is not satisfied unless all the work is the work of his own hands. His use of Jänecke's ink and Batchelor's paper is enough to dispose of the latter suggestion; equally his use of the nineteenth-century cast-iron press, and of type cast by machine, show that his painstaking approach was not that of an antiquarian hobbyist. When contemporary equipment and methods were superior to those used to produce the fifteenth century books he wished to emulate—as the Albion press undoubtedly *was* superior to the old wooden presses—he adopted them. Only when nineteenth century standards fell short of his own requirements were materials specially produced for his use, and in such instances he did not hesitate to entrust the work to another craftsman of integrity.

In January 1891 Morris's "little typographical adventure" (as he described it) finally achieved existence. Premises were taken and equipped, staff appointed, and the new type received from the founders. Originally Morris's press (which took its name from Kelmscott Manor, Morris's country house on the Thames in Oxfordshire) was to be private in the strictest sense: he intended to see what could be done in the way of producing well-designed and executed books at his own expense, and at first planned to print only twenty copies of the press's first

book (*The Story of the Glittering Plain*) for distribution to friends. However, news of its production leaking out, he received so many inquiries and requests to be allowed to buy copies that he decided to increase the edition and make some copies available for sale. If the public was prepared to give financial support to his experiments in printing what he wanted how he wanted, he was content. The production costs of the Kelmscott books were very high, and would not have permitted so extensive and ambitious a program had such support not been forthcoming.

The original intention had been to produce a lavishly illustrated edition of Voragine's *The Golden Legend*, much as 20 years earlier Morris's intention was an edition of *The Earthly Paradise*. In the event, five other slighter books had been printed before the edition of Voragine's work was completed in November 1892. By that time the Kelmscott style was clear: volumes carefully designed with the double-spread (rather than the single page) as the unit of design, with wide, well-proportioned margins, decorated with borders designed by Morris and illustrations by Burne-Jones engraved on wood, splendidly printed using the best of materials.

Before *The Golden Legend* was complete, Morris had taken larger premises and added extra Albions to cope with the volume of work planned, and designed a new black-letter typeface (see Figure 1). This was first used in an edition of Caxton's translation of the *Recuyell of the Historyes of Troye* (and so named the "Troy" type) also published in November 1892. Work was started in the summer of the same year on the great Kelmscott *Chaucer*, using a smaller size of the same design (the "Chaucer" type). As with the "Golden" type, Morris's design was translated by the punchcutter E. P. Prince, and cast at the Fann Street Foundry. A very much more medieval design than Morris's previous face, its composing qualities were superior, and it harmonized far better with the illustrations and decoration of the Kelmscott books. In this sense it represents an advance, but it was an advance up a blind alley from which no further progress in general book design was possible. (This did not prevent its being copied very rapidly in the United States, where a very similar type was marketed under the name Satanick and quite widely used in the 1890s. It is worth noting, too, that the lowercase of the Wallau type, designed by the great German typographer Rudolf Koch and cast by the Klingspor Foundry in 1925, is remarkably like it. Within the context of the blackletter revival in Germany it was an admirable model for Koch to use.)

Until 1893 the sale of Kelmscott Press books was handled through Reeves & Turner, Morris's regular publishers, but from the publication of *Godefrey of Boloyne* (1893) on, it became normal practice for the Press to publish directly. At first Morris's son-in-law Halliday Sparling was Secretary of the Press, but from 1894 until the Press finally closed the position was held by Sydney Cockerell.

Undoubtedly the Kelmscott Press's greatest book was its *Chaucer*, on which work started in 1892, although it was not completed until the summer of 1896. By that time Morris, whose health had been failing since 1894, was a very sick man. He knew that he was dying, and asked Cockerell and Emery Walker whether



FIGURE 1. Double-spread from the Kelmscott edition of *Love Is Enough*, set in the 'Troy' type, with illustration by Burne-Jones and borders by William Morris.

they would be willing to continue the press after his death. They did so for 18 months after his death on October 3, 1896, in order to complete books which were already in hand. However, as they had told Morris, they were in favor of its ceasing, rather than declining by degrees, and work was therefore abandoned on a number of books which were in too early a stage of production to be carried through in the authentic Morrisian manner. Among the books abandoned was a splendid *Froissart*. Nonetheless, despite this curtailment of its publishing program, the final book published by the Kelmscott Press (*A note by William Morris on His Aims in Founding the Kelmscott Press*, 1898) records in the bibliography of its work prepared by Cockerell a total of fifty-two books in sixty-six volumes—no bad total for 7 years of a “little typographical adventure.”

It is impossible to judge the Kelmscott books without handling them; the color of the ink, the feel of the paper, the presswork, the *mise-en-page*—these cannot be conveyed by reproductions. The books produced by the press were of a kind the late nineteenth century public had never seen. There were many contemporary critics: aesthetic objections from those like Walter Crane who regarded Morris's gothicizing as undesirable; technical objections from those who felt his deliberately heavy impressions to be a blemish; political objections by those who said he was “preaching socialism and going away to prepare books which none but the rich could buy.” This was of course beside the point: the Kelmscott Press was an *aesthetic* venture, and a very considerable aesthetic success. And a financial success too: Thorstein Veblen in fact used the press as a prime illustration of his theory of conspicuous consumption. Perhaps the best measure of Morris's achievement is an observation made by the late Beatrice Warde: that he changed book design and production from being merely technical matters of concern only to those in the trade into a subject in which cultivated literate society would take an interest; out of the realm of the artisan into that of art.

In setting the tone for a renaissance of interest in the arts of the book, Morris had many followers and imitators, not only in Britain but just as strongly in the United States and in Europe, particularly in Germany. [The influence was almost as great (if less long lasting) in the Netherlands and in Scandinavia. In France, however, Kelmscott had little effect, and the development of the modern French *livre d'artiste* owes little to Kelmscott or the private press movement.] Among these were the private presses, some of which, like the Ashendene Press (q.v.) and Doves Press (q.v.), sought their own routes to the same goal as Morris without imitating his manner. From these and the later presses in the same tradition, like the Golden Cockerel (q.v.), Gregynog (q.v.), and Nonesuch (q.v.), modern book design has largely developed. Even the alternative “Bauhaus” style, apparently so alien in concept, is in a direct line of descent from Morris (6).

There were those who imitated the Kelmscott manner rather than its spirit. Elbert Hubbard's Roycroft Press at East Aurora, New York, is a prime example of how poor such imitation could be. Holbrook Jackson commented justly that the Kelmscott Press “found its nemesis in Elbert Hubbard's Roycroft books,” but with all their faults they, and the other Roycroft crafts, did awaken thousands of

Americans to ideals of craftsmanship and design. Similarly the Kelmscott-inspired titlepages, endpapers, and bindings which were used on the very successful Everyman's Library and other series in the early years of the twentieth century, though bad were at least better than had gone immediately before and helped to pave the way for improved typographical practice since.

It is very easy to condemn the work of the Kelmscott Press and to say with Holbrook Jackson that its books were "typographical curiosities from birth, and so far removed from the common way of readers that they have become models of what a book should not be. . . [Morris's] typefaces became picturesque, his margins inclined to pomposity, and his paper was pretentious. The Kelmscott books are overdressed. They ask you to look at them rather than to read them" (7). A more balanced judgment, with which the consensus of typographical opinion would agree, states that

it was the *concept* which Morris embodied in all of his books that has given them their enduring appeal. Many printers have aped his ornate woodcuts, his archaic type faces, his heavy handmade paper, seeing only the *devices* by which Morris gained his results. In the main their productions have been without importance. But both in this country and abroad certain gifted typographers have looked more deeply into Morris' purpose and grasped the essentials of his inspiration. Without copying him, they have emulated his taste, consistency, and honest craftsmanship. By their example, in less than two generations the whole approach to book design has been revitalised, and what began in the limited, laborious output of a single press is now common to all printers who have quality as an objective (8).

REFERENCES

1. Charles Holtzapffel, *Printing Apparatus for the Use of Amateurs*, London, 1846. A recent photolithographic reprint edited by James Mosley and David Chambers (Private Libraries Assoc., London, 1971) gives an excellent account of the sort of press produced, and of the kind of work undertaken.
2. Ruari McLean, *Modern Book Design from William Morris to the Present Day*, Faber, London, 1958, pp. 5-6.
3. Joseph R. Dunlap, *The Book That Never Was*, Oriole Editions, New York, 1971, discusses these projected books in detail. An edition of a part of *The Earthly Paradise, Cupid and Psyche*, is currently being printed by the Rampant Lions Press in Cambridge, one of the finest presses in the Kelmscott tradition of craftsmanship at work today. Utilizing the original, hitherto unused wood engravings, and set in "Troy" type freshly cast at the Oxford University Press from the matrices in the possession of Cambridge University Press, it is testimony to the still living influence of the Kelmscott Press.
4. W. R. Lethaby, quoted in H. Halliday Sparling, *The Kelmscott Press and William Morris, Master Craftsman*, Macmillan, London, 1924, p. 54.
5. In *The Art of the Book*, The Studio, London, 1914, p. 7.
6. Ray Watkinson, *William Morris as Designer*, Studio-Vista, London, 1967, pp. 66, 78-79.
7. Holbrook Jackson, "The Typography of William Morris" in his *The Printing of Books*, Cassell, London, 1938, pp. 175-185. It should be noted that Jackson's paper was originally read at the Morris Centenary Dinner of the Double Crown Club in 1934 and was deliberately provocative in tone.
8. Roland Baughman, *Great Books in Great Editions*, Huntington Library, San Marino, California, 1954, p. 57.

BIBLIOGRAPHY

- Avis, F. C., *Edward Philip Prince, Master Punchcutter*, Avis, London, 1967.
- Balston, Thomas, *The Cambridge University Press Collection of Private Press Types*, University Press, Cambridge, 1951.
- Blunt, Wilfred, *Cockerell*, Knopf, New York, 1965.
- Cave, Roderick, *The Private Press*, Faber, London, 1971.
- Dunlap, Joseph R., *The Book That Never Was*, Oriole Editions, New York, 1971.
- Franklin, Colin, *The Private Presses*, Studio-Vista, London, 1969.
- McLean, Ruari, *Modern Book Design from William Morris to the Present Day*, Faber, London, 1958.
- Morris, William, *A Note on His Aims in Founding the Kelmscott Press*, Kelmscott Press, Hammersmith, 1898. (Photolitho reprint by Irish Universities Press, Shannon, 1969.)
- Ransom, Will, *Private Presses and Their Books*, Bowker, New York, 1929.
- Sparling, H. Halliday, *The Kelmscott Press and William Morris, Master Craftsman*, Macmillan, London, 1924.
- Watkinson, Ray, *William Morris as Designer*, Studio-Vista, London, 1967.
- William Morris Society, *The Typographical Adventure of William Morris*, London, 1957. (It should be noted that the *Journal* of the society contains, inter alia, a good deal of material on the Kelmscott Press.)

RODERICK CAVE

KENT STATE UNIVERSITY, SCHOOL OF LIBRARY SCIENCE

The School of Library Science of Kent State University traces its beginnings in 1946 to undergraduate coursework offered to meet the needs of school libraries in Ohio. John B. Nicholson, Jr., then the university librarian, guided this early program, which in 1949 began offering graduate courses culminating in a Master of Arts. In 1960 the present dean of the school, Guy A. Marco, became head of the Department of Library Science. Under his direction, the program was accredited in 1963 and achieved school status in 1966. At the present time, Kent State has the only accredited program in the state university system of Ohio. During this developmental period graduates were choosing positions in all types of libraries. In recent years the largest number of placements have been in public and academic libraries, although the undergraduate program does still supply Ohio with a great many school media specialists. Over the years the school has attracted a substantial number of out-of-state students and has graduates in twelve foreign countries, many of these now holding major library positions.

The present M.L.S. program requires 48 graduate quarter hours, 24 of these being in core coursework. Electives are permitted in graduate departments other than library science. A limited number of undergraduate courses in basic concepts and techniques are taught in the school, intended as a foundation for graduate work and also for school library certification.

In 1968 a sixth year program leading to an Advanced Certificate was established for experienced librarians, in which independent research is stressed. Individual programs are designed for the student, enabling him to concentrate on areas of particular interest. To date six students have been involved in this program. Although the program does not require long papers, several projects have resulted in journal articles. The school is scheduled to begin a doctoral program in 1976. Two special programs are offered by the school at the master's level: music and newspaper librarianship.

The school moved to new facilities in 1971 and is now located in the University Library, the sixth largest academic library building in square footage in the country.

Research facilities of the school include the Center for Library Studies, established in 1966 and directed by Edward Heiliger, and the Program for the Study of Ethnic Publications, founded in 1971 by Lubomyr Wynar. The former has been involved in several projects relating to library automation while the latter is concerned with bibliographic control of materials published in the United States in foreign languages by ethnic populations.

In 1969, increased student interest in governance and Dean Marco's recognition of this interest resulted in the creation of the present policy-making body of the school, the Faculty-Student Council. Student representatives, elected by the student organization, Biblio Kent, hold full voting rights in a 1 to 3 ratio to the faculty. Student representatives serve on almost all committees of the school and are able to help in areas such as scheduling classes and selecting guests for the colloquia held in Fall and Spring.

Another area of student involvement has been the initiation and compilation of quarterly evaluations of faculty teaching.

Each year outstanding students are inducted into the Rho chapter of Beta Phi Mu, national library science honorary.

The faculty of the school—40% holding doctorates, and active in national and international associations—has endeavored to produce a sense of responsibility to the international and national aspects of the profession in its students, often inviting as speakers librarians of national and international reputation. The faculty has a good publishing record, including a number of substantial monographs. Publications of the school, in addition to those produced by the Center for Library Studies, include the series *Keys to Music Bibliography* and *Aspects of Librarianship*, revived in 1966.

The school has endeavored to provide continuing education for both its graduates and other professionals. The School Library Workshop, offering updating on current issues in the field for practicing librarians, has been an annual feature since 1959, broken only in the year 1970 when tragic campus events resulted in its

cancellation. In 1971 an additional offering was initiated for school librarians, for graduate credit, The Summer Institute for Media Specialists.

Another successful and unique offering of the school in continuing education has been the summer Newspaper and Mass Media Libraries Workshop, directed by Miss Rose Vormelker.

In 1971 the school celebrated its twenty-fifth anniversary which coincided with the dedication of the new library building. One of the programs at that time was a panel discussion of "Libraries in the 70's," featuring Lillian Bradshaw, president of ALA; Dean Halliwell, vice-president and president-elect, Canadian Library Association; and Joseph H. Reason, vice-president and president-elect, Association of College and Research Libraries.

Appropriately enough, after its 25 years of existence, the faculty and students have been engaged in reevaluating the goals and priorities of the school. Although this task is not yet completed, there is evident a concern to educate individuals to be able to adapt to a changing profession in both national and international frameworks.

BIBLIOGRAPHY

DuBois, Paul Z., *Education for Librarianship at Kent State University, 1946-1971*, The University, Kent, Ohio, 1971.

McChesney, Kathryn, "Student Involvement in Education," *J. Educ. Lib.*, **11**, 303-307 (Spring 1971).

Miller, Jean E., "Confidentiality of Student Records," *Ibid.*, **11**, 223-230 (Winter 1971).

Rogers, A. Robert, "An Experiment With Student Grading," *Ibid.*, **12**, 48-49 (Summer 1971).

Rogers, A. Robert, "How Do Students Spend Their Time?" *Ibid.*, **11**, 163-165 (Fall 1970).

KATHRYN MCCHESENEY

KENTUCKY HISTORICAL SOCIETY

Founded on April 22, 1836, less than a half a century after Kentucky was admitted to statehood, the Kentucky Historical Society and its library have had a continuing and, in the twentieth century, productive history. However, it was not until the 1960s that it began to enjoy the same official support that other midwestern societies have received from their governments. The membership was also relatively small, indeed considerably less than that of the Filson Club (q.v.) in Louisville. In 1965 the membership was barely over 1,000, but in 1970 it reached 10,000. Despite relatively slender finances, the society has steadily maintained its basic role as the commonwealth's official historical agency, in large measure due to the

dedication of past officers, several of whom have served in the multiple functions of director, librarian, museum curator, and editor at salaries far below those of the employees of other midwestern state historical societies. Two noteworthy treasures illustrative of the society's vitality are virtually unbroken collections of papers of the governors and the handsome file of the quarterly *Register*, founded in 1903 under the editorship of Mrs. Jennie C. Morton and today the oldest state historical journal with a continuing existence.

In part the survival of the society between 1838 and 1960 may be attributed to the influential Kentuckians who have been active members. The first president was Senator John Brown and the second, elected in 1838, was Judge John Rowan, master of "Federal Hill" in Nelson County, better known as "The Old Kentucky Home." George M. Bibb, Tyler's secretary of treasury, was vice-president. The treasurer was George Keats of Louisville, brother of the poet. The librarian, Dr. Edward Jarvis, was empowered to collect and preserve "whatever may relate to the Antiquities, the Natural, Civil, Literary and Ecclesiastical History of this country, and more particularly the State of Kentucky and the Mississippi Valley" (1). The circular on which this appeal was made did garner some 1,200 to 1,500 books, pamphlets, newspapers, and manuscripts for the library. In 1841, Governor Charles A. Wickliffe signed an act which directed the Secretary of State to deliver one copy of the legislative journals and all other public documents to the society. Unfortunately, this embryonic depository legislation was respected more in the breach than in the observance, and still today the commonwealth has no effective statute providing for distribution to public and academic libraries of even the basic documents such as the *Kentucky Revised Statutes*, the *Acts of the Legislature*, and the *Journals* of the legislature.

After Judge Rowan's death in 1843, the society declined gradually and ceased activity entirely in 1861 when both unionists and secessionists invaded the neutral commonwealth. It was rehabilitated in 1875 by some of the most prominent men in the state at the time, including Governor James B. McCreary; President James K. Patterson of Kentucky State A. & M. College (now the University of Kentucky); Colonel W. C. P. Breckinridge, noted newspaper publisher and scion of the great Lexington family; General Don Carlos Buell, prominent unionist general with the Army of the Cumberland; and the old abolitionist fire-eater, Cassius Marcellus Clay of Madison County. Colonel Ed. Porter Thompson, historian of Kentucky's puissant "Orphan Brigade" (C.S.A.), had been appointed librarian by Governor Simon Bolivar Buckner, brigadier general (C.S.A.) and later editor of the Louisville *Courier*. Although Colonel Thompson was a more competent soldier than bibliographer, he did record 417 titles of books, newspapers, and magazines then in the society's library (2).

The true beginnings of the society as we know it today originated at a meeting of Mrs. Morton and other Frankfort ladies at the home of Miss Sally Jackson on July 4, 1895, at which time the Kentucky Colonial Daughters were organized with the primary objective of reviving the Kentucky Historical Society. The following years saw substantial acquisitions of books, periodicals, manuscripts, maps, news-

papers, paintings, and museum material, and the older collections were cleaned and brought out for display. But volunteer work and barely \$100 a year in membership fees were not enough. Fortunately, Mrs. Morton's efforts to put the society back on its feet were crowned with success on March 16, 1906 when Governor J. C. W. Beckham, himself a proven friend of the society, signed into law a bill calling for an annual appropriation of \$5,000 to the society.

From 1908 to 1920 the society was housed on the ground floor of the New Capitol, but in the latter year it moved back to the magnificent Old State House, still its home. The structure, in the heart of old Frankfort, is a fine example of the Greek Revival, popular in the Ohio Valley when the building was constructed by the noted architect Gideon Shryock in 1827-1830. The meager support received from the state remained on the same relative level, considering inflation—\$15,000 in 1946, a little over \$40,000 in 1961, a little over \$50,000 in 1963. With the advent of Colonel George Chinn (U.S.M.C., ret.) in 1959, the society's fortunes with state budget officials improved markedly, and by 1970 the annual appropriation was over \$200,000, comparing favorably with funds granted to similar state societies elsewhere.

The library has grown disproportionately to other activities of the society. The dedicated work of Mrs. Morton and her successors, Bayless Hardin and Charles Hinds (presently state librarian), developed a fine nucleus of books, manuscripts, microforms, and supporting museum material. Parenthetically, it should be noted that a rich source of the printed books and pamphlets has been the steady stream of review copies sent to the *Register*, published regularly and on schedule under Mrs. Morton's editorship three times a year from 1903 to 1930, thereafter quarterly by her and her successors.

The location of the society at the seat of government has made it a logical depository for the papers of state officials and agencies rather than the privately operated Filson Club (q.v.) in Louisville or the University of Kentucky Library in Lexington, which experienced no real growth as a research library until the late 1930s of this century. Although the Genealogical Society of the Church of Jesus Christ of Latter Day Saints in Salt Lake City (q.v.) had been filming Kentucky county records prior to World War II and depositing copies in the University of Kentucky Library, the program was necessarily selective due to the vast bulk of the material. In the early 1960s the society moved into this field and for a decade and a half has been supplementing the work of the Genealogical Society. In addition, it has filmed significant parts of its own collections such as governors' papers, including executive journals, remissions, pardons, pensions, election returns, declarations, and enrolled bills. Among other microfilm acquired is that of the so-called "Draper Papers" in the State Historical Society of Wisconsin. For many decades Kentuckians had been unjustifiedly bitter about the removal from the commonwealth of many basic documents by Lyman Copeland Draper before the Civil War, but one wonders just what care they would have received in Frankfort before 1895.

The some 50,000 books and pamphlets now in the collections represent a

virtually complete collection of printed Kentuckiana. While this part of the collections is largely and properly duplicated in the Filson Club, in the Kentucky Library of Western Kentucky University in Bowling Green, and in the University of Kentucky Library (3), the collections of maps, early newspapers, and printed broadsides are not duplicated in these three major collections (4). An up-to-date, professionally edited union list of these categories is urgently needed. The same applies to portraits and other pictorial material, in which the society and the Filson Club are especially rich. The genealogical material in the society and the Filson Club is also quite extensive in manuscript and print and on film. Kentuckians and Southerners in general have been notorious as "ancestor worshippers" and "head-hunters," but the society has put genealogical research on a scholarly basis, well buttressed with its own collections. Since 1965 it has published the quarterly *Kentucky Ancestors*, the leading journal of its type in the Ohio Valley and, along with the collections in the society's library, significant for the entire middle west and trans-Mississippi West. Since the late eighteenth century Kentucky has been the funnel for nearly all westward emigration, thus lending an importance to the Kentucky Historical Society's collections that extends far beyond the borders of the commonwealth.

REFERENCES

1. Gabriel Collins, *The Louisville Directory for the Year 1838-39*, J. B. Marshall, Louisville, Kentucky, 1838, pp. 142-144.
2. Ed. Porter Thompson, *A Catalogue of the Kentucky State Library*, Frankfort, Kentucky, 1889, pp. 318-335.
3. Due to their relatively late starts, Kentucky historical libraries lack much basic printed Kentuckiana that is now unique or very scarce. The Lost Cause Press of Louisville has remedied this situation in part by its "Kentucky Culture Series" on microfiche. See Lawrence S. Thompson, ed., *The Kentucky Thousand*, Lost Cause Press, Louisville, Kentucky, 1973.
4. Among other noteworthy collections of Kentuckiana is the library of the late Colonel Reuben T. Durrett. See Edward A. Henry, "The Durrett Collection, Now in the Library of the University of Chicago," *Papers of the Bibliographical Society of America*, 8, 57-94 (1914).

BIBLIOGRAPHY

Jillson, Willard Rouse, *A Sketch and Bibliography of the Kentucky Historical Society, 1836-1943*, Kentucky Historical Society, Frankfort, Kentucky, 1943.

Kentucky Historical Society, *Register*, Vol. 1, 1903-date. The news notes in the *Register* were supplemented from 1947 until 1965 by *The Communique*, continued from 1965 to date by the *Bulletin*.

Kentucky. Legislature. *Acts*. December session, 1837-date. Madigan, *infra*, gives reference to various pieces of legislation affecting the Society, beginning with the first (December Session, 1837 [1838], Chap. 895, pp. 269-271).

Madigan. Mary Lou S.. *Your Kentucky Historical Society*, The Society, Frankfort, Kentucky, [1973?].

LAWRENCE S. THOMPSON

KENTUCKY LIBRARY ASSOCIATION

The Kentucky Library Association (KLA) was founded in June 1907 when Mr. William F. Yust, librarian of the Louisville Free Public Library, extended an invitation to librarians, trustees, teachers, clubwomen, and others interested in libraries and education in Kentucky to meet at a conference in Louisville for the purpose of forming an organization to further library interest throughout the state. At this meeting, a feature of which was an exhibit of "forms, tools, bulletins, book lists, and literature on library management," a constitution was drawn up and adopted, and fifty-two people enrolled as charter members of the association. Mr. Yust, described as the first trained librarian in the state, became president and began an organized effort to extend and improve library service in the commonwealth.

From its foundation, the emphasis of the KLA has been on cooperative programs between librarians and concerned laymen. The governor of Kentucky, in signing a bill creating a State Library Commission in 1910, indicated that the bill was a result of the united efforts of the association and the Kentucky Federation of Women's Clubs. The formation in 1936 of the Kentucky Citizens' Library League, a name changed in 1944 to Friends of Kentucky Libraries, gave impetus to the association's Legislative Committee, and in March 1944, through the combined endeavors of these two groups, Kentucky House Bill 317 was passed by the state legislature, making Kentucky one of three states in the nation having basic modern library legislation. That same year, upon recommendation by KLA, a professional librarian was appointed by the governor as state librarian, and a state Board for the Certification of Librarians was created; members of the Board were also appointed by the governor from names submitted by the Executive Board of KLA. Three years later efforts of some years to establish the office of State School Library Consultant were also rewarded.

Other significant projects undertaken by KLA have included surveys of library resources within the state as a basis for the development of libraries and improved library services. The first such extensive survey was financed and carried out in 1933; the final report urged support of libraries in schools at all levels, of public library service through city, county, and regional libraries, and of state extension agencies to reach areas and individuals in the state not contacted by the above agencies.

As an affiliate of the Southeastern Library Association, the Kentucky association participated in an extensive survey initiated by that organization in 1947, generally known as the Wilson-Rothrock Survey, and in an updating of that project designed to be carried out between 1972 and 1974.

Full support was also given to a study conducted by Arthur D. Little, Incorporated, in 1969. The resulting report to the Kentucky Department of Libraries, "A Plan of Library Service for the Commonwealth of Kentucky," formed a basis

for many of the projects carried out by the Department of Libraries with the support of funds appropriated by the Library Services and Construction Act. Among these have been the establishment of a state library network utilizing the TWX for faster interlibrary loan and reference service, and publication in 1972 of *Kentucky Serials*, a union list of the serial holdings of most of the major libraries in the state, utilizing the computer for continuous revision and computer-output-microfiche to produce the first and proposed annual editions. A book catalog of holdings of the Kentucky Department of Libraries and an experimental project titled *Microfilm Access to Selected Holdings (MASH)* have also been a direct result of the Little study. The latter project uses as a base a microfilm copy of the complete card catalogs of a Louisville-area consortium of colleges, universities, and seminaries, plus that of the Louisville Free Public Library. Access to the resources in these libraries is provided throughout Kentucky through the Information Referral Center of the University of Louisville Library, where the film is housed, and by means of the state network system.

Another of the most significant and rewarding projects aided by KLA began in 1947 when a mutual dream of that organization and the Friends of Kentucky Libraries began to materialize in the bookmobile project. By September 1954, eighty-nine counties were organized, and the bookmobiles with approximately 2,000 books each were turned over to the counties, bringing library services to areas never before reached.

The official publication of the organization is the *Kentucky Library Association Bulletin*, which first appeared in January 1933, and continues today as a quarterly, containing articles of professional significance as well as news items. Other publications have been issued from time to time by the association or by groups within KLA; among these are, "A Checklist of Kentucky Newspapers in Kentucky Libraries" (1935), a compilation of "Local Indexes in Kentucky Libraries," and a "Bibliography of Graduate Theses Accepted by Kentucky Colleges and Universities through 1948," compiled by the College and Reference Librarians and printed in the *Register of the Kentucky Historical Society*, Vol. 48 (1950). A supplement covering the years 1949-1953 appeared in Vol. 54 (1956) of the same publication.

Currently KLA is an organization of more than 900 members. A chapter of the American Library Association and an affiliate of the Southeastern Library Association, it is composed of four sections: College and Research (officially organized in 1941); Public; Special (1952); and the Kentucky Association of School Librarians, largest in the association. This last section developed in 1952 when two groups with two sets of officers, one meeting in the spring as part of the Kentucky Education Association, and one in the fall as a section of the Kentucky Library Association, joined under a new constitution and a single set of officers. Addition of a fifth section, Library Education, was endorsed in a new association constitution, approved by the members attending the 1972 annual meeting for submission to the entire membership by mail vote.

The chairmen of these sections, together with the Executive Committee (president, vice-president/president-elect, recording secretary, and treasurer), the

American Library Association councilor, and the Southeastern Library Association board member constitute the Board of Directors, which meets at least four times a year and is empowered to act for the association in the intervals between meetings of the entire association, held annually in the fall. The immediate past president, the editor of the *Kentucky Library Association Bulletin*, the state librarian with the Kentucky Department of Libraries, a school library consultant from the Kentucky Department of Education, and the executive secretary of the association are ex-officio nonvoting members of the Board. In addition to the fall convention, individual sections usually meet in the Spring for programs of specific interest to their particular types of libraries and to conduct the business of their respective sections. In order to assure that interests of all types of libraries are fairly represented, the KLA bylaws specify that a nominee for an association office shall not be a member of the same section as the incumbent of that office.

Each year the Kentucky Library Trustee Association and the Friends of Kentucky Libraries meet in conjunction with the KLA convention. Since 1964 the trustees have annually recognized with an award the outstanding librarian from each type of library represented in the association; in turn, the outstanding library board of the year is presented a plaque by KLA in recognition of its contribution to the advancement of the interests of libraries in the commonwealth. Thus the policy established by the first KLA president, that of librarian and layman united for better library service, is continued.

BIBLIOGRAPHY

- Campbell, Lois, and Kelly Scott Reed, "Activities at Kentucky Department of Libraries," *Kentucky Lib. Assoc. Bull.*, 35(3), 17-20 (July 1971).
- Corwin, Euphemia K., "Twenty-five Years of the Kentucky Library Association," *Ibid.*, 1(1), 4-8 (January 1933).
- Dugan, Mrs. Hammond, "The Past is Prelude; KLA's First Forty Years," *Ibid.*, 12(2), 3-7 (June 1948).
- "Kentucky Library Association. Proposed Constitution and Bylaws, October 1972 revision," *Ibid.*, 36(4), 28-34 (October 1972).
- Kinhead, Ludie J., "The Editor's Desk: The Kentucky Library Association," *Register of the Kentucky Historical Soc.*, 56, 293-303 (1958).
- "A Plan of Library Service for the Commonwealth of Kentucky." Report to Kentucky Department of Libraries, Arthur D. Little, Incorporated, June 1969.
- Willis, Margaret. "The A. D. Little Report: Retrospect and Prospect," *Kentucky Lib. Assoc. Bull.*, 35(1), 6-14 (January 1971).

MADGE G. DAVIS

KENTUCKY. UNIVERSITY OF KENTUCKY COLLEGE OF LIBRARY SCIENCE

Library Science education began in the Fall of 1911 when the course Library Training was offered for the first time at the University of Kentucky. This course, as a part of the curriculum in the English Department, was taught by Miss Anna Jackson Hamilton who had been appointed dean of women and associate professor of English. In the Fall of 1917 an additional course, Library Methods for Teachers, was added and taught by Miss Margaret I. King who had been appointed librarian at the university in 1912. Miss King remained in her capacity as librarian until her retirement in the fall of 1950 and was a significant contributor to the development of the Department of Library Science during her stay at the university.

During the period from 1911 through 1928 the curriculum was expanded primarily in methods to train librarians for school library work. Even though some of the courses offered were done so under the auspices of the College of Education, Library Science was and continued to be basically offered in the English Department. In the catalog of 1929-1930 the curriculum had expanded to the extent that nine courses were listed under Library Science.

In the Fall of 1930 Miss Mildred Semmons came to the university to teach the courses in Library Science. Previously all Library Science courses had been taught by Miss King and others from the library doing double duty. When Miss Semmons came as assistant professor, the Department of Library Science was organized and in the fall of 1932 it was officially a department with her as the acting head. She expanded the curriculum within the department and was promoted to associate professor and head of the department in 1935.

One of the first functions of Miss Semmons was to expand the faculty, and in 1936 Miss Dorothy Doerr came as assistant professor. The curriculum remained relatively static during the late 1930s, although the faculty continued to expand, and Mrs. Sarah G. Garris was appointed to replace Miss Doerr who resigned. In the fall of 1938 Miss Azile Wafford was appointed assistant professor. The faculty was further augmented in the fall of 1940 by the appointment of Miss Laura K. Martin as associate professor.

Soon after the department was organized in 1932 it was accredited by the Kentucky State Department of Education and by the Southern Association of Colleges and Secondary Schools. An invitation was extended in March 1934 to the Board of Education for Librarianship of the American Library Association to visit the department with a view towards accreditation. However, due to the fact that a 30-hour program was being offered for the first time and to the then present condition of unemployment among librarians, the board was reluctant to encourage other training agencies to be developed and, consequently, the visit was not made.

The first visit of the Board of Education for Librarianship was made on De-

ember 6 and 7, 1937. In its report the following year recommendation was made that the program of school librarianship be strengthened, rather than developing a general program of training for various fields of library service. It was also suggested that financial support should be increased if the school was to compete with other library schools, especially in attracting instructors of competence. Accreditation was therefore deferred until such conditions could be met.

The Department of Library Science was fully accredited by the ALA following a visit from two members of the Board of Education for Librarianship on April 1 and 2, 1942. The accreditation was for a Type III library school, that is, giving training on the undergraduate level, with special emphasis on library service to schools and colleges. From the time of accreditation until 1951 the department offered the Bachelor of Science degree in Library Science to those taking 30 hours following graduation from college.

Meanwhile, major changes had been taking place in the training programs throughout the country. For years there had been widespread dissatisfaction with the Bachelor of Science degree in Library Science. This was particularly voiced by school librarians who, in many instances, were not given credit in rank and salary with other faculty members, even in the same system, who held master's degrees.

Beginning in the fall of 1949 two programs were outlined in Library Science, one for undergraduates qualifying for school library positions and minor positions in other types of libraries and the graduate program. The significant change was the introduction of the graduate program, which required that the student complete 24 hours of library science, pass the foreign language test, and a standard oral examination on an acceptable thesis. The Bachelor of Science in Library Science degree was offered for the last time in the summer of 1951 after having been awarded to seventy-one graduates since the degree was first granted in June 1944.

On April 25-27, 1955, the Department of Library Science was visited by two members of the Board of Education for Librarianship of the ALA. The purpose of this visit was to evaluate the Department of Library Science under the standards of accreditation adopted by the ALA Council on July 13, 1951, and to make recommendations in regard to accrediting the master's program of the department. In a rather lengthy report, the visiting committee presented a very discerning picture of existing factors relating to the department and made certain recommendations. Request was made that a report be submitted to the Board within the following year. The report ended with a recommendation that the program leading to a master's degree offered by the University of Kentucky be accredited. At its meeting on July 3, 1955, the Board of Education for Librarianship of the ALA voted that the master's degree program at the University of Kentucky be accredited.

Throughout the following years, from 1955 to 1966, the curriculum remained basically the same. In 1966 the curriculum underwent a major revision after being advised by the Committee on Accreditation of the ALA that the revision was necessary. Particular emphasis was given to the development of a curriculum

which would be more general in nature including other fields of librarianship such as public and special libraries as well as school and college libraries. Emphasis was also placed on the development of a more research-oriented faculty and an increased effort in research publication by the department. A number of new courses were added to the curriculum amounting to thirty-two different courses which students might take, including a course in professional field experience which enabled a student to earn academic credit by working in cooperating libraries.

As of 1973, the curriculum has been revised so that the college provides an opportunity for the student to make wide selection on his own in regard to the development of his program. Only three courses are required of the students—Library Services and Administration, Library Operations, and Reference and Information Services. Beyond this the student is free to select whatever courses he wishes under the guidance and direction of a well worked out advisory system. The traditional foreign language has been dropped as well as comprehensive examinations. At the same time, admission standards have been raised in the College of Library Science so that it now has one of the highest admission requirements within the University of Kentucky.

Along with the increase in admission standards and new freedom given the student for development of his program, there has been the creation of a strong advisory system. Each student has a faculty advisor to work with him and to plan his program. In collaboration with the advisor, a student assumes responsibility for establishing his own goals and objectives upon the determination of his own educational needs. In the initial advising with a student, the contract is agreed to by the student and advisor concerning the educational program for the student during his stay in the College of Library Science. This contract is flexible and negotiable but does constitute an agreement between the two. The educational program for the student must, however, meet the standards for the Master of Science in Library Science degree and the student's needs.

In the development of the curriculum in the Department of Library Science at the University of Kentucky, now the College of Library Science, emphasis has always been placed upon the principles of librarianship in addition to techniques and methodology. By means of developing goals and objectives for the curriculum, attention has been directed to the development of an awareness on the part of students of the social and communications role of the library within society as well as to the education of effective librarians in the techniques of selection, evaluation, organization, storage, distribution, and interpretation of print and non-print materials in terms of the informational needs and interests of readers. As confirmation of this, in 1973 a new set of purposes and objectives were agreed to by the faculty of the College of Library Science in response to the changing needs of librarians in society. In this manner the curriculum has been geared to the needs of the present as well as anticipated requirements of the future.

In the development of the Department of Library Science there were frequent changes in administration. Miss Semmons was granted leave for the academic year 1943–1944 and in the summer of 1943 Dr. Richard H. Logsdon was appointed

associate professor and acting head. Following the resignation of Miss Semmons before the end of the spring semester and effective July 1, 1944, Dr. Logsdon, on military leave, was appointed head of the department with the rank of professor. Miss Margaret I. King served as acting head after Dr. Logsdon decided in December 1945 that he would not return to the university.

Dr. Robert H. Deily was appointed head, took charge on July 22, 1946, and served for two years. He was followed for the academic year 1948-1949 by David Otis Kelly, who left at the end of the spring semester. In September 1949 Leslie I. Post became head and served through the summer session of 1953. While Mr. Post was on leave of absence for the academic year 1951-1952 to continue work and requirements for the doctorate at the University of Chicago, Miss Azile Wafford served as acting head of the department.

In the fall of 1953, following Mr. Post's resignation, Dr. Edward J. Humeston succeeded as head of the department. He served in this capacity through the summer session of 1959 and was succeeded on October 1 of that year by Maurice D. Leach, Jr. who served through the summer of 1966, when he was followed by Dr. Lawrence A. Allen, who became head of the department and full professor in the fall of 1966.

In addition to its administration, the organization of the department also underwent significant changes. In 1968 the Department of Library Science had grown not only in size and stature within the university, but also in relationship within the university structure. Recognizing this fact the Board of Trustees of the university voted that the Department of Library Science become an autonomous Graduate School of Library Science in the fall of 1968. At that time Dr. Lawrence A. Allen became the first dean. To place the school on the same level as other colleges within the university the School of Library Science became the College of Library Science in 1970. This created the first College of Library Science in the country.

Since the beginning of the Department of Library Science the student body has grown considerably. For example, in 1966 there were twenty-six graduate library science students. In 1973 the College had 150 graduate students and serviced approximately 300-500 College of Education students in the course of a year through courses in children's literature. Since 1950, when it awarded its first master's degree, the library school has awarded 510 master's degrees (as of 1973). Perhaps even more significant is the fact that over half of these degrees were awarded in the last 4 years. The college now offers approximately 100 degrees per year.

In light of the number of graduate library schools being accredited by the Committee on Accreditation, combined with the fact that the employment situation is not a good one for librarians at this particular time with the supply having outrun the demand, the College of Library Science has limited its graduate enrollment to 150 students. The entrance requirements of the college in 1971 demanded a Graduate Record Examination score of 800 and a grade point average of 2.5; these have been raised upward to 900 and 2.75 respectively. In addition

the standards have been upgraded so that the college will continue to improve in overall quality with a growing reputation for graduate students who are characterized by excellence.

In 1966 a student committee was organized in order to facilitate a greater participation of the student body in the administration of the college. As the college grew, the student committee became more formalized as a student organization and contributed significantly to the development of the college in all its aspects. Student representatives became voting members of all committees in the college as well as faculty meetings.

As an example of the leadership role of the student organization within the college, the Epsilon chapter of Beta Phi Mu, the national honorary fraternity for librarians, was established in the college in 1971. The student organization assumes primary responsibility for serving as the "link" between students and administration in terms of communication in both the social and academic orientation of the student body. Students are recognized as a major element within the college, not only to receive education but also to contribute to the development of that education.

All the library educational needs of a state and region cannot be satisfied by means of the formal curriculum on campus. Consequently, a rather extensive extension program has been developed by the College of Library Science. One of the responsibilities assumed by the college is to provide continuing education for working librarians and other Kentuckians not able to enroll as regular students on the Lexington campus. Consequently, the extension program has been developed as both a formal, credit program and a noncredit continuing education program through a series of workshops, institutes, and seminars. Extension activities were first undertaken in the fall of 1949 under the leadership of Mr. Post, and extension courses have continued to be offered throughout the years as the demand has arisen and been foreseen by the College of Library Science. The extension courses maintained by the College of Library Science are offered in cooperation with the University Extension Program. The emphasis of this curriculum has been primarily in the beginning courses so that a student may take these prior to coming on campus to finish his degree requirements. The number of extension courses offered has been increased to approximately fifteen courses each semester, and these are offered in five or six locations throughout the state.

Other opportunities for continuing education, in addition to formal courses, have been offered both on and off campus by the College of Library Science. Many of these special programs have been offered in cooperation with the Department of Libraries at the state level and a number of other institutes have been supported by federal funds. Each year the college sponsors a conference for school librarians and conducts a 2-day workshop prior to the Kentucky Library Association convention in the fall. With the reduction of federal funds for training programs in continuing education for librarians, attention must be given to ways in which activities can be provided on a self-supporting basis.

Another opportunity for continuing education is available through the colloquium

series of the College of Library Science. Seven or eight times during the year the college invites a guest speaker, an expert in a particular field and a person having national reputation. These lectures are open to all people in the state and region who care to attend.

A further development of the educational program for librarians by the College of Library Science has been the development of the library technician program in cooperation with the community college system of the university. At the present time there are three programs being offered in community colleges throughout the state. Although the College of Library Science is not in control of the library technician program it serves in an advisory and consulting capacity to the community colleges in the organization and administration of the program. The program was purposefully designed to be small with a limited number of students, due to the fact that the "market" for library technicians has not been recognized in the library world as yet. Also, constant attention has been paid to the ways and means in which library technician programs might articulate with the master's degree program.

The key to the success of any College of Library Science basically rests with its faculty. Emphasis, therefore, has been placed on the development of a faculty which has expertise in the areas of research, publication, and teaching. The faculty of the college can be characterized as being relatively young, with an average age of approximately 35. At the present time there are eleven full-time faculty members, nine of which hold the doctoral degree. An additional faculty member will be added to the school librarianship area next year. The faculty can be best described as a "producing" faculty and has contributed significantly to library literature in terms of publishing books, monographs, and articles so that there is now heavy emphasis on the research component within the college.

Research, however, is not the only element within the college, and from the beginning of the Department of Library Science to the present time (1973) the entire faculty has been very active in local, state, regional, and national library associations and projects. Faculty members continue to serve as consultants to all types of libraries within their own particular areas of expertise. They have been asked to be speakers for library and educational institutions throughout the country, and they serve as officers within library organizations at all levels from the local to the national scene as well as editors of nationally recognized journals.

One of the major purposes for the development of a Department of Library Science at the University of Kentucky was to give direction and leadership to the development of library service in the state of Kentucky. Not only has this objective been accomplished, but the present College of Library Science continues to provide that leadership on the national and regional levels as well as the state level. Many of the graduates of the college serve in positions of leadership in the library profession, and the faculty continues to contribute significantly to the research and educational needs of the profession, which places the College of Library Science as an agency continuing to work toward the development of more effective library service in the commonwealth of Kentucky and in the nation.

BIBLIOGRAPHY

Evans, Charles, "The College of Library Science: Building for Better Service to Kentucky," *Kentucky Lib. Assoc. Bull.* 36, 40-46 (January 1972).

Wofford, Azile, "History of the Department of Library Science," University of Kentucky, Lexington, Kentucky, 1963, Unpublished.

LAWRENCE A. ALLEN

KENTUCKY. UNIVERSITY OF KENTUCKY LIBRARIES

The University of Kentucky was founded in 1865 as a land-grant college, but it was not until 1909, after overcoming a series of false starts, that the university library was established and Miss Margaret I. King was appointed librarian. Miss King secured a Carnegie building for the university in 1909, laid the base for an effective and harmonious relationship with the faculty, and established and maintained high professional standards in administration, service, and collection development. She was succeeded in 1948 by Dr. Lawrence S. Thompson, bibliophile and bibliographer who served as director of libraries until 1965 when he resigned to accept an appointment as Professor of Classics. Dr. Stuart Forth, the director until 1973, was appointed to succeed him. All three of these librarians emphasized the development of quality collections responsive to the teaching and research needs of the university, but also recognized their obligations to secure resources for the future needs of the academic community. The collections are particularly strong in bibliography, history, mathematics, literature and languages, and physical and life sciences. In recent years the collections in law, medicine, and agriculture have developed rapidly.

The Carnegie library was replaced in 1931 with a Georgian styled building which was greatly enlarged in 1962. Another addition is scheduled for completion in 1973 which will include new quarters for the department of special collections, an exhibition gallery, a new art library, the technical service departments, and the library's administrative offices. The decade of the 1960s saw the construction of completely new library facilities for the colleges of law, medicine, agriculture, and engineering and the establishment of the architecture library. Since 1965 new space has been provided for mathematics, fine arts, and education and a new biological science library is presently under construction. In this same period, all of the university's community colleges were built with their libraries.

The main library, named after Miss King on her retirement, includes the reference, circulation, acquisitions, and cataloging departments, a government documents department established in 1967, a newspaper-microform division estab-

lished in 1968, the reserve book collection, a spoken word collection, and a general periodicals reading room. In 1972 a map department was also established. The usual services provided in medium sized university libraries are available and include copy services, a campus delivery service, interlibrary loans, exhibits, the occasional publication of various newsletters about collections and library activities, and library sponsored speakers, seminars, and colloquia.

The geography of the campus dictates the number of branch collections which has lead to some duplication of resources in such obvious areas as agriculture, applied technology, the biological sciences, and medicine but every effort is made to control it. Almost all the collections in the humanities and social sciences, numbering over 720,000 volumes and major microform collections, are housed in the main library. The rest of the collections is distributed among the branch libraries as follows: Agriculture, 65,000; Architecture, 14,000; Biological Sciences, 26,000; Chemistry-Physics, 25,000; Education, 31,000; Engineering, 30,000; Fine Arts (Art and Music) 33,000; Geology, 25,000; Law, 133,000; Mathematics, 16,000; and, Medicine, 129,000.

The library's department of special collections includes rare books, manuscripts, and the university archives. The book collections are particularly rich in western travels, Ohio Valley and Kentucky history, typography and the history of books and printing, French Romantic writers, music theory, a fine Milton collection. There are also strong collections in French and Spanish drama, and broadside ballads and chapbooks. The strength of the manuscript collection derives from the papers of such modern political figures as Alben Barkley, Thurston B. Morton, Jouett Shouse, A. O. Stanley, Brent Spence, Fred M. Vinson, John Sherman Cooper, Albert B. Chandler, and many others. The head of the department since its establishment in 1946 has been Dr. Jacqueline Bull, who is both a librarian and an historian.

The special collections department also houses two hand presses used in teaching carefully selected students the evolution of typography, the use of the press, and, most important, the satisfaction of creating a handsome book. Under the direction of Mrs. Victor Hammer, curator of rare books, the press has produced limited editions of a number of books, including Wendell Berry's *The Rise* in 1968, *Rhymes for a Wince* by John Jacob Niles in 1971, and several others. Much of the work of the press is supported by private money available through the University of Kentucky Library Associates.

The libraries of the University of Kentucky in Lexington consist (1973) of approximately 1,250,000 volumes, 941,000 microforms, and 92,000 maps housed in the Margaret I. King Library and eleven branch libraries located in various other buildings on the campus. These branch libraries serve the departments of chemistry-physics, geology, and mathematics, the schools of biological sciences and fine arts, and the colleges of law, engineering, architecture, agriculture, education, and the university's medical center. The latter includes the colleges of medicine, dentistry, pharmacy, nursing, and allied health professions. In addition to these

collections the university's thirteen community colleges, located in various towns throughout the commonwealth, have small, lower-division libraries totaling some 225,500 volumes.

The resources of the library are supplemented through various methods of access to the collections of the Lexington Theological Seminary, the State Historical Society, and the Filson Club of Louisville. The library is an institutional member of the Center for Research Libraries in Chicago and has access to its holdings, and has joined the recently established Southeastern Library Network which will ultimately provide easier cooperative sharing of resources throughout the region. It is also a member of the Association of Research Libraries and the Association of Southeastern Research Libraries and can utilize the various bibliographic resources of these organizations.

The libraries on the Lexington campus are administered centrally with the exception of the Medical Center Library, which is autonomous. The libraries of law, agriculture, and medicine do their own acquisitions and cataloging, but those functions are performed centrally for all other libraries. The director is charged with formulating and implementing library policy, and reporting to the vice-president for academic affairs, and is advised by a committee of the university's senate. The sixty librarians in the library system hold academic appointments, and a number of them regularly teach in various departments.

STUART FORTH

KENYA, LIBRARIES IN

Kenya is situated in East Africa, astride the Equator. It has an area of 224,960 square miles (582,647 square kilometers) and a rapidly-growing population which now exceeds 10 million. Formerly a British colony, Kenya achieved independence in December 1963.

Pre-Independence

Our knowledge of the early history of what is now Kenya is quite limited. Thus we can only speculate about the existence of libraries before the twentieth century. While there is no direct evidence, it is possible that there may have been small libraries in the various Arab and Portuguese settlements along the coast as early as the sixteenth century. However, even if such libraries existed, they had only a local and temporary influence. The history of Kenya's present library structure and practice must be dated from the establishment of formal British administration of the area in 1895.

The first library in modern Kenya appears to have been established by the Department (now Ministry) of Agriculture about 1916. The purpose of the library was to serve the needs of the department's staff, especially its research officers. However, as early as 1924 the library began to lend material to farmers. This service continued for many years and was apparently well used. Thus the library may lay claim to being not only the first library to Kenya but also the first to operate an extension service.

Special libraries established and operated by government departments or research institutions dominated the Kenya library scene for many years. The most numerous dealt with various aspects of the agricultural and veterinary sciences—-not surprising when one considers that the economy of Kenya was and to some extent still is based on farming and ranching. Most of the government libraries had small collections (a few hundred to a few thousand volumes), very limited budgets, and no professional direction. Indeed, many were hardly more than reading rooms "looked after" by a clerk. There was little in the way of overall planning or co-ordination of library services, even within a single department, and none on a government-wide basis.

There were several special libraries of considerable importance in addition to those maintained by the Kenya government. The largest of these was part of the East African Agriculture and Forestry Research Organization (EAAFRO) located at Muguga, near Nairobi. EAAFRO was developed and operated as a major research institution by the East African High Commission (later the East African Common Services Organization and now the East African Community). The library, numbering over 20,000 volumes at the time of Independence, had the best collection in agricultural sciences in eastern Africa.

The largest and best-known library in pre-Independence Kenya was the McMillan Memorial Library. Established in 1931 by Lady McMillan, the library occupied (and still occupies) one of Nairobi's most impressive buildings. By 1961 the collection numbered 55,000 volumes and included many rare items of Africana. The McMillan Library was essentially a private institution, supported by endowment, gifts, and subscriptions from members. Africans were not admitted to membership until shortly before Independence. Several other smaller subscription libraries provided limited service to the European and Asian communities. Service to Africans was all but nonexistent until the library of the East African Literature Bureau began to be developed in the 1950s. Located in Nairobi and supported by government funds, the bureau had among its responsibilities the provision of library service to the African population. While the collection reached 40,000 volumes by 1961, the bureau had no adequate library building, a very small staff, and devoted most of its efforts to the operation of a book-box service to outlying areas. There were no truly public libraries of any size in Kenya until the McMillan Library was taken over by the Nairobi City Council in 1962.

Institutions of higher education did not begin to develop until the 1950s. What was to become the University of Nairobi was chartered in 1951 as the Royal Technical College of East Africa. The first students were admitted in 1956. The college

was designed to provide technical education at the diploma level and to prepare students to qualify for entry into universities elsewhere. Little money was spent on the library during the first few years, but an expanding program required that the library be improved. By 1961 the library of Royal College, Nairobi, as it was then named, numbered 25,000 volumes and was headed by one of the few fully qualified librarians in East Africa.

Post-Independence

Independence brought about no immediate and spectacular changes in the Kenya library scene. In general, developments have tended to follow patterns established earlier. Perhaps the most significant trend in the post-Independence period has been the steady increase in size and importance of the library of the University of Nairobi (formerly called the Royal College and then the University College). The University Library now contains well over 100,000 volumes, is housed in attractive buildings, enjoys adequate and dependable financial support and has a well-qualified senior staff. The University Library is by far the largest and best-supported library in Kenya. To an increasing extent, it serves, in fact if not in name, as the national research library.

It should be noted that the post-Independence emphasis on university development was not unique to Kenya, but was general throughout much of Africa. Major investment in universities was seen as essential in order to produce urgently needed civil servants, scientists, and other professionals. Also, the results of such investment were highly visible and more or less certain. A given amount of money over a given period of time could be counted upon to produce a given number of doctors, agronomists, and engineers. This high visibility and relative certainty made grants to universities and their libraries especially attractive to foreign donors. The library of the University of Nairobi was among those which received considerable sums for both buildings and books from foreign governments and foundations.

Special libraries remain important, although they no longer dominate the scene. The largest special libraries are those maintained by the Ministry of Agriculture, the East African Statistical Department, the Mines and Geological Department, and the East African Agriculture and Forestry Research Organization. While all these libraries exceed 15,000 volumes, none can come even close to the University Library in size, financial resources, and number and training of staff. The future of a number of the special libraries remains unclear. There is some indication that certain research programs which were traditionally conducted by government departments may be assigned to the university. Such a move would not leave libraries unaffected.

Only modest progress has been made in the provision of public library service. A Kenya National Library Service was created by the National Assembly in 1965. Its board was charged with the responsibility to promote, establish, equip, manage, maintain, and develop libraries. Unfortunately, several years passed before the

legislation became effective, during which time much of the service which had been provided by the Literature Bureau was permitted to wind down. Even more unfortunately, the national government has not seen fit to grant the board sufficient funds to implement more than a fraction of its mandate. This lack of support has made it impossible for the board and its staff to make more than the most limited public library service available to the majority of the population.

The failure to provide adequate financial support for public libraries cannot be attributed to lack of zeal on the part of public librarians or lack of understanding on the part of government. The situation in Kenya is common in Africa and is to some extent inherent in the situation. Financial resources are so limited and demands on them so great that few government officials feel justified in giving more than token support to public libraries. Large expenditures on public libraries do not produce the immediate and tangible results desired by the planning ministries.

Librarians in Kenya have been eager to participate in efforts to make more effective use of limited resources. They have made great contributions to the successful development of the East African Literature Service (EALS). The EALS has its headquarters in the library of the East African Agriculture and Forestry Research Organization, and is supported by the East African Community. The EALS, started in 1967, has made it possible for scientists working in over 100 research stations throughout East Africa to keep abreast of what is being published and to obtain copies of articles needed in their work. The success of the operation has depended from the start on cooperation, imagination, and hard work on the part of Kenya librarians. Their ability to meet the challenge is a tribute to them and augurs well for the future of libraries in Kenya.

BIBLIOGRAPHY

- Belton, E. J., *Directory of East African Libraries*, Makerere College Library, Kampala, Uganda, 1961.
- Luckman, M. E., "Development of Special Libraries in East Africa," *East African Lib. Assoc. Bull.*, 7, 29-37 (1966).
- Luckman, M. E., "Oldest Library in Kenya?," *East African Lib. Assoc. Bull.*, 9, 18-20 (1968).
- Makerere University College Library, "Directory of East African Libraries," 2nd revised edition, Kampala, Uganda, 1969.
- Munn, Robert F., "East African Literature Service," *UNESCO Bull. Lib.*, 27, 29-32 (1973).
- Wallenius, Anna-Britta, *Libraries in East Africa*, Scandinavian Institute of African Studies, Uppsala, 1971.

ROBERT F. MUNN

KNAPP FOUNDATION OF NORTH CAROLINA, INC.

The Knapp Foundation of North Carolina, Incorporated, is a nonstock corporation established to administer funds entrusted to it in an endeavor to be helpful to others by educational, charitable, or whatever other means may seem wise to its trustees. The foundation was organized on March 5, 1929 under the laws of the State of North Carolina by Joseph Palmer Knapp, whose love for his fellow man and neighbors was reflected in a variety of charitable activities as early as 1920 when Knapp took up residence and became a citizen of North Carolina.

Joseph Knapp, son of one of the founders of the Metropolitan Life Insurance Company, became interested in lithography as a salesman in his father's lithographic firm, Major and Knapp. In 1891 he purchased the firm and formed the American Lithographic Company. This was followed in 1904 with the publication of *Associated Sunday Magazine*, a weekly newspaper supplement. In 1906 he purchased the Crowell Publishing Company, later purchased the *American Magazine*, and in 1908 formed the Alco-Gravure Division of Publication Corporation. In 1919 he purchased *Collier's Weekly* and the book publishing business of P. F. Collier and Sons. The United Newspaper Magazine Corporation was founded by Joseph Knapp in 1935.

Joseph Knapp's interest in fishing and duck hunting led him to establish his home on Mackay Island, Currituck Sound, North Carolina, where he took a keen interest in his neighbors, their families, and their way of life. He soon learned that they depended upon agriculture, some fishing, and acting as hunting guides for their livelihood. Realizing that educational opportunities for the children were limited and that it was impossible for his neighbors to raise their standard of living, Joseph Knapp became determined to render financial aid and assist in their educational, social, physical, and economic welfare.

Currituck County Schools, North Carolina

Beginning in the early 1920s Mr. Knapp contributed over \$400,000 of his own resources to finance a plan to reorganize the schools of Currituck County, North Carolina. The consolidation and development of a model school plan under the direction of the superintendent, Miss Maud C. Newbury, initially included the construction and equipping of three new schools and additions to existing schools. Four faculty houses were built and furnished to attract new teachers to the area, and faculty and administrative salaries were supplemented with Knapp's financial assistance. Through additional funds, the Knapp family provided for school buses, free textbooks, and equipment for all schools. The Currituck County School plan supported by Knapp also provided for a school nurse, health clinics, a home dem-

onstration agent, special subject teachers in home economics, music and art, a county librarian, and the equipping of school libraries.

Recognizing that, aside from capital investment involved in the school plan, many of the services which had been inaugurated could not be continued, Joseph Knapp established the Knapp Foundation of North Carolina. The income of the foundation in the beginning was provided from certain trusts established by Knapp. Knapp contributed nearly \$800,000 from his own funds and from payments by the foundation toward a more adequate school system in Currituck County. In 1937 changes made in North Carolina school laws provided state and local funds to meet most of the requirements of the improved school system. Consequently, the foundation was able to reduce its commitments. However it did continue to support salary supplements and provide special teachers until 1952.

In the early years of the foundation almost the entire income was devoted to the Currituck County Schools. Smaller grants were used to support the Currituck County Welfare and Health program and clinics. A Santa Claus fund was established to purchase clothing, food, and medical care for needy school children. During the period from 1929-1959 the foundation made donations in larger amounts to support new building programs for Berea College, Kentucky (\$23,500); the Albermarle Hospital in Elizabeth City, North Carolina (\$60,000); and the McComb City Hospital in McComb, Mississippi (\$245,000).

The State Education Commission of North Carolina

In 1947 the foundation provided \$100,000 to be added to a \$50,000 allocation from the State of North Carolina to support a 1-year survey and study of school conditions within the state. The State Education Commission was planned by Dr. Frank Graham, president of the University of North Carolina. An eighteen member commission was appointed by Governor Cherry to make recommendations for a plan of operation which would equalize and make uniform the administration and curriculum of public schools in North Carolina. The comprehensive report of the State Education Commission covered all phases of public school education and served as a guidebook and plan for future education improvements. Published in December 1948, the report made seventeen recommendations on the following subjects:

1. Education of North Carolina's Resources.
2. The Instructional Program.
3. Elementary Education.
4. Secondary Education.
5. Vocational Education.
6. The Education of Exceptional Children.
7. Adult Education.
8. Instructional Materials.
9. Public Personnel and Pupil Services.
10. Instructional Personnel.

11. Teacher Education.
12. Pupil Transportation.
13. School Plants.
14. State Organization and Administration.
15. Local School Organization and Administration.
16. The Financial Program for Public Education.
17. What is the Minimum Program of Education?

Institute of Fisheries of North Carolina

The establishment of the Institute of Fisheries of North Carolina was supported by a grant of \$100,000 from the foundation in 1947. The purpose of the institute, administered by the University of North Carolina, was the study and collation of data on the fisheries of North Carolina with the object of their greater exploitation and the ensuing additional employment such fisheries would provide. Staffed by scientists employed by the state, the research teams assembled, digested, and summarized all data with regard to the physical, chemical, hydrographical, and hydrobiological characteristics of coastal waters. While the studies included shrimp, oysters, clams, scallops, and fin fish, oysters and shrimp received the greatest attention since these were established industries giving the greatest monetary return. Coastal areas were seeded, and experiments proved it was possible under proper supervision to bring the oyster culture back to a level where adequate yield could be obtained without exhaustion. Continuous studies were run on the salinity, food, and marine life in the North Carolina coastal area. The Institute of Fisheries, its personnel, and equipment is now maintained by the state, but considerable credit is given to the Knapp Foundation for providing the impetus to start this branch of government service, particularly for the economic benefit accruing to the fishing industry and to commercial fishermen.

The Technical Institute

At the same time support was given to the Institute of Fisheries, the foundation provided a grant of \$50,000 to establish the Technical Institute. Originally housed in Morehead City, this 1-year educational institute was primarily established to provide returning veterans with training in technical occupational subjects. The Institute is now located in Gastonia and functions as a part of the State College of North Carolina providing a 2-year course in a variety of vocational subjects.

Institute of Government Building

In 1952 the foundation offered a grant of \$500,000 to the University of North Carolina if an equal amount could be secured from state funds to establish the

Institute of Government. The State of North Carolina matched the grant and the Institute of Government was housed in the newly erected Joseph Palmer Knapp Building. The purpose of the institute is to provide an academic setting to update legal theory and procedures as they are practiced in the city halls and county courthouses of North Carolina. The institute provides an auditorium, classrooms, dormitories, a crime detection laboratory, and physical training rooms for elected and appointed local and state legal enforcement personnel to utilize while attending classes, workshops, and seminars relating to law enforcement and legal procedures.

Knapp School Libraries Project

The Knapp Foundation's continued interest in education and its first support for a major educational program on a national level resulted in December 1962 through a grant of \$1,130,000 to the ALA. The Knapp School Libraries Project, directed by Miss Peggy Sullivan and administered by the American Association of School Librarians, followed nearly 2 years of planning before the project began implementation on March 1, 1963. The scope of the 5-year demonstration project was incorporated in a three-phase program in which eight demonstration schools worked cooperatively with nearby teacher education programs to advance the concepts of quality school library service and its contribution to the process of education. Project funds ranging from approximately \$40,000 to \$100,000 were allocated to the selected schools for salaries, library materials, and during the last two phases of the project for the expansion of the library's physical facilities, to bring the library program to the level of the 1960 *Standards for School Library Programs*. A major portion of the project funds was allocated to pay travel expenses of visiting teams to each of the project schools.

The basic objectives of the Knapp School Libraries Project were (1) to demonstrate the educational value of school library programs, services, and resources which fully met national school library standards; (2) to promote improved understanding and utilization of library resources on the part of students, teachers, and administrators by relating the demonstration library situations to teacher education programs in nearby colleges; (3) to guide and encourage educators and citizens, from as many communities as possible, in the development of local school library programs; and (4) to increase interest and support for school library development among educators and citizens through dissemination of information and materials.

Phase I established demonstration school libraries at the Central Park Road School, Plainview, New York, and the Marcus Whitman School, Richland, Washington. As each of these elementary schools had already made a substantial investment in library programs to meet the 1960 *Standards for School Library Programs*, their selection provided an early opportunity for the project to receive applications and award visiting teams travel grants to visit the demonstration schools. The teacher education programs selected to work with the project during Phase I were

Teachers College, Columbia University and Eastern Washington State College. In 1967 the ALA published *Impact: the School Library and the Instructional Program*, a report on Phase I of the Knapp School Libraries Project.

Phase II continued a focus on the development of the elementary school library programs by selecting three additional elementary schools for demonstration. The schools selected had made an early commitment toward achieving national standards for school libraries, but required more resources and time to meet these goals. The schools and their cooperating teacher training institutions were: Allisonville School, Washington Township, Indiana and Ball State University; Mount Royal School, Baltimore, Maryland, and Towson State College; Casis School, Austin, Texas and the University of Texas. Two filmstrip programs were produced by the ALA in connection with the Phase I and II demonstration schools. *Living School Libraries*, 1965 served as a progress report of the first five demonstration programs. *Focus on Three* was published as a set of three filmstrips in 1967 which gave increased emphasis to the Phase II schools. Specific titles included *Allisonville Evaluates*, *Mount Royal the Inner City*, and *Casis Reading Guidance Program*.

Phase III of the project gave emphasis to school library programs at the secondary level. Three schools were selected and supported with project funds for staff, operating budget, materials, and alteration in physical quarters. The schools and cooperating teacher education programs selected during Phase III were: Roosevelt High School, Portland, Oregon, and Portland State College; Farrer Junior High School, Provo, Utah, and Brigham Young University; and Oak Park and River Forest High School, Oak Park, Illinois, and the University of Illinois. The project continued its program of financial support for travel expenses to selected visiting teams until 1967.

More than 16,000 visitors observed the eight demonstration schools during the 5-year project. Through a variety of project publications, programs, and its film . . . *And Something More*, 1964, the scope of the project was responsible for stimulating national interest in school library development and encouraged local planning and action programs by educators and community citizens. The interest and successful impact of the Knapp School Libraries Project and its demonstration programs were reflected across the country in 1967-1968 when twenty-nine states allocated a portion of their Title II Elementary and Secondary Education Act funds for special purpose grants, many of which were developed and implemented on a demonstration plan similar to the Knapp School Libraries Project. In 1968 the ALA published *Realization*, the final report of the Knapp School Libraries Project which detailed the activities, programs, and evaluations of the eight demonstration schools and their cooperating teacher education programs.

School Library Manpower Project

In November 1967 the Knapp Foundation continued its interest and support in the school library field through a \$1,163,718 grant to the ALA for a second 5-year

project. The School Library Manpower Project, administered by the American Association of School Librarians and directed by Robert N. Case and associate Anna Mary Lowrey, evolved from problems identified but which were beyond the scope of the Knapp School Libraries Project. Designed to attack three aspects of the problem of effective development and utilization of school library media personnel through task analysis, education, and recruitment, the School Library Manpower Project was implemented in two phases.

During Phase I a task analysis survey was conducted for the project by the Research Division of the National Education Association. The results of this study and its subsequent analysis led to new definitions for school librarianship which would more nearly meet actual job responsibilities as determined by advances in educational technology and identified in the 1969 *Standards for School Media Programs*. In 1971 the ALA published the results of the project's 2-year Phase I endeavor. *Occupational Definitions for School Library Media Personnel* identified the nature, scope, major duties, knowledges, and abilities for a variety of school library media positions. Along with recommendations from regional conferences, the publication served as a foundation and provided the direction for the proposed content and flexibility of structure the Phase II experimental education programs would follow. Additional project publications produced during Phase I and published by the ALA were: *Task Analysis Survey Instrument*, 1969, *School Library Personnel: Task Analysis Survey*, 1969, and a recruitment film on school librarianship, *At The Center*, 1970.

Phase II of the project encompassed the last 3 years, the final two of which focused on the development and implementation of six experimental programs in school library media education. The institutions which each received \$102,000 grants to develop, implement and evaluate new curriculum design and innovative approaches for the education of professional school library media personnel were: Arizona State University, Tempe, Arizona; Auburn University, Auburn Alabama; Mankato State College, Mankato, Minnesota; Millersville State College, Millersville, Pennsylvania; University of Denver, Denver, Colorado; and the University of Michigan, Ann Arbor, Michigan. The six selected programs administered by guidelines developed by the project began some phase of activity in September 1971, completing their experimentation at the project's conclusion in August 1973.

The experimental programs focused on the undergraduate, graduate, and post-graduate levels of education. Most of the competency-based field-centered programs provided an individual approach to learning through such strategies as modules, mini courses, self-paced learning, case studies, and problem solving techniques. Early and continuous fieldwork experience provided reinforcement for immediate evaluation feedback and modification. Emphasis was given to new patterns for staff development and recruitment during the 2-year experimentation. The content of the six programs was interdisciplinary in nature and the scope was broadened to encompass a full range of media, both print and nonprint.

The heavy investment by the foundation and the six colleges and universities in the Phase II experimental programs resulted in the development of occupationally

relevant educational programs. The final report of these experimental programs, *Curriculum Alternatives: Experiments in School Library Media Education*, was published by the American Library Association early in 1974.

At the conclusion of Phase II the School Library Manpower Project received a one-year extension to implement an evaluation plan of the six experimental programs in school library media education. The \$150,000 grant from the foundation permitted an extension of Phases I and II of the 5-year project into a sixth year Phase III summative evaluation study. Phase III began in September 1973, and was concluded in August 1974.

The purpose of the Phase III extension was to provide an assessment of the validity of the experimental programs and to give guidance for the future direction of library education programs. A second and equally important goal was to demonstrate the value of a quality control system for the continued evaluation and improvement of education programs.

The major objectives of Phase III were to conduct a summative evaluation of the six experimental programs and to develop and field test survey procedures for obtaining information from the experimental program directors and staff, in-program students, and from experimental program graduates and their supervisors on the job. Procedures were developed for using survey information to evaluate and modify educational programs on a continuing basis. The six Phase II experimental programs, utilizing the survey information for program modification and revision, will also prepare status reports of their experimental programs 3 years after their inception.

During Phase III, a basic information collecting device was developed and utilized. The *Behavioral Requirements Analysis Checklist* (ALA, 1973) is the survey instrument designed to collect a wide variety of information from experimental program graduates, in-program students, experimental program directors and staff, and supervisors of the graduates in the field. The *Behavioral Requirements Analysis Checklist* (BRAC) is a compilation of competency-based job functions and task statements for professional school library media personnel. The job functions and supporting task statements are grouped within the seven major competencies identified during Phase I. The seven major competency areas are: Human Behavior, Learning and the Learning Environment, Planning and Evaluation, Media, Management, Research, and Professionalism.

During Phase III a number of techniques were developed and information was obtained on the evaluation of competency-based education programs which will be of interest to those concerned with the education of professional school library media personnel. Three regional workshops were held in the spring of 1974 in San Francisco, Chicago, and Atlanta for the purpose of discussing and disseminating information about the work of the six experimental programs and the results of the Phase III evaluation study.

A final report will be published at the conclusion of Phase III which will describe and interpret the survey findings. The final report will give special emphasis to the following evaluations of the experimental programs: (1) the degree to which

the training programs prepared students to perform those activities which they are actually required to perform on the job, and (2) the degree to which the graduates could capably perform in the field those activities which were covered in the experimental programs. In addition, the final report will contain a status report provided by the program directors for each of the six experimental programs as of January 1974. The final report of Phase III will be available for distribution from the American Library Association in December 1974.

ROBERT N. CASE

KNOWLEDGE AVAILABILITY SYSTEMS CENTER

The University of Pittsburgh formally addressed the information science field in September 1962 when Chancellor Edward H. Litchfield, in a speech marking the 175th anniversary of the university, called for study to address four major problem areas:

1. New knowledge is transmitted too slowly. The classical process of research, writing, publication, and distribution is no longer adequate in a great many fields in which we presently work. New knowledge must be made available over tremendous areas as soon as it becomes knowledge. . . .
2. Existing knowledge is insufficiently mobile. . . . We are hobbled by the equipment and technologies of earlier times. . . .
3. Knowledge in many fields has already become so vast and complex that often we do not know what we have, and when we do know that certain information exists, we are unable to find it. . . .
4. As knowledge burgeons, the patterns of relationship short of broad philosophic systems become increasingly difficult to comprehend. We urgently need the means to relate vast quantities of knowledge to one another so that those patterns may become discernible to the thinking, researching, practicing professional person. . . ."

It was to address these problem areas that the university established, in 1963, an interdisciplinary Knowledge Availability Systems (KAS) Center, with the charter to develop a program of teaching, research, and operations in the information sciences.

The first courses were taught in April 1963; the first research project was funded in July 1963; and the first operational activity was initiated in 1964. From this start, many programs and interrelationships have been developed.

The information science teaching program has progressed over a decade to the point at which instruction is provided at the baccalaureate, master's, and doctoral levels.

TABLE 1
Example Projects of the Knowledge Availability Systems Center

Title/description	Sponsoring agency
Notation Studies on Pyrimidine Derivatives—with emphasis on barbiturates	National Institutes of Health
Regional Dissemination Center development	National Aeronautics and Space Administration
Relevance predictability experiment	National Institutes of Health
Class scheduling study	U.S. Office of Education
Thesaurus developments	
Paint	Federation of Paint Technology Societies
Aerospace	National Aeronautics and Space Administration
Health Administration	Health Services and Mental Health Administration
Mental Retardation	American Association on Mental Deficiency
Political Science	American Political Science Association and National Science Foundation
Testing and Evaluation of FTD CIRC System	Goodyear Aerospace Corporation
Technical Assistance Information Switching Program	Commonwealth of Pennsylvania and U.S. Office of State Technical Services
Chemical Information Center—experiment station	National Science Foundation
PERT/CPM in information systems design	Office of Naval Research
Development of a generalized search program	Office of Naval Research
Study of man-machine interface	Office of Naval Research
Toxicology information study	National Library of Medicine
Development of Campus-Based Information System	National Science Foundation
Production of <i>Bibliography of Asian Studies</i>	Association for Asian Studies

The undergraduate work is offered through both the College of Arts and Sciences (daytime) and the School of General Studies (evening): the former is limited to several introductory courses; the latter provides a full concentration (or major).

At the graduate level, a full specialization is offered through two routes: in the Graduate School of Library and Information Sciences, and in the Interdisciplinary

Doctoral Program in Information Science. Cognate course support is provided to many areas of the university, most notably in the Schools of Education and Engineering.

The research program has ranged from the basic to the applied; from system design to evaluation. In operations, systems both large and small have been involved, with the major one being the continuing development of a regional dissemination center on behalf of the National Aeronautics and Space Administration. The KAS Center has enjoyed considerable support during its first 10 years—some \$5,000,000 from some twenty-five sponsoring organizations. Some example projects and sponsors are listed in Table 1.

The activities of the center have spawned a number of conferences, the most recent of which, an Advanced Institute in Information Science (1973), was sponsored by the North Atlantic Treaty Organization (NATO).

Many publications have been issued in conjunction with the center's activities, not the least of which is the *Encyclopedia* in which this article is published.

Organizationally, the center is a part of the University of Pittsburgh's Office of Communications Programs, which also includes the University Libraries, the Academic Computer Center, and the Interdisciplinary Doctoral Program in Information Science. The director of that office is Allen Kent, who founded the center and who still serves as director at the time of preparation of this article (1973).

ALLEN KENT

KNOXVILLE-KNOX COUNTY PUBLIC LIBRARY

Library service has been available in some form almost since the beginning of Knoxville's history. Knoxville was chartered in 1791, and in 1817 the Knoxville Library Company (third oldest in Tennessee) was organized as a subscription library. Intermittently after that for many years library organizations of various kinds were organized and disbanded. In 1873 the Knoxville Library and Reading Room Association, also a subscription library, was organized. In 1885 Colonel Charles McGhee constructed a building for a public library as a memorial to his daughter Mrs. May Lawson (McGhee) Williams. The Board of Directors of what had in 1879 become the Public Library of Knoxville accepted the building and became trustees of the new Lawson McGhee Library at the corner of Gay and Vine Streets. At that time the membership fee was \$1 and dues 25¢ a month. In addition to housing the library, the building had space for rental purposes to provide income for the library.

In 1904 this building was destroyed by fire, and the library was moved to a rented house at the corner of Market and Commerce. The original structure was

renovated and rented again, the rents still being used for library purposes, this time toward a new library building. In 1917 the Lawson McGhee Library Trustees joined with the City of Knoxville in building a new Lawson McGhee Library, at Market and Commerce, which was to be a tax-supported institution free to the public. Because Knoxville had had only subscription libraries, the trustees had inscribed over the door of the two-story terra cotta building, "Free to the Public," below the name Lawson McGhee Library. The library opened with 12,342 volumes and with Mary U. Rothrock as its librarian. Miss Rothrock was the second professionally trained librarian who had served the people of Knoxville. From 1892 to 1896 Mary Louise Davis, like Miss Rothrock a graduate of the New York State Library School, was the librarian of the Lawson McGhee Library. (The appointment of Miss Davis, one of only a few trained librarians in the country, indicates that very early Knoxville's library board recognized the importance of qualified librarians as well as of good books.)

Under Miss Rothrock's direction the library grew and developed with the addition of several branches. The first of these, The Free Colored Library, a Carnegie building, was opened in 1918. In 1920 the librarian was authorized by the board to place deposits of books in community houses, business organizations, industries, and hospitals for free circulation in areas not within easy reach of the Lawson McGhee Library. In 1928 the Knox County Court contracted with Lawson McGhee Library for service to all the residents of Knox County. In 1929, as one of the libraries selected by the Rosenwald Fund and with an additional appropriation of \$5,000 from the County Court, county service was increased to provide bookmobile service to all elementary schools and to neighborhoods, to furnish aid to the eight consolidated high schools, and to lend them small collections of books when needed. During the 1920s the library served as a coordinating agency to supervise and provide books to the Knoxville City School libraries, but this arrangement was discontinued in 1936.

In 1930 the first branch library built with local public funds, the Lonsdale Branch, was opened. In 1931 the second, the Park City Branch, was opened. The same year the South Knoxville and Murphy Branches were established in rented or donated quarters.

In 1940 the Broadway Branch was established in rented quarters, and in 1941 the city and county branches and the county bookmobile were consolidated into one department called Extension Services. The Burlington Branch was built and bookmobile service was begun in 1946. In that same year, a lawsuit questioning the legality of using taxes collected in the city for county purposes resulted in the discontinuance of the county's library program. At that time the county service included four branches and service by bookmobile to all the county schools and many other community locations, 114 stops in all. In 1949 the Knox County Court appropriated money for library service through the County Board of Education, and library service to the county was resumed, but with no connection with the city's library. During the 1950s and 1960s several branch buildings were built by the city: Murphy, Sequoyah, North Knoxville, and West Knoxville. In 1963, when

the city annexed a large part of the county, the former county branches of Fountain City, Inskip, Norwood, South Knoxville, and West Haven became part of the city system. Soon after, new buildings were erected at Fountain City, Norwood, and South Knoxville.

In 1967 the city and county library systems were consolidated into the present Knoxville-Knox County Public Library System with the result that Carter, Corryton, Farragut, Halls, Karns, Mascot, Millertown, Powell, and Southgate branches became part of the integrated system. Of these branches only Farragut was in a library-owned building; all of the others were in quarters provided by community groups. Later Halls, Southgate, and West Haven were moved into rented space in shopping centers.

Part of the city-county consolidation agreement was that the county would take over administration of the library's funds and that it would build a new main library building. The legal name of the new system was Public Library of Knoxville and Knox County, but the new building was to continue to be the Lawson McGhee Library.

In 1971 a new Lawson McGhee Library building, centrally located in the downtown area at the corner of Church and Walnut, was opened at a cost of \$2 million, with \$604,000 of the amount coming from federal funds. The new building provides twice as much available floor space as the old one and has an estimated capacity of 400,000 books. Provision for expansion of the building was made by including elevator space for an additional floor as well as the possibility of addition to the west of the building.

In the same year the Park City and Inskip Branches were closed because of changes in the communities. Shortly thereafter, federal funding of a special project for service to the disadvantaged made possible the addition of another branch in the Park City area called the East Knoxville Branch. This is a mobile unit which can be moved if the location selected becomes less desirable than another spot in that area.

Knoxville was settled largely by the English and Scotch Irish, and for over 100 years was almost totally Anglo-Saxon. However, in the 1930s the Tennessee Valley Authority brought a decided change in the makeup of the area, as did the coming of the Oak Ridge installation a few miles northwest of the city in the 1940s. As a result of these developments, as well as of the tremendous growth of the University of Tennessee, the library now serves a diversified population. The fact that the libraries at Oak Ridge, the TVA Libraries, the Knoxville College Library, and the University of Tennessee Library are in or near Knoxville means that Knox County has a much larger concentration of library resources than a town of under 300,000 would normally have. (The county's population in 1970 was 276,293.)

Service to those beyond its boundaries was begun when Knoxville's Board of Library Trustees in 1939 contracted with the Tennessee Valley Authority and the State Department of Education to provide library service to TVA employees and their families at Watts Bar Dam. This was the beginning of a service which,

when TVA support was withdrawn, was taken over by the state and has grown into a regional library system which now provides library service to every county of the state. It was the model from which regional library systems all over the country have developed and was the brainchild of Knoxville's and Knox County's first public librarian, Mary U. Rothrock.

A state-wide development which has had considerable impact on the Knoxville-Knox County Public Library is the development of Area Resource Centers by means of which all of the smaller counties of the state are served by the four metropolitan libraries. Knoxville serves nineteen counties (in the Clinch-Powell, Nolichucky, and Watauga regional library systems) of Upper East Tennessee with reference and interlibrary loan service. This service makes library service available to the people of these less densely populated counties at a very small cost. The use of In-WATS telephone service, a TWX, and the mails makes possible relatively easy and fast communication between the libraries. The Area Resource Center program was financed from Library Services and Construction Act funds, 1964-1973, but is now financed from state funds.

Another service which the library makes available to the librarians of East Tennessee is a Preview Room in which all new books are kept for 1 month, so that librarians from all types of libraries can examine the books before purchase.

The library system is governed by a seven-member Board of Trustees who are appointed by the City Council and the Knox County Quarterly Court for 3-year terms. The Board of Trustees is the legal agency for the library, administering library property and funds, formulating policies, and in general giving direction and continuity to library affairs. Its authority is defined in state statutes and in the joint resolution of the City Council and County Court in 1967. The 1973-1974 budget of over \$1 million is provided by funds appropriated by the Knoxville City Council, the Knox County Quarterly Court, the Knox County Commission, and the state government. The local funds are provided by the city and county on a per capita basis. Fines and fees collected by the library are also included in the total budget figure.

The library has six departments: Extension, Technical Services, Children's Services, Reference, Book Selection and Circulation, and the McClung Collection. The Reference Department includes a Fine Arts Section and a Business and Industry Section.

A special department not so usual in a public library is the Calvin M. McClung Historical Collection, which was opened to the public in 1921 after having been given to the library by the widow of Calvin M. McClung. Calvin M. McClung, a local merchant and long-time member and chairman of the library board, had for many years collected books and other materials about the history and families of Tennessee and the South. His collection formed the nucleus of what has become an outstanding one, particularly on Knoxville and East Tennessee. Over 15,000 books and several hundred thousands of manuscripts, maps, pictures, journals, diaries, and broadsides are now available to scholars and genealogists who come from every state and some foreign countries.

In 1925 the East Tennessee Historical Society was organized, with Miss Rothrock as one of the leaders of the group and with Lawson McGhee Library's McClung Historical Collection as its headquarters. This society, Tennessee's oldest continuously functioning historical association, has issued forty-five annual *Publications*, which have added tremendously to the published materials available on Tennessee history. In addition, several volumes on Tennessee history have been reprinted or published, notably *The French Broad-Holston Country* edited by Miss Rothrock, and Ramsey's *Annals of Tennessee*.

The library has never had an endowment fund, but at present a campaign to raise an endowment fund of at least \$100,000 for the Calvin M. McClung Historical Collection is in progress.

In 1971 a Friends of the Library group which has rendered valuable assistance to the library in many fields was organized. The group has made public officials more knowledgeable about the library and its needs, as well as having made members of the community more aware of the library and what it has to offer. In promoting this effort, special committees as well as special community groups of Friends have been organized so that both subject and geographical representation in the organization have given it greater appeal.

The Board of Library Trustees of the Public Library of Knoxville and Knox County has adopted the following statement of objectives for the library:

The purpose of the Public Library of Knoxville and Knox County is threefold: to help people (1) to solve problems of daily living so that they may find satisfaction for themselves; (2) to expand their mental horizons so that they may be better citizens of the community, the nation and the world; and (3) to enjoy books and reading as recreation.

To this end, the Library collects material, organizes it for convenient use, and tries to make it accessible and inviting to young and old. It employs librarians who are qualified to give skilled assistance in the use of this material. Its doors are open to all who wish to profit from the wisdom and experience of mankind, and to enjoy the pleasures of reading.

The philosophy of extending library service to all who can and will use it has been basic throughout this library's history. Without fanfare and before most other southern libraries, it opened its doors and services to the community's Black citizens and truly made it free to *all* the public. It has led the way for other libraries in giving service to those beyond its geographical boundaries. It has always striven to give books and information to everyone—rich or poor, educated or uneducated. Thousands of Knoxvilleians and East Tennesseans are better informed and better educated because the Knoxville-Knox County Public Library exists.

LUCILE DEADERICK

KONINKLIJKE BIBLIOTHEEK (ROYAL LIBRARY), THE NETHERLANDS

The history of the present *Koninklijke Bibliotheek* (*Royal Library*) begins in 1798: in that year the people's representation of the then "Batavian Republic" decided to make the library of the ex-"stadhouder" William V of Orange a National Library. After the stadhouder's flight from the country in 1795 all his possessions were confiscated, including his private library. With some additions this amounted to a collection of about 5,000 books, room for which was found in a building in The Hague's "Binnenhof," which at present houses the Second Chamber of the States General. It was primarily intended for use by members of the representation and by high officials, but private persons were allowed to make use of it after permission had been obtained from a parliamentary committee.

From the beginning, the administration of the library was in the hands of Charles Sulpice Flament, up to the time of his death in 1835. He was a French priest who had fled from his country during the revolution, and who had come to the Netherlands in 1794.

From 1806 until 1810, when Napoleon's brother Louis Bonaparte was King of Holland, the library was called the Royal Library for the first time. The king's administration was of great importance to the library. Through generous grants its collection increased from about 10,000 to 45,000 volumes in those 4 years. The purchase of several extremely valuable private libraries in 1807-1808 laid the foundation of the important collection of medieval manuscripts and early printed books. This collection has become one of the library's main interests. The growth of the collections, however, proved to be too fast for the library's organization. The uncertainty as to its accommodation added to these difficulties. In 1807 it was transferred to the Mauritshuis in the Binnenhof, from where the king intended to remove the collection to Amsterdam, thus leaving a chaotic situation when he finally abdicated in 1810.

Following the French annexation of the Netherlands in July 1810, the library (now called *Groote Hollandsche Bibliotheek* or *Great Dutch Library*) was brought under the municipal ownership of The Hague. During the 3 years of annexation there were no acquisitions worth speaking of; Flament needed all his ingenuity to protect the library from the imperial officials who wished to transfer the best parts of its collections to the *Bibliothèque Nationale* in Paris.

Napoleon's downfall led to the restoration of the House of Orange in the Netherlands. King William I renounced all claims on the confiscated collections and took great interest in the library, called *Royal Library* for the second time. As the collections were on the increase once more, a new accommodation was required.

In 1821 the library was situated in an early eighteenth-century building in the *Lange Voorhout* which has remained its most important site since then, although

for the last few years all newspapers and some of the old books have been housed elsewhere in The Hague.

The French annexation had seen an end to the exclusive use of the library by a small privileged group: the library was now opened to the public at large. New regulations in 1837 arranged for the lending of books. In the beginning special permission of the minister was required for taking books out of The Hague.

The period from 1815 until around 1870 saw a steady, if unsystematic and uneven growth of the collections. This increase was due primarily to the acquisition of whole libraries, since the budget hardly allowed for regular purchases from booksellers. Moreover, both the Ministry of the Interior (under which direction the library functioned) and Flament (a great bibliophile, but out of contact with the scientific developments of his time) had a marked preference for the purchase of costly works and rare editions.

Under the librarianship of Flament's successor Jan Willem Holtrop (1835–1868), the collection was enlarged in a more scientific way. One of the founders of modern incunabular science, Holtrop devoted much attention to the acquisition and the cataloging of manuscripts and old books. During this period the influence of J. R. Thorbecke, the great Dutch statesman, was of more equivocal value. As Minister of the Interior he personally supervised the library's acquisition policy. As such he demanded the utmost thrift, while strongly recommending the purchase of modern books of interest to politicians (politics, economics, and law), at the expense of works of predominantly typographical interest. On the one hand Thorbecke imposed severe and undesirable restrictions upon Holtrop; on the other hand he put his finger on the collection's weak spot: the acquisition of modern works in which the library had little interest until that time.

Important changes were initiated under the administration of Holtrop's brother-in-law and close collaborator for years, M. F. A. G. Campbell, who succeeded him as librarian (1869–1890). These changes were not so much due to the new librarian, who continued his predecessor's policies, as to the fresh wind that blew over the country after 1870. A time of rapid economic growth, it also saw a scientific and artistic revival. For the library this resulted in a rapidly increasing budget and a steady enlargement of the number of staff which until that time had never exceeded four or five.

Only now did a systematic acquisition of modern works come within reach. When the balance was struck in 1876, it appeared that there was no point in filling up the gaps as far as the natural, technical, and medical sciences were concerned. From then onward the library therefore consciously refrained from acquisitions in these fields. On the other hand, philosophy, theology, philology, and the arts were now added to the subjects Thorbecke had already desired for the library to develop representative collections.

Campbell was succeeded as librarian by Theodoor C. L. Wijnmalen, who died in 1895 and who was replaced by Willem Geertrudes Cornelis Byvanck, a literary historian of great stature, but without previous library experience. This may have inspired in him an absence of bias not without its advantages in a time of tempes-

tuous change. In any case, the years of the Byvanck administration (1895–1921) saw the transformation of the Royal Library into a modern large-scale enterprise. Thus the number of staff members with university training increased from five in 1890 to fourteen in 1920. In 1908 the accommodation was enlarged by means of a new building erected in the former garden (the present Kazernestraat) and connected with the main building. The new building had a storage capacity for 300,000 volumes, while space was also found for a new reading room with eighty-four seats.

In spite of these improvements, Byvanck's librarianship was not an unequivocal success: his imagination frequently outran his practical sense and his grand projects often left first things undone. This is especially striking in the field of cataloging. His predecessors had never arrived at a satisfactory disclosure of the library collections by means of an alphabetical or a subject catalog, with the exception of Holtrop's excellent printed catalog of incunabula. Under Byvanck's administration, several partial catalogs have appeared in print or have been prepared, among them a thirteen-volume catalog of historical books, a nine-volume catalog of pamphlets, and the first part of a catalog of manuscripts. But alphabetical and subject card indexes of the collection at large were still lacking at the time of his resignation. Moreover, too ambitious designs, like the inclusion of articles in periodicals in some of the catalogs, hampered the progress of cataloging. In the field of documentation, too, Byvanck launched several schemes that proved too ambitious for the library's financial resources. Among them was a subject index to Dutch periodicals which ran to eight annual volumes between 1914 and 1921.

Philipp Christiaan Molhuysen (1921–1937), Byvanck's successor, was a well qualified professional librarian with a marked practical sense. Molhuysen's administration meant an immediate and radical reversal of Byvanck's policy: his costly and laborious projects in documentation were brought to a stop, whereas work on the alphabetical and subject catalogs was firmly taken in hand. On Molhuysen's resignation these catalogs had practically been completed and so at last the collection was disclosed in a satisfactory way. Moreover, Molhuysen has done his utmost to bring more coherence and unity to the Dutch library scene and to assign a central role to his own, as the national library. Thus he brought about two institutions that will be referred to later, the Union Catalogue (1922) and the International Exchange Office (1928). In connection with these coordinating activities the institution of the State Advisory Council on Librarianship (1922) should be mentioned, with the director of the Royal Library *ex officio* in the chair.

Molhuysen's successor, Leendert Brummel (1937–1962), had to safeguard the library in one of the most difficult periods of its existence: first the economic crisis, then the German occupation, and finally the frugal policy of the first postwar governments put staff and financial means both under continued heavy pressure (besides the problems peculiar to the war). Under his administration large-scale renovations were out of the question. Building on the foundations laid by his predecessors, Brummel was nevertheless able to effect important improvements in many fields.

Thus he continued Byvanck's careful acquisition policy; the building of the collection, which had been overlooked by Molhuysen owing to his organization

preoccupations, again became a high priority. And once the most frugal postwar years were over, Brummel successfully sought to enlarge the number of university trained staff members: thus responsibility for accessions in the Dutch, German, and English philology departments was now allotted to individual subject specialists, whereas the upkeep of these subjects had previously been entrusted to one staff member only; other specialists were attached to the library to take care of the social sciences and geography. Cooperation with other research libraries, which had left much to be desired under Molhuysen, was put on a sound basis again by Brummel. Finally, Brummel systematically extended the library's services, for instance, a separate union catalog for periodicals in 1943.

When in 1962 Cornelis Reedijk took charge of the library instead of Brummel, the postwar period of recovery could be regarded as brought to a close, and the country found itself on the brink of a new period of expansion. As in the later decades of the last century, the Royal Library has amply shared in this expansion. Thanks to the enlargement of financial resources after 1962, the collections have grown faster than ever before. Also these ampler means and the increase of personnel have made it possible to assume tasks former librarians had of necessity left undone. Thus in a workshop with modern equipment, specially trained workers apply themselves to the restoration of old bindings; for the last few years a group of university trained staff members have been occupied with a thorough revision of the collection of old books printed between 1540 and 1800. Lastly, the Royal Library takes care of a bibliography of books translated from the Dutch. Over and above that the library has contributed to the automation of librarianship, among other things through a mechanized union catalog of periodicals, started in 1966.

Because of all these novel activities, and because of the accelerated growth of the collection, the library outgrew its accommodation, even after it was extended to an eight-story building in the Kazernestraat in 1960–1963. Plans for a new building elsewhere in The Hague have therefore been devised, the realization of which will probably be brought about by 1978. Only time can tell to what extent these plans will be affected by the worsening economic conditions of the last few years.

If, after this short historical survey, we now proceed to a description of the library's task and function in Dutch librarianship, it should be noted first that it only partially fulfills the role of a "national library."

Notably lacking is the function of a legal deposit library. During the last century the Netherlands have been familiar with this institution and, although it has often hardly been enforced, the library owes a not negligible part of its collection to it. The 1912 Copyright Act did away with the obligatory deposit copies for publishers and since that time the Royal Library has depended upon purchases for the acquisition of a large part of Dutch book production.

In the fields of manuscripts, incunabula, and old books from the period 1500–1540, pamphlets, and song books, the Royal Library possesses collections representative of Dutch book production. Furthermore, for the last decade complete

coverage has been attempted as far as Dutch literature and Dutch newspapers are concerned. In the domain of the natural, technical, and medical sciences hardly anything has been acquired since 1876. In other fields—humanities and social sciences—a selective acquisition policy is being followed: only those works are bought that are deemed necessary for the study of the arts and sciences.

Because of this, works in the Dutch language currently make up about 15% of the library's collection, while the majority is constituted of foreign scientific and literary works. Although one must act upon a very selective principle, it can be maintained that the library has built a collection of representative foreign works in many fields, on the understanding that it is mostly restricted to works in the French, German, and English languages, works in other languages usually being left to the university libraries.

The collections now include almost a million volumes. Among these are about 2,000 incunabula (half of them Dutch and Belgian printings), and 4,000 books printed between 1500 and 1540. The collection of manuscripts comprises 1,500 medieval manuscripts (400 of which are illuminated), 200 alba amicorum, 100,000 letters and 3,000 other manuscripts.

Among the library's "curiosities" are several collections from private libraries acquired through donation or purchase, and further enlarged since then. There is the "Bibliotheca Van der Linden-Niemeijeriana," with some 15,000 volumes—the largest chess collection in Europe. There are also collections on falconry, on Joan of Arc, and on the history of paper making and cooking.

The absence of a legal deposit also accounts for the fact that the Royal Library does not publish a national bibliography as do most national libraries. As far as bibliographical publications are concerned, the library's role has been restricted thus far to an annual bibliography of Dutch official publications (since 1929) and, for the last few years, a bibliography of translations from the Dutch.

The legal deposit problem is now under study again. A government commission instituted in 1970 has already drafted a bill concerning the introduction of a legal deposit scheme, which is taken into account in the newly planned library building. If this legal deposit materializes the library will also be charged with the publication of a national bibliography.

In two respects the Royal Library already functions as a national library through two of Molhuysen's creations mentioned above.

More than eighty libraries are now participating in the *Union Catalogue of Books* (Centrale Catalogus—CC), while the *Union Catalogue of Periodicals* (Centrale Catalogus van Periodieken—CCP) has about 250 participating libraries. In the CC some 5 million titles are registered, in the CCP 130,000 with about 300,000 holdings. Moreover, a *Union Catalogue for Congresses and Symposia* (Centrale Catalogus van Congressen—CCC) is being built up since 1964. In the last few years there has been a marked increase in the consultation of the three union catalogs: in 1971 they dealt with 222,756 inquiries (by mail, telephone, or telex), 43% of which was accounted for by the CCP and about 2% by the CCC. As

regards the CCP, a decline in the number of inquiries can be expected in the near future as a consequence of its automation. About 60% of the catalog has already been published in book form and it is hoped to complete publication within the next 3 years. As work progresses, users of CCP services will have to apply to the Royal Library less frequently.

Molhuysen's second creation is the International Exchange Office, which acts as intermediary for the exchange of books between Dutch and foreign libraries and scientific institutions.

Finally, something should be said about a few institutions connected with the Royal Library that fulfill functions peculiar to a national library.

By virtue of his office, the director of the Royal Library is head administrator of the Museum Meermanno-Westreenianum founded in 1852 and established since then in the Prinsessegracht in The Hague. It comprises the extensive collections bequeathed to the Dutch state in 1848 by the bibliophile and collector W. H. J. baron van Westreenen van Tiellandt: Egyptian, Greek, and Roman coins and antiquities, valuable pottery, and also about 17,000 books, among which are 1,233 incunabula and over 300 manuscripts. In 1960 Brummel provided this remarkable and typical nineteenth-century museum with a larger scope: in that year it was established as a Book Museum, thus enabling it to pay attention to *modern* books as objects of art as well.

The director of the Royal Library is also officially director of another institution which cooperates closely with the library, the Nederlands Letterkundig Museum en Documentatiecentrum or Dutch Literary Museum and Documentation Centre, founded in 1953. It has been set the task of tracing and preserving manuscripts and correspondence of Dutch men of letters as well as documentary activities in the field of Dutch literature, and restricted to the period from 1750 until now.

A. A. DE JONGE

KOREA, LIBRARIES IN THE REPUBLIC OF

The system of library resources and services that exists in Korea today reflects the historical, cultural, and geographical aspects of the country. An ancient country, whose history reaches back into the mists of mythology, Korea is located adjacent to eastern Asia and in the realm of Chinese culture. Due to its aptitude for assimilation and adaptation to improve the old and to discover the new, librarianship in Korea has kept pace with the transition of the country.

Korea, whose domain extended over both the greater part of Manchuria and the Korean peninsula in its early period, was unified under the single rule of the Silla Kingdom in the seventh century. Experiencing only two subsequent dynastic changes, the Koryo dynasty (A.D. 918–1392) and the Yi dynasty (1392–1910),

Korea was ruled by Japan for the first four decades of this century. The period of complete Japanese control (1910–1945) brought lasting effects to Korean modernization which can be seen in particular in the area of library development. The Japanese surrendered in 1945 and Korea was put under the military occupation of two powers, the United States and the Soviet Union, which eventually partitioned the country at the 38th parallel. Unifying efforts failed, so the Republic of Korea, which is the topic of this article, was established in the Southern zone in 1948. The Korean War (1950–1953) further delayed the growth of the nation as a democratic society.

Despite pursuing invasions from outside forces and the obvious influences of Chinese culture, Korean culture has a vitality and individuality which is strikingly native. Korean music, literature, scholarship, and printing have had a long history and are important to its people. The Korean alphabet, *Han-Gul*, is the national language in which reading is easily learned and which has been a noteworthy educational vehicle for increasing literacy. The illiteracy rate has dropped from 78% in 1945 to 12% in 1955 and to 11% in 1965. Running counter to the illiteracy rate is book production which has risen from approximately 1,000 titles in 1946 to 1,300 in 1955 and to 3,187 in 1965. Today well over 4,000 book titles are published in the Republic of Korea (1). The rising literacy rate is also due to the present system of education which provides compulsory elementary education and which is organized in the 6-3-3-4 pattern. Education is centralized under the Ministry of Education, one of the fifteen ministries of the government which is based on the Western democratic system.

Geographically, Korea is a small mountainous peninsula jutting out from the southeastern edge of Manchuria between the Yellow Sea and the Sea of Japan, covering approximately 85,268 square miles of which 20% is arable. The nine provinces of South Korea comprise 36,769 square miles of the peninsula (about the size of Holland or the state of Indiana) and the remaining 48,499 square miles is North Korea. North Korea is larger in its physical size and richer in raw materials than South Korea, and has a well-developed pattern of industry, which includes Korea's paper mills, a factor of significance to the book world. South Korea is relatively poor in natural resources and has a dense population (30 million, about 312 persons per square kilometer) which is primarily of Mongolian stock.

Massive efforts to modernize have enabled the nation to increase its gross national product (GNP) at the high rate of approximately 8% annually throughout the first two Five Year Plans (1962–1971). Per capita GNP has grown from \$76.1 in 1953 to \$223.3 in 1970. More than one-fourth of Korea's GNP comes from agriculture and fishing, followed by manufacturing and wholesale-retail trade (2).

The peninsular structure and its location as it extends from the Asian land mass has caused it to be the proving grounds of other nations' aggressions: Mongol attempts to invade Japan used Korea as a bridge; Korea was a crossroads of bitter rivalry between Russia, China, Japan, and ambitious Western nations; the latest Japanese invasion of China was via Korea; and, in a more peaceful vein, much of the Chinese influence on Japan's culture found its way through the Korean

peninsula. Its geographical location is the most significant factor in its history, culture, and consequently in its librarianship as a whole.

History

EARLY PERIOD: BEGINNINGS TO THE MIDNINETEENTH CENTURY

It is not possible to determine just when library became a fact in Korean life, but collections in schools have been in existence for at least 2,000 years. The first library described dates back to the Go-Jo-Seon period (195–57 B.C.? to A.D. 313) when the Korean's earnest desire for education and enthusiasm for learning resulted in private collecting of books. There was also royal collecting of books during the second century B.C. Continuous recorded library history, however, starts during the period of the Three Kingdoms (57 B.C.?–A.D. 661) when the central government established the *Tae-Hag* ("great school") in A.D. 372 by decree to educate upper class youths and the *Hyang-Dang* ("place for learning") to educate young men from ordinary families. At *Hyang-Dang* in particular, books were organized in broad classes such as Philosophy, History, Classics, and Belles Lettres (3–5). Since then, libraries have been called by different names in different historic periods. Fostered by the Buddhist religion and Confucian philosophy, libraries accumulated reading materials as an integral part of the national emphasis on education and learning.

Unification under the single rule of the Silla Kingdom (A.D. 661–918) in the seventh century, which was followed by only two subsequent dynastic changes, provided opportunities for libraries to grow and prosper. The first important royal library was established by Sin-Mun-Wang (681–691) in 682. Strengthened by succeeding rulers who were also patrons of literature (6–8), royal libraries remained the most dominantly consistent type until the modern era.

During the Koryo dynasty (918–1392) some important cornerstones for library growth were formed. The Koryo King, Se-Jong (982–997), opened a golden age of libraries in Korea when he set up a national policy of books and libraries. The national policy augmented the royal library and started a national archival center, at the same time encouraging the establishment of temple libraries for Buddhistic literature and private libraries for individuals. Mongolian invasions during the thirteenth century prompted the country to found *Sa-Go* ("storehouses for history") in four distant decentralized places, and thus the traditional policy of keeping duplicates to preserve reading materials against foreign invasions and other incidents was initiated (9–11).

Two important factors which contributed to contemporary library growth were the multitude of authors and growing demands of the reading public. The manifestation of literature in every branch of intellectual activity was further illustrated by two important developments: paper (12–15) and printing, both woodblock and movable metal types (16,17). Introduced by the fifth century from China, developments of papermaking and printing techniques reached their height during

the thirteenth century. Buddhist charms, which were discovered recently and are the oldest extant woodblock printing of Korea, date back to about A.D. 685 (18), older than Shotoku's one million Buddhist charms by almost a century. Both the methods of making paper and the application of woodblock printing techniques were culminated in the famous extant and monumental production of Buddhist literature, *Tripitaka Koreana*. The first carving of this woodblock printing, begun in 1011, was destroyed by the Mongolian invasion of 1232. A second undertaking was completed in 1252 after 16 years of effort. These 81,258 woodblocks in 6,791 volumes of 160,000 pages are today stored in the woodblock temple library of the Hae-In-Sa on Mount Gaya, west of the city of Tae-Gu (19-21).

Significantly, the invention of a movable metal-type printing press in Korea, first used in 1234, is older by some 210 years than Gutenberg's invention (22-24). Linking invention of printing in the Far East to its spread westward in his extensive research work, Carter states that "printing with metal type was done on an extensive scale" (25). Historians acknowledge the fact that "it reached its highest point in Korea with fifteenth century with the extensive use of cast metal type that began in the year 1403" (26-29), the early part of the Yi dynasty (1392-1910).

Indeed, a brilliant cultural renaissance reached its peak under the reign of Se-Jong (1418-1450) of the Yi dynasty who strengthened the library traditions of the Koryo. Se-Jong's personal interest and initiative in many scientific inventions and cultural innovations saw vital publishing activities and the outpouring of a great deal of literature. Perhaps Se-Jong's most outstanding creative achievement was the Korean alphabet *Han-Gul* which was promulgated in 1446 as "the letters for teaching the people." A very good phonetic alphabet employed in a fashion like a syllabary and suited to the native Korean language of the Ural-Altai family, *Han-Gul* made a complete departure from written Chinese of the Sino-Tibetan family. Work on the alphabet proceeded slowly, and Korean scholars on trips to Liaotung, Peking, and Central Asia consulted many Chinese and Sanskrit phonologists. Finally, in 1446, the alphabet was promulgated after 3 years of intensive study by leading scholars of the time at *Jip-Hyeon-Jeon* ("Hall of Assembled Scholars") in the work *Hun-Min Jeong-Eum* [*Correct Sounds for Instructing the People*] (30-34).

The present name of the script *Han-Gul* [script of the Han ("Korean") people] was devised by the modern grammarian Ju Sigyeong (1876-1914) for the script invented at the command of King Se-Jong. It contained 28 letters, 17 consonants and 11 vowels when it was proclaimed in 1446; various modifications reduced these to 14 consonants and 10 vowels. Words are written in syllable clusters. In the preface to the *Hun-Min Jeong-Eum*, King Se-Jong reasoned this undertaking as follows:

The sounds of our language differ from those of China and they do not accord with written [Chinese]. Therefore, there are many of the common people who have something they wish to express but are ultimately unable to bring out their feelings. In sympathy with this, I have newly made twenty-eight letters, simply desiring that men become familiar with them and easily put them conveniently into daily use.

The compound advancement of paper, printing, and *Han-Gul* during the fifteenth century was an index of a thriving growth of libraries. Mostly organized under four broad classes of subjects (Classics, History, Philosophy, and General Encyclopedias), which were further subdivided minutely, royal libraries were the most notable single library (35). The extant and most famous library is the latest one, *Gyu-Jang-Gag* ("The Royal Library"), founded in 1776 by Jeong-Jo (1776–1800) who was responsible for the cultural and intellectual revival of the eighteenth century. This collection of soft-covered bound volumes, kept from 1776 until 1910, is in remarkably good physical condition due to the high quality of the paper used and the unheated buildings in which the collection was housed. It is a rare collection, of inestimable value, concerning the history and culture of Korea and other Far Eastern countries. Transferred to Seoul National University Library in 1929, *Gyu-Jang-Gag* includes books of literature, fine arts, calligraphies of the Yi kings, their official orders, instructions and wills concerning public administration, and records of the Royal Household. It has a total of 138,989 volumes and 25,620 titles; out of this total number 73,421 volumes and 19,708 titles are Korean, and 65,568 volumes and 5,912 titles are Chinese.

A central repository for books was established in the capital in the first half of the sixteenth century, and shortly thereafter various works planned for the education of the common people were distributed throughout the country (36). This was the first attempt to begin true public library service in Korea. Attached to different levels of the education system, there were three kinds of libraries for the common people: *Seo-Dang*, *Hyang-Gyo*, and *Seo-Weon*. *Seo-Dang* ("Private Academies"), a primary education organization, were established in most villages throughout the country while *Hyang-Gyo* ("Regional Schools"), a secondary educational system, existed in each administrative district. *Seo-Weon* ("Lecture Halls"), a combination school and reading center, were established in rural areas in order to encourage people to learn by reading books. These libraries had the responsibility to receive, deposit, and preserve books, manuscripts, and other cultural items as well as to open their facilities for the use of authors, scholars, and individuals. Today over 520 of these libraries are preserved as local history sites in the Republic of Korea (11,37,38).

MIDDLE PERIOD: MIDNINETEENTH CENTURY TO 1955

Gradual recognition of the importance of Western learning arrived at the turn of the nineteenth century. However, Korea self-imposed a closed door policy to all foreign countries during the later half of the nineteenth century when the new Western thoughts and civilization infiltrated the country. While this land of strategic importance became a scene for the power struggles of Japan, Russia, China, and Western countries, the awakening to Western civilization started the movement for changing the administrative system of government, establishing schools, and publishing newspapers. For instance, schools along Western lines were established in the 1880s and a new education law that established primary schools,

high schools, and normal schools was proclaimed in the 1890s when outside powers began to pawn the Korean peninsula in their strategy. As a part of the modernization movement, a new library concept was introduced to Korea in accordance with the idea of democratic rights and equal educational opportunities. However, the modernization of Korea, which included literary development, was interrupted by the Japanese plans for all-out penetration of Korean culture, particularly during the last quarter of the nineteenth century.

The rise of the modern library in Korea is a story descriptive of the education of Korea, which was marked by political instability together with social and economic problems. The modern library status of the country can be divided into two great periods: from the last quarter of the nineteenth century until 1955 when the Korean Library Association was reorganized, and from 1955 to the present time.

The period of 1875–1955 is marked by political instability as shown by the following events.

1. 1875–1910: Japanese efforts to penetrate and take over Korea.
 - (a) Japan vigorously pursued expansion policies in Korea beginning in the last quarter of the nineteenth century. Specifically, Sino-Japanese rivalry in Korea during the 1890s ended in Japan's superior position, both political and economic.
 - (b) Russo-Japanese War (1904–1905) cleared Japan's political, military, and economic prerogatives in Korea, and in 1905 Korea was forced into a protectorate treaty granting Japan virtual control of the government whereby Korea, in effect, ceased to exist.
 - (c) The Treaty of Annexation in 1910 brought the Yi Dynasty to an end, depriving Koreans of freedom not merely in the political field but in every aspect of Korean life.
2. 1910–1945: Korea was forcibly annexed by Japan in 1910 and liberated from Japanese domination in 1945. Japanese colonial policy literally attempted to exterminate Korean culture, barring the use of the Korean language and banning Korean newspapers, magazines, and books.
3. 1945–1948: Military occupation of Korea by the United States and Soviet Union liberation forces bisected Korea at the 38th parallel, with the United States forces occupying the southern half and the Soviet Union troops the northern half. For 3 years military governments were enforced by alien forces with administrative power. In 1948 elections in the south established the Republic of Korea, while another government was established in the north.
4. 1950–1953: The Korean War, that destroyed whatever was left of the colonial period, brought the country to a standstill in its modernization efforts and left libraries in Korea in shambles.

A tentative modernization of the Korean library system came under Japanese rule (1910–1945) when Japan set out to incorporate Korea as part of the process of making a modern Japan. When authors touch on the period of Japanese occupation, they often confuse the real with the imaginary contributions of the Japanese. These authors refer to Korean libraries prior to 1900 as "gracious things, manifestations of culture, but the Japanese brought with them a new (western) concept of the (functional) purposes to which books be put" (39). It is true that

the Japanese modernization movement brought something like a modern university library (departmental libraries in 1906, 1923, etc.) and started the forerunner of a national library in 1923, but this development did not include Korean language materials. The prototype of public libraries in the modern age was first introduced for the Japanese living in Korea in 1901. However, public libraries together with school libraries were virtually nonexistent and the few libraries which were in operation were restricted in use.

Ironically, however, Japan had not yet become a democratic society, despite a seemingly modern appearance, when libraries were planned by the government, as Sawamoto declares for Japanese library services during the first half of the twentieth century (40). Aided by the Japanese library law, the numeric growth of libraries accompanied the deterioration of services, particularly in Korea, where the Japanese tried to kill the spirit of Korean independence while preparing for World War II. What Gitler summarized about Japanese librarianship prior to 1945 is also applicable for Korea (41,42); preservation and custodial concepts were promoted with the long-focus on cataloging and classification.

Modern libraries, primarily political as introduced and projected by the Japanese, created a public image of the modern library as a tool for propagandizing colonial policies. This image has handicapped modern library services by making the public suspect the libraries are for political propaganda, and consequently the public provides meager support, both financial and moral, to libraries.

To the Japanese, the library was a political tool reinforced by persecution. The ban on the use of the Korean language, both spoken and written, prohibited all Korean publications, particularly reference works and works of scientific nature. This vacuum of literature paralyzed the development of the Korean language and prevented the growth of modern libraries in Korea. Oh offers this analysis: "At the time of the Japanese capitulation in August, 1945, the libraries in Korea reflected the policies and planning of the Japanese in their forty-years domination more than they represented one accumulated knowledge of Korea" (36). However, the Japanese occupation emerges as only the first of the two key obstacles to the development of modern library services in Korea.

The second key obstacle to modernizing both the country and its library system was the partition of Korea at the 38th parallel and the subsequent Korean War from 1950 to 1953. Liberation from Japanese dominance promised the revival of libraries that would truly be transformed from static bibliotheca into functional information resource centers and from political propaganda tools to cultural repositories and centers of learning.

An immediate partial solution was to open libraries with large numbers of technical books in English which eventually "served to limit the number of patrons who could profitably consult the books" (43). For instance, the U.S.I.S. Library was considered to be the first library for general public use in Korea. Books salvaged from those discarded by the U.S. Army Library Service became additions to the College of Education Library of the Seoul National University, which also received a generous gift of dictionaries from the Merriam-Webster Company; these

were shared with other departments of the university. College and university collections at this time were not for general student use but rather for the professors. Existing libraries, such as the Central Library (present Central National Library), attempted to change their character in 1945 by collecting books written in Korean which would represent the accumulated knowledge of the country.

The formation of the energetic Korean Library Association (KLA) in 1945 seemingly launched a new era. The first official meeting was held in 1947. The KLA attempted to lay the ground work of Korean librarianship by training librarians and publishing basic library tools. In 1946 the KLA established a library training center to offer a 1-year course (originally a 6-months course) which produced about 100 students by the beginning of the Korean War in 1950. Basic tools for librarians were formulated and produced: two of these were the *Korean Decimal Classification*, which is still used by the Central National Library, and the *Korean Cataloguing Code*, which served as the basis for today's code in Korea. These initial efforts to plant seeds of modern library services under North American influence were abruptly crippled by the outbreak of the Korean War.

MODERN PERIOD: 1955 TO THE PRESENT TIME

The post-Korean War period was initiated by two auspicious events: the reorganization of the Korean Library Association in 1955 and the passing of the Library Law in 1963, whereby the government publicly recognized that libraries play major roles as an educational mass medium in building scholarship and as vital instruments by becoming cultural centers in constructing a democratic society.

The library world after the armistice of the Korean War was like the bursting of a dam behind which the energies and forces of centuries had accumulated. Parallel with the massive reconstruction of its overall economy in order to regain its prior status as an Asian power, the democratization of education became a great concern of the populace after the war and gave effective stimulus to Korean librarianship. Elementary school attendance rose from 57% at the end of the

TABLE 1

Year	Libraries			
	Public	Academic	School	Special
1950	16 (100%)	17 (100%)	—	14 (100%)
1955	12 (80%)	48 (253%)	—	15 (107%)
1960	18 (101.2%)	68 (400%)	149 (100%)	41 (294%)
1965	49 (306.2%)	109 (641.2%)	1,422 (954.4%)	71 (507.1%)
1970	60 (375%)	129 (759%)	2,260 (1517%)	134 (957.1%)

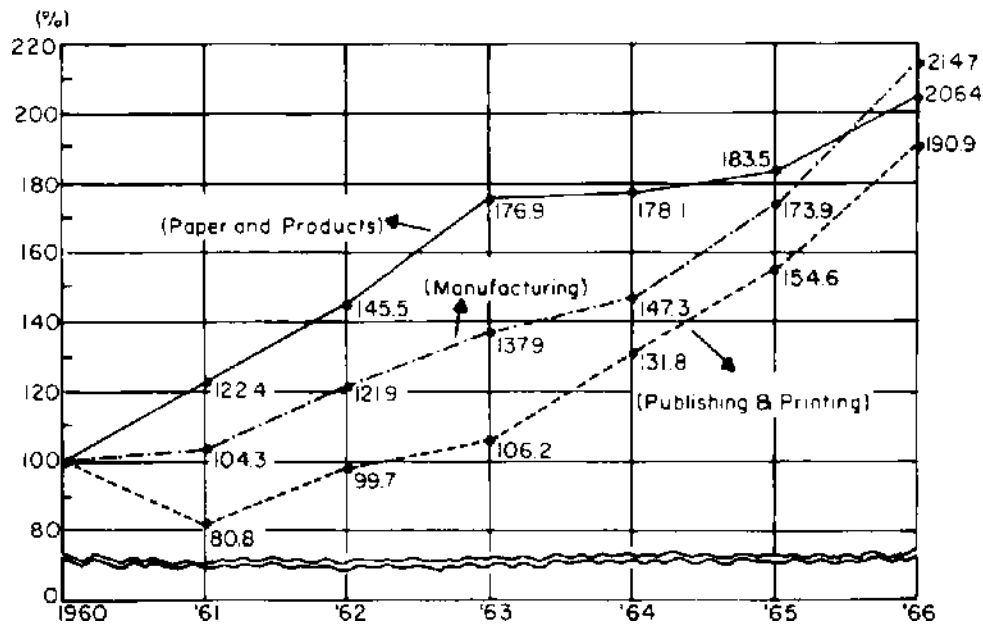


FIGURE 1. *Publishing trends in Korea.* (From Yun-Hyun Chin, "Problems of Korea's Publishing Industry as Seen through Market Survey," in *Books and National Development*, Korean Publishers Assoc., Seoul, Korea, 1969?, p. 73.)

Japanese occupation to 77.4% in 1955 and 95.1% in 1965, whereas illiteracy of the adult population dropped from 78% at the time of Korean independence to 12% in 1955 and 11% in 1965. The picture of libraries changed as shown in Table 1.

Librarianship was further aided by the rapid progress of the publishing industry as it responded to increasing demands for reading materials printed in the Korean language. (See Tables 2 and 3 and Figure 1.) It is interesting to note the various methods that a library may apply in purchasing publications with the largest

TABLE 2

Statistics on Book Publication (1,2,15)

Year	Total	Index (%)
1948	1,136	100
1950	—	—
1953	1,100	96.8
1955	1,308	115.1
1958	1,281	112.8
1960	1,618	142.4
1963	3,042	267.8
1965	3,187	280.5
1966	3,464	305.0
1970	4,207	370.0

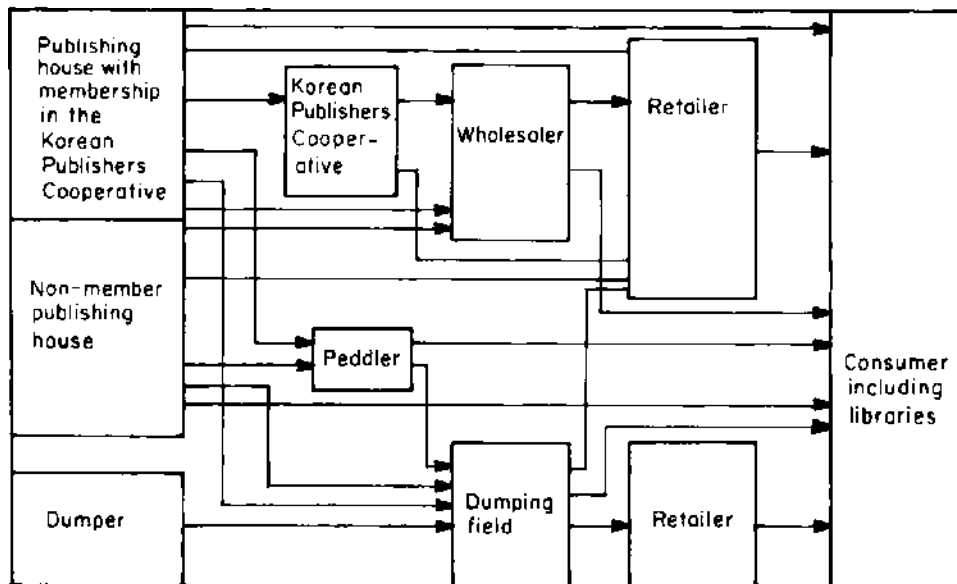


FIGURE 2. *Distribution of books in Korea.* (From Yun-Hyun Chin, "Problems of Korea's Publishing Industry as Seen through Market Survey," in *Books and National Development*, Korean Publishers Assoc., Seoul, Korea, 1969?, p. 58.)

discount, the best services, and other benefits. (See Figure 2.) This distribution pattern of books indicates the lack of wholesalers who specialize in library purchases.

Professional Associations and Development

The KLA was reestablished in 1955 as a nonpolitical, nonprofit organization which is "a social and academic institution of all the libraries and librarians in the Republic of Korea" (44). The KLA "aims at promoting and improving library services and facilities in Korea through mutual exchanges and cooperation among

TABLE 3
Statistics on Books Translated by
Language (1967) (1,2,15)

Languages	Title	Ratio (%)
Japanese	53	19.5
Chinese	43	15.7
English	106	38.8
French	15	5.5
German	13	4.8
Russian	10	3.7
Others	3	1.0
TOTAL	273	100.0

foreign and domestic libraries and librarians with the ultimate purpose of contributing to the cultural and economic development of (the) Korean nation" (44).

Operated by such revenue sources as government subsidies, membership fees, income from Association projects, and subsidies from related organizations, the KLA has secured memberships in both the International Federation of Library Association and the Asian Federation of Library Associations. Membership in KLA falls into four categories: (1) institutional membership, including libraries, schools, and other organizations providing reading facilities; (2) individual membership, including employees of libraries and organizations with reading facilities as well as those who have completed 18 credits or more in library science and who would promote the principles and objectives of the KLA; (3) supporting membership, including individuals or groups who support the principles and objectives of the KLA; and (4) honorary membership, including those who have contributed to the development of KLA and who are recommended by the Association's Board of Directors. When the KLA held its first national convention in 1955, its total membership was 98 library representatives; by 1973 the membership had increased to over 890 (about 420 institutions and about 450 librarians).

Headquartered in the compound of the Central National Library in Seoul, the KLA has a secretariat with two departments, five divisions, and nine committees:

- | | |
|--------------|--|
| Secretariat: | (1) General Affairs Department |
| | (2) Program Department |
| Divisions: | (1) Public Library Division |
| | (2) College and University Library Division |
| | (3) School Library Division |
| | (4) Special Library Division |
| | (5) Medical Library Division |
| Committees: | (1) Technical Committee |
| | (2) Administration and International Relations |
| | (3) Training and Research Committee |
| | (4) Classification Committee |
| | (5) Cataloging Committee |
| | (6) Publication Committee |
| | (7) Terminology Committee |
| | (8) Bibliography Committee |
| | (9) Mechanization Committee |

Do-Hyub-Wol-Bo [Bulletin of the Korean Library Association] has been the official journal since 1960. It is published monthly.

Since 1962 the association has held the National Convention of Librarians at different provincial capitals annually in order to promote library services and facilities and to enhance the cultural development of Korea. The primary goal of the annual conferences is to study and discuss current problems of Korean libraries. The annual conferences are also aimed at helping government officials and the general public to understand and recognize the important role that libraries and library science play in society.

Since 1964 "Library Week" has become one of the regular activities sponsored by the KLA, which first participated in "Book Week" in cooperation with the Ministry of Education in 1955. Besides administering the Distribution Center, which was first conceived of in 1959 as the central pool for reference materials, and the Library Prize, first established in 1968, the KLA manages the Korean Bibliographical Center at its headquarters. Founded in 1968, and supported by the government, the Korean Bibliographical Center aims at providing accurate and comprehensive information materials on Korean studies to both foreign and local scholars. Although Korean bibliographical services have been building slowly on sound lines, librarians and bibliographers in Korea feel that further developments are needed, especially in the areas of coordinating and speeding up the bibliographic efforts through more financial support—preferably from government sources.

The two oldest programs initiated by the KLA that still continue are training programs for librarians and publication programs of professional literature. The KLA has conducted ten training programs since 1955, and has produced 660 librarians at the introductory level and 160 at the advanced level. Between 1964 and 1967 the KLA trained 418 teacher-librarians for schools whose qualifications had to comply with the Library Law of 1963. In 1965 and 1966 the KLA conducted special training programs for 160 librarians who had no formal training. Annually the KLA also conducts nonperiodic programs at municipal and provincial levels to recruit teachers and educate them as librarians. These annual programs have proved to be valuable because they include special seminars on library services on behalf of the principals of secondary schools, who in turn have become strong supporters of libraries as an integral part of the high school system.

The oldest program of the KLA is publication. Besides the publication of the monthly official organ, the *Bulletin of the KLA*, this organization has issued *Statistics on Libraries in Korea* annually since 1955. The backbone of the publication programs has been "The Korean Library Science Series," which was conceived of in the early 1960s and which was first issued in 1964 to cover the academic achievements by library scholars and library science organizations in Korea. The association brought out a number of publications on library science, translations of foreign publications, and reference materials necessary for library management.

In May 1969 the KLA held its first international meeting and sponsored the Asia Pacific Conference on Libraries and National Development in Seoul. This 3-day conference of representatives from ten countries reviewed and discussed matters regarding the role of libraries in the process of the nation's modernization. This conference also served as an occasion to promote community awareness of library's role in the region and further attempted to enhance international library cooperation. The association plans to host the annual conference of the IFLA in 1976 in Seoul.

Perhaps the most significant achievement of the KLA has been the passage of the Library Law that was promulgated on October 28, 1963. This permissive legislation, set forth in Law No. 1424, encourages development of public and school

library services, including academic libraries of higher educational institutions. At the same time this law appoints the National Central Library to be a legal depot for books and documents published in Korea and to be a center of national resources, bibliographic services, international exchange, research and study in librarianship, and to instruct and support other libraries. Also, the Library Law authorizes the national and local governmental units, within budgetary limits, to grant subsidies to the KLA which was founded to promote interlibrary cooperation, research on library administration and management, international library cooperation, and social and economic advancement of library personnel. As a keystone in the structure of library development in Korea, the Library Law has had a significant impact both in the total number of libraries serving the country and in the qualitative improvements of library services despite the inadequate definition of the role of libraries and a concomitant lack of comprehension concerning their true function. Libraries are not simply storehouses of cultural commodities to be rigidly safeguarded but are rather centers of learning with tools of knowledge and communication—tools which must be available in the kinds and quantities needed and which must be used to be of assistance; this fact is not strongly realized.

The Library Law of 1963 was passed when the first group of librarians from the first Korean library schools, Yon-Sei and E-Hwa, begun in 1956 and 1959, respectively, became active professional members in society. Education for librarianship in Korea is confined to four levels of study in library science. These centers of study are all located in Seoul, from which programs are dispatched to other areas when there is a need to train library personnel. The four levels of study in library science are offered at the university level (Yon-Sei, E-Hwa, Sung-Kyun-Kwan, and Chung-Ang), at the graduate level (Yon-Sei, E-Hwa, Sung-Kyun-Kwan, and Chung-Ang), at the special level with special lecture courses at the universities of Yon-Sei and Sung-Kyun-Kwan for 1 year, and at the National Central Library, and at the teacher-librarians level of education (E-Hwa for the Seoul area and the KLA for the provinces, under the supervision of the Ministry of Education) (45,46). The schools at the university level and graduate level grant a Bachelor's degree and Master's degree, respectively, to their graduates, while special level training gives a certificate. Programs for teacher-librarians offer teacher-librarian certificates. A doctorate degree is not offered. These programs at different levels offer degrees that have neither the same formal status nor the same intellectual level. The lack of legislation to establish formal and distinct levels of education, along with personnel classification in libraries, is causing severe problems in professional development.

At each particular level the same course materials are basically used in teaching. The general lines of Anglo-American librarianship are followed and adopted as part of the education in these schools. Evidence of the North American influence can be seen in the general preference for the Dewey Decimal Classification or its modification, the Korean Decimal Classification. In addition, there is the use of LC descriptive cataloging code along with the ALA cataloging code or its modification, the Korean cataloging code, as well as the translation of Sear's

Subject Headings and index terms of the DDC. A switch from the dictionary catalog to the classified catalog (47,48) is a predominant Anglo influence. Use of the classified catalog also characterizes the unique Korean library problems centering around the language situation of existing collections which demands librarians to be fluent in Korean, Chinese, Japanese, English, and a few European languages which belong to three or more language families. Rooted in the historical background of the book world and libraries in Korea, this multiple language situation has led librarians to be language specialists and has led library scientists to search for principles in the organization of the multiscript collections. Yet there is little exploration of problems particular to libraries in Korea. Although curricula in these schools are modeled after those of North American library schools, still there are outmoded and conservative approaches. For instance, very little modern management theories, research methodologies, automation, or information retrieval techniques are included in their curricula.

The KLA, as a collective pulse of Korean librarianship, reorganized in 1955 and assumed vital leadership in the postwar reconstruction of the profession. Korean librarianship set out to achieve in only several years what had taken decades to develop in the West—modern library facilities, modern library services, and a modern pattern of library system, all of which are geared into the creation of a truly democratic educational system and society.

Since historically there is little that Korean librarianship can build on by way of recruitment, today's librarianship in Korea suffers to some extent. Prior to the current period, Korea has had no concept of a librarian as a highly specialized professional person despite the interest and activity in training individuals for library work, which dates back as far as the history of books and libraries in Korea. In 1953 an undergraduate minor in library science was offered at E-Wha Women's University. Prior to this time, however, there was no library school at the university level despite the existence of libraries throughout Korean history and the first formal training program which was organized in the National Central Library in 1946. The "chief librarian" of the larger libraries, public and academic, was usually a renowned government official, a distinguished scholar, or a senior professor appointed on a short-term basis.

In comparison to other professions representing branches of scholarship with a long tradition, the library profession in Korea has not been well understood by society at large. The reason, besides the traditional concept of service professions (see the section entitled "Academic Libraries" below), may be that this particular profession was first perceived and organized in 1945 after the Japanese rule. Recognition of the library as a vital means for creating and maintaining a democratic society, as well as a new scholarship, has not been a part of the will, wish, or demand of the majority of Korean people but rather has been a result of the impetus of the government policy on education.

So many changes and such profound changes have taken place in Korean education and also in the library world since the war that adjustment to and acceptance of all of them by most of the Korean people would be to expect the impossible. If changes are to be accepted, they must be planned, understood, and

believed in by the majority of the people who are willing to work toward these goals of making the library a center of learning where diverse ideas meet and new ideas are created and of placing the library at the heart of the democratic processes and of a democratic society.

Therefore, whether libraries in Korea fulfill their twin goals—a major role in building a new scholarship and in becoming a vital means of fostering a democratization epoch—largely depends on the future.

Present Library Situation

NATIONAL LIBRARIES

The concept of a modern public library service, administered by local central governments with public funds and freely available to all, is one that only recently gained acceptance by both the government and the people of Korea. In particular, the concept of a national library and its relation to a national library service is being reexamined in the light of existing conditions. There are two national libraries—the Central National Library and the National Assembly Library—in the sense of duties listed by the Delhi UNESCO Seminar in 1955, which concluded that a national library

should collect all literary and related materials concerned with the nation, both current publications under copyright deposit and historical materials; be a conservatory of materials concerned with world culture and the natural main source in the country of such materials for scholars and research workers; act as the authority for the compilation of the national bibliography . . . ; serve as the focal point and organizing agency for national and international interloan of books; and . . . be the organizing center for national and international book exchange (49).

It is especially significant to note that both the Central National Library (CNL) and the National Assembly Library (NAL) have had the new book deposit provision since 1963, and that there is a movement to unify these two national libraries. A statistical comparison of the two libraries in terms of staff, collections, number of users, and expenditure is briefly presented in Table 4 (50).

TABLE 4

1973	Staff			Collections			Number of books added	Number of users	Expenditure (Won)
	Professional	Nonprofessional	Total	Oriental	Occidental	Total			
CNL	43	93	136	466,856	49,522	516,378	11,702	395,720	107,303,000
NAL	42	138	180	121,393	42,047	163,440	15,192	26,590	231,247,000

The Central National Library

The Library Law of 1963 charged the Central National Library with the acquisition and preservation of materials related to the nation, bibliographic and information services, bibliographic control of recorded materials, international exchange of library materials, research work in the area of library science, and assistance as well as instruction to other libraries in Korea.

Started in 1923 under Japanese rule, the forerunner of the Central National Library was opened in its present building in 1925. By 1945 the collection was the largest in Korea with 287,999 volumes of which 141,973 (49.3%) were Oriental books, 129,323 (44.8%) Oriental classics, and 16,703 (5.9%) Occidental books. Today the Central National Library has 516,378 volumes of which 49,552 (9.7%) are Occidental and 160,000 (31%) are old and rare. During the last 25 years the collection has almost doubled and created a critical space shortage with an inadequacy beyond expectation in this old building. A new building, at an estimated cost of \$9,000,000, is planned to be constructed in 1976.

The current means of acquisition are book deposit, gifts, international exchanges, and purchases. Current acquisition information is published in its weekly *Bibliography of Deposited Materials*, its semimonthly *The Literary Information Bulletin*, and its annual *Cummulated National Bibliographies* which together form important cornerstones of a current national bibliographic network of newly appearing titles. First issued in 1965, annual volumes have been published each spring to supplement its basic volume, *Korean National Bibliography*, which covers the years 1945 to 1962 and was published in 1964. The *Korean National Bibliography* is arranged according to the Korean Decimal Classification with an author index and thus furnishes both subject and author access to book production.

Operating under the Ministry of Education, the Central National Library is comprised of four departments, eight committees and one branch under its director, who is presently Mr. Sang-Kyu Rhi (51). The library staff consists of 136 people of whom 43 (31.6%) are trained professionals.

Affiliated with the IFLA, FDI, ICA, ALA, and other national library associations, the Central National Library participates and cooperates in international exchange programs and since 1964 has operated the International Book Exchange Center to promote international exchange of materials more effectively. Presently it has exchange programs with 207 institutions in fifty-six countries.

Beyond the responsibility of developing comprehensive research collections of a broad scope and great depth as well as a bibliographical and book exchange center, the Central National Library has participated in the project of improving the caliber of librarians and has produced sixty-one librarians and 285 assistant librarians since 1967 (52). Beginning with the Korean Library Science Research Institute in 1969, the library has published important studies of Koreanology which encourages the study of library science in Korea. Its monthly journal *Do-Seo-Gwan* [*The Library*] has been an important medium for research work on Korean librarianship.

In order to instruct and assist other libraries, the Central National Library has

designed and demonstrated model libraries since 1970, and has attempted to standardize processing methods by providing *The Processing Regulations for Library Materials*. Current standardization efforts employ the organization of Oriental books by the *Korean Decimal Classification*, and that of Occidental books by the 16th edition of the *Dewey Decimal Classification* while the revised edition of the *Korean Cataloging Rules*, which was edited by the Cataloging Committee of the KLA, serves as the standard cataloging rules.

Public (or readers') services have been recently recognized as the most significant activity of the library in order to be a social educational institution. This recognition has extended activities beyond the functions of a national library which are usually regarded as essential in Western countries. The library emphasizes reference services through a well accommodated reference room with trained reference librarians, and stresses readers' services by providing separate reading rooms and periodical rooms which have about 195 titles of newspapers and 2,286 titles of periodicals. The aspects of public service that are stressed by the library include such special services as offering microfilm and copying services, and extension services that undertake such activities as traveling libraries which go to local public libraries, cultural organizations, children in the branch libraries, and to summer resort places (53,54). This feature of public service makes the Central National Library unique in being both a national and a free public library, and this feature is also in keeping with the recommendation of the 1955 Delhi Seminar that "in some countries, particularly smaller countries, the functions of the national library and the central library board should be integrated for better and more economical development" (55).

In order to fulfill its role as a national bibliographical information center, the Central National Library has published bibliographic information by setting up unified and specific bibliographic plans. Special bibliographies have been compiled and published with such titles as *The Thesis Index of Korean Language and Literature (before 1945)*, *The Index of the Articles of Korean Literary Criticism, 1950-1965*, *Korean Administration Index*, and *Index for the Study of Korea*. Since 1971 a series of publications of the catalog of the Oriental classics has been published along with an annotated bibliography of rare books that are held in the Central National Library.

The Central National Library has been an active participant in the interlibrary loan system which has been in operation since 1968. The interlibrary loan system includes sixteen libraries: the Central National Library, the National Assembly Library, two special libraries, two public libraries, and ten university libraries. The Central National Library has further encouraged interlibrary cooperation by publishing a union catalog in early 1971. The union catalog project aims at eliminating duplication of the acquisition of materials and promoting an effective interlibrary loan system. About the beginning of 1970 efforts were made to compile unified comprehensive information indexes of all materials in Korea, and studies were made to employ the automated bibliographic control system. As the first important step of this comprehensive program, with the assistance of the Asia Foundation,

the library compiled card catalog information from forty-seven participating academic and research libraries during 1970. Despite the difficulties of inadequate lists of holdings in other libraries, the first volume of the union catalog was published in early 1971, followed by continuous annual union catalog volumes. Collecting responses through printing cards from over 4,000 libraries, the Central National Library has experimented with the distribution of printed cards and is planning to initiate printed card projects.

The National Assembly Library

The National Assembly Library, organized in 1951, became a depository library in 1963 in accord with the National Assembly Library Law (56). The National Assembly Library Law calls for this library to assist in the performance of duties by the members of the National Assembly by collecting books and library materials (purchase, gift, exchange, deposit) in order to render library services. The library was established with the realization that an effective research function was of paramount importance for the deliberations of state affairs by the assembly members. It also serves the public and general organizations by collecting and organizing library materials of a comprehensive nature and scope. Universality is upheld as a fundamental principle of the library's philosophy and of its services and activities.

The functions of the National Assembly Library are twofold: to build up a comprehensive collection of the records of national achievements for preservation in perpetuity in conjunction with the privilege accorded to it by the legal deposit system, and to collect, as extensively as possible, publications that may be helpful to Korea's progress in culture and science. As an independent agency of the Legislative Branch, the National Assembly Library serves assembly members and committees by supplying necessary materials and information and by providing reference-related services.

To accomplish its stated functions, the National Assembly Library is structurally organized. The library is under the control of the assembly and reports to the speaker of the National Assembly. The speaker appoints the librarian, who is now Mr. Chang-Ho Kim, with approval of the assembly after consultation with the Standing Committee for Management of the Assembly. This committee is responsible for general library management and for the policies according to which the library is to function.

Beneath the lines of the chief librarian come four divisions: Administrative Division, Legislative Research Department, Processing Department, and the Law Library. The library has a staff of 180 members of which forty-two (23.3%) are trained librarians. The staff is recruited from graduates of universities, junior colleges, and senior high schools through open competitive examinations.

The library offers reference research services to assembly members whereby the Legislative Research Department has experts at work answering different questions. Since 1965 the department has published a monthly bulletin that reports

on materials pertaining to legislation, and it also issues a reference service periodical (57).

As the central library of Korea, the National Assembly Library furnishes general reference and bibliographical services to the public, and has issued the *Index to Korean Periodicals* since 1963. This important compilation was originally started by the KLA in 1962. The National Assembly Library prepared and published this index annually for two subsequent years until it became a quarterly publication in 1965. This compilation project commands the attention of over eleven full-time staff members and depends heavily on periodicals received on legal deposit. In 1965 the library also published the *Index to English Language Periodical Literature Published in Korea, 1890-1940* which was compiled by J. McRee Elrod. The monthly *Bulletin*, among other publications, is the in-house organ which reports on library activities and new acquisitions.

As the representative library of Korea, it promotes international exchange of information and publications as well as the international loan of books. It operates standing exchange programs in cooperation with 210 organizations in forty countries and participates in international publication projects. According to the National Assembly Library Law, the library also serves as a depository for copies of all materials published in Korea. In addition, it coordinates library activities among government agencies.

The National Assembly Library's initial collection of 3,604 books in 1951 had grown to a total of 163,440 volumes of books in 1973, of which 42,047 (25.7%) are Occidental. The annual average addition of volumes from 1952 to 1972 has been about 7,000 volumes, and since 1964 the annual increase has numbered over 9,000 volumes, with more than 11,000 additions since 1970. As of June 1971, the collections consisted of the following (58):

Books	142,932
Maps	233
Records	209
Microfilm	2,521
Caligraphic arts	18
Paintings	11
Frames and other A-V	47
Special materials (rare books)	1,285
Periodicals	4,141 titles (146,144 volumes)
Domestic	3,507 titles (75,127 volumes)
Foreign	1,634 titles (70,987 volumes)
Newspapers, Domestic	936 titles
Foreign	38 titles

One noteworthy fact is that about 33.4% of foreign periodicals are published in the United States, while about 32.5% comes from Japan, 10.4% from Great Britain, 8.9% from Germany, and 8.8% from Taiwan (59).

Although the scope of the library's collections is encyclopedic in principle, its primary function to service the assembly necessitated that great emphasis be placed

on politics, laws, economics, and other branches of the social sciences, both Korean and international. Books in the social science comprise 41.73% of the total collection, followed by science and technology (13.76%), literature (12.8%), and history (12.63%) (60). In terms of language distribution, 32.47% of the collection is in Korean, 29.02% in Japanese, and 26.32% in English (60). The prime requisite for librarians, therefore, is fluency in various languages and expert knowledge of the bibliographies of other nations. Materials are acquired not only through annual assembly appropriations, but also by copyright deposit, international exchange, gifts, special purchase, and official transfer from other government departments. The dominant method used in adding resources annually is by means of purchase. This accounts for about 40% of the total new acquisitions, while the method of exchange comprises about 13%. The library reports on the newly acquired materials in its semimonthly periodical, *Acquisitions News*.

Important among the holdings are copies deposited with the library, as required by law, of virtually every publication—governmental, commercial, and institutional—issued in Korea during the past 10 years. Older Korean materials, acquired mostly through purchase and donation, are also substantial.

The books in the National Assembly Library have been arranged and classified in the Dewey Decimal Classification (16th ed.). In adopting the DDC, the greatest modification has been made by the library to accommodate books about the Orient. Anglo-American Cataloging Rules (ALA and LC) are applied for Occidental materials while the Korean Cataloging Rules are used for Oriental materials.

Annual expenditures of the National Assembly Library have increased 33.7% between 1964 and 1971, with an annual average increase of 32% for the acquisition of materials. One of the pressing problems that has accompanied the steady growth of the library is that of space. The library, which was originally built in 1955, was connected to the assembly in the heart of the capital city. Due to the growing need for more space, an annex was added as a separate building in 1967. However, this continually mounting problem of space has been recognized, and as a result a new library building is planned in conjunction with a new assembly building. Hopefully, their completion in the near future will solve the problem of space which has plagued both services and activities of the national library.

PUBLIC LIBRARIES

The concept of a modern public library service, which is freely available to all and administered by local and central governments with public funds, is one that only recently gained acceptance by both the government and the people of Korea. Despite the early beginnings of the modern public library movement at the turn of the twentieth century, it was not until 1963 that a new epoch-making library law was enacted to establish public libraries in Korea. According to the Library Law, public libraries are to offer, organize, and preserve books and other library materials in order to best serve the public's intellectual requirements, research interests, and recreational needs. The law also encourages public libraries to

stimulate freedom of expression and a constructive critical attitude toward the solution of social problems by sponsoring discussion groups, exhibitions, debates, and other similar interest groups. In addition, the law expects public libraries to promote better cooperation between school (including academic) and special libraries and to extend the activities of the libraries so that new educational possibilities may be offered to the people.

Public libraries in Korea are ultimately the responsibility of the Ministry of Education although local governments are directly responsible for their development. Today there are about sixty-nine public libraries in Korea, and each public library serves an average of 462,781 people. This total is far less than the number of either academic, school, or special libraries. In order to rectify this unbalanced growth pattern, the government plans to establish at least 184 libraries as a district public library system by 1981, which means that one will be located in each local community. Table 5 is a brief statistical summary of the current public library situation in Korea.

TABLE 5

Public libraries	No.	Staff (professional)	Collections	(annual increase)
Provincial libraries	4	72 (13)	55,793	(9,636)
City libraries	26	383 (78)	548,002	(59,287)
Town libraries	22	55 (9)	42,256	(13,971)
Private libraries	17	96 (14)	109,015	(7,611)
TOTAL	69	606 (114)	755,066	(90,505)

Some of the recent services developed include bookmobiles and extension collections which carry library services to the people, circulation and reference services to handle telephone and mail inquiries, children's rooms in 60% of the libraries, and the collection and use of audiovisual materials, film showings, and record concerts (61).

A few of the momentous events that are changing the public library scene are of notable interest: Seoul had only two real public library systems until a district library was opened there in 1971. This is the first of several in the district public library system which the city plans to establish. By 1976 there will be nine public libraries of this type. In 1971 Chong-Ro Public Library, one of the three public library systems in Seoul, opened the first bookmobile service in Korea. Also, the Chong-Ro Public Library has provided special services to groups such as mothers-wives and bus girls. A model district library system can be found at Kang-Jin County in Chon-Nam Province. The main library is located in Kang-Jin, the county seat, and all microlibrary programs within the county were incorporated into a system which will eventually open town branches in the county.

The number of public libraries increased six times, climbing from eleven to a total of sixty-nine libraries (62) with the establishment of an average of 3.4 libraries

annually. The collections of these libraries increased 1.6 times between 1955 and 1973. During this 17-year period the number of books grew from 472,401 to 755,066 volumes. During this same period the libraries added an average of 16,600 books annually. Over one-third of the total collections is concentrated in Seoul. Since the national libraries are also located in that city, the majority of resources in Korea is heavily centralized.

When the total number of available books is considered in terms of total population, one book was available for every forty-one people as of 1973. About nine out of ten books are written in an Oriental language, mostly Korean. A little more than a third of the public libraries (37.6%) have less than 3,000 volumes. The shortage of books becomes a more glaring problem when public libraries issue the statement that about 40% of the collections consist of books to be discarded (63).

The book collection in public libraries in 1973 is given in Table 6.

TABLE 6

Volumes	Public libraries	
	Number	%
Under 1,000	7	10.1
1,000-3,000	19	27.5
3,001-5,000	10	14.5
5,001-10,000	13	18.9
10,001-50,000	16	23.2
50,001-100,000	2	2.9
Over 100,000	2	2.9
TOTAL	69	100.0

Public libraries are headed by officials in local government who usually divide their time between government affairs and library responsibilities. About one-half of the public libraries have at least one person who has some training in library science, less than half of the total staff in public libraries have ever had a college education, while about 44% of the staff is categorized as temporary employees.

Both the shortage of collections and the lack of trained personnel in public libraries have influenced service patterns. In fact, none of these public libraries have free open access services although they maintain partial open access to newspapers, certain periodicals, and some reference materials. The method of circulating books is different from that in the Western countries. The libraries lend books to microlibraries, smaller community libraries, and certain groups of people. However, two-thirds of the libraries do not circulate books individually to the public unless the books are used inside of the library buildings. Due to the personal responsibility placed on library staff regarding lost books, the staff is not eager to promote open access to collections.

Many ostensibly "public" libraries actually charge deposit fees for the use of books (64), consequently books are rarely used in comparison to the number of reading spaces occupied. About 66% of the people using the library, the majority of whom are students, come with their own books and occupy reading seats without ever borrowing library materials. Furthermore, each person receives a numbered tag upon entering, and returns it as he leaves the library building. The number of persons allowed to enter may not exceed the number of seats available in the library. If all seats are filled, the next arrival must wait outside until someone leaves.

The inadequacies in bookstock, staff, and services has produced the image of public libraries as being "great study halls" which are not much different from the neighborhood "reading rooms." As a direct offshoot of the "great study halls" idea, *Do-Seo-Sil* ("reading rooms") has been confused with *Do-Seo-Gwan* ("libraries") by laymen in Korea who have never experienced modern public library services. In using the "reading rooms," where there are no books available, people come with their own material and rent space to read or study. "Reading rooms" became especially popular during the 1960s in order to relieve the problem of study space in Korean homes which do not provide separate study rooms.

In contrast to the functions of "reading rooms," there are bookstores which supply books to meet the public's current demands. Until quite recently public libraries were thought of as a "supplement" to bookstores which served as an informal library where people stand by the hour reading books. For centuries the Korean people have been in the habit of buying books rather than borrowing them. Because of this habit of owning books, which encourages the use of bookstores, the people have not experienced modern public library services of free circulation and free access to all materials. These services of public libraries are founded on the assumption that books and other reading materials are public property.

One particular activity called "microlibraries" is worth mentioning. "Microlibraries" have met the need for reading material in tiny, remote, thinly populated villages and islands which are cut off from the urban centers by mountains, rivers, and seas. These libraries were first started by Mr. Dae-Sup Ohm in 1960 as a private venture. If the villages finance half the cost of providing books and magazines, the remaining half is furnished by the Micro-Library Association, which receives subsidies from the Ministry of Education. Acting as a minilibrary, each "microlibrary" has approximately 300 books and a few magazines. The nature of the book collection varies according to the needs of the village. The collections are usually comprised of agricultural, horticultural, and fishing handbooks in addition to some fiction. Books are often exchanged with nearby "microlibraries" and at times collections are borrowed from public libraries in the vicinity. More recently the "microlibrary" program has proved to be successful to the extent that the Ministry of Education subsidizes these libraries in an effort to help coordinate their activities with public libraries. There are over 30,000 "microlibraries" in Korea today.

The highly successful experiences of both "reading rooms" and "microlibraries," juxtaposed with book reading habits, are indicators of public demands for full-

fledged public library services and public willingness to develop habits of book borrowing over the traditions of book buying and owning (65). On the other hand, the same experiences have unfortunately reenforced the "great study halls" image of public libraries, mainly because of the complete lack of free circulation, open stacks, and other modern public (or readers') services. Nevertheless, public libraries are combating this image by recent implementation of bookmobile services and imaginative reader services to women (66-69).

Due to the steadily rising rate of literates, it is most important for Korea to demonstrate the real role and potentialities of public libraries with the full assistance of the Ministry of Education, which is the central government agency responsible for the development and supervision of public libraries. A national library service is undoubtedly costly, and Korea is still battling economic and social problems and cannot afford to allocate funds for a service unless it is considered a real necessity. Libraries and librarians need to persuade the government authorities concerned that the public library should be viewed as an educational institution of the utmost importance for all ages which will help raise the educational, economic, and social levels of the nation.

SERVICES TO CHILDREN

Library services for children in Korea are perhaps the most neglected aspect of Korean librarianship, although 60% of public libraries are reported to have children's rooms to comply with the Library Law. Because public libraries are essentially thought to be adult institutions, there is almost a total absence of services to children. A breakthrough for serving children in their own right rather than as miniature adults resulted in the foundation of the Korean Children's Center Library in 1970. Located on the 15th floor of the center's nineteen story building on Nam-San Hill in downtown Seoul, this library has 13,600 books of which over half (7,600) are children's books. Approximately 1,500 children visit this library daily. The center plans to construct a new, separate library building in 1975.

Books for children are produced by many publishers, and during the past 5 years the quality of these books, including illustration, binding, paper, and other physical formats, has improved significantly. A sizable output of juvenile books, both in sets and individual volumes, produced by several of the larger publishers, is indicative of a large and growing "serious" juvenile book industry. However, the degree to which commercial channels of the book market are flooded with children's comic books cannot be ignored. In 1964, when 161 juvenile titles were published, 3,213 comic book titles were published. In 1965 the number of comic titles almost doubled to 6,062 while 270 juvenile titles were published (70). Boys like comics which mainly feature fighting, adventure, crime detection, or any combination of these three elements, while girls like those dealing with home life. Comic books are produced on poor paper and binding with inferior illustrations. Less than 5% of these

comic books are considered to be educational in nature, posing problems in children's education and reading guidance. Near many of the school entrances are comic rental bookstores which are patronized by enthusiastic young readers everywhere in Korea. Children usually read a far greater quantity of comic books found in these rental stands than children's books borrowed from public or school libraries.

The school library is a recent phenomenon in Korea; classroom collections are more frequent. There has been a notable increase in the number of schools and children attending them since the end of the Korean War, and with this increase came the beginning and growth of school libraries. The first modern school libraries were individually started at the high school level by Kyung-Nam Province, followed by high schools in Seoul and other parts of the country during the late 1950s. Therefore, although libraries have a long and distinguished history in Korea, school libraries in the modern sense came into being as a product of the postwar reorganization of education.

Due to the fact that Korea is making desperate efforts to provide compulsory elementary education with modern teaching methods for the school-going population, the importance of school libraries has been steadily recognized. Since the war there have been drastic changes in methods of teaching and in curriculum, with the emphasis being on pupil-centered teaching, and these changes have brought school libraries into the life of school children.

Individuals who were trained as teacher-librarians by the first library school at Yon-Sei University have given impetus to the beginning of school libraries. However, specific stimulus for the development of school libraries came with the Library Law in 1963, despite its inadequate premises and the lack of standards for school libraries. Statistics show that school libraries increased from 149 in 1962 to 3,034 in 1973, while staff increased from 335 members to 2,409 in the same years, and collections grew from 403,528 to 9,675,712 books. The law provides for every school to have its own library and a teacher-librarian. However, according to the school census in 1970, only about one-quarter (2,260) of the total number of schools (9,439) reports having a library; about 20% (1,352) of elementary schools (6,910) have libraries, while 20% (316) of middle schools (1,640) and 67% (592) of high schools (889) have libraries. In the elementary and middle schools, the prewar teaching method that relies on textbooks-lecture notes-memorization-tests prevails, while a more rapid change of teaching methods is taking place in high schools.

Library staff, which is needed to offer necessary services to pupils, is better provided in high school libraries than in elementary or middle schools (Table 7). The Library Law requires teacher-librarians to have completed at least 240 hours of lectures in Library Science. Out of the total staff (2,260) of school libraries in 1970, there were 419 teacher-librarians (18.5%) who met the requirements of 240 completed hours. About 43% (256) of the total number of teacher-librarians (419) worked in high school libraries, while 37% (117) were in middle schools and less

TABLE 7
School Libraries in 1973

Schools	Number of libraries	Staff (professional)	Collections
Elementary	1,688	550 (381)	4,118,096
Middle	610	818 (454)	2,035,658
High	736	1,051 (548)	3,021,958
TOTAL	3,134	2,429 (1,383)	9,675,712

than 4% (46) in elementary schools in 1970. High school libraries have received stronger support than middle and elementary schools. This is due to the individual principal's endorsement of libraries as part of the total educational process.

The success of school libraries also depends greatly upon the support and interest of the education boards of individual local governments. For instance, in 1970 over 56% (1,273) of school libraries (2,260) were located in three provinces, Kyung-Nam (26.6%), Chon-Nam (15.9%), and Kyung-Buk (13.9%), where each board of education supported library programs. These three provinces, with over half (3,105,095 volumes) of the total school library collections (6,047,710 volumes) of the nation, have some of the more outstanding school libraries. Especially in Kyung-Nam, a sound, progressive provincial school library plan has been in effect since 1963 to develop model libraries to demonstrate modern school library services and to encourage the establishment of libraries in the school system.

About 60% of Korean school libraries circulate library materials for home use while the remaining 40% allow circulation of books within the library proper (71). Since the seat capacity for children is greatly limited in school libraries, this negative circulation policy limits children's use of the library.

A full-scale open stack policy, which makes the library a valuable educational experience by encouraging pupils' free access to collections, is followed by about 47% of school libraries. About 32.3% of school libraries have a policy that combines open and closed stacks. This combination policy permits the user to see the books either behind the counter or inside the glass-enclosed bookshelf area and prohibits the user from browsing or handling books. Children in about 19% of the school libraries, whose stacks are completely closed to the users, have to rely on catalogs in order to find books in their needs and interests. Although a majority of the school library collections (87%) is organized according to the decimal classification, only a minority (12%) of the school libraries has a dictionary catalog which is the only viable key, in their natural language, to the systematic arrangement of collections.

In their efforts to emphasize the use of libraries, teacher-librarians battle the policy of personal accountability imposed on them when books are lost. School libraries are relatively small, with about a quarter of them having over 1,000 volumes.

The current trend for school libraries is to become instructional media centers that will collect and incorporate various forms of library materials. This trend of creating instructional media centers will be further promoted and strengthened by the present educational reformation which eliminated entrance examinations for middle schools a few years ago and plans to omit similar examinations for high schools. About 54% of elementary school graduates are admitted into middle school, almost 70% of middle school graduates enter high school, and about a third (32.3%) of high school graduates go on to colleges and universities. Keen competition for admittance into the next hierarchy of education, especially into the "top level" institutions, was usually taken in the form of entrance examinations until a few years ago when the present educational reform movement was started. Elimination of entrance examinations, except those for higher educational institutions, will have a direct bearing on the growth of school libraries and students' use patterns of library services.

ACADEMIC LIBRARIES

Academic libraries, because they are closely attached to changes in the educational system, have been recognized as playing an indispensable role in education since the war in Korea. The physical expansion of academic libraries is striking, and shows what was taking place quantitatively in Korea (Table 8 and 9).

About 90% (148 libraries) of the 165 academic libraries in Korea have been established since independence in 1945. The greatest number of libraries (68), 41.2% of the total number, were founded during the last decade. This was characterized by raising teachers' colleges to university status and by establishing junior and technical colleges. All of the 4-year colleges and universities have their own libraries, while about one-quarter of the junior and technical colleges do not have any (Table 10).

In 1973 the academic libraries had about 6.5 million volumes of books with a professional staff of 440 to serve 228,967 students who were enrolled in colleges

TABLE 8
Number of Colleges and Universities

Institutions	Years					
	Before Independence on 8/15/54	1952	1955	1960	1965	1970
4-Year colleges and universities		43	44	51	70	71
Junior and teachers' colleges		6	9	12	61	67
TOTAL	19	49	53	63	131	138
Rate of growth, %	13.7	21.7	2.9	7.3	49.3	5.1

TABLE 9
Growth of Academic Libraries

	Years						Total
	Before 8/15/54	8/15/54- 1949	1950- 1959	1960- 1969	1970- 1973	Others	
Libraries	17	22	43	68	11	4	165
Percentage	10.3	13.3	26.1	41.2	6.7	2.4	100

and universities. The increase of volumes in 1973 numbered about 390,000, with an annual average of about 285,000 volumes during the last decade. The average number of volumes available per student in 1973 was 28.5 and the number of students to be served by one professional staff member averaged 520.4.

Students enrolled in 4-year colleges and universities were better provided for in terms of books (91%) and professional services (80%). For instance, the average number of available volumes per student dropped drastically to 12.7 in junior and technical colleges while the number increased to 35.3 in 4-year colleges and universities, and the number of students to be served by one professional staff member increased to 1,036.4 in junior and technical colleges while it decreased to 422.3 students in 4-year colleges and universities.

The disparity of the situation between the 4-year colleges and universities and the junior and technical colleges becomes more striking in the area of periodical holdings. The number of periodicals held by academic libraries in 1973 averaged about 217 titles, which dropped to 27 in junior and technical colleges and which increased to 347 in 4-year colleges and universities.

The majority of junior and technical colleges hold less than 10,000 volumes, and this constitutes the largest percentage (36%) of the 165 academic libraries.

TABLE 10
Academic Libraries in 1973

	Colleges and universities	Junior and teachers colleges	Total
Number of libraries	98	67	165
Staff	1,089	218	1,307
Professional staff	388	52	440
Collections	5,951,864	579,691	6,531,555
Oriental	3,465,065	430,488	3,895,553
Western	2,486,799	149,203	2,636,002
Annual increase of collections	290,630	100,150	390,780
Periodicals	33,928	1,830	35,758
Foreign	15,638	500	16,138

TABLE 11
Distribution of Collections in 1973

Number of volumes	Number of libraries	Percentage
Over 500,001	1	0.6
400,001-500,000	0	0
300,001-400,000	2	1.2
200,001-300,000	3	1.8
150,001-200,000	6	3.6
100,001-150,000	6	3.6
50,001-100,000	15	9.1
30,001-50,000	10	6.1
20,001-30,000	21	12.8
10,001-20,000	37	22.4
Under 10,000	60	36.4
Unspecified	4	2.4
TOTAL	165	100.0

About 11% (18 libraries) holds more than 100,000 volumes and only one library, Seoul National University Library, has over a half million volumes (Table 11).

Seoul National University Library is the largest single university library in Korea. Currently located on scattered sites in the city of Seoul with a variety of branch libraries which have considerable autonomy, the total holdings of the university libraries approximate over 900,000 volumes. As a part of a new academic plan which is based on the need for greater academic and administrative centralization, the new central library building of the university is being completed to serve about 15,000 students, faculty, and staff. When completed, the new library will house the total holdings, including its rare book collection of *Gyu-Jang-Gag*, with the exception of the library collections of the colleges of agriculture and medicine.

Because it will be of central importance to the academic future of this prestigious university, the new library building will be the largest single structure of Seoul National University. The library will be located at the center of the campus as a nodal point for campus traffic. This building will make a major departure from library construction of the past by utilizing at least 38% of the area as space to accommodate readers, with special consideration given to different groups of the academic community such as undergraduates, graduates, and faculty members. Internally, the building will provide a physical arrangement as conducive as possible to a less authoritarian environment and a more pleasant atmosphere.

Another new library building that will be instrumental in promoting a library as an indispensable learning center of its academic community is that of Sogang University. It opened in March 1974 with over 85,000 volumes and is to be the first library in Korea to experiment with a full-scale open stack policy at the higher educational level. This new library building, which cost \$570,000, has modular construction and such new equipment as copying machines, microform readers, and

turnstiles. It will accommodate 200,000 volumes. The major emphasis in the internal physical arrangement of stacks and furniture is given to the reference area which will serve as a focal point of reader services and as the meeting point of students, resources, and professional librarians.

In selecting materials, the majority of libraries do not have a standard written policy that guides selection procedures but rather depends more upon individual faculty requests to order certain books. The faculty sometimes controls the budget for library materials. Most academic libraries (65%) do not expend the greater part of their book and periodical funds on materials they have selected themselves. The funds are used on selections largely made by faculty members, either individually or as a group. Instead of applying any professional skills to book selection, libraries have to give faculty the books they demand for individual needs.

In ordering foreign materials, academic libraries depend heavily upon bookstores; about 40% of the libraries in Korea have an individual arrangement with bookstores to handle foreign book orders while 16% choose from current bookstock of bookstores. Placing individual orders to foreign book jobbers/publishers is not very popular due to the large amount of paperwork involved in terms of letter writing and government regulations.

Some libraries (about 20%) use UNESCO coupons in ordering foreign books. Another means of securing foreign material is through gift and exchange programs which academic libraries do not promote very well. About one-third of the libraries maintain some sort of program relating to international exchange of library materials.

One factor that requires attention here is the fact that a significant portion of recorded holdings in academic libraries is obsolete. Most of the obsolete material is either dated Japanese books or outdated textbooks in other languages. Aggravated by the spectacular increase of students seeking higher education (from 7,819 students including Japanese in 1945 to 228,967 students in 1973), the problem of resources has been singled out over the years as "the greatest problem facing Korean academic libraries" (72). Some university libraries have taken initial steps to share resources. For instance, E-Wha Women's, Sogang, and Yon-Sei University Libraries jointly published a union list of serials in 1971. Located in close proximity, these universities have a consortium arrangement for their graduate programs; their libraries have granted borrowing privileges to graduate students and faculty members in the recent years.

The present state of collections in academic libraries influences the service patterns. Library collections are inadequate in terms of quantity and quality; therefore, circulation services are not actively encouraged. According to statistics published by the KLA, less than three-quarters of the academic libraries (72% of 119 libraries) actually circulate books for home use. The circulation rate of books used at home is about 40% in terms of the total number of volumes, with an annual average of about 11 books checked out per student. This statistic indicates the students' aspiration for learning; furthermore, it offers an excellent opportunity to promote circulation, reference, and other aspects of library services.

Another reason for inactive circulation services is fear of the loss of library

materials; prices of library materials are high in comparison to per capita income. This fear is further compounded by the fact that lost books are actually the personal responsibility of the staff involved. Circulation services for home use, which are maintained passively and negatively, discourage students' interest in using library materials and in optimizing library services. At the same time, the state of circulation services in academic libraries continues to encourage students to use library seats as study space. It is estimated that about 40% of the students who come to the library utilize its seats without consulting any library materials or services. This factor of students' habits in using library seats, in turn, has influenced patterns of constructing library buildings which provide study areas outside of the circulation control of the library proper. Besides the lack of study space in students' homes, another reason for using libraries as study halls is the shortage of public libraries in the neighborhood.

Over one-third of the academic libraries have reserve collections to serve the immediate needs of classroom instruction and to relieve the shortage of needed books. Two major reasons for not having reserve collections are the difficulty in gaining faculty cooperation and the lack of planning by the faculty for courses that require the use of library materials.

About one-third of academic libraries do not have reference collections. All the 4-year universities are provided with reference rooms, while about 70% of the 4-year colleges and about 55% of junior and technical colleges have these rooms.

Generally, the use of reference collections is relatively low, and that is due primarily to reference materials which fail to meet the demand of students, and secondarily because of the lack of experience in using reference services on the part of the students. There is a relatively small number of reference books published in Korea in the Korean language. The majority of reference collections consists of books written in Japanese and English.

The benefits of reference services are often neither experienced nor appreciated by the library staff who are in the position to offer these services. There is a lack of experienced reference librarians who are well equipped with an expert knowledge of reference materials in foreign languages and with modern professional service approaches. Traditionally, service professions have not been appreciated in Korea and librarianship is no exception. Furthermore, the service concept in the library is rather new and is still under experimentation. Even a highly trained library staff usually prefers to stay behind the office walls and catalog books rather than directly serve a person using the library.

Reference services are further jeopardized by the insufficient bibliographic coverage of publications and by indexing coverage of periodicals and newspapers as well as by inadequate organization of the holdings that academic libraries have. For instance, about 13% of academic libraries do not have any catalog to their holding, while about 11% do not have author entries and 14% are without title entries. Most academic libraries (80%) have classified catalogs to solve the multiscript problems of their collections which are dominated by such disparate language families as Korean, Japanese, Chinese, and English. About 10% of the libraries which have classified catalogs assign subject headings, while about 12.3%

attempt to draw up index terms for class numbers (73). Evidently there is a lack of standardization and principles in organizing collections which are closed to the public in most academic libraries. Modern library services, which entail reference services and the individual independent use of library materials in open stacks, cannot be realized until this problem of organizing collections is resolved.

One of the most important qualifications needed for professional librarians in academic libraries is fluency in diverse foreign languages: Japanese, Chinese, German/French, and English. However, each year many experienced librarians want to change their career from the academic world because of their status as office staff with salaries that are below those of the faculty and because of their limited opportunities for promotion. University administrators in general have not recognized librarianship as a profession; they classify library staff members as "nonprofessional secretaries." Usually the library director is a professor who has been elected by other faculty members or appointed by the president or dean. The director is usually assisted by one full-time executive assistant who is professionally trained in library science. The executive assistant actually administers the library and manages daily routines. Due to the nonfaculty and nonacademic status of librarianship at academic libraries, individuals who are not trained in library science have frequently been employed in areas that require professional skills. These circumstances have lowered the quality of library services, thus accentuating the status of librarians as office staff.

University administrators in general have not seen the connection between the quality of library services and the quality of the person in charge of them. Any initiative on the part of academic libraries to contribute to the educational process or to the intellectual advancement of the university community is resented by both administrators and faculty members. However, a movement to reform the educational system, which was started 5 years ago, is changing the scene of domination by nonlibrary people. A highly selective educational system, based on a series of examinations beyond the first 6 years of compulsory education, is bringing drastic changes in Korea. Academic library services have been hampered in the past by an educational system which failed to include early library experiences as part of the student's total education. Presently the number of credits required to obtain a bachelors degree is being reduced by some 20 credit hours to allow more independent study time for students. These recent changes in education will have a definite effect upon the prevailing teaching methods that fail to encourage students' systematic use of the library. By adhering to the prevalent methods of teaching, instructors have been primarily concerned with preparing lectures and engaging in their own research. Changes in teaching methods will be accelerated by young faculty members who have studied abroad and have learned to consider the library as part of the whole educational experience.

SPECIAL LIBRARIES

Special libraries have grown more important in Korea today because of the quick, on the spot service they have been able to give to functional groups of

national significance. These libraries in Korea include the libraries of government offices and their research institutions, local government libraries, nongovernmental research institutions, and the libraries of inquiry departments of private firms and organizations. Their primary function is to assist the practical daily work of the group they serve.

Korea's first modern special library came into existence when the government rural development office opened a library in 1906. Before the Korean War special libraries were mostly archival in function. Since the war, however, with the rapid rehabilitation of industry and advances made in science and technology, special libraries have been organized into various types of industrial, technical, and scientific institutes. Leaders in the institutes have recognized the value of a library as an aid in assisting the staff when deciding on the implementation of a new idea, in contributing information that can provide a short cut to any process, and in giving assistance when marketing a product. This recognition has helped libraries develop rapidly as centers for acquiring and disseminating information.

Korean special libraries are organized well; the scientific documentation and information centers have provided photocopying equipment and microfilm services. In fact, most of the well-organized special libraries in Korea have a microfile service. Some of these libraries provide abstraction and translation services of indexing periodical articles. A few of the libraries are computerizing their services.

Over 50% of the 161 special libraries in Korea were established during the past decade (Table 12). Since 1955 the number of libraries has increased quite rapidly, growing from 15 in 1955 to 134 in 1970 and to 161 in 1973. Over three-quarters (124 libraries) of all the special libraries in Korea are concentrated in Seoul, indicating a persistent trend toward the centralization of scientific research institutes, scholarly institutions, and private firms and organizations.

Special library holdings (1,787,392 volumes) are 37% more than those of the public library (755,066 volumes), with over a quarter of the former written in

TABLE 12
Special Libraries in 1973

Number of libraries	Staff (professional)		Collections		Periodicals				
161	729 (224)		1,309,241 (Oriental) 478,151 (Western) 1,787,392 (Total)		6,751 (Domestic) 14,457 (Foreign) 21,208 (Total)				
Establishment of special libraries by decades									
	1900- 1909	1910- 1919	1920- 1929	1930- 1939	1940- 1949	1950- 1959	1960- 1970	Others	Total
Number of libraries	1	2	7	1	8	38	67	10	134
Percentage	0.7	1.5	5.2	0.7	6.0	28.4	50.1	7.4	100

Occidental languages. More than two-thirds (14,457 periodicals) of the 21,208 periodicals come from foreign countries. In terms of current acquisitions, special libraries are able to order 77% more books than public libraries.

The largest number of special libraries are those of government offices (29%), which are followed by those of private firms (15%), academic research institutes (14%), armed forces (13%), banks (9%), and hospitals (8%) (74). Korea has its greatest number of special libraries in the fields of science, technology, and medicine.

The Ministry of Education exercises a profound influence upon a majority of the Korean agencies whose function is to produce and use scientific information. This affects every aspect of education which includes control of personnel, policies, and appropriations in almost every university, especially public universities. The ministry is further influential through its subsidizing of government and private research institutes, academic societies, and through the publications these organizations issue.

The Ministry of Science and Technology is another government unit which is responsible for the development of special libraries in Korea. This ministry came into being as a state organ aimed at promoting the development of science and of infusing science into the mainstream of administration and industry as well as into the life of the nation.

The Ministry of Science and Technology provides a forum for the exchange of ideas at the highest level, serving as a liaison agency among many diverse institutions and agencies. Its primary function is one of a policy-making organ which stimulates cooperation among all Korean institutions concerned with science and technology as well as representing the country at international scientific activities. In its recent effort to join in international scientific information exchange and transfer, the ministry actively participates in UNISIST.

In order to picture the typical special libraries available in Korea and to indicate the sophistication available as well as the individual responsibilities, a few special libraries are described in the following paragraphs.

Special libraries that were established decades ago and those that are recently founded coexist in Korea. One of the oldest and most outstanding special libraries in Korea is the National Institute for Industrial Research Library. The key aim of this institute is to serve the scientific and technological world by providing research materials to technicians and engineers, popularizing modern technology in industry, and offering leadership in the industrial field. The library has 19,817 volumes of books, 178 Western journals and 21 Japanese-Korean journals. At least 70 to 80% of the book budget is spent on Western materials. The library can be traced back to 1883. It was reorganized in 1957 under the Ministry of Commerce and Industry.

The library of the Korean Development Institute is one of the youngest libraries in Korea. Established in 1971 as a government unit, it aims at providing the researcher with necessary information and materials in order to assist in economic planning. An initial book fund was provided by the U.S. AID to acquire 35,000

titles on economic development and management. The library holds 5,000 volumes and 500 periodical titles (250 in economics), as well as 500 titles of U.S. Government publications and 100 research papers.

As in the case of the library of the Korean Development Institute, libraries which specialize in a single, narrow subject area are many. The Central Education Research Institute was established in 1953 to contribute to education through publication, research, workshops, and counseling. Its library contains over 9,000 volumes of books and over 360 periodicals related to the field of education.

The library of the Korean Research Center was founded in 1956 for the purpose of advancing the study of Korea. The library contains 54,611 volumes (30,000 Oriental and 24,608 Occidental), at least 145 current periodicals, a Korean microfilm center, and one of the best collections of preannexation Korean newspaper files. It also has over 500 reels of microfilm dealing primarily with Korea.

There are notable foreign libraries in Korea. The most influential foreign libraries are the U.S.I.S. Library and U.S. Eighth Army Library, which serve as models for modern library services. Both have outstanding personnel. These libraries have participated in local affairs and helped local libraries by making materials available through interlibrary loan.

The strongest leadership for special libraries comes from those in the area of science and technology. The Korean Institute of Science and Technology (KIST) was established in 1966 through the financial support of the governments of the Republic of Korea and the United States. Officially dedicated in 1969, KIST is located in the Seoul Research and Development Complex. It presently holds over 1,640 academic journals, 94% of which come from abroad, with extensive back files and 38,000 volumes of books on science and technology, 79% of which are Occidental. The periodical collection at the library was computerized for management, location, and bibliographic purposes in 1970. This is the first electronic data processing system applied to library service in Korea.

The Korean Scientific and Technological Information Center (KORSTIC) was established in 1962 under the auspices of UNESCO to provide scientific and technical bibliographic and literature services to industries, companies, government agencies, individuals, and universities. As an independent corporation under the supervision of the Ministry of Education in 1964, KORSTIC became the responsibility of the Ministry of Science and Technology in 1967 as a nonprofit foundation. With the completion of its new building in 1969, KORSTIC moved to its present site in the Seoul Research and Development Complex. The center has the largest current periodical holdings in Korea with its 5,134 titles, 4,691 (91%) of which come from abroad. Besides aiming at facilitating the international transfer of scientific knowledge in general and at contributing to the development of Korean science and technology in particular, KORSTIC also attempts to play a leading role in the field of documentation and the integration of related information activities in Korea. As a domestic service to Korean industry, the center provides literature searching and current awareness service by publishing indexes to current

scientific and patent literature and by reproducing tables of contents of appropriate journals for college and university professors.

KORSTIC also performs referral and consultant services to inform its customers of additional materials available at other participating organizations in Korea. In order to promote interlibrary cooperation, KORSTIC presently compiles a union list of foreign scientific journals which are held by major libraries in Korea. Its attempt to produce a computerized union catalog of books written in Western languages was met with success in 1973. This important book catalog is the first computerized union catalog in Korea. It lists 12,308 titles of Occidental monographs that are held by one of the cooperating six special libraries which are located in the Seoul Research and Development Complex. The catalog has three parts, with each book being listed under the author entry, the title entry, and the Library of Congress Classification numbers.

In addition, KORSTIC holds workshops and symposia pertaining to information management and techniques in disseminating information. It also offers reprography services, both microfilm and hard copy. In 1970 there were about 1,400 recopy requests per month and, of these requests, 47% came from industry, 26% from research institutes, 11% from colleges and universities, 11% from individual users, and 5% from miscellaneous organizations. To promote the international exchange service, KORSTIC publishes bimonthly English abstracts of two Korean scientific works: *Korean Scientific Abstracts* and *Korean Medical Abstracts*. This center receives 787 titles of foreign journals on exchange from 604 organizations in 37 countries. Besides the union list of foreign scientific journals and current awareness services, important publications of the center include *Journal of Technology*, a bimonthly periodical of scientific and technological highlights from abroad, and *Documentation and Information Service*, a bimonthly professional journal.

In general, Korea has shown a remarkable development in the last few years. A decade ago special libraries were considered to be the least developed area of librarianship. Today special libraries in Korea are at the most advanced level of development with relatively adequate financial support and with modern technology. Indicative of expansion of libraries in medical and health science fields, for instance, the Korean Medical Library Association was formed in 1968. The government encourages special libraries in the field of science and technology, in particular, and plans to participate actively in UNISIST.

One of the major problems of special libraries is obtaining well-qualified librarians who may satisfy their highly specialized needs. Other inadequacies of major significance in this field are in the area of insufficient coordination among relating agencies. This produces gaps as well as causing overlapping in activities and in the area of language problems which involve translation work.

Conclusion

The library system in the Republic of Korea mirrors characteristics of library development that reflect the society from which it emerges. The unique geographical,

historical, political, cultural, and linguistic aspects of the country have a great influence on librarianship. This peninsula hermit nation, jutting out from Manchuria in far eastern Asia, has been protected by relatively wide intervening seas and straits and so has developed strong indigenous characteristics. The geographic feature of being a peninsula located between China and Japan has provided Korea with an aptitude for assimilation and adaptation.

The tradition of establishing libraries that has paralleled the history of written literature and scholarship as well as the respect for learning in Korea is among the oldest in the world. Since the end of the Korean War in 1953, the rapid political and social progress of revolutionary ideas dealing with the development of human resources in Korea has placed the vital role of education in a central position. This rapid modernization through education and the overall social awakening for literacy places libraries in the position of acting as a social force destined to play a major role in the future of Korea.

In spite of political and socioeconomic instabilities during the first half of this century, Korea has made great progress in the past generation and the Korean library system in the modern sense can only be discussed in terms of improvements. Not only did the number of libraries increase, but their quality has greatly improved. There is an unprecedented interest in libraries as intellectual centers, cultural centers, and social centers. As with any sociological and cultural phenomenon, it is interesting to speculate on the causes. The improvement of library services in Korea has come about as a result of internal influences as well as those coming from outside the library world, both professionally and nonprofessionally. This improvement is attributed to the following factors:

Dynamic leadership through the Korean Library Association.

The rapid expansion of library education through schools in Seoul.

Strong American influence on Korean librarianship.

More recently, the major thrust of the Library Law of 1963.

Most recently, the major thrust coming through educational reformation by omitting entrance examinations for middle and high schools and by lowering the number of credits required in colleges and universities.

The rise of Korea's modern libraries is a story of changes in the educational system. Korean library development is largely a product of her educational heritage and experience as well as the result of Korean concepts of librarianship, books, and reading. The direct bearing of the democratization of education on the development of libraries after the independence of Korea in 1945 has been very critical, with reforms in curricula and new teaching methods that increasingly involve libraries as a vital means of education. The library is considered to be one means of implementing the nation's transformation to democracy.

Librarianship in Korea is quite dynamic. The general trend is definitely toward greater recognition of the value of libraries in a democratic society. Administratively, the Ministry of Education directs, organizes, advises, and coordinates the library system in Korea. Acting as coordinator and advisor, the ministry manages national public finances to be used in support of local libraries. The Ministry of

Education, under a minister of cabinet rank, authorizes the establishment of new public and private libraries. According to the Local Autonomy Law, however, each library is independent and each is controlled by the government of its province, county, city, town, or village; provincial and local boards of education are appointed by the respective governors and mayors with the consent of their assemblies.

This overall decentralization has handicapped the development of a public library network system and other programs of cooperation and coordination. Yet, cooperation among libraries, not only of the same kind but also of different kinds, is an important prerequisite to future development since it is necessary in overcoming the inadequacies which exist in financial premises, resources, and staff, both in number and calibre. For instance, interlibrary loan, which is the stepping stone for further cooperation among libraries, has not yet been sufficiently established. One of the main reasons for this insufficient interlibrary loan arrangement is the great difference in quality among the libraries, even in libraries of the same type.

A national plan for librarianship originating at the top level of government is necessary to implement effective cooperation among libraries. This will lead to the formation of a national network of libraries and information centers at different levels and of greater scope. Such a plan is also necessary because of the two kinds of dichotomies of development that are present in the current library situation in Korea.

Among the different types of libraries, a clear dichotomy of development has evolved which has placed them into two categories: the university, national, and special libraries; and the school, public, and children's libraries. The former types of libraries are active in progressively defining better methods, in putting new techniques into operation, and in experimenting with modern technology. Poorly motivated to improve their situation, the libraries of schools, for children, and for the general public are not vigorously participating in innovative explorations in this critical period for library development.

Perhaps a greater dichotomy of development than the one between library types stands between the libraries in rural areas and those in urban areas. This is particularly evident in the fact that a majority of libraries, resources, qualified personnel, and facilities are concentrated in Seoul, the capital city. There is a need for knowledgeable and decisive action from different levels of government, coordinated with a strong national plan for library development.

In view of these facts, it becomes obvious that librarianship demands the formulation of a national plan for the development of all the libraries in the country. A plan of this nature, in turn, will then provide for the most efficient use of funds for an implementation of the highest standards possible. This is especially necessary in Korea, where the population density is relatively low in most of the rural areas but runs high in the cities, particularly in Seoul.

As an essential component of a national plan, guidelines for library planning pertinent to the educational and socioeconomic needs of the country should be

established. In order to supply the unfulfilled demands for librarians, while upgrading their required qualifications in subject and language needs, a minimum and maximum plan for their education must be formulated. This plan should sufficiently prepare librarians, who will be working in school and public libraries in developing areas, with a beginning level program in library science. At the same time, this plan would raise the level of library and information science programs significantly, particularly in meeting demands in the areas of special and university libraries.

There are signs of a revitalization of the profession through the KLA. An awareness of professional responsibility is made evident by the willingness of the KLA to substitute teamwork for the strong individualism of the past and to elect young librarians into key posts. There is a realization that only in this way can the profession successfully meet the demands of the present and of the future. It is anticipated that the next few years will likely bring notable innovations and significant advances in libraries and librarianship in Korea.

REFERENCES

1. United Nations, Statistical Office, *Demographic Yearbook*, New York, 1965-1972. United Nations, Statistical Office, *Statistical Yearbook*, New York, 1965-1972.
2. *Korea Annual*, 1971, 8th ed., Hapdong News Agency, Seoul, Korea, 1971. *Korea Annual*, 1972, 9th ed., Hapdong News Agency, Seoul, Korea, 1972.
3. Rin Paik, *Han-Guk Do-Seo-Gwan-Sa Yeon-Gu (The History of Korean Libraries)* (Korean Library Science Series, no. 3), Korean Library Assoc., Seoul, Korea, 1969, pp. 6-12, 15-16.
4. Gee-Baeg Yi. *Han-Gug-Sa Sin-Ron (A New Study of Korean History)*, Il-Jo-Gag, [Seoul, Korea], 1968. Translated by the author.
5. Hanyong Im, "Education of General Public," in *Korea: Its Land, People and Culture of All Ages*, Hankwon-Sa, Seoul, Korea, 1963, pp. 367-368. This author follows romanization as standardized by the Korean Ministry of Education in 1956, unless certain words are widely known in other forms of romanization.
6. William E. Henthorn, *A History of Korea*, Press Press, New York, 1971, pp. 66-68.
7. Ref. 5, p. 368.
8. Ref. 3, pp. 17, 21.
9. Ref. 3, pp. 49-56.
10. Ref. 4, pp. 139, 200.
11. Chu-Chin Kang, "Korean Libraries: Past and Present," in *The Role of Libraries in the Process of Modernization: Conference Report, May 28-30, 1969*, Academy House, Seoul (Korean Library Association, comp.), Seoul, Korea, 1970, p. 28.
12. W. Turner Berry and E. Edmund Pool, *Annals of Printing: A Chronological Encyclopedia from the Earliest Times to 1950*, Univ. Toronto Press, Toronto, 1966, p. 3.
13. Norman E. Binns, *An Introduction to Historical Bibliography*, 2nd ed. rev. and enl., Assoc. Assistant Librarians, London, 1962, pp. 13-14.
14. Hongyol Yu, "Printing and Publication in Ancient Korea," in *Korea: Its Land, People and Culture of All Ages*, Hankwon-Sa, Seoul, Korea, p. 413.
15. Man-Nyun Han, "Publishing in Korea--A Historical Survey," in *Books and National Development: Seminar Report, April 27-29, 1968*, Academy House, Seoul. Korean Publishers Assoc., Seoul, Korea, [1969?], p. 29.
16. Thomas Francis Carter, *The Invention of Printing in China and Its Spread Westward*, Columbia Univ. Press, New York, 1931, pp. 25, 61.

17. "Koryo Jo Mog-Pan Darani-Keong Bal-Gyeon," ("Discovery of the woodblock remnants of Koryo: Darani"), *Dong-A Il-Bo*, April 12, 1972, p. 5. Translated by the author.
18. Geom-No Yi. "Go-Seo-Bi-Hwa; 2, 'gwon'eui Yu-rae-wa Yin-Swae" ("Secrets of Rare Books; 2nd series, The Origin of "Title" and Printing"), *Han-Kook Il-Bo*, December 15, 1973, p. 6. Translated by the author.
19. Ref. 16, p. 63.
20. Ref. 6, pp. 109-110.
21. Howard Sochurek, "South Korea: Success Story in Asia," *The National Geographic*, 135(3), 301-345 (March 1969), especially pp. 326-327.
22. Ref. 12, pp. 5, 8.
23. Ref. 16, pp. 61, 170, 175.
24. Ref. 14, p. 414.
25. Ref. 16, p. 25.
26. Ref. 16, p. 179.
27. Ref. 13.
28. Ref. 12.
29. D. C. McMurtrie, *The Book: The Story of Printing and Bookmaking*, Oxford Univ. Press, New York, 1943.
30. Ref. 4, pp. 225-226.
31. Ref. 16, p. 174.
32. Jay E. Daily, "Alphabets," in *Encyclopedia of Library and Information Science*, Vol. 1 (A. Kent and H. Lancour, eds.), Dekker, New York, 1968, pp. 202-216.
33. Fred Lukoff, *Spoken Korean, Basic Course*, Published for the United States Armed Forces by the Linguistic Society of America and the Intensive Language Program, American Council of Learned Societies, Ithaca, New York, 1945-1947, 2 vols. (U.S. Department of the Army. Education Manual, EM 564-565.)
34. William S-Y. Wang, "The Chinese Language," *Sci. Amer.*, 228, 50-60 (February 1973).
35. Ref. 3, pp. 69-100, 120-21, 122.
36. Chae Kyung Oh, *Handbook of Korea*, Pageant Press, New York, 1958, p. 95.
37. Ref. 3, pp. 136-140.
38. Ref. 4, pp. 212-213. "To-Hyang Mun-Hwa-Jae-ro Ji-Jung-Bo-Ho," ("Designation and Protection of Local Cultural Materials"), *Han-Kook Il-Bo*, January 5, 1974, p. 6. Translated by the author.
39. David Kaser, *Library Development in Eight Asian Countries*, Scarecrow Press, Metuchen, New Jersey, 1969, p. 11.
40. Takahisa Sawamoto, "Recent Japanese Library Development," *College and Research Lib.*, 24, 213 (May 1963).
41. Robert L. Gitler, "Japan," *Lib. Trends*, 12, 274 (October 1963).
42. Dae Sup Um, "Libraries," in *UNESCO Korean Survey*. Dong-A, Seoul, Korea, 1960, p. 497.
43. Ref. 36, p. 96.
44. Korean Library Association. *Libraries in Korea '72*, Seoul, Korea, 1972, [p. 4].
45. Jai Chul Lee, "Survey of Library Education and Training in Korea," in *Library Education and Training in Developing Countries* (George S. Bonn, ed.), East-West Center Press, Honolulu, 1967, pp. 73-80.
46. Chu-Chin Kang. "Future Needs for Trained Library Workers in the Republic of Korea," in *Library Education and Training in Developing Countries* (George S. Bonn, ed.), East-West Center Press, Honolulu, pp. 120-130.
47. J. McRee Elrod. "Reorganizing a Korean Library," *Lib. J.*, 84, 3522-3524 (November 15, 1959).
48. J. McRee Elrod. "Korean Classified Catalog," *Lib. Resources Tech. Services*, 4, 331-336 (Fall 1960).

49. UNESCO, *Public Libraries for Asia: the Delhi Seminar* (Public Library Manuals, no. 7), Paris, 1956, p. 27.
50. Korean Library Association. *Statistics on Libraries in Korea, 1973*, Seoul, Korea, 1973. Analysis of data is taken from annual editions of *Statistics on Libraries in Korea* unless indicated otherwise.
51. Central National Library, *A General Catalogue of the Central National Library, Korea, 1972-1973*, Seoul, Korea, 1973.
52. Ref. 51, pp. 14-15.
53. "Yeo-Seung Wey-Han Campaign Yi-Je" ("Two Campaigns for Women Readers"). *Dong-A Il-Bo*, November 26, 1971, p. 5. Translated by the author.
54. "Gyung-Po-Dae-e 'Yim-Hae Mun-Go'" ("Seaside Book Collections' at Gyung-Po-Dae"), *Dong-A Il-Bo*, July 26, 1971, p. 5. Translated by the author.
55. Ref. 49, p. 000.
56. Ref. 50, p. 115. Annual editions include the National Assembly Library Law as an appendix.
57. National Assembly Library, *Gug-Hoe Do-Seo-Gwan An-Nae* (Guide to the National Assembly Library), Seoul, Korea, 1971, p. 10. Translated by the author.
58. Jeong-Gu Kang, "Gug-Hoe Do-Seo-Gwan Peon" ("The National Assembly Library"), in *Jeon-Gug Do-Seo-Gwan Sil-Tae Jo-Sa; Sang* (Survey of Korean Libraries, Part I) (Korean Library Association, comp.), Seoul, Korea, 1971, pp. 31-73, especially pp. 50-55. Translated by the author.
59. Ref. 58, p. 23.
60. Ref. 58, p. 17.
61. Yeong Yun, "Gong-Gong Do-Seo-Gwan Peon" ("Public Libraries"), in *Jeon-Gug Do-Seo-Gwan Sil-Tae Jo-Sa; Sang* (Survey of Korean Libraries, Part I) (Korean Library Association, comp.), Seoul, Korea, 1971, pp. 75-126. Translated by the author.
62. The statistics of public libraries in this section do not include those of the Central National Library.
63. Ref. 61, pp. 94-95.
64. Section 8 of Chapter 1 of the Library Law permits public libraries to collect fees for the use of public libraries.
65. Seung-Hwan Kim and Jun Choe, "Dog-Seo mich . . ." ("Survey of Reading Habits and the Library Needs in Korea"), *Do-Seo-Gwan Hag-Bo* (Bull. Lib. Sci. Inst., Chung-Ang Univ. Inst. Lib. Sci), 1, 52-70 (February 1968). Translated by the author.
66. "Gug-Nae Choe-Cho-eui 'Yi-Dong Do-Seo-Gwan Ma-Ryeon'" ("The First Bookmobile Service in Korea: Chong-Ro Public Library"), *Dong-A Il-Bo*, p. 5 (April 27, 1971). Translated by the author.
67. Hwi-Ja Hong, "Yi-Dong Mun-Go" ("Bookmobiles"), *Ibid.*, p. 6 (May 14, 1971). Translated by the author.
68. "Yeo-Seong Wi-Han Campaign Yi-Je" ("Two Campaigns for Women Readers"), *Ibid.*, p. 5 (November 26, 1971). Translated by the author.
69. Ye-Kwon Kang, "The New Community Movement and County Library Services," *Bull. Korean Lib. Assoc.*, 14, 11-15 (November 1973).
70. S. A. Barnett and others. *Developmental Book Activities and Needs in the Republic of Korea*, Wolf Management Services, New York, 1966, pp. 51, 116-117. (U.S. AID contract no. AIA/csd-1162.)
71. Du-Hong Kim, "Hag-Gyo Do-Seo-Gwan Peon" ("School Libraries"), in *Jeon-Gug Do-Seo-Gwan Sil-Tae Jo-Sa; Ha* (Survey of Korean Libraries, Part II) (Korean Library Association, comp.), Seoul, Korea, 1971, pp. 5-90, especially pp. 66-70. Translated by the author.
72. Ref. 39, p. 25.

73. Chun-Hi Lee, "Dae-Hag Do-Seo-Gwan Peon" ("Academic Libraries") in *Jeon-Gug Do-Seo-Gwan Sil-Tae Jo-Sa; Sang* (*Survey of Korean Libraries, Part I*) (Korean Library Association, comp.), Seoul, Korea, 1971, pp. 127-177, especially pp. 154-157. Translated by the author.
74. Cheol-Gyu-Yi, "Teug-Su Do-Seo-Gwan Peon" ("Special Libraries"), in *Jeon-Gug Do-Seo-Gwan Sil-Tae Jo-Sa; Ha* (*Survey of Korean Libraries, Part II*) (Korean Library Association, comp.), Seoul, Korea, 1971, pp. 102-103. Translated by the author.

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