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ENCYCLOPEDIA OF LIBRARY AND INFORMATION SCIENCE

VOLUME 10

GHANA, LIBRARIES IN

General Historical Survey

ACHIMOTA

Achimota Library can be rightly called the foundation of libraries and library training in Ghana. By the 1930s Achimota College Library had already made a mark on the reading public. Although originally a Teachers' Training College Library, it developed on the basis of a University Library. Its facilities extended to other institutions and interested individuals throughout the country. In 1944–1945 the library accommodated for library training a number of students from all the British West African Colonies. These included a number of Ghanaians. Soon after World War II. library resources at Achimota included a main collection of over 11,000 volumes, a Science School Library with about 12,000 volumes, an Engineering School Library with 850 volumes, and an Art School Library with 270 volumes. But these collections were doomed to be disintegrated and distributed to serve new institutions of higher learning throughout Ghana. The University College of the Gold Coast, which later became the University of Ghana, was founded by Ordinance on August 11, 1948. Its initial library stock of 6,400 volumes included 3,000 volumes transferred from the Achimota Library. The Achimota Teachers' Training College, also established by Ordinance in 1948, moved with its library from Achimota to become a foundation faculty of the Kumasi College of Technology, now the University of Science and Technology. From Kumasi College of Technology, the Achimota stock continued to circulate to form the basis for the libraries of the University College of Cape Coast, the School of Administration of the University of Ghana, and the Teachers' Training College, Winneba. This does not, however, mean a total destruction for Achimota. Achimota School, which remains at the old site, can still boast of one of the best school libraries in Ghana today.

AGLIONBY AND THE BRITISH COUNCIL

Just at about the same time as Achimota was providing library services for Ghana and Ghana's literate inhabitants were beginning to feel and exhibit the joy of reading, John Aglionby, Lord Bishop of Accra, already had in his private general collection some 6,000 volumes housed in the Bishop's Boys' School, Accra. This library was opened to the general public in 1928 and was eventually to form the basis of the Public Library Services of Ghana. When the Aglionby Library was finally handed over for use by the general public, The British Council provided accommodation and staff to develop the collection in its initial stages.

UNIVERSITY LIBRARIES

University of Ghana, The Balme Library, P.O. Box 24, Legon/Accra. The Balme Library of the University of Ghana, with a book stock of over 260,500 volumes and 5,000 periodicals, is the largest research library in Ghana, serving a student population of about 2,400 and a teaching staff of 300. It was founded at Achimota in 1948 and moved to Legon in August 1959 into new buildings designed to accommodate 350 readers and 250,000 books. There is already need for extensions to accommodate its new facilities, its increasing library resources, and its staff of thirty professionals and forty-three nonprofessionals. Professionals include library assistants preparing for professional examinations. The library is classified according to the Library of Congress Scheme of Classification, and it maintains a union catalog of its departmental libraries. These include the Law Library, and libraries of the Departments of Agriculture, Physics, Chemistry, Zoology, Botany, Biochemistry, Nutrition, and Food Science. There are other library facilities at the university that have not yet been integrated with the Balme Library Union Catalog. These include libraries of the School of Administration, The Institute of African Studies, The Institute of Statistics, and libraries of the five Halls of Residence—Legon Hall, Akuafo Hall, Commonwealth Hall, Volta Hall, and Mensah Sarbah Hall.

Within the Balme Library, special collections such as the Africana Library, the Students' Reference Library, the United Nations Library, the Atoms for Peace Library, the Arabic Library, and the Volta Basin Research Project Library are being developed. The Balme Library is open to the general public for reference purposes only but operates interlibrary loans services with both national and international research organizations. A Technical Services Unit of the library provides binding, printing, and photographic services to researchers throughout the world.

The Balme Library is a model of library organization and administration for all the university libraries in Ghana. Each of these libraries is administered by the librarian, assisted by a Library Board or committee whose chairman is normally the vice-chancellor or principal of the university. The libraries are allocated a portion of the funds provided periodically by the Central Government. The overall administration of the university is centralized at the vice-chancellor's offices which are responsible, among other things, for academic, personnel, and all accounting and financial processes.

All books in print are usually ordered through the university's bookshop. Orders for out-of-print publications, periodical subscriptions, and other library materials are processed through agents overseas.

The University Libraries are generally open-access libraries with restrictions for Special Collections. In the Balme Library, fines are imposed for overdue loans, while in the other university libraries no fines are imposed for overdue loans and no deposits are required of entitled users.

Junior Staff are almost all Ghanaians, most of whom are chartered librarians of the British Library Association. In the Balme Library the senior staff includes a handful of expatriates.

All the universities publish various lists, bibliographies, bulletins, and reports.

University of Science and Technology. A Kumasi College of Technology was established by Ordinance on October 6, 1951. This was later transformed into the Kwame Nkrumah University of Science and Technology by an Act of Parliament on

August 22, 1961. On February 24, 1966, it became known as the University of Science and Technology. Its book stock is over 45,000 volumes with about 1,000 periodicals. Special Collections include an Undergraduate Library and a Ghana Collection. There are four carrels on the top floor and four in the Undergraduate Library. The stack room houses the Reference and Research Library. The library is classified by the Library of Congress Classification, and both author and classified catalogs are of the sheaf-type, the volumes of which are housed in a special stand. The library's staff includes twelve professionals and twenty-five nonprofessionals.

University of Cape Coast. The College Library was founded in 1962 with 625 books transferred from Kumasi. It has since increased its stock to over 60,000 volumes and 1,400 periodicals, and it has a staff of fourteen professionals and twenty-one nonprofessionals. A new library, now being built, will be organized on a subject basis and will contain 300,000 volumes and 650 seats.

THE PUBLIC LIBRARY SYSTEM

The Ghana Library Board, P.O. Box 663, Accra. The public library system of Ghana is directed by the Ghana Library Board founded by statute on January, 1, 1950, to establish, manage, and maintain public libraries in Ghana. With branches throughout the country, the collections total over 547,303 volumes and 345 periodicals classified by Dewey Decimal Classification. There are twenty-eight professionals and 202 nonprofessionals in its establishments. Some of its special collections are designed to serve middle schools, children, and commerce. There is also a Mobile Library Service. It is planned to establish more libraries throughout the country.

The Research Library on African Affairs. In 1961 a Padmore Research Library was founded by the Ghana Library Board in memory of George Padmore to support research on African affairs. It now houses over 7,000 volumes and 320 periodicals. With a staff of two professionals and three nonprofessionals, the library publishes a Ghana National Bibliography and a Bibliography Series. The library is now called The Research Library on African Affairs.

THE GHANA ACADEMY OF SCIENCES, P.O. BOX M.32, ACCRA

The Ghana Academy of Sciences, with branches throughout the country, maintains a Central Reference and Research Library, founded in July 1964 and now being developed into a scientific and technical documentation center. Like some of its branch libraries, it is classified by UDC. The present stock is over 5,000 volumes and 1,000 periodicals. The library publishes the Academy Record and a Union List of Scientific Periodicals. The staff is comprised of two professionals and four nonprofessionals including one science graduate.

The National Institute of Health and Medical Research branch of the Ghana Academy of Sciences has a library of over 7,000 volumes and 400 periodicals originally based on Professor Joseph Gillman's private collection on medical sciences.

The collection, including a large number of reprints, was bought by the National Research Council in August 1961. It is classified by Bernard Classification for Medical and Veterinary Libraries. The one curator is a professional librarian.

Another branch library of the academy is the Animal Research Institute library with one professional librarian and a book stock of over 1,200 volumes and fifteen periodicals.

In 1952 a West African Building Research Institute was established in Accra with financial support from the governments of Ghana, Sierra Leone, Nigeria, and the United Kingdom. The institute was dissolved in 1962 and was absorbed by the Ghana Academy of Sciences as Building Research Institute. A Road Research Unit was added in 1963 when the institute moved to Kumasi as the Building and Road Research Institute. Its present stock is over 6,000 volumes, excluding pamphlets, and 200 periodicals. With one professional curator, the library publishes *Quarterly Assessions Lists* and *Lists of Serial Publications* currently received.

Another branch library of the Ghana Academy of Sciences is the Cocoa Research Institute at Tafo, established about 1949 when books and periodicals previously kept in the laboratories were collected in a small room. A trained librarian was first appointed in 1962. The present stock is over 7,500 volumes and 435 periodicals.

THE GHANA MEDICAL SCHOOL, P.O. BOX 4236, ACCRA

With only a stock of nearly 2,000 volumes, excluding pamphlets, and no periodicals, the Ghana Medical School Library was founded in October 1964. The library is classified by Barnard Classification. Two professional librarians are engaged in building up the collection. The library possesses a tape recording machine and lectures on general practice on audio-digest magnetic tapes. In due course, all the medical library resources of the Ministry of Health and the National Institute of Health and Medical Research will be combined under the administration of the Ghana Medical School.

INSTITUTE OF PUBLIC ADMINISTRATION, GREENHILL, P.O. BOX 50, ACHIMOTA

The Institute of Public Administration is an independent postgraduate professional training and research institution. Its library, founded in 1961, is developing rapidly. It has a monograph collection of over 10,000 volumes and 250 periodicals. The library is particularly strong in its materials on management practices in government and industry, public finance, law, economic planning, personnel administration, and related materials drawn from all over the world. It is also acquiring a strong collection of Gold Coast and Ghana official documents. The library is responsible for the circulation of training materials and for the operation of the institute's audiovisual equipment, consisting of a microfilm reader, an overhead projector, tape recorders, film and film-strip/slide projector, and a photocopier. A six-way microphone mixer for the tape recorders is available for use at conference sessions. The library is classified by Library of Congress Classification. There are at present three nonprofessionals and one professional librarian.

THE VOLTA RIVER AUTHORITY, P.O. BOX M.77, ACCRA

When the Volta River Project was promulgated. it was intended that the project should evolve into a full multipurpose undertaking in which the whole area of economic impact of the Volta Dam should be considered. Consequently a team of experts was invited under the auspices of the United Nations to make a preliminary survey and to lay down the necessary program of research and planning. An independent Volta River Authority was established in October 1964 to carry out the project, including a library. This library is to support the various activities of the authority, including water resource development. hydroelectric power generation and distribution, dams, inland transportation, and fisheries. With one professional librarian and three nonprofessionals. the library now holds over 3,000 volumes and seventy periodicals. It is classified by UDC.

OTHERS

There are a number of other small special libraries being developed by trained librarians, and there are a number of good collections awaiting the availability of trained librarians to develop them. Among the developing libraries are the libraries of the Bank of Ghana, the National Investment Bank, National Productivity Centre, Ministry of Agriculture, Bureau of Statistics. Ghana Meteorological Services, the Armed Forces, Ministry of Foreign Affairs, Parliament House, The British Council, UNESCO, and the Supreme Court.

A United States Information Service Library was opened in 1954 to provide information about the United States of America to the Ghanaian public. It contains nearly 7,000 volumes and eighty-five periodicals. Publications include a monthly *Library News* and occasional *Bibliographies*. The library, staffed with four nonprofessionals, is classified by the Dewey Decimal Classification.

COLLEGE AND SCHOOL LIBRARIES

Apart from the universities, Ghana's numerous other educational institutions include secondary schools and sixth forms, technical schools and institutes, and commercial and clerical institutions with private or government support. These all house libraries of various qualities and sizes. Although the Ghana Library Board provides short occasional training for teacher librarians, the organization and administration of most of the school and college libraries have still left much to be desired. It is hoped that these college and research libraries will provide job opportunities for locally trained librarians in the near future.

Staff and Library Education in Ghana

The need for trained Ghanaian librarians was felt as early as the 1930s when serious thought was being given to the expansion of library services for Ghana. Until 1961 when a Library School was established in Ghana to conduct courses for the British Library Association Examinations, preparations for these examinations consisted of organized intensive in-training, correspondence courses, or full-time courses in the United Kingdom. The minimum entrance requirement was the production of evidence that a candidate had obtained a suitable General Certificate of Education, or had passed an acceptable equivalent general examination. The Ghana Library School operated until 1965. In October 1965 the school moved to Legon to become the Department of Library Studies of the University of Ghana, and to provide undergraduate courses in librarianship. The undergraduate courses ended with the close of the academic year 1966/1967. Beginning with 1967/1968, only postgraduate courses in librarianship are to be taught in the Department of Library Studies.

The Regulations and Syllabus of the British Library Association for professional examinations have meanwhile been revised. The minimum entry conditions now require evidence that a candidate has passed the General Certificate of Education in five subjects, of which one must be in the English Language and two must be at an advanced level. The universities of Ghana also require a minimum entry standard of a pass in two subjects at an advanced level of the General Certificate of Education. This equation of entry requirements imposes strong competition. Many Ghanaian aspirants to the profession of librarianship today naturally choose to precede their training with a degree course because this ensures brighter career prospects. This situation also imposes staff problems at the middle level where turnover is rather large. Library assistants with two advanced levels, on employment, spend on the average 1 year in the library and then leave to enter the universities. Those with one advanced level subject may spend 2 to 3 years, depending on how quickly they pass their second subject at an advanced level. The Department of Library Studies, University of Ghana, has started a Certificate Course for the training of library assistants with ordinary level subjects and 2 years of working experience in a library.

The Library Education programs for Ghana have produced a few score Ghanaian librarians up to now. And because many government departments, business corporations, and other organizations have been waiting for these librarians, most of them are now being engaged to build up and develop libraries of all kinds throughout the country. It may thus be deduced that the future of library facilities in Ghana will be closely linked with the future of library education programs in Ghana.

The Ghana Library Association

With a steadily growing number of trained professional librarians, it has long been realized that a national association was required to be the mouthpiece of the profession in the Ghanaian community. The Ghana Library Association was formally inaugurated at a conference held at the University of Ghana from June 29 to July 1, 1962. At an inaugural dinner, the then vice-chancellor of the University of Ghana stressed that the effectiveness of the library as an essential instrument of education depended upon the calibre of the librarians and that, to a great extent, depended upon a good professional environment. "A vital factor in the development of this environment in any country is its Library Association, which encourages research institutes, education programs, represents the individual librarian in all negotiation and, above all, establishes professional standards." Indeed, these are but some of the many objectives of the Ghana Library Association. Although not much has yet been achieved practically owing to various limitations, the association has every reason to look into the future with optimism. The association publishes a *Ghana Library Journal*.

Concluding Remarks

Ghana's total library stock numbers only a few million volumes and a few thousand periodicals. Demand on this stock at the universities is mainly from undergraduates. At the various other institutions and organizations, demand is restricted to small groups of researchers in limited fields. Service to readers at this stage is consequently less complex, generally comprising (1) a guide to the undergraduate in finding his material from a confused mass of collections arranged in some peculiar order with peculiar "keys" called catalogs; and (2) assistance to the researcher through the compilation of special bibliographies, and help in acquiring outside material necessary for his research which is unavailable locally. Frustrations for the librarian and the researcher in this last regard are many, owing to limitations imposed by distance, communication, and exchange control restrictions. But the future is not dim. Ghana's libraries will grow step by step as they develop in response to various needs. And although library processes throughout the country today are generally manual, when the need arises for the speeding up of processes through the use of automation, Ghana's libraries will not be found hesitant nor wanting in resources.

Computer facilities are already available at the University of Ghana's Institute of Statistics. There is an IBM 1620 Data Processing System and also an IBM 360/20 Machine. The institute uses the computer facilities in connection with various research projects in collaboration with various government departments and research units all over Ghana. Short courses in computer programming are also conducted. The institute is keenly interested in continuing and expanding its activities in the field of automatic analysis of data so as to be able to play its role in research and education. Libraries in Ghana might one day be caught up in its expanding activities.

Ghanaian literates, however, have yet to feel it a duty to support libraries generously in sum and/or in kind. Greater financial resources for libraries will mean greater service. The archives of eminent Ghanaian scholars, churches, and other organizations worthy of note in the annals of Ghana should not remain locked up in dusty and stuffy rooms, but should be donated to libraries for preservation and use. Even the rich illiterate farmers who freely donate large sums of money toward the building of a village chapel have yet to be made aware of the need to support the building and development of libraries throughout the country. The sooner this awareness comes to Ghanaians, the sooner library efforts will result in the development of a happy and well-informed community.

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E. Y. AMEDEKEY

GIFTS AND EXCHANGES

A significant portion of library collections are provided through gift and exchange programs. As library book budgets become tighter, materials received as gifts acquire greater importance and assist significantly in stretching the budget resources of libraries. Another program of importance to libraries is that of exchanges. Many types of material, particularly some materials published outside the continental United States, can not be purchased outright by individual libraries and must be acquired through exchange programs conducted with other institutions. This article discusses the fundamental points to be considered in each program.

Gifts. Gifts can constitute as much as 30% or more of the annual acquisitions of a library. Many institutions have benefited greatly from the receipt of materials in this manner.

> University libraries, such as Yale and U.C.L.A., receive thousands of gift items annually in addition to gift funds for books and occasional collections. The J. K. Lilly collection, presented to Indiana University in 1956, is regarded as "one of America's great private libraries" and "is regarded by rare book authorities as the largest and most valuable benefaction of its kind ever made to an American University" (*1*).

The Library of Congress receives hundreds of thousands of items each year, but a large amount of this material is received as a result of dumping by other governmental agencies (*2*). It has been said that gifts can be a mixed blessing (*3*), and this is quite true. Thus, while much of what a library may receive by gift will be of great use and should be added to its collection, there is considerable material that is useless and takes valuable staff time to dispose of.

Gifts may come in two forms—money and material. Both may be restricted or unrestricted and the library should develop a gift policy in order to deal fairly and uniformly with each donor. The suggested policy statement of the American Library Association made in 1939 contains useful suggestions for librarians, library trustees, and donors to consider.

> The Association . . . believing that gifts and bequests to libraries, both tax supported and privately endowed, and to libraries of colleges, universities, and other institutions should be encouraged, invites the attention of library trustees, lawyers, trust officers, and other friends of libraries to the following considerations:
>
> 1. The Association recommends that, in recognition of the economic situation, any program for gifts and bequests should be formulated carefully and with long-term objectives which should be kept constantly in the public mind.
>
> 2. The Association believes that memorials in the form of funds for library purposes have a strong appeal to many people because they present the opportunity to carry on the life interest of an individual or a group and can continue a beneficent service through the years. It recommends, therefore, the encouragement of such memorials.

3. The Association believes that the development of trust funds presents a field for constructive work on the part of library boards and recommends to such boards, or to others responsible for the administration of libraries, that the possibilities and opportunities presented by such funds be called to the attention of their constituencies.

4. The Association believes that one way to broaden the base of giving to libraries is to interest a large number of people in writing bequests into their wills, and it recommends that libraries let it be known that a modest bequest may be made with just as much sincerity and dignity as a large one and that it is just as acceptable to the library.

5. The Association believes that insurance policies, including annuities, offer a form of gifts to libraries, the possibilities of which have as yet not been fully explored, and it recommends that libraries be suggested as the beneficiaries of such policies.

6. The Association strongly urges that in considering any gift or bequest, the donor be asked to consult the library administration in order to make the benefaction of the greatest possible use both for the present and for the future and that he be asked to protect his gift legally in such a way that changed conditions in future years may be met without impairing the usefulness and general purpose of his gift (*4*).

A gift policy should make clear that the library has the right to dispose of duplicates and unwanted volumes, that it should not be required to keep the collection together in one physical place in the library, and that it has the right to administer it as it sees fit in the future. Generally, policies should be written and local conditions will dictate their application to fit the need. If the policy is too rigid, gifts may go to another library and possible future gifts may be sent elsewhere. For example, very important gifts may be kept together by the library in order to insure that the institution receives the collection. However, libraries generally refuse to receive gifts with strings attached, unless there are very special circumstances.

When the library is approached by a donor to receive a gift, there are a number of points to be considered before the material is accepted. First, as was noted above, libraries usually should refuse to accept any items with stipulations attached to them. Second, when the gift is a large one, space may be a consideration. If a collection can not be housed properly, it will be of less value to the users. However, if the collection is of significance, the library should explore all possible means to acquire funds to acquire the necessary space. Materials that are being offered should be examined in terms of their value to the community library and in relation to instructional and research programs in the case of academic institutions. Any gift accepted with stipulations must be examined in terms of how it is to be housed, serviced, cataloged, classified, and used. For example, if the items in the collection are of high monetary value or are rare, it may be necessary to house them in a separate area with special security precautions, and special catalogs may have to be constructed. Often the latter will require highly trained personnel which the library may not have available at the time.

If there are stipulations regarding the collection, an agreement should be made with the donor in so far as the administration of the collection, i.e., discarding, selling, weeding or exchanging items, is concerned. Without such an agreement, the library may find that it will be difficult to administer the gift in future years. Also, the nature of the library may change or the value of the collection may be reduced. When a benefactor gives a special collection, it may be that it should be kept together and the library acquire additional materials to maintain its value through the years. This will require funds that the library may not have, and should be brought to the donor's attention in the hope he will provide the necessary resources. Finally, the library should, generally, maintain a policy of not appraising materials. Librarians are not book dealers and are often unaware of their latest market value. Many gifts are given to libraries in order to take advantage of tax laws and the donor, therefore, requests monetary appraisal of his collection's value. Whenever possible, the library should tactfully ask the donor to contact an appraiser and carry this procedure out himself. If a library has the name of a competent appraiser, it may pass this information on to him. If the donor will not or can not pay for the appraisal, the library, if the gift is significant enough, may pay for an outside appraiser to make an estimation. The Tax Reform Act of 1969, unfortunately, has had a detrimental effect on gifts to libraries as well as other nonprofit institutions. The Association of College and Research Libraries of the ALA has published guidelines concerning appraisals:

> A STATEMENT OF RECOMMENDED LIBRARY POLICY REGARDING APPRAISALS, by a special committee of the ACRL Rare Books Section.
>
> 1. The appraising of a gift to a library for income tax purposes is the responsibility of the donor since it is the donor who requires an appraisal, not the library, but the library may make arrangements for and suggestions concerning appraisals.
>
> 2. The library should at all times protect the interests of its donors as best it can and should suggest the desirability of appraisals whenever such a suggestion would be in order.
>
> 3. The library, as an interested party, to protect both its donors and itself, should not appraise gifts made to it. In the case of gifts having only a comparatively small monetary value, however, there would appear to be no legal obstacles to the library's establishing its own evaluations.
>
> 4. The donor is at liberty to make his own arrangements for an appraisal.
>
> 5. If so requested by the donor, the library will obtain a qualified expert to make an appraisal.
>
> 6. The acceptance of a gift which has been appraised by a third—and presumably disinterested—party does not in any way imply an endorsement of the appraisal by the library.
>
> 7. The cost of the appraisal should ordinarily be borne by the donor, and is in itself a tax-deductible item. If it wishes to bear this expense, there seems to be no legal reason why the library should not do so.
>
> 8. The library should not appraise items for a private owner. It should limit its assistance to referring him to such sources as auction records and dealers' catalogues and to suggesting the names of appropriate experts who might be consulted.
>
> 9. A librarian, if he is conscious that as an expert he may have to prove his competence in court, may properly act as an independent appraiser of library materials. He should not in any way suggest that his appraisal is endorsed by his library (such as by the use of the library's letterhead) (5).

Once a gift has been received it should be promptly acknowledged. Depending on its value, this may be done by the management staff of the library, the director of libraries, the president of the institution, or the chairman of the board. An attractive form letter may be sufficient for smaller gifts. Those which are of greater importance may be accepted and acknowledged by a formal reception or special program to which suitable publicity can be given. This has a twofold purpose: first, to assure the donor that his gift is appreciated, and second, to advertise that the library is the recipient of a valuable collection, thereby encouraging prospective donors to consider the institution for their own materials. Gifts beget gifts; if an institution does not advertise the fact that it not only appreciates them but publicly thanks the donor for the material, a valuable public relations opportunity can be overlooked.

A program that many libraries initiate to encourage the giving of gifts to the institution is that of the Friends, or Associates, of the Library. Many libraries have benefited greatly by organizing such a group. Nevertheless, there are a number of questions that should be asked before any institution proceeds to do so. Who is going to bear the major staff responsibility for organizing and administering the group? Who are the people who can form the nucleus of such a group and assume the burdens of leadership? What is the breadth of membership desired and what dues structure is appropriate? What is the focus of the Friends effort? What are the prerequisites of membership in the program?

As Rogers and Weber note, a successful Friends group will not succeed without a great deal of attention from an important official in a library. They state that the two obvious candidates for this role are the director of libraries or the head of the Rare Book or Special Collections Department (*6*). An active Friends group can be valuable in promoting the needs of the library not only in acquiring gifts but also in bringing attention to problems of budget, staffing, and service. It should be noted, though, that Friends of the Library groups often confine their interests to rare and special collections.

The Gift Librarian needs to be personable as well as tactful in order to handle the wide variety of inquiries and contacts that will come to him in his position. He must know the collection of the institution well enough to recognize, when surveying a prospective gift, if the material would be more appropriate in some other library. If this can be determined in advance of receipt of the gift, it can save much time and money on the part of the receiving library. Procedures that the Gift Librarian sets up are vitally important in order to properly thank donors and to insure that the material has been properly book-plated and entered into the library collection. Just as important is the need to identify gifts that are discarded to insure that they have been properly stamped as a withdrawal or a discard so that the material does not return to the library sometime in the future under the mistaken notion that it is part of the collection. A simple stamping across the bookplate or the title page of the material will avoid this kind of error.

Gifts that libraries should avoid include nonbook materials such as mementos of famous persons or artifacts of one sort or another. These are suitable for museums designed and equipped for this class of material. A library that accepts them is only creating problems for itself and doing an injustice to their proper display for scholarly perusal.

Exchanges. It is usually more efficient for a library to purchase materials directly instead of going through an exchange program. However, there are certain categories of materials that can be acquired only through this method. Libraries may be under currency restrictions, denied foreign credits for purchase of foreign publications, or simply not have the money to purchase foreign titles outright. There are a large number of different types of material used for exchanges, e.g., official publications, dissertations, abstracts of dissertations, duplicate books, duplicate serials, nonduplicate materials such as university published series, journals, university press monographs, nonserial publications, instructional department publications, library publications, society publications, and other miscellaneous materials.

> One of the first instances of exchanges between libraries came in 1694 when the Bibliothèque du Roi in Paris established exchanges with several countries and carried on this program for about four years. About 1740, a commercium literarium was set up between the universities of Lund, Abo, and Greifswald for the exchange of academic publications. In 1817, the German Akademischer Tauschverein was founded in Marburg, consisting of institutions in Germany, Sweden, Switzerland, Belgium, and the Netherlands. Early in the nineteenth century the British government made an unsuccessful attempt to arrange an exchange of copyright deposits with France. Also early in the nineteenth century the American Philosophical Society in Philadelphia and the American Academy of Arts and Sciences in Boston began to exchange their publications with foreign learned societies (*7*).

Since that time, several conferences were held that eventually led to international agreements on the handling of exchanges. Among the most notable was the Brussels Convention of 1886 which was signed by twenty-one countries and established a number of mechanisms for handling international exchanges. The second convention with which the general reader should be aware is the UNESCO Convention of 1958. Thompson reports the results of the latter as follows:

> The provisions of the convention concerning the international exchange of publications are: 1) contracting states shall encourage and facilitate the exchange of publications between both governmental bodies and non-governmental institutions of an educational, scientific, technical, or cultural nature. 2) publications to be considered for exchange under this convention are official publications, government documents, and publications of an educational, legal, scientific, technical, cultural, and informational nature. 3) the contracting states may entrust the national exchange service or central exchange authority with facilitating the exchanges, supplying advice and information on exchange possibilities, and encouraging the exchange of duplicate materials. (4) transmission may be made directly between the exchange partners or the national exchange service, and 5) the contracting states shall pay the transmission costs unless transmissions are made directly between exchange partners (*8*).
>
> There are two generally accepted methods of exchange, direct exchange between libraries and indirect exchange through central exchange bureaus. In direct exchange, each library deals directly with every library with which it has exchange relations. In indirect exchange, the central exchange bureau may have the libraries

> handle all arrangements and provide only shipping services or it may provide central services for information and advice, with the libraries handling all exchange matters in agreement with or through the central exchange bureau (9).

There are many hidden costs for the library in exchange work. Among these are staff time spent in establishing the exchange through correspondence, which often requires the writing of large numbers of letters, telephone calls, and even occasional visits to the other institutions. Once the exchange is finally arranged, time is spent packing the material to be exchanged and following up to assure that materials have arrived. This involves claiming and checking in the material, and other record keeping.

A library should weigh very carefully whether exchange is the only way the material can be procured. Libraries sometimes make the error of establishing exchanges only to find out later that the material can be more easily purchased through commercial channels or purchased outright from the originator. Domestic exchanges should be kept to a minimum because of the general ability to acquire the material directly from the source or through a dealer.

On the other hand, exchanges with institutions overseas may be the only way that the material can be acquired. Often a library in the United States is not even aware that an item is being published until several months after the publication date, and by then it may already be out of print. This is particularly true for materials published in Latin America or Africa. Therefore, the exchange method may be the best, if not the only way, of acquiring materials from institutions in developing countries. Thus, by establishing an exchange with an institution overseas, the library is in the position to receive the material as soon as it is published.

To be successful any library needs support from its parent institution to provide the materials that cooperating libraries will wish to receive on exchange. This is not too much of a problem for academic libraries since academic departments will often publish reports and studies, or there may be a university press. In the case of the latter, press materials may be acquired for as much as 40% discount. Also, from time to time, a university press will turn over its stock of remainders to the library. Occasionally exchanges are set up whereby a library will purchase books and periodicals that are not published by the parent institution and send them to an exchange partner. Libraries in the Soviet Union and Eastern European countries often ask American libraries for items published in the trade which they are unable to acquire directly through normal trade channels.

In addition to some of the points mentioned above, libraries in the United States should carefully monitor the material they are receiving to ensure a reasonable equivalency of value. Many libraries exchange on a page for page or a piece for piece basis. Many libraries outside the United States insist on pricing exchanges as a means for establishing equivalents. None of these systems are wholly satisfactory and care must be exercised in their application.

Libraries which are developing rapidly may overlook the necessity of assigning one person or more exclusively to the exchange program. Consequently, a lack of coordination develops and a discontinuity of information occurs. It is mandatory that accurate records be maintained on a current basis and correspondence be answered promptly since much redundancy occurs in the process of trying to determine whether the partners are sending the materials which they have promised to provide. Probably one of the more frustrating aspects of exchanges for American and European libraries is this lack of continuity in exchange programs in institutions in developing countries. Often too little attention is paid to the procedures established for these exchanges. Likewise, staff turnover and lack of trained personnel cause exchanges to lapse, resulting in considerable additional work to reestablish contact.

UNESCO has long had an interest in exchanges, and its handbook on the international exchange of publications is an invaluable source of information for libraries wishing to establish international exchanges. The handbook covers the different types of exchanges which are possible and explains the responsibilities to the exchange partners. It is written in four languages and is used throughout the world. In the United States, the United States Book Exchange (USBE), which is governed by a board of directors made up of representatives from scholarly and library associations, the Library of Congress, and the Smithsonian Institution, has been developed as a clearinghouse for duplicate materials sent to it by foreign and domestic member libraries. By using its services, a library may be relieved of the paper work necessary when establishing an exchange directly with another partner. It simply sends unwanted items to the USBE for credit to be used against future purchases. However, it must pay transportation and a handling fee for each book or issue of the periodical it selects. Lists of available materials are sent to member libraries periodically for their selection on a first come–first serve basis. It is a unique source of periodicals from all countries, in all subject fields, ranging in date from the earliest to current issues, as well as of out-of-print and other books in research fields. The stock numbers over 4,000,000 periodical issues and 100,000 books (as of 1970) (*10*).

Other organizations that can be of assistance in setting up exchanges in various subject areas include the American Association of Law Libraries, the American Theological Library Association, the Council of Planning Librarians, and the Medical Library Association (*11*). Each of these associations has a committee exclusively devoted to the problems of exchange programs.

One can see that although an exchange program can be very rewarding, a great deal of care and selectivity must be given to the types of materials to be acquired. An exchange should never be undertaken until it has been determined that there is no better way to acquire the titles desired.

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JOHN N. DEPEW

GLASGOW. UNIVERSITY OF GLASGOW LIBRARY

The University of Glasgow was founded in the year 1451, by Bull of Pope Nicholas V. But during the first century and a quarter of its existence it suffered from a crippling lack of material resources, and had a difficult struggle to survive. Of its library during that period practically nothing is known, apart from the record of three gifts: on November 3, 1475, John Laing, the bishop of Glasgow, gave for the use of the regents two manuscript books containing the text of various treatises of Aristotle; about the same time Duncan Bunch, a former principal regent, gave seven volumes (again mainly devoted to Aristotle and his commentators, though there was also a manuscript of the text of the Bible); and in 1483 one of the regents, John Brown, gave thirteen volumes (again mainly devoted to Aristotelian scholastic philosophy).

None of these has survived. But from 1577 onward matters were different. In that year, thanks to the energies of Andrew Melville, who had become principal regent 3 years earlier, the university received a new charter from King James VI. At about the same time it received, in the grant of the parsonage and vicarage teinds of the Parish of Govan, a steady source of income which made progress possible for the future. In this same year of 1577 the continuous history of the library begins, with the gift by the rector, Andrew Hay, of a copy of *Biblia sacra, Interprete Castalione, magno folio excusa Basileae, 1556,* perhaps the first printed book to enter the library. A reference to it constitutes the first entry in a list of twenty-one volumes bearing the somewhat ambitious title "Catalogus librorum communis bibliothecae Collegii Glasguensis, 1578"; the rest of the list describes twenty books by Greek authors, the gift of the great humanistic scholar George Buchanan. To the same year, 1577, belongs the first note of books bought for the library—fourteen volumes, including works by Aristotle, Cicero, and Saint Augustine, as well as a Bible and *The Hail Actes of Parliament.* But for the next century, and more, the continuing growth of the library was achieved mainly through the medium of gifts, since the only revenues available to it were the small payments made by students on matriculation and graduation.

Within a few years of the receipt of its new charter, the university had drawn up a series of statutes to govern its proceedings. Among the offices it established under these statutes was that of quaestor (to be elected annually, from among the regents, by the dean of faculty and the masters) whose duties were to take charge of the treasury and of the library. To the quaestor fell the duty of making all payments, for which he had to account yearly to the principal and the regents. His powers in the buying of books for the library could be exercised only on the order of the regents as a whole, or of a committee of four which was to include the principal. The collection of the payments due at matriculation and graduation was also the responsibility of the quaestor.

These payments were at first graded by year of study, scholars in the upper classes paying considerably more than those in the lower ones. But in 1637 new regulations were laid down, under which students were divided into three groups by rank—first, noblemen's sons and the eldest sons of barons and lairds; second, other children of barons and lairds, and the sons of the reasonably wealthy; third, all the rest, save those destitute of means to sustain themselves. The fees to be paid to the quaestor before examination were graded correspondingly, at first in the proportions 4:3:2, but later (1659) this was changed to 5:3:2. At graduation a flat-rate sum of 10 merks was payable by everyone.

In 1630 the university launched a public appeal for funds. There is no doubt that the main purpose of this was to make possible a program of general rebuilding, but the inventory of donations or promises received speaks of them as being "for the building of a commoun librarie within the Colledge of Glasgow, furnishing thairof with books, and utherways inlarging the fabrick of the said Colledge . . . ," and most of the individual promises received are expressed in the terms "for the help of the Building and Librarie of the Colledge of Glasgow." Whether the library did in fact benefit to any great extent is doubtful; for despite evidence of purchases made by regents whenever they had occasion to visit Edinburgh or London, and regular consignments of continental books from an agent in Holland from 1632 onward, the Parliamentary Commission which visited the university in 1664 reported that it found the library "but verie small for ane Universitie, and haveing no considerable ways to better the samen by the Universities awen care."

The office of Librarian was not established until 1641 when Thomas Hutcheson of Lambhill, a graduate of the university, gave a sum of money to be used as endowment for the salary of a young Master of Arts to be employed as librarian of the college. The nominee was to be presented by the Town Council of Glasgow and was to hold office for 4 years only. Ten years later the university on its own part contributed an additional 100 merks to his annual salary, and claimed in return the right to nominate alternate holders of the office. The system continued in force until 1782.

In 1643 the regulations for the use of the library were first codified, in the following admirably brief terms (translated from Latin):

1. No-one may enter the library without the librarian's permission.
2. No-one may have the right to read until he has been enrolled and has taken the oath.
3. No-one may handle a book unless it is given to him by the librarian.
4. No-one is allowed to take out a book without permission, but should observe the rules for borrowing prescribed or to be prescribed.
5. No-one shall mark books with ink or by folding the paper.
6. If anyone soils a book through carelessness, he must show it to the librarian at once, and pay a penalty determined by him. Fines of the kind are to be kept by the librarian for the use of the library.
7. No-one may read by lamplight, or a book near a flame.
8. When the college is open, reading will be permitted every day except Sunday: in winter from 10 to 12 and 2 to 4 P.M. but in summer additionally from 7 to 9 A.M.

9. Everyone must leave promptly when the signal is given at 9, 12 and 4 P.M.
10. Everyone must read quietly by himself without disturbing another while reading, and if conversation is necessary he should approach the person and whisper in his ear.
11. Any reader who on entry has obtained a book may keep it if he wishes until closing time, and the person who first obtains a book cannot lawfully be deprived of it.

In the following year steps were taken to place tighter controls on the lending of books, from which practice "no slight harm had arisen." But it appears that the passing of regulations and ensuring that they were observed may have been two very different matters, for only 15 years later it was found necessary "for the remedie and preventing of many abuses relating to the Public Library and the Questores Accountes" to publish a revised set of regulations and to lay down "that in all tyme comeing the Statutes . . . be inviolably observed."

Between the Restoration in 1660 and the Revolution in 1688 the flow of gifts practically dried up, but it quickened again from 1692. Among the more interesting entries in the library's record of donations, begun that year, is one for the second edition of John Eliot's *Indian Bible*, presented on March 20, 1693, by "David Campbell, bookseller at Bostoun in New England." The 1663 edition was added 5 years later, by gift of the widow of Robert Burns, junior, merchant in Glasgow.

It has been estimated that the total contents of the library at the end of the seventeenth century numbered only about 3,500 volumes. Shortly afterwards, however, the rate of increase began to quicken as a result of a new source of acquisition becoming available. Under the Copyright Act of 1709 the library became entitled to be furnished with a copy of each work entered at Stationers' Hall. Yet this new privilege was not an unmixed blessing. The books were not sent regularly; they were provided only in sheet; and the expense of collecting them from London and binding them on arrival was quite a serious drain on the resources available.

In 1712 the regulations were again revised. The hours of opening were fixed as 10 A.M. to 12 noon and 2 P.M. to 4 P.M. The right of reading was to be confined to those who were "cives Bibliothecae," a status conferred gratis on graduates and on others only after payment of at least £3 Scots to the funds of the library. The librarian was enjoined not to put in the hands of students any books that were not germane to their studies, or any that might harm their faith or morals.

Three years later a short-lived rule limited the right of borrowing books to teachers of the university; but within 8 months it was withdrawn in recognition of the prejudicial effect it had on the work of students.

In 1726 came the first moves to provide the growing library with a building of its own. Six years earlier the Duke of Chandos had made to the university a gift of £500 sterling, to be applied as the chancellor, the Duke of Montrose, might determine. He now, "considering that it will be of great use and advantage as well as ornament to the said University that a fitt house should be built for a Library wherein the books . . . may be lodged with greater safety and conveniency than they now are," signified his will that the gift should be devoted to this purpose. The building was duly begun in 1732 and completed in 1744. It seems to have provided more than adequate space initially, for the use of its lower story was conceded by the university in 1754 to Robert Foulis, for his Academy of Arts.

The new building appears also to have revived interest in the development of the collections. For the first time a real effort was made to derive full benefit from the Stationers' Hall privilege, when in 1774 John Murray (founder of the famous firm of publishers) was appointed the university's agent in London. In 1782 the Town Council was at last persuaded to surrender to the university the sole right to appoint and pay the keeper of the general library. This made it possible for the first time to achieve some real continuity in the routine management of the library. The Reverend Archibald Arthur, who had originally been appointed by the council in 1774, and re-elected in 1778 by the university when its turn came, was now given tenure for life. In fact, he held the office until 1794, but combined it from 1780 with a lectureship in Moral Philosophy, and ultimately became professor in that subject in 1796, in succession to the famous Thomas Reid.

Another consequence of the removal to the new building was the preparation of new alphabetical and press catalogs, which were completed some time before 1750. The first printed catalog, however, did not come till 40 years later. The plans for it were proposed by Arthur in 1776, 2 years after he took up office, and the work appears to have been complete by 1787 when he received an honorarium of £200 in recognition of his labors; but the catalog itself, published in two volumes, bears the date 1791. It lists some 20,000 volumes in all, both in shelf order and in alphabetical order. (A further catalog, listing much more briefly, and with less care, the accessions from 1790 to 1825, was published in the latter year and continued by annual supplements to 1860. Since that date the general catalog has been maintained only in a master copy.)

Relying upon the Stationers' Hall privilege to satisfy its needs for British books, the library sought to concentrate its expenditure principally on foreign publications, especially the memoirs of foreign academies. But it is clear that the privilege was not working satisfactorily: in 1820 the curators authorized the immediate expenditure of £1,000 "to supply defects," and it has been remarked that many of the books entered as bought between 1783 and 1815 were such as should have been delivered under copyright. The professor of divinity, giving evidence before the Royal Commission of 1826, remarked, "we get very few valuable books comparatively, we get a great many idle books, and it is very expensive to bind them." It is therefore not surprising that the withdrawal of the privilege, under the Copyright Act of 1836, and the substitution of an annual grant of money, was welcomed at the time. Glasgow, with its grant assessed at £707 per annum, fared best of the four Scottish universities out of this transaction. By modern standards it is an insignificant amount: yet it helped the library to increase its holdings by 200% over the next half-century.

At about the same time a new facility was introduced for the special benefit of students. Thomas Campbell, the poet, who was elected rector in 1826, has been given the credit of having suggested it: but it was in 1833 that the senate resolved to set aside a room in the library "to the purpose of a reading room," and to furnish it with a special collection reserved for the use of the readers. The facility still exists, though now in separate premises and in greatly elaborated form.

The middle decades of the nineteenth century brought great enrichment to the library through the bequest of a number of important special collections. John Smith of Crutherland, in 1847, left sets of the publications of such societies as the Maitland Club, the Percy Society, the Abbotsford Club, and others, together with many pamphlets on Glasgow history. In 1874 William Euing, an underwriter, left his library of over 15,000 volumes, comprising early editions of the classics, a large group of ballads and minor poetry, examples of Scottish printing, and many works on bibliography, together with some 2,000 editions of the Bible in all languages. Four years later the philosophical library of Sir William Hamilton (professor of logic at Edinburgh) was bought for the university by private subscription, and added 8,000 volumes to the library's holdings in philosophy, education, and history. Its resources in music were enhanced in 1884 by the bequest of Thomas L. Stillie, numbering about 750 volumes.

The most valuable gift of all, however, has not been mentioned. This was the bequest by William Hunter (1718–1783), anatomist, obstetrician, and medical teacher, of the contents of his museum, including books and manuscripts; coins; paintings; archaeological and ethnographical material; geological, zoological, and botanical specimens; and anatomical preparations. The museum came to Glasgow in 1807 and was housed in a special building of its own. Since 1902, however, the books and manuscripts have come under the care of the university librarian, though as a separate collection for which he is responsible not to the library committee but to the museums committee. It is very rich indeed in specimens of early Italian printing—there are more than 530 incunables—and in medieval manuscripts (including the twelfth century English psalter known as the "York Psalter").

A new phase in the life of the library began in 1866 with the appointment of Dr. William Purdie Dickson, the professor of divinity and biblical criticism, then convener of the library committee, to be curator of the library. Preparations were then being made for the migration of the whole university from its centuries-old home in the shadow of the cathedral to a new site at Gilmorehill in the western outskirts of the city, and grave deficiencies in the library's catalogs and inventories had been discovered by the librarian. Professor Dickson submitted an outline plan by which "a full inventory of the contents of the library would be obtained, the rearrangement of the books on their removal would be greatly facilitated, and the means of preparing the new alphabetical, press, and (if thought necessary) classified catalogues, and of subsequently keeping them up, would be furnished in the most ready and convenient form." The plan was approved, and Professor Dickson, as curator, carried it through. The code of rules adopted was that "given by Mr Jewett in his Smithsonian Report of 1853."

The alphabetical part of the catalog thus produced formed the basis of the library's catalog up till 1968 (though many modifications were introduced during its century of life) and is still in use. Considering the facilities available at the time, it can be regarded as a remarkable achievement; but it was not the only one attributable to Professor Dickson, in whose time as curator the whole machinery of the library's practices was overhauled.

The new premises occupied by the library in 1870 comprised one-half of the long north face of Gilbert Scott's gothic university building. They consisted of two great halls, approximately 160 feet by 65 feet, one above the other, with a half-basement below. The upper hall had a gallery round it. The shelving capacity, assuming an alcove arrangement, with a large central area left clear, was estimated by the architect at about 180,000 volumes, which must have seemed very adequate at the time of entry, when the collection numbered about 100,000 volumes. The new home for the Hunterian books and manuscripts was a room adjacent to the upper hall of the library. Equally conveniently, the Reading Room occupied a separate hall adjacent to the library's lower hall and entrance. Its reserve collection at the time numbered about 2,200 volumes; there were seats for 250 readers (or 280 at a pinch) controlled by a system of numbered tallies issued on entrance and returned on leaving the room. Between 1889 and 1893 the number of tallies in use was about 275, and the number of books issued about 23,000 in the year. The total number of students at the university in each of the years from 1880–1891 was between 2,100 and 2,300, of whom between 475 and 500 borrowed from the university library an average of about fifteen books each per year.

By 1890 the collections had grown to about 150,000 volumes. A contemporary estimate of their sources makes an interesting commentary on parts of the foregoing account:

Received from Stationers' Hall privilege (1710–1836)	28,000 vols.
Purchased from the compensation grant (1837–1891)	58,000 vols.
Purchased by the annual interest on legacies (1730–1891)	8,000 vols.
Purchased by University funds (1577–1836)	8,000 vols.
Received in donation (1578–1867)	12,000 vols.
Received in donation (1868–1891)	30,000 vols.
Class libraries	6,000 vols.

Before the turn of the century the new accommodation was again under pressure as the rate of acquisition accelerated. Respite was initially found by filling up the vacant area in the center of the lower hall with tall bookcases and providing some flat table cases in the same part of the upper hall. Difficulties also arose in due course over working accommodation for the library staff. In 1900 they still numbered only ten, and the minimal provision made was still just sufficient. After the end of World War I, however, with the first introduction of regular and systematic government financial support for universities, the rate of growth made these pressures intolerable.

In 1924–1925 the whole of the library's lower hall was gutted and converted to accommodate a three-story steel stack. This raised the building's capacity to about 500,000 volumes. But no seats for readers were provided in the stack, and the total available in the upper hall at the time was not above fifty.

That this situation could be tolerated was made possible only through the development of a strong system of class and departmental libraries, and through

FIGURE 1. *Glasgow University Library. New building opened in 1968. In the foreground is the circular Reading Room for undergraduates opened in 1939. (Photograph by Robert Cowper.)*

further strengthening of the Reading Room collection, as well as by the grant of relatively generous borrowing facilities from the university library to all classes of reader. Undergraduates were not at first granted access to the shelves and to the reading areas of the library; this privilege came only in the late 1920s, and was limited to students in the last 2 years of an honors course, who had to present forms of recommendation signed by their tutors.

At the outbreak of World War II the collections had grown to over 375,000 volumes; the annual expenditure on books, periodicals, and binding was about £8,000, and on salaries (for a staff which by that time numbered between 25 and 30) was £5,650. Out of some 4,500 matriculated students, about 850 used the borrowing facilities of the library; the majority still relied upon the reserve collection in the Reading Room and upon class libraries.

After the war the pace began to quicken rapidly; and when the report of the Robbins Committee changed the whole pattern of university education in Great Britain, libraries generally were the first to feel the effects.

At the time of writing the library spends about £150,000 a year on the services which in 1939 cost £8,000. Its staff has increased fivefold. Undergraduates enjoy full access to the collections, now numbering over 700,000 volumes (more than 900,000 if branch, class, and departmental libraries are counted)—and nearly 90% of a total enrollment of 9,000 in fact exercise this right. The new building which has made this change possible was opened in the autumn of 1968 (see Figure 1); it provides seats for 925 readers, at single and double tables, in seminar rooms and private studies and carrels; and it is organized on a basis of subject divisions. A new series of the catalog was begun in 1968, conforming to Anglo-American Cataloging Rules, 1967; and the open-access stock (about 450,000 volumes) is in process of conversion from fixed location shelving to a classified order based (at certain removes) on the Library of Congress schedules.

Already plans are being worked out for a further extension.

R. O. MacKenna

THE GOLDEN COCKEREL PRESS

One of the side-effects of World War I in Britain was the cessation of work by almost all the private presses of any importance which had been set up following William Morris' "little typographical adventure" at the Kelmscott Press in the early 1890s. Of the "great" private presses of the pre-war vintage, only St. John Hornby's Ashendene Press (q.v.) was to continue work throughout the 1920s and later, and Ashendene was by no means a typical private press of the period.

Of the new crop of private presses which grew up in Britain in the interwar years, three were in their different ways to achieve a higher level of work than the others: the Golden Cockerel Press, the Gregynog Press (q.v.) and the Nonesuch Press.

At its start the Golden Cockerel Press did not promise very highly from the point of view of fine book production. Harold Midgeley Taylor, its founder, thought of it originally as a cooperative press at which he, his wife, and some friends would with their own hands print significant works by new authors; the authors themselves assisting in the physical production of their work. The members of the cooperative accordingly spent some time in learning the rudiments of printing at Hilary Pepler's St. Dominic's Press in Sussex—one of the best presses working in the simple arts and crafts tradition—before moving to Waltham St. Lawrence in Berkshire, where Taylor had a house, and where the new press was set up in a hut in the garden. A vivid, though biased, account of the early years of the press is given by Loran Hurnscot in her *A Prison, a Paradise* (*1*).

Printing and binding equipment was installed, the first press being a Wharfedale. Founders' Caslon Old Face type was purchased for hand-setting; the first book produced at the press, April 1921, being A. E. Coppard's *Adam and Eve and Pinch Me*, his first book. It was an unpretentious but carefully designed book, though not exceptionally well produced: Coppard, in his autobiography *It's Me, O Lord* (*2*) said "my eyes were so bedazed by the title page that they were blind to the inadequacies of the rest; the type was poor, the paper bad, the leaves fell out, the cover collapsed. . . ." Coppard was exaggerating, but fortunately for the press and the author the book had a considerable success with the critics, so that a third printing was called for before the end of 1921. In this way the future of the Golden Cockerel Press was assured, but in other respects it remained precarious. The partners in the cooperative venture lost interest and drifted away, leaving the running of the press to Taylor and his wife. Their marriage was breaking down, and Taylor himself became seriously ill with tuberculosis. As a result of his illness, an interesting and little-known project—the production of small finely-printed editions of Golden Cockerel books which Will Ransom was undertaking in order to secure copyright for the texts in the United States—had to be abandoned.

For a while the press was continued, very much under the direction of Mrs. Taylor and A. E. Coppard; the work of composition and printing being done by the professional printers taken on at the press after the collapse of the cooperative idea. A Victoria Platen press—superior to the Wharfedale—was installed, and the program of work changed from the original publication of new works by new authors to the production of finely printed editions of the classics. Robert Gibbings was commissioned to cut wood engravings for the press's edition of Brantôme's *Lives of Gallant Ladies*, but before it was completed the collapse of Taylor's health once more made the closure of the press seem inevitable, until with financial assistance from a friend, Gibbings took over direction of the Golden Cockerel in January 1924.

Robert Gibbings was the leading light in the Society of Wood Engravers, which had been founded in 1920, and for the members of which the Golden Cockerel books were to provide such an ideal vehicle during the rest of the 1920s. For in the 9 years in which the Golden Cockerel Press was under Gibbings' control, it issued forty-eight books illustrated with wood engravings (and a further ten with copper engravings) and rapidly became recognized as the most important press working with the medium (see Figure 1). Wood engraving had languished after its replacement by photomechanical engraving as a reproductive illustration process in the last years of the nineteenth century; despite its use as an artistic medium by such artists as Lucien Pissarro at his Eragny Press (q.v.), it was not until the 1920s, under the combined influence of the Society of Wood Engravers and of the Golden Cockerel Press, that its supreme excellence as a process for autographic illustration of books was recognized and widely exploited. All the important English wood-engravers of the time, almost without exception, worked for the Golden Cockerel Press.

In his earliest years as director of the press, Gibbings was still feeling his way toward the perfect harmony of type with wood engraving which characterized its later work. In the earliest books, too, the pressmen did not always have the skill to make ready so that the impression of the engravings was as good as possible, but they rapidly acquired this skill and the press became famous for the quality of its printing on dampened handmade paper in the traditional way. At the same time, Gibbings and the other wood engravers he employed became fully conversant with the special problems of the wood engraving as book decoration (as opposed to independent print) and were able to modify their style to deal with these problems. Under Gibbings another printing press, a Phoenix platen, replaced the Wharfedale.

sparrow, the whippoorwill, & many others. I was seated by the shore of a small pond, about a mile and a half south of the village of Concord and somewhat higher than it, in the midst of an extensive wood between that town & Lincoln, & about two miles south of that our only field known to fame, Concord battle ground; but I was so low in the woods that the opposite shore, half a mile off, like the rest, covered with wood, was my most distant horizon. For the first week, whenever I looked out on the pond, it impressed me like a tarn high up on the one side of a

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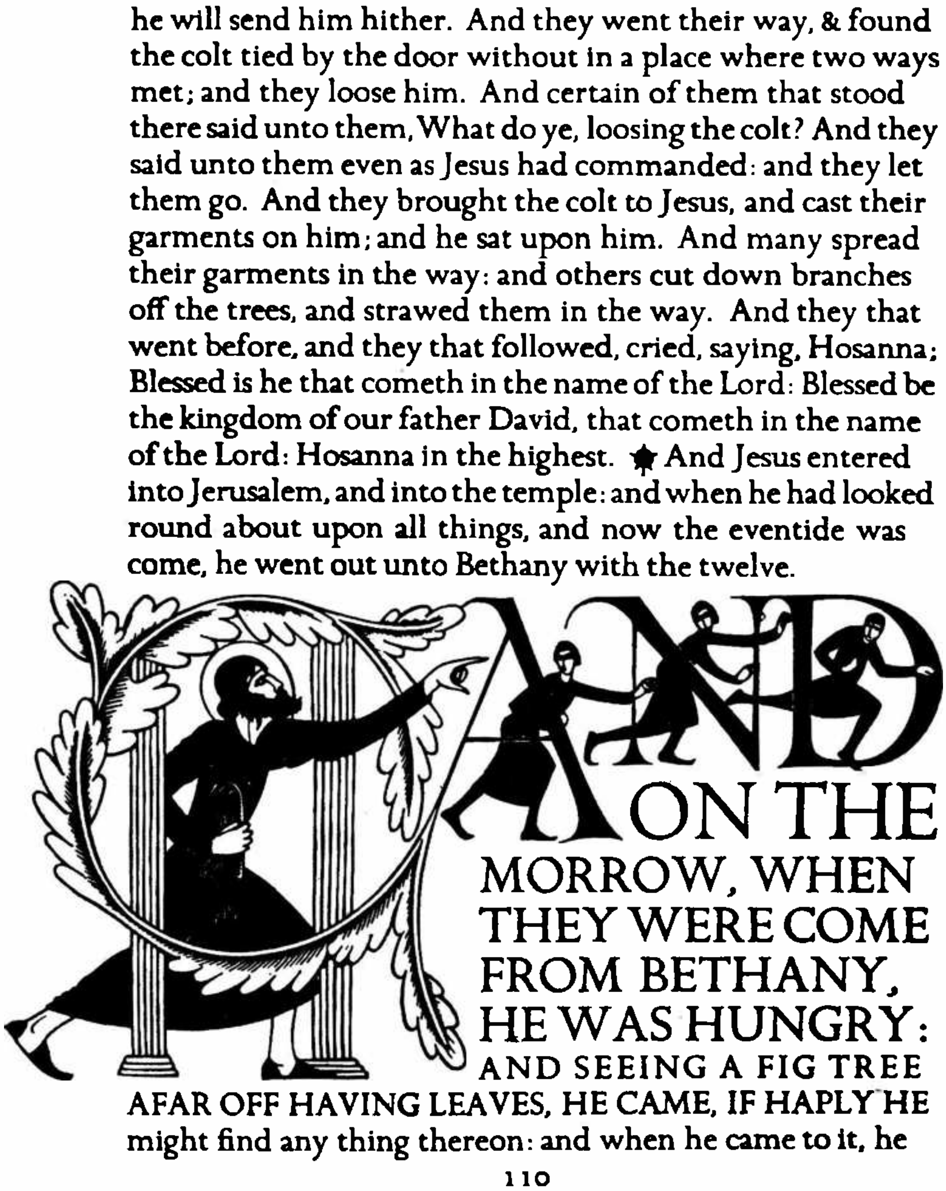
FIGURE 1. *A page from Thoreau's* Where I Lived and What I Lived For *(1924). The wood engraving by Robert Gibbings was printed in blue in the original.*

and a Columbian handpress for proofing the engravings was also installed.

For much of Gibbings' regime the books of the press were printed in handset Caslon Old Face type; for example, such excellent work as Chaucer's *Troilus and Criseyde* (1927) and his *Canterbury Tales* (1929–1931), both with engravings by Eric Gill, or *The Chester Play of the Deluge* (1927), with engravings by David Jones, and Lucian's *True Historie* (1927) for which Gibbings cut the wood-engravings, and Sterne's *Tristram Shandy* (1929–1930) with copper engravings by J. E. Laboureur. Caslon type, however, though of pleasant quality and with many virtues, is rather light-appearing to tone in with wood engravings (unless the latter are exceptionally carefully designed), and Gibbings therefore commissioned a new proprietary face from Eric Gill. Two sizes of the new typeface for the exclusive use of the press were cut; 14-point and 18-point. The type received its first showing in A. E. Coppard's *Hundredth Story* in January 1931. Gill was fresh from designing his very successful Perpetua type for the Monotype Corporation when he worked on the Golden Cockerel type, and the latter is very similar to it though rather blacker and more rounded. It showed to excellent advantage in *The Four Gospels* (1931) with wood engravings by Gill—one of the most beautiful of all twentieth century books, and certainly the most important of all the Golden Cockerel books (see Figure 2).



he will send him hither. And they went their way, & found the colt tied by the door without in a place where two ways met; and they loose him. And certain of them that stood there said unto them, What do ye, loosing the colt? And they said unto them even as Jesus had commanded: and they let them go. And they brought the colt to Jesus, and cast their garments on him; and he sat upon him. And many spread their garments in the way: and others cut down branches off the trees, and strawed them in the way. And they that went before, and they that followed, cried, saying, Hosanna; Blessed is he that cometh in the name of the Lord: Blessed be the kingdom of our father David, that cometh in the name of the Lord: Hosanna in the highest. And Jesus entered into Jerusalem, and into the temple: and when he had looked round about upon all things, and now the eventide was come, he went out unto Bethany with the twelve.

AND ON THE MORROW, WHEN THEY WERE COME FROM BETHANY, HE WAS HUNGRY: AND SEEING A FIG TREE AFAR OFF HAVING LEAVES, HE CAME, IF HAPLY HE might find any thing thereon: and when he came to it, he

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FIGURE 2. *A page from* The Four Gospels *(1931). Illustration and type design by Eric Gill.*

The new proprietary typeface was not the only one used, however; Caslon continued to be used and at least one book was printed in another face, Gill's Sans-serif, under Gibbings' direction of the press. But the early 1930s, with the disastrous contraction of the market for finely printed but expensive books (which followed, of course, as a result of the Depression), hit the Golden Cockerel very hard. Gibbings made some attempts with such books as *Rummy* (October 1932) to attract a larger market with larger and more cheaply produced editions at lower prices, but it was a vain effort: to maintain the printing house at Waltham St. Lawrence, with its compositors and pressmen to be paid each week, was consuming far more money than the dwindling sales could cover.

In consequence in July 1933 Gibbings sold the press to Christopher Sandford, Francis Newbery, and Owen Rutter, all three of the Chiswick Press in London, an old-established firm of commercial printers which had been responsible for some of the best commercial printing in the nineteenth century. The impetus for this purchase came from Sandford: with his wife Lettice Sandford, a wood engraver, he was already running the Boar's Head Press, a private press which had printed some attractive books. Sandford was also responsible for the Chiswick Press having undertaken the production of a finely printed edition of Marlowe under the imprint of the Golden Hours Press. Newbery, the managing director of the Chiswick Press, was a sleeping partner in the new venture, and Owen Rutter became the new literary editor of the Golden Cockerel. The new partners' formula for keeping the press alive during the recession was to remove it from Waltham St. Lawrence to the Chiswick Press, where the staff, already skilled in fine work, could work on Golden Cockerel books as the occasion demanded, thus obviating the need for the Golden Cockerel Press itself to meet a regular wage bill (and at the same time, of course, giving the Chiswick Press employees an assured flow of work even in slack times). This was, in fact, a very similar method to that used by Charles Ricketts in the running of his Vale Press at the beginning of the century. But the new partners took it further: probably inspired by the example of the Nonesuch Press, they often resorted to Monotype setting, using some of the excellent new faces which had become available, and reserving the more costly handsetting of the proprietary type for their more expensive books.

Though to the purist these changes converted the Golden Cockerel Press from a private press to a commercial imprint, they were certainly successful in prolonging its life. Some concession to the difficulty of the period can be seen from their experiments with cheap unlimited editions, such as L. A. G. Strong's *The Hansom Cab and the Pigeons* (1935) or Nancy Quennell's *Epicure's Anthology* (1936), but the sales were disappointingly small. Another concession, at the time successful but ultimately deleterious, was the production of lusciously illustrated editions of erotic classics at high prices. The 1920s and 1930s were a time when censorship for obscenity was commonplace in England. Presses such as the Golden Cockerel were more immune to such prosecution than the ordinary commercial firm, and some of the books (and even more the publicity) were aimed directly at this market for erotica. Such books as *The Golden Bed of Kydno* (1935) are examples of such work. More importantly, though, the press started its publication of sea logs, opening the series with Captain Bligh's log of *The Voyage of the Bounty's Launch* (1934). The press also expanded its list in the field of historical works with such books as T. E. Lawrence's *Crusader Castles* (1936), and *The Trials and Sufferings of Father Jean de Brebeuf* (1938) with wood engravings by Eric Gill, and *The Pilgrim Fathers* (1939) with wood engravings by Geoffrey Wales. At the same time the Golden Cockerel continued to produce handsome editions of the "standard" classics favored by private presses; notable among these were *Ecclesiastes* (1934), with masterly engravings by Blair Hughes-Stanton, and *Mademoiselle de Maupin* (1938) and the *Pervigilium Veneris* (1939), both illustrated by John Buckland-Wright, the first with wood and the second with copper engravings.

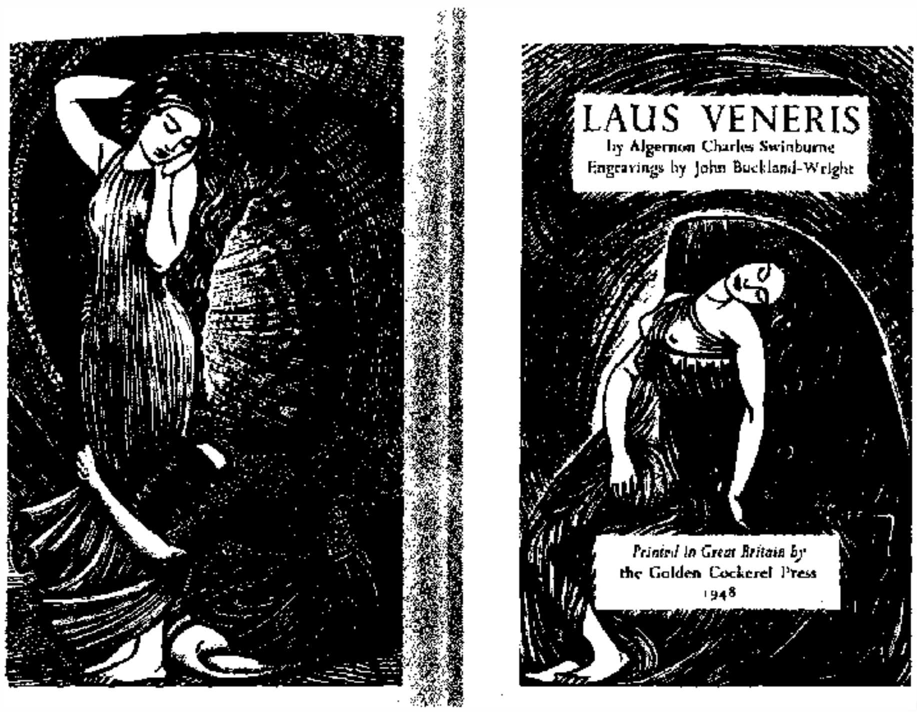

FIGURE 3. *A two page spread from a postwar Golden Cockerel Press book.*

The outbreak of war in 1939 did not cause the press to cease work as it did most other English private presses. Newbery had withdrawn from the partnership several years earlier, and though both Rutter and Sandford were absent on war service they managed to keep the press alive. But the number of volumes issued dropped very considerably, as did the quality—the presswork on some of the wartime publications was far inferior to their earlier work. The supply of handmade paper, fine leathers for binding, and other materials did not present a serious problem as Golden Cockerel was almost the only press using them.

Owen Rutter died in 1943, after which date Christopher Sandford continued the press alone. In the postwar years a number of very fine books were produced (see Figure 3), such as the *Endymion* (1947) with Buckland-Wright's splendid wood engravings, or Shelley's youthful extravaganza *Zastrozzi* (1955) for which Cecil Keeling supplied very fine engravings in the same extravagant mood as the text. Nevertheless, the late 1940s and the 1950s were a period of increasing difficulty for the press. The number of craftsmen, in printing shop or bindery, capable of the high standards of workmanship requisite in the press's books was declining rapidly, and the cost of the special materials needed was soaring. In the early 1950s the Chiswick Press had been bought by Eyre & Spottiswoode, the Queen's Printers, and Sandford thereafter had to have the Golden Cockerel books printed by several different firms. A further difficulty was that fashion was turning against the wood engraving, with which the name of the press was so closely linked: younger artists were not interested in the medium. And in England changing tastes in book collecting, allied to postwar austerity, meant that the market for the press's work had contracted. As a totally independent concern the press was becoming unviable. (It is significant that when the Nonesuch Press was revived in the postwar years. it was linked with a commercial publisher.) In 1959 the Golden Cockerel Press was bought by Thomas Yoseloff, the New York publisher. A few more books already planned were completed, but since the early 1960s the press has been dormant, although there are plans to revive the imprint. In the 40 years of its active life, the press issued some 200 books, among them some of the finest examples of English illustrated books of the twentieth century.

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RODERICK CAVE

GORBUNOV-POSADOV, IVAN IVANOVICH

Ivan Ivanovich Gorbunov-Posadov (1864–1940) was an outstanding follower of Leo Tolstoy's ideals. He was editor-in-chief of "Posrednik," the publishing house founded by Tolstoy to spread knowledge among the masses. and a writer of books *služeniya l'udam* (*Forty Years of Selflessly Serving the People*), a collection of articles dedicated to his social, literary, and editorial activities (edited by N. N. Gusev and M. V. Muratov, Moscow, 1925, 165 pp., with a portrait).

OLGA AKHMANOVA

GOVERNMENT PRINTING OFFICE

The United States Government Printing Office is the agency which provides the printing and binding services required by the federal government. Established in 1861, after Congress had appropriated $135,000 to purchase for the government a small commercial printing plant in Washington, D.C., the Government Printing Office has become the largest multipurpose printing establishment in the world. It produces or procures commercially through its Regional Printing Procurement Offices more than $250 million worth of printing annually, employs approximately 8,000 persons, and utilizes modern equipment and machinery valued in excess of $40 million. Tape driven phototypesetting equipment is used to advantage in the automatic composition of material stored in a machine-readable computer data base.

The Government Printing Office is headed by the public printer of the United States, who is appointed by the president, with confirmation by the Senate. It is in the Legislative Branch of the government. The Joint Committee on Printing, a Congressional Committee composed of an equal number of members of the Senate and House of Representatives, oversees the operations of the Government Printing Office in a manner somewhat comparable to that of the board of directors of a commercial or industrial organization.

Employees of the Government Printing Office must qualify for their positions under eligibility requirements established by the United States Civil Service Commission. The high percentage of craftsmen skilled in the graphic arts must have served the required apprenticeship in their craft, in addition to having Civil Service qualification.

The printing required by the United States Government establishment can include anything from a single-page form to a bound volume or set of volumes. The Government Printing Office has the capacity for producing this wide range and variety of federal printing. While it is not responsible for United States currency, savings bonds, and postage stamps, which are produced by the Bureau of Engraving and Printing of the Treasury Department, the Government Printing Office does produce United States postal cards, money orders, and Internal Revenue Service tax forms. The *Agriculture Yearbook*, which it prints annually, is one of the world's most widely distributed and highly regarded books. The publication for which the Government Printing Office is probably best known is the *Congressional Record*. This reporting of the debates in the Senate and House of Representatives is issued daily when Congress is in session. The printing must be completed each night in sufficient time to permit delivery of copies to the office and home of each member of Congress by 8:00 A.M. on the following day.

A significant portion of the output of the Government Printing Office consists of publications originated by virtually every department and agency of the United States Government which report for the information of the citizens the results of study and research conducted in the process of fulfilling the functions for which they are established. This type of material is of great interest to librarians. There is a widespread demand for the information contained in the publications of the United States Government from both those who have an official and a personal or avocational interest in their subject matter. To meet this demand, Congress has established by law the Department of Public Documents in the Government Printing Office. This department is in charge of the Superintendent of Documents, a major official of the Government Printing Office, who is appointed by the Public Printer. It has the responsibility for an inventory of more than 100 million copies of government publications, which involve approximately 27,000 different titles, and for the maintenance and servicing of mailing lists which include a total of more than 3 million names. This function of the Government Printing Office dates from 1895 when it was authorized by the General Printing Act of that year.

Under the law, the price at which government publications are sold to the public must be established on the basis of their cost as determined by the Public Printer, plus 50%. A discount not to exceed 25% is granted to authorized bookdealers and quantity purchasers of 100 or more copies of a publication to be mailed to one address. Remittance by check or money order payable to the superintendent of documents, or by special documents coupons sold in denominations of 5, 10, 25, and 50 cents, must be made in advance of mailing publications. Cash sent through the mail is at the risk of the sender and is not advised. Postage stamps cannot be used as payment for publications.

Exclusively a service organization, the Government Printing Office, including the Department of Public Documents, has no jurisdiction over the title, subject matter, or purpose for the issuance of any publication other than those which the office compiles. Publications initiated by the Government Printing Office include the *G.P.O. Style Manual,* as well as forty-seven different subject price lists of available government publications; the *Monthly Catalog of United States Government Publications;* and the biweekly *List of Selected U. S. Government Publications,* devoted to newly issued or still popular publications offered for sale. The price lists and *List of Selected Publications* are available without charge on request to the superintendent of documents. The *Monthly Catalog* is, primarily, a library tool and is sold on subscription at $7.00 a year.

Although the operations of the Department of Public Documents are conducted principally by mail, a retail bookstore for the sale of government publications is maintained at the Government Printing Office in Washington, D.C., with five branches in other government buildings in the Washington metropolitan area. Branch bookstores are also located in Chicago, Illinois; Kansas City, Missouri; San Francisco, California; Boston, Massachusetts; Los Angeles, California; Atlanta, Georgia; Dallas, Texas; Denver, Colorado; New York City; Canton, Ohio; Birmingham, Alabama; Detroit, Michigan; and Philadelphia, Pennsylvania. The enthusiastic response by the public to the existing branch stores indicates that others will undoubtedly be established in additional major United States cities in the years ahead. The superintendent of documents is authorized to designate any other United States Government official or agency as his agent for the sale of government publications. Under this arrangement, field offices of the Department of Commerce, Internal Revenue Service, Department of Labor, Coast Guard, National Park Service, and others sell certain types of government publications in many areas of the United States which they serve.

The Federal Depository Library System administered by the Department of Public Documents of the Government Printing Office represents an important national resource whereby nonclassified United States Government publications of public interest or educational value are made available to specially designated libraries throughout the United States for the free use of the public. The Depository Library Act of 1962 revised the system provided for by the General Printing Act of 1895 which had, in turn, formalized the system of distributing important government publications to key libraries, that had been authorized by earlier statute in 1857, and placed the responsibility for its administration in the Government Printing Office. Depository libraries are designated on the recommendation of members of Congress and the law imposes a limit of two representative-designated depositories for each Congressional District and two senatorial designations for senators of each class, which may be located anywhere in the state. Land grant colleges, state libraries, and libraries of certain United States Government departments, agencies, and bureaus are also depositories. To be a depository, a library must be open to the public without charge, and must have at least 10,000 books other than government publications, together with sufficient staff, space, and related facilities to provide the public service required. Not more than two depository libraries in each state may be designated as Regional Depositories. As such, they receive all publications made available for depository distribution and agree to furnish other depositories within their area of service with interlibrary loan and reference services. Other than the Regional Depositories, all depository libraries are selective and the law requires that they select in advance those categories of government publications that will be sent to them in the future. There are more than 1,080 depository libraries located in all of the states, plus Puerto Rico, Guam, the Virgin Islands, and the District of Columbia. The Department of Public Documents distributes approximately 12 million publications a year to these depositories.

The steadily increasing demand for the public services which the superintendent of documents provides is responsible for the sale by his department of 80 million publications a year. This operation necessitates the handling of up to 60,000 letters and 2,000 telephone requests each day. In an effort to reduce the time required to process this volume of requests for and about government publications, the Government Printing Office is seeking the acquisition of sufficient additional modern ware-house space to permit the entire publications inventory to be stored at one location. Another improvement has resulted from the establishment of two Area Distribution Centers of the Department of Public Documents, one in Philadelphia, Pennsylvania, serving the northeast, and the other in Pueblo, Colorado, designed to process orders originating west of the Mississippi River.

Plans are underway to reproduce in microform the entire publications availability file of the Department of Public Documents and to offer this listing, with an updating service, for public sale. There is also a strong possibility that the Government Printing Office may receive future authorization to distribute copies of certain government publications in microform, in addition to continuing distribution in the hard-copy format, as heretofore.

CARPER W. BUCKLEY

GOVERNMENT PUBLICATIONS (DOCUMENTS)

General

In common with matters related to government, the organization itself often not too clearly understood and at times in a state of change, government publications seem to have no standard and generally accepted definition. Some varied attempts at such definition are here cited from various sources, followed by statements on various other general points, a summary of the situation in the United States, considered a classical land for such treatment, and in various other countries and regions with suitable references attached to each, and concluding with international intergovernmental organizations.

DEFINITION

"Informational matter which is printed as an individual document at Government expense or as required by law" is probably the most recent attempt in 1962 in the United States to define "government publications" as a part of the legislation relating to the depository library program (*United States Code,* Title 44, sec. 1901). Earlier, in connection with the distribution of government publications to the Library of Congress for its own use and for international exchange (sec. 1718), the specification is "Publications and maps which are printed or otherwise reproduced, under authority of law, upon the requisition of a Congressional committee, executive department, bureau, independent office, establishment, commission or officer of the Government."

In Title 44 of the *United States Code,* enacted into positive law as Public Law 90–620, 90th Congress (October 22, 1968), the term "document" or "public document" appears quite frequently as used in earlier legislation. Indeed, the office having charge of the centralized sale and distribution of United States government publications was created by the Printing Act of January 12, 1895, as the Superintendent of Documents (Public Documents Division or Department), continuing as such. While Benjamin Perley Poore's *Descriptive Catalog* in 1885 used the term "government publications," the biennial comprehensive index established by the Printing Act of 1895, and continued through Vol. 25, 1939–1940, had the title *Catalog of the Public Documents* (binder's title: *Document Catalog*), the *Monthly Catalog,* also set up by the same act, used the term "public documents" through 1939, and made the change to "government publications" beginning with 1940.

In the United States of America, considered the classical land for government publications and so designated by the late Georg Schwidetzky, the official designation has tended to set the pattern for the use of the term. Yet the most recent book on the U.S. Government Printing Office in 1970 by Robert E. Kling, Jr., tends to relapse into the older pattern, indexing under "public documents" and not under "government publications." Further, under sec. 505, Title 44, "Government publications may not be copyrighted."

Below the national level, reference is made to state publications or state documents, and similarly to municipal publications or municipal documents.

Here, the emphasis is on those of national governments, and some remarks will be made first on Great Britain. The term "government publications" has been used by H. M. Stationery Office at least since 1922, although the older terms "parliamentary papers" and "non-parliamentary papers" are often cited. In 1965 Ollé in his manual prefers "government publications," while Pemberton in 1971 prefers "official publications." In contrast with the United States, there is Crown copyright in government publications in Great Britain under the Copyright Acts of 1911 and of 1956.

In France the term "publications officielles" was used by the late Jacques de Dampierre in the manual of 1942, and this use seems to continue. About a century earlier, in 1848, the administrative official La Peyrie used the term "documents officiels." Even Jean Meyriat in the global study on current bibliography of national official printing made in 1958 for UNESCO uses the term "publications officielles," there defined briefly as "l'ensemble de documents, volumes, périodiques et autres ouvrages publiés sur ordre et aux frais des pouvoirs publics."

In Germany the late Georg Schwidetzky, author of the first systematic manual in 1927, uses "Amtsdrucksachen," although the monthly catalog prepared at the Deutsche Bücherei, which began in 1928 and continued until 1944, uses a variant "Amtliche Druckschriften." As early as 1922 Facius had selected the expression "Verwaltungsdrucksachen." For 1957–1958 and later the inclusive biennial list for the German Federal Republic prepared at the Deutsche Bibliothek, Frankfurt-am-Main, continued the use of "Amtliche Druckschriften," defined as "Veröffentlichungen der Behörden, Körperschaften, Anstalten und Stiftungen des öffentlichen Rechts sowie der wichtigsten halbamtlichen Institutionen in der Bundesrepublik Deutschland und West-Berlin."

In 1968 the Deutsche Bücherei, Leipzig, in a revised reprint of its *Neue Mitteilungen*, no. 19, made a more detailed specification as follows:

> Als *Amtliche Druckschriften* werden die Veröffentlichungen bezeichnet, die von den Zentral-, Landes- und Kommunalbehörden sowie von Körperschaften, Anstalten und Stiftungen des öffentlichen Rechts herausgegeben werden. Von diesen—wie man früher sagte "offiziellen"—Amtsdrucksachen werden die "offiziösen" auch "halbamtlich" genannten Druckschriften, die lediglich im Auftrag oder unter Mitwirkung oder mit wesentlicher Unterstützung amtlichen Stellen erschienen, unterschieden.

In Italy the following brief definition of "pubblicazioni ufficiali" has been noted in the *Manuale del catalogatore a cura della Bibliografia Nazionale Italiana* (Firenze, 1970): "Sono gli atti dei governi, della amministrazioni pubbliche, statali, comunali, provinciali ecc."

The usage seems more or less similar elsewhere, either government publications or official publications, or their equivalents in various foreign languages, usually with insufficient definition.

AS THE MIRROR OF GOVERNMENT AND ITS FUNCTIONS

From one point of view, government publications are a mirror of the functions of a government and of its agencies and its instrumentalities and of its subventions. Almost from the beginning of time, governments in some form or another have existed as an organized means of survival. Their acts, which were originally transmitted in good part by oral means of communication, and then for preservation engraved on stone, written on baked clay tablets, on papyrus, or on skins, or etched on tablets or blocks from which copies could be drawn, and finally with the invention of printing from movable type, may well be designated government documents, or even documents, and constitute a special field or fields outside the scope of the present article.

For practical purposes here, government publications can be said to date from after the invention of printing from movable type in the mid-1400s, or subsequent to the introduction of printing in the various jurisdictions. Greater elaboration of government with the development of increasingly specialized functions led to the flowering of government publications in the second half of the nineteenth century and in the twentieth century, accompanied by the extensive use of near-print processes and even by other means as when the U.S. Government Printing Office reports in 1971 having "requested . . . approval to publish, sell and distribute U.S. government publications in microform."

Indeed, a retrospective detailed framework for each and all of the governments that have existed on the national level since the invention of printing from movable type is badly needed as the basis on which to make evaluations of contributions to national bibliography and to scholarship as systematic inventories or censuses of government publications of the various national governments, except for a few instances to be mentioned in the course of the article.

For the period 1815–1931 there was published the *List of the Serial Publications of Foreign Governments*, edited by Winifred Gregory (New York, 1932), which included state and colonial governments. While the work from necessity did not furnish details as to the framework of government, entering the serials mainly under the issuing or editing agencies, the following introductory paragraph to the preface of the work by the late James Thayer Gerould, chairman of the committee supervising the work, illustrates vividly the problems faced, and still faced in good part:

> It is a singular fact that, until recently, the documents which contain the primary record of the activities of governments should have been so largely

> neglected by scholars. The documents have been published [i.e., printed], thumbed over a bit by the more conscientious officials and legislators, and consigned to the waste basket. There is no library in London, Paris, or Berlin, to say nothing of lesser capitals, where the complete records of the national administrative history can be consulted.

The great variety of official languages complicates the problem still further in a way not mentioned by Gerould, even increasing at times as areas attain national status. For official languages not always too widely understood outside the jurisdiction, there is frequently a tendency for the national governments to make available a selection of informational, scientific, and statistical government publications in more widely used languages such as English and French.

Still further, the situation is complicated by various other factors, such as the following:

a. Forms of government such as the one-party state and the one-religion state. Some aspects of one of these special forms have been considered in the author's *Government and Official Publications in a People's Democracy (German Democratic Republic)* (Washington, D.C., 1968, 11 pp.), which with updating was reprinted from Vol. 1 of the *Ranganathan Festschrift.*

b. Temporary forms of government such as governments in exile, revolutionary, military, and occupational governments.

c. Bilingualism and multilingualism.

d. Lack of uniformity in administrative terminology as well as frequent changes in administrative terms themselves. For instance, the word "institute," or its equivalent in various languages, has been used to designate a government bureau, a university research or specialized teaching unit, a bank, school, professional organization, scientific society, an umbrella organization for a national group of scientific societies or academies, etc.

e. Frequent changes in governmental organization without being accompanied by ready guides to such changes or even to the overall government organization.

f. Enormous expansion of government functions, agencies, and programs, particularly in the twentieth century but to some extent earlier, usually without comprehensive and ready guides.

GOVERNMENTS AS CORPORATE ENTRIES IN LIBRARY CATALOGS

Probably much of the relative ease of access to government publications in American library catalogs is due to the foresight of the late Charles Ammi Cutter in advocating in his *Rules for a Printed Dictionary Catalogue* (Govt. Printing Office, Washington, D.C., 1876) entry for government publications without personal author under jurisdiction, subdivided by agency or form. Apparently the same practice had to a great extent prevailed at the British Museum, London, at an even earlier date, being gradually followed elsewhere in Great Britain and other English-speaking areas. In many other countries, reinforced by such catalog rules as the *Prussian Instructions (Instruktionen für die alphabetischen Kataloge der preussischen Bibliotheken vom 10. Mai 1899)*, the practice has usually been to treat government publications without personal authors as anonymous entries under title. Or possibly now as of 1970 in the Italian instructions, a half-way measure of entering directly under the agency as author without mention of the jurisdiction, suitable only for a one jurisdiction catalog.

Application of the Cutter principles, represented today in the *Anglo-American Cataloging Rules,* 1967, opens up a number of problems not easily resolved unless precise administrative information is readily available. While government directories and state handbooks have often existed from a relatively early period, these frequently only indicate the existence of specified agencies at a definite time. Only in relatively recent periods have a few national government organization manuals appeared in keeping with progress in studies and practice of public administration.

GOVERNMENT PUBLICATIONS AND LIBRARY CLASSIFICATION

German archivist Friedrich Facius indicated that government publications constitute *Ein Grenzgebiet zwischen Archiven und Bibliotheken* (a borderland between archives and libraries) in *Der Archivar,* July 1955. This expression was based among other things on his experience in preparing an inventory of the Thuringian States from the eighteenth century through 1922, published in the *Zeitschrift des Vereins für thüringischen Geschichte und Altertumskunde,* new series, **33** (1939). It represents a point of view not recognized in the prevailing library classification by subject. When the office of the Superintendent of Documents was created by the Printing Act of 1895, the emphasis of its library on the preparation of the new *Monthly Catalog* and the classification of the United States government publications received was and is by agency of publication in an order of government organization. It is in an order similar to the classification of public records in an archives, as expressed in the second edition of the *Checklist of Public Documents,* 1895, expanded in the third edition, 1911, and kept up to date by the entries in the *Monthly Catalog* as well as issued to August 1945 in mimeographed form by Edwards Brothers, Ann Arbor, Michigan, as *Documents Office Classification, compiled . . . by Mary Elizabeth Poole.* Indeed, the arrangement thus represents a classification suitable for handling a great mass of government publications, frequently quite important and not always susceptible to being handled very promptly and effectively by conventional cataloging and classification. Thus, that scheme has offered a practical approach to coping with the problem of handling and arranging fairly adequately and promptly for use and preservation the rather steadily increasing flow of United States government publications, at least for the expanding network of domestic depository libraries in the United States. To the searcher for an unusual or elusive government publication, not of the more recent period, an official archives may contain under the pertinent agency a description of the title, note of the location of certain copies or even copies of such government publications, as may be noted from certain comments below under Great Britain.

GOVERNMENT PRINTING AND PUBLISHING

Originally and even now the functions of government printing and publishing are likely to be considered primarily from the point of view of the needs of the government itself and not from the point of view of meeting the informational requirements of the citizens themselves. This is in contrast with the usual publishing of books, magazines, newspapers, etc., where the stress is placed on meeting the needs of readers and making a profit. Normally government printing and publishing is likely to be concentrated at or near the capital city. Even if, as in the United States of America, there is a central Government Printing Office, there may well be, or develop under ordinary conditions, a certain number of agency printing and reproduction facilities, including those for special purposes such as maps, as well as contract printing and publishing arrangements. At best with a periodical catalog of government publications as issued currently, as well as sectional catalogs or lists of those in stock, these would seem geared mainly to library and institutional use, especially medium-sized and larger institutions. In a few fields such as agriculture, which have extension workers of various kinds, there is likelihood that many government publications may be brought directly to the attention of a very considerable number of those most in need of the information. For agencies in other fields, there is likely to be very little direct contact throughout the jurisdiction with individuals to furnish clues to the agency publications likely to be most useful or needed. Relatively few government publications as they appear have been, or are, treated as newsworthy by the newspapers and other mass means of communication, and usually there is little or no provision for advertising in appropriate media. Government publication shops and other outlets are likely to be few in number, and even difficult for the initiated to locate readily. Ordinary bookshops and outlets seldom attempt to handle government publications or serve as a means for ordering them. One government, Canada, in 1970 attempted to completely reorient the situation by establishing in place of the Department of Public Printing and Stationery two agencies: Information Canada and the Canadian Printing Bureau. Further, with a general and rather liberal library depository system such as exists in the United States and Canada and to a modest extent, if at all, elsewhere, there remains the very great problem of how to help make available the steadily increasing output with many specialized ramifications to those most likely to need the information presented.

GOVERNMENT PUBLICATIONS BIBLIOGRAPHICAL CONTROLS

While current regularly appearing catalogs of national government publications have existed since the late nineteenth century in both the United States and Great Britain, considerable extension of such national catalogs did not really occur until the late 1920s. A statement of this situation as of 1941 is furnished by the third edition of the author's *Government Document Bibliography in the United States and Elsewhere* (Govt. Printing Office, Washington, D.C., 1942, xviii +

78 pp.), which is being replaced through an entirely new publication, now in the course of preparation at the Library of Congress by Vladimir Palic. The article by J. B. Childs, "Government Publications" [*Lib. Trends*, **15**(3), 378–397 (January 1967)] presents a picture of current national government bibliographical control over government publications as of late 1966. The chronological picture of the establishment of national government special current catalogs works out about as follows:

1927, Japan, quarterly.
1928, Germany, monthly.
1929, Netherlands, annual.
1931–1933, Sweden, annual.
1946, Switzerland, annual.
1948, Denmark, annual.
1950, France, irregular.
1952, Australia, monthly.
1952, Israel, annual.
1953, Canada, monthly and annual.
1956, Norway, annual.
1957–1958, German Federal Republic, biennial.
1961, Australia, annual.
1961, Finland, annual.

Even at best, most parliamentary and administrative libraries are likely to be under constant pressure to adapt their collections to and serve the current national programs which quite likely frequently change and shift. They seldom if ever serve as archives, even in modern days, for publications of their own agencies. All the while, there is apt to be a steady tendency for the output of government publications to balloon vastly beyond the capacity of any and all conventional recording and bibliographical controls, particularly when the systems are confronted with specialized scientific and technical report literature.

Countries and Regions

UNITED STATES

The 18,405 government publication entries in the *Monthly Catalog of United States Government Publications* for 1970, plus a great number of separate periodical numbers (the title being included only once a year, as well as many sheetmaps and charts not included) presents an almost astronomically complicated and complicating picture. This is especially so when compared with the situation of the federal government beginning operations under the Constitution at New York City on March 4, 1789, with the Senate selecting Thomas Greenleaf as its printer and the House of Representatives recognizing Childs and Swaine as its printer and as printer of laws to the United States. Now, on account of a considerable number of field printing plants as well as a great number of reproduction facilities in various agencies, the complication and control problems may seem to be increasing constantly. For the year 1970, the *Non-GPO Imprints Received in the Library of Congress in 1970* (Library of Congress, Washington, D.C., 1971, 25 pp.) adds at least 400 more entries to the 18,405, without attempting "to duplicate adequate and readily available bibliographical data, the items that fall within the scope of *Nuclear Science Abstracts*, *Scientific and Technical Aerospace Reports*, *U.S. Government Research and Development Reports*, and *ERIC's Research in Education*." Even then, it is not unlikely that occasional government publications made in agency or field printing plants may entirely escape a record in the *Monthly Catalog*, and elude description with a Library of Congress printed catalog card for nearly a decade. Examples are the eight sections of the *Report on Scribing*, by the Inter-Agency Committee on Negative Scribing, which were printed in Washington, D.C., between 1957 and 1963.

Such a situation, calling for continual alertness, needs a review of the present state based upon the bibliographical control record of United States government publications from 1789 to the present.

In 1911 appeared the first and only volume of the 3rd edition of the basic *Checklist of United States Public Documents, 1789–1909* (xxi + 1707 pp.) edited by the superintendent of documents at the United States Government Printing Office, Washington, D.C. The proposed second volume (index) never appeared. Although 1789 is mentioned in the title, it is actually mainly devoted to the period December 1, 1817–1909, covering the fifteenth through the sixtieth Congress. The situation for the 1789 to 1817 period is covered for the contemporary printed documents only by A. W. Greely's *Printed Documents of the First Fourteen Congresses*, (Washington, Govt. Printing Office, Washington, D.C., 1900, 903 pp.). After 70 years this is in serious need of reworking as evidenced by two articles relative to 1789 in the *Papers* of the Bibliographical Society of America during 1962 and 1964. Of the *Senate Executive Documents* and *Reports*, originally printed only in confidence for the use of the Senate, the 1909 *Checklist* had scarcely any itemization previous to 1901, since the only record file of these printed from the eighteenth Congress (1823–1825) had been in the office of the executive clerk of the Senate. As a matter of fact, studies have been written about the Jay Treaty with Great Britain of the 1790s without anyone having seen and used a copy of the confidential executive prints for the Senate. Nor, apparently, has a copy yet been seen of the confidential executive prints of the Louisiana Purchase Treaty and conventions in 1803. Even for the Congressional Committee hearings, H. O. Thomen's *Checklist of Hearings before Congressional Committees through the Sixty-Seventh Congress* [1921–1923], (Library of Congress, Washington, D.C., 9 parts in 7) seems to be the most nearly complete inventory extant. In the introduction to the 1909 *Checklist*, "Attention is called to the fact that in case of certain issuing offices, which are large publishers of government charts, maps and specifications, no attempt is made . . . to enter such publications." Further, no attempt was made in the *Checklist* to include various other classes of material quite meagerly represented in the Public Documents Library such as the separate Executive Orders and Proclamations of the President of the United States, separate issues of the treaties and conventions, and the Bills and Resolutions of the Senate and of the House of Representatives of the United States Congress (still printed in foolscap folio as were those of the beginning in 1789), which can be traced in the *Congressional Record* and in the *Journals* of the Senate and of the House. As may be noted in *House Document* no. 120, 27th Congress, 2nd session, 1841/42 (a report from the secretary of state on printing), of some separate treaties previous to that date as few as 38 copies were printed, of others 50 copies, of others 100 copies. Yet for all these gaps, one must not overlook the very considerable contribution made by the precise statements as to organization and change at the beginning of each agency section in the *Checklist.*

In 1971 the U.S. Historical Documents Institute, Washington, D.C., republished this first and only volume in microfilm and in bound form with the addition of the Public Documents Library shelflist as the *Checklist of U.S. Public Documents, 1789–1970.* There had been commercial facsimile reprints in 1953 and in 1962 of the 1909 *Checklist.*

Under the Printing Act of January 12, 1895, which created the office of the superintendent of documents at the U.S. Government Printing Office, Washington, D.C., two bibliographical control projects of high importance were established. The Government Printing Office itself had come into being in 1861.

The first of these was the biennial *Document Catalog, Catalog of the Public Documents,* of which 25 volumes appeared, covering from March 4, 1893 to December 31, 1940, each volume having the dictionary catalog arrangement and constituting the basic record for the period covered.

The second is the *Monthly Catalog of United States Government Publications,* arranged by agency, beginning with 1895, and from 1941 taking also the place of the biennial *Document Catalog* as the permanent record. One must not forget that this contains notes as to change in agencies. To help fulfill the basic purpose assumed, the *Decennial Cumulative Index* by topic has appeared for 1941–1950 and 1951–1960. To supplement the topical indexes, a *Cumulative Author Index* for 1941–1950, 1951–1960, and 1961–1965, under the editorship of Edward Przebienda, was published by the Pierian Press, Ann Arbor, Michigan, in 1971. For the *Monthly Catalog* considered as a permanent record, the problem of agency field printing plants scattered from Maine to Alaska as well as contract printing, together with other agency reproduction facilities, has presented such a formidable problem for coverage that *A Partial List of Non-GPO Imprints* was prepared at the Library of Congress in 1964, and the Exchange and Gift Division there has published *Non-GPO Imprints* for July 1967–December 1969, and for 1970.

Previous to the biennial *Document Catalog,* coverage is furnished first by Benjamin Perley Poore's *A Descriptive Catalogue of the Government Publications of the United States, September 5, 1774–March 4, 1881* (Govt. Printing Office, Washington, D.C., 1885, iv + 1392 pp.). The arrangement is chronological with an index at the end. Owing to the rather inexperienced workers under Poore, the *Descriptive Catalogue* has various inconsistencies as well as lacking entries for a considerable number of publications of the period, particularly because there was then no comprehensive, well-organized collection of United States government publications available. Among inconsistencies, one point may be mentioned. From the fifteenth Congress (1817–1819) to the eighteenth Congress (1823–1825), the House Documents bore only the number at the head of the title page without mention of the series, and at times in Poore are cited as Executive Papers, Executive Documents, or even State Papers, possibly from volume titles on bindings, as though referring to a series separate from the House Documents.

Between Poore and the biennial *Document Catalog*, coverage is furnished by the *Comprehensive Index to the Publications of the United States Government, 1881–1893*, 2d ed. (Govt. Printing Office, Washington, D.C., 1905, 2 vols.), by John G. Ames, who had been superintendent of documents in the Department of the Interior. The *Comprehensive Index* is geared to the Congressional Series or Serial Set, and is thus incomplete for all government publications not included there, especially departmental publications.

Next, a system of depository libraries for government publications more extensive than exists elsewhere in any national jurisdiction attempts to provide some access to these for the citizens throughout the country. The system had its beginning with the Joint Resolution of December 17, 1813, providing then for the distribution of the Journals, Documents, and Reports of the Senate and of the House of Representatives to each university and college and to each historical society incorporated in each state. As an almost concurrent action, systematic numbering of Senate Documents, Senate Reports, House Documents, and House Reports, as well as binding these, seems to have been initiated with the fifteenth Congress (1817–1919). A consecutive numbering of these volumes, including the Journals of both Houses as the Serial Set or Congressional Series (or even popularly earlier known as the "Sheep Set" from the binding used), was devised by John G. Ames, superintendent of documents in the Department of the Interior, and appears in the second edition of the *Checklist of Public Documents*, 1895. Indeed, once when faced again with the forbidding bulk and complexity of the Serial Set, the late E. P. Oberholtzer commented privately that he believed himself then the only American historian to have plowed through the Serial Set for the period he was covering.

To avoid the considerable delay consequent on the printing of special Serial Set title-pages for binding and distribution to depository libraries, annual and other serial publications were under the provisions of the Joint Resolution of January 15, 1908 (35 Stat. L. 565), thereafter distributed in the edition of the issuing agency. Further, under a resolution of the Congressional Joint Committee on Printing of May 21, 1924, all congressional documents and reports of sufficient size to be bound separately were thereafter also given immediate distribution. After that, the complete Congressional Series with special volume title-pages was distributed only to the Library of Congress, Senate and House Libraries, National Archives and the Library of the Superintendent of Documents.

The annual *United States Government Organization Manual*, edited since 1948 by the Office of the Federal Register, National Archives and Records Service, contains not only precise descriptions of the various departments and agencies, but also had two extremely useful and important appendixes:

A. Executive agencies and functions of the federal government abolished, transferred, or terminated subsequent to March 4, 1933. (A in 1972–1973 had only changes for 1971–1972.)

B. Representative publications of departments and agencies of the federal government. (B terminated with 1970–1971.)

Fairly frequent preparation and publication of such government organization manuals in other national jurisdictions would, aside from bibliographical controls, do much to make clear the government organization, which frequently becomes unclear and confused except possibly to the relatively few initiated. With reorganizational changes occurring from time to time, it is not unexpected to note references such as one in a Washington newspaper of August 22, 1971 to a government publication by the National Ocean Survey, to which agency there was no reference in the *United States Government Organization Manual* for 1970–1971. Even such a House Document as *How Our Laws are Made?* by the late Charles J. Zinn (law revision counsel of the House Committee on the Judiciary, which has appeared in repeatedly revised editions beginning with 1953), tends to define and clarify some of the basic but seemingly very intricate processes as well as publications in the course of United States legislation that should be a part of the standard equipment of every voter as well as of every news reporter of such actions in the national scene.

Further, there are the *Praeger Library of U.S. Government Agencies* (New York, Washington, London, Praeger Publishers), of which at least twenty-nine volumes, covering that many agencies, have appeared from 1967 to 1971, and the much earlier series *Service Monographs of the United States Government,* edited by the Institute for Government Research of the Brookings Institution, Washington, D.C., of which sixty-six volumes, covering that many individual agencies, appeared from 1919 to 1934. These all tend to clarify the problems of government organization as related to government publications for those who badly need to pursue the matter further. Unfortunately, only very few other countries have similar series of much needed monographs explaining in detail the ramifications of individual agencies, and encyclopedias of various kinds seldom ever seem to devote articles to different government agencies, which at times can tend to become quite intricate and confusing.

Still further, it is well to remember that briefer overall guidance as to government organization and as to government publications may be furnished by the following:

Boyd, Anne Morris, *United States Government Publications*, 3rd ed., rev. by Rae Elizabeth Rips [reproduced with corrections], Wilson, New York, 1949 [i.e., 1952], xx + 627 pp.

Schmeckebier, Lawrence Frederick, and Roy B. Eastin, *Government Publications and Their Use*, 2d rev. ed., Brookings Institution, Washington, D.C., [1969], [xi] + 502 pp.

Shaw, Thomas Shuler, ed., *Federal, State and Local Government Publications*, Univ. Illinois Press, Urbana, Illinois, 1966, 194 pp. [*Lib. Trends*, **15**(1) (July 1966).]

A substantial key to the great variety of United States government publications available for distribution currently by the superintendent of documents to depository libraries in the United States is furnished by the following:

Mechanic, Sylvia. *Annotated List of Selected United States Government Publications Available to Depository Libraries*. Compiled for the University of the State of New York, the New York State Library, Wilson, New York, 1971, xiii + 407 pp.

Under the Depository Law of 1962, the maximum number of such libraries throughout the United States has been projected to 1,341. As of April 6, 1971, the number of depository libraries was 1,044, and new applications are continually in the course of being considered. Robert E. Kling, superintendent of documents, reported on page 129 of *Legislative Branch Appropriations for 1972, Hearings before a Subcommittee of the Committee on Appropriations, House of Representatives, Ninety-Second Congress, 1st Session* (Govt. Printing Office, Washington, D.C., 1971, ii, 789 + viii p.) that "This year we will distribute to depository libraries approximately 11,538,000 publications, about 1,048,000 more than in fiscal year 1970," plus as stated on page 133, "An estimated 150,000 additional publications not produced at the Government Printing Office."

As to the current availability of government publications in the sales stock, the superintendent of documents has a main book store in Washington, D.C., at the Government Printing Office on North Capital Street. Although under section 1708, Title 44, *U.S. Code*, "A discount of not to exceed 25 percent may be allowed to book dealers and quantity purchasers," there seems to be modest availability of government publications in the American booktrade. Yet, despite this situation, the lack of authority to advertise, and the relative lack of adequate arrangement with the press and other mass media of communication to publicize government publications whenever deemed newsworthy, the Superintendent of Documents has been able to set up branch bookshops in Federal buildings in six cities outside Washington. This agency has authority to set up three more, and is continually seeking to extend the availability of government publications. His office issues a biweekly *Selected List of United States Government Publications* which has an infinitely wider circulation than the *Monthly Catalog*. Further, the superintendent of documents distributes a wide variety of topical *Price-Lists*, revised from time to time to show the status of his stock in the various fields.

A purely topical approach is furnished by the two following manuals:

Jackson, Ellen Pauline. *Subject Guide to Major United States Government Publications*. American Library Assoc., Chicago, 1968, x + 175 pp.

Leidy, William Philip. *A Popular Guide to Government Publications*. 3rd ed., Columbia Univ. Press, New York, 1968, xvii + 365 pp. No indexing by agency.

One more point may be mentioned for this seemingly constantly changing field. On page 129 of the House Hearings on the *Legislative Branch Appropriations for 1972*, Mr. Kling, the superintendent of documents, said:

> The Public Printer has requested the Joint Committee on Printing approval to publish, sell, and distribute U.S. government publications in microform. The Public Documents Department is engaged actively in study and planning for this program, as well as the possible distribution of such material to Federal depository libraries.

Approval and implementation of such action would, in the first place, require adequate provision of machines for reading microform in all depository libraries receiving such. Even at the present time there is increasing provision, usually commercial, to make available microform copies of large groups of government publications no longer available, such as Senate and House Bills or Congressional committee hearings, publications not available for deposit, as well as groups printed on paper subject to deterioration. Thus there may be some provision for reading machines in a number of the existing depository libraries.

Such, of course, is quite aside from the use of film productions by official information sources in the United States as well as in some other countries as a means of mass communication, of which there may often be insufficient record and control.

United States—State Publications

With more than 20,000 titles for the year 1970 recorded in the *Monthly Checklist of State Publications* at the Library of Congress, Washington, D.C., the problem of access, use, and preservation of the output from the agencies of the fifty states and of the insular possessions is seen to be very considerable and complicated as well as important. The impetus and impact of the publication of R. R. Bowker's *State Publications* at New York from 1899 to 1908 and of Adelaide R. Hasse's* *Index of the Economic Material in Documents of the States of the United States* for the states of California, Delaware, Illinois, Kentucky, Maine, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, and Vermont by the Carnegie Institution of Washington, beginning in 1907 and concluding in 1922, led to the establishment of the *Monthly Checklist of State Publications* by the Library of Congress beginning with the year 1910, as an overall current record. An account of further progress in widening the record of and in making more serviceable this great and increasing body, important but frequently very refractory, of material as of 1966 was furnished by the article by J. B. Childs "Bibliographical Control of Federal, State and Local Documents," [*Lib. Trends,* **15**(1), 6–26 (July 1966)], there being other pertinent articles in the same number.

* Adelaide Rosalia Hasse, 1868–1953, began her distinguished service in the field of government publications with the *List of Publications of the U.S. Department of Agriculture, 1841–1895* (1895); served as the first librarian for the superintendent of documents, 1895–1897; was with the New York Public Library, 1897–1918; and furnished impressions of her motivation in *The Compensations of Librarianship* (Privately Printed, 1919, 24 pp.).

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Boyd, Anne Morris, *United States Government Publications*, 3rd ed. rev. by Rae Elizabeth Rips, [reproduced with corrections], Wilson, New York, 1949 [i.e., 1952], xx + 627 pp.

Leidy, William Philip, *A Popular Guide to Government Publications*, 3rd ed., Columbia Univ. Press, New York, 1968, xvii + 365 pp.

Mechanic, Sylvia, *Annotated List of Selected United States Government Publications Available to Depository Libraries*, compiled for the University of the State of New York, the New York State Library, Wilson, New York, 1971, xiii + 407 pp.

Praeger Library of U.S. Government Departments and Agencies (Ernest S. Griffith and Hugh Langdon Elsbree, consulting eds.), Praeger, New York, Washington, London, 1967–.

From 1919 to 1934, the Institute for Government Research of the Brookings Institution, Washington, D.C., published sixty-six volumes of the series *Service Monographs of the United States Government*, many of which can still be consulted with some profit.

1. Pizer, Vernon, *The United States Army*, 1967, x + 213 pp.
2. Fitch, Edwin M., *The Alaska Railroad*, 1967, x + 326 pp.
3. Huston, Luther A., *The Department of Justice*, 1967, xi + 270 pp.
4. MacCloskey, Monro, *The United States Air Force*, 1967, xi + 244 pp.
5. Burkhardt, Robert, *The Federal Aviation Administration*, 1967, x + 249 pp.
6. Donovan, James A., *The United States Marine Corps*, 1967, x + 246 pp.
7. Moore, Ernest G., *The Agricultural Research Service*, 1967, xii + 244 pp.
8. Popkin, Roy, *The Environmental Science Services Administration*, 1967, x +278 pp.
9. Willmann, John B., *The Department of Housing and Urban Development*, 1967, xiii + 207 pp.
10. Cullinan, Gerald, *The Post Office Department*, 1967, xvi + 272 pp.
11. Borklund, Carl W., *The Department of Defense*, 1968, x + 342 pp.
12. Carrison, Daniel J., *The United States Navy*, 1968, x + 262 pp.
13. Clague, Ewan, *The Bureau of Labor Statistics*, 1968, xv + 271 pp.
14. Henderson, John William, *The United States Information Agency*, 1969 xii + 324 pp.
15. Parris, Addison W., *The Small Business Administration*, 1968, xii + 292 pp.
16. Schaffter, Dorothy, *The National Science Foundation*, 1969, xii + 278 pp.
17. Marvell, Thomas B., *The Federal Home Loan Bank Board*, 1969, x + 291 pp.
18. Blancké, W. Wendell, *The Foreign Service of the United States*, 1969, xiii + 286 pp.
19. Harvey, Donald R., *The Civil Service Commission*, 1970, xiii + 233 pp.
20. Brundage, Percival Flack, *The Bureau of the Budget*, 1970, viii + 327 pp.
21. Oehser, Paul Henry, *The Smithsonian Institution*, 1970, xiii + 275 pp.
22. Carey, Robert G., *The Peace Corps*, 1970, xii + 274 pp.
23. Simms, Denton Harper, *The Soil Conservation Service*, 1970, ix + 238 pp.
24. Fitch, Edwin M., and John F. Shanklin, *The Bureau of Outdoor Recreation*, 1970, xii + 227 pp.
25. Chommie, John C., *The Internal Revenue Service*, 1970, xii + 267 pp.
26. Kling, Robert E., *The Government Printing Office*, 1970, xi + 242 pp.
27. Clawson, Marion, *The Bureau of Land Management*, 1971, xiii + 209 pp.
28. Wagner, Susan, *The Federal Trade Commission*, 1971, vii + 261 pp.
29. Jones, Stacy V., *The Patent Office*, 1971, xii + 234 pp.

Schmeckebier, Lawrence Frederick, and Roy B. Eastin, *Government Publications and Their Use*, 2nd rev. ed., Brookings Institution, Washington, D.C. [1969], [xi] + 502 pp.

United States Government Organization Manual, 1935–, Govt. Printing Office, Washington, D.C., edited 1948– by the Office of the Federal Register, National Archives and Records Service, General Services Administration. Included each year an Appendix A, "Executive Agencies and Functions of the Federal Government Abolished, Transferred, or Terminated Subsequent to March 4, 1933" (A in 1972–1973 includes only changes in 1971–1972), and an Appendix B, "Representative Publications of Departments and Agencies of the Federal Government." (Appendix B terminated with 1970–1971.)

U.S. Superintendent of Documents. *Checklist of United States Public Documents, 1789–1909: Congressional to the Close of Sixtieth Congress; Departmental to End of Calendar Year 1909,* 3rd ed., rev. and enl., Vol. 1: *Lists of Congressional and Departmental Publications,* Govt. Printing Office, Washington, D.C., 1911, xxi + 1707 pp. The proposed Vol. 2 (Index) was never published.

Does not include the original prints of the First Fourteen Congresses, 1789–1817, of which A. W. Greely's *Public Documents of the First Fourteen Congresses, 1789–1817* (Washington, D.C., 1900) still remains the only comprehensive record, although after 70 years it is in serious need of reworking, and further does not have an account of the Senate Executive Documents and Reports previous to the fifty-seventh Congress, and still further does not present a full picture of the Congressional Committee Hearings, for which the fullest inventory seems to be H. O. Thomen's *Checklist of Hearings before Congressional Committees through the Sixty-Seventh Congress [1921–1923],* (Washington, D.C., 1957–1959).
Issued in a facsimile reprint by Edwards, Ann Arbor, Michigan, 1953, then also in 1962 by the Kraus Reprint Corp., New York, and recently in both microfilm and bound volume form by the U.S. Historical Documents Institute, Washington, D.C., as *Checklist of U.S. Public Documents, 1789–1970,* incorporating the shelflist of the Public Documents Library, dual media edition, 1972, by Daniel W. Lester. 5 vols. and 118 reels of microfilm.

[*Document Catalog*], *Catalog of the Public Documents of the Fifty-Third–[Seventy-Sixth] Congress and of all Departments of the Government of the United States for the Period from March 4, 1893, to [December 31, 1940*]. Govt. Printing Office, Washington, D.C., 1896–1945, 25 vols. Comprehensive dictionary arrangement for each biennial volume, without stress on personal authors. Preceded by:

1. Poore, Benjamin Perley, *A Descriptive Catalogue of the Government Publications of the United States, September 5, 1774–March 4, 1881,* Govt. Printing Office, Washington, D.C., 1885, iv + 1392 pp. [Serial Set 2268.]
2. Ames, John Griffith, *Comprehensive Index to the Publications of the United States Government, 1881–1893,* Govt. Printing Office, Washington, D.C., 1905, 2 vols. [Serial Set 4745-46.]

From 1941 to date the permanent record of the biennial *Document Catalog* is considered as being continued in the *Monthly Catalog of United States Government Publications,* with its consolidated indexes.

U.S. Superintendent of Documents, *Monthly Catalog of United States Government Publications,* Govt. Printing Office, Washington, D.C., 1895–. Considered as the permanent record 1941 to date, continuing the biennial *Document Catalog*. On this account, *Decennial Cumulative Indexes* have been published for 1941–1950 and 1951–1960. Since the indexing of personal authors was not begun until 1963, the Pierian Press, Ann Arbor, Michigan, published in 1971 the *Cumulative Author Index,* edited by Edward Przebienda, for 1941–1950, 1951–1960, and 1961–1965. In the effort to increase the current coverage of material printed or reproduced elsewhere than at the Government Printing Office, the American Library Association, Chicago, published in 1964 an 86-page brochure *United States Government Publications: A Partial List of Non-GPO Imprints,* prepared by Jennings Wood. In 1970 this was continued by the

Exchange and Gift Division, Library of Congress, *Non-GPO Imprints, Received in the Library of Congress, July, 1967, through December, 1969, a Selective Checklist.* and in 1971 by a similar brochure for those received in 1970.

U.S. Superintendent of Documents, *Price List*, Superintendent of Documents, Washington, D.C. Revised and changed from time to time, showing the status of the stock for sales.

10. Laws, Rules and Regulations.
11. Home Economics.
15. Geology.
19. Army Field Manuals and Technical Manuals.
21. Fish and Wildlife.
25. Transportation, Highways, Roads and Postal Service.
28. Finance.
31. Education.
33. Labor.
33A. Occupations, Professions and Job Descriptions.
35. National Parks, Historic Sites, National Monuments.
36. Government Periodicals and Subscription Services.
37. Tariff and Taxation.
38. Animal Industry: Farm Animals, Poultry and Dairying.
41. Insects.
42. Irrigation, Drainage and Water Power.
43. Forestry, Managing and Using Forest and Range Land.
44. Plants, Culture, Grading, Marketing and Storage of Fruits, Vegetables, Grass and Grain.
46. Soils and Fertilizers, Natural Resources, Erosion, Conservation.
48. Weather, Astronomy and Meteorology.
50. American History.
51. Health and Medical Services.
51A. Diseases and Physical Conditions.
54. Political Science, Government, District of Columbia.
55. Smithsonian Institution, National Museum, and Indians.
58. Mines, Explosives, Fuel, Gasoline, Gas, Petroleum, Minerals.
59. Interstate Commerce.
62. Commerce, Business, Patents, Trademarks and Foreign Trade.
63. Navy, Marine Corps and Coast Guard.
64. Scientific Tests, Standards.
65. Foreign Relations of the United States.
67. Immigration, Naturalization and Citizenship.
68. Farm Management, Foreign Agriculture, Rural Electrification, Agricultural Marketing.
70. Census Publications.
71. Child Development and other Publications relating to Children and Youth.
72. Homes.
78. Social Services, Aging, Family Planning, Handicapped, Medicaid, Nursing Homes, Pensions and Retirement, Poverty, Social Security and Social Welfare.
79. Air Force, Aviation, Civil Aviation, Naval Aviation, Federal Aviation Administration.
79A. Space, Missiles, the Moon, NASA and Satellites.
81. Posters and Charts.
82. Radio and Electricity.
83. Library of Congress.
84. Atomic Energy and Civil Defense.
85. Defense, Veterans Affairs.

86. Consumer Information.
87. States and Territories of the United States and Their Resources.
88. Ecology

GREAT BRITAIN

Although Parliament functioned for a long time in Great Britain before the introduction of printing from movable type by Caxton in 1476, it was not until the seventeenth century that any current parliamentary printing began. Aside from the occasional printing of laws, proclamations, and the like, it was not until 1665 with the Court at Oxford that an official newspaper was started as the *Oxford Gazette*. With the transfer of the Court to London in 1666, the official newspaper was also removed and retitled the *London Gazette*. With contents quite changed from the original newspaper style to the purely official content, the *London Gazette* still appears today, including the following:

> State Intelligence. Proclamations, Orders in Council, Acts of Parliament passed, Addresses to the Sovereign, Appointments and Promotions in the various Orders of Chivalry, Civil Appointments, Exchequer Statement, Returns of Prices of Corn, Bank of England Issue and Banking, Bank Returns, Departmental Orders, Notices, etc.
>
> Appointments, Promotions, etc., in the Armed Forces.
>
> Advertisements. Decrees of High Court of Chancery, Sales by Auction, Bankruptcy, Meetings of Public Companies, Land Registry, Heirs and Kindred of Deceased Persons, Names Changed, etc.

Not until much later than the beginning of the *Gazette* did the Government establish and develop a central authority for government publications as may be seen from H.M. Treasury's brochure *Official Publications* (HMSO, London, 1968), where on page 2 the situation is summarized as follows:

> The Controller of Her Majesty's Stationery Office is responsible for printing and publishing almost all official publications. When he publishes a document, he acts in one or other of three capacities. If the publication is prepared by a government department, he acts as the Government Printer, deriving his authority from his position as head of the department responsible for this work; if the publication is undertaken on behalf of the Houses of Parliament, his authority derives from Parliament itself; and in printing Acts of Parliament, he acts as Queen's Printer of Acts of Parliament, a position to which he has been appointed by the Crown by letters patent. It is today the custom for the person appointed Controller of Her Majesty's Stationery Office to be appointed Queen's Printer of Acts of Parliament and to be the Printer for the Houses of Parliament. But it has not always been so. The Stationery Office was founded in 1786, but private contractors continued to print for the two Houses of Parliament until 1882, and the Controller of the Stationery Office did not become Queen's Printer of Acts of Parliament until 1887. Hansard was published as a private venture up to 1889, and by private contractors until 1908, so that it is only since 1909 that the Stationery Office has been responsible for the printing and publication, with a few exceptions, of all official publications.

Indeed, for the retrospective period, the most comprehensive listing is probably represented by the five volumes (62–66), having "England" as a heading, in the main devoted to official publications, of the *Catalogue of Printed Books, Photo-lithographic Edition to 1955* of the Department of Printed Books of the British Museum (Trustees of the British Museum, London, 1959–1966, 263 vols.).

It was not until the period beginning with 1801 when systematic official binding (at first of a few annual sets of the Sessional Papers of both the House of Commons and the House of Lords) was systematically undertaken, including the public bills, reports from committees of the House, reports from commissions, inspectors, royal commissions, etc., accounts and papers, and command papers. Subsequently, the printing of annual or sessional indexes for each House made possible for libraries and institutions obtaining, or subscribing for, full sets of the bills and papers each to make up and bind their own sets. In contrast with the *Congressional Series* in the United States, which was distributed to depository libraries in bound form, the *Sessional Papers* of both Commons and Lords seem never to have been available officially for fairly wide distribution or sale in bound sets.

For the Commons, the principal collective indexes to the *Sessional Papers* are:

1. *General Index to the Bills, 1801–1852.*
2. *General Index to the Reports of Select Committees . . . 1801–1852.*
3. *General Index to the Accounts and Papers, Reports of Commissioners, Estimates, etc. . . . 1801–1852.*
4. *General Alphabetical Index . . . 1852–1899.*
5. *General Index to the Bills, Reports and Papers Printed by Order of the House of Commons and to the Reports and Papers Printed by Command, 1900 to 1948–49.*
6. *General Alphabetical Index . . . 1950 to 1958–59.*

And sessional indexes.

For the Lords there are but three cumulative indexes: 1801–1859, 1859–1870, and 1871–1884/1885.

Soon after the time of World War I the format was in general changed from foolscap folio to octavo.

For the years previous to 1801 there are (1) *Hansard's Catalogue and Breviate of Parliamentary Papers, 1696–1834* (Blackwell, Oxford, 1953), and (2) in 1968 Sheila Lambert's *List of the House of Commons Sessional Papers, 1701–1750* (List and Index Society, London) which may well be followed by a similar work for 1751–1800, and possibly by work on the seventeenth century.

Great stress is placed on explaining the intricacies of parliamentary publications by John E. Pemberton in his *British Official Publications* (Pergamon, Oxford, New York, 1971, xiii + 315 pp.). Another work, written primarily for student librarians, *An Introduction to British Government Publications*, by James G. Ollé (Association of Assistant Librarians, London, 1965, 128 pp.) may also be useful in filling out the picture of the whole field.

At this point it may be helpful to trace briefly the development of the present HMSO plan of current recording daily, monthly, and annually with five-year indexes, and cards. However, only a modest number of British government publications, i.e., those having a more general interest, seem to be entered in the *British National Bibliography,* as seems to be the case in many other national bibliographies.

For the years 1894–1896, the *Quarterly List . . . of Official and Parliamentary Papers,* cumulative annually, of the Stationery Office continued the *List of Parliamentary Papers for Sale,* by Hansard and Son, then from 1886 by the Stationery Office. From 1897 through 1921 there was both a *Quarterly List . . . of Official Publications,* cumulative annually, and a *Quarterly List . . . of Parliamentary Publications,* also cumulative annually. In 1922 these were merged in the *Consolidated List of Government Publications,* which was the cumulative number for the year of the *Monthly List.* Beginning with 1936–1940 the annual *Government Publications* (later *Catalogue of Government Publications*) has been accompanied by 5-year indexes, so that annual indexes can be discarded with the binding of 5-year volumes. There is, of course, a daily list in processed form available for immediate use, and printed catalog cards.

The monthly *Government Publications,* as it was called beginning with 1936, and the annual *Catalogue of Government Publications* include only publications placed on sale by the HMSO (about 6,500 as of 1969) and do not include the following:

1. *Statutory Instruments* (formerly *Statutory Rules and Orders),* included only in the daily list, there being a special monthly appearing January through November and an annual list.
2. Those publications distributed free of charge, such as the following:
   a. *Control and Audit of Public Receipts and Expenditures* (HMSO, London, 1907). For free or official distribution by the Treasury.
   b. *Government Publications, Official Indexes, Lists, Guides, Catalogues* (HMSO, London, 1964). For free distribution by the Stationery Office itself.
3. Admiralty charts, a separate catalog being put forth by the Hydrographic Department of the Admiralty.
4. Ordnance Survey maps, the Survey at Southampton having a monthly publication report with a quarterly list for Geological Survey maps.
5. Patent Specifications and other Patent Office publications for sale by the Patent Office, Orpington, Kent.
6. Private parliamentary bills.
7. Other publications available from the agencies, and published by them, being sometimes noted in accession lists of administrative libraries, as noted in a *Guide to Government Libraries,* 2nd ed., by the Organisation and Methods Division of the Treasury (HMSO, London, 1958, viii + 139 pp.).

Material available in the sales stock of the Stationery Office is represented by a series of forty or so sectional catalogs arranged in the main on the division of reponsibilities among the sponsoring agencies and revised from time to time as the status of the stock varies as well as in keeping with agency changes and reorganization. This as well as the current material is procurable not only directly by mail, but through some seven or so government bookshops in London and elsewhere in Great Britain as well as through a series of officially appointed agents in Great Britain and abroad. The only depository of a copy of every publication put forth by HMSO seems to be the British Museum, London, W.C. 1, although the other copyright libraries have a claim too.

Under the Copyright Acts of 1911 and 1956, and even earlier to a somewhat lesser extent, statutory copyright protection subsists in all works produced by or under direction of the Crown or a government agency for the period of 50 years from the end of the year of first publication, regardless of whether published by the HMSO or not. This even applies to unpublished work, although in view of international practices this does not seem rigidly applied as regards patent specifications. A discussion of this and of the granting of permission to reproduce appeared in an article by John E. Pemberton under the title "Crown Copyright" in *Library World*, London, April 1970.

Since World War II there have been many changes in the names and duties of government agencies as mentioned briefly by James G. Ollé in a footnote on pp. 77–78 of *An Introduction to British Government Publications* (London, 1965), and these changes have continued, baffling many would-be users of British government publications, since the *British Imperial Calender and Civil Service List* (HMSO, London) does not contain information as to the establishment and changes of agencies. Aside from the *O. & M. Bulletin* and *Public Administration,* and of course the daily press, one recourse for those having to make considerable and continuing use is *The New Whitehall Series . . . Prepared under the Auspices of the Royal Institute of Public Administration* (George Allen & Unwin, London; Oxford Univ. Press, New York) of which fifteen volumes on various ministries and other agencies have been published from 1954 through 1970. Changes continue. As of November 12, 1970, the Ministry of Overseas Development was dissolved, and the services were placed under the Foreign and Commonwealth Office as Overseas Development Administration. About the same time, (1) the three Ministries of Housing and Local Government, of Public Buildings and Works, and of Transport were merged as the Department of the Environment; (2) the Board of Trade and the Ministry of Technology were merged as the Department of Trade and Industry; and (3) the Department of Employment and Productivity became simply the Department of Employment.

Thus the overall record of British government publications from about the second quarter of the nineteenth century seems concentrated on those printed for sale. Those not printed for sale as well as those printed for sale and distribution by the agency are much in need of further definition and inventory as well. The need is related to an increasing requirement for a comprehensive inventory, and so far as that is not possible a need for inventories by agency with precise agency organization information.

Indeed, the overall record of the earlier English books by A. W. Pollard and G. R. Redgrave, published at London in 1926 by the Bibliographical Society under the title *A Short-Title Catalogue of Books Printed in England, Scotland and Ireland and of English Books Printed Abroad 1475–1640*, is reported as being in the process of revision. There are about 50 pages under the heading "England." If there should be some concentration on government agencies and their development during that period, it is not unlikely that a considerable number of government publications would be brought to light as well as more precise information about many of those recorded in the original edition. Further, the 3-volume continuation of Pollard and Redgrave by Donald Wing (published by the Index Society, New York, 1945–1951 as *Short-Title Catalogue of Books Printed in England, Scotland, Ireland, Wales and British America and of English Books Printed in Other Countries, 1641–1700*) contains, as reported by R. J. Roberts in the *Journal of Librarianship,* London, October 1970, about 80,000, with about sixty pages under "England" as a heading, and "Better recording would raise this to 90 or 100,000 or more."

Even the work by Sheila Lambert on the House of Commons in the first half of the eighteenth century, as mentioned previously, points out a pioneer track that needs to be followed in work on British government publications. Similar precise inventories of earlier periods, agency by agency, might well be regarded as essential to the understanding of agency functions and history.

Indeed, certain of the Public Record Office *Handbooks* such as the following furnish some idea as to what possibly might be expected:

4. *List of Cabinet Papers, 1880–1914,* 1964.
6. *List of Papers of the Committee of Imperial Defense to 1914,* 1964.
8. *List of Colonial Office Confidential Print to 1916,* 1965.
9. *List of Cabinet Papers, 1915 and 1916,* 1966.

Full agency inventories, including all nonsales publications, which might well extend the existing record very considerably, would seem increasingly needed for informational purposes of the present as well as research of the future.

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Bond, Maurice Francis, *Guide to the Records of Parliament,* HMSO, London, 1971, x + 352 pp., 16 facsims.

British Museum, *Department of Printed Books,* England, I–[V], London, 1960–1963, 5 vols. (4,028, 1,042 cols.) (General catalogue of printed books, photolithographic edition to 1955, Vols. 62–66.)

British Museum. *Department of Printed Books. State Paper Room.* Checklist of British Official Serial Publications, first Provisional Edition, 1967–, London, 1967–. Arrangement is by title except in the case of annual reports, bulletins, etc., which are under the issuing agency. Indicates whether published by HMSO or by agency.

Di Roma, Edward, and Joseph A. Rosenthal, *A Numerical Finding List of British Command Papers, Published 1833–1961/62.* New York Public Library, 1967. [New York] 148 pp. "Designed to help researchers ascertain the volume in the collected series of British Sessional Papers in which any particular Command Paper from 1833 through 1962 appears without having to refer to the annual numerical lists giving this information."

Ford, Percy, and Grace Ford, *A Breviate of Parliamentary Papers, 1900–1916. The Foundation of the Welfare State*, Blackwell, Oxford, 1957, xlix + 470 pp. Also Irish Univ. Press, Shannon, 1969.

Ford, Percy, and Grace Ford, *A Breviate of Parliamentary Papers, 1917–1939*, Blackwell, Oxford, 1951, xlviii + 571 pp. Also Irish Univ. Press, Shannon, 1969.

Ford, Percy, and Grace Ford, *A Breviate of Parliamentary Papers, 1940–1954: War and Reconstruction*, Blackwell, Oxford, 1961, 1, 515 pp.

Ford, Percy, and Grace Ford, *A Guide to Parliamentary Papers; What They Are, How to Find Them, How to Use Them*. [New ed.], Blackwell, Oxford, 1956, xiii + 79 pp.

Ford, Percy, and Grace Ford. *Select List of British Parliamentary Papers, 1833–1899*, Blackwell, Oxford, 1953, xxii + 165 pp. Also Irish Univ. Press, Shannon, 1969. Accompanied by the reprint of *Hansard's Catalogue and Breviate*.

Great Britain, *Central Statistical Office. List of Principal Statistical Series*. Available: I, Economic Statistics; II. Financial Statistics; III. Regional Statistics. HMSO, London, 1965, iv + 36 pp. (Studies in Official Statistics, No. 11.)

Great Britain, Interdepartmental Committee on Social and Economic Research. *Guides to Official Sources*, HMSO, London, 1948–1961. 6 vols.

1. *Labour Statistics*, 1948, rev. 1950.
2. *Census Reports of Great Britain, 1801–1931*, 1951.
3. *Local Government Statistics*, 1953.
4. *Agricultural and Food Statistics*, 1958.
5. *Social Security Statistics*, 1961.
6. *Census of Production Reports*, 1961.

Most of its duties have devolved on the Social Science Research Council. The Interdepartmental Committee, popularly known as the North Committee after its chairman George North, then Registrar General, was set up in October 1946 and continued to 1960, but apparently has never been formally dissolved.

Great Britain, Department of Trade and Industry, *Technical Services for Industry: Technical Information and Other Services Available from Government Departments and Associated Organizations*, Department of Trade and Industry, London, 1970, 302 pp. Previous editions were prepared by the Ministry of Technology, which late in 1970 was merged with the Board of Trade to form the Department of Trade and Industry.

Great Britain, Parliament. House of Commons. *Catalogue of Papers Printed by Order of the House of Commons, from the Year 1731 to 1800. In the Custody of the Clerk of the Journals*, [London], 1807 [HMSO, London, 1953], lx + 101 pp.

Great Britain, Parliament. House of Commons. *General Index to the Bills, Reports and Papers Printed by Order of the House of Commons and to the Reports and Papers Presented by Command, 1900 to 1948–49*, HMSO, London, 1960, viii + 893 pp. "Short titles of bills," pp. 805–893.

The main nineteenth century indexes are as follows:

a. *General Index to the Bills . . . 1801–1852*.
b. *General Index to the Reports of Select Committees . . . 1801–1852*.
c. *General Index to the Accounts and Papers, Reports of Commissioners, Estimates, &., &.. . . . 1801–1852*. Reprinted by HMSO, 1938. Also printed, Irish Univ. Press, Shannon, 1968.
d. *General Alphabetical Index to the Bills, Reports, Estimates, Accounts and Papers, Printed by Order of the House of Commons, and Papers, Printed by Command, 1852–1899*. 1909.

All the sessional numbers of papers are omitted.
The General Indexes compress the material of the sessional and decennial indexes.

Great Britain, Parliament. House of Commons. *Hansard's Catalogue and Breviate of Parliamentary Papers, 1696–1834,* Reprinted in Facsimile with an Introduction by P. Ford and G. Ford, Blackwell, Oxford, 1953, xv + viii + 220 pp. "A companion volume to the *Select List of Parliamentary Papers, 1833–1899,* by P. and G. Ford." Includes on pp. xi—xiii a select list of House of Lords papers not in the *Breviate.*

Great Britain, Parliament. House of Commons. Library. *A Bibliography of Parliamentary Debates of Great Britain.* HMSO, London, 1956, cover-title, 62 pp. (Document No. 2.) "The main work . . . was done by Dr. John A. Woods when he was attached to the Library of the House of Commons during several months in 1953." "Foreword" signed: S. Gordon, librarian.

Great Britain, Stationery Office. *Catalogue of Government Publications, 1922–.* HMSO, London, 1923– Annual. Includes only sales publications. Continuation of the *Quarterly List,* 1894–1921. Includes annual supplement for publications of international organizations, 1955–. Five year index replacing the annual indexes began 1936–1940. Title varies:

1922: *Consolidated List of Parliamentary and Stationery Office Publications.*
1923–1950: *Consolidated List of Government Publications.*
1951–1953: *Government Publications Consolidated List.*
1954–1955: *Government Publications Catalogue.*
Cover-title, 1955–: *Government Publications.*

Currently, there is a *Monthly Government Publications List.* Commonwealth jurisdictions official publications so far, as received currently in the jointly administered libraries of the Foreign and Commonwealth Office and the Overseas Development Administration (formerly Ministry of Overseas Development) are recorded in *Technical Cooperation, a Monthly Bibliography,* from the Overseas Development Administration, having a quarterly supplement devoted to bills and subsidiary legislation.

Great Britain, Stationery Office. *Government Publications: Official Indexes, Lists, Guides, Catalogues,* HMSO, London, 1964, cover-title, 14 pp. Has been occasionally revised in the past.

Great Britain, Stationery Office. *Government Publications. . . . Sectional List . . . ,* HMSO, London. The various sections are revised and changed from time to time to keep abreast of changes in agency and emphasis as well as of the state of the stock. Even sections no longer in print may occasionally be helpful in locating specific titles. A single volume catalog of nonparliamentary government publications appeared last in 1921 as of December 31, 1920.

1. Agriculture and Food.
2. Department of Education and Science.
3. Department of Trade and Industry (Headquarters Industrial Divisions and Industrial Research Establishment).
5. Department of the Environment (Housing and Local Government).
8. Aeronautical Research Council.
11. Department of Health and Social Security (Health).
12. Medical Research Council.
17. Reports of the Royal Commission on Historical Manuscripts.
18. Official Forms for Use in Premises under the Factories Acts.
21. Department of Employment.
22. Department of the Environment (Transport).
23. Fisheries.
24. British National Archives.
26. Home Office.

27. Ancient Monuments and Historic Buildings.
28. Periodicals and Subscription Rates.
29. Board of Inland Revenue.
31. Forestry Commission.
32. H.M. Treasury and Allied Departments.
36. Scottish Education Department.
37. Meteorological Office.
43. Land Registry.
44. Civil Service.
45. Institute of Geological Sciences.
49. Department of Health and Social Security (Social Security).
50. Miscellaneous List.
51. Department of Trade and Industry.
52. Department of Agriculture and Fisheries for Scotland (Agriculture).
53. Central Office of Information.
55. Victoria and Albert Museum.
56. Office of Population Censuses and Surveys.
59. Royal Commissions, 1936–1966.
60. War Histories.
61. Building.
65. Scottish Development Department.
66. Scottish Home and Health Department.
67. Ministry of Defence, Navy Department, Army Department, Air Force Department.
69. Overseas Affairs.

Between World Wars I and II there was a not so extensive series of Sectional Lists, designated by letters of the alphabet, probably discontinued about 1934.

Great Britain, Treasury. Organization and Methods Division, *Historical Table of Changes in Government Organization*. Organization and Methods Division, H. M. Treasury, [London], 1957, cover-title, 81 pp. "The information in this table [eleventh–twentieth centuries] was mainly provided by departments at the request of the Royal Institute of Public Administration. Part of it is contained in appendix to *The Organization of the Central Government, 1914–1956*, published recently under R.I.P.A. auspices."

Lambert, Sheila (Mrs. G. R. Elton), *List of House of Commons Sessional Papers, 1701–1750*, (P. & D.) Swift, London, 1968 [i.e., 1969], xviii + 155 leaves. (List & Index Society. Special Series, Vol. 1.) 1st ed., January 1968; 2nd ed., October 1968; 3rd ed., September 1969. "An attempt to make a list . . . in the manner of the sessional lists of the bound set . . . which begins in 1801."

Mackenzie, William James Millar, and J. W. Grove, *Central Administration in Britain*. Longmans, Green, London, New York, [1957], 487 pp.

Menhennet, David, *The Journal of the House of Commons, a Bibliographical and Historical Guide*, HMSO, London, 1971, viii + [96] pp. (House of Commons Library, Document No. 7)

Morgan, Annie Mary, ed., *British Government Publications, an Index to Chairmen and Authors, 1941–1966*, Reference, Special and Information Section, The Library Association, London, in Association with Birmingham Public Libraries, 1969, [3] + 193 pp. An index prior to 1941 is projected.

The New Whitehall Series . . . Prepared under the Auspices of the Royal Institute of Public Administration and Edited on its Behalf by Sir Robert Fraser . . . . George Allen & Unwin, London; Oxford Univ. Press, New York, 1954–. "The purpose . . . is to provide authoritative descriptions of the present work of major departments of central government."

1. Newsam, Sir Frank, *The Home Office*, [1954], 224 pp.
2. Strang, William Strang, Baron, *The Foreign Office*, [1955], 226 pp. In October 1968 the Foreign Office absorbed the Commonwealth Office as the Foreign and Commonwealth Office.
3. Jeffries, Sir Charles Joseph, *The Colonial Office*, [1956], 222 pp. On August 1, 1966, the Colonial Office was merged with the Commonwealth Relations Office to form the Commonwealth Office, and the Commonwealth Office was in October 1968 merged with the Foreign Office to form the Foreign and Commonwealth Office.
4. Emmerson, Sir Harold Corti, *The Ministry of Works*, [1956], 171 pp. The Ministry of Works has since become the Ministry of Public Building and Works, which in 1970 merged with the Ministries of Housing and Local Government and of Transport as the Department of the Environment.
5. Milne, Sir David, *The Scottish Office and other Scottish Government Departments*, [1957], 232 pp.
6. King, Sir Geoffrey Stuart, *The Ministry of Pensions and National Insurance*, [1958], 162 pp. The Ministry of Pensions and National Insurance has since become the Ministry of Social Security.
7. Jenkins, Sir Gilmour, *The Ministry of Transport and Civil Aviation*, [1959], 231 pp. The ministry has since been divided.
8. Ince, Sir Godfrey Herbert, *The Ministry of Labour and National Service*, [1960], 215 pp.
9. Melville, Sir Harry Work, *The Department of Scientific and Industrial Research*, [1962], 200 pp. In 1964, the D.S.I.R. was divided between the Department of Education and Science and the Ministry of Technology.
10. Crombie, Sir James, *Her Majesty's Customs and Excise*, [1962], 224 pp.
11. Winnifrith, Sir John, *The Ministry of Agriculture, Fisheries and Food*, 1962, 271 pp.
12. Bridges, Edward Ettingdene Bridges, Baron, *The Treasury*, 2nd ed., 1966, 248 pp.
13. Johnston, Sir Alexander, *The Inland Revenue*, [1965], 201 pp.
14. Sharp, Evelyn, Baroness Sharp, *The Ministry of Housing and Local Government*, 1969, 253 pp. In 1970 the ministry was merged with the Ministries of Public Buildings and Works and of Transport as the Department of the Environment.
15. Clark, Sir Fife, *The Central Office of Information*, 1970, 184 pp.

Ollé, James Gordon Herbert, *An Introduction to British Government Publications*, Association of Assistant Librarians, London, 1965, 128 pp. An elementary introduction to the entire range of British government publications. Updated by the author with an article of 4 pages entitled "Recent Developments in British Government Publishing" in *The Assistant Librarian*, June 1966.

Pemberton, John E., *British Official Publications*, Pergamon, Oxford, New York, [1971] xi + 315 pp. (Commonwealth and International Library. Library and Technical Information Division.)

Rodgers, Frank, *Serial Publications in the British Parliamentary Papers, 1900–1968, A Bibliography*, American Library Association, Chicago, 1970, 156 pp.

Rodgers, Frank, and Rose B. Phelps, *A Guide to British Parliamentary Papers*, [Urbana], 1967, 35 pp. (Illinois University Graduate School of Library Science. Occasional Papers. No. 82.) "Constitutes, in somewhat condensed form, three chapters of projected manual of British government documents, which it is hoped may, when completed, fill the need for a companion to Boyd and Rips' *United States Government Publications*."

Royal Institute of Public Administration, *The Organization of British Central Government, 1914–1964; A Survey by a Group of the Royal Institute of Public Administration*, edited by D. N. Chester, written by F. M. G. Willson, 2nd ed. by F. M. G. Willson, Allen & Unwin, London, 1968, 521 pp.

Staveley, Ronald, and Mary Piggott, eds., *Government Information and the Research Worker*, 2nd rev. ed., The Library Association, London, 1965, 267 pp. 1st ed., London Univ. School of Librarianship, 1952. Includes articles from the various agencies on HMSO, Public Record Office, Board of Trade, Central Office of Information, Colonial Office, Commonwealth Relations Office and Ministry of Overseas Development, Commonwealth Agricultural Bureaux, Foreign Office, H.M. Customs and Excise, H.M. Treasury, Interdepartmental Committee on Social and Economic Research, Medical Research Council, Ministry of Agriculture, Fisheries and Food, Ministry of Aviation, Ministry of Housing and Local Government, Ministry of Labour, Ministry of Power, Ministry of Public Housing and Works, Naval Library, Royal Commission on Historical Monuments (England), Social Survey, and the United Kingdom Atomic Energy Authority. Since there is no article from the former Ministry of Education or from the present Department of Education and Science, the following may well be considered as an informal supplement:

Argles, Michael, and J. E. Vaughan. *British Government Publications Concerning Education. An Introductory Guide*, Institute of Education, The University of Liverpool. [Liverpool], 1966, 24 pp. For sale by the University of Liverpool School of Education.

Temperley, Harold William Vazeille, and Lillian M. Penson, eds., *A Century of Diplomatic Blue Books, 1814–1914: Lists Edited with Historical Introductions*, Cambridge Univ. Press, Cambridge, 1938, xvi + 600 pp. A new impression was published in 1966 in London by Frank Cass & Co., and in New York by Barnes & Noble.

Vogel, Robert, *A Breviate of British Diplomatic Blue Books, 1919–1939*, McGill Univ. Press, Montreal, 1963, xxxv + 474 pp. To continue Temperley and Penson.

Wilding, Norman W., and Philip Laundy, *An Encyclopedia of Parliament*, 4th ed., completely rev., St. Martin's Press, New York, [1971], ix + 931 pp. Includes information about the present British departments as well as about the legislative bodies of the Commonwealth countries.

CANADA

On April 1, 1970, the Minister of Supply and Services transferred the publishing activity of the Queen's Printer, as well as the six government bookshops, except for the Parliamentary Papers, Statutes of Canada, and the *Canada Gazette,* to the Publishing Division of the new Information Canada, having charge of distribution and sales of Canadian government publications. Information Canada had come into being as a result of the studies of the Task Force on Government Information. The printing and reproduction activity of the Government is now centered in the Canadian Government Printing Bureau. The former Department of Printing and Stationery was rescinded when the Queen's Printer's operations were transferred to the Department of Supply and Services in 1967.

A system of depository libraries for Canadian government publications had been authorized by Privy Council Minute 1471, August 4, 1927. In 1952–1953 daily checklists and monthly catalogs of Canadian government publications were established as a preliminary to the cumulative annual catalog, all of course bilingual in English and French, the two official languages, and are now published by Information Canada. *Canadiana*, the monthly and annual Canadian national bibliography, published by the National Library, Ottawa, which began in 1950, has included Canadian government publications in Part 2, with two sections (English and French), and Canadian provincial government publications as Section 3. The as yet small series of *Sectional Catalogues* is being gradually continued by Information Canada. In 1958 a manual *Organization of the Government of Canada* (in French as *L'Administration Fédérale du Canada*) was initiated by the Department of Public Printing and Stationery, from 1966 in loose-leaf form, continued from 1970 by Information Canada. It provides a key to the understanding of government agencies in orienting the user of government publications. Indeed, the only overall attempt to cover Canadian government publications from the establishment of the Dominion in 1867 is still the work *Canadian Government Publications, A Manual for Librarians* (Chicago, 1935), by Marion Villiers Higgins. Under the Canadian Copyright Act, Section 11, any documents published by or for the Canadian Government, including maps or other material published in any form, is protected by copyright for a period of 50 years from the date of first publication.

Undoubtedly the greatest single body of Canadian government publications for the period 1867–1868 through 1925 is contained in the series *Sessional Papers* of the House of Commons, published in bound form, also in French for the same period as *Documents parlementaires*. For a time the series was continued by a more limited bound collection entitled *Annual Departmental Reports*, 1924–1925 through 1929–1930, with a parallel French edition as *Rapports annuels des ministères*. Apparently all the individual publications bound in both series had appeared originally in separate form and are indexed in the five volumes of the *General Index to the Journals of the House of Commons of the Dominion of Canada* (Ottawa, 1880–1932) covering the period 1867–1930.

According to the "Guidelines" on page 13 of *Policy and Guide on Canadian Government Publishing* (Treasury Board, Ottawa, 1967),

> Government publications [of the Executive Branch] are a means of promoting the effectiveness of departmental policies and programs by:
> (a) enlisting public co-operation for these policies and programs, or assisting the administration of statutes and regulations;
> (b) encouraging immigration and tourism;
> (c) making available abroad information on Canada and Canada's role in world affairs;
> (d) promoting the use of Canadian products and services at home and abroad;
> (e) disseminating the results of technical, scientific, economic, statistical or historical studies; and
> (f) providing information to the public in answer to requests, in order to protect health and welfare, to assist in education or training and to meet emergencies.

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Bhatia, Mohan, *Canadian Federal Government Publications: A Bibliography of Bibliographies*, Murray Memorial Library, University of Saskatchewan, Saskatoon, 1971, [2] + 33 leaves, mimeographed.

Bishop, Olga Bernice, *Publications of the Government of the Province of Canada, 1841–1867*, National Library of Canada, Bibliothèque Nationale du Canada, Ottawa, 1963 [i.e., 1964], x + 351 pp.

Canada, Canadian Government Publications—du Gouvernement Canadien, *Catalogue,* 1953–, Department of Public Printing and Stationery, Ottawa; 1970–, Information Canada. Annual, preceded by a daily checklist and then by a monthly catalog.

Canada, Canadian Government Publications, *Sectional Catalogue. . . .* Publications du Gouvernement du Canada, *Bibliographie . . . .* Queen's Printer, Ottawa; 1970–, Information Canada.

1–9. Never published.

10. *Canadian Government Publications Relating to Labour. Publications du gouvernement canadien sur les sujets relatifs au travail,* 3rd ed., 1963.

11. *Northern Affairs and National Resources, Publications. Nord canadien et ressources nationales,* 1963.

12. *Energie, mines et ressources, Direction des mines et division des ressources minérales,* Mines Branch and General Resources Division, Energy, Mines and Resources, [3rd ed.], 1967.

13. *Department of Forestry. Ministère des forêts,* [Catalogue and Index of Publications], [1963].

14. *Dominion Bureau of Statistics. Bureau fédéral de la statistique,* [Publications, 3rd ed.], 1964.

15. *Canada Treaty Series, 1928–1964. Recueil des traités du Canada,* [1969].

16. *National Museums of Canada, 1970. Musées nationaux du Canada,* [1970].

Canada, *Organization of the Government of Canada, June 1958–.* Queen's Printer, Ottawa; 1970–, Information Canada.

1966–, in loose leaf form.

Also appears in French under the title *L'Administration fédérale du Canada.*

Canada, Bureau of Statistics. *Historical Catalogue of Dominion Bureau of Statistics Publications, 1918–1960,* Dominion Bureau of Statistics Library, Canada Year Book Division, Dominion Bureau of Statistics, Ottawa, 1966, [i.e., 1967], xiv + 298 pp. (DBS Cat. No. 11-504.)

Canada, Department of Agriculture, Main Library, *Publications of the Canada Department of Agriculture, 1867–1959,* compiled by Miss Ella S. G. Minter, assistant librarian (retired), Main Library, Information Division, Canada Department of Agriculture, Queen's Printer, Ottawa, 1963, 387 pp. "A permanent record of all the known publications issued officially by the Department from its inception until its reorganization in 1959."

Canada, Fisheries Research Board, *Index and List of Titles, Fisheries Research Board of Canada and Associated Publications, 1900–1964, by Neal M. Carter,* [Queen's Printer], Ottawa, 1968, xviii + 649 pp. (Bulletin, 164.)

Canada, Geological Survey. *Index of Publications of the Geological Survey of Canada, 1845–1958,* by A. G. Johnston, [Queen's Printer, Ottawa, 1961], x + 378 pp., color map. Later years are covered by:

1959–1964, by H. M. A. Rice, [Ottawa, 1965], vii + 163 pp.

1964, by H. M. A. Rice, [Ottawa, 1965], vi + 110 pp. (Paper 65–3.)

1965, by Leona R. Mahoney, [Ottawa, 1966], vi + 70 pp. (Paper 66–3.)

1966–1967, by Devorguilla Snowden, [Ottawa, 1967], vi + 57 pp. (Paper 67–3.)

1967–1968, by Devorguilla Snowden, [Ottawa, 1968], iii + 75 pp. (Paper 68–3.)

Canada, National Museum. *Publications of the National Museum of Canada,* [1913–1967], [Ottawa, 1967], 36 leaves, mimeographed.

Canadiana, 1950–. National Library of Canada, Ottawa. Monthly with annual cumulation. Part 2: *Canadian Government Publications,* English and French; Part 3: *Provincial Government Publications.*

Henderson, George Fletcher, *Federal Royal Commissions in Canada, 1867–1966; A Checklist*, Univ. Toronto Press, [Toronto], 1967, xvi + 212 pp. Chronological. Only about 300 reports have been located for the 396 commissions recorded.

Higgins, Marion Villiers, *Canadian Government Publications, A Manual for Librarians*, with an Introduction by Gerhard Lomer, American Library Association, Chicago, 1935, ix + 582 (i.e., 588) pp. Planographed. Dominion government only. "Brief outline histories of the various governmental bodies with a list of their publications." Various other publications here cited now update and supersede certain sections of the pioneering manual by Miss Higgins.

National Research Council of Canada, *Publications, 1918–1952*, 3rd ed., Ottawa, 1953, 263 pp.
Supplement, 1953–1958, Ottawa, 1959.
Supplement, 1958–1963, Ottawa, 1964, 438 pp.
Supplement, 1964–1967, Ottawa, 1967, 90 leaves.

ALGERIA

From the time of independence in 1962, the classified *Bibliographie de l'Algérie* (Bibliothèque Nationale, Algiers) has contained the following: No. 1, October 1963, serial publications of July 1962–September 1963; No. 2, July 1964, monographs of July 1962–June 1964; No. 3, July 1965, serial publications of July 1962–December 1964; No. 9, 2nd half of 1967, a cumulative record of periodicals July 1962–July 1967. It includes official publications with the use of corporate headings, and includes separate and smaller sections for titles in Arabic.

AUSTRALIA

Although the Commonwealth of Australia was constituted January 1, 1901 through the federation of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania, with the capital initially at Melbourne and from the 1920s permanently at Canberra, a systematic listing of Australian government publications did not begin until 1937 in the 2nd number of the *Annual Catalogue of Australian Publications*, edited by the Commonwealth National Library. It continued in this way with the exception of the years 1941 through 1944 until the year 1960, there being also for 1952 through 1960 the *Monthly List of Australian Government Publications*. When the *Australian National Bibliography*, by the National Library of Australia, cumulative annually, was established in 1961, it was paralleled by the annual *Australian Government Publications*, from 1971 quarterly with annual cumulation. To quote from the foreword of the 1969 volume, the series *Australian Government Publications*

> attempts to list all official publications (including monographs, annuals and periodicals) except the following categories:
>
> a. non-book material (for example, maps and films)
>
> b. single issues of certain parliamentary papers, which are later published in consolidated form (namely, rules and orders, ordinances, statutory rules and orders, notice papers, journals and votes and proceedings). Consolidations of these are listed in the bibliography.

Entries for maps and films were included in *Australian National Bibliography* until the end of 1967. Maps are currently listed in *Australian Maps* which began publication with an issue for January to September 1968 and continues as a quarterly. Films are listed in the monthly and annual supplements to *Australian Films; a Catalogue of Scientific, Educational and Cultural Films, 1940–1958.* Individual acts, bills and ordinances are listed in *Australian National Bibliography*. Some publications are listed both in *Australian National Bibliography and in Australian Government Publications*. These are official monographs of five and more pages and the first issue of each official annual and periodical. In *Australian Government Publications*, items are entered by corporate author under the Commonwealth of Australia, its Territories and the States listed in alphabetical order. There is an index of subjects, secondary authors and titles."

Thus the period 1901 through 1936 remains not covered as well as that for 1941–1944.

In all, the 1969 volume included 4,256 entries, 2,250 being for the Commonwealth.

In 1962 Parliament ordered a complete review of Commonwealth printing and publishing arrangements, as mentioned and described by R. A. Nott, Controller, Australian Government Publishing Service, in *AARL*, December 1970, under the title "The Distribution of Australian Government Publications." During 1963 and 1964 the Joint Select Committee on Parliamentary and Government Publications, with G. D. Erwin as chairman, investigated the matter. One of the principal recommendations of the Erwin Report, presented May 13, 1964, led to the establishment of the Australian Government Publishing Service as approved by the government in October 1968, having control of the Commonwealth Government Printing Office, and the first Controller assumed office in July 1969. The National Library and the State Reference Libraries have now been designated as full depositories. Weekly and monthly lists of Australian government publications soon began to appear. Change has been made in the format of the Parliamentary Papers from foolscap folio to a large octavo. According to the *Style Manual*, p. 230, of the Commonwealth Government Printing Office (Canberra, 1966),

> The copyright in matter first published by or under authority of the Commonwealth is, subject to any agreement with the author, vested in the Crown.

Probably the largest single body of Australian government publications is represented by the *Papers Presented to Parliament and Ordered to be Printed*, usually available in separate form at the time of printing, and distributed in consolidated bound form later with volume titles *Parliamentary Papers*, constituting an integral part of the bound series *Records of the Proceedings of Parliament*, to which there have been a series of *General Indexes* as well as a consolidated papers index, 1901–1949.

The work *Government Publications in Australia*, 2nd ed., 1970, edited by R. L. Cope, librarian, Parliamentary Library of New South Wales, although stressing New South Wales, contains useful articles relating to Commonwealth government publications. During the years 1966–1970, Mr. Cope edited a semiannual section on government publications in the *Australian Library Journal.*

A very positive approach to government publications is presented at the end of the foreword to *Australian Government Publications, 1969,* as follows:

> The [National] Library of [Australia] endeavours to facilitate the widest use of the publications of governments, both Australian and overseas, in the national interest. For this purpose, arrangements have been to secure the supply, whenever possible by air, of the publications of overseas governments and of international agencies so that they may be quickly available in Australia for the benefit of government, business, industry and scholarship.

AUSTRALIA BIBLIOGRAPHY

Australia, Parliament, *General Index to the Papers Presented to Parliament. . . .* , (compiled in the Office of the House of Representatives.) 1–2: [Melbourne], Government Printer for the State of Victoria; 3–6: [Canberra], Commonwealth Government Printer, 1910–1967, 6 vols.

1. 1901–09, Paper no. 55, Session 1910.
2. 1910–19, Paper no. 153, Session 1920–21.
3. 1920–29, Paper no. 59, Session 1929–31.
4. 1929–37, Paper no. 71, Session 1937–40.
5. 1937–49, Paper no. 15, Session 1954.
6. 1950–61, Paper no. 375, Session 1964–65–66.

A consolidated papers index for 1901–1949 appeared in the Session 1954–55, no. 100.

Australia, Prime Minister's Department, *Commonwealth of Australia Directory to the Office of the Governor-General, the Parliament, the Executive Government, the Judiciary, Departments and Authorities,* Commonwealth Government Printer, Canberra, 1926–, 1926 to date, Irregular.

Title, 1926–1958: *Federal Guide, A Handbook on the Organization and Functions of the Commonwealth Government Departments . . . .*

Cover-title, 1970: *Commonwealth Directory.*

Borchardt, Dietrich Hans, *Checklist of Royal Commissions, Select Committees of and Boards of Inquiry,* Stone, Cremorne, N.S.W.; 2–, Wentworth Press, Sydney, 1958–. (Studies in Australian Bibliography, 7, 10, 17):

1. *Commonwealth, 1900–1950,* 1958; 2d ed., 1965.
2. *Tasmania, 1856–1959,* 1960.
3. *Victoria, 1856–1960,* 1970.

Canberra, National Library, *Australian Government Publications, 1961–*, National Library of Australia, Canberra, annual. Preceded by:

1. "Section of Official Publications for 1937–1940 and 1945–1960," in *Annual Catalogue of Australian Publications, 1936–1960.*
2. *Monthly List of Australian Government Publications, 1952–1960.*

The annual *Australian Government Publications* does not include films, maps, single copies of acts and bills, which appear only in the *Australian National Bibliography.* Also it does not include separate issues of Arbitration Court awards, statutory rules and orders, and parliamentary notice papers, journals and votes and proceedings.

Linge, G. J. R., *Index of Australian Tariff Reports, 1901–1961,* Research School of Pacific Studies, Australian National University, Canberra, [1964] xi — [96] pp. (Aids to Research Series, A/1-1964.) "Lists every Tariff Report that has been published and bound into the

Commonwealth of Australia *Parliamentary Papers* from 1901–02, Vol. I to 1961, Vol. III inclusive." Appendix I (p. 94) itemizes 18 Reports, 1925–1960, noted as printed but not traced in the *Parliamentary Papers*. A *Supplement, 1961–1967* (x + 38 pp.) to the *Index* appeared in 1967.

New South Wales. Parliament. Library. *Government Publications in Australia: Papers on Their Use and Understanding* (R. L. Cope, ed.), 2nd ed., The Library of Parliament, Sydney, 1970. 110 pp. (Reference Monograph No. 8). 1st ed., 1965.

For each of the States with the exception of Queensland, there are various collective indexes to the *Parliamentary Papers*. For Western Australia, a preliminary draft (288 pp.) of *Western Australian Government Publications, 1829–1959, A Bibliography compiled by Elmar Zalums,* appeared in a very limited edition at Flinders University Library, Bedford Park, S.A., early in 1968: 2nd ed., National Library of Australia, Canberra, 1971. For New South Wales, there is at the Public Library of New South Wales, Sydney, a manuscript bibliography of N.S.W. government documents to 1900, tentatively titled "New South Wales Government Document Bibliography." J. A. Ferguson's *Bibliography of Australia* (Sydney, 1941–) records government publications only to 1850.

AUSTRIA

Currently the fortnightly *Oesterreichische Bibliographie: Verzeichnis der österreichischen Neuerscheinungen,* edited by the Österreichische Nationalbibliothek, Vienna, since 1946, includes Austrian government publications without special indication in the classified arrangement of each number, and indexes to a limited extent under agency.

The Österreichische Staatsdruckerei, Vienna, which had its origin in 1804, published a classed catalog of its library in 1906. Its 381 pages contain, from the mid-nineteenth century to the very early 1900s, probably the most extensive representation of Austrian government publications listed anywhere in print to that date. Unfortunately, the entries often do not indicate very precisely the issuing agency. From time to time the Staatsdruckerei makes available a *Verlagsverzeichnis* (sales catalog) of government publications in stock. Thus a series of these sales catalogs after 1906 would supplement the record in the 1906 Library Catalog. This, of course, should be supplemented by catalogs of map and chart producing agencies, also with the understanding that certain agencies such as the Österreichische Staatsarchiv have their government publications appear in the booktrade through private publishing houses. In the present *General Catalogue* of the British Museum Department of Printed Books, the entries under Austria, including the Archduchy, the Empire, Republic, and the united Austro-Hungarian Monarchy occupy Columns 892–962 of Vol. 8. In the United States-printed *National Union Catalog, Pre-1956 Imprints,* entries under Austria occupy pages 47–194 and the Austro-Hungarian Monarchy pages 206–221 of Vol. 27.

The official state directory (*Österreichischer Amtskalender*) which furnishes a listing of government organizations and higher officials, continues a series extending at least to the 1700s, thus showing the many changes undergone from the Austro-Hungarian Monarchy to the present Republic of Austria. Even the government newspaper *Wiener Zeitung* had its origin in 1703 and continues today with an official section.

In the report on Austrian bibliographical services appearing in *Bibliography, Documentation, Terminology* (UNESCO), Vol. 11, No. 3, May 1971, one of the bibliographical desiderata is cited as "*Bibliographie der amtlichen Drucksachen Österreichs;* Joint project with *Österreichische Rechtsdokumentation,*" of which year no. 1, published for the Administrative Bibliothek und Österreichische Rechtsdokumentation im Bundeskanzleramt, appeared at Vienna in 1969.

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Austria, Staatsdruckerei, *Katalog der Bibliothek der K. K. Hof- und Staatsdruckerei,* Vienna, 1906, vi + 381 pp.

Kossina, Margarete, *Die Rotbücher der Österreichisch-Ungarischen Monarchie,* Vienna, 1946, 106 leaves, typewritten. Diss.—Vienna. Records thirty-two *Austro-Hungarian Red Books,* 1868–1916.

Österreichischer Amtskalender, 1. Jhg., 1922–, Staatsdruckerei, Vienna, annual, suspended 1938–1948. Preceded at least by the following:

1. *Hof- und Staatshandbuch des Kaiserthums Österreich,* 1807–1868.
2. *Hof- und Staatshandbuch der Österreichisch-Ungarischen Monarchie,* 1874–1918.

BELGIUM

The Kingdom of Belgium was formed in 1830 from provinces that had been a part of the Netherlands, and has had from the beginning the problem of bilingualism—Dutch and French. Names of agencies may be found cited in either language. There is no centralization of official printing and publishing. The administration of the *Moniteur belge—Belgisch Statsblad,* the official gazette dating from 1831, does publish a certain number of separate prints, mainly laws, decrees, and regulations, as well as a certain number of periodical "annexes," including parliamentary proceedings and documents. As of 1954 the only directory of current official serial publications, arranged in the order of the ministries, includes 294 titles. The one attempt at overall retrospective coverage extends from 1794 to 1914, and frequently does not include, or assign, any issuing agency to the various titles. For the period 1840–1939 there was an official annual directory, thus enabling one to determine the government organization and agencies for any particular year. There were not, of course, any directories for the years 1915–1919. Since then, one can use a privately published administrative and judicial directory. For only one ministry has there been an attempt to compile a record of its government publications, covering in this instance the period 1895–1939. For the legislative branch, there are collective indexes (not itemized here) to the parliamentary documents as printed currently in separate form, but later and ordinarily represented in consolidated editions. In addition, there have been and will be a few agency lists of publications, revised from time to time to indicate the availability of stock. Of course, one must not ignore the complications presented by military occupation governments during World Wars I and II and of the Government in Exile.

Government publications are currently included in the various classes of the monthly national bibliography entitled *Bibliographie de Belgique, Belgische Bibliografie* and edited by the Bibliothèque Royale de Belgique, Brussels, but the extent of the current representation has not been stated. Under Belgium as author entry in the *National Union Catalog, 1956–67* (Library of Congress), Vol. 10, pp. 166–197, the approximately thirty pages with three columns to a page may furnish a partial idea of what a full coverage for the period might be.

BELGIUM BIBLIOGRAPHY

Annuaire administratif et judiciaire de Belgique et de la capitale du Royaume . . ., Etablissements Emile Bruylant, Brussels, annual.

Belgium, *Almanach royal officiel*, 1840–1939, Brussels, annual, 1915–1919 not published.

De Weerdt, Denise, *Bibliographie retrospective des publications officielles de la Belgique, 1794–1914*, Editions Nauwelaerts, Louvain; Béatrice Nauwelaerts, Paris, 1963, 427 pp. (Centre interuniversitaire d'histoire contemporaine. Cahiers 30. Interuniversitair centrum voor hedendaagse geschiedenis. Bijdragen 30.) Covers the period of the nine departments attached to the French Republic and the following period attached to the Netherlands to 1830, as well as the independent Belgium, 1830–1914, with 3,471 entries. In each of the three periods the arrangement is alphabetical, mainly by title, with the fewer numbers having individual authors and editors interspersed. Based on the holdings, not always complete, of the Bibliothèque Royale, Brussels, of the Archives Générales du Royaume, and of the libraries of the various ministries. There are two indexes; one by personal authors and the other by topics, places, and agencies. The entries arranged alphabetically by title frequently contain no mention of the issuing agency, thus making it difficult to locate all the materials by a particular agency.

Guide des ministères. Revue de l'administration belge, 1951–, Brussels, annual with monthly supplements.

Keppenne, Marie Ghislaine, *Les publications périodiques éditées par les services centraux des Ministères, 1954*, Commission Belge de Bibliographie, Brussels, 1957, 63 pp. (Bibliographica Belgica, 22.) Arranged by Ministries. "Mémoire présenté à l'Ecole provinciale de bibliothécaires du Brabant, pour l'obtention du diplôme de gradué en sciences bibliothéconomiques et bibliographiques, session 1955."

Warnotte, Daniel, *Le Ministère du travail et de la prévoyance sociale*, Schaumans, Brussels, 1939, cover-title, 49 pp. "Extrait de la *Revue du travail* d'avril et mai 1939." An administrative history and list of publications of thé ministry from its beginning in 1895.

BULGARIA

Bulgaria became a principality in 1878, an independent kingdom in 1908, and a People's Republic in 1946. The latter presents many special problems in the relationships between the government and the Bulgarian Communist Party.

Probably the most comprehensive attempt at an overall record is to be found in the printed catalogs of large libraries using corporate authorship for government publications as in the British Museum. Department of Printed Books, *General*

Catalogue, Vol. 29, columns 480–504 and in the Library of Congress, *National Union Catalogue, Pre-1956 Imprints,* Vol. 83, pp. 515–550, and these are doubtless far from sufficient.

Currently the classified fortnightly (monthly before 1969) national bibliography *B'lgarski knigopis,* published now by the Narodna Biblioteka Kiril i Metodii, Sofia, includes official publications, without special indication, but with special annual indexes to corporate authors and series; from 1962 it provides a quarterly supplement of official publications, publications containing preliminary and temporary information, etc.

BULGARIA BIBLIOGRAPHY

Chipev, T. F., *I͡ubileen obshch katalog. I. Ofitsialni izdani͡a,* Sofia, 1939, 278 pp. Includes the Sofia University, the Academy of Sciences, the Ministry of Education, etc.

Dzherova, Li͡uba, and N. Toteva, *Bibliografi͡a na bŭlgarskata statisticheska literatura, 1878–1961.* Tsentralno Statistichesko Upravlenie pri Ministerskii͡a Sŭvet, Sofia, 1961, 105 pp. "Spetsialni statisticheski publikatsii," pp. 62–81.

Sofia, Bŭlgarski Bibliografski Institut, *Bŭlgarski periodichen pechat, 1844–1944. Anotiran bibliografski ukazatel,* Nauka i Izkustvo, Sofia, 1962–69, 3 vols. Added title page: *Bulgarische Periodika, 1844–1944. Annotiertes bibliographisches Verzeichnis.* More than 8,100 Bulgarian serials, 1844–1944, carefully described and arranged by title, without indexing by agency for official serials.

Vol. 1, A-M, 1962, 503 pp.
Vol. 2, N-Z, 1966, 520 pp.
Vol. 3, languages other than Bulgarian, indexes, 1969, 479 pp.

Volumes 2 and 3 edited by the Narodna Biblioteka "Kiril i Metodiĭ." The most recent record, also not indexed by agency, seems to be *Bŭlgarski periodichen pechat '67,* Sofia, 1969, 347 pp., appearing as an annual supplement to *Bŭlgarski knigopis,* and containing description of 1,517 Bulgarian serials in 1967.

BURMA

Burma became independent on January 4, 1948. Burmese then became the official language with the use of English being permitted. Separate catalogs of government publications printed in English and of those printed in Burmese are issued by the Union of Burma Government Book Depot, and revised from time to time. From 1908 through 1927 the Superintendent of Government Printing and Stationery at Rangoon edited an annual *List of Official Publications.* Presently the trend of government publication seems increasingly toward the use of Burmese only, particularly for publications intended for domestic use.

CEYLON

After the Ceylon Independence Act came into effect in February 1948, Sinhala became the official language with English as the second language in the government publications centrally produced at the Government Press, Colombo. This makes some reassessment of the problem necessary as regards procurement, recording, and use, even as to the use of the names of agencies. In 1972 the new constitution changed the name of Ceylon to Sri Lanka. Extending from the mid-nineteenth century, the *Ceylon Sessional Papers* present a very considerable body of reports and other government publications, and at least to the time of the Independence Act there are several collective indexes. Currently, government publications are included in the *Ceylon National Bibliography*, edited since 1962 in the National Bibliography Branch of the Department of National Archives, Colombo, and further in the quarterly *Accessions List: Ceylon*, from the American Libraries Book Procurement Center, New Delhi, India, under the Library of Congress Public Law 480 Project, beginning with 1967. The following union catalog reference furnishes an overall statement:

Macdonald, Teresa, *Union Catalogue of Ceylon Publications held by Libraries in London, Oxford and Cambridge*, Mansell, London, 1970, 44 pp.

CZECHOSLOVAKIA

Czechoslovakia came into being late in 1918 to govern the Czech lands upon the breakup of Austria-Hungary. Between March 1939 and May 1945, when Czechoslovakia was restored, it was replaced by an independent Slovakia and a German Protectorate of Bohemia and Moravia, there having been also a Czechoslovakia Government in Exile. In 1948 a Communist government took over, and here again the interrelationship of the Communist Party and the government presents many complications. In January 1969, Czechoslovakia became a federal republic with a federal government, with a Czech Socialist Republic, and with the Slovak Socialist Republic, each of the three with ministries and other agencies of government. During this whole period there seems to have been a reference directory of the Czechoslovak ministries and central offices only for 2 years. It had the title *Organisace československého státního zřízení* (Orbis, Prague) and was edited by the Ministerstvo Informací in 1946 and in 1948.

In the absence of any general bibliography or catalog of Czechoslovak government publications, it may be well to resort to the printed catalogs of large libraries using corporate entries such as the *National Union Catalog, Pre-1956 Imprints* (Library of Congress), Vol. 130, pp. 574–659, and the British Museum Department of Printed Books *General Catalogue*, Vol. 47, pp. 554–578.

Currently, government publications are included in the various classes of both sections of the Czechoslovak national bibliography *Bibliografický katalog, ČSSR*, without special indication, without the use of corporate authors, and without the extent of the coverage being indicated. The first section *České knihy*, weekly, is edited by the Státní knihovna, Prague, and the second *Slovenské knihy*, monthly, by the Matica slovenská at Martin.

As to the central government of the far distant past, particularly 1501–1800, it has been planned to conclude the second part of the *Knihopis českých a* *slovenských tisků od doby nejšarší až do knoce 18. století* (Československá akademie věd, Prague, 1925–) with an inventory of government publications, probably mainly of Bohemia in that period.

FRANCE

Although the first printing press in Paris was in 1470, it was not until 1640 that a national government printing office was established under the name Imprimerie Royale. Dampierre points out on page 221 of *Les publications officielles des pouvoirs publiques* (Picard, Paris, 1942) that while the office was set up for the printing of the royal acts, the bulk of such administrative needs was much too modest then to absorb the facilities equipped mainly for art editions. On pages 582–583 he furnishes a few main references on the present Imprimerie Nationale and on other special government printing offices. On pages 584–586, he itemizes bibliographies of official publications (American, English, German, Italian, and Dutch) as of 1942 and mentions but two for France; one of these is a *Partial List of French Government Serials in American Libraries* (Albany, 1902), and the other the first and only part of the ambitious current bibliography of French government publications he was authorized to undertake under the title *Inventaire général des publications officielles,* but was never able to complete and continue because of World War II conditions. Unfortunately, Dampierre did not mention the almost completely unknown attempt at a systematic annotated bibliography of French government publications by Jean Pierre de La Peyrie *Bibliographie administrative* (Paris, 1848). Dampierre, who was a product of the Ecole des Chartes, Paris, had, for an archivist, an unusually varied career and experience in administration and the book trade. He died in 1947.

The momentum created by the work of the Commission des Publications Administratives, which had been established in 1937 with M. Julien Cain, administrator general of the Bibliothèque Nationale as vice-chairman, led to the beginning in 1950 of the occasional Supplement F "Publications officielles" to the *Bibliographie de la France* (Cercle de la Librairie, Paris). This is the weekly classed French national bibliography, based on the publications received through legal deposit, the entries being prepared at the Bibliothèque Nationale. Each entry of French government publications is marked with an asterisk. For those not described in Supplement F, there is a reference to the entry in the main section or in the other supplements. From the entries it is not always easy to appreciate the complexity of the material or its physical size. For instance, a complete and complex set of the annual budget documents at the beginning of the 1970s would probably weigh at least 60 pounds.

Next, beginning with 1952, Supplement F is paralleled by the *Bibliographie sélective des publications officielles,* published by the official Documentation française, Paris, semimonthly (monthly in July and August), and edited by a committee representing five different centers most interested in the field. The first section contains entries for many parliamentary and other reports of more than usual current interest, likely otherwise to escape notice. Its second section contains contents of various official periodicals.

As regards the more recent overall picture of French government publications in serial or periodical form, the 4th edition of the *Répertoire de la presse et des publications périodiques française, 1966* (prepared under the direction of H. F. Raux, edited by the Département des Périodiques of the Bibliothèque Nationale, and published by Documentation française, 1968) has a section "Administration" and is indexed by "collectivités," including ministries and other official agencies.

For the details of the more recent French governments and their agencies, especially since World War II (remember that France had a government in exile —Free France—during World War II), the following are particularly to be recommended:

Bottin administratif et documentaire; Annuaire général de l'administration française, Société Didot-Bottin, Paris, 1942–.

Encyclopedie permanente de l'administration française, Paris, 1949–.

Répertoire permanent de l'administration française, Paris, 1945–.

In addition, for a considerable variety of autonomous organizations or business enterprises owned entirely or in good part by the government (not the subject of annual appropriations), precise information rather more detailed than might be given in the above is furnished regularly by the following, which is presented annually to the Assemblée Nationale under Art. 164 (§I, a) of Ordonnance no. 58-1374, December 30, 1958:

Nomenclature des entreprises nationales à caractère industriel ou commercial et des sociétés d'économie mixte d'intérêt national. . . . . Imprimerie nationale, Paris.

Formerly, it had the title

Nomenclature des établissements publics et semi-publics de l'Etat, des sociétés d'économie mixte et des fondations et associations subventionnés d'intérêt national . . . . Imprimerie nationale, Paris.

In connection with the budget, beginning in 1962, there is further issued the following:

Liste des associations régies par la Loi du 1er juillet 1901 ayant reçu directement sur le plan national au cours de . . . une subvention à quelque titre que ce soit, Imprimerie nationale, Paris.

This indicates the extent to which not only the French government but other modern governments may extend their activities.

As in the past, French government printing, publication, and distribution continues to be decentralized. As the principal government printing and reproduction facility, the Imprimerie Nationale, 27 rue de la Convention, Paris 15me, usually issues a *Catalogue des publications officielles en vente à l'Imprimerie nationale* annually; sales distribution is provided under the name Service d'Edition et de Vente des Publications Officielles (SEVPO). In addition, the Imprimerie des Journaux Officiels, 26, rue Desaix, Paris 15me, prints and makes available for subscription the *Journal officiel de la République française*,* together with its various sections and supplements, including the debates of the Assemblée Nationale, parliamentary documents, and administrative documents; it occasionally issues a *Catalogue des publications editées par les Journaux officiels*, covering separate prints of laws, decrees, regulations and compilations of these as well as the *Journal officiel* and supplementary parts. The Assemblée Nationale, the principal parliamentary body, has its own Imprimerie de l'Assemblée nationale, which produces its documents, reports, etc., for immediate use, in separate form. The map and chart producing agencies such as the Institut Géographique National and the Service Hydrographique de la Marine do their own printing and publishing. The Ministère de la Justice has the Imprimerie Administrative at Melun, which prints but does not publish. The Documentation Française publishes for the Direction de la Documentation, apparently using commercial printing facilities. At the Institut Pédagogique National, Paris, under the Ministère de l'Education Nationale, there is a publishing agency for official educational publications known as the Service d'Edition et de Vente de Productions de l'Education Nationale (SEVPEN). These specifications could be continued.

As to the past, reference may be made first to the manual *Les publications officiels des pouvoirs publics* (Paris, 1942) by the late Jacques de Dampierre (1874–1947). Probably the most extensive record in detail of French government publications is to be found in Vol. 77 (France) of the *General Catalogue* of the British Museum Department of Printed Books. The main series of the *Catalogue général des livres imprimés* of the Bibliothèque Nationale, Paris, includes French government publications only so far as they had personal authors. The supplement for the years 1960–1964 does include corporate entries under France. A modest amount of the detail of the retrospective organization from year to year of the French government can be charted for the World War I period and earlier from the *Almanach national*.

FRANCE BIBLIOGRAPHY

Childs, James Bennett, "French Government Document Bibliography," in *Library Science in India: Silver Jubilee Volume Presented to the Madras Library Association* (K. Chandrasekharan, ed.), Madras Library Association, Madras, 1953, pp. [85]–97. Reprinted for private distribution, and in the process of being updated.

**Notes et études documentaires* (Direction de la Documentation), no. 1.738 May 7, 1953, 22 pages, is entitled *Les Journaux officiels de la République française, étude historique et analytique*, and deals with the *Moniteur universel*, 1789–1869, and the *Journal officiel*, 1869–, and contains mention of the *Gazette de France*, back to the 1630s.

Dampierre, Jacques de. *Les publications officielles des pouvoirs publics; étude critique et administrative.* Editions A. Picard et Fils, Paris, 1942, 628 pp., front., pl. The late Jacques de Dampierre had been placed in charge of the project "Inventaire général des publications officielles françaises" by the Commission des Publications Administratives, which had been set up by order of the Minister of Finance in August 1937 with headquarters at the Bibliothèque Nationale. Only the preliminary part of Vol. 1 of the *Inventaire général des publications officielles* was published at Paris by Berger-Levrault in 1940, owing to the wartime conditions, although the interest generated led to the establishment of Supplement F of the *Bibliographie de la France*, in 1950, and of the periodical *Bibliographie sélective des publications officielles françaises* (Documentation françaises) in 1952. On pp. 594–612, de Dampierre includes the "Principales publications officielles françaises citées en exemple," on pp. 613–614, "Documents diplomatiques français de la période 1920–1940," supplementing Doré, and on pp. 615–618, "Journaux officiels de la France et de son Empire."

France, *Almanach national: annuaire officiel de la République française,* Berger-Levrault, Paris, 1872–1919. Earlier it had appeared under various other titles:

1700, *Almanach royal.*
1793, *Almanach national de France.*
1805, *Almanach royal.*
1806, *Almanach impérial.*
1814–1815, *Almanach royal.*
1849–1852, *Almanach national.*
1853, *Almanach impérial.*

France, Ministère de l'Education Nationale, *Inventaire général des publications officielles.* Première série: Institutions centrales de l'Etat. T. 1. Publications administratives et techniques. 1937–1938 [Fasc. 1. Notes préliminaires: avertissement, documents justificatifs, publications parlementaires, impressions budgétaires], Berger-Levrault, Paris, 1940. C p. Owing to wartime conditions, the *Inventaire* edited by Jacques de Dampierre was never continued.

France, Ministère des Finances, Bureau de Statistique et d'Etudes Financères, *Inventaire des publications de série du Ministères des Finances. 1er décembre 1944,* Paris, 1944. 19 leaves, typed. Includes note of the latest part to appear as well as the size of the edition, and includes much information not available elsewhere.

Martin, Marcel, ed., *Les institutions politiques de la France,* Paris, Documentation Française, Paris, 1959–1961. 2 vols. (Le Monde contemporaine). A composite of many sections by specialists, mainly from various branches of the French government. Instead of the originally planned third volume, certain studies of institutional questions appeared in the *Notes et études documentaires* (Direction de la Documentation).

Paris, Bibliothèque Nationale, Département des Imprimés, *Catalogue de l'histoire de France. Reproduction de l'édition publiée de 1855 a 1895.* Bibliothèque Nationale, Paris, 1968–1969. 16 vols. The sections on constitutional and administrative history contain many official publications, but the section on legislation was never printed.

Paris, Bibliothèque Nationale, Département des Imprimés, *Catalogue général des livres imprimés: auteurs, collectivités, auteurs-anonymes. 1960–1964,* Paris, 1965–1967, 12 vols. France, Vol. 4, pp. 580–717. The main *Catalogue général* did not contain entries under jurisdiction.

Paris, Bibliothèque Nationale, Département des Imprimés, *Catalogue général des livres imprimés de la Bibliothèque Nationale. Actes royaux.* Impr. nationale, Paris, 1910–1960, 7 vols. Editing begun by Albert Isnard and completed by Suzanne Honoré. Extends to 1789.

GERMANY (PREVIOUS TO MAY 1945)

Although the united Germany with twenty-six states dated only from 1871, the government publications tended to follow to a considerable extent the pattern existing in each of the states, particularly Prussia, the largest state of all. The publications were distributed to, and collected mainly by parliamentary, administrative and law libraries, as well as to government officials, parliamentarians, and those collaborating with government agencies, and not to public and reference libraries. The publication activities were never subjected to close centralized control over printing and publishing, and were never registered to any appreciable extent in the national or state current bibliographies, so far as these existed, except probably insofar as they were published through the book trade. For those government publications not having personal authors, the tendency had been generally to entry under the title as anonymous work such as found expression in the Prussian cataloging instructions mentioned earlier. Thus a record of government publications was to be found to a considerable extent in the printed catalogs and accession lists of parliamentary, administrative, and law libraries rather than in national or state bibliographies, and to be entered under title where there was not a personal author. For those government publications handled through certain book publishers, their most extensive catalogs would most likely help eke out the record.

Only in the late 1890s and the early 1900s was an effort begun to pinpoint the problem as it concerned libraries and to find ways of increasing the availability of the constantly growing and expanding body of government publications, both national and state. At Berlin in 1926 the late Dr. Georg Maas (1863–1941), one of the outstanding pioneers in attempting to enlist support for the solution of government publications problems, told this author privately of encountering some librarians in that earlier period who openly expressed the feeling that German government publications were of minimal interest for public and reference libraries and that he was wasting his time in a futile cause.

Indeed, it was not until after World War I that the late Georg Schwidetzky (1875–1952), a former Stadtrat with much practical experience in the making of government publications as well as in their use, became available to head the government publications section of the Deutsche Bücherei, Leipzig, which focuses its attention on the national bibliography. From personal conversation with Herr Schwidetzky as well as through some years of active correspondence, this author knows that he had a very practical approach to the problems, and produced in 1927 a manual *Deutsche Amtsdrucksachenkunde, ein methodisches Handbuch für Parlamentarier, Verwaltungsbeamte, Bibliothekare, Archivare und Lehrer der Staatsbürgerkunde* (109 pp.), published by the well-known firm of Otto Harrassowitz, Leipzig, as No. 59 in its standard series *Beihefte zum Zentralblatt für Bibliothekswesen*. The wide spectrum of those to whom the manual was addressed reflected the importance that Herr Schwidetzky as well as the officials of the Deutsche Bücherei gave to the matter.

The impression of this stress soon led to the approval in the Reichsministerium des Innern of the proposal to finance the preparation and publication of the monthly catalog of German government publications (*Monatliches Verzeichnis der reichsdeutschen amtlichen Druckschriften*), which began in 1928 and continued through June 1944. The unusual favor with which the initial proposal was regarded in the Reichsministerium des Innern was related to this author subsequently by the official responsible for its approval.

Special problems related to the government organization under the one-party (National Socialist) state of the 1930s and 1940s are treated in the publication by the late Otto Neuburger, a one-time German national government official himself.

Changes in the government agency organization through the whole span 1871–1945 can be traced through the series of the national handbook, through the national budget, and through the law collection.

Indeed, the only states of the twenty-six comprising unified Germany having a relatively full record of their government publications were a group of smaller states that united in 1920 to form Thuringia. This record was printed in 1939 by an archivist, Friedrich Facius.

GERMANY (PREVIOUS TO MAY 1945) BIBLIOGRAPHY

Berlin, Preussische Staatsbibliothek. *Deutsche amtliche Druckschriften. Erwerbungen der Staatsbibliothek zu Berlin.* 1927, Januar–Juni Juli–Dezember; 1929, Januar–Dezember, W. de Gruyter & Co., Berlin, Leipzig, 1928–1930, 3 vols. Edited by H. Feldkamp. Also includes states, public corporations, cities, and church bodies. The wealth of material included indicates what the problem of an inclusive retrospective record would be. The 1929 volume contained a note that 1928 was in preparation, but it apparently never appeared.

Berlin (West), Staatsbibliothek, Abteilung Amtsdruckschriften, *Deutsche Parliamentaria, Ein Bestandsverzeichnis der bis 1945 erschienenen Druckschriften,* Berlin, 1970, ix + 140 pp.

Facius, Friedrich, "Die Verwaltungsdrucksachen der Thüringischen Staaten vom 18. Jahrhundert bis 1922. Bibliographische Übersicht der periodisch erschienen amtlichen Veröffentlichungen," *Zeitschrift des Vereins für Thüringischen Geschichte und Altertumskunde, Jena,* N.F. **33,** 190–232, 467–475 (1939).

Germany, Bundesrat. *Sachregister zu den Protokollen und Drucksachen des Bundesraths, einschliesslich des Bundesraths des Zoll- und Handelsvereins, für die Jahre 1867 bis 1890. Bearbeitet im Reichsamt des Innern.* Reichsdruckerei, Berlin, 1891, 230 pp.

Germany, Bundesrat, *Sachregister zu den Protokollen und Drucksachen des Bundesraths für die Jahre 1891 bis 1900. Bearbeitet im Reichsamt Innern,* Reichsdruckerei, Berlin, 1902, 109 pp. The documents of the Bundesrat seem not to have been issued and distributed in collected bound sets, but only to have been distributed in separate form, as printed, to the delegations from each state to the Bundesrat, and as a consequence although often quite important are likely to be very uncommon.

Germany, Reichsministerium des Innern, *Handbuch für das Deutsche Reich, 1874–1936,* Heymann, Berlin, 1874–1936.

Germany, Reichstag, *Generalregister zu den Stenographischen Berichten über die Verhandlungen und den amtlichen Drucksachen des konstituirenden Reichstages, des Reichstages des Norddeutschen Bundes, des Deutschen Zollparlaments und des Deutschen Reichstages vom*

Jahre 1867 bis einschliesslich der am 24. Mai 1895 geschlossenen III. Session 1894–95. Nebst Anlagen: A. Übersicht über die Etatsverhandlungen; B. Namentliche Abstimmungen. Herausgegeben vom Reichstagsbureau. Druck und Verlag der Norddeutschen Buchdruckerei- und Verlags-Anstalt, Berlin, 1896, 459, 135, and 239 pp. Continued only by sessional indexes. At the time of printing and later, the documents were distributed in separate form as well as in the collected sets of Anlagen, and are not infrequently cited as separate documents, occasionally without reference to the Reichstag. A statement of the parliamentary publications and of the official law collections of Germany and of the German States is included in both the *Katalog der Bibliothek des Reichstages,* Berlin, 1890–1899, and the *Bücher-Verzeichnis des Hauses der Abgeordneten,* 4. Aufl., Berlin, 1900–1911.

Germany (Federal Republic, 1949–), Institut für Landeskunde, *Ein Jahrhundert amtliche geologische Karten. Verzeichnis der amtlichen geologischen Karten von Deutschland und Nachweis ihrer Standorte in Bibliotheken und Instituten.* Bearb. vom Institut für Landeskunde, Hauptbearbeiter: H. Schamp. Bundesanstalt für Landeskunde und Raumforschung, Bad Godesberg, 1961. 536 pp., folded map. (Berichte zur Deutschen Landeskunde. Sonderheft 4.)

Heymanns (Carl) Verlag, *Verlags-Verzeichnis mit geschichtlicher Einleitung herausgegeben zur Hundertjahrfeier, 1815. 1. Oktober, 1915.* [Carl Heymanns Verlag, Berlin, 1915.] 117, 332 pp. frontispiece, pl. The *Verlags-Verzeichnis* covers principally the period 1871–15 Sept. 1915, and contains many official publications of that period. In the period, especially before World War I, German official publications appeared to a very considerable extent through publishers such as Carl Heymanns Verlag, E. S. Mittler und Sohn, etc., and it is often in their consolidated catalogs that one needs to search.

Heymanns (Carl) Verlag, *Verlagsverzeichnis ausgegeben im November 1929,* [Berlin, 1929], 240 pp.

Koch, Alfred, *Schrifttum über das deutsche Postwesen, 1871–1964.* R. v. Decker's Verlag, G. Schenck, Hamburg, Berlin, 1966, viii + 323 pp. Koch continues particularly the two following by Hermann Wolpert:

1. "Vom Anfang des 16. Jahrhunderts bis zum Ende des Römischen Reichs Deutscher Nation (1806)," in *Archiv für das Post- und Fernmeldewesen,* 1950, pp. 465–585.
2. "Vom Ende des Römischen Reichs Deutscher Nation (1806) bis zur Gründung des Deutschen Reichs (1870)," in *Archiv für das Post- und Fernmeldewesen, 1952, pp.* 177–272.

The greater part of Koch is devoted to official postal material.

Moeller, Johannes. "Zeitgeschichtliche Dokumentation. Vom Farbbuch zum Aktenwerk—Von der Lüge zur Wahrheit." in *Geist der Zeit, Wesen und Gestalt der Völker. Neue Folge von "Hochschule und Ausland,"* Organ des Deutschen Akademischen Austauschdienstes, Berlin, **18,** 243–250, 298–304, 365–381, 560–575 (1940). "Bibliographie der deutschen und fremden amtlichen und halbamtlichen Dokumenten-Veröffentlichungen." August 1914–1939/40, supplementing Sass.

Monatliches Verzeichnis der reichdeutschen amtlichen Druckschriften. Mit Genehmigung des Reichsministeriums für Volksaufklärung und Propaganda. Herausgegeben und bearbeitet von der Deutschen Bücherei. 1. Jhg.–17. Jhg., 3/6 Heft, 1928–März/Juni. 1944. Heymann. Berlin, 1928–1944. 17 vols. Monthly and annual indexes.

1928–1935: Herausgegeben vom Reichsministerium des Innern.
1928–1933: Published by the Reichs- und Staatsverlag, and 1934–1935, by the Reichsverlagsamt.

Included the official and semiofficial publications of the National Government, of the corporations of public law, of the State Governments, of the larger municipalities, and of the National Socialist Party during that period.

Neuburger, Otto, *Official Publications of Present Day Germany: Government, Corporate Organizations, and National Socialist Party, with an Outline of the Governmental Structure of Germany*, Govt. Printing Office, Washington, D.C., 1942 [i.e. 1943], 130 pp. 2nd printing, 1944.

Sass, Johann. *Die Deutschen Weissbücher zur auswärtigen Politik, 1870–1914: Geschichte und Bibliographie*, W. de Gruyter & Co., Berlin, Leipzig, 1928, 244 pp. Sass was librarian of the Auswärtiges Amt. For a continuation see Moeller.

Schwidetzky, Georg, *Deutsche Amtsdrucksachenkunde: ein methodisches Handbuch für Parlamentarier, Verwaltungsbeamte, Bibliothekare, Archivare und Lehrer der Staatsbürgerkunde*. Otto Harrassowitz, Leipzig, 1927, x + 109 pp. (59. Beiheft zum Zentralblatt für Bibliothekswesen.) Schwidetzky was a retired Stadtrat who became librarian at the Deutsche Bücherei, Liepzig, in charge of official publications, about 1921, and who was directly involved with the establishment of the *Monatliches Verzeichnis der reichsdeutschen amtlichen Druckschriften*, which began with 1928.

GERMANY (DEMOCRATIC REPUBLIC)

The German Democratic Republic was established in October 1949, replacing the German zonal authorities and agencies of the Soviet-occupied zone of Germany which had been in process of development since July 1945. A full statement of the authorities and agencies of the German Democratic Republic through 1958, and also of those of the preceding German zonal organization, together with their government publications, is contained in the four volume survey (J. B. Childs) completed in 1960–1961, exclusive of the interrelationships with the official party organization.

A central printing and publishing house was established in March 1946 as the Deutscher Zentralverlag, renamed the Staatsverlag der Deutschen Demokratischen Republik on January 1, 1963. For school books and educational literature, the central publishing house was the Volk und Wissen Verlag created in October 1945 in connection with the Ministerium für Volksbildung. The official agricultural publishing house had its origin late in 1945 as the Deutscher Bauernverlag, now working closely with the Landwirtschaftsrat. The official military publishing house is now the Deutscher Militärverlag which had its origin as the Verlag des Ministeriums für Nationale Verteidigung. These and other similar official publishing houses handle not only government publications but other works having a national interest in their fields.

The Deutsche Bücherei, Leipzig, which is now the national library of the DDR, edited in 1928–1944 the monthly catalog of German government publications, and continues collecting with unusual activity under its new national library function as the "Gesamtarchiv des in Deutschland erschienen Schrifttums und der deutschsprachigen Schriften des Auslandes seit 1913." The zealousness is evidenced in the "überarbeiteter Neudruck," January 1968, of *Neue Mitteilungen aus der Deutschen Bücherei*, No. 19 (4 pp.) entitled "Sammlung und Verzeichnung der amtlichen Druckschriften," the text of which should be more widely known. After May 1945 it was not possible to continue the monthly bibliography of German official publications, and that function as a whole had to be assumed by the "Sonderkatalog der amtlichen Druckschriften in der Deutschen Bücherei" which arranged according to the principles of corporate authorship, and thus is in contrast with the practice followed more or less generally in German libraries under the Prussian cataloging instructions. In 1945 this special catalog was begun anew, reflecting the new and developing governmental administrative structure. Currently, government publications intended for relatively wide distribution are usually published in the book trade and are entered in series A of the *Deutsche Nationalbibliographie,* either under personal author or under title. Since most government publications do not appear in the book trade, they are entered in series B. Since 1957 the quarterly indexes to series A and to series B have included a special "Register der korporativen Verfasser" which, of course, enters directly under agency and not under jurisdiction and then under agency. The problem of determining what a government publication is in the German Democratic Republic was covered in J. B. Childs, *Government and Official Publications in a People's Democracy (German Democratic Republic)*, Washington, D.C., 1968, 11 pp. This publication was reprinted with some additions, updating the data, from Vol. 1 of *Ranganathan Festschrift (Library Science Today)*, Bombay, New York, 1965, and furnishing some suggestions as to the solution of the problem in similar situations elsewhere.

GERMANY (DEMOCRATIC REPUBLIC, 1949–) BIBLIOGRAPHY

Childs, James Bennett, *German Democratic Republic Official Publications, with those of the Preceding Zonal Period, 1945–1958; A Survey,* Reference Department, Serial Division, Library of Congress, Washington, D.C., 1960–1961, 4 vols. "An operational document for limited distribution issued in an edition of 50 copies." Available in microfilm and xerox reproduction from the Photoduplication Service, Library of Congress.

1. Zonal period. Democratic Republic. Ministerium für Arbeit und Berufsausbildung.
2. Ministerium für Aussenhandel und Innerdeutschen Handel.—Ministerium für Land- und Forstwirtschaft, part I.
3. Ministerium für Land- und Forstwirtschaft, part II.—Ministerium für Volksbildung.
4. Staatssekretariat für Erfassung und Aufkauf landwirtschaftlicher Erzeugnisse—Deutsche Akademie der Wissenschaften zu Berlin.

Germany (Federal Republic, 1949–), Bundesministerium für Gesamtdeutsche Fragen, *S B Z von A bis Z. Ein Taschen- und Nachschlagebuch über die Sowjetische Besatzungszone Deutschlands. Zehnte, überarbeitete und erweiterte Auflage.* Deutscher Bundes-Verlag, Bonn, 1966, 608 pp. 1st edition, 1954.

Germany (Federal Republic, 1949–), Gesamtdeutsches Institut, Bundesanstalt für gesamtdeutsche Aufgaben. *Der Staatsapparat der Deutschen Demokratischen Republik. Fünfte Auflage. Stand: Dezember 1970. Als Manuskript vervielfältigt. Nicht im Buchhandel,* Bonn, 1971. 51 pp.

GERMANY (FEDERAL REPUBLIC)

The German Federal Republic came into existence with the uniting of the three western zones of Germany on September 21, 1949. After June 1945, there had been a trend in each of the three western zones toward the development of German zonal services and institutions. In June 1947 the Vereinigtes Wirtschaftsgebiet was set up through the economic fusion of the British and United States zones, and the zonal authorities were taken over in the Federal Republic.

Several new Länder (Lower Saxony, North Rhineland–Westphalia, and Rhineland–Palatinate) were created, with the large Land Prussia abolished in 1946, and further the Länder Baden and Württemberg combined as a single Land Baden-Württemberg.

Although the Bundesdruckerei was founded at Frankfurt am Main in 1949 as the federal printing office (and there is a Deutscher Bundes-Verlag, G.m.b.H., established at Bonn in 1950, to handle the sale of federal government publications), there still seems to be a lack of any centralized control over government printing and publishing. Some agencies, particularly those making maps and charts, have their own reproduction plants and distribution facilities. Others follow the former pattern of using private publishers, such as the Statistisches Bundesamt, Wiesbaden, which publishes through W. Kohlhammer Verlag, Mainz. There is also a quite limited provision for depository library distribution of German Federal Government publications, but without some centralized controls it is quite difficult to tell how effective such a system has become.

With the support of the federal government, the Deutsche Bibliothek, Frankfurt am Main, serving as the national library of the German Federal Republic, enlarged the scope of its current national bibliography, the *Deutsche Bibliographie,* beginning with 1957, with the following biennial publication (originally projected as an annual):

Deutsche Bibliographie. Verzeichnis amtlicher Druckschriften . . . Veröffentlichungen der Behörden, Körperschaften, Anstalten und Stiftungen des öffentlichen Rechts sowie der wichtigsten halbamtlichen Institutionen in der Bundesrepublik Deutschland und West-Berlin.

The Bund (federal level) occupies the first part for each biennial period, followed next by the Länder (state level), then by cities over 100,000, and finally by church bodies. The arrangement is alphabetical under each part and subpart. Indexes are by agency, place, title and catchword, and by personal names.

In January 1966 the *Deutsche Bibliographie* (in which section A includes material in the book trade, and series B material not in the book trade) apparently began appearing as an automated bibliography, carrying out the recommendations of the International Conference on Cataloging Principles, Paris, 1961, "sie erkennt Körperschaften aller Art, einschliesslich der Gebietskörperschaften, als Urheber, Herausgeber, Bearbeiter usw, von Veröffentlichungen an und berücksichtigt sie bei der Titelaufnahme (Korporative Verfasser)." Such changes probably have not become fully effective until 1971, and it is uncertain whether this fully envisions the use of jurisdictions with agencies as subheadings or not—a pattern to which libraries in the English-speaking world have become accustomed.

Since the customarily used government directory *Die Bundesrepublik* (Heymann, Cologne) does not include details about the authority for the organization of an agency, such information as well as brief administrative histories of the various federal agencies would probably have to be gleaned from the voluminous annual *Bundeshaushaltsplan* (Bundesministerium der Finanzen).

The survey by J. B. Childs of the German Federal Republic government publications in two volumes, which appeared in 1958, covers the period 1949 to 1957, together with the previous zonal government publications in the period 1945 to 1949. Although originally issued in quite a limited edition, it is still available on order in microfilm and xerox copies; it probably should be reedited, with any subsequent additions, in more widely available form to provide with the *Deutsche Bibliographie: Verzeichnis amtlicher Druckschriften* the approximately complete coverage of the German Federal Republic government publications so essential for everyday needs as well as for scholarly research.

The *Verzeichnis amtlicher Druckschriften,* on account of its present biennial schedule, is always likely to be somewhat in arrears as to current coverage. It is difficult to determine how full the current coverage is in the sections of the *Deutsche Bibliographie;* thus it may be necessary to keep regularly informed as to agency lists as they appear, as well as to accession lists of administrative libraries.

GERMANY (FEDERAL REPUBLIC, 1949–) BIBLIOGRAPHY

Ämter und Organisationen der Bundesrepublik Deutschland, Boldt Verlag, Bonn (1966–1969: Athenäum Verlag, Frankfurt am Main, Bonn):

1. Lohmann, Albrecht, *Das Auswärtige Amt,* 1966, 78 pp.
2. Faude, Alfred, and Kurt Fritz, *Das Bundesministerium des Innern,* 1966, 112 pp. 2: Überarb. Aufl., 1969, 126 pp. 3: Überarb. Aufl., 1971, 152 pp.
3. Klein, Franz, *Das Bundesministerium der Finanzen,* 1966, 130 pp.
4. Randel, Edgar, *Das Bundesministerium für Wirtschaft,* 1966, 211 pp.
5. Nobis, Friedrich, *Das Bundesministerium für Ernährung, Landwirtschaft und Forsten,* 1966, 127 pp. 2: Überarb. Aufl., 1971, 151 pp.
6. Ziller, Gebhard, *Der Bundesrat,* 1966, 96 pp. 3: Überarb. Aufl., 1970, 112 pp.
7. Behrendt, Günther, *Das Bundeskanzleramt,* 1967, 113 pp.
8. Bachmann, Michael, *Der Bundesrechnungshof,* 1967, 91 pp.
9. Lohmann, Karl, *Der Deutsche Bundestag,* 1967, 142 pp.
10. Seeck, Horst, and Gernot Steffens, *Die Deutsche Bundesbank,* 1967 [106] pp.
11. Frentzel, Gerhard, and Ernst Jäkel, *Die deutschen Industrie- und Handelskammern und der Deutsche Industrie- und Handelstag,* 1967, 144 pp.
12. Meckel, Heinz, and Otto Kronthaler, *Das Bundesministerium für das Post- und Fernmeldewesen und die Deutsche Bundespost,* 1967, 120 pp.
13. Biederbick, Karl Heinz, and Wolf Recktenwald, *Das Bundesministerium der Justiz,* 1967, 103 pp.
14. Attenberger, Gerhart, and Helmut Eiden-Jaegers, *Das Bundesministerium für Gesundheitswesen,* 1968, 91 pp. 2: Erw. Aufl., 1970, 126 pp.
15. Attenberger, Gerhart, and Helmut Eiden-Jaegers, *Zentrale Einrichtungen des Gesundheitswesens,* 1968, 94 pp.
16. Kolbenschlag, Heinrich, and Hans Günther Patzig, *Die deutsche Handwerksorganisation,* 1968, 134 pp.
17. Massow, Valentin von, *Organisation der Wissenschaft und der Wissenschaftsförderung in der Bundesrepublik Deutschland,* 1968, [84] pp.

18. Kaps, Norbert, and Hanns Küffner, *Die Presse- und Informationsamt der Bundesregierung*, Boldt Verlag, Bonn, 1969, 179 pp.
19. Sobotta, Johannes, *Das Bundesministerium für Wissenschaftliche Forschung*, 1969, 237 pp.
20. Zimmermann, Bernhard, *Das Bundespräsidialamt*, 1968, 98 pp.
21. Wieland, Lothar, *Das Bundesministerium für Vertriebene, Flüchtlinge und Kriegsgeschädigte*, 1968, 104 pp.
22. Caspar, Elmar, *Das Bundesamt für Wehrtechnik und Beschaffung und sein Geschäftsbereich*, 1969, 100 pp.
23. Busch, Eckart, *Das Amt des Wehrbeauftragten des Deutschen Bundestages*, 1969, 145 pp.
24. Dolff, Helmuth, *Die deutschen Volkshochschulen: ihre Rechtsstellung, Aufgaben und Organisationen*, 1969, 82 pp.
25. Schnell, Stefan, *Der Deutsche Städtetag*, 1970, 112 pp.
26. Giesen, Hermann, *Der Deutsche Bundeswehr-Verband*, 1970, 128 pp.
27. Berkenhoff, Hans Albert, *Der Deutsche Städtebund*, 1970, 113 pp.
28. Mann, Siegfried, *Das Bundesministerium der Verteidigung*, 1971, 244 pp.
29. Morsbach, Josef, *Das Bundesministerium für Verkehr*.
30. Pütz, Helmuth, *Die Christlich Demokratische Union (CDU)*.
31. Adam, Alfred, *Das Bundesministerium für Innerdeutsche Beziehungen*, 1971, 104 pp.
32. Dickopf, Paul, and Rolf Holle, *Das Bundeskriminalamt*, 1971, 152 pp.
33. Kasulke, Winfried, *Die Bundesstelle für Aussenhandelsinformation*, 1971, 128 pp.

Childs, James Bennett, *German Federal Republic Official Publications, 1949–1957, with Inclusion of Preceding Zonal Publications: A Survey*, Reference Department, Serial Division, Library of Congress, Washington, D.C., 1958. 2 vols., vii + 887 pp. "An operational document for limited distribution issued in an edition of 50 copies." Available in microfilm and other reproduction from the Photoduplication Service, Library of Congress. Contents: Vol. 1. Bundespräsident-Bundesministerium der Justiz. Vol. 2. Bundesministerium für das Post- und Fernmeldewesen-Bundesministerium für Wohnungsbau. Miscellaneous Agencies. Zonal Period.

Deutsche Bibliographie: Verzeichnis amtlicher Druckschriften, 1957–1958—Veröffentlichungen der Behörden, Körperschaften, Anstalten und Stiftungen des öffentlichen Rechts sowie der wichtigsten halbamtlichen Institutionen in der Bundesrepublik Deutschland und West-Berlin, Bearbeitet von der Deutschen Bibliothek, Frankfurt am Main, Buchhandler-Vereinigung, Frankfurt a. M. Biennial. Each biennial volume has four divisions: Bund, Länder, Kommunen, Kirchen.

Germany (Federal Republic, 1949–). *Jahresbericht der Bundesregierung. . . . Herausgegeben vom Presse- und Informationsamt der Bundesregierung.* [Kommissionsverlag, Bonn, Deutscher Bundeverlag]. The consolidated report of all ministries and other agencies, and reprints seem to be made for limited circulation by the various ministries. The title varies:

1950–1958: *Deutschland im Wiederaufbau. Tätigkeitsbericht der Bundesregierung für das Jahr . . . .*

1959: *Deutschland im Wiederaufbau, 1949–1959, und Tätigkeitsbericht für das Jahr 1959.*

1960–1966: *Deutsche Politik. . . . Tätigkeitsbericht für das Jahr . . . .*

Preceded by a brief mimeographed report as of 20 September 1950: Tätigkeitsbericht der Bundesregierung im ersten Jahr des Bestehens der Bundesrepublik.

Germany (Federal Republic, 1949–), Statistiches Bundesamt, *Das Arbeitsgebiet der Bundesstatistik. Stand Mitte 1962. Statistisches Bundesamt*, Kohlhammer, Stuttgart, Mainz, [1962]. 303 pp., folded table. Previous edition, mid-1958.

Germany (Federal Republic, 1949–), Statistisches Bundesamt, *Quellennachweis regionalstatistischer Ergebnisse. Stand Mitte 1965. Zusammengestellt im Statistischen Bundesamt in*

Zusammenarbeit mit den Statistischen Landesämtern, Herausgeber: Statistisches Bundesamt, Wiesbaden, Kohlhammer, Stuttgart, Mainz, [1966], 117 pp.

Vogel, Walter, *Westdeutschland, 1945–1950. Der Aufbau von Verfassungs- und Verwaltungseinrichtungen über den Ländern der drei westlichen Besatzungszonen.* Teil I: Koblenz, Bundesarchiv; Teil II: Boppard am Rhein, Harald Boldt Verlag, 1956– (Schriften des Bundesarchivs, 2, 12). Contents: Teil I. Geschichtlisher Überblick: oberste beratende Stellen und Einrichtungen für Gesetzgebung Verwaltung und Rechtsprechung; einzelne Verwaltungszweige: Ernährung, Landwirtschaft und Forsten. Teil II. Einzelne Verwaltungszweige: Wirtschaft, Marshallplan, Statistik. Teil III is in preparation. In the meantime, Tilman Pünder, *Das bizonale Interregnum, die Geschichte des Vereinigten Wirtschaftsgebietes, 1946–1949,* Grote, [Cologne], 1966, may be found helpful.

GHANA

The Ghana Independence Act became effective in March 1957 for the former colony of Gold Coast in West Africa, with the Trusteeship Territory of Togoland. The following reference furnishes an inventory of the government publications to 1968:

U.S. Library of Congress, African Section, *Ghana, A Guide to Official Publications, 1872–1968,* compiled by Julian W. Witherell and Sharon Lockwood, African Section, Reference Department, General Reference and Bibliography Division, Library of Congress, Washington, D.C., 1969, xi + 110 pp. Includes Gold Coast, 1872–1957, and Ghana, 1957–1968, with a selection of British documents relating to Gold Coast, Ghana, and British Togoland as well as League of Nations and United Nations documents on British Togoland. Emphasis is on material in the Library of Congress, supplemented from other American libraries represented in the National Union Catalog.

The *Ghana National Bibliography,* prepared by the Padmore Research Library, Ghana Library Board, Accra, first appeared in 1968 for the year 1965, and furnishes a mean of keeping the record to date. The Government Printer, later Ghana Publishing Corporation, issues a *Publications Price List* from time to time.

HUNGARY

Currently the fortnightly national bibliography *Magyar Nemzeti Bibliográfia; Bibliographia Hungarica,* edited by the Országos Széchényi Könyvtár (National Széchényi Library), Budapest, includes official monographic publications, together with similar serials, without any particular designation showing them to be government publications. This is the case because there are a few understandable exceptions not included such as "brochures d'importance mineure" and "imprimés d'ordre administratif et commerciale," and because there are no corporate entries. Here as elsewhere in some other national bibliographies, a precise understanding of the official cataloging rules might be an aid in using the national bibliographies as a partial guide in determining the current coverage of official publications. Also helpful would be a precise pinpointing of the various agencies of the government at any particular time, especially under the Constitution of 1949 of the People's Republic of Hungary and of their interrelationships with agencies of the official party.

There is no centralization and no bibliography or catalog of government publications for official printing and distribution. Retrospectively one may find a union catalog of about 6 pages of serials in the *List of the Serial Publications of Foreign Governments, 1815–1931* (New York, 1932), including Hungary particularly as a unit of the Austro-Hungarian Monarchy, and a section of nearly 50 pages in Vol. 109 of the *General Catalogue* of the British Museum Department of Printed Books, under the heading "Hungary."

INDIA

For the Republic of India, which became effective at the beginning of 1950 after the establishment of a separate India in August 1947, there is a manual by Mohinder Singh and J. F. Pandya, published in 1967, which furnishes the best orientation on Indian government publications as to content, list, and distribution system for the various departments and other agencies. The manual stresses the need for a library depository system. The principal publisher for the Republic of India is the Manager of Publications, Government of India Publications Branch, who issues occasional cumulative catalogs of publications in stock with supplementary lists of those published. Further, there is the Ministry of Information and Broadcasting, and the Survey of India, which requires special facilities for the production of maps. Indeed, many of the other agencies distribute some or all of their own publications, particularly those which are unpriced. Part 2 of the monthly *Indian National Bibliography*, edited by the Central Reference Library of the Ministry of Scientific Research and Cultural Affairs at the National Library, Calcutta, is devoted to government publications, both national and state, in classified order. The monthly *Accessions List: India* (with annual index), edited by the American Libraries Book Procurement Center, New Delhi, begun in July 1962 as a part of the Library of Congress Public Law 480 Project, includes government publications, both national and state. In the Constitution of the republic there is provision for Hindi as the official language, but how far this will affect government publications is yet to be determined. For the government publications of India before August 14, 1947, a few of the more important references are given in the following; a very great deal remains to be done to establish control over the great body of material.

INDIA BIBLIOGRAPHY

Datta, Rajeshwari, *Union Catalogue of the Central Government of India Publications held by Libraries in London, Oxford and Cambridge*, Mansell, London, 1970, [242] pp.

India (Republic), Parliament, Lok Sabha, *List of Publications (Periodical or* ad hoc) *Issued by Various Ministries of the Government of India*, 3rd ed., Lok Sabha Secretariat, New Delhi, 1958, cover-title, 282 pp. (S. S. no. 5.) Arranged by ministries and other principal agencies. Corrected to March 1957. No later editions have appeared.

India (Republic), Secretariat Training School, *Organisational Set-Up and Functions of the Ministries/Departments of the Government of India*, 4th ed., New Delhi, 1969, 376, 3 pp. folded chart.

Indian Institute of Public Administration, *The Organization of the Government of India*, Asia Publishing House, London, [1958], xii + 416 pp.

Singh, Mohinder, and J. F. Pandya, *Government Publications of India, A Survey of their Nature, Bibliographical Control and Distribution Systems (Including over 1500 Titles)*, Foreword by S. R. Ranganathan, Metropolitan Book Co., Delhi, [1967], 8 p. l., 270 pp. Ministries in alphabetical order, pp. [32]–240, followed by other agencies.

Before August 14, 1947

Campbell, Francis Bunbury Fitzgerald, *Index-Catalogue of Indian Official Publications in the Library, British Museum*, Library Supply Co., London: G. E. Stechert, New York; [etc., 1900], 6, 193, 314, 72 pp.

Great Britain, India Office, Record Branch, *A Classified List, in Alphabetical Order, of Reports and Other Publications . . . , December 1892*, London, 1894, viii + 230 pp.

India, *List of Nonconfidential Publications Exempted from Registration, Which Were Issued by the Departments of the Government of India and Local Governments and Administrations*, [Calcutta, 1892–1909], 1892 (third quarter)–1907, originally quarterly; 1902–1907, annual. Continued from 1908 by separate lists for the various departments of the Government of India and for the provincial governments. Beginning with 1927 the separate lists for the various departments of the Government of India were replaced by the *List of Nonconfidential Publications not Included in the General Catalogue of Government of India Publications*, issued annually by the Central Publications Branch, Delhi. Apparently the *List* was continued through 1940.

India, Office of the Economic Adviser, *Guide to Current Official Statistics . . .* , prepared under instructions from the Economic Adviser by S. Subramanian, Statistician, Manager of Publications, Delhi, 1943–1949, 3 vols. in 4.

INDONESIA

Indonesia was established as a republic in place of the former Netherlands East Indies in August 1945 with the capital at Djakarta (formerly Batavia). Bahasa Indonesia is the official language. Government publications are included in the *Accessions List: Indonesia*, issued irregularly beginning in July 1964 by the American Libraries Book Procurement Center, Djakarta, under the Library of Congress Public Law 480 Project. The preface of the two volume *Bibliografi nasional Indonesia, kumulasi 1945–1963* (P. N. Balai Pustaka, Djakarta, 1965) contains the following explanation:

> Government publications are not listed in this bibliography, because during the compilation of this bibliography the Political and Social History Library under the supervision of Mrs. Rusina Sjahrial-Pamuntjak was compiling a bibliography on this subject. The compilation of a bibliography of government publications requires a great amount of time, energy and determination due to difficulties in tracing and obtaining those publications. The changes in names and organization of the government agencies give rise to technical problems in assigning the authorship of the publications. Being aware of the present stage of this work, we decided not to duplicate such a difficult and laborious undertaking. If in the future it is deemed necessary to include the government publications in the national bibliography, the bibliography published by that library will be of great help.

The explanation in plain terms sets forth the difficulties faced in most jurisdictions in attempts to include government publications in the national bibliographies, and has reference to the following:

Sjahrial-Pamuntjak, Rusina, *Daftar penerbitan pemerintah Republik Indonesia; suatu usha pertjobaan*, Perpustakaan Sedjarah Politik dan Sosial. Djakarta, 1964, 56 leaves. A trial list of Indonesian government publications, 1945–1962, arranged chronologically, with an author index.

A few years earlier the following had appeared at Cornell University, Ithaca, New York:

Lev, Daniel S., *A Bibliography of Indonesian Government Documents and Selected Indonesian Writings on Government in the Cornell University Library*, Southeast Asia Program, Dept. of Far Eastern Studies, Cornell University, Ithaca, New York, 1958, 58 leaves. (Cornell University, Southeast Asia Program, Data Paper No. 31.)

For the period 1950–1969 the following, compiled by Luwarsih Pringgoadisurjo, covers the executive departments, except Agriculture (prepared separately by Bibliotheca Bogoriensis) and nondepartmental institutes, is arranged by agency, and has no index by author, subject, and title:

Pusat Dokumentasi Ilmiah Nasional. Bibliografi penerbitan baden-baden Pemerintah Indonesia, 1950–1969, Djakarta, [1971], vii + 412 pp.

The government publications for the former Netherlands East Indies were included in the annual bibliography of Netherlands government publications.

IRELAND

Constituted and recognized as the Irish Free State in 1922, Ireland became a republic in 1949. The Government Publications Sale Office at the Stationery Office, Dublin, issues lists of the new Irish government publications weekly or every 2 weeks in *Iris Oifigiúil*, the official gazette, circulates the reprints separately, cumulates these annually as *Catalogue of Government Publications*, and less frequently as *Consolidated Catalogue*, but does not include Ordnance Survey maps. Since 1967 the Institute of Public Administration, Dublin, has published the *Administration Yearbook & Dairy*,* including a very full directory of the government and of state-sponsored bodies (statutory corporations, trading enterprises, etc.). The number of state-sponsored bodies is an indication of the extent to which the modern government may extend its activities and influence.

The *Dublin Gazette*, the previous official gazette, began in the early eighteenth century. Government printing in Ireland apparently began in the sixteenth century as evidenced by the very considerable article by Prof. David Beers Quinn, entitled "Government Printing and the Publication of the Irish Statutes in the Sixteenth Century," which appeared in the *Proceedings of the Royal Irish Academy* in 1943. Probably the most extensive retrospective record of Irish government publications appears under the heading "Ireland" for Ireland to 1922; Irish Free State, 1922–

*There is also an official *Eolaí ar sheirbhísí stát . . . Directory of State Services . . .*, published by the Stationery Office, Dublin.

1949; and Republic of Ireland, 1949– in Vol. 112 of the *General Catalogue* of the British Museum Department of Printed Books.

ISRAEL

Established as a republic in place of Palestine in May 1948, Israel has had its capital at Jerusalem since 1950. The State Archives at Jerusalem edited a biennial *List of Government Publications* in 1952, 1954, and 1956, and a bimonthly *Israel Government Publications* beginning in 1956, which became quarterly, the last being No. 60 in September 1968, with annual issues for 1965 through 1968, and a cumulation for 1948–1964. The Central Office of Information, Prime Minister's Office, edits an annual *Israel Government Organization Year Book* in Hebrew, and in English from 1950, so that changes in government agencies can be followed conveniently. Hebrew is the official language, and English is used for government publications likely to have international circulation and use.

ITALY

The jurisdictions of Sardinia, Tuscany, Two Sicilies, Modena, Parma, the Papal States, etc., became united as the Kingdom of Italy in 1861. During the period 1922–1943 there was a government of the Fascist Party (Partito Nazionale Fascista), with a whole host of interrelationships between party agencies and government agencies. In June 1946 Italy became a republic. The Decree-Law of January 18, 1923, creating the office of the Provveditorato Generale dello Stato, made a very decisive effort to rationalize the efforts of government printing and publication, and in the process Italy became the first European country to prepare a comprehensive retrospective general catalog of its government publications. Coverage is from the unification in 1861 to 1923, published in 1924, and continued in due course by supplements for the periods 1924–1930, 1931–1935, 1936–1940, and 1941–1944, with more to come. The general catalog was soon followed by a collective index to government publication periodicals and collective works for the period 1901–1925 (*Spoglio dei periodici e delle opere colletive*), which has likewise been continued by supplements. These were an outgrowth of the effort to set up a central government printing office and a central agency for the sale and distribution of government publications (Libreria dello Stato). A few agencies, particularly those engaged in making maps and charts such as the Istituto Idrografico della Marina and the Istituto Geografico Militare, seem to continue their previous practices as to catalogs, sales, and distribution. The current *Bibliografia nazionale italiana,* edited by the Biblioteca Nazionale Centrale in Florence, includes a relatively modest representation of government publications. Many of the complications in the changes of government agencies from the beginning in 1861 can be traced in the *Calendario generale del Regno* through 1921–1922 and from 1948 in the *Annuario parlamentare*. For the Italian jurisdictions previous to the formation of the Kingdom of Italy in 1861, a modest representation of the government publications for each may be found in such a source as the *General Catalogue* of the British Museum Department of Printed Books, under the appropriate entries, but a real inventory of government publications for each, similar to the *Catalogo generale* for Italy, 1861–1923, is much needed to facilitate research in various fields.

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Italy, Ministero dell'Interno, *Calendario generale del regno d'Italia, 1862–1921/22,* Turin, Florence, Rome. For the years 1892–1896, this was merged with *Annuario d'Italia.*

Italy, Parlamento, Camera dei Deputati. *Annuario parlamentare, 1948/49–,* Rome, 1948–. Annual.

Italy, Provveditorato Generale dello Stato. *Pubblicazioni edite dallo Stato o col suo concorso (1861–1923). Catalogo generale,* Libreria dello Stato, Rome, 1924, xiii + 668 columns. Following the parliament, the arrangement by ministries was more or less along the 1923 status. Royal universities, technical colleges, academies, societies, royal institutes, and colonies were included.

Italy, Provveditorato Generale dello Stato, *Catalogo generale. Supplemento 1924–1930; [1931–1935; 1936–1940; 1941–1944] e aggiunte al periodo anteriore, Libreria dello Stato,* Rome, 1931–1969, 4 vols.

JAPAN

To quote from Naomi Fukuda "About Government Publications" in the International House of Japan *Library News*, No. 21, (October 1963):

> The problems in connection with Japanese government publications are many and enormous. No one has ever studied them exhaustively, and no one even can be sure of how many publications there are. One reason is that there is no centralized publishing agency. Some publications are official (some of which are for sale and others not), some are semi-official, and others have official character in name only. Each Ministry and each bureau or other sub-division seems to have related organizations of its own, some for research purposes, some for publishing purposes, some mainly for the recreation of ex-officials, etc. Any of these may have a publication or publications. *Kuni no Yosan* (National Budget) no. 45, for example, is compiled by officials of the Budget Bureau of the Finance Ministry, who formed an organization called the Zaimu Chosakai (Finance Research Society), located in the same Bureau. Its contents are based on the official report, *Yosansho* (National Budget), no. 43, compiled for the use of the Diet. It is published by Doyu Shobo, a commercial publishing firm which does not seem to publish other books. This sort of publication is considered semi-official and is listed in the catalog (incomplete) of government documents. Part of the explanation is that the Government Printing Office, under the Ministry of Finance, is far too small and weak to cope with the ever increasing number of government documents.
>
> The best list of government publications is the section on government offices, Kankocho-hen, in the *Zen-Nihon Shuppanbutsu Somokuroku* (Japanese national bibliography). . . . Its 1960 edition gives 5,747 titles in 7,128 volumes for mon-

graphs (3,291 titles in 4,190 volumes for central and the rest for local government offices) and 5,693 periodical titles (2,908 titles for central government offices). The drawback of this catalog is that publications are at least three years old before they are listed in it.

Further on, it is reported:

> There is a bookstore called the Kancho Kankobutsu Sabisu Center (Government Publications Service Center) located near many of the major Ministry buildings in downtown Tokyo. The center is attractively equipped and keeps many items for sale and others, such as official reports not for sale, as samples.

Earlier, the author had stated:

> The 1948 law establishing the [National] Diet Library stipulated that the Ministries were to send 30 copies of all their publications to the Library for exchange purposes. However, in practice some government offices have ignored the law or provided only samples of their publications.

As may be noted from the Bibliography, Japan, despite its decentralized condition, was one of the first countries after the World War I period to inaugurate a regular current record of government publications, and has endeavored to maintain this subsequently. From number to number, *Biblos, Monthly Magazine for Branch Libraries, Executive and Judicial, and Other Special Libraries,* edited by the National Diet Library, Division for Interlibrary Service, with mainly Japanese text, usually includes a monthly report on official publications and an agency section on selected official publications of postwar Japan.

Despite the difficulty of attempting to follow the record retrospectively, there is an official directory which began in 1886, and for those who persist and who read Japanese, it might be possible to pursue the search further.

JAPAN BIBLIOGRAPHY

Kanchō kankō tosho geppō. [*Monthly bulletin of government publications, 1927–1943*], Naikaku Insatsukyoku, Tokyo. From December 1927–1937, quarterly *Kanchō kankō tosho mokuroku.*

Kokuritsu Kokkai Toshokan [National Diet Library], Kanchō kankōbutsu tenjikai [Exhibition of Government Publications], *Catalogues and Annotations,* Tokyo, 1958, 75 pp.

Kokuritsu Kokkai Toshokan, *Kanchō kankōbutsu sōgō mokuroku* [*Union Catalog of Government Publications*], Tokyo, 1952–1960, 8 vols.

1, September 1945–1950.
2, 1951–1952.
3–8, 1953–1958, annual.

The comprehensive catalog of central government publications ceased with Vol. 8, and is continued currently as the government section of *Nōhon shūhō* [*Current Acquisitions Weekly*] and cumulatively in the annual *Zen Nihon shuppanbutsu sōmokuroku* [*Japanese National Bibliography*], all prepared by the National Diet Library. For government publications, 1927–1943, see *Kanchō kankō tosho geppō.*

Kokuritsu Kokkai Toshokan. *Kankōchō chikuji kankōbutsu ichiran* [*Directory of Periodic Government Publications*]. Tokyo, 1960. 104 pp. As of December 1959.

Kokuritsu Kokkai Toshokan. *Obun ni yoru kanchō kankōbutsu ichiran* [*List of Japanese Government Publications in European Languages*]. Tokyo, 1959, 91 pp. Covers the period 1945–1958, and has appended SCAP. 1946–1952.

Seifu kankōbutsu geppō [*Monthly Bulletin of Government Publications*. Vol. 1, no. 1. 1956–], by the Seifu Kankōbutsu Fukyu Kyōgikai [Council for Popularization of Government Publications], Seifu Kankōbutsu Sābisu Sentā, Tokyo, 1957–. No. 2–, monthly. Title, Vol. 1, no 1–Vol. 5, no. 3, *Seifu kankōbutsu mokuroku.*

Shokuinroku [*Directory of Government Officials*. 1886–], Okurasho Insatsukyoku. Tokyo. Annual. Central government, Vol. 1 of each year.

KOREA

For the Republic of Korea, with its capital at Seoul, the National Assembly Library has edited a catalog *Government Publications in Korea* (*including University Publications*) covering the period 1948–1965 with supplementary parts for 1966–1967 and 1968–1969, the main title page and most of the publications recorded being in the Korean language. There seems to be no centralization of government printing and publishing. A regulation requiring the deposit of multiple copies of the official gazette and other government publications with the Central National Library for international exchange was promulgated March 13, 1967.

LATIN AMERICA

On page 8 of her *Current National Bibliographies of Latin America, a State of the Art Study* (Gainesville, Florida, 1971), Irene Zimmerman comments as follows:*

> Official government publications represent an important part of the national production of book materials, but they are in general a neglected one. For some Latin American countries, if not most, the series compiled in the late 1940s *A Guide to the Official Publications of the Other American Republics* (1945–1949) under the general editorship of James B. Childs still stands as the best record of such publications.

J. B. Childs explained the circumstances leading up to the series "initiated in the fiscal year 1941 as a part of the program of the United States Department of State for cooperation with the other American republics," making Latin America the first area of the world in which each country has some systematic record of its government publications from the time of independence to the 1940s. This appeared in a paper "Forty Years of Latin American Document Bibliography," which appeared in the *Herald of Library Science* (Varanasi, India), 7(2), 71–78 (April 1968) and was also issued in reprint form (Washington, D.C., 1968, 8 pp.).

*This publication has a relatively good essay providing comprehensive retrospective coverage for the Latin American Countries, but rather meager current coverage.

Five of these guides (for Argentina, Bolivia, Colombia, Cuba, and Paraguay) were completed by J. B. Childs, who endeavored to furnish for each the pattern of the governmental development from the beginning of independent government to the 1940s, and to give as full a statement as possible of the government publications of each—serials, monographs, etc. The difficulties faced in the task were almost unbelievable.

For the 1961 annual Seminar on the Acquisition of Latin American Library Materials (SALALM), of which the secretariat is at the Pan American Union Columbus Memorial Library, J. B. Childs also prepared (with the assistance of John H. Thaxter) a paper which commented on the need for the pinpointing of government organization manuals and national budgets as necessary aids in the understanding of government publications. This point aroused a most helpful contribution by Rosa Q. Mesa, University of Florida Library, for the 1965 Seminar, resulting in the extremely useful Working Paper 16 for the 1970 Seminar entitled "Bibliography of Organization Manuals and Other Sources of Information on the Government Organization of the Countries of Latin America," (15th SALALM, 1970, *Final Report and Working Papers*, II, pp. 257–276.)

In the meantime, with the support of SALALM, the University of Florida Libraries, Gainesville, financed by a grant from the Ford Foundation, has embarked on a union list *Latin American Serial Documents*, edited by Rosa Q. Mesa, of which the first six volumes have appeared through University Microfilms-Xerox, Ann Arbor, Michigan (Vol. 5–, Bowker, New York) as follows:

1. *Colombia*, 1968.
2. *Brazil*, 1968.
3. *Cuba*, 1969.
4. *Mexico*, 1970.
5. *Argentina*, 1971.
6. *Bolivia*, 1972.

Of this series, Irene Zimmerman concludes (pp. 8–9):

> Since the closing date was December, 1966, and the project is not a continuing one, the inclusion of the series here might be questioned. Justification lies in the fact that, in general, official documents are inadequately recorded [currently] in most Latin American countries. These new lists provide data hitherto unavailable in many of them, and also provide a working basis upon which it is hoped the countries can and will build. The state of the art would be greatly advanced by the improvement of that basic starting point, government organization manuals in the countries where they exist, and their initiation in the too great number where they are now lacking.

Wherever recent government organization manuals do not exist, frequently recent telephone directories for the capital city, or other directories if such are available, may furnish a fairly detailed listing of current government agencies. This same suggestion may apply equally elsewhere outside Latin America.

Attention may be drawn also to the various country brochures, revised from time to time, of the series *Actividades estadísticas de las naciones americanas,* prepared and published by the Interamerican Statistical Institute, Washington, D.C.

Further, for official sheet and atlas maps, the American Geographical Society's four-volume *A Catalogue of Maps of Hispanic America* (New York, 1930–1932) includes usually under each country a separate section for the official maps of that country. This has been updated from 1926, when the coverage of the above seems to terminate, by the two-volume *A Catalogue of Latin American Flat Maps, 1926–1964,* by Palmyra V. M. Monteiro, Preface by Donald D. Brand (Institute of Latin American Studies, University of Texas at Austin, 1967–1969).

A statement about each Latin American jurisdiction with the most pertinent references follows in alphabetical order.

Argentina

While there was an uprising against Spanish rule in 1810 and independence was declared in 1816, a stable central government was not organized until 1853. No central government printing office exists, and a few of the ministries and other agencies have their own printing offices, and each handles the distribution of its own government publications. No current official directory of the government is published, and the one practical way of keeping abreast of the government organization and of the changes is the annual *Presupuesto general de la administración,* particularly for the period from 1944 to date. The Argentine volume by J. B. Childs, *A Guide to the Official Publications of the Other American Republics,* contains a very condensed historical statement. It was published in 1945, and is much in need of a revised edition or supplement with a record of all subsequent agency changes and of all government publications that have appeared since then, together with any additions to the original work.

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Sociedad Argentina de Bibliotecarios de Instituciones Sociales, Científicas, Artísticas y Técnicas, *Catálogo colectivo de publicaciones periódicas existentes en bibliotecas científicas y técnicas argentinas,* Segunda edición. . . . Dirigido por Ernesto Gietz, Consejo Nacional de Investi-

gaciones Científicas y Técnícas, Buenos Aires, 1962. xxvii + 1726 pp. Geographical index for Argentina, including especially official agencies, pp. 1387–1458.

Bolivia

Bolivia became independent in 1825. A concise but comprehensive statement of the agencies and their publications from that time until 1944, eked out wherever possible by local assistance, is furnished by the volume on Bolivia by J. B. Childs in the series *A Guide to the Official Publications of the Other American Republics.* Although there seems now to be an Editorial del Estado, the government publications seem usually to be produced by private facilities and distributed by the agencies themselves.

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Bolivia, Direccion de Organización Nacional, *Manual de organización y funciones de gobierno de Bolivia,* Secretaría Técnica de Administración, La Paz, 1969, 207 pp. [Instituto Superior de Administración Pública (ISAP) Serie Estudios no. 11.]

Childs, James Bennett, *A Guide to the Official Publications of the Other American Republics. II. Bolivia,* The Library of Congress, Washington, D.C., [1945], 66 pp. (The Library of Congress. Latin American Series, No. 10.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 2. Bolivia,* Segundo edición. Agosto de 1959. Unión Panamericana, Washington, D.C., [1959], 48 pp.

Mesa, Rosa Quintero, *Bolivia,* Bowker, New York, 1972, xxxiii + 156 pp. (Latin American Serial Documents, Vol. 6).

Brazil

In 1808, during the Peninsular Wars, Rio de Janeiro, Brazil, became the seat of the government of Portugal and Brazil, and certain agencies and institutions such as the Imprensa Nacional date from that period. Brazil, united to Portugal, became a kingdom in 1815, then in 1822 became independent as an empire, and in 1889 a republic as the Estados Unidos do Brasil. By the constitution of 1967 the name was changed to the Federative Republic of Brazil. On April 21, 1960, Brasília, in the interior, was inaugurated as the capital, and the transfer from Rio de Janeiro has been a long and continuing process.

For the earliest period of the government (1808–1831) there is a precise inventory by Alfredo Valle Cabral of all items printed by the Imprensa Nacional, which can be supplemented to some extent by the catalog of the exposition of Brazilian history at the Biblioteca Nacional, Rio de Janeiro, in 1881.

The Brazil volume of *A Guide to the Official Publications of the Other American Republics* presents an overall picture for the whole period to the mid-1940s so far as possible to assemble such a picture from the collections and catalogs of the library of Congress.

In the consolidated annual report (*Relatório*) for 1939–1942, the Imprensa Nacional included an inventory of the government publications printed there during that period, and has continued this in separate form as an annual alphabetical inventory of all material printed there under the title *Mostra de livros*. Many agencies have separate arrangements for printing, reproduction, and distribution of their publications, particularly those producing maps and charts. A few agencies have at times issued considerable catalogs of their own publications. Even this information may at times be supplemented by various administrative library accession lists. Further, the semiannual *Boletim bibliográfico* of the Biblioteca Nacional and the *Bibliografía brasileira mensal* of the Instituto do Livro as well as the earlier volumes of its *Bibliografía brasileira*, beginning with 1938–1939, do include government publications and do use corporate headings, but the problem of overall coverage is a very great and serious one.

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Brazil, Ministério da Educação, e Cultura, Serviço de Documentação, *Catálogo das publicações do Serviço de Documentação, 1947–1965*, Organizado pelos bibliotecarios Xavier Placer, Edson Nery da Fonseca e José Alcides Pinto, [Rio de Janeiro], 1965, 156 pp.

Brazil, Ministério das Relações Exteriores, *Lista de publicações, 1826–1950*, [Rio de Janeiro, 1951], 67 pp. Gives in detail the *Relatórios*, beginning with 1826, as well as the other publications of the ministry for the whole period.

Brazil, Superintendencia do Desenvolvimiento do Nordeste, *Catálogo das publicações editadas pela SUDENE*, [*1959–1969. Dez anos de ação*], Recife, 1969, 135 pp. 994 entries grouped by topics in alphabetical order, with author, subject, and title index. Nearly all issued at Recife or in area. Includes analyticals.

De Noia, John, *A Guide to the Official Publications of the Other American Republics. III. Brazil*, The Library of Congress, Washington, D.C., 1948, 223 pp. (Library of Congress, Latin American Series, No. 35.)

Fonseca, Edson Nery da, "Bibliografia da Câmara dos Deputados," in *Boletim da Biblioteca da Câmara dos Deputados*, Brasília, 1963–1968, Vols. 12–18.

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1.2. *Atas*. —1.3. *Sinopse*. —1.4. *Resenha legislativa*, Vol. 12, No. 2, pp. 575–577.
1.5. *Diarios*, Vol. 13, No. 1, pp. 137–139.
1.6. *Boletim da Biblioteca*, Vol. 13, No. 2, pp. 487–497.
1.7. *Indice de discursos*, Vol. 14, No. 1, pp. 149–166.
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2.1. *Documentos parlamentares*, Vol. 14, No. 3, pp. 585–596.
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Rio de Janeiro, Biblioteca Nacional, *Exposição comemorativa do centenario do Diario oficial, 1862–1962,* Biblioteca Nacional, [Rio de Janeiro], [1962], 14 pp., plates, facsimiles. Describes the Brazilian official gazette from the earliest one in 1808 to 1962, with facsimiles and a bibliography of eleven titles.

Valle Cabral, Alfredo do, *Annaes da Imprensa Nacional do Rio de Janeiro de 1808 a 1822,* Typographia Nacional, Rio de Janeiro, 1881, lxv + 339 pp., 5 plates. 1,154 items arranged alphabetically under each year. The bibliography of 1,154 items was reprinted during 1942–1943 in Nos. 16–31 of the *Boletim bibliográfico,* Biblioteca, Imprensa Nacional, Rio de Janeiro. Posthumously a continuation 1823–1831 with supplementary titles, 1808–1822 appeared in Vol. 75 (1954) of the *Anais da Biblioteca Nacional,* Rio de Janeiro, and also separately as *Anais da Imprensa Nacional (1823–1831) e suplemento aos Anais da Imprensa Nacional (1808–1823),* Rio de Janeiro. Biblioteca Nacional, 1954, 87 pp. Much subsequent material previous to the 1880s appeared in Vol. 9, Parts 1 and 2, and the supplementary part of the *Annaes da Biblioteca Nacional.*

Visão apresenta perfil da administração federal/71, [Sociedade Editorial Visão, São Paulo, 1971.] cover-title, 172 pp. [*Visão,* **39**(2), suppl., (July 19, 1971)]. A private compilation presenting much the same type of information about the various government agencies as the former *Indicador da organisação administrativa federal,* which apparently has not appeared since 1957.

Chile

Chile became independent from Spain in 1818, a national government having been formed in 1810.

The Chile volume of *A Guide to the Official Publications of the Other American Republics* attempts to present an overall picture of agencies and their publications from the beginning of self-government to 1946, including the many changes, so far as is possible from the catalogs and collections of the Library of Congress.

Since 1964 the annual national bibliography *Anuario de la prensa chilena,* edited at the Biblioteca Nacional, Santiago, has included a special list of government publications (libros y folletos), arranged mainly by agency.

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Molina Arias, Evaristo, *Ensayo bibliográfico chileno sobre hacienda pública. Chilean Bibliographical Sketch of the Public Finances*, Edición de 100 ejemplares, edition of 100 copies. Imprenta Nacional, Santiago de Chile, 1901, 64 pp. Over 500 titles in Spanish arranged alphabetically by title, keyed with English translations, also arranged by title.

Neuburger, Otto, *A Guide to the Official Publications of the Other American Republics. IV. Chile*, The Library of Congress, Washington, D.C., 1947, 94 pp. (Library of Congress, Latin American Series, No. 17.) Only beginning with 1964 did the *Anuario de la prensa chilena* (Biblioteca Nacional, Santiago) begin to include a special list of official publications, arranged mainly by agency.

Colombia

Colombia, the former Viceroyalty of New Granada, became independent from Spain in 1819, and constituted with Ecuador and Venezuela the republic of Greater Colombia (Gran Colombia). In 1830 the republic of New Granada, Ecuador, and Venezuela became separate republics. In 1858 it became the Confederación Granadina, in 1863 the Estados Unidos de Colombia, and in 1886 the República de Colombia.

The volume on Colombia by J. B. Childs in the series *A Guide to the Official Publications of the Other American Republics* furnishes a concise and rather precise account of the development of the government agencies and their publications from independence to 1944. For the period to 1834, the items are described separately in the *Bibliografía bogotana, 1738–1831*, by Eduardo Posada (Bogotá, 1917–1925, 2 vols.) and in the continuation by Gustavo Otero Muñoz (*Boletín de historia y antigüedades*, Bogota, Vols. 37 and 38, 1950–1951).

From the first volume (1951–1956) to date, the annual national bibliography edited by the Instituto Caro y Cuervo, Bogotá, *Anuario bibliográfico colombiano. . .*, has included government publications in the various classes with indexing by agency. Beginning with 1964 the Escuela Interamericana de Bibliotecología, Medillín, has been editing an irregularly issued *Bibliografía oficial colombiana*, covering national, departmental, and local governments.

COLOMBIA BIBLIOGRAPHY

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Childs, James Bennett, *A Guide to the Official Publications of the Other American Republics. V. Colombia*, The Library of Congress, Washington, D.C., 1948, 89 pp. (Library of Congress, Latin American Series, No. 33.) Subsequent publications can be traced so far as recorded in the *Anuario bibliográfico colombiano* (Instituto Caro y Cuervo) from the first volume for 1951–1956 to date. For the period 1958–1962 especially, see Peraza below.

Colombia, Secretaría de Organización e Inspección de Administración Pública. *Manual de organización de la rama ejecutiva del poder pública nacional*, [Imprenta Nacional, Bogota, 1970], xlviii + 341 pp.

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 5. Colombia,* Segunda edición, Mayo de 1956, Instituto Interamericano de Estadística, Unión Panamericana, Washington, D.C., 1956, 68 pp.

Mesa, Rosa Quintero, *Latin American Serial Documents, A Holdings List; Vol. 1: Colombia*, University Microfilms, Ann Arbor, Michigan, 1968, xv + 137, 3 pp.

Peraza Sarausa, Fermín, and José Ignacio Bohorquez C. *Publicaciones oficiales colombianas*, Gainesville, Florida, 1964, 4 p. l., 31 leaves. Mimeographed. (Biblioteca del bibliotecario, 69.) The two papers registering Colombian official publications, the first for the national government and for the departmental governments during 1961–1962, and the second for the output of the Imprenta Nacional, 1958–1962, appeared originally in a very limited edition as Documento 35 of the Conferencia sobre Administración Pública en los Países en Desarrollo, Bogota, April 15–21, 1963.

Costa Rica

Costa Rica in Central America became independent in 1821, and formed from 1824 to 1839 a part of the Republic of Central America. J. B. Childs, *Memorias of the Republics of Central America and of the Antilles* (Washington, D.C., 1932) contains a record of the memorias of the Confederation and of those of the principal executive departments of Costa Rico to about 1930, with organizational changes.

Government publications have been included currently in the annual national bibliography, first in the *Boletín bibliográfico,* of the Biblioteca Nacional, San José, 1946–1955, and next in the *Anuario bibliográfico costarricense* of the Asociación Costarricense de Bibliotecarios (Comité Nacional de Bibliografía "Adolfo Blen"), from 1956, printed at the Imprenta Nacional, San José.

COSTA RICA BIBLIOGRAPHY

Besso, Henry V., *A Guide to the Official Publications of the Other American Republics. VI. Costa Rica,* The Library of Congress, Washington, D.C., 1947, 92 pp. (Library of Congress, Latin American Series, No. 24.)

Costa Rica, Oficina de Planificación, *Manual de organización de la administración pública,* San José, Costa Rica, 1968, 468 pp. The first edition by the Oficina del Presupuesto appeared in 1962.

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 6. Costa Rica,* Segunda edición, Julio de 1958, Instituto Interamericana de Estadística, Unión Panamericana, Washington, D.C., 1958, 60 pp.

Kopper D., Nelly, "List of Author Headings for the Principal Government Offices of Costa Rica," in *Tenth Seminar on the Acquisition of Latin American Library Materials. Final Report and Working Papers,* Washington, D.C., Pan American Union, Washington, D.C., 1966, Vol. 2, pp. 211–229. Published also in the *Boletín de la Asociación Costarricense de Bibliotecarios,* San Jose, Costa Rica, 1966, No. 18, pp. 9–21, with the brief introductory text in Spanish, references in Spanish, and the title in Spanish: Lista de encabezamientos de autor de las principales oficinas gubernamentales de Costa Rica.

Cuba

Cuba became independent in 1898. In 1959 control was taken over by the Socialist (Communist) pattern of government, with close interlocking of party and government.

The Cuba volume by J. B. Childs in the series *A Guide to the Official Publications of the Other American Republics* covers all branches of government and their publications with many changes from the independence in 1898 to 1944. Subsequent government publications are recorded in the *Anuario bibliográfico cubano*, founded by Fermín Peraza Sarausa with 1937, and more recently in the *Bibliografía cubana*, edited by the Biblioteca Nacional Jose Martí, Havana, beginning with Vol. 1 (1959–1962).

CUBA BIBLIOGRAPHY

Childs, James Bennett, *A Guide to the Official Publications of the Other American Republics. VII. Cuba,* The Library of Congress. Washington, D.C., [1945], 40 pp. (Library of Congress, Latin American Series, No. 11.)

Mesa, Rosa Quintero, *Latin American Serial Documents, A Holdings List; Vol. 3: Cuba.* University Microfilms, Ann Arbor, Michigan, 1969, xvi +207, [2] pp.

Dominican Republic

Details of the principal executive departments of the Dominican Republic to about 1930 with their memorias are contained in J. B. Childs, *Memorias of the Republics of Central America and of the Antilles.* The Dominican Republic part of *A Guide to the Official Publications of the Other American Republics* apparently attempts to present an overall picture of all agencies and their publications as of about 1946 so far as this information was available in the collections and catalogs of the Library of Congress, there being no national bibliography.

DOMINICAN REPUBLIC BIBLIOGRAPHY

DeNoia, John, *A Guide to the Official Publications of the Other American Republics. VIII. Dominican Republic,* The Library of Congress. Washington, D.C., 1947, 40 pp. (Library of Congress, Latin American Series, No. 25.)

Dominican Republic, Oficina Nacional de Administración y Personal, *Manual de organización del gobierno,* Santo Domingo, 1969, 372 pp. (Its Publicaciones, 8.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 20. Republica Dominicana,* Unión Panamericana, Washington, D.C., 1960, 60 pp.

Ecuador

Ecuador became independent from Spain in 1821, but formed a part of the republic of Gran Colombia from 1822 to 1830. In view of the paucity of national bibliographical data, the overall picture of the government and of its publications as presented from the catalogs and collections of the Library of Congress in the Ecuador part as of about 1945–1946 of *A Guide to the Official Publications of the Other American Republics* seems no mean achievement.

ECUADOR BIBLIOGRAPHY

Alvear, Alfredo, and Ximena Espinosa, "List of Headings of Official Entities of Ecuador, Working Paper No. 7," in *11th Seminar on the Acquisition of Latin American Library Materials, 1966. Final Report and Working Papers,* Washington, D.C., 1967, Vol. 2, pp. 189–206.

DeNoia, John, *A Guide to the Official Publications of the Other American Republics. IX. Ecuador,,* The Library of Congress, Washington, D.C., 1947, 56 pp. (Library of Congress, Latin American Series, No. 31.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 9, Ecuador,* Segunda edición, Mayo de 1963, Unión Panamericana, Washington, D.C., 1963, 78 pp.

Quito, Universidad Central, Instituto de Estudios Administrativos, *Manual de gobierno* [*de la*] *repûblica del Ecuador. USAID en El Ecuador,* [Editorial Universitaria, Quito, 1965], 445 pp., charts (partly folded). The second edition of the Government Organization Manual, the first having appeared in 1962 with 348 pp. At the head of title: Universidad Central del Ecuador; Instituto de Estudios Administrativos, Secretaría Técnica de Administración, Oficina Nacional de Organización. The organization charts slightly reduced were issued separately as *Manual de gobierno: Organigramas.*

Guatemala

Guatemala became independent from Spain in 1821, and formed a part of the Republic of Central America 1824–1839. The record here presented, while undoubtedly not complete, seems unique.

GUATEMALA BIBLIOGRAPHY

Besso, Henry V, *A Guide to the Official Publications of the Other American Republics. XI. Guatemala,* The Library of Congress, Washington, D.C., 1947, 88 pp. (Library of Congress, Latin American Series, No. 30).

Guatemala, *Centro para el Desarrollo de la Administración Pública,* Manual de organización del gobierno de la repûblica de Guatemala, Marzo 1962, [Guatemala, Editorial Galindo, 1962.] 70 pp. folded chart. Intended to be revised annually, but never continued. On back cover: Alianza para el progreso.

Guatemala, *Tipografía Nacional,* Catâlogo general de libros, folletos y revistas editados en la Tipografía Nacional de Guatemala desde 1892 hasta 1943, Guatemala, Tipografía Nacional, 1944. 352 pp. Arranged year by year from the establishment of the Press. Kept up to date from time to time by continuously paged supplements, the one for 1963 to July 1965 extending to page 597. Not indexed.

Interamerican Statistical Institute. *Actividades estadísticas de las naciones americanas,* No. 12, Guatemala, Segunda edición, Abril de 1959, Unión Panamericana, Washington, D.C., 1959, vi + 60 pp., folded chart.

Valenzuela, Gilberto, *Bibliografía guatemalteca y catálogo general de libros, folletos, periódicos, revistas, etc.* . . . . Guatemala, [Tipografía Nacional], 1961–1964. 8 vols. (Colección bibliográfica

del III Centenario de la Introducción de la Imprenta en Centro América, 3, 4, 5, 6, 7, 8, 9, and 10.) Arranged by years. Most entries are annotated. Vols. 1–5 by Gilberto Valenzuela, "padre," vols. 6–8 by Gilberto Valenzuela Reyna.

[1], 1821–1830. 1961. 319 p.
[2], 1831–1840. 1961. 206 p.
[3], 1841–1860. 1961. 189 p.
[4], 1861–1900. 1962. 483 p.
[5], 1901–1930. 1962 [i.e. 1963.] 537 p.
[6], 1931–1940. 1963. 288 p.
[7], 1941–1950. 1964. 383 p.
[8], 1951–1960. 1964. 573 p.

Nos. 1 and 2 of the *Colección bibliográfica* are as follows:

1. O'Ryan, Juan Enrique, *Bibliografía guatemalteca de los siglos XVII y XVIII*, 2nd ed., Guatemala, Ministerio de Educación Pública, 1960.
2. Medina, José Toribio, *La imprenta en Guatemala, [1660–1821]*, 2nd ed., Guatemala, Tipografía Nacional 1960.

Haiti

Haiti became independent from France in 1804, and had the jurisdiction of the Dominician Republic united with it in the period 1820–1844. The Haitian section of J. B. Childs, *Memorias of the Republics of Central America and of the Antilles,* the part on Haiti of *A Guide to the Official Publications of the Other American Republics,* and Bissainthe's *Dictionnaire* . . . with the supplements constitute the most extensive record available of Haitian government publications.

HAITI BIBLIOGRAPHY

Bissainthe, Max. *Dictionnaire de bibliographie haïtienne*, Scarecrow Press, Washington, D.C., 1951, x + [1055] pp. Entries to December 1949. Entries under Haiti, pp. 137–177. Periodical and serial publications of Haiti, pp. 759–857. Supplemented from time to time by Bissainthe in *Conjonction* Institut Français d'Haiti, Port-au-Prince, as follows:

1950–1951, in No. 81/2.
1952, in No. 77/78.
1953, in No. 76.
1954, in No. 73/74.
1955, in No. 72.
1956, in No. 67/8.
1957, in No. 70/71.
1958, in No. 75.
1959, in No. 79/80.
1960–1961, in No. 94/5.
1962–1964, in No. 98.

Haiti, "Budget de fonctionnement de l'exercice . . . ," in *Le Moniteur journal officiel de la République d'Haiti*, Numéro extraordinaire. Annual.

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 13. Haiti*, Segunda edición, Junio de 1961, Union Panamericana, Washington, D.C., 1961, vi + 62 pp.

[Neuburger, Otto], *A Guide to the Official Publications of the Other American Republics. XII. Haiti,* The Library of Congress, Washington, D.C., 1947, 25 pp. (Library of Congress, Latin American Series, No. 23.)

Honduras

Honduras became independent in 1821, but formed part of the Republic of Central America, 1824–1839. J. B. Childs, *Memorias of the Republics of Central America and of the Antilles* describes the principal executive departments, changes, and memorias to about 1930. The part on Honduras of *A Guide to the Official Publications of the Other American Republics* attempts to present an overall statement of the various agencies and their publications to about 1946, so far as is available from the collections and catalogs of the Library of Congress. For 1961 and 1962–1963 the Biblioteca Nacional de Honduras, Tegucigalpa, edited the *Anuario bibliográfico hondureño,* including government publications in the classified arrangement.

HONDURAS BIBLIOGRAPHY

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 14. Honduras,* Segunda edición, Octubre de 1954, Instituto Interamericana de Estadística, Unión Panamericana, Washington, D.C., 1954, 34 pp.

[Neuburger, Otto], *A Guide to the Official Publications of the Other American Republics. XIII. Honduras,* The Library of Congress, Washington, D.C., 1947, 31 pp. (Library of Congress, Latin American Series, No. 29.)

Mexico

Mexico became independent in 1821, the war of independence having begun in 1810. Undoubtedly the best and most comprehensive overall description of the government agencies and their publications to about 1936 is contained in Ker's work, based to a considerable extent on first-hand investigation in Mexico City, and is continued in part by Fernández Esquivel. Interest created for the holding of the Feria del Libro y Exposición Nacional del Periodismo at Mexico City in 1943 brought into print retrospective catalogs of six agencies. A study by Edwin H. Carpenter, Jr., entitled "Government Publication in late Eighteenth Century Mexico" in the *Papers of the Bibliographical Society of America,* Vol. 42, 1952, draws attention to quite rare government publications of the colonial period here, as well as elsewhere in Latin America, only very meagerly recorded for the most part.

MEXICO BIBLIOGRAPHY

Fernández Esquivel, Rosa María, *Las publicaciones oficiales de México: Guía de publicaciones periódicas y seriadas, 1937–1967,* México, 1967, 269 pp. (Universidad Nacional Autónoma de México, Facultad de Filosofía y Letras, Seminario de Investigaciones Bibliotecológicos. [Pub-

licaciones.] Serie B, No. 4.) "Tesis profesional para obtener el título de licenciado en bibliotecología." A continuation of Ker. A project for recording the monographic official publications from 1937 to date is reported to be under way.

Gonzáles Sánchez, Silvino M., *Algunas fichas para una bibliografía general de la Secretaría de la Defensa Nacional,* México, 1943, 206 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Ker, Annita Melville, *Mexican Government Publications, A Guide to the More Important Publications of the National Government of Mexico, 1821–1936.* U.S. Govt. Printing Office, Washington, D.C., 1940, xxi + 333 pp. At head of title: Library of Congress. On account of this publication, no part for Mexico appeared in the collection *A Guide to the Official Publications of the Other American Republics.* Ker is continued by Fernández Esquivel.

Mesa, Rosa Quintero, *Latin American Serial Documents, Vol. 4. Mexico,* University Microfilms, Ann Arbor, Michigan, 1970, xxi + 351, 4 pp.

Mexico, Depto. de Salubridad Pública, *Bibliografía . . . , México,* 1943, 63 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Mexico, Secretaría de Comunicaciones y Obras Públicas, *Bibliografía . . . 1891–1943,* México, 1943, 189 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Mexico, Secretaría de la Economía Nacional, *Publicaciones oficiales . . . (1933–1942),* México, [1943], 75 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Mexico, Secretaría de Hacienda, *Bibliografía . . . 1821–1942,* México, 1943, 226 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Mexico, Secretaría del Patrimonio Nacional, *Directorio del poder ejecutivo federal . . . ,* Secretaría del Patrimonio Nacional, México. Government directory. The editions of 1947, 1948, 1949, 1950, 1951, and 1956, edited by the Dirección Técnica de Organización Administrativa of the Secretaría de Bienes Nacionales e Inspección Administrativa (now the Secretaría del Patrimonio Nacional) appeared under the title *Directorio del gobierno federal de los Estados Unidos Mexicanos.* Under the present title, editions for 1961, 1963, 1965, and 1968 have appeared.

Mexico, Secretaría del Trabajo y Previsión Social, *Bibliografía . . . ,* México, 1943, 32 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Saldivar, Gabriel. *Bibliografía de la Secretaria de Relaciones Exteriores,* México, 1943, 96 pp. "Biblioteca de la Feria del Libro y Exposición Nacional del Periodismo, 1943."

Nicaragua

Nicaragua became independent in 1821 and was a part of the Republic of Central America, 1824–1839. The principal executive departments to about 1930 with their memorias are given in J. B. Childs, *Memorias of the Republics of Central America and of the Antilles.* The part on Nicaragua in *A Guide to the Official Publications of the Other American Republics* attempts to present the overall picture up to about 1946 of all government agencies and of their publications from the catalogs and collections of the Library of Congress. Many of the earlier government publications of Nicaragua are recorded in *A Bibliography of Books and Pamphlets Published in Nicaragua (with 1942 or earlier as Date of Publication), to be Found in Certain Private Libraries of Nicaragua* (Managua, 1943, 157 pp.), published by the American Library of Nicaragua.

NICARAGUA BIBLIOGRAPHY

De Noia, John, *A Guide to the Official Publications of the Other American Republics. XIV. Nicaragua,* The Library of Congress, Washington, D.C., 1947, 33 pp. (Library of Congress, Latin American Series, No. 27.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. 16. Nicaragua,* Segunda edición. Julio de 1956, Instituto Interamericana de Estadística, Unión Panamericana, Washington, D.C., 1956, vi + 47 pp.

Panama

Panama declared its independence from Colombia in November 1903. J. B. Childs, *Memorias of the Republics of Central America and of the Antilles* furnishes a statement of the principal executive departments with their memorias from the beginning to about 1930. The part on Panama in *A Guide to the Official Publications of the Other American Republics* attempts to present an overall picture of the government agencies and their publications to about 1946, so far as the information was available from the catalogs and collections of the Library of Congress.

PANAMA BIBLIOGRAPHY

De Noia, John, *A Guide to the Official Publications of the Other American Republics. XV. Panama,* The Library of Congress, Washington, D.C., 1947, 34 pp. (Library of Congress, Latin American Series, No. 22.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 17. Panamá,* Segunda edición, Marzo de 1958, Instituto Interamericana de Estadística, Unión Panamericana, Washington, D.C., 1958, vi + 73 pp., folded chart.

Panama, Dirección General de Planificación y Administración, *Manual de organización del gobierno de Panamá,* Panamá, 1961, 202 pp. Processed.

Panama City, Biblioteca Nacional, *Guía de organismos oficiales y sus publicaciones,* Panama, 1960, 29 pp. Mimeographed.

Paraguay

Paraguay became independent from Spain in 1811. Printing seems to have been introduced there only in the 1840s. During 1865–1870 the country suffered the disastrous war against the Triple Alliance. The volume by J. B. Childs on Paraguay of *A Guide to the Official Publications of the Other American Republics* presents an overall picture of various branches of the government and their various agencies with their publications from the beginning to about 1946.

PARAGUAY BIBLIOGRAPHY

Asuncion. Universidad Nacional. Escuela Paraguaya de Administración Pública. *Manual del Gobierno Paraguayo,* [2nd ed.]. Asuncion, 1965, vii + 90 pp.

Childs, James Bennett. *A Guide to the Official Publications of the Other American Republics. XVI. Paraguay.* The Library of Congress, Washington, D.C., 1947. 61 pp. (Library of Congress, Latin American Series, No. 15.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 18. Paraguay,* Segunda edición, Septiembre de 1959. Union Panamericana, Washington, D.C., 1959, vi + 44 pp.

Peru

Peru declared its independence from Spain in 1821, but war ensued until 1824. The Peru part of *A Guide to the Official Publications of the Other American Republics* attempts to present an overall statement, from the beginning to about 1945–1946, of the various branches of the government, the agencies, and their publications insofar as the information was available in the catalogs and collections of the Library of Congress. The record of subsequent government publications can be traced for the most part in the *Anuario bibliográfico peruano,* edited by the Biblioteca Nacional, Lima.

PERU BIBLIOGRAPHY

De Noia, John, *A Guide to the Official Publications of the Other American Republics. XVII. Peru,* The Library of Congress, Washington, D.C., 1947, 90 pp. (Library of Congress, Latin American Series, No. 36.) For a record of subsequent official publications, consult the *Anuario bibliográfico peruano* (Biblioteca Nacional, Lima). Certain important retrospective contributions to the bibliography of Peruvian official publications have appeared in the *Boletín bibliográfico, Publicado por la Biblioteca de la Universidad Nacional de San Marcos de Lima,* especially in Vols. 3 (1928), and 7, 12, 22 (1950).

Peru, Oficina Nacional de Racionalización y Capacitación de la Administración Pública, *Guía del Gobierno Peruano,* [2nd ed.], Lima, 1966, 296 pp.

Salvador (El Salvador)

El Salvador became independent in 1821 and formed part of the Republic of Central America, 1824–1939. J. B. Childs, *Memorias of the Republics of Central America and of the Antilles,* presents the record of the principal executive departments and their memorias to about 1930. The El Salvador part in *A Guide to the Official Publications of the Other American Republics* attempts to present an overall statement of the various branches of the government, the agencies, and their publications to about 1945–1946 insofar as they are available from the catalogs and collections of the Library of Congress.

SALVADOR (EL) BIBLIOGRAPHY

De Noia, John, *A Guide to the Official Publications of the Other American Republics. X. El Salvador,* The Library of Congress, Washington, D.C., 1947, 64 pp. (Library of Congress, Latin American Series, no. 19.)

Interamerican Statistical Institute, *Actividades estadísticas de las naciones americanas. No. 10. El Salvador,* Segunda edición, Marzo de 1959, Unión Panamericana, Washington, D.C., 1959, vi + 48 pp.

Salvador, Dirección General de Bibliotecas y Archivos, "List of Official Author Headings of the Government of El Salvador," in *Tenth Seminar on the Acquisition of Latin American Library Materials. Final Report and Working Papers,* Washington, 1966, Vol. 2, pp. 231–256.

Salvador, Imprenta Nacional, *Nómina de las obras editadas en la Imprenta Nacional y existentes en el archivo de la misma,* [San Salvador, 1943], 56 leaves, typewritten.

Uruguay

Uruguay's first constitution was adopted in 1830, independence having been recognized in 1828. The Uruguay part of *A Guide to the Official Publications of the Other American Republics* attempts to present an overall record of the various branches of the government, the agencies, and their publications to about 1945–1946 insofar as the information was available in the catalogs and collections of the Library of Congress. This can be supplemented by the work of Musso for the legislative branch to 1965.

URUGUAY BIBLIOGRAPHY

De Noia, John, and Glenda Crevenna, *A Guide to the Official Publications of the Other American Republics. XVIII. Uruguay,* The Library of Congress, Washington, D.C., 1948, 91 pp. (Library of Congress, Latin American Series, No. 37.)

Musso Ambrosi, Luis Alberto, *Bibliografía del Poder Legislativo desde sus comienzos hasta el año 1965. Mandada publicar por Resolución del Senado del 14 de junio de 1966,* Montevideo, 1967, 236 pp. At head of title: República Oriental de Uruguay. Cámara de Senadores. Also issued with a new title page by the Centro de Estudios del Pasado Uruguayo, Montevideo.

Venezuela

Venezuela's independence was proclaimed in 1811. From 1821 to 1830 it was united with Nueva Granada (now Colombia) and Ecuador as the Republic of Colombia (Gran Colombia). The Venezuela part of *A Guide to the Official Publications of the Other American Republics* attempts to present an overall record of the various branches of the government, agencies, and their publications to about 1946–1947 insofar as information seemed to be available in the catalogs and collections of the Library of Congress. Subsequent government publications can be traced in publications of Biblioteca Nacional, Caracas, so far as deposited there. On the centenary of the Battle of Ayacucho, the famous Venezuelan bibliographer Manuel Segundo Sánchez did a bibliography of the publications of the Ministerio de Hacienda to the early 1920s.

VENEZUELA BIBLIOGRAPHY

Interamerican Statistical Institute. *Actividades estadísticas de las naciones americanas. No. 22. Venezuela,* Segunda edición, Mayo de 1966, Unión Panamericana, Washington, D.C., 1966, vi + 78 pp.

Neuburger, Otto. *A Guide to the Official Publications of the Other American Republics. XIX. Venezuela.* The Library of Congress, Washington, D.C., 1948. 59 pp. (Library of Congress, Latin American Series, No. 34.) So far as official publications are deposited in the Biblioteca Nacional, Caracas, they have been recorded in the *Anuario bibliográfico venezolano*, which began with 1942 and was discontinued with 2 volumes for 1949–1954, and in the mimeographed semiannual *Indice bibliográfico de la Biblioteca Nacional*, beginning with 1956, continuing at least through 1965.

Venezuela. Comisión de Administración Pública. *Manual de organización, base legal, atribuciones, estructura y funciones del Poder Ejecutivo* [Caracas], 1963. 341 pp. —2nd ed., 1966, xxiv + 605 pp. Government organization manual.

Venezuela, Ministerio de Hacienda. *Bosquejo histórico de la vida fiscal de Venezuela; ofrenda del Ministerio de Hacienda en el primer centenario de la Batalla de Ayacucho*, Caracas, 1924, xxii + 167 pp. Consists mainly of an exhaustive bibliography of the official publications of the Ministry of Finance prepared by the well-known bibliographer, the late Manuel Segundo Sánchez. Also issued in English as *Historical Sketch of the Fiscal Life of Venezuela.*

Venezuela. Oficina Central de Coordinación y Planificación. *Catálogo de series estadísticas*, Caracas, 1965, xiii + 492 pp. At head of title: Oficina Central de Coordinación y Planificación, Ministerio de Fomento: Dirección General de Estadística y Censos Nacionales.

LIBERIA

Liberia was established as a sovereign state in West Africa in 1847. Although there is a Government Printing Office at the capital, Monrovia, there has never been any centralized control over distribution and sale of government publications, and indeed there was relatively little known of Liberian government publications until the appearance of the following:

Holsoe, Svend E., "A Bibliography of Liberian Government Documents," *African Studies Bulletin* (Boston, Mass.), **11**(1), 39–62 (1968); **11**(2), 149–194 (1968).

MALAGASY REPUBLIC

Madagascar became a member state in the French Community as the Malagasy Republic in October 1958. From 1960 when it became a sovereign state, government publications have been subject to the "dépôt légal," with the difficulties inherent in this, and are included in the *Bibliographie annuelle de Madagascar*, prepared by the Bibliothèque Universitaire, Tananarive, with the assistance of the Bibliothèque Nationale, beginning with 1964. There is an Imprimerie Nationale, formerly the Imprimerie officielle. Use of the vernacular Malagasy language seems to be increasing.

MALAGASY REPUBLIC BIBLIOGRAPHY

Malagasy Republic. *Annuaire national de la République Malgache, 1961–*, [Societe des Quatre Points Cardinaux, Paris].

1961–63, edited by the Vice-Présidence du Gouvernement.

1964–, edited by the Service Général de l'Information.

U.S. Library of Congress. African Section, *Madagascar and Adjacent Islands, A Guide to Official Publications,* compiled by Julian W. Witherell. Reference Department. General Reference and Bibliography Division. Library of Congress. Washington. D.C., 1965. xiii + 58 pp.

Madagascar, pp. 1–20.
Comoro Islands, p. 20.
Réunion, pp. 20–21.
Mauritius, pp. 30–44.
Seychelles. pp. 44–47.

MAURITIUS

Mauritius in the Indian Ocean, known before 1810 as the Isle de France. became independent on March 12, 1968. The following furnishes the fullest record available of the government publications, both retrospective and current:

Toussaint, Auguste. *Bibliography of Mauritius, 1502–1954, Covering the Printed Record, Manuscripts, Archivalia and Cartographic Material,* [by] A. Toussaint, Chief Archivist, [and H. Adolphe, Assistant Archivist], Esclapon, Port Louis, 1956. xvii + 884 pp. "Government and semi-official publications, 1810–1954." pp. 249–398. The official publications of the earlier French period to 1810 are included in the chronological order of the early imprints. Continued in the *Annual report* of the Archives Department.

NETHERLANDS

The Kingdom of the Netherlands dates from 1815. In the *General Catalogue* of the British Museum, Department of Printed Books, Vol. 170, Columns 64–291, the government publications are arranged under the Netherlands, with the following chronological subdivisions:

Netherlands before 1581.
Southern Provinces. 1581–1793.
United Provinces. 1581–1795.
Batavian Republic. 1795–1806.
Kingdom of Holland, 1806–1810.
United Netherlands. 1813–1815.
Kingdom of the Netherlands. 1815–.

The full annual bibliography of Netherlands government publications by the Royal Library, The Hague. only began with 1929. The problem and need for a full retrospective bibliography would seem to present many complexities. In the national book trade bibliography some government publications have been included under title or personal author. often without mention of the agency. In the past many government publications seem to have been collected. used and preserved in administrative libraries, and may even at times appear in the Royal Archives as a part of official records. There is a government printing office (Staatsdrukkerij). and a central publications sales office (Staatsuitgeverij). but some government publications (particularly maps and charts) are printed or reproduced in separate agency printing offices or elsewhere. They are not available at the central publications office and are not included in its periodical announcement list.

NETHERLANDS BIBLIOGRAPHY

Franken, T. J. H., *Nederlandse periodieke overheidspublikaties*, Uitgeverzfonds der Bibliotheekvereenigingen. 's Gravenhage, 1959. 15, [75] pp. Bibliotheekstudies, monografieën over praktische en theoretische problemen van het bibliotheekvak. 2.) Based on F. K. van Iterson's work of the same title.

Hague. Koninklijke Bibliotheek. *Bibliografie van in Nederland verschenen officiële en semi-officiële uitgaven*, Staatsuitgeverij. 's-Gravenhage. 1930–. Vol. 1, 1929, to date. Previous to Vol. 24, 1953, had the title: *Nederlandse overheidsuitgaven*. . . . Includes the provinces and, for the period before 1940, also the East and West Indies. Strives toward completeness, including the various agencies and institutions supported or subsidized by the government, but does not include the individual documents of the two chambers of the Staten-Generaal, which are indexed fully in the series of consolidated *Alphabetisch register* to the proceedings of Parliament, beginning with one for 1847–1853.

Netherlands, *Staatsalmanak voor het Koninkrijk der Nederlanden* . . . . Staatsdrukkerij- en Uitgeverijbedrijf, 's Gravenhage, (previous to 1958: Nijhoff), 1808, 1815 to date, annual. Edited at the Ministerie van Binnenlandse Saken.

NEW ZEALAND

New Zealand had its origin as a British colony in 1840, and became a dominion in 1907.

The Government Printer, Wellington, has issued a monthly list of publications since 1953, and apparently in 1971 began to make arrangement for a library deposit system of current government publications. In addition, some agencies have separate arrangements for printing, reproduction, and distribution, particularly maps and charts. From the early period of Parliament, the *Appendices to the Journals of the House of Representatives* constitute the series of sessional or parliamentary papers. These are also distributed separately at time of printing; the series of cumulative indexes are the key to these. For the other earlier government publications, a record is often to be found in the two-volume *Catalogue of the General Assembly Library* (Wellington, 1897) with supplement (1899), and with lists of accessions, 1899/1902–1940/41. In the *Copyright Publications*, edited periodically by the General Assembly Library beginning with 1933–1934, which gave way to the *New Zealand National Bibliography* in 1967, there was a separate section for government publications beginning in 1946. The National Library Act of 1965, effective April 1, 1966, combined the General Assembly Library, the Alexander Turnbull Library, and the National Library Service as the National Library of New Zealand. The first published volume of the *New Zealand National Bibliography to the Year 1960*, with A. G. Bagnall as chief editor and compiler (Government Printer, Wellington, 1969, Vol. 2, 1890–1960, A–H, xvi + 604 pp.) does include government publications except periodicals, annual reports, and separate parliamentary papers.

NEW ZEALAND BIBLIOGRAPHY

New Zealand, House of Representatives, *Index to the Appendices to the Journals of the House of Representatives of New Zealand, 1854 to [1963]*, Government Printer, Wellington, 1915–1965, 5 vols.

1. 1854–1913.
2. 1914–1922.
3. 1923–1938.
4. 1939–1953.
5. 1954–1963.

Annual reports and many other documents appear currently for distribution in separate form with the Appendix numbering and are collected later in the bound volumes of the Appendices. The Indexes constitute a most important key to New Zealand government publications.

Wilson, J. O., "The Papers of Parliament," *New Zealand Libraries*, **25**, 213–224 (1962). Mr. Wilson was chief librarian, General Assembly Library, Wellington.

NIGERIA

Nigeria, the former colony and protectorate of Nigeria, in West Africa, became a Federation in 1954; on October 1, 1960 it became independent; and on October 1, 1963 it became a Republic. In May 1967 the regions were replaced by 12 states.

NIGERIA BIBLIOGRAPHY

Nigerian Publications, [**1–18**], 1950/52–1969, *Current National Bibliography*, Compiled in the Ibadan University Library, Ibadan University Press. [Ibadan], 1953–1970, 18 vols. Cumulated national bibliography, including state as well as federal government publications. being continued by the National Library of Nigeria. Lagos.

U.S. Library of Congress, African Section, *Nigeria, A Guide to Official Publications*, compiled by Sharon Burdge Lockwood, Reference Department, General Reference and Bibliography Division, Library of Congress, Washington, D.C., 1966, xii + 166 pp. "The first [part] includes the documents issued by Nigerian governments from the establishment of Lagos in 1861 to the amalgamation of the Northern and Southern Protectorates in 1914. The second covers publications of the federal and regional governments from 1914 to 1965, and of the Southern Cameroonian Government."

PAKISTAN

Pakistan was constituted August 14, 1947 from British India, including Baluchistan, East Bengal, North-West Frontier Province, Sind, West Punjab, and the States acceded to Pakistan; in 1956 it became an Islamic Republic. Originally the capital was Karachi, but in 1970 transferred to Islamabad. There has been a Government of Pakistan Press at Karachi, and the manager of publications issues a *Catalogue of the Government of Pakistan Publications* with occasional supplements. Beginning with July/December 1962 (as a part of the Public Law 480 Project of the Library of Congress) the American Libraries Book Procurement Centers, Karachi-Dacca, has edited the monthly *Accessions List: Pakistan*, including government publications.

PAKISTAN BIBLIOGRAPHY

Datta, Rajeshwari. *Union Catalogue of the Government of Pakistan Publications held by Libraries in London, Oxford and Cambridge.* Mansell, London, 1967. 64 pp. From the Centre of South Asian Studies, University of Cambridge.

Moreland, George Boulton, and Akhtar H. Siddiqui. *Publications of the Government of Pakistan, 1947–1957.* Institute of Public and Business Administration, University of Karachi, Karachi, 1958. iv + 187 pp. Endeavors to record all publications of the national government of Pakistan through December 1957.

The Pakistan National Bibliography, ... Government of Pakistan Directorate of Archives and Libraries. National Bibliographical Unit, Government of Pakistan Press, Karachi, 1966–. Annual volume for 1962 was published in 1966, for 1968 in 1970. Includes government publications.

PHILIPPINES

The Republic of the Philippines was established July 4, 1946, having been for the previous years the Philippine Commonwealth. The Philippine Islands were transferred from Spain to the United States in December 1898 following the Spanish-American War. Although there is a government Bureau of Printing in Manila, there is no central control over printing, sales, and distribution of government publications.

PHILIPPINES BIBLIOGRAPHY

Manila, National Library, Legislative Reference Division. *Checklist of Publications of the Government of the Philippine Islands, September 1, 1900 to December 31, 1917,* Compiled by Emma Osterman Elmer, chief of the Public Documents Section, Bureau of Printing, Manila, 1918, 288 pp. Continued by the following: Bibliographical Society of the Philippines, *Checklist of Philippine Government Documents, 1917–1949,* Compiled by Consolación B. Rebadavia, Edited by Natividad P. Verzosa and Pacífico M. Austria, University of the Philippines Library, Quezon City, 1960, 817 pp. Processed. *Checklist of Philippine Government Documents, 1950,* The Library of Congress, Washington, D.C., 1953, 62 pp.

Manila, National Library, Public Documents, Exchange and Gift Division, *Checklist of Philippine Government Publications, 1964, 1965–66,* Manila, 1965–, mimeographed.

Philippine Bibliography, 1963–1964. Rizal Diliman, The Library, University of the Philippines, 1965–, 1963–64, 1965, 1966–67, mimeographed. Includes government publications.

Philippines, Office of Public Information, *Official Directory of the Republic of the Philippines,* Bureau of Printing, Manila, 1946–, irregular.

Philippines, Office of Public Information, *Republic of the Philippines Government Manual, 1950,* First edition revised to June 15, 1950, Bureau of Printing, Manila, 1950, viii + 785 pp.

Philippines, Office of Statistical Coordination and Standards, *Annotated Bibliography of Official Statistical Publications of the Philippine Government,* Manila, 1963, 25 leaves, mimeographed. (OSCAS Monograph No. 1.)

Philippines, University of the Philippines, Institute of Public Administration, *List of Philippine Government Publications, 1945–1958,* Manila, 1959–1960, 2 parts, mimeographed.

1. *Depts. of Agriculture and Natural Resources, Commerce and Industry, Education, and Labor,* by Andrea C. Ponce and Jacinta C. Yatco.
2. *Depts. of Finance, Foreign Affairs, Health, and Justice,* by Jacinta Y. Ingles and Ursula G. Picache.

The planned third part was not issued.

POLAND

Poland was declared independent in November 1918, uniting the Polish territory in Russia with that from the Austro-Hungarian Monarchy and from Germany. From September 1939 to 1944 the Polish Republic was under a German occupation government, and during this period a Polish government in exile existed. An independent government was reestablished in 1945, and in the elections early in 1947 Poland became Communist dominated. One must not forget the Kingdom of Poland until its partition in the late eighteenth century between Russia, the Austro-Hungarian Monarchy, and Prussia, and then again after the Congress of Vienna, and particularly the paucity of information that exists on the government organization and the government publications of this earlier period. One page was devoted to the government serial publications of the Tsarstvo Pol'skoe under Russia in the *List of the Serial Publications of Foreign Governments, 1815–1931* (New York, 1932), but did not include the eighteenth century and earlier, as contrasted with five pages for the republic, 1918–1931.

Currently the periodical national bibliography *Przewodnik bibliograficzny; Urzędowy wykaz drukówowydanych w Polskiej Rzeczypospolitej Ludowy,* edited by the Biblioteka Narodowa, Instytut Bibliograficzny, Warsaw, includes government publications without distinguishing the entries in any way and without the ordinary use of corporate author headings.

The following agency catalog of government publications, covering a 50-year period, would seem to indicate the need, as well as general utility, of a general inventory of government publications for the same period:

Poland, Glówny Urząd Statystyczny, *Bibliografia wydawnictw Glównego Urzędu Statystycznego, 1918–1968,* Warsaw, 1968. 466 pp. Bibliography of the publications of the Central Office of Statistics. 1918–1968.

PORTUGAL

Portugal became a republic in October 1910, having previously been a monarchy that had existed since the twelfth century. Under the constitution of March 19, 1933, Portugal is a unitary and corporative republic with a single legal political organization.

Probably the most extensive record of Portuguese government publications is furnished by the heading "Portugal" in the *General Catalogue* of the British Museum, Department of Printed Books, Vol. 193, columns 563–636.

From time to time the Imprensa Nacional, Lisbon, issues a *Catálogo de livros à venda;* there have been a few agency catalogs, especially for map and chart producing agencies having separate reproduction facilities. The Imprensa Nacional itself was established by Royal Act of December 24, 1768 as the Impressão Régia (also called Régia Oficina Tipográfica), taking over the printing office of Miguel Manescal da Costa, one of the eleven printing offices at Lisbon in that period. Previously the laws and government publications seem in good part to have been printed in the Oficina Régia Silviana. According to *A Imprensa Nacional de Lisbõa . . . 1768–1912* by Jose Vitorino Ribeiro (Lisbon, 1912), the Impressão Régia between 1769 and 1801 printed 1,230 volumes plus many separate pamphlets and other government publications. About 1823 the Impressão Régia was given the present name Imprensa Nacional.

Current government publications were included in the periodical national bibliography *Boletim de bibliografia portuguesa,* edited by the Biblioteca Nacional, Lisbon, although not marked in any way, but that publication was suspended in 1964.

PORTUGAL BIBLIOGRAPHY

Anuário comercial de Portugal . . . , Empresa Nacional de Publicidade, Lisbon, Annual. A government directory is at the beginning of each edition. 1968 is the 87th edition. It had been published under the present title since 1893. A few years previous it had been established under the title *Almanaque comercial de Lisboa* or *Anuario de Portugal.*

Lisbon, Biblioteca Nacional. *Repertório das publiçacões portuguesas, 1961* (incluindo o suplemento referente ao ano de 1962), Biblioteca Nacional, Libson, 1964, vii + 419 pp. Continued by supplements, at least for 1964 and 1965. Includes with very few exceptions all Portuguese serial publications received by the National Library of Portugal as of 1961–1962 from daily to annual and irregular with full information, including the beginning date or the earliest date in the library. Arranged by the UDC. For official titles, indexing includes the names of ministries and other agencies. Certain classes such as 31, 34, 35 are largely official publications. Many of these may connect with the Portugal section of Gregory's *List of the Serial Publications of Foreign Governments, 1815–1931,* but still there have been many changes in both government and publications during the period since 1931. As to monographic publications, the representation in the *Boletim de bibliografia portuguesa,* edited by the Biblioteca Nacional since 1935, seems gradually to have become more and more comprehensive, although seemingly not always indexed under agency very fully or carefully. This source may to some extent well be extended by reference to various editions of the catalogs and lists of publications of the Imprensa Nacional, Agencia Geral do Ultramar, Direcçao de Hidrografia e Navegação, Secretariado Nacional de Informação, etc. The Biblioteca Nacional, on the inauguration of its new building on April 10, 1969, held an exhibit of Portuguese publishing activity, issuing in 1969 a catalog (*Actividade editorial do Estado: Catálogo da Exposição*) describing more than 2,000 of about 13,000 printed in 1926–1966, and the separate *Bibliografia das publicações oficials portuguesas* with the eventual intent to continue the annual bibliography of Portuguese government publications.

RHODESIA

Rhodesia declared its independence in 1965 and its status as a republic in 1970. Originally the area was part of the territories of the British South Africa Company, which was established in 1889 and named Rhodesia in 1895. In 1923 Northern Rhodesia (independent as Zambia) and Southern Rhodesia (now Rhodesia) were taken over by the British Government. During the period 1954–1963, there was a Federation of Rhodesia and Nyasaland, embracing Southern Rhodesia as its principal member. When Northern Rhodesia became an independent republic as Zambia in October 1964, the name Southern Rhodesia was shortened to Rhodesia. At Salisbury, the capital, there is a government Department of Printing and Stationery, with a Government Publications Sales Office. From 1966 government publications have been recorded in the annual *Rhodesia National Bibliography, List of Publications Deposited in the Library of the National Archives,* Salisbury. The annual *Government List,* from the government Department of Information, includes a considerable section of "Statutory Bodies," (for 1971 more than seven pages), presenting a usual feature of modern government quite aside from the agencies of the legislative, executive, and judicial branches.

RHODESIA BIBLIOGRAPHY

U.S. Library of Congress, African Section, *The Rhodesias and Nyasaland. A Guide to Official Publications,* compiled by Audrey A. Walker, Reference Department, General Reference and Bibliography Division, Library of Congress, Washington, D.C., 1965, xv + 285 pp.

Central African Interterritorial Agencies prior to Federation, pp. 1–6.
Federation of Rhodesia and Nyasaland, pp. 7–46.
Northern Rhodesia [independent as Zambia], pp. 47–117.
Southern Rhodesia (later simply Rhodesia), pp. 118–193.
Nyasaland [independent as Malawi], pp. 194–228.

Wilding, Norman W., *Catalogue of the Parliamentary Papers of Southern Rhodesia and Rhodesia, 1954–1970 and the Federation of Rhodesia and Nyasaland, 1954–1963,* University College of Rhodesia, Salisbury, 1970, viii + 161 pp. (Department of Political Science, Source Book in Political Science, No. 6.) Continuation of Willson.

Willson, Francis Michael Glenn, *Catalogue of the Parliamentary Papers of Southern Rhodesia, 1899–1953,* F. M. G. Willson and Gloria C. Passmore, assisted by Margaret T. Mitchell and Jean Willson, Department of Government, University College of Rhodesia and Nyasaland, Salisbury, 1965, xxx + 484 pp. (Source Book Series.) Continued by Wilding.

ROMANIA (RUMANIA)

Romania had its origin in the union of the principalities of Moldavia and Walachia in the mid-nineteenth century. Its independence was recognized in 1879–1880, and it became a kingdom. At the end of World War I it acquired Bessarabia, Bukovina, and Transylvania. In 1947, soon after the end of World War II, it changed from a kingdom to a Communist dominated People's Republic, and under the constitution of August 21, 1965 became a Socialist Republic, with close relationships between party agencies and government agencies.

Currently the periodical national bibliography edited by the Biblioteca Centrală de Stat, Bucharest, includes government publications but with the relative coverage not being determined; it does not seem to distinguish them in any way and does not seem to use corporate headings.

For the past, government publications in periodical form are included in the alphabetical arrangement by title, without indexing by agency, in the bibliography of Romanian periodicals of the Biblioteca Academiei Republicii Socialiste România; Vol. 2 appeared at Bucharest in 1969 under the title *Publicatiile periodice românesti (ziare, gazete, reviste), Tome II: Catalog alfabetic: 1907–1918, supliment: 1790–1906*. Such lengthy entries as 724 (*Desbaterile Adunârei Deputatilor*) and 1608 (*Monitorul Oficial*, which dates from 1832) may be particularly noted. Volume I, covering the period 1820–1906, appeared in 1913.

SCANDINAVIAN COUNTRIES

Each of the Scandinavian countries, with the exception of Iceland, has an annual catalog of government publications, beginning with Sweden for 1931–1933, next Denmark for 1948, followed by Norway for 1956, and finally by Finland for 1961, in contrast with Latin America where the coverage is mainly retrospective.

Denmark

From 1948 to date marks the full coverage of the government publications of the Kingdom of Denmark. Previously the national bibliography had included a few publications from time to time from the government agencies, particularly those that might be cited under personal author and that might be obtainable through the book trade. The official yearbook from 1734 and the three publications of the Royal Archives (covering the organization of the government 1848–1935) would afford a foundation on which to work for retrospective coverage, plus a few agency lists and administrative library catalogs.

DENMARK BIBLIOGRAPHY

Denmark, *Kongelig Dansk hof- og statskalender, Statshåndbog for Kongeriget Danmark for året* . . . , A/S J. H. Schultz Universitets-Bogtrykkeri. Copenhagen. Annual from 1734.

Denmark, Rigsarkivet, *Den civile centraladministration, 1848–1893*. Af G. N. Kringelbach. I kommission hos C. A. Reitzel. Copenhagen, 1894, xiv + 274 pp.

Denmark, Rigsarkivet, *Den civile centraladministration, 1894–1913*, ved L. Laursen, Reitzel, Copenhagen, 1921, 116 pp.

Denmark, Rigsarkivet, *Den civile centraladministration, 1914 35* . . . , ved Harald Jørgensen. Levin & Munksgaard, Copenhagen, 1936, xiii + 210 pp.

[Hansen, Karl Anders], *Oversigt over beretninger, betænkninger m. v. udgivet ved statens foranstaltning i tiden 1848–1929*, Trykt hos J. H. Schultz a-s., Copenhagen, 1929, 86 pp. A provisional print arranged in subject groups. A chronological checklist of government commission reports, 1839–1928, appears on pp. 34–46, 1928 supplement to the catalog of the Rigsdagensbibliotek.

Impressa publica Regni Danici, Bibliografi over Danmarks offentlige publikationer. Udgivet af Danmarks Institut for International Udveksling. . . . Copenhagen, 1948 to date. Annual. "Bibliography of the printed papers and publications financed wholly or in part by the Danish

Government, as well as a bibliography of publications issued and subsidized by the municipalities of Copenhagen and Arhus."

Finland

Finland became a republic in 1918. From the sixteenth century to 1809 it had been a grand duchy under Sweden, and in 1809 it had been transferred to Russia. Finnish and Swedish are official languages.

FINLAND BIBLIOGRAPHY

Finland, Eduskunta, Kirjasto, *Valtion komiteanmietinnöt; Statenskommitteebetänkanden, 1930–1960,* Toimittaneet—redigerad av Aune Auttit, Kaarina Einola, Helsinki, 1966 [i.e., 1967], 326 pp. (Eduskunnan Kirjaston Julkaisusa, 4.) The record of Finnish government committee reports from 1961 to date is contained in the annual *Valtion virralliajulkaisut—Statens officiella publikationer—Government Publications in Finland,* edited by the Finnish Parliamentary Library beginning with 1961. Earlier official publications can often be traced in the various editions of the general sales catalog of the Valtion—Julkaisutoimisto, and also in the catalog of the Finnish Parliamentary Library with its various supplements.

Suomen valtiokalenteri vuodeksi . . . , Julkaissut Helsingin Yliopisto, Oy Weilin & Göös Ab, Helsinki. Annual government directory. Began in 1869. Also issued in Swedish as *Finlands statskalender för året . . . ,* Uitgiven av Helsingfors Universitet. Began in 1811.

Norway

Norway became independent from Denmark in 1814, and was under personal union with Sweden through the king until 1905.

Beginning in 1956 the Universitetsbibliotek in Oslo has edited the annual bibliography of Norwegian official publications entitled *Bibliografi over Norges offentlige publikasjoner,* including in alphabetical agency order the official publications as well as those subventioned by the government. Maps are registered. The second section is devoted to a useful analysis of the separate documents in the Stortingsforhandlinger. There are separate indexes by persons and by subjects.

Previous to 1956 a bibliography of governmental and parliamentary papers by Vilhelm Haffner entitled *Innstillinger og betenkninger fra kongelige og parlamentariske kommisjoner, departementale komitéer m.m.,* in two volumes, covers the years 1814–1924 and 1924–1934. Indexes by persons and subjects. For the interval 1935 and 1956 when *Bibliografi over Norges offentlige publikasjoner* came into being, the chronological compilation of *Innstillinger og betenkninger fra kongelige og parlamentariske kommisjoner, departementale komitéer m.m.* may be consulted only by means of an annual list of contents. Norwegian parliamentary records, both official and private, published from 1814–1962, are registered by O. C. Torp in *Bibliotek og forskning* (*Library Research*), **12,** 279–292 (1963).

So far as the official publications are recorded in the alphabetical *Norsk bokfortegnelse* (*The Norwegian National Bibliography*), they appear under title, personal author, or institution according to the international cataloging rules, with only a few exceptions. "Norsk bokfortegnelse" appears as a weekly list of new issues in *Norsk bokhandlertidende*, then in annual and quinquennial cumulations. In addition, the annual and the 5-year volumes have separate systematic sections classified by Dewey Decimal Classification.

NORWAY BIBLIOGRAPHY

Haffner, Vilhelm, *Instillinger og betenkninger fra kongelige og parlamentariske kommisjoner, departementale komitéer m. m. 1814–1924*. Fabritius & sønners boktrykkeri, Oslo, 1925, xlvi + 823 pp. *1925–1934, med tilleg for tidsrummet 1814–1924*, Olso 1936, xviii + 203 p.

Norway, *Norges statskalender for året 1875–*. Aschehoug, Oslo. Annual.

Norway, Statistisk Sentralbyrå, *Fortegnelse over Norges offisielle statistik, 1828–1950. Catalogue de la statistique officelle de la Norvège pour les années 1828 à 1950*. Aschehoug, Oslo, 1951, 97 pp. (Norges officielle statistik, XI, 63.) Prepared by Sigrid Madshus.

Oslo, Universitet, Bibliotek, *Bibliografi over Norges offentlige publikasjoner. Utgitt av Universitetsbiblioteket i Oslo*, Universitetsforlaget, Oslo, 1956 to date. Annual.

Sweden

Since 1931 a royal proclamation has required the deposit of a copy of all government publications in the Library of the Riksdag (Parliament), Stockholm. Owing to delays in getting the deposit program fully effective, there being no central government printing office nor any central control over government printing and distribution of publications, the Library of the Riksdag started its *Årsbibliografi över Sveriges offentliga publikationer* under way with a combined volume for the years 1931–1933. From 1967 onward duplicated (mimeographed, etc.) publications are also included. Government publications so far as they are included in the periodical *Svensk Bokförteckning*, prepared at the Royal Library (Kungl. Biblioteket), Stockholm, and its cumulations, are entered under personal author, editor, compiler, or title; no corporate entries are used, in keeping with the Swedish cataloging rules.

More or less regular issuance of government publications, particularly laws, proclamations, and orders, seems to have been started in the 1500s. Even the present official gazette (*Post-och inrikes tidningar*), published now by the Swedish Academy, as is also the government directory, apparently dates in one form or another from the newspaper *Ordinari post tijdender* in 1645.

For government publications previous to 1931, resort might be the *List of the Serial Publications of Foreign Governments, 1815–1931*, to the *General Catalogue* of the British Museum, Department of Printed Books, Vol. 233, columns 128–283, to the Library of the Riksdag printed catalog and supplements, to very elusive agency catalogs and lists of publications as well as to agency library catalogs. The need for fully pinpointing the field previous to 1931 would seem to become more painfully evident as the years go by, as is true for most other jurisdictions mentioned in this article.

SWEDEN BIBLIOGRAPHY

Andrén, Nils Bertel Einar, *Modern Swedish Government*, Almqvist & Wiksell, Stockholm, [1961], 252 pp. The aim is to present a comprehensive introduction to Swedish government, mainly on the national level, in English.

Höppener, Johan Per, *Förteckning uppå alla kongl. placater, förordningar påbud resolutioner, privilegier, manifester, fredsfördrager, relationer, domar och allmenne handlingar som ifrån år 1522 til och med år 1750 på kongl. befallning af trycket serskilt utgångne äro. Allmenheten til tjenst framgifven*, Stockholm, 1754. 547 pp. The collection *Kongl. placater, resolutioner, förordningar och påbud samt andra allmänna handlingar*, printed in small quarto leaves and pamphlets from about 1522 to 1824, with annual indexes, apparently contained the great mass of official publication during the period.

Sweden, *Sveriges statskalender 1877– utgiven efter Kungl. Maj:ts nådigste förordnande av dess Vetenskapsakademi*, Almqvist & Wiksells boktrykkeri AB, Uppsala, Stockholm. Annual.

Sweden, Riksdagen, Bibliotek, *Årsbibliografi över Sveriges offentliga publikationer, utgiven av Riksdagsbiblioteket*, Stockholm, 1931–1933 to date. Annual. Each number contains a listing of the contents of *Statens offentliga utredningar* and of *Sveriges officiella statistik*. For the older parliamentary documents, there are consolidated indexes beginning with 1809.

Sweden, Riksdagen, Bibliotek, *Förteckning över statliga utredningar 1904–1945*, Östergotlands dagblads tryckeri, Norrköping, 1953. vi + 1405 pp. A continuation of the two volumes by Erik Thyselius entitled *Förteckning öfver komitébetänkanden*, covering the period 1809–1903 and published 1896–1904.

SOUTH AFRICA

On May 31, 1910, the four provinces of Cape of Good Hope, Natal, Orange Free State, and Transvaal became the Union of South Africa, with Pretoria as the seat of the government and Cape Town the seat of the legislature. English and Afrikaans are the official languages. On May 31, 1961, the Union of South Africa became the Republic of South Africa.

Under Treasury Instruction No. 2102, "Unless otherwise prescribed all departments shall obtain all stationery, printing, etc., required by them from the Government Printing and Stationery Department . . ." Since September 1947 the Government Printer, Pretoria and Cape Town, has inserted once each month in the *Government Gazette—Staatskoerant* a list entitled "Official Publications issued . . . , Offisiële publiskasies uitgegee . . . ," which also appears separately in mimeographed form.

Government publications, both national and provincial, and now those from South West Africa, are included currently in *S.A.N.B.*, *South African National Bibliography, Suid-Afrikaanse nasionale bibliografie*, published by the State Library (Staatsbiblioteek), Pretoria.

In 1969 the first volume of the *Bibliography of South African Government Publications—Bibliografie van Suid-Afrikaanse staatspublikasies* appeared, prepared by the Division of Library Services of the Department of National Education.

Under section 39 of the Copyright Act of 1965, copyright subsists in government publications of the state, as well as in such works remaining unpublished, and under section 46, applying to all copyrighted works, a copy of each government publication upon issue is required to be delivered "to each of the following libraries, namely the Library of Parliament, Cape Town, the South African Public Library, Cape Town, the Library of the Natal Society, Pietermaritzburg, the State Library, Pretoria, and the Bloemfontein Public Library."

SOUTH AFRICA BIBLIOGRAPHY

Guide to State Departments and Certain Statutory Bodies, Harold MacCarthy Publications, Johannesburg, 1967 to date. Annual (except 1969).

South Africa, Department of National Education, Division of Library Services, *Bibliography of South African Government Publications*. [1]—[*Bibliografie van Suid-Afrikaanse staatspublikasies*], Pretoria, 1969–. Prepared in English and Afrikaans, the two official languages. The Department of Cultural Affairs, under which Vol. 1 was prepared, has been absorbed in the Department of National Education.

1. *Department of Statistics, 1910–1968*.
2. *Agriculture*, probably, not to appear until the end of 1972.

South Africa, House of Assembly, *Index to the Manuscript Annexures and Printed Papers of the House of Assembly, including Select Committee Reports and Bills, and also to Principal Motions and Resolutions and Commission Reports, 1910–1961*. [Government Printer, Cape Town], 1963, 631 pp. The separate Printed Annexures to the Minutes of Proceedings and the separates of the other documents referred to are made available currently for distribution and sale, and then collected sessionally for binding for official use. For the Cape of Good Hope, there is a similar *Index to the Annexures and Printed Papers of the House of Assembly, 1854–1897*, printed 1899; 1898–1903, printed 1903; and 1904–1910, printed 1910. *Cape Official Publications, 1854–1910*, by Reuben Musiker and N. Musiker, is scheduled for publication by Irish Univ. Press. For Natal there is a similar inventory of Sessional Papers, 1854–1910, in the work compiled by Colin de B. Webb under the title *A Guide to the Official Records of Natal*, University of Natal, Pietermaritzburg, 1965, 318 pp. For the South African Republic, there is P. J. Schutte's *'n Beredeneerde gesamentlike katalogus van groenboeke van die Zuid-Afrikaanse Republiek*, State Library, Pretoria, 1966, as its Bibliographies, No. 9.

SPAIN

Official printing and publication in Spain, as in many other countries having a long and complicated administrative history, has been decentralized and is far from well defined and recorded. Government publications have apparently existed from soon after the introduction of printing from movable type in Spain in the fifteenth century. The present official gazette, *Boletín oficial del Estado—Gaceta de Madrid*, had its origin in 1661. [*III Centenario de la Gaceta de Madrid*, Madrid, 1961, 32 pp. (*Boletín oficial del Estado. Gaceta de Madrid*, 1961, num. 50, suppl.)] A government directory was first printed in 1722 and continued to the 1930s.

In connection with the executive agreement between the United States and Spain for the comprehensive exchange of government publications concluded May 8, 1950. J. B. Childs completed a one-volume *Preliminary Survey of Official Publications of Spain*, (typed) at the Library of Congress in 1955. Since this showed so much promise and utility, it was determined to produce in a limited edition, a full survey as *Spanish Government Publications after July 17, 1936,* as 2,304 pages in six volumes reproduced from 1965 to 1969.

At the same time some articles Childs had written, plus other related materials from UNESCO and elsewhere, aroused so much interest in the problem at the Servicio de Documentación of the Spanish Ministry of Information and Tourism that it was there determined to prepare the *Censo de las publicaciones oficiales españolas, 1939–1964,* with Ricardo de la Cierva as coordinator. Of the *Censo,* five volumes in seven appeared from 1966 through 1971, leaving the Ministerio de la Gobernación, the Ministerio de Justicia, and the Secretaría General del Movimiento for the sixth and final volume, with the promise of a supplementary *Censo* from 1965 onward.

In 1941 the second edition of the Spanish official cataloging rules included fifteen additional rules for corporate entries, making a considerable advance over the first edition in 1902; the pattern has been continued in the third edition, 1964, with twenty-two rules now on the application of the corporate entry. Thus the record in current monthly national legal deposit bulletin and the annual national bibliography (*Bibliografía española*), which began in 1958, use corporate entries. Indeed, the index to the annual volume for 1968 has six columns of entries under España (Spain) and subdivisions.

Some steps seem to have been taken in the more recent period toward the coordination of government printing and publication, stressing the importance of the printing and publishing facility of the *Boletín oficial del Estado* (official gazette) as a national service and creating "servicios de publicaciones" in each of the ministries and in various other large agencies.

As to the retrospective picture from the late 1930s, one must remember that the government of the Kingdom of Spain has had a great number of complexities from the fifteenth to the twentieth centuries, including two republics, 1870–1875 and 1931–1936, all affecting publications in one way or another; also, there was never enforced any systematic provision for legal deposit of printed material such as exists today. One of the most extensive retrospective records of Spanish government publications is in the *General Catalogue* of the British Museum, Department of Printed Books, Vol. 226, columns 702–911.

SPAIN BIBLIOGRAPHY

Childs, James Bennett, *Spanish Government Publications after July 17, 1936. A Survey,* Vols. I–VI, Reference Department, Serial Division, Library of Congress, Washington, D.C., 1965–1969. Processed. Preceded by a typed survey 1936–1956. Limited reference circulation, edition of fifty copies. Available on microfilm and in xerox reproduction order from the Photoduplication Service, Library of Congress.

I. *Jefatura del Estado. Presidencia del Gobierno. Ministries. Ministerio de Agricultura,* 1965, 439 pp.

II. *Ministerio del Aire. Ministerio de Asuntos Exteriores. Ministerio de Comercio. Ministerio de Educación Nacional [through Dirección General de Archivos y Bibliotecas],* 1966, pp. 441–832.

III. *Ministerio de Educación Nacional* [*continued*]. *Ministerio del Ejército. Ministerio de la Gobernación. Ministerio de Hacienda* [*through Direccion General de Aduanas*], pp. 833–1248, 1967.

IV. *Ministerio de Hacienda* [*continued*]. *Ministerio de Información y Turismo*, 1968, pp. 1249–1659.

V. *Ministerio de Información y Turismo* [*continued*]. *Ministerio de Justicia. Ministerio de Marina. Ministerio de Obras Públicas*, 1969, pp. 1661–2063.

VI. *Ministerio de Trabajo. Ministerio de la Vivienda. Index*, 1969, pp. 2065–2304.

F.A.C. Ficheros de altos cargos Madrid, 194–. A card directory of the Spanish government with monthly supplements, arranged alphabetically by ministries, and under each by the various dependencies. In two groupings prior to 1971–1972, the administrative being marked with the letter "A". Includes the Movimiento Nacional (earlier FET y de las JONS). Established by Angel Estirado Pérez, probably in the early 1940s.

Spain. *El Gobierno informa*. [Editora Nacional, Madrid], 1964. 4 vols., maps, folded diagrams, folded tables. At head of title: 25 aniversario de la paz española. A consolidated report, ministry by ministry and other agencies, for the period 1939–1964, assembled as a part of the celebration of the Junta Interministerial Conmemorativa del XXV Aniversario de la Paz Española.

1. *Política de paz: La Jefatura del Estado. La Presidencia del Gobierno. El Movimiento Nacional. Los Asuntos Exteriores. La Gobernación del País*, 732 pp.
2. *Sociedad Española: La Justicia. La Educación Nacional. El Trabajo. La Información y Turismo. La Vivienda*, 839 pp.
3. *Defensa Nacional: El Ejército. Las fuerzas navales. La aviación*, 533 pp.
4. *Nueva economia: La Hacienda. Las Obras Públicas. La Industria. La Agricultura. El Comercio*, 735 pp.

The section for each ministry was also reprinted for distribution, probably mainly by the ministry.

Spain, *Guía oficial de España*. Madrid, 1722–1930, Annual. Originally: *Kalendario manual y guia de forasteros*. Later: *Guía de forasteros* . . . .

Spain, Ministerio de Información y Turismo. *Censo de las publicaciones oficiales españolas, 1939–1964*, [Editora Nacional, Madrid], 1966–. Prepared in the Servicio [later Sección] de Documentación with Ricardo de la Cierva as coordinator.

1. *Ministerios de Trabajo, Información y Turismo, Vivienda*, 1966, xlv + 612 pp.
2. *Ministerios de Ejército, Marina, Aire*, 1966, xxx + 437 pp.
3¹. *Ministerios de Agricultura, Comercio, Hacienda*, 1966, xxxiv + 531 pp.
3². *Ministerios de Industria, Obras Públicas*, 1966, pp. [534]–937.
4. *Ministerio de Educación Nacional*, 1966, 2 vols. (xxiv + 1230 pp.)
5. *Ministerio de Asuntos Exteriores, Jefatura del Estado, Presidencia del Gobierno*, 1971, xxiii + 575 pp.

Spain, Presidencia del Gobierno. Centro de Información Administrativa. *Guía de la administración del Estado*, [B O E, Ediciones], Madrid, 1965, 507 pp., folded administration charts. Government organization manual, preceded by a provisional *Guía de la administración española*, 1960, and by the *Guía de la administración civil del Estado*, 1963, both prepared by the Oficina de Información, Presidencia del Gobierno. The many changes made in late 1967 are fully accounted for in *Organización de la administracion civil del Estado*, B O E, Madrid, 1968, 408 pp.

SRI LANKA: See CEYLON

SWITZERLAND

Beginning in 1946, the Schweizerische Landesbibliothek, Bern, has been editing the annual *Bibliographie der schweizerischen Amtsdruckschriften: Bibliographie des publications officielles suisses.* The entries are reproduced for government publications from the two classified series of the current Swiss national bibliography *Das Schweizer Buch: Le Livre suisse: Il Libro svizzero* (*Bibliographisches Bulletin der Schweizerischen Landesbibliothek,* Bern, 1901–) in a grouping by agency, first the national government, then separate sections for cantons, cities, and church bodies. In both series of *Das Schweizer Buch,* Swiss government publications are distinguished by the mark "●," and publications of international intergovernmental organizations by the mark "▲." Beginning in 1967–1968, the coverage of the *Bibliographie der schweizerischen Amtsdruckschriften* was broadened to include the elusive government publications that escaped record in *Das Schweizer Buch.* Periodical government publications are recorded in a separate bibliography, *Periodische Amtsdruckschriften vom Bund, Kantonen und Gemeinden,* the first issue of which appeared in 1968 with revisions about every 5 years.

Probably the most extensive retrospective record can be found in the *List of the Serial Publications of Foreign Governments, 1815–1931,* approximately 7 pages, and in the *General Catalogue* of the British Museum, Department of Printed Books, Vol. 233, columns 574–596.

As to the possibility of a retrospective bibliography, Schweizer says

> Die Erstellung und Bearbeitung einer retrospekti ven Amtsdruckschriften-Bibliographie der Schweiz . . . ist aber mit beträchtlichen Aufwand verbunden. Einmal müssten Fachleute wie z. B. Historiker, Juristen usw. zur Mitarbeit beigezogen werden. Ein weiteres Problem stellt in der Schweiz sicherlich die Finanzierung eines solchen Werkes.

The problem is further complicated by the use in government publications of three official languages: French, German, and Italian. The fourth national language, Romansch, is not used for national government publications.

SWITZERLAND BIBLIOGRAPHY

Bern, Schweizerische Landesbibliothek. *Bibliographie der schweizerische Amtsdruckschriften. Bibliographie des publications officielles suisses.* Schweizerische Landesbibliothek. Bibliothèque nationale suisse, Bern, 1947–. Vol. 1, 1946 to date. With 1967–1968, an attempt is made to go far beyond the coverage of *Schweizer Buch,* and to have from 1968 a 5-year supplement recording the periodical and serial titles.

Schweizer, Therese, *Die Amtsdruckschriften in der Schweizerischen Landesbibliothek. Definition—Sammlung—Bibliographie,* Schweizerische Landesbibliothek, Bibliothèque nationale suisse Bern, 1970, 64 leaves, mimeographed.

Switzerland, *Staats-Kalender. Annuaire fédérale. Annuario federale,* Bundeskanzlei, Bern, 1848–, Annual.

THAILAND

The Kingdom of Siam became Thailand in June 1939. Bangkok had been the capital since the late eighteenth century. The Thai (or Siamese) language is the official language. Foreign languages are customarily only used in government publications of informational, statistical, scientific, and technical character intended to a considerable extent for circulation abroad and for those not understanding the Thai language. There is no centralization of government printing and publishing, and retrospective information about government publications seems to be quite meager. Aside from the items in the Bibliography, the Thai Library Association is sponsoring a current listing of government publications.

THAILAND BIBLIOGRAPHY

Bangkok, Thammasat University. Institute of Public Administration, *List of Thai Government Publications*, Bangkok. 1958, 43 leaves. Processed.

Bangkok, Thammasat University, Institute of Public Administration, *Thailand Government Organization Manual Series*, Bangkok, 1960–1962, 11 vols.

1. *Public Health*, 1960.
2. *Agriculture*, 1960.
3. *Cooperatives, 1960*.
4. *Justice, 1960*.
5. *Foreign Affairs, 1960*.
6. *Economic Affairs, 1960*.
7. *Communications, 1960*.
8. *Industry*, 1961.
9. *Finance*, 1961.
10. *Education*, 1962.
11. *Defence*, 1962.

Chiravadhana Chakrabandh, M. R., *Thai Government Periodical Directory*, National Library. [Bangkok], 1965, [2], 16, [2] pp.

Organizational Directory of the Government of Thailand (including Thai Government Organization Charts), 1970–, Translation and Secretarial Service, Bangkok, 1971–. Formerly prepared and issued for limited distribution only by the Public Administration Division, United States Operations Mission to Thailand of the Agency for International Development.

TUNISIA

Tunisia in North Africa is a sovereign independent republic. The monarchy, which had been a protectorate under France from 1881 to 1956, was abolished in July 1957. Arabic is the official language, with much use of French. While there is as yet no precise record of the government publications of the republic, there is an unusually good coverage for the period 1860–1955.

TUNISIA BIBLIOGRAPHY

Quéméneur, Jean, "Publications de l'Imprimerie Officielle Tunisienne (Matba'a Rasmiya) de sa fondation (1276 H/ 1860) à 1300 H/ 1882," *IBLA, Tunis, Institut des Belles Lettres Arabes*, **25**, 147–173 (1962).

Tunis, Dār al-Kūtub al-Qawmiyah, *Récapitulation des périodiques officiels parus en Tunisie de 1881 à 1955,* Tunis, 1956, 108 pp. At head of title: Royaume de Tunis, Ministère de l'Education Nationale, Bibliothèque Nationale de Tunisie, Hélène Pilipenko, Jean Rousset de Pina. Title and introduction also in Arabic, 10 pp. at end.

TURKEY

Turkey became a republic October 29, 1923 (capital at Ankara). At the end of World War I, Turkey (the Ottoman Empire), with its capital at Constantinople (Istanbul), had disintegrated. In 1928 the Latin alphabet was substituted for Arabic.

The current national bibliography *Türkiye bibliografyasī,* edited by the Millî Kütüphane Bibliografya Enstitüsü (National Library Bibliographical Institute), Ankara, includes government publications (which are indicated with an asterisk), and uses corporate headings. The first of two volumes was devoted to government publications for the period 1928–1938. Occasionally coverage by agency can be extended by special agency lists or catalogs of agency publications. In addition, there is the following detailed Turkish organization manual, in Turkish, prepared and published by the Public Administration Institute for Turkey and the Middle East, Ankara, in 1968. Somewhat less extensive versions in English appeared in 1965 and 1966:

Türkiye ve Orta Doğu Amme Idaresi Enstitüsü, *T. C. Devlet teskilâti rehberi 1968,* Universitesi Basimevi, Ankara, 1968, xiii + 812 pp. (Yayin No. 100). There have been the following earlier English publications:

1. *Organization and Functions of the Central Government of Turkey,* 1965, 408 pp.
2. *Turkish Government Organization Manual,* 1966, 572 pp.

The *Devlet Salnamesi* appeared six times between 1925 and 1941.

There was an official gazette for the empire in Arabic script, *Takvim-i-vakayi,* published at Constantinople, beginning in 1831, and somewhat similar gazettes in subordinate jurisdictions of the empire, as well as many other government publications for which there seem to be no easily available records.

UNION OF SOVIET SOCIALIST REPUBLICS

The Union of Soviet Socialist Republics (USSR) was constituted as a federal state or union at the end of 1922, with each of the union republics as a sovereign state. In January 1918 the Russian Socialist Federal Soviet Republic (RSFSR) was constituted as the only Soviet state in Russian territory; this followed the Provisional Government, which had existed in March–November 1917 after the February–March 1917 Revolution and the abdication of the emperor, and continued thus as the principal state on Russian territory until other Soviet states were organized and the union became possible in 1922, with the RSFSR still remaining the largest and most important of the present fifteen republics.

Probably the most extensive record of Russian government publications before

1917 and following is under the heading "RUSSIA" in the *General Catalogue* of the British Museum Department of Printed Books, Vol. 209, columns 577–788.

According to the paper by B. P. Kanevsky entitled "On Acquisition of Official Publications and Their Use in the State Lenin Library of the USSR," presented to the Committee on the Exchange of Official Publications of the International Federation of Library Associations (IFLA) at Moscow in September 1970, the government publications of the Soviet Union embrace "the publications of central soviet bodies, proceedings of the meetings of the supreme legislative body of the Soviet Union—the Supreme Council of the USSR, sets of legislative and diplomatic papers, codes, statistical handbooks and similar materials and state approved standards too. . . . As a whole, over 100 Soviet publications and about ten periodicals refer to the category of All-Union official publications," and these "are issued by different central publishing houses such as the Publishing House of Juridical Literature and Publishing House of Political Literature."

The late David Judson Haykin (in the May 1932 Prefatory Note to "RUSSIA" in the *List of the Serial Publications of Foreign Governments, 1815–1931*), stated that "There is no Russian bibliography in the field of government documents." This still seems to remain substantially true after 40 years.

Currently the periodical classified national bibliography *Knizhnai͡a letopis,* edited by the Vsesoi͡uznai͡a Knizhnai͡a Palata (All-Union Book Chamber), includes government publications without distinguishing them, and apparently uses corporate headings rather sparingly. In some entries the name of the publishing house may furnish the only clue as to the possible official character of publications. An exact understanding of the official cataloging code in the section devoted to corporate headings may furnish some clue to the extent of the coverage.

For the government publications of serial or periodical nature, the following Bibliography may furnish the most practical way of making a search or inventory.

UNION OF SOVIET SOCIALIST REPUBLICS BIBLIOGRAPHY

Smits, Rudolf, *Half a Century of Soviet Serials, 1917–1968. A Bibliography and Union List of Serials published in the USSR*, Library of Congress, Washington, D.C., 1968. 2 vols. Russia (RSFSR and USSR) as author, Vol. 2, pp. 1021–1085.

U.S. Library of Congress, Division of Documents, "Russia, Including Imperial Russia, Grand Duchy of Finland, Kingdom of Poland, the Provisional Government, and Soviet Russia, with Appendices: Key to Abbreviations Commonly Used in Soviet Russian Publications; Publications of the Communist Party." Compiled in the Division of Documents, Library of Congress [by Vladimir Gsovskii and George Novossiltzeff], in *List of the Serial Publications of Foreign Governments,* 1815–1931. Winifred Gregory, ed., New York, 1932, pp. 577–667.) For the period 1901 onward, the following should be consulted for fuller and additional information: Leningrad. Publichnai͡a Biblioteka. *Bibliografii͡a periodicheskikh izdaniĭ Rossii, 1901–1916.* Leningrad, 1958–1961. 4 vols. The index volume (Vol. 4) contains on pp. [203]–267 the special index to corporate publishers, organizations, and government agencies. Added title-page: Bibliography of Periodicals of Russia, 1901–1916 . . . .

Vsesoi͡uznai͡a Knizhnaia Palata, *Periodicheskai͡a pechat SSSR 1917–1949: bibliograficheskiĭ ukazatel',* Moscow, 1955–1963, 10 vols. in 11. Classified. Does not include newspapers, *1950–*

1954 gg, . . . , Moscow, 1955, 500 pp. *1955–1960 gg*, . . . , Moscow, 1962–1963, 2 vols; Vol. 1, periodicals, has an index by agencies.

VIETNAM

The republic of Vietnam, with its capital at Saigon, was established in 1955. It is the only one of the states formerly a part of French Indo-China having a substantial record of its government publications; these publications are mainly in the official Vietnamese language.

VIETNAM BIBLIOGRAPHY

Saigon, Hoc-viên Quóc-gia Hành-chánh. *Niên-giám hành-chánh, 1971*, Saigon [1971], 443 pp. Viet Nam Government Organization Manual by the National Institute of Public Administration, of which an edition appeared in English for 1957–1958 with a Supplement for 1960.

Vietnam, Nha Văn-Khò và Thư-Viện Quốc-gia. *Thư-tịch về ấn-phẩm-công Việt-Nam, Bibliography on Vietnamese Official Publications (1960–1969)*, Directorate of National Archives and Libraries, Saigon, [1971], cover-title, [3] 134 leaves. Processed. The *National Bibliography of Vietnam*, beginning with November 1, 1967, does not include government publications.

YUGOSLAVIA

Yugoslavia had its origin at the end of World War I on December 1, 1918 as the Kingdom of the Serbs, Croats, and Slovenes with its capital at Belgrad, uniting the kingdoms of Serbia and Montenegro with the former Austro-Hungarian Croatia, Slovenia, Bosnia-Herzegovina, and Voivodina. The name was changed to the Kingdom of Yugoslavia on October 3, 1929. The independence of Serbia and Montenegro from Turkey had been recognized in 1878.

At the end of World War II Yugoslavia was proclaimed a republic (Communist dominated) on November 29, 1945 with the federal republics Serbia, Croatia, Slovenia, Bosnia and Herzegovina, Macedonia, and Montenegro, and under the Constitution of April 7, 1963 was designated a Socialist Federal Republic.

Currently the periodical, classified national bibliography *Bibliografija Jugoslavije* (1950–), edited by the Jugoslovenski Bibliografski Institut, Belgrad, includes government publications; each entry is designated beginning with 1956 by an asterisk. For the period 1945–1967 the institut has published *Jugoslavenska retrospektivna bibliografija grada: knjige, brošure i musikalije* in some twenty parts during 1969–1970.

A contribution to the study of Yugoslav government publications by Branislava Stajic in *Bibliotekar*, Belgrad, **22**, 585–593 (1970) refers to a law stating that a government publication is any printed matter published by any organ of the government as its own publication; Stajic attempts to refine the definition by bringing out into the open some experiences from general practices in the international exchange of Yugoslav government publications. There is no centralized government printing or publication office in Yugoslavia, but the official gazette establishment Službeni

List SFRJ and other similar printing or publishing establishments do the largest business in government publications.

As to the retrospective period before Yugoslavia, an article in *Bibliotekar*, **18**, 153–163 (1966) describes the history of the official gazette of Serbia (*Srpska novine*) from its beginning as a newspaper in 1834.

The two following references, the first on the various defence agency publications 1945–1968, and the second on the Liberation War and Revolution publications 1941–1945, picture vividly what needs doing badly for the whole range of Yugoslav government publications and for those of the predecessor governments of Serbia and Montenegro:

Krivokapić, Radovan V., *Bibliografija voinih izdanja, 1945–1968*. Vojnoizdavački zavod, Belgrad, 1969, 367 pp. (Vojna Biblioteka. Naši pisci.) 1,148 annotated entries of Yugoslav defense agencies publications, arranged according to the Universal Decimal Classification.

Yugoslavia, Vojnoistorijski Institut. *Bibliografija izdanja u narodnooslobodilačkom ratu, 1941–1945*, Vojnoistorijski Institut, Belgrad, 1964. 8 p. 1., 815 pp., [4] leaves. 1 port., 1 folded map. 9,558 entries of the Liberation War and Revolution of the Peoples of Yugoslavia, including government publications.

International Intergovernmental Organizations

In addition to presenting many of the same characteristics and problems as do government publications, the publications of international intergovernmental organizations have the feature of being at least one degree removed from the potential individual user. Prior to the advent of the global international intergovernmental organization (the League of Nations in 1920), these publications were addressed primarily to the specialized agencies of governments participating (such as those dealing with copyright, industrial property, postal service, standards of weights and measures, etc.). They were distributed primarily to such specialized agencies, with only occasional provision for other distribution and sale, especially to libraries and individuals.

The following seem to have been the principal international intergovernmental organizations before 1920 with origins in the nineteenth century:

International Bureau of Weights and Measures.
International Telecommunications Union.
International Union for the Protection of Industrial Property.
International Union for the Protection of Literary and Artistic Works.
International Union for the Publication of Customs Tariffs.
Interparliamentary Union.
Permanent Court of Arbitration (Hague Court).
Universal Postal Union.

Even with the usual bilingual nature of these publications it may occasionally be necessary, whenever there is desire to cite a passage in one language or the other, to compare the texts in both languages for correctness of rendering. In a certain bilingual country, the author's attention was once called to a particular law of which the two official texts as enacted did not correspond to a slight extent in several important sections, necessitating reconsideration and reenactment as corrected. The problem of assuring the correctness of the text would seem to become even more imperative with the present multilingual character of many such publications and the wider use of many languages for scholarly publication. Further, the growing number of organizations and of their publications presents increasing problems for systematic access, use, and preservation. As of 1971 there seem to be almost 250 international intergovernmental organizations functioning, and the number changes from time to time. The situation was quite different when the League of Nations came on the scene.

LEAGUE OF NATIONS

The League of Nations, which had its permanent headquarters at Geneva, Switzerland, was established in connection with the peace treaties after World War I as the first major global international intergovernmental organization "to promote international co-operation and to achieve international peace and security" (quoting from the beginning of the Covenant). It existed from January 10, 1920 to April 18, 1946, when its assets and properties were transferred to the then beginning United Nations. Originally the League of Nations had forty-nine member states, but not the United States, which subsequently participated in many important ways. The principal autonomous agencies in connection with the League were as follows:

International Cinematographic Institute.
International Institute for the Unification of Private Law.
International Institute of Intellectual Cooperation.
International Labor Organization.
Permanent Court of International Justice.

The inability of the League to restrain the aggression in Manchuria and the invasion of Ethiopia as well as some subsequent quite equally violent actions elsewhere negated one of the main purposes of that organization and led inevitably to World War II.

The main development of the League had fostered the concept of the international civil servant, and at the same time its experience in the publications field was most useful later. Many small publications with stress on the use of the foolscap folio, for then and for many generations past the prevailing pattern for British parliamentary publications, soon led to the device of a systematic overall sales number for the League publications; thus institutions acquiring complete sets could bind for permanent preservation after the pattern of the British parliamentary sessional papers. Since English and French were the official languages of the League, there were editions in both languages as well as bilingual publications. By 1938 a depository system had been developed whereby 137 institutions each received a free copy of all League of Nations sales publications. As Aufricht states on p. 16 of the *Guide*, There are very few libraries, with the exception of libraries of foreign offices, which have complete sets of League of Nations documents. This is not surprising when one recalls that the all-inclusive subscriptions averaged 142 in the years 1928–1938: the maximum of 156 was reached in 1930. Apparently the high costs of binding and cataloguing the documents as well as the extraordinary shelf space required to house the legal-size documents were deterrents to the acquisition of complete League collections.

Yet, despite such disadvantages, other features, such as the approach toward global registration and publication of treaties and other international agreements recorded in the 205 volumes of the League of Nations *Treaty Series*, have made their impress and have been continued.

LEAGUE OF NATIONS BIBLIOGRAPHY

Aufricht, Hans, *Guide to League of Nations Publications: A Bibliographical Survey of the Work of the League, 1920–1947*, Columbia Univ. Press, New York, 1951, xix + 682 pp. "Although this *Guide* is designed to give a selective rather than a complete list of League documents, it is hoped that it constitutes a fuller and more systematic survey of League publications than has been available heretofore. Unlike the League's *Catalogue of Publications* and Marie J. Carroll's *Key to League of Nations Documents Placed on Public Sale, 1920–1929*, which, with their respective supplements, are confined to documents on public sale, the *Guide* lists documents which were never on public sale, at least not as separate documents." Beyond the League proper, the *Guide* also treats of the publications of the principal autonomous organs as follows: Permanent Court, International Labor Organization, International Institute of Intellectual Cooperation, International Cinematographic Institute, and International Institute for the Unification of Private Law. A. C. von Breycha-Vauthier's *Sources of Information; A Handbook on the Publications of the League of Nations*, published at London and New York in 1939, analyzing league documents through December 1, 1938, had been preceded by similar treatments by the same author published in French, German, Czech, and Russian.

Carroll, Marie Juliette, *Key to League of Nations Documents Placed on Public Sale, 1920–1929*, World Peace Foundation, Boston, 1930, 340 pp. *1930*, [*1931, 1932–1933*], *First–*[*Third*] *Supplement*, World Peace Foundation, Boston, 1931–1934, 3 vols.

1934–1936, Fourth Supplement, Columbia Univ. Press, New York, 1938, [xxiii] + 188 pp. *Supplement, 1937–1947, Prepared in the Law Library of Columbia University, Listing the Documents in Its Collection*, [New York, 1953], [63] pp., typewritten.

League of Nations, Publications Department, *Publications issued by the League of Nations . . . . 1935*, Publications Department, League of Nations, Geneva, 1935, 312 pp. Contains publications for sale through the end of May 1935. There were four supplements for 1936, 1937, 1938, 1939, and one for 1940–1945. The catalog was also issued in French since there were French editions of most League of Nations publications as well as English editions or bilingual editions. An annual *Subject List of Documents Distributed to the Council and Members of the League of Nations*, including many documents not placed on sale, was prepared by the Distribution Branch, and printed for the years 921 through 1928, and continued thereafter only in periodical mimeographed lists.

UNITED NATIONS

The charter of the United Nations was drafted and signed at the United Nations Conference on International Organization, held at San Francisco, California, April 25–June 26, 1945 (*Documents of the Conference*, London, New York, 1945–1955, 22 vols.), the main objective being "to maintain international peace and security." From August to December 1945 the Preparatory Commission sitting in London, England, arranged for the first meeting of the General Assembly there in January 1946 with fifty-one states' members, which has been increased to 132 as of late 1971. In August 1946 the headquarters were temporarily located at Lake Success, New York, and remained there until moving to its present permanent headquarters in New York City during 1950–1951. In April 1946 the assets and properties of the League of Nations were transferred to the United Nations, whose organization is much more complex than that of the League of Nations. The principal organs are as follows:

General Assembly.
Security Council.
Economic and Social Council.
Trusteeship Council.
International Court of Justice.
Secretariat.

Further, there are the following specialized agencies:

Food and Agriculture Organization, Rome.
Intergovernmental Maritime Consultative Organization, London.
International Atomic Energy Agency, Vienna.
International Bank for Reconstruction and Development (World Bank), Washington, D. C.
International Civil Aviation Organization, Montreal.
International Development Association, Washington, D.C.
International Finance Corporation, Washington, D.C.
International Labor Organization, Geneva.
International Monetary Fund, Washington, D.C.
International Telecommunication Union, Geneva.
United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris.
Universal Postal Union, Bern.
World Health Organization, Geneva.
World Meteorological Organization, Geneva.

English and French are the working languages for the United Nations, and are used for publications. For the General Assembly, Chinese, English, French, Russian, and Spanish are official languages, and are used in publications of the General Assembly.

United Nations document numbers as well as sales numbers provide devices whereby those acquiring substantially complete sets may treat these for preservation and binding after the fashion of the British parliamentary sessional papers. Indeed, the Dag Hammarskjold Library of the United Nations has prepared in a second revision (1970) a 171-page *List of United Nations Document Series Symbols* (ST/LIB/SER B/5/Rev. 2) (United Nations Publication Sales No.: E.70.I.21.), furnishing a key to the rather complex scheme of notation.

In addition to having United Nations sales publications at its Sales Section both in New York and Geneva as well as through other distributors, the United Nations has established a widespread system of depository libraries; these libraries receive the material free of charge with the requirement that it be kept in good order and be made accessible readily without charge. In each member state there is at least one depository, and where required up to fifty additional libraries in the member state, with also one in each state not a member of the United Nations. Parliamentary libraries are added on request. Details as to the framework of the depository system are contained in the 12-page processed *Report on the 1966 Questionnaire to Depository Libraries* (ST/LIB/20, 4 January 1968). As of late 1970 there seems to be a total of about 350 depositories according to the 27-page geographically arranged *List of Depository Libraries Receiving United Nations Material* (ST/LIB/12/Rev. 5, 1 January 1971). The year of designation, the type of material received, and the language edition are indicated for each depository. Although the International Court of Justice, The Hague (one of the principal organs of the United Nations) is autonomous in depository and sales arrangements, its depositories usually include the United Nations depositories.

For the period 1946 through 1949, documents and publications have been recorded and indexed in the various parts of the *Check List of United Nations Documents*, issuance of which began in 1949. The *United Nations Documents Index* began in 1950. From 1950 through 1962 the monthly numbers included both the United Nations and specialized agencies documents and publications, and appeared only in an English edition. Beginning with 1963 the documents and publications of the specialized agencies have been omitted, and the monthly numbers are superseded at the end of the year by two separate annual cumulations, the *Cumulative Checklist* and the *Cumulative Index*. In 1970, the *UNDEX United Nations Documents Index* was also initiated, for the time being for official use only. The *UNDEX*, prepared through the computer, was to cover at first "selected portions of documents and publications issued currently by the United Nations, mostly in the economic, social and human rights fields," in four languages; the plan was that by the end of 1972 *UNDEX* might include all United Nations documents and publications in every field, and then replace the existing *United Nations Documents Index*.

To help overcome the difficulties faced by the users now and in the future of the various constantly increasing and complex series of United Nations documents, often reproduced on a not too durable quality of paper, the United Nations Archives has assembled a whole collection in English and prepared a microfilm. Copies are available either from the United Nations Archival Unit, New York, or from the World Peace Foundation, Boston. Inventory record of the documents in English reproduced on microfilm of the period 1946 through 1967 is contained in *Archives Special Guide*, No. 14 (1963) and *Supplement*, No. 1 (1970). There is an indication of those not issued, not available, restricted, or for limited use, or only in a language other than English.

Faced with the omission of the documents and publications of the specialized agencies from *United Nations Documents Index* beginning with 1963, the Association of International Libraries has attempted to focus attention on the possible ways of meeting the situation. Among other things the association published in the *UNESCO Bulletin for Libraries,* **21**(5), 263–270 (1967), an "Inventory of Lists, Indexes and Catalogues of Publications and Documents of Intergovernmental Organizations other than the United Nations," and has furthered the consideration of the matter in its *Newsletter.*

Also in 1967 the Food and Agricultural Organization at Rome through its Documentation Center began publishing the *FAO Documentation Current Index,* paralleled by a series of retrospective *Special Indexes.* Previously there had been from 1961 a processed checklist of documents and working papers under the title *FAO Documentation, A Quarterly List of Documents,* as well as the customary *Catalogue of FAO Publications.*

At the same time the United Nations Educational, Scientific and Cultural Organization (UNESCO) at Paris has, in addition to the usual sales catalogs, continued its processed quarterly *List of UNESCO Documents and Publications,* also in French, which began in 1951 and which includes the following four groups:

a. UNESCO documents issued from headquarters,
b. UNESCO publications issued from headquarters,
c. Documents and publications issued from one of UNESCO's regional centers or offices,
d. Works published by other publishers.

The other United Nations specialized organizations have made various efforts to cover the void created by the discontinuance of the listing of their documents and publications in the *United Nations Documents Index,* beginning with 1963.

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1. *General Assembly.* Not issued.
2, No 1. *Security Council, 1946–1949,* 1953, v + 188 pp.
3. *Atomic Energy Commission, 1946–1952,* 1953, v + 46 pp.
4. *Trusteeship Council, 1947–1949,* 1949–1951, 3 vols.
5, No. 1–3. *Economic and Social Council, 1946–1949,* 1949–1952, 3 vols.
6A, No. 1. *Economic and Employment Commission, 1947–1949,* 1952, x + 63 pp.
6B, No. 1. *Transport and Communications Commission, 1946–1949,* 1951, viii + 43 pp.
6C, No. 1. *Statistical Commission, 1947–1949,* 1951, x + 51 pp.
6D, No. 1. *Commission on Human Rights, 1947–1949,* 1952, viii + 111 pp.
6E, No. 1. *Social Commission, 1946–1949,* 1951, ix + 84 pp.
6F, No. 1. *Commission on the Status of Women, 1947–1949,* 1951, viii + 42 pp.
6G, *Commission on Narcotic Drugs.* Not issued.
6H, No. 1–2. *Fiscal Commission, 1947–1949,* 1949–1951, 2 vols.
6J, No. 1. *Population Commission, 1947–1949,* 1951, viii + 32 pp.
7A. *Economic Commission for Europe.* Not issued.
7B, No. 1. *Economic Commission for Asia and the Far East, 1947–1949,* 1951, x + 91 pp.
7C, No. 1. *Economic Commission for Latin America, 1948–1949,* 1951, viii + 41 pp.
8, No. 1. *United Nations International Children's Emergency Fund and United Nations Appeal for Children, 1946–1949,* 1953, viii + 58 pp.
9. *Secretariat.* Not issued.

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United Nations, Office of Conference Services, *United Nations Publications, 1945–1966,* [prepared by the Sales Section, Publishing Service, Office of Conference Services]. United Nations, New York, 1967, vi + 175 pp. (ST/CS/SER J/8).

Winton, Harry Nathaniel McQuillian, *Publications of the United Nations System: A Reference Guide,* Bowker, New York; Unipub, London, 1972, xc + 262 pp.

ORGANIZATION OF AMERICAN STATES

The Organization of American States, the international intergovernmental organization of the American republics, began with a series of Pan American Conferences. At the first of these, in 1889, provision was made for the International Bureau of the American Republics, Washington, D.C. In 1910 the bureau was reorganized as the Pan American Union, now functioning as the secretariat of the Organization of American States, the Charter of which was drafted at the Ninth Pan American Conference, Bogota, 1948.

On June 1, 1960, an organizational classification scheme for the official documents of the Organization of American States (OAS) was adopted, suitable for binding sets for preservation and use. Since Spanish is the principal working language of the Organization (Spanish: Organizaci6n de los Estados Americanos, referred to as OEA), the 68 page combined guide, scheme, and tables, issued in April 1961 in Spanish, had the title: *Serie de los documentos oficiales de la Organizaci6n de los Estados Americanos: Guía, esquema y cuadros explicativos de categorías.*

The first annual list and index of the official documents of the OAS (OEA) under the classification scheme appeared as a volume of almost 500 pages under the title *Documentos oficiales de la Organizaci6n de los Estados Americanos: Indice y lista general, volumen I, Enero–Diciembre 1960,* including in classified form 3,900 documents (total of 42,000 pages). The compact index to the more important documents, prepared in the Columbus Memorial Library of the Pan American Union, is on colored paper (about 140 pages at the end of the volume. For each document is indicated: the classification and language (Spanish, English, French, or Portuguese); whether the document is for limited distribution, or for sale (with price); and whether in a few instances it has been cancelled or not used.

The classification is by organization and the volume includes only the acts and documents of the OAS (OEA), the Inter-American Conferences, its council, the Interamerican Social and Economic Council, the Meetings of Ministers of Foreign Relations, specialized Inter-American conferences, and other central councils, commissions, and agencies. Informational and technical publications of the Pan American Union, secretariat of the OAS (OEA), of which separate pricelists appear, are not included, nor are the publications of the specialized agencies for public health, child welfare, geography and history, agriculture, and Indian affairs. Deposit for the documents of the OAS (OEA) may be subject to official representation through the appropriate national representative.

Among Inter-American specialized agencies is one linked to Spain, the Postal Union of the Americas and Spain, with a permanent bureau at Montevideo, Uruguay, most of its contacts being with the postal services of the member-countries.

Further, there is a regional organization, the Central American Organization of States.

WEST EUROPEAN INTERGOVERNMENTAL ORGANIZATIONS

For the special grouping of West European Intergovernmental organizations, it may be helpful to quote from the introduction to Vol. 10 (1962) of the *European Yearbook* (Published under the auspices of the Council of Europe, Nijhoff, The Hague, Vol. 1, 1955–. Usually includes a section of official publications under each agency treated.) by L. Benvenuti, the then Secretary-General of the Council of Europe.

> During the ten years which have elapsed, the scope of European activities has expanded enormously. The first volume reported on the constitutions and activities of eight organizations: in the intervening period, the number has doubled. Two of the oldest have been transformed: The Brussels Treaty Organisation into the Western European Union and O.E.E.C. into the Organisation for Economic Co-operation and Development. The principal newcomers are, of course, the Economic Community, Euratom, and the European Free Trade Association. The oldest international organisation in existence, the General Commission for the Navigation on the Rhine, is now among the contributors, as are the newer technical organisations such as the Customs Co-operation Council, the Commission for Civil Status, the European Civil Aviation Conference, "Eurocontrol," the Conference on Posts and Telecommunications and the two newest members of the European family: The European Space Research Organisation (ESRO) and the European Launcher Development Organisation (ELDO). The number of these bodies and the variety of subjects with which they deal show that consciousness of the need for European co-operation is not limited to politicians and economists but extends to almost every branch of public activity.

Neither the European regional agencies of the United Nations nor the specialized agencies of the United Nations with headquarters in Europe are treated in the *European Yearbook*.

Summary lists of the official publications of the various Western European organizations accompany the appropriate sections from year to year, thus forming the most comprehensive record extant, so far as can be ascertained. Some of the organizations do issue lists of their own publications available for sale or distribution from time to time. In the Documentary Section of the *European Yearbook*, Vol. 17 (1969), the following Western European intergovernmental organizations are treated:

1. Central Commission for the Navigation of the Rhine.
2. Benelux Economic Union.
3. Western European Union.
4. Organisation for Economic Co-operation and Development (OECD).
5. Council of Europe.
6. International Commission on Civil Status.
7. Customs Co-operation Council.
8. European Communities:
   a. European Coal and Steel Community.
   b. European Economic Community.
   c. European Atomic Energy Community (EURATOM).
9. Nordic Council.

10. European Conference of Ministers of Transport.
11. European Organisation for Nuclear Research (CERN).
12. European Civil Aviation Conference.
13. European Conference of Postal and Telecommunications Administrations.
14. European Free Trade Association.
15. European Space Research Organisation (ESRO).
16. European Space Vehicle Launcher Organisation (ELDO).

In 1949 the Council of Europe came into being at Strasbourg, France, as a forum for the development of public opinion. It has stimulated and fostered the growth of various specialized organizations and agencies.

The European Coal and Steel Community was brought into being by treaty on April 18, 1951, signed by the Federal Republic of Germany, Belgium, France, and the Grand Duchy of Luxembourg. Its seat was in the Grand Duchy of Luxembourg.

The European Economic Community* came into being by treaty at Rome on March 25, 1957, between the same powers. Its seat is in Brussels, Belgium. It has close and interweaving ties with the European Coal and Steel Community. By a parallel treaty at Rome, the European Atomic Energy Community was established with its seat also at Brussels.

A single council and a single commission was established for the three European Communities by a treaty of May 8, 1965, effective July 1, 1967. It aimed seemingly at the eventual consolidation of the three with headquarters at Brussels.

As a counterbalance to the "Common Market" established by the European Economic Community, the European Free Trade Association (EFTA) was set up by convention in 1960, concluded between Great Britain, Sweden, Norway, Denmark, Austria, Portugal, and Switzerland (Finland later became an associate member). The headquarters are in Geneva, Switzerland.

EAST EUROPEAN INTERGOVERNMENTAL ORGANIZATIONS

The Soviet Ekonomicheskoĭ Vzaimopomoshchi (SEV), often referred to in English as the Council for Mutual Economic Assistance (COMECON), was founded in January 1949 with headquarters at Moscow. It represents the people's democracies, or socialist states, of East Europe. Russian is the working language, with the languages of all the member countries being considered as official. The COMECON functions mainly through annual sessions of the council and through permanent committees in various fields, as follows (1971):

* Gordon Lee Weil, ed., *A Handbook on the European Economic Community*, Praeger, New York, Washington, London, published in cooperation with the European Community Information Service, Washington, D.C., [1965], xiv + 479 pp. (Praeger Special Studies in International Economics.) The bibliography (pp. 465–479) includes "a complete listing of official documents of the EEC which are available to the public." One must remember that in addition there are many mimeographed publications, documents for limited distribution to specialists, working papers not intended for distribution outside the EEC, etc.

1. Agriculture.
2. Chemical Industry.
3. Coal Industry.
4. Construction.
5. Coordination of Scientific and Technological Research.
6. Currency and Finance.
7. Economic Questions.
8. Electric Power.
9. Engineering Industry.
10. Food Industry.
11. Foreign Trade.
12. Geology.
13. Iron and Steel Industry.
14. Light Industry.
15. Non-Ferrous Metals Industry.
16. Oil and Gas Industries.
17. Peaceful Uses of Atomic Energy.
18. Radio Engineering and Electronics Industries.
19. Standardization.
20. Statistics.
21. Transport.

Publications may ordinarily be in Russian, the working language, or in one of the other official languages. For instance, the periodical agricultural review of the Permanent Committee on Agriculture has among other things a German edition published at Berlin, German Democratic Republic, under the title *Internationale Zeitschrift der Landwirtschaft.*

Further, among the socialist states of East Europe, various specialized intergovernmental organizations have been brought into existence, among them:

1. Central Distribution Board of the United Power Systems.
2. International Bank for Economic Cooperation.
3. International Center of Scientific and Technical Information.
4. International Organization for Economic, Scientific and Technical Cooperation in the Field of Small-Tonnage Chemicals.
5. Joint Institute for Nuclear Research.
6. Organization for Cooperation in the Bearing Industry.
7. Organization for Cooperation in the Iron and Steel Industry.
8. Organization for the Collaboration of Railways.
9. Railway Wagon Pool.
10. Warsaw Treaty Organization.

Each of these apparently has documents and publications in Russian or in one of the official languages of the member countries, and citations to the names of each may likewise occur in Russian as well as in one of the languages of the member countries.

OTHER AREAS

The League of Arab States, established in the Middle East and North Africa in 1965, has specialized agencies of the Arab States, all with Arabic as the working language. The Organization of African Unity was established in 1963, and Africa has various other regional and specialized organizations. For these and other areas. brief information is furnished by the *Yearbook of International Organizations* (Union of International Associations, Brussels, Vol. 1, 1948–).

Conclusion

A slowly but steadily increasing appreciation can be discerned of the importance of government publications as sources of information, of the complications presented by agencies and agency changes, of the intricacies developed by administrative terminology in the widening range of official languages, of their frequently rather specialized character (intended for equally specialized but necessary use), and of the necessity for current and retrospective record in some form or another as well as adequate library treatment in classification and in cataloging with the use of corporate author headings. The present overall statement, which tends to establish a method of approach in searching for data about jurisdictions and organizations not treated here for one reason or another, undoubtedly does pinpoint the importance of various factors involved such as:

1. Definition of coverage for current recording.
2. Arrangement by agency with concise statement of agency (date of establishment, authority, organization, changes, etc.).
3. Awareness of any special names or catchword designations for agencies used in popular, legislative, and mass communications.
4. Designation by asterisk or some other marking whenever government publications are recorded in general national bibliographies or elsewhere, particularly when integrated with other materials in alphabetical or classified arrangement.
5. The possibility of certain types of government publications not being recorded or controlled; even with centralized or somewhat centralized government printing and distribution, due not infrequently to changes in government programs and agency structure, there is a tendency to outstrip existing facilities, such as map printing, which require separate facilities.
6. Stress on the increased importance of attempting to orient jurisdictions toward making sufficient provision for disseminating information about all current government publications and documents as well as toward making adequate provision for a depository library system, in furtherance of the informational service of which a frequently revised government organization manual is a requisite.
7. The increasingly acute problem of current control posed by the rather continual development of international intergovernmental organization, such as the United Nations, its principal organs, and various specialized agencies, organizations outside the United Nations; and bilateral organizations; and for them to attempt to arouse an awareness of the utility of an adequate depository library system.

What the future holds will be conditioned by the considerable advances demonstrated above and by the continually imperative call for further progress.

James Bennett Childs

GRABHORN PRESS

The Grabhorn Press was operated in San Francisco from 1920 through 1965, although its antecedents, the University Press in Seattle and the Studio Press in Indianapolis, and its successor, Grabhorn-Hoyem in San Francisco, add an accessory twelve or more years to its forty-five year history. The press, founded by Edwin (1889–1968) and Robert (1900–) Grabhorn in San Francisco, ran a remarkable course in the annals of American printing, and its performance has been compared with the performances of the leaders in the fine press movement of the turn of the century.

Edwin Grabhorn, after a number of apprenticeship jobs in Indiana, went to Seattle at the age of twenty as a music typesetter—and eventual proprietor of a job-printing establishment, the University Press—but returned about 1912 to Indianapolis to start the Studio Press. This press was mainly devoted to advertising printing, but occasionally it produced small editions of works distinguished even at this early date by an indefinable quality which combined modern and allusive typography. Robert, his brother, who often assisted him at the Studio Press, went with him to San Francisco in late 1919, where they became associated in the establishment of a press in a city already boasting two fine presses—those of John Henry Nash and Taylor & Taylor, both of which were still strongly influenced by William Morris. At first the press subsisted mainly on advertising work but eventually came to the attention of the Book Club of California, an organization devoted to the ideals of fine bookmaking. This association, while it was not the principal determining factor in the subsequent acclaim of the press, helped to set a direction that pointed the brothers more and more to production of books later described with all manner of hyperboles.

As early as 1923 the press, from its selection of books printed that year, had two books chosen for inclusion in the American Institute of Graphic Arts Exhibition of the Fifty Books of the Year. Three years later the press received for its printing of *The Letter of Amerigo Vespucci* the Institute's Gold Medal Award, a coveted honor granted in previous years only to Bruce Rogers, Carl Purington Rollins, and Daniel B. Updike. After this award the reputation of the press grew rapidly beyond local boundaries. In 1928 Bennett Cerf of Random House bought the entire edition of *The Voiage and Travaile of Sir John Maundevile*, which the press was preparing for direct sale; and, following the successful reception of this book, a succession of commissions from Random House followed, notably *Leaves of Grass*, which has been acclaimed by many as one of the most perfect books ever produced in America. The Limited Edition Club's *Robinson Crusoe*, printed by the Grabhorns in 1930 with illustrations by Edward A. Wilson, further brought the press to the attention of a discriminating public.

During the early 1930s when the lucrative limited editions boom came to a standstill and when publishers and organizations ceased to commission printings, the Grabhorns found a way of holding a market for their books by issuing three series of reprintings of rare Americana. The books in these series were published to provide at modest cost works otherwise almost unavailable to libraries and collectors. The three series were published from 1932 to 1937, a total of nineteen titles, ranging in price from $1.50 to $7.50.

Adrian Wilson, the well-known San Francisco printer and book designer, wrote

> In Grabhorn books there is a sense of great space and time, of boundless resources, like the American West itself. Somehow it is possible for the Grabhorns to lavish on every volume breathtaking margins, extra colors, kaleidoscopic combinations of display types, large text types (18 pt. handset where any printer who employs an accountant would use 10 pt. linotype) and vigorous initials from the hands of artists like Valenti Angelo, Mallette Dean, and Jo Sinel. Always there is the surprise of a gift, the presentation of something far beyond expectation.

Among the natural and acquired talents of the Grabhorns was an acutely tuned sense of judgment for recognizing in the persons they employed what was superior and what could be used for optimization of desired effects. Sinel, Dean, and Angelo were only a few of the many talents—editors, illustrators, type designers, and binders—who contributed to the fine quality of Grabhorn productions. The Grabhorn Press, in many respects a kind of family enterprise, counted wives and a daughter among these contributors to excellence. Mary Grabhorn, Edwin's daughter, illustrated many of the books, including the entire Shakespeare series, produced by the press. Marjorie, Edwin's wife, often assisted in the preparation of books for binding. Jane, Robert's wife, supervised the binding of most of the books produced during the last twenty or so years of the press, but she was also, according to her husband, "occupied in proof-reading, folding printed sheets, hounding delinquent clients, writing letters and even introductions to books. . . ."

The Grabhorn Press, by extension, included within its framework a few separate enterprises, which in one way or another owed their existence to the Grabhorn brothers. The first of these was the Westgate Press, a publishing venture launched in 1929 by Robert Grabhorn and Oscar Lewis, the California historian. The founders decided to publish limited and (usually) signed editions of well-known authors, including Frank Norris, Lewis Mumford, Havelock Ellis, and Virginia Woolf. This experiment, riding the crest of fine signed editions, was ostensibly successful in its three short years but succumbed to the depression and inability to come to a satisfactory business arrangement with Edwin, who supervised the printing of the books.

The Jumbo Press, conceived by Jane Grabhorn in 1937, was a kind of private press plaything which later took on some of the serious overtones intrinsic in satire. Jumbo Press issues utilized Grabhorn types and the shop's proof-press, as well as technical assistance and advice from Robert Grabhorn. It caught the delighted attention of many of the persons who were the victims of its gentle ridicule of typographical pomposity, and Will Ransom included the Jumbo Press in *Private Presses and Their Books.*

In 1938 the Colt Press was founded by Jane Grabhorn and William Roth. Between 1938 and 1943, the Colt Press, apart from technical advice from Robert Grabhorn, was really a separate entity from the Grabhorn Press, for the books produced were externally selected, edited, designed, and printed. Books from the Colt Press covered many subject areas—western Americana, gardening, gastronomy, poetry—but eventually came to concentrate on modern American writers, two of its notable publications being Edmund Wilson's *The Boys in the Back Room* and Henry Miller's *The Colossus of Maroussi*. In 1943 the Colt Press, for a variety of reasons, principally economic ones, became absorbed by the Grabhorn Press. Subsequently, a Colt Press imprint was really a Grabhorn imprint and is so chronicled in the *Bibliography of the Grabhorn Press*.

A bibliography of the Grabhorn Press was conceived of in the middle 1930s by David Magee, the San Francisco bookseller. His problem was in finding a Grabhorn collection comprehensive enough to record, but fortunately Elinor Raas Heller, eventually the cocompiler, had purchased from Valenti Angelo a fairly complete collection of Grabhorn imprints. The bibliography includes imprints all the way from Indianapolis days up to 1940, after which date David Magee and his wife, Dorothy, listed in a second volume items up through 1956. The two volumes are really more than a bibliography, for they record typographical details, notes on problems encountered in production, and other information such as types of binding and prices. The identification of type faces in the bibliography shows the wide variety used by the press over the years, and notes indicate the first use of the types by the press and, in at least three cases, the first use in the United States. Poliphilus type was used for the first time in this country by the Grabhorns in the printing of *Aldus Pius Manutius* in 1924. Bibel Gotisch, or Jessenschrift, designed by Rudolf Koch of the Klingspor Foundry, was introduced by the Grabhorns in the production of *The Voiage . . . of . . . Maundevile*. Franciscan, a typeface designed by Frederic Goudy, was introduced by the press in 1933 and came to be known as the Grabhorns' exclusive type. Appropriately, it was employed in the printing of the *Bibliography of the Grabhorn Press*.

A list of outstanding books by the Grabhorn Press would be endlessly supplemented by collectors and printers, for the variety of subjects, illustrations, techniques, and innovations employed by the press all have their champions. In 1963 the Grabhorns listed the ten favorite books they had printed: *The Scarlet Letter* (1928), *The Relation . . . of Cabeca de Vaca* (1929), *Leaves of Grass* (1930), *Fables of Esope* (1930), *The Santa Fe Trail*, by H. M. T. Powell (1931), *Wah-To-Yah & the Taos Trail* by Lewis H. Garrard (1936), *Two Years Before the Mast* (1936), *Naval Sketches of the War in California*, by William H. Meyers (1939), *Maps of the California Gold Region*, by Carl I. Wheat (1942), *Maps of San Francisco Bay* by Neal Harlow (1950), *Figure Prints of Old Japan* (1959), and *Bibliography of the Grabhorn Press* (1940 and 1957). Opulence and price were not the criteria in this selection for, while *Leaves of Grass* sold for $100, *Wah-To-Yah* was issued at a modest $7.50.

One of the most interesting things about the Grabhorn Press was its ability to produce simultaneously job printing, ephemeral items which would normally be handled by ordinary commercial presses, vanity publishing, and the vastly complicated volumes which have brought the greatest acclaim. The lesser efforts have profited by their proximity to the greater, for letterheads, wine labels, simple announcements, and Christmas cards have shared in the excellence that distinguishes a Grabhorn imprint. While the press was printing the monumental Japanese print series, it was also engaged in dozens of other projects, many of them quite complex in their own right. The Japanese print series, published by the Book Club of California between 1959 and 1965, has been hailed as one of the greatest achievements in modern typographical history. *Figure Prints of Old Japan* (1959), *Landscape Prints of Old Japan* (1960), *Ukiyo-E, The Floating World* (1962), and *Twelve Woodblock Prints, Kitagawa Utamaro* (1965), reproduced from prints in the collection of Marjorie and Edwin Grabhorn, were accomplished by a number of graphic techniques. The original prints were sent to the Meriden Gravure Company, where they were rendered in collotype, after which time countless linoleum blocks were cut for providing the colors. Patient experiment with color combinations and various mica grounds brought these reproductions to a verisimilitude never thought possible.

The print books were the last major works by the press, for Edwin, for reasons of failing health, retired in 1965. Robert went into partnership the following year with Andrew Hoyem, a young San Francisco printer who had worked during 1963–1964 at the Grabhorn Press. Edwin died in December 1968 at the age of seventy-nine. The Grabhorn-Hoyem Press continues operation at 566 Commercial Street in San Francisco, and its productions, while expressing the individuality of the new combination of talents, inevitably reflect much of the feeling and style of the Grabhorn Press.

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ROBERT E. BELL

GRAMMAR

The term *grammar* derives from the Greek word *grammatikos* which referred to the study of the letters of the alphabet. Today, the word *grammar* has two disparate meanings. In its first meaning it refers to the correct usage of the structure of a language where *correct* is defined as the educated mode of speech or writing. The books for teaching the rules of standard educated language are known as *prescriptive grammars* or *normative grammars;* they often stress the drills for extirpating such nonstandard linguistic forms as: "I ain't done nothin," and "He done it." The term *grammar* is also used to refer to various more or less rigorous and scientific descriptions of the structure of a language. Books describing such structure are know as *descriptive grammars.*

Modern descriptive grammars are commonly divided into three parts: *phonology,* which is the study of the sounds of a language and of their patterns of occurrence in speech; *morphology,* which describes how individual sounds combine into minimal meaningful units of language called *morphemes* and how the morphemes combine into words (e.g., the independent morpheme *work* and the dependent morphemes *er* and *s* may form the words: *work, works, worker,* and *workers*); further, morphology classifies the words of a language into *word classes* often referred to as the *parts of speech* (e.g., *noun, verb,* and *pronoun*); the third division of grammar is *syntax,* which describes how parts of speech combine into *phrases* and *clauses* which in turn combine into *sentences.*

Many concepts and terms of modern descriptive grammar come to us from the Greeks. Thus the terms *noun* and *verb* appear already in the works of Aristotle (384–322 B.C.). Somewhat later, Greek philosophers of the Stoic school investigated and described the morphology of the Greek verb system in terms of *verbal inflections* (as in *sing, sings, sang, sung*) and the morphology of Greek nouns in terms of *nominal inflections* (as in *man, man's, men*). Still other grammatical concepts and corresponding terms (e.g., *article, conjunction, pronoun, adverb, preposition, participle*) were invented by the Greek grammarians of Alexandria (second century B.C. to second century A.D.) and used extensively in in-depth studies of language structure. Our indebtedness to these early scholars is immense and as far as their perception of the basic parts of speech is concerned modern descriptive grammars of English and other European languages remain under the influence of classical scholarship. A distinction should be made, however, between the modern and classical *definitions* of parts of speech. Whereas classical grammarians (and traditional grammarians who follow in their footsteps) define word classes in terms of their meanings (e.g., a noun is the name of a place, action, or thing), most descriptive grammarians define parts of speech in terms of the patterns of co-occurrence of dependent and independent morphemes [e.g., a noun is an independent morpheme which can concatenate with the bound morphemes possessive (*'s*), plural (*es, s,* etc.), and so forth]. Yet, in actual practice, at least as far as English and other European language are concerned, the two different systems of definitions lead to very similar classificatory results.

A descriptive grammar describes a language at a particular point of its development; such description is said to be *synchronic*. Languages can also be described from the point of view of their evolution in the course of time. Such descriptions are said to be *diachronic* and are commonly referred to as *historical grammars* or *comparative grammars*. Although speculations concerning the origins of language, the plurality of tongues, and derivation of individual words are as ancient as the story of the Tower of Babel (ninth or tenth century B.C.) and the writings of the Greek historian Herodotus (fifth century B.C.), solid scientific work in this area is quite recent and reaches back only to the beginnings of the nineteenth century. The rise of historical grammar seems to have been influenced on the one hand by the emergence of various European nationalisms, each with its concomitant interest in the origin of the national language, and on the other hand by the advent of a strong scientific concern with evolutionary processes. Thus the work of historical, i.e., evolutionary, grammarians Jacob Grimm (1785–1863), Karl Adolph Verner (1846–1896), and Karl Brugmann (1849–1919) closely parallels Charles Darwin's work on the origin of species, Sir Charles Lyell's studies of historical geology, Pierre-Simon Laplace's speculations concerning the development of the universe, and Karl Marx's studies of the evolution of sociopolitical systems. The work of historical grammarians yielded the proof that contemporary national languages such as German, Italian, Russian, Greek, and Hindi and their respective ancestral forms, Germanic, Latin, Slavonic, ancient Greek, and Sanskrit, derive from the same protolanguage, the Indo-European (second or third millenium B.C.). Large portions of the grammar (i.e., phonology, morphology, and syntax) of this protolanguage were reconstructed and many mechanisms of linguistic change, related to its evolution, were described (e.g., Verner's law, Grimm's law, assimilation and dissimilation of sounds, word contamination, and analogical change). Karl Brugmann's and Berthold Delbrück *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen* (1886–1900) (English translation *Outline of the Comparative Grammar of the Indo-European Languages*), still a standard reference work, ranks among the great scientific achievements of the last century (*1*). It shows, for instance, that the ancestral form of the English word *brother*, the French work *frère*, the German word *Bruder*, and the Russian word *brat* is the Indo-European word *bhraatór*, while the original Indo-European word for *warm* (Greek *thermós*, Russian *garyachiy*, Latin *formūs*, Sanskrit *gharma*) was *gwhermóos*.

The term *structural grammar* designates a specific type of descriptive grammar, namely, one whose goal is the classification of language data on the sole basis of their structure. The rise of structural grammar in the United States and in Europe in the first decade of the twentieth century seems related to the emergence of the view that in order to qualify as scientific a descriptive-classificatory system must deal exclusively with empirical data and forego all reference to categories which are not directly or indirectly observable. In line with this prevalent opinion, structural grammarians or *structuralists* consider that a grammar which they view as a linguistic taxonomic system should classify all language data solely on the basis of their overt and observable characteristics. As a consequence of this outlook, structuralists require that grammars describe the structure of the spoken language rather than of its written form since they regard speech as a primary, directly observable activity and writing as its secondary and much distorted representation. All structuralists consider that the form and pattern of occurrence of linguistic segments within the so-called *spoken chain* are directly observable and thus constitute valid criteria for the classification of speech events. With respect to meaning, structuralists differ. Members of the so-called European school of structuralism regard meaning as an observable category, and thus one which may be legitimately used in structural grammar. Members of the so-called American branch of structuralism, particularly those with strong scientific-empiricist leanings, consider meaning as a category which is not observable and which, therefore, may not be so used. A further difference between the European and American branches of structuralism consists in the goals set for their respective brands of grammar. Whereas European structuralists under the influence of the great founder of their school, Ferdinand de Saussure (1857–1913), author of *Cours de Linguistique Générale* (2), seek to describe the general linguistic system which they assume must underlie all overt speech behavior, the goal of American structuralists has been the classification of individual speech events, without any reference to the general system on which they are assumed to be based. It should be noted that the argument between the two branches of structuralism (parallel in many ways to the dispute between European gestaltists and American behaviorists) has lost recently much of its force, perhaps under the influence of the *generative-transformational* critique of structuralist theory and practice.

Generally speaking, structural grammars describe the structure of language, so to speak, from the bottom up, i.e., starting with the description of the smallest linguistic elements and continuing with the description of progressively larger elements up to and including the level of the sentence. Thus the first part of a structural grammar is *phonemics* which describes in considerable detail the occurrence of the smallest linguistic elements used to differentiate the meaning within a particular language.

The basic function of phonemics is the assignment of individual phones of a language to distinctive classes of phones (so-called phonemes). Thus two or more perceptibly different phones are said to be *in free variation* when they may be freely exchanged in the same utterance without any change in its meaning (e.g., the phone *n* in the word *pin* when this word is pronounced with either a long or a short final consonant *n*). Such different phones are spoken of as the *allophones* of the same phoneme. Allophones are thus defined as all the different phones within a permissible range. Phones whose substitution in an otherwise identical chain of phones causes a change of meaning are said to be *in contrast* and are assigned to different phonemes (e.g., when the phones *i* and *e* are substituted for one another in the phonic chain p-n). By methods such as these, structural grammarians are able to establish the phonemic repertory of a language. Depending on the dialect, English is said to have between forty and fifty distinctive phonemes. This count includes the phonemes of stress important in distinguishing, for instance, between "lighthouse keeping" and "light housekeeping" and the phonemes of pitch important in distinguishing "He is a jolly good fellow" from "He is a jolly good fellow?" The phonemes of stress and pitch are referred to as the *suprasegmental phonemes* of a language.

The second part of a structural grammar is called *morphology*. Its two main functions are: (1) the assignment of phonemes to morphemes, i.e., the listing of all morphemes of a language, and (2) the description of their patterns of occurrence in the spoken chain. European structuralists define a morpheme as a minimal meaningful unit of language while American structuralists, shunning the criterion of meaning, define it as "the independent phonemic sequence of each utterance. A necessary but not sufficient condition for considering an element to be independent in a particular utterance is if that utterance can be matched by others which are phonemically identical with the first except that the element in question is replaced by another element" (*3*). Structuralists view morphemes as consisting of either phonemically identical morphs or two or more phonemically different *allomorphs*. Different allomorphs of a single morpheme diverge in various ways in their phonemic composition. For example, the English morpheme of the plural consists of the allomorphs *s* (as in *lips*), *is* (as in *vases*, pronounced *veyziz*), *z* (as in *dogs*, pronounced *dogz*), while the morpheme *nayf* (written *knife*) consists of the allomorphs *nayf* and *nayv* (as in *knives*). By grouping different allomorphs into morphemes, structural grammarians are able to establish the morphemic repertory of a language. Depending on the educational level of a speaker, his *idiolect* (i.e., his particular brand of English) contains between approximately a thousand and some fifteen thousand morphemes.

The second function of morphology is to describe the patterns of co-occurrence of morphemes in utterances. Since the number of the morphemes of an idiolect is often too high to permit a clear, compact, and exhaustive description of their co-occurrence, structuralists generally first proceed to group individual morphemes into classes and then state the permissible patterns of morpheme co-occurrence in terms of such classes. The process of assigning morphemes to morpheme classes is highly proceduralized. As a first step, a set of so-called *testing frames* (also known as *substitution frames*) is prepared by the grammarian. A set of testing frames may consist of morpheme strings such as *"the . . . is good"* and *"for . . .'s sake"* where ". . ." represents a pause in the spoken chain into which a *free morpheme* (i.e., a morpheme capable of functioning as a separate word) or a string consisting of a free morpheme and of one or more *bound morphemes* (i.e., morphemes which can function only as affixes) can be fitted. A structural grammarian then sets up an experiment in which a native speaker of the language under investigation is requested to fill the pause in the test frame with any word which will transform the testing frame into a legitimate utterance of his language. All morphemes and morpheme strings thus elicited are assigned to one morpheme class (i.e., the words *child*, *company*, etc. are grouped together as *nouns*).

Through repeated use of a hierarchy of testing frames, structural grammarians strive to identify progressively larger groupings of morphemes in the language under investigation. Thus, in describing the structure of the English language, they may process a string of morphemes belonging to classes such as, for example:

Q T Nu Aq N N+s

through an appropriate set of testing frames, and if the result of the experiment is successful, assign the above string to an appropriate class of morphemes classes. [The symbols in the example above are defined as follows: Q, quantifier; T, the definite article *the* and the demonstrative adjectives *these, those; Nu*, cardinal numerals *three, four,* etc.; Aq, qualifying adjectives *old, nice, red,* etc.; N, the set of all nouns; +s, the plural; the entire string is assignable to the class *noun phrase*, symbolically, NP. (An instance of a noun phase with above structure is "all the ten fine old stone houses.")]

Structuralists view all phrases as endowed with an internal organization which is binary in nature. Thus the structure of the above phrase is analyzed as:

(Q(T(Nu(Aq(N(N+s))))))

The pair of elements within a set of parentheses is known as the immediate constituents of a phrase. The process of analysis which accepts as input an utterance in phonemic notation (e.g., ɔlðə ten fayn owld hawziz), recognizes the morphemes of which it is composed, assigns individual morphemes to morpheme classes, and then—as in the example above—proceeds to group them two by two into increasingly larger sets of immediate constituents is called, synonymously, either *parsing* or *immediate constitutent analysis*.

The third part of a structural grammar, the *syntax*, is viewed by structuralists as an extension of morphology. Its goal is to describe the patterns of occurrence of morpheme classes in the confines of a sentence where the word *sentence* is defined as the widest linguistic class in which restrictions on the co-occurrence of morpheme classes can be observed.

During the last 50 years, structural grammars have exercised an influence which is both profound and multifarious. Thus, for instance, the outstanding successses of massive language teaching programs undertaken by the U.S. Army, the Foreign Service Institute of the Department of State, and other agencies are directly traceable to both the theoretical and practical achievements of structuralist grammar. Similarly, the development of writing systems for various preliterate African, Amerindian, Asian, and other languages by anthropological linguists and by various national and international groups and agencies has been based predominantly on structuralist philosophy and practice. Likewise, the many computer programs for automatic parsing of machine-readable texts in English, French, German, Russian, and other languages which have been written during the last 15 years and are now available for research and development in areas such as automatic indexing, query analysis, and thesaurus construction are generally based on structuralist grammars.

It should be noted that in spite of its undoubtedly considerable achievements, structural grammar has met in the last decade with much well-founded criticism for many of its failures and overly sanguine claims. Thus it has been shown that not all linguistic constructions are binary in nature and can be analyzed "from the bottom up" in terms of a progression of pairs of immediate constituents (e.g., the sentence *They called me up,* where *called* and *up* cannot be assigned to the same morpheme class by means of the substitution frame procedure described above). As Noam Chomsky, the founder of generative-transformational grammar and one of the most perceptive critics of structural grammar, has put it, the techniques of structural grammar are "limited to the phenomena of surface structure and cannot, therefore, reveal the mechanisms that underlie the creative aspect of language use and the expression of semantic content" (*4*).

The term *generative-transformational grammar* designates a special type of descriptive grammar, namely one which consists of various sets of rules which will generate (i.e., enumerate) an infinite number of grammatical (i.e., well-formed) sentences of a language and no ungrammatical ones and assign to each generated sentence its proper grammatical description. A generative-transformational grammar consists of two parts, the syntax and the phonology. The syntax itself consists of two subparts: the phrase structure grammar and the transformational grammar. The rules of phrase structure grammar state the structure of sentences by specifying permissible patterns of co-occurrence among syntactic classes; in addition, the phrase structure grammar assigns lists of morphemes to each of the terminal syntactic classes it generates. The rules of the transformational grammar, which is the second component of syntax, specify various transformations to which the linguistic structures generated by the phrase grammar can be subjected. Finally, the phonological part converts a string of formatives of specified syntactic structure into a phonetic representation; that is, it assigns proper pronunciation to the sentences of the language generated by the rules of the syntax. The output of the phonological part of grammar constitutes the observable part of linguistic utterances and hence its name, *surface structure.*

Generative-transformational grammar constitutes a notable advance over structural grammar, and its influence has been both deep and widespread. Thus, in behavioral sciences, notably in psychology, the formerly dominant behaviorist school has seen its influence considerably diminished and its trial-and-error, stimulus-response methods replaced with various Chomsky-inspired generative, model-building techniques. In the computer field, generative techniques developed originally in connection with the construction of phrase structure grammars have been important in the specification of high level languages and of syntax-directed compilers which translate them into machine language.

It should be noted that in spite of its undoubted achievements, generative-transformational grammar has met recently with some strong criticism, notably among Chomsky's students and followers. Thus, for instance, it has been asserted that by maintaining a separation between grammar and semantics, generative-transformational techniques fail to account for many significant linguistic phenomena. Other critics have dismissed the insights into human psyche offered by generative-transformational grammars on the grounds that its logical-mathematical model of language cannot be shown to correspond to the system which underlies the human ability to produce and comprehend well-formed sentences of the natural language. Still other critics have taken issue with the early claim of generative-transformational grammarians that their system of language analysis can conjoin the advantages of formality, explicitness, completeness, and simplicity. Yet in spite of these and other critical views, transformationalism remains a novel and outstandingly fruitful theory of language and its contributions to any future theory of grammar will undoubtedly be quite significant.

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CASIMIR BORKOWSKI

GRAND VALLEY STATE COLLEGE, DIAL-ACCESS INFORMATION SYSTEM AND MULTIMEDIA

Modular teaching aids, multimedia services campuswide, telecommunications in its latest sense . . . Grand Valley State College's approach to the uses of media teaching tools has come a long way since its pioneering dial-access random information retrieval system of 1963.

At that time, as one of the first installations of its kind in the nation, GVSC's random access system, headquartered in one building and available to students through connections in study booths (carrels), was to serve all disciplines of the academic community, allowing professors and students an almost one-to-one ratio in tutorial academic settings.

As with many early systems, there were inherent problems both in performance and in philosophy. "Random" meant students would join tapes by dial-access anywhere within the material presentation. A frustrating wait would ensue while the tape concluded and presentations commenced from the beginning. Materials themselves had to be developed from outside sources or in a rather limited way on campus, as little release time was granted professors to develop fully pertinent tapes for their particular courses. Professors' fears of total automation were never completely answered.

Creative use of the early system was often limited by shortcomings in the manner of presentation, by lack of support in its use, and by an unclear goal of its future.

As the college began its steady climb in enrollment from its first class of 226 in 1963, the thought remained, however, that it was desirable to keep the rapport of faculty and students found only in smaller units, i.e., in groups which could interact rather than simply absorb "lecturing-to." Even in larger classes, creative use of media could offer enrichment, a specific to illustrate, a focal point, a method to present many of the repetitious or review segments for later classroom reaction and discussion.

In 1968 a new, superbly-equipped communications center opened, offering an entire complex of services to the college community and more properly titled the Grand Valley State College Multi-Media Audio-Video Center.

The multimedia approach, created through services of every conceivable technical advancement, and often economically interconnected and/or put together from diverse parts at the college, includes such hardware as banks and individual audio tape machines; a new timed-sequence selector dial-access system; cassett machines; small and large black/white and color television sets; master antenna; complete television production and mobile studio facilities; audio recording studio facilities; 8 and 16mm film projection equipment; audio and video classroom consoles; FM and TV master control; slide, transparency, and opaque projection equipment; PA systems; switching systems; permanently installed and portable videotape recording equipment; telephone dial assistance systems; and language laboratories.

All classrooms, lecture halls, auditoriums, student centers, carrels, library, theater, residence hall lounges, and rooms are interconnected through the center by over 400 miles of interconnecting underground cable.

Guided flexibility and creativity have been the keys to placing media services in the hands of GVSC's faculty and students. No longer is media a "thing apart." Its uses through continual "hands on" seminars and explanations have become increasingly known, used, and desired by community members of this state-supported four-year institution west of Grand Rapids in Allendale, Michigan.

From the first small student body in 1963, to 5,000 in 1972, from two buildings to fifteen, from one college to three decentralized, independent collegiate units, media has helped maintain that important rapport of faculty and students. All disciplines on campus use multimedia, with professors finding numerous ways to utilize the center's custom-tailored services. Such tailoring may involve instances of modular audio or videotape segments, incorporated into classroom lectures, or presented in carrels for specific understanding; lengthier films or tapes used in classrooms and followed by question and answer periods; audio and videotape sequences programmed into study carrel audiotape machines or television sets for review at the students' convenience; check-out tapes; modular sequences taped in-the-field and reviewed in class; self-analysis videotapes for professors' review; audio-tape critiques of students' classroom work; and many other innovative uses.

For both curricular and extracurricular activities the center also offers full engineering services for planning, design, installation, and operation, meeting such diverse requests as marine communications and research equipment for Grand Valley's Research Vessel "Angus"; a lie-detector for psychology studies; amplification systems for concerts and rock groups; Field House and theater public address systems.

What happened to GVSC's pioneer dial-access random information retrieval system in this new age of multimedia? It has been totally modified by college personnel to compatibility within the newer remote-controlled system and continues in service as an important link in review, testing, and instruction of the college's seven language laboratories, consoles, and duplicating equipment.

As educational television joins Grand Valley's offerings during 1972, a new dimension of education will become available not only to the campus, but also to members of the west Michigan community.

The AV-CCTV-CATV-ETV concepts of GVSC's installations continue to point the way to diversity and the era of multimedia.

DAVID H. DOEBEL

GRANDJEAN, PHILIPPE

Philippe Grandjean de Fouchy was born in 1666 in Mâcon, Eastern France. Before his death in 1714 he was to achieve especial fame as the chief cutter of the punches for the *romain du roi,* the new printing types ordered by Louis XIV in 1692 for the exclusive use of the Imprimerie Royale. Even so, his original interest in typography would seem to have been aroused almost by accident. After being taken by a friend to see a printing office, he decided that he could design better types than he had seen being used. His drawings were good; Louis XIV heard about them, and Grandjean was commanded to enter the royal printing service. There, besides making new models for punches, he devised a number of improvements in the method of letter-cutting. His subsequent work on the *romain du roi* has a somewhat complicated background.

The Imprimerie Royale had been established in 1640 at the Louvre for Louis XIII, and for more than 50 years commercially produced Old Face types, in the style of Garamond and his imitators, were used for its publications with great effect. For Greek texts there were, of course, the *grecs du roi* by Claude Garamond. By 1692 the new king, Louis XIV, had grown so reluctant to print with the same romans and italics as were available to other printers that it was decided to produce a new and exclusive series of types regardless of cost. This would also afford the designers the opportunity completely to rethink the shaping of letters in order that the new types might be perfect as well as royally different, and such reconsideration of letter design was already in progress, by a committee!

After the undoubted success of Garamond's *grecs du roi* it might seem odd that it was now considered desirable to turn to the work of a committee for advice on the design of the new alphabets. Fournier was to assert that, by that time, there was no one person in France who clearly understood the principles underlying the art of letter-cutting, but that was not strictly true, for Grandjean clearly had ample skill and understanding. However, this was the age of organized deliberation by teams of experts, and since 1675 there had been the official intention that the Académie des Sciences should also undertake studies of crafts in France and elsewhere with a view to their technical and aesthetic improvement. It had been seen fit to make a start with printing—presumably because of the royal interest and because it was "the Art which preserves all others."

Because the learned members of the académie were not prepared to turn from more academic matters, a commission, The Assembly appointed by His Majesty for the Description & Perfection of the Arts, was made up of nonmember technologists with the Abbé Bignon as director. Later references to this group as the "Jaugeon Committee" were to result from Jaugeon's manuscript notes which, for a long time, formed the only known account of its activities. Also, Jaugeon's work toward a new French typographic alphabet is specifically referred to in a report from the académie in 1699, by which time the assembly had been accorded membership of the académie. And Fournier, too, in his *Manuel Typographique,* referred to Jaugeon's being entrusted with the preparation of the report on letter-cutting.

The proportions and the shapes of the strokes for the new alphabet, "chosen to please the eye as far as was possible," depended upon a series of the most elaborate geometrical rules. These were drawn up only after careful study of the best classical lettering and type design as shown in "the most beautiful manuscripts and printed books in the Bibliothèque Royale and other libraries." Before being engraved, each capital roman letter was constructed geometrically within a square divided into sixty-four smaller squares, each of these being further subdivided into thirty-six others. The lower-case letters and the italics were drawn within similarly divided rectangles and parallelograms, respectively. However, Jaugeon and his colleagues were not unaware of the dangers of proportional reduction, and trial punches were cut and proofs examined in collaboration with Grandjean before the assembly decided upon the most suitable proportions for the thicknesses of the letter strokes. Finally model letters were drawn and engraved on copper by Simonneau so that they might be published. The first prints are dated 1695, but production of all the alphabets was not completed until 1718. The treatise on the art of letter design, punch cutting, printing, and binding, the *Description et Perfection des Arts et Métiers,* intended from the outset as much more than a set of instructions for the cutter of the royal types, was never published.

The new models showed a radical departure from the familiar Old Face types of the day, and they reflected the growing French regard for the copper engraver's art, whether as a vehicle for illustrations, page decorations (borders, head and tail pieces, and medallions), or for lettering—for example, the captions to engraved illustrations. Simonneau had done much of the engraving for the plates of those luxurious presentation publications in the series known as the *Cabinet du Roi.* Jaugeon and his colleagues, in their search for the ideal book, had studied these as well as the calligraphy of the manuscripts specially produced for the royal collection by Nicolas Jarry and others. The two influences were bound to have an effect upon the assembly's final attitudes to letter design for typography, which the parent académie announced would be demonstrated in the new types used for the *Médailles sur les Principaux Evénements du Règne de Louis le Grand.* This was to be the last and most majestic item in the *Cabinet du Roi.*

The first size of the *romain du roi* was cut by Grandjean over the years 1694–1699, during which time only the 1695 letter plates were printed. The publication of the full series of model drawings was never regarded as urgent, so it cannot be suggested, as legend would have it, that the geometrical rules and models were produced by the assembly for the sole guidance of Grandjean in his cutting of the royal types and that he followed his instructions more in the spirit than to the letter. However, it is not unreasonable to suggest that he was obviously stimulated by those drawings which did exist. We know that there was discussion and experimentation between the two parties while the basic tenets of the assembly were being set down in the manuscript *Description.* But it is also a fact that many of the model letters engraved after 1699 embodied stylistic features of the earlier Grandjean romans. Grandjean's taste in letter design and that of the assembly had both been stimulated by the new style of book decoration and the manuscript hand of contemporary scribes such as Jarry. Thus they both developed inevitably along similar lines, and perhaps the work of each of the parties reinforced the attitudes of the other.

Grandjean died before the last of the eighty-two fonts of the *romain du roi* were completed in 1745. His work was continued by his pupil, Jean Alexandre, who was assisted by his son-in-law, Louis Luce. The first work to be set in the new types, the very handsome folio edition of the *Médailles . . . du Règne de Louis le Grand,* was printed by the Imprimerie Royale in 1702. The royal hallmark on the type was in the form of an annoying flick which projects to the left from the center of the lower case l. A similar mark is known on some black-letter types, copied from certain manuscript hands.

The *romain du roi* was clearly different from the Old Face types with which everyone was so familiar. The contrast or modeling between the thick and the thin strokes was slightly more pronounced than that of the Old Face alphabets. The axis of the shading was nearer to the vertical. The serifs were cut much thinner than ever before, almost without brackets; and on the ascenders of the lower case the serif was extended to the right as well as to the left—a feature which accentuated the horizontal movement of the letters. The total effect was to lighten the color and weight of the printed page so that the increased brilliance made the face far more compatible with engraved decorations than Old Face types.

Grandjean's novel adaptations mark the breaking away from the traditional Jenson–Aldus–Garamond designs, the beginnings of the transition to something quite different—Modern Face types. This movement was continued by Fournier and other would-be imitators in France (though they were hampered by a royal edict which forbade the copying of the *romain du roi*), and by Baskerville in England. In 1784 another Frenchman, Firmin Didot, completed the process, further accentuating the contrast between thick and thin strokes, and fining down the serifs until they were mere hair-lines, completely unbracketed. In Italy Giambattista Bodoni went on to produce similar fonts in which the contrasting styling was, if anything, even more exaggerated.

The related italic cut by Grandjean also has important points of interest. For the first time there was a conscious effort to standardize the degree of slope of the letters. This was particularly successful in the upper case, where the italics are really sloping versions of the romans, quite capable now of being composed together without offense to the eye. The obvious harmony and relationship between the two faces, which we consider essential for an effective secondary face, was strengthened in the lower case by Grandjean's new form of the italic h. He gave it a straight shank where earlier cuttings had always been curled inwards, a relic of the written character. However, he still retained the penman's flowing serifs and the simple oval of the cursive a.

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GRANJON, ROBERT

It is thought that Robert Granjon was born about 1513, the son of a Paris printer and bookseller, but instead of staying in the family business he developed an interest in the cutting of types. He cut a considerable number of excellent faces, exotic (Greek, Syriac, and Arabic) as well as roman and italic. His most distinguished work was done within the realm of the italic, though he is also remembered for his special script type which became known as Civilité.

The first face which can be attributed to Granjon appeared in Paris in 1543. This was an italic used by L. Grandin for *Oratio contra Philippi Epistolam* by Demosthenes. Shortly afterwards it was also being used by two outstanding scholar printers of the day, Sebastien Gryphius and Jean de Tournes of Lyons. The latter went on to use the whole series.

By 1545 Granjon was renting a shop in Paris; he began publishing in 1549; and he had a house there as late as 1575. He was a pioneer supplier of punches and strikes on an international scale, and so he moved about Europe, living for part of his life in Lyons (where he married the daughter of de Tournes' illustrator, Bernard Salomon), Antwerp, and Frankfurt. All were important centers of printing or type supply where some of his most notable customers had their offices. Others would naturally visit such centers. For example, Oporinus of Basle and Torrentino of Florence used his types. He did much work over a number of years for Christopher Plantin, including the Greek and Syriac types for his Polyglot Bible. Then, in 1578, toward the end of his life, Granjon answered a call to Rome expressly to cut Oriental types and some romans in the style of Garamond for the Medicean and Vatican Presses. Whether he died there or in Paris is not known with any certainty; nor is the date of his death.

Granjon's italics show him to have been the paramount designer of such types in his day. He followed the style of Arrighi rather than that of Aldus, but all except one of his italic faces have a greater slope than had been seen before. Moreover, although italics with sloping capitals (called by A. F. Johnson the Old Face group) had been inaugurated by cutters at Basle, Granjon's upper-case italics had a more satisfactory inclination, so that his work and that of other French typecutters who followed his example had the effect of firmly establishing this style. Throughout Europe for the next 200 years or so Granjon's design was to be the standard choice for an italic type, just as Garamond's letters were to set the pattern for romans. Granjon was also involved in the early development of printers' fleurons and arabesques for combination into elaborate typographical borders and headpieces.

Since the middle of the sixteenth century the use of cursive gothic printing types, *lettre bâtarde*, had been regarded as an anachronism, and about 1557 Granjon started printing in a new script type of his own devising. It was based upon the current French hand, *lettre courant*, a very stylized version of the gothic *lettre bâtarde*. Granjon called his new type *lettre françoise*, and he saw it as a warranted manifestation of French nationalism. The accepted printed cursives had come from Italy. He thought that Frenchmen would now rally behind this typographic form of their national hand at a time when there was a concern that a reformed French language (rather than Latin) should be the vehicle for serious publications in France. However, it had a greater success in the Low Countries than in France, and even that was only relative. Italic types were too strongly entrenched for the rival form to stand any chance of taking their place in common usage.

As a technical and artistic achievement the new face was superb, and a further demonstration of Granjon's great skill in cutting and founding type. It earned him a 10-year privilege or monopoly from Henri II, though that did not stop others from producing copies. But copying the written forms of letters required the use of more ligatures than did roman or italic, and special alternative swash letters were also necessary. The calligraphic flourishes gave the face a restless appearance and made the sorts difficult to cast and prone to damage. Nor was the face economic of space. All these handicaps made it unattractive to the printer, though theoretically it was an ideal type for popular works in the vernacular because the reader of limited ability would find it so familiarly similar to the letters he had been taught to write.

Probably with this in mind Granjon used his *lettre françoise* in 1558 to print a French translation of a school book by Erasmus, *La Civilité Puérile Distribuée par Petits Chapitres et Sommaires.* In 1559 two Parisian printers used a close copy for another popular children's book on good manners, *La Civile Honesteté pour les Enfants.* The style was quickly extended to other works for children and, as a result, the face became known as Civilité, particularly after 1810 when the types were so designated in Brunet's *Manuel du Libraire*. From the advantage of hindsight it was therefore inevitable that a letter which was found particularly suitable for children to read could not stand any chance of being accepted in the adult book world.

Nevertheless, the face had its copyists, and such types could be found in use in France right up to the mid-nineteenth century. In the Low Countries, where Civilité enjoyed a greater vogue, so important a printer as Plantin owned three fonts, and the Dutch foundry of Joh. Enschedé en Zonen was still offering six fonts (not all by Granjon) as late as 1926. A font of Granjon's first Civilité was used in Scotland in 1571, but English printers managed without the style for about another 5 years. Even then it appears to have been reserved almost exclusively for the simulation of engrossing, particularly in legal jobbing work. Civilité never affected the course of general type design.

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GREAT BOOKS PROGRAMS

The Rationale of Great Books Education

Great books, classics, or masterpieces, have always been the basis of formal study in schools of higher education in Europe and America. This is part of the reason such works have achieved their status. They are the works chosen by the cultured to represent the culture; the works which, taken together, embody the Western cultural tradition; the works without a knowledge of which one would not be considered educated. Yet, only quite recently, and in America, the influence of the great authors has gone beyond the small elite that traditionally enjoyed the privileges of higher learning, or the few academic specialists, expert in the major literature of their particular field of learning.

During the middle third of the twentieth century literally hundreds of thousands of grammar school, high school, and college students, and adults of every age, profession, and social background, began reading and discussing the great works of the Western world both within and outside of formally organized contexts. After an initial 15 years, and through the efforts of about a dozen of America's more illustrious figures in higher education, the movement acquired a defining shape and character which became commonly known as the Great Books Program. The phrase was a generic description, however, for there were many different programs, with a variety of distinguishing characteristics, but they were all united by a generally similar reading list and a similar educational philosophy. This particular educational movement in America, founded during the twenties, is still flourishing today.

Possibly the most radical, and controversial, aspect of Great Books Programs has to do not with the books themselves, but the way they are studied. A common, and perhaps the distinguishing characteristic of the movement is the small discussion group. This method of learning stems from the belief that people who are actively engaged in a process of inquiry, and respect the power of reason in themselves and in others, are valuable teachers of one another—more valuable teachers, in fact, than any single presumed authority or expert who might lecture on or explain the books.

Charges against subjectivism and superficiality are countered with arguments stemming from the basic tenets of the great books-discussion philosophy: that the great books can be profitably read by any literate person of average intelligence; that the great books are the best statements of the most important and fundamental human issues; that the authors of the great books furnish models of the best minds of our cultural tradition trying to come to terms with the knowledge most worth having, the values most worth holding, and the courses of action most worth pursuing; that there are no single positions on these matters, hence, no sole authorities—no lecturers, not even an author of a great book; that the ability to understand and arbitrate among the various claims and contrasting viewpoints constitutes the principle virtue of a liberally educated man; that all men, especially those who live in a democracy, ought to be liberally educated; and that one of the best ways to acquire a liberal education is to read and discuss the great books, that is, to participate in and keep alive the "great conversation" of the Western world.

THE GREAT BOOKS

Although there are many different lists of great books, there is very little disagreement about what constitutes a great book and most of the lists that have been compiled have shown remarkable general agreement. Traditionally, great books are considered the best written original communications of perennially significant insights into man and his world; in the words of Matthew Arnold: "The best that has been thought and written." Advocates of Great Books Programs generally avoid the use of the world "classic" since the term often connotes a reverence for antiquity for its own sake. Great books, on the other hand, are judged to be those which many different men in many different circumstances, places, and times have turned to and found unfailing sources of wisdom. Thus great books are not old books although they span many centuries; they are the perennially significant books.

The broad historical span of the books is important in at least two contexts: their chronological range helps free men from the limitations of the immediate by providing a perspective on the enduring human concerns; and one of the reliable indications that a book is great may be found in the fact of its historical survival. Through many passing concerns, the great books endure. For these reasons it is sometimes difficult to judge which contemporary books are great, and recent books rarely appear on the standard great books lists. The test of time cannot be applied, and there is not sufficient perspective to judge the lasting qualities of recent books.

A sample list of the great books would be useful to acquaint a reader with the authors that are usually read and discussed in Great Books Programs. The 4-year reading plan advocated by Robert Hutchins in 1947 for 50 million adults is typical.

First Year

1. The Declaration of Independence; the Bible: 1 Kings, 21; 2 Samuel, 11, 12.
2. Plato: *Apology, Crito.*
3. Plato: *Republic,* Books I, II.
4. Thucydides: *The History of the Peloponnesian War.*
5. Aristophanes: *Lysistrata, Birds, Clouds.*
6. Aristotle: *Ethics,* Book I.
7. Aristotle: *Politics,* Book I.
8. Plutarch: "Lycurgus" and other selections.
9. St. Augustine: *Confessions,* Books I–VIII.
10. St. Thomas: *Treatise on Law.*
11. Machiavelli: *The Prince.*
12. Montaigne: *Selected Essays.*
13. Shakespeare: *Hamlet.*
14. Locke: *Of Civil Government* (second essay).
15. Rousseau: *The Social Contract,* Books I–II.
16. *Federalist Papers:* Nos. 1–10, 15, 31, 47, 51, 68, 71.
17. Smith: *The Wealth of Nations,* Book I, Chaps. 1–9.
18. Marx: *Communist Manifesto.*

Second Year

1. Homer: *Odyssey.*
2. Herodotus: *History,* Books I and II.
3. Aeschylus: *House of Atreus.*
4. Sophocles: *Oedipus Rex, Antigone.*
5. Aristotle: *Poetica.*
6. Plato: *Meno.*
7. Aristotle: *Ethics,* Books II and VI (Chaps. 1, 2, 5, 9–13).
8. Lucretius: *De Rerum Natura,* Books I–IV.
9. Chaucer: *Troilus and Cressida.*
10. Hobbes: *Leviathan,* Book I, Chaps. 1–7, 11, 13-15; Book II, Chaps. 17–21.
11. Milton: *Areopagitica.*
12. Swift: *Gulliver's Travels.*
13. Pascal: Selections from the *Pensées.*
14. Rousseau: *Discourse on Inequality; Treatise on Political Economy.*
15. Nietzsche: *Beyond Good and Evil.*
16. Kant, *Fundamental Principles of the Metaphysic of Morals.*
17. Mill: *Representative Government,* Chaps. 7–18.
18. Tawney: *The Acquisitive Society.*

Third Year

1. Aeschylus: *Prometheus Bound;* The Book of Job.
2. Plato: *The Statesman.*
3. Aristotle: *Politics,* Books III–V.
4. Euclid: *Elements of Geometry,* Book I.
5. Aristotle: *Categories,* Chaps. 1–4; *On Interpretation,* Chaps. 1–8.
6. Nicomachus: *Introduction to Arithmetic.*
7. Lucian: *True History* and other selections.
8. St. Augustine: *Of the Teacher;* St. Thomas: *Of the Teacher.*

9. *Song of the Nibelungs and the Volsungs.*
10. Gilbert: *On the Magnet.*
11. Spinoza: *Tractatus Politicus.*
12. Milton: *Paradise Lost.*
13. Locke: *Essay on Human Understanding,* Book III.
14. Stendhal: *The Red and the Black.*
15. Gibbon: *The Decline and Fall of the Roman Empire,* Chaps. 15, 16.
16. Mill: *Of Liberty.*
17. Thoreau: *Civil Disobedience; A Plea for Captain John Brown.*
18. Freud: *The Origin and Development of Psychoanalysis.*

Fourth Year

1. Hippocrates: *Ancient Medicine* and other selections.
2. Plato: *Republic,* Books VI and VII.
3. Aristotle: *Metaphysics,* I, 1, 2; IV; VI, 1; XI, 1-4.
4. Euclid: *Elements,* Book V.
5. St. Augustine: *Confessions,* Books IX–XIII.
6. St. Thomas: *Summa Theologica,* Book I, QQ. 78, 79, 84-88, and 16-17.
7. Montaigne: *Apology for Raymonde de Sebonde.*
8. Rabelais: *Gargantua and Pantagruel,* Books I and II.
9. Descartes: *Discourse on Method.*
10. Bacon: *Novum Organum.*
11. Galileo: *Two New Sciences: Third Day.*
12. Harvey: *The Motion of the Heart.*
13. Hume: *Inquiry Concerning Human Understanding.*
14. Voltaire: Selections from the *Philosophical Dictionary.*
15. Darwin: *Origin of Species,* Chaps. 1–6, 15.
16. Dostoevski: *The Brothers Karamazov.*
17. Mill: *Utilitarianism.*
18. James: *Pragmatism.*

THE DISCUSSION APPROACH

An important educational objective of Great Books Programs is to develop a participant's ability to analyze and criticize ideas, and to make intelligent statements and choices about value. Such abilities are best developed through active participation in a learning process. The learner must become the primary agent in the practice of learning, constantly weighing and evaluating, formulating reasons, accepting and rejecting, winding his way from known to unknown—seeking and judging always, discovering and concluding often. These activities are best exercised, proponents of Great Books Programs argue, through discussion.

Discussion is essentially a collective learning enterprise that begins with a variety of individual contributions and proceeds toward knowledge and personal insight through a dialectical reasoning process. No participant assumes any special expertise on the topic that is discussed, rather, the responsibility for putting forth information and ideas falls to the inquiring participants. They determine what is important to consider. They define, to their own and the group's satisfaction, the questions raised by the book and the answers they think they have found.

Different Great Books Programs place different emphasis on the importance of textual understanding. Some insist that the authors of the great books are the master teachers and that all attention must be paid to understanding exactly what they said, what their words mean, and what the truth or value of their ideas are. Others believe that the authors ought not to be the center of study; discussions should be about what the books are about. That is, if a group reads Aristotle's *Ethics*, their discussion should focus on the meaning and practice of happiness and virtue. Aristotle's thought should be represented as faithfully as possible in the course of discussion, but the important educational value comes not from learning what Aristotle said so much as each participant's attempt to formulate his own understanding of virtue, and critically appraise what he and the others, including Aristotle, had to say.

Whatever the emphasis, discussing the great books inevitably turns a participant back on his own personal experience. This does not necessarily detract from an objective consideration of the book, it merely acknowledges that participants speak from their own experience and their understanding of what they have read. They necessarily become more personally involved in what they are studying. Because of this personal involvement (the practice of formulating ideas, of subjecting them to the critical appraisal of others, of expressing oneself clearly) participants gain an appreciation of their stake in the issues discussed as they develop an active, critical mind, and, hopefully, a commitment to standards of reasoned inquiry.

Learning by discussion, argue Great Books Program advocates, is a more certain guarantee that learning will become a life-long activity than when one is a passive recipient of knowledge as a member of a captive audience. Everyone has a stake in becoming a good man and a good citizen; active critical examination of the perennially significant human concerns is the best educative means of accomplishing these objectives. For this reason, reading and discussing the great books is recommended for everyone, and in the context of vital discussion, the great books are not merely the record of civilization, they are one of the most potent civilizing influences in the world.

The History of Academic Great Books Programs

EARLY ORIGINS

The entire great-books discussion movement probably owes its inspiration to John Erskine, a musician, and first president of the Julliard School of Music; a novelist, literary critic, and professor of English at Columbia University. In his autobiography, *My Life as a Teacher,* Erskine tells of how in 1917 at Columbia he conceived of the idea of having large numbers of students, normally and properly occupied with contemporary life, read and discuss the great books. "It is the fashion," he wrote, "among many of my older colleagues to refer with regret, and certainly not with respect, to the literary ignorance of the younger generation. They [the students] might do very well on the courses we gave on American and English literature, but they knew little or nothing about the Bible, or Homer, or Vergil, or Dante, or the other giants whom the world at large has long esteemed." Erskine observed that most Columbia students read and discussed at least one popular novel on their own time every week. There was no reason why a course could not be offered on the simple principle of reading and discussing one classical masterwork each week.

Erskine's simple idea was not enthusiastically received by the Columbia faculty on the grounds that such a program could lead only to a smattering of knowledge and not a real understanding of any one author. The academic profession cherishes exact knowledge, and teachers with concentrated, specialized knowledge thought that reading and discussing a great book every week would give students nothing more than a superficial acquaintance.

Against this opposition, Erskine argued that there was a wide difference between a reading acquaintance with great authors and a scholarly investigation of them. "The original charge against the younger generation was not their lack of scholarship, but their reluctance to read great books. The audience who thronged the ancient theater to enjoy a work by Aeschylus or Sophocles were not classical scholars: they were merely the human beings for whom the play was written . . . the lectures of scholarly classicists sometimes ignore the fact that the Greek dramatists wrote plays for human beings." Eventually the faculty authorized Erskine's proposal and the course began in 1920.

Classes were divided into sections of twenty-five and thirty students. All sections met simultaneously on Wednesday evenings, and each group had two instructors assigned to it, selected on the basis of their disposition to disagree with one another. They were present, said Erskine, not to lecture, nor in any way behave like professors, but to add fuel when necessary to the argument. Reports have it that few sections stopped talking before the janitor closed the building.

Erskine was a strong advocate of the discussion method. "Exchanging ideas for two hours," he insisted, "the students probably teach each other more about the rich aspects of Shakespeare's genius than any one of them is likely to think of for himself, or than any lecture is likely to say." This was no reproach against the quality of lectures delivered at Columbia, it was rather Erskine's belief in "a natural social approach" to literature:

> After the students have read and discussed the author of the week, they share a variety of literary information and opinion which serves for a future conversation and argument. Perhaps for the first time they have the basis for any intellectual life in common. Meeting on the campus they need not confine their talk to estimates of athletic prowess or to school gossip. The great writers provide, as Wordsworth said they would, nobler loves and nobler cares.

Concurrent with the Columbia program, Alexander Meiklejohn, then president of Amherst, was making an important, if less direct, impact on the collegiate great books discussion movement. Meiklejohn's influence was largely twofold: his own commitment to and practice of the socratic method (learning by questioning through discussion) and his conception and formulation of general (liberal) education which later served as a philosophical basis of fully developed great books curricula at other colleges. Meiklejohn made little direct contributions to a formal great books program of study at Amherst. He later confessed that he thought St. John's College accomplished what he was trying to do there, but didn't know how to do.

The curricular model that Meiklejohn devised to accomplish his educational objectives consisted of a "lower" and an "upper" college, with 2 years of study at each level. The lower college focused on the development of general intelligence and constituted the "liberal" component of one's collegiate education. The upper college consisted of largely specialist and professional competence in one of the traditional academic disciplines chosen by the student as the basis for his career preparation and his particular contribution to society. In 1931–1932 Meiklejohn's own model of the "lower-college" program was realized at the University of Wisconsin as the now-famous educational experiment, the "Athens–America curricula," but he acknowledged that this was only one of many ways to accomplish his objectives.

Meiklejohn originally described this program in terms of three objectives that he wanted his students to accomplish during their work in the "lower college."

> First, they were to become acquainted with Athens. Second, they were to become likewise acquainted with nineteenth-century America. Third, by comparing and contrasting these they would make for themselves an understanding of what civilization is. But most important there is another activity which attends these—that of developing insight with respect to one's current experience and using it as an instrument of intelligent human living.

In Meiklejohn's Wisconsin program, the Greek studies were largely centered around the *Republic* of Plato together with a number of related dialogs. In the American portion, the *Education of Henry Adams* assumed a corresponding position.

CHICAGO AND ST. JOHN'S

In 1929, Robert Hutchins, at the age of 30, became chancellor of the University of Chicago and began to develop revolutionary concepts of general humanities and a reorganization of liberal education at the college level. Hutchins saw the undergraduate college as exclusively devoted to the purpose of general education—an end in itself, in no way to be regarded as a mere training ground for the graduate school or other professional or vocational education.

During the early 1930s, while Hutchins began drawing such distinguished professors as Mortimer Adler, Richard McKeon, Clarence Faust, and Joseph Schwab to Chicago to support his educational tenets, and while Alexander Meiklejohn's work was going on at the University of Wisconsin, another important group of faculty members at the University of Virginia were also making an important contribution to the liberal arts and great books education. In a letter dated September 15, 1934, to the president of Virginia, a report by Stringfellow Barr, A. F. Benson, Scott Buchanan, Robert Gooch, G. L. Ferguson, and J. J. Luck argued that with "good" instructors and "good" students, the best possible subject matter to develop general culture and a liberal education was a selection of the great classics of the Western tradition. It was further expressed by this committee that these classics should be studied as the highest achievements not only in language and literature, but also in mathematics and the sciences. These works, moreover, were to be studied in their entirety to achieve the maximum possible understanding of them.

Unlike Meiklejohn's program, the educational goal recommended by the Virginia committee was not the development of a free-wheeling intelligence, but rather the comprehension of the main elements of Western thought—or perhaps it would be more accurate to say personal development *through* a comprehension and assimilation of the main elements of Western thought. The committee believed that to live in our civilization requires some understanding of Western classics, and that textbooks were not worthy of a student's serious study, largely because "publishers at the time were doing their best to supply increasingly easy texts that were generally derivative, oblique, and irrelevant to the real subject at hand."

In 1935 Hutchins began assembling a Committee on the Liberal Arts at Chicago, and in 1936 persuaded Stringfellow Barr, a historian, and Scott Buchanan, a philosopher, to come to Chicago from the University of Virginia to serve with Mortimer Adler and Richard McKeon on it. The work of the committee was to consider the place of the liberal arts in modern education, and to design a curriculum based on a study of the great books of Western civilization. The project caused a great deal of controversy and dissension at Chicago, and amidst this controversy, Richard Cleveland, son of the United States president and moving spirit of the Board of Trustees at St. John's College, Annapolis, invited Barr and Buchanan to his school. The trustees at St. John's were persuaded of the educational cogency of their great books curriculum, principally designed by Buchanan, while the faculty at the University of Chicago at best was only sympathetic towards the main outlines of the proposal. Finally, the controversy which Hutchins' Committee stirred at the University of Chicago was resolved only after Barr and Buchanan decided to go to St. John's the following year, 1937, as its president and dean, and brought their 4-year integrated great books curriculum with them.

Hutchins' program of liberal education, based entirely on a study of the great books, was thus realized at St. John's. It is therefore appropriate to regard St. John's as a curricular prototype and look more closely at the work that Barr and Buchanan began at Annapolis in 1937.

Buchanan argued in a brief rationale for the new program that

> the most powerful controlling factor in any human environment is tradition, and any system of education that tries to ignore or escape the tradition within which it operates is bound to fail and destroy itself. The latent dangers in tradition become actual only when they are ignored and evaded. Conscious suppression or artificial construction of a tradition leads only to a cultural monstrosity. Eternal vigilance within a tradition is the price of liberty . . . it is the purpose of the new program at St. John's College to recover the great liberal tradition of Europe and America, which for a period of two thousand years has kept watch over and guided all the other Occidental traditions. All liberal colleges ought to be devoted servants of

> this great tradition, and this is the secret of their tenacious attempts to discharge their functions against many odds.

The general approach to learning at St. John's involves a community of teachers and inquirers, each learning from and teaching one another. The faculty abandoned the usual distinctions of professorial rank, yet there remains an acknowledged hierarchy among the various levels of teachers and learners. First, there are the authors of the great books. They are the master teachers, who, for the most part, are speaking at the high point of their own learning. Next comes the reading and speaking faculty member who is at a stage of learning somewhere between the author of the book and the best student in the class. Then follow the other students at distances proportional to their degree of understanding. At St. John's, all students of the same year read the same books at the same time with the same immediate preparation. Faculty members, in time, are expected to teach all of the different seminars and tutorials that the students are required to take.

The format of the original St. John's curriculum consisted of a fourfold study approach: (1) reading and discussing the books in seminars which usually met twice a week; (2) formal lectures on special topics by guest speakers and various members of the staff; (3) tutorial instruction for small groups or individuals in original languages, mathematics, and writing; (4) laboratory work in mathematics and measurement, empirical experimentation, and in combining scientific findings from different areas such as the medical sciences, the mechanical sciences, and the mathematical sciences.

To graduate from St. John's, a student was expected to demonstrate the knowledge of the contents of the required books of the curriculum, competence in the liberal arts, a reading knowledge in at least two foreign languages, competence in mathematics through elementary calculus, and to spend no fewer than 300 satisfactory hours in the laboratory. Buchanan concluded his rationale for and description of the program with the claim that

> despite daily assertions to the contrary, there is no educational device for assuring worldly success to the students. To cultivate the rational human powers of the individual so that armed with the intellectual and moral virtues, he may hope to meet and withstand the vicissitudes of outrageous fortune—that is education.

St. John's has seen very little change in the first 45 years of its great books curriculum. Freshmen still start with the Greek language and literature, and over a 4-year period work their way to the twentieth century, attempting in some measure to relive and assimilate the intellectual high-points of Western civilization. The organization of the curriculum has seen slight modifications from time to time, but it still consists of essentially the same list of books studied in basically the same way. Recent thought has been given to whether there might not be less actual reading in the program in order to devote more time to personal contemplation, to questioning whether the great books are asking the most important questions with which twentieth century man should be concerned, or to helping students make the thoughts of the great authors truly their own. But most of the students and faculty at St. John's believe that the program is in need of no fundamental revision. The program of study and the requirements for graduation have seen no essential change.

Far from showing any signs of major alteration, St. John's established a new campus in Sante Fe, New Mexico, in 1964. The two campuses comprise one legal entity with a single president, one Board of Trustees, an interchangeable faculty, and the same curriculum. In short, everything that proved successful at Annapolis was transplanted intact to the Southwest. Thirty years after the founding of St. John's, Scott Buchanan best answered the question of St. John's continuing success without any significant change by stating that its curriculum "represents an almost complete structure—a scaffolding within which people could hunt almost endlessly."

While many of the facets of the St. John's Program later found their way in one way or another into the "Chicago Plan" during Hutchins' tenure between 1929 and 1950, they never all came together at the same time in the way Hutchins would have liked. Hutchins believed in a single body of materials in the various fields of knowledge which should be mastered by any person who considers himself educated; he believed in a fixed curriculum; he believed in basic organizing principles in the humanities, social sciences, and natural sciences which would draw together and integrate the various disciplines of the traditional subject matters; he believed in an autonomous college faculty whose sole responsibilities would be to teach these general and integrated courses. While it is true that the great books were always central to the "Hutchins College," the St. John's program really represents the ideal of the Chicago chancellor.

In proselytizing great books education, no one was more active than Mortimer Adler. Indeed, his efforts, added to those of Hutchins, to convince the public outside of the academy of the cogency of reading and discussing the great books, can be seen both with reference to a commercial enterprise with Encyclopedia Britannica in publishing a fifty-two volume set of the *Great Books of the Western World,* and the founding of a distinct nonprofit educational organization incorporated as the Great Books Foundation. The *Great Books of the Western World* has remained, since its appearance in 1952, a standard reference of major writers who, from the ancient Greeks to the end of the nineteenth century, have comprised the "great conversation." Robert Hutchins was the editor and Mortimer Adler the associate editor of these handsomely bound and widely circulated volumes. Members of the editorial Advisory Board included the names of most of those prominent educators that Hutchins gathered around him in Chicago: Barr, Buchanan, Erskine, Faust, Meiklejohn, Schwabb, and Van Doren.

The distinctive accomplishment of this edition was its two-volume index of the great books, entitled "The Great Ideas: A Syntopicon. . . ," an invention of Mortimer Adler, which defined, organized, and cross-referenced 102 of the major issues and ideas of Western culture. The Syntopicon (the term was coined by Adler, general editor of the index, to indicate his great matrix of topics), included such ideas as Art, Beauty, Democracy, Education, God, Good and Evil, Justice, Knowledge, Love, Poetry, Religion, War and Peace, and Wisdom. With the aid of the Syntopicon, a reader can easily turn to what any of the great authors included in the set have to say on the given topic—a demonstrable testimony that Western culture is characterized by a dialog between great minds on common concerns. The Britannica edition of the great books also contains several individual reading programs, and a series of introductions to each topic. Since 1961, annual volumes supplementing the Britannica set, entitled *The Great Ideas Today*, have been published to continue to serve the cause of great books by anthologizing the ideas of contemporary thinkers who are making contributions in our time to "the great conversation."

UNIVERSITY OF NOTRE DAME

In 1959 John J. Cavanaugh, C.S.C., then president of the University of Notre Dame, initiated, with the help of Mortimer Adler, a degree-granting program of general education at Notre Dame based entirely on reading, discussing, and writing about the great books. Six years later, Otto Bird, the first director of that program, associate editor of the Syntopicon, and editor of *Great Ideas Today* from 1964–1970, initiated the Collegiate Seminar—a two-semester great books reading and discussion course in which all students of Notre Dame's colleges of Arts and Letters and Engineering now participate.

The degree-granting program at Notre Dame, the General Program of Liberal Studies, is organized around the great books seminar, but it attempts to balance this integrated study with more traditional specialized courses in literature, philosophy, theology, the fine arts, and the history and philosophy of science. The General Program shares many features of the St. John's Program, but also possesses a number of differences, some of which stem from the fact that the Notre Dame program is situated as one program within a university.

Like St. John's, the Notre Dame General Program attempts to give a genuine understanding of each of the great areas of learning while simultaneously giving a sense of the interrelations, distinctive qualities, and methodological similarities and differences among these areas. As at St. John's, General Program classes are small in size (twenty or fewer) and rely heavily on discussion as the best mode of stimulating students' intellectual development. As at St. John's, all students pursue the same courses at the same time. All classes in both programs are taught by a separate faculty who share the goals of interdisciplinary learning through discussion of the great books.

There are also differences between the two programs. Since Notre Dame is a Catholic University, students in the General Program are especially encouraged to explore issues that involve their faith. Whereas the central basis for unification of learning at St. John's is philosophy, the General Program relies heavily on both historical and philosophical modes of understanding. Thus courses in history of science, history of the arts, and intellectual history are included in its curriculum. In 1955, the Notre Dame General Program changed from a 4-year program to a 3-

year program. In recent years the classics of the East have come to be included in the General Program seminars and tutorials, and students in the Notre Dame Program take one elective course per semester from the university's offerings.

The Collegiate Seminar provides the opportunity for all Arts and Letters and Engineering students at Notre Dame to integrate their diverse curricular learnings with reference to a rotating list of some thirty great books. Approximately 900 students each year critically discuss the same list of books in classes of less than twenty students conducted by faculty members from virtually every department of the College of Arts and Letters and several departments of the Colleges of Science and Engineering. A substantial number of Notre Dame graduates regard the Collegiate Seminar as one of the best courses of their college career. Many feel that the course provides an excellent basis for helping them work out their own personal philosophy and develop a heightened sense of intellectual adventure by rubbing against and testing with their fellow students the issues contained in the great books.

OLD WESTBURY

Educational analysts have questioned whether the St. John's program was a revolutionary move of the time away from Dewey's social instrumentalism or a reactionary return to the established cultural monuments. In 1967 Harris Wofford, Jr., a lawyer, political activist, Kennedy advisor, and Peace Corps Director, was given the opportunity by the State University of New York's School System to found an experimental college at Old Westbury. Wofford was convinced that neither of the polarizing epithets of "revolutionary" or "reactionary" identified the educational character of a great books curriculum. While it was possible to study the great books in the cloister of the Academy, the majority of the authors of these books did not write them there, and with Socrates as a model, Wofford sought to combine great books–great issues discussion with the education that arises from active participation in the ghetto and the marketplace. Wofford believed with Hutchins that "it was likely to be true that there are *some* things which *every* person needs in order to be free, things as essential to our minds and souls as water and salt, bread and wine are to our bodies." There was no better way to acquire these learning essentials than to incorporate in his experimental college something of the model established by St. John's College.

Alongside of small-group seminars on the great books, Wofford intended to provide an ample opportunity for independent study so students could follow questions wherever they lead, or develop a specialized competence of their own choice. A third part of his model curriculum would require that students go beyond the campus gates to learn from what they found in society. Perhaps the best way to describe Wofford's Old Westbury curricular ideal would be to say that he wanted students to not only become conversant with the issues of "the great conversation," but to become actively involved in living out the implications and consequences of those issues in society. Their formal collegiate program would involve not merely the acquisition of great ideas, nor the acquisition of mere experience. but a combination of the two in such a way that the double experience would be educative in its richest theoretical and practical dimensions.

The Wofford scheme never really got a chance to develop at Old Westbury. The school's commitment to "full partnership" in the student–faculty governance of social and academic life at the college led to many problems. Study projects defined by students were viewed by the educational world with high suspicion; the great books common learning was voted out; and Harris Wofford left after 3 years to become president of Bryn Mawr.

CALIFORNIA

Another experimental program of the 1960s based on reading and discussion of the great books was that developed by Joseph Tussman at Berkeley. In the preface of the book he published describing his program, Tussman pays a direct homage to Meiklejohn's Athens–America program at Wisconsin—"a legend in an educational paradise lost."

Tussman's program was designed to revitalize Meiklejohn's concept of lower division, undergraduate education. His program showed basic sympathy with Hutchins, the developers of St. John's, and the Harvard authors of the 1945 report on *General Education in a Free Society*. ("For the sake of all of us, for society, and for the individual [the college must] develop rational powers, heighten sensitivity to an awareness of fundamental human problems, cultivate and strengthen habits and dispositions which make it possible for humanity to displace the varieties of warfare with the institutions, the practices, and the spirit of reasoning together.") Tussman reasserted that the college is not a professional school, and "students" are not "scholars." The mission of the liberal arts college is to cultivate human understanding in the mind of the person, rather than to extend the frontiers of knowledge or provide professional training. Within this frame of reference, Tussman argues that the college has a fundamentally different mission than the pluralistically oriented multiversity complex. The specialist competence of the departmental expert is not relevant to the kind of teaching competence that is required to help students personally face the enduring *human* problems, which are essentially the great moral questions.

Accordingly, Tussman's program was based on a simple corps of "great books," although Tussman himself was uncomfortable with the phrase because he did not want his program to be identified with either the selection and organizing principles, or the metaphysical assumptions which he associated with the Chicago and St. John's programs. His model is Meiklejohn's, although his curriculum adds a study of seventeenth century England to the Golden Age of Athens and nineteenth century America. Tussman claims his orientation is a "problem-oriented" one, using materials which are, to some extent, historically clustered. Tussman also believes that everyone should study the same material at the same time, but his reading list in uncommonly short. In the belief that serious reading is almost a lost art, and that rapid reading under pressure is killing it, he insists that students take the necessary time to read at a more leisurely pace, allowing sufficient time for reflection and close examination of texts. Accordingly, his students spend 2 weeks studying Homer's *Iliad,* or 3 weeks studying Thucydides' *Peloponnesian War,* or 3 weeks on Plato's *Republic,* or the Bible—and nothing else. Lectures occasionally supplement the readings; weekly seminar discussions are required; secondary commentaries are discouraged.

As one might well imagine, Tussman's program had difficulty holding his own amidst the unsympathetic, graduate-oriented, department-defined faculty at Berkeley. Tussman claims success in the years that he did operate between 1964 and 1969, and he hopes to recoup funds and staff and continue his efforts in the near future.

Just as there have been very recent efforts to revive the Meiklejohn Wisconsin program at Berkeley, and modifications of the Hutchins ideal at Old Westbury, there have been efforts to create a new college of Catholic learning based on the model of St. John's. While it is true that other schools besides Notre Dame (notably St. Mary's College in California and St. Michael's College in Vermont) were enamored by the St. John's model, and incorporated programs based on its tenets into their curriculum, Thomas Aquinas College, founded in 1970, and located in San Rafael, California, followed St. John's and devoted itself exclusively to a common great books curriculum based on seminar and tutorial learning. Unlike any other model, however, Thomas Aquinas College harkens back to the Middle Ages not only in acknowledging its patron and in its conception of the liberal arts, but in its belief that the unity of the curriculum is ultimately found in the study of Theology. Most of the faculty members at Thomas Aquinas have been drawn from St. Mary's College of California, who in turn have been schooled in the philosophy and methods of St. John's.

It is possible to generalize, in conclusion, that the great books are an exceptionally dependable and resourceful vehicle of many different philosophies of education. Various combinations of basically the same list of great books have figured prominently in Columbia's general education following John Dewey's influence of the thirties; in the "liberal education for responsible citizenship" orientation that followed the Harvard report on *General Education in a Free Society;* the "collected knowledge-most-worth-having" of Hutchins and Buchanan; the Meiklejohn–Tussman programs at Wisconsin and Berkeley; and the teaching of religiously committed colleges such as Notre Dame in Indiana, and St. Mary's and Aquinas Colleges in California. The books represent no single ideology or teaching approach, but rather contain all the possible paradigms of learning that may be found in the Western tradition. Perhaps they accommodate many educational philosophies, because, taken together, they represent all the educative possibilities, and all the models of human aspiration and achievement that our culture has recorded.

The advent of paperback books during the 1950s also has had a great effect on American higher education by making most of the great books readily available to college students and the reading public at large in inexpensive editions. During the

1930s most college learning was done through textbooks. During the 1960s and into the 1970s colleges of almost every quality were using primary source materials in almost all forms of nontechnical learning. While many of these primary source materials are contemporary writings, a substantial number are also the texts that belong to the great books tradition. It is also true that a vast number of American colleges and universities have abandoned the lecture method of teaching along with their turning away from textbooks. Small seminars and discussion classes seem to be the recent preferred norm. It would be nearly impossible to demonstrate that the great books discussion innovations of the thirties were directly responsible for these changes, but it is safe to conclude that there was a prophetic character about the educational ideas of Erskine, Meiklejohn, Hutchins, and Adler, whose educational thoughts in many respects seemed ahead of their time as they were proclaiming the value of this kind of learning for men in any time.

Great Books Discussion Outside of the Academy

Probably the first instance of organized reading and discussion of great books outside a formal college curriculum took place when Mortimer Adler led such an activity for a group of adults at Cooper's Union in New York from 1927–1929 through a grant provided by the Carnegie Foundation. Adler had participated in Erskine's program at Columbia as a student and as a faculty discussion leader, and the value of the experience never left him. On the basis of his experience at Cooper's Union, however, Adler was convinced that adults, as well as students, could begin their liberal education at any point in their lives—as a matter of fact, adults had the advantage of more years of living experience to help them better understand the significance of what the great authors have to say. Robert Hutchins was quick to identify himself with Adler's convictions and enthusiasm for such adult education as the two began working together at the University of Chicago in 1930, and the history of subsequent great books discussion outside of the academy directly followed from the combined work of these two men.

The basic idea for adult education that Adler and Hutchins promoted was to help Americans come to grips with a seemingly chaotic world by reading and discussing, on a 4-year plan, some seventy-two books. Hutchins said at a June 1947 press conference in New York that "the basic reason this program will have a wide appeal is that everyone who has reached maturity in this country is concerned about the world, himself, and life, and finds that his education doesn't do him any good."

The plan was rife with idealism. Hutchins envisioned 15 million adults forming voluntary discussion groups in clubs, business firms, labor unions, libraries, parent–teacher groups, and similar organizations. He idealized blue-collar workers coming off the assembly lines, changing their clothes, showering, and gathering to discuss Aeschylus, Plato, Montaigne, Descartes, Adam Smith, and Karl Marx around a seminar table. "We have been saying for years that education is the way to improve society, but we have limited education to infants between the ages of 6 and 21," Hutchins said. "If we want to save the world, this program is unrealistic. The world may not last long enough to let the present educational system affect the course of events."

Adult great books discussion began at and near the University of Chicago shortly after World War II, and quickly spread throughout some seventeen cities in all parts of the country. Within 3 years, 20,000 adults were involved in discussing great books. In 1947 a nonprofit Great Books Foundation was founded to administer and carry on this project with Lynn A. Williams, Jr., as president of the foundation, and Dr. Hutchins as chairman of a Board of Directors consisting of Mortimer J. Adler, then professor of law at the University of Chicago, Ralph A. Beals, director of the New York Public Library, and E. H. Powell, president of Encyclopedia Britannica, Inc. The history of nonacademic great books discussion in America subsequently is best reflected in the history of the Great Books Foundation.

During its initial years, the Great Books Foundation demonstrated a rather consistent, if difficult growth. By 1950 the foundation had nearly 1,000 groups operating in almost every state in America, and managed even a few foreign programs in Canada and abroad. By the end of 1955 there were 1,600 functioning groups. Free training courses for discussion leaders grew proportionately. Unfortunately, even with this growth, the nonprofit organization could not keep from running thousands of dollars in debt each year, reaching deficits in six figures near the end of the 1950s.

Understandably, the Great Books Foundation reached a point of operational crisis, and there was serious doubt about its future. Fortunately for the organization, C. Scott Fletcher, president of the Fund for Adult Education, a philanthropic division of the Ford Foundation, offered the Great Books Foundation $500,000 on a matching fund basis. Under the presidential leadership of Richard Dennis, the foundation was successful in raising its equal share, and with a million dollar resource there was promise of establishing the work of the foundation on a perpetual and self-sustaining basis.

Since the founding of the Great Books Foundation in 1947, nearly a million adults have participated in great books discussion groups, the largest number at any one time reaching about 75,000. The attrition rate of those in the early years of the adult program has averaged about 30%, a remarkably low figure for this kind of volunteer activity. Currently there are approximately 50,000 adults discussing the great books under the auspices of the Great Books Foundation, a number that has remained constant over the past decade.

According to James A. Davis, senior study director of the National Opinion Research Center, in three studies in 1957, 1958, and 1961, participants in adult Great Books Programs tended to be

> highly educated, quite married, somewhat female, disproportionately professional men and wives of white-collar husbands; infrequently "intellectuals"; undermobile; possibly disproportionately irreligious; possibly under-proportionally Catholic; sociable; joining Republicans and Democrats. . . . They are not . . . so immersed in ideas and culture that these have become the centers of their lives. The

> stereotype of the bookish, ivory tower intellectual, does not apply to these people, most of whom share basic middle-class values and few of whom consider themselves intellectuals.

It was also found that a combination of the social interchange of the discussion context and the intellectual stimulation of the great books accounted for most participants joining Great Books Programs. Those who completed the programs reported that the activity had a "genuine impact" on their lives, most often in terms of learning what the great minds of history have to say about the basic issues of life; reacquainting themselves with a cultural background which had become rusty; improving their ability to analyze and criticize arguments; escaping the intellectual narrowness of their occupation; or talking with people who have more intellectual interests than their usual "social" friends. Understandably, the survey also disclosed the Great Books participants are heavy readers, and generally enjoy mental activities. While the National Opinion Research Center could indicate evidence of some shifts in participants' religious and political positions as a result of great books discussions, they were unable to detect much evidence for major changes in basic values.

With the turn of the sixties, unexpected returns began to appear in the foundation's operation through the impetus of enthusiastic adults who had found their great books discussion experience rewarding, and who began to encourage similar programs for their children in the high schools. In 1960, partially in response to this interest, Edwin Moldof was hired as academic director of the foundation, one of his responsibilities being to develop a "junior" great books program and explore the possibilities of younger children reading good literature with profit and enjoyment and learning from one another in the context of discussion.

Under Mr. Moldof, a program was begun in 1961 for fifth, sixth, and seventh grade students with mimeographed reading lists and inexpensive paperback books. The immediate success of these initial groups led to the publication of 5,000 copies each of two experimental sets of inexpensive editions. The sets were sold out almost at once, and the leaders and participants in over 400 pilot groups were asked to fill out questionnaires about their experiences. On the basis of the overwhelming number of enthusiastic responses the foundation decided to start an official Junior Great Books Program. In 1963 the experimental sets of children's literature underwent a major revision and resulted in five sets of readings, ranging from the fifth through the ninth grade. It was hoped—a projection which later came true in practice—that the adult selections could be read and discussed by students in the tenth grade who already had participated in the earlier junior levels of the program. A further revision and expansion of the texts took place during 1967, reaching its current span from the third grade through the ninth grade, with the adult sets of Great Books available thereafter.

The Great Books Foundation has been continually evaluating its work and revising its program. In the spring of 1953 the foundation sent a questionnaire to all discussion leaders and participants in an attempt to find out what they thought of the program. There were many responses and most were complimentary. Major recommendations for changes included shortening some readings, changing others, and finding better translations for some selections. In 1966, 35,000 Junior Great Books leaders were sent a questionnaire asking them to evaluate their experience conducting discussions. The leaders enjoyed their activities; they claimed to have learned more than the youngsters; they cited the rewards of contributing to children's growth and ability to handle ideas; they read books that they missed but always wanted to read as children; they got to know children better; they felt they were contributing meaningfully to community life; they developed new intellectual skills themselves; and they were proud to be identified with the activities of the Great Books Foundation. The survey also uncovered successful and unsuccessful reading selections. Fabre's *Selections in Science*, Grimm's *Household Tales*, and *The Song of Roland* were found by many not to discuss well. Dickens' *A Christmas Carol*, Browning's *The Pied Piper*, Hawthorne's *A Wonder-Book*, Stevenson's *Treasure Island*, Kipling's *The Jungle Books*, and Defoe's *Robinson Crusoe* were selected among the most satisfactory.

Revisions in discussion leader preparation and reading lists have been guided by the results of such surveys. Currently the Junior Great Books selections consist of the following:

Series One

La Fontaine: *Fables*
Hutchinson: *Chimney Corner Fairy Tales*
Milne: *Winnie-The-Pooh*
Jacobs: *English Fairy Tales*
Duvoisin: *The Three Sneezes and Other Swiss Tales*
Sawyer: *Picture Tales from Spain*
Hatch: *13 Danish Tales*
Perrault: *Fairy Tales*
Lang: *Beauty and the Beast*
Shedlock: *The Art of the Story-Teller*
Babbitt: *Jataka Tales*
Uchida: *The Dancing Kettle/The Magic Listening Cap*

Series Two

The Brothers Grimm: *Household Tales*
de la Mare: *Tales Told Again*
Kipling: *Just So Stories*
Wilde: *Tales*
Aesop: *Fables*
Curcija-Prodanovic: *Yugoslav Folk Tales*
Chase: *The Jack Tales*
Sawyer: *The Way of the Storyteller*
Lofting: *The Story of Doctor Dolittle*
Jacobs: *Celtic Fairy Tales*
Wheeler: *Russian Wonder Tales*
Courlander and Herzog: *The Cow-Tale Switch and Other West African Stories*

Series Three

Andersen: *Stories*
Hawthorne: *Wonder-Book*
Benson: *Stories of the Gods and Heroes*
Dickens: *A Christmas Carol*
Bowie: *The Bible Story for Boys and Girls*
Smola and Dixon: *The Arabian Nights*
Browning: *The Pied Piper*
Grahame: *The Wind in the Willows*
Hieatt and Hieatt: *The Canterbury Tales of Geoffrey Chaucer*
Kipling: *The Jungle Books*
Tolstoy: *Fables*
Stevenson: *Treasure Island*

Series Four

London: *To Build a Fire*
Boccaccio: *The Decameron*
Irving: *The Sketch Book*
Thackeray: *The Rose and the Ring*
Xenophon: *The Education of Cyrus*
Schiller: *William Tell*
Warner: *Men and Gods*
Poe: *Stories and Poetry*
Carroll: *Alice's Adventures in Wonderland*
Colum: *The Children of Odin*
Frost: *You Come Too*
Defoe: *Robinson Crusoe*

Series Five

Crane: *The Open Boat*
Virgil: *The Aeneid*
Gogol: *The Overcoat*
Sutcliff: *Beowulf*
Euripides: *Alcestis*
Bennett: *The Lion's Share*
Blake: *Poetry*
Melville: *Bartleby*
Bunyan: *The Pilgrim's Progress*
The Declaration of Independence
Moliere: *The Would-Be Gentleman*
Twain: *Huckleberry Finn*

Series Six

Chekhov: *Stories*
Sophocles: *Antigone*
Scott: *The Two Drovers*
Plato: *Apology; Crito*

Galsworthy: *Stories*
Stevenson: *Dr. Jekyll and Mr. Hyde*
Epictetus: *The Manual*
Shaw: *Pygmalion*
Pascal: *Thoughts*
Turgenev: *The Watch*
Reade: *"There's Many a Slip 'twixt the Cup and the Lip"*
Crane: *The Red Badge of Courage*

Series Seven

Aristotle: *Rhetoric*
Wells: *The Time Machine*
Dostoevski: *The Honest Thief*
Ibsen: *An Enemy of the People*
Homer: *The Odyssey*
Kant: *Education*
Calderon: *Life is a Dream*
Swift: *Gulliver's Travels*
Thoreau: *Walden*
Sophocles: *Philoctetes*
James: *Psychology: Briefer Course*
Conrad: *The Shadow-Line*

The current strength of Great Books Foundation activities lies in the combined Junior and Adult Great Books program. The deficits of the fifties were gradually eliminated and a surplus of operating capital was actually achieved toward the end of the sixties. While the junior program is most popular among suburban families throughout the country, there are successful cases of programs for ghetto children in such cities as Chicago, St. Louis, and San Francisco. Most of the students participating in these programs range from grades three through seven. There is a noticeable drop-off in participation among students reaching the eighth grade and the high school level. Compared to a reasonably steady 30% attrition rate among adult discussants, the figure varies from zero to as high as 50% with the younger group. Some 80% of all the discussion leaders now trained by the Great Books Foundation are trained to lead Junior Great Books groups. It can be generally estimated that some 150,000 young people are currently involved in Junior Great Books activities. This number, too, seems to have remained fairly steady over the past several years.

The Great Books Foundation has developed a very successful training course designed to teach leaders how to conduct a discussion of a great book solely through the use of questions. Leader-trainees learn how to formulate basic questions that stimulate group exploration of major ideas in a book, frame a series of related questions that lead to a discussion in depth, incorporate the ideas of the group into new questions, and evaluate their own performance as a discussion leader. The preparation program emphasizes an ability to read analytically, to think systematically, to listen intently, and to express oneself effectively—skills which are lifelong and widely-applicable assets.

In view of the success of this leader-trainee course, it is possible that the Great Books Foundation is reaching another point in its history where policy changes in response to public demand may effect the future of its operational objectives. Many participants who have undergone the leader-trainee program have found the skills they develop serviceable in various areas of school and professional activities that do not have to do directly with great books. The question has arisen whether the methods of reading, thinking, and critical discussion can be divorced from the great books, their traditional subject matter. The question was studied carefully by the foundation between 1968 and 1972, and in a new book on discussion for the organization, Edwin Moldof argues that other materials—for example, fine arts, films, and records—can lend themselves to the same methods of analytical discussion so long as the object under investigation yields interpretation, and a common discourse and common experiential frame of reference is shared by those in the discussion.

People in Great Books Programs reap many benefits from their activities. They learn to read more perceptively and to evaluate contemporary writing against the best that has been written in Fiction, Politics, History, Science, Philosophy, and Religion. They learn to think independently because they become accustomed to supporting what they say with evidence and judgment. They learn to express themselves more clearly because they talk regularly about serious ideas. They learn to listen more intensely because they discover how much they can learn from others. Above all, people in Great Books Programs value their association with other thoughtful people in the rewarding activity of putting to work in their own lives the accumulated wisdom of the human race.

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GREECE, LIBRARIES IN

Historical Background

Libraries in Greece at the present time, and particularly school and public libraries as agencies for educating or further educating the public, are uncommon, and in large segments of the country nonexistent. To be fair, such libraries or aspects of such library service may be found in the large urban centers of the country. They are, though, still lacking in the small towns and the rural areas.

This fact is perhaps very strange if one considers the intellectual history of the Greek nation, and particularly if one considers the contribution of Greece to the development of modern western culture through her poets, philosophers, dramatists, historians, and others. The renowned libraries of Greek antiquity seem to have no counterpart today.

However, it can safely be stated that at present libraries in Greece, after a long period of dormancy, are on the threshold of a period of rapid development.

To understand the state of affairs that has reigned in Greece with respect to libraries since the turn of the century, it will be useful to survey briefly the history of the country to this period. This will bring forth the interrelationship of the social forces that assisted in the development or regression of libraries during certain periods of the nation's life.

The libraries that existed and functioned during the first period of Turkish domination, following the fall of Constantinople in 1453, were a continuation of those that flourished during the Byzantine Empire. Soon, however, the intellectual and cultural continuum of Byzantium was broken off because of the social and cultural upheavals that followed the collapse of the empire. The ensuing population movement, and in particular the emigration of that segment of the population that regulated and influenced the intellectual and cultural development of the nation, was directly responsible for the stagnation of libraries and the depletion of their resources during the period that followed.

The historical period that followed the fall of Constantinople was characterized by a gradual depletion of the resources of libraries in the areas under Turkish domination, partly because of the movement of the centers of study away from these areas. The new centers of scholarship in turn became strong magnets for library materials, thus enhancing the process of depletion.

During the last period of Turkish domination, that is, toward the end of the eighteenth century and the early part of the nineteenth, libraries began to flourish in certain Greek provinces of the Ottoman Empire. The development of these libraries was linked with the rise of a number of schools, gymnasia, and colleges in occupied Greece in this period known in Greek history as the Period of Enlightenment. During this period a number of Greeks living in the West and in Russia believed that the liberation of the Greek nation would come about only through cultural and intellectual evolution. This, they believed, should begin at the schools, a number of which were established and flourished: at Ioannina in Northwestern Greece, on the island of Chios, in Dimitsana and at Andritsaina, in the Peloponnese, at Zagora and Melies in Peleon, and others. The libraries of these schools, rich in resources, played a significant role in the education of their students. Their collections or what has been left of them, are considered outstanding.

The period following the liberation of Greece witnessed a shift of focus of library resources toward the capital. The establishment of institutions of higher education in the capital, and of scientific and literary societies there, tended to concentrate the library resources in the capital and only at a later period in other towns, mainly in Thessaloniki. The historical libraries of the previous period gradually lost their former aura, and this was followed by a decline of financial support and patronage. Their social impact in the total national picture also declined. Even today, their strength is found in the resources they acquired during the period in which they flourished.

The Present Picture

As already stated, today the largest concentration of libraries and library resources is found in Athens. There is, however, a significant difference in the type of libraries found today over the previous period. Whereas at the turn of the century and up to the period preceding World War II, the academic and the central state libraries dominated the library scene, both physically and in terms of their impact on scholarship (Ionian Academy, University of Athens, National Library, Library of Parliament), the last two decades have witnessed the development of libraries attached to institutions dealing with research. It is natural that such institutions need well-organized and up-to-date collections to cope with the demands placed on them by their staff. It is to be noted that these are the libraries that demand and hire professionally trained personnel, trained locally and abroad.

Grouped by type, the following libraries are found in Greece (the listing is selective).

Central Libraries

THE NATIONAL LIBRARY

This library was established in 1829 on the island of Aigina, off the port of Piraeus, in the Saronic Gulf, which was then the capital of Greece; it then had 1,844 volumes. In 1834 it was moved to Athens and functioned as the first public library of Greece. In 1842 it was merged with the University Library which had been established 4 years before in 1838. The University Library had at that time about 15,000 volumes, which was then considered a good collection. In 1866, by royal decree, the two libraries were legally merged and a campaign for better quarters began.

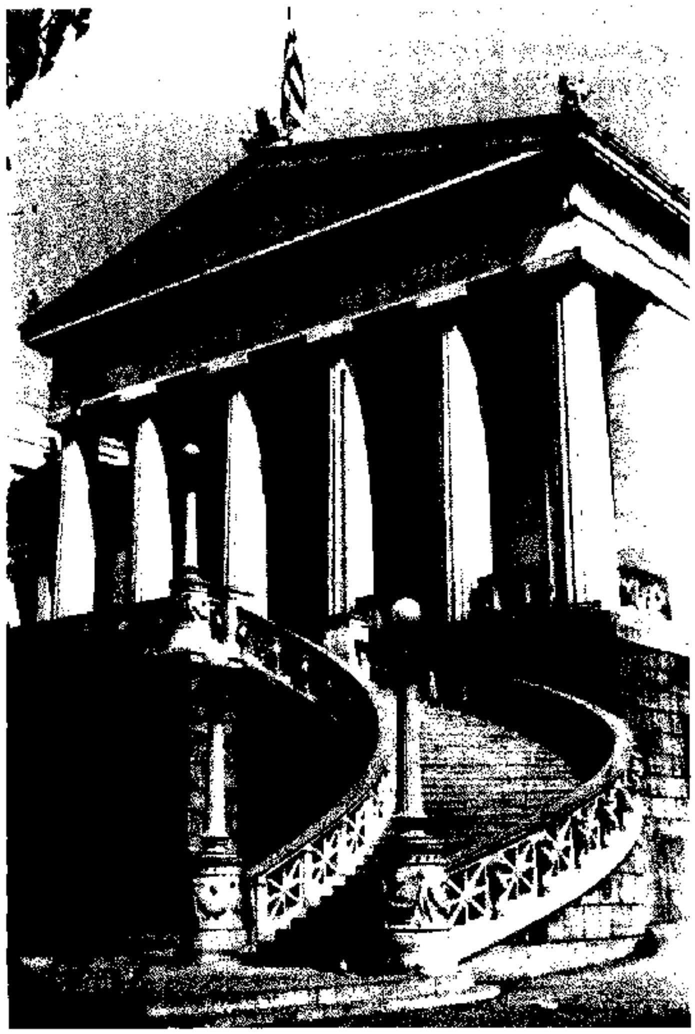

FIGURE 1. *The National Library, Athens, Greece.*

It was not, however, until 1903 that the National Library moved to its present monumental building in the heart of Athens. The building was donated by the Vallianos brothers and designed by a Danish architect (see Figure 1). In 1920 it became a public corporation under the jurisdiction of the Ministry of Education. It was not until 1943 that it became one of the depository libraries of the country; the other being the Library of the Greek Parliament.

By the terms of the above law, two copies of each publication are deposited at the National Library, one for its own collection and the other becomes the property of the University of Athens, its collection still being housed in the National Library. However, because of the particular pattern of Greek publishing and the lack of current bibliographic awareness, many publications, particularly those privately printed, escape notice. The result is that there are significant gaps in the collection, particularly of fugitive materials.

The library's collections are in excess of 1,000,000 volumes, among which are over 150 incunabula, about 2,500 volumes of the sixteenth century, and a number of Aldus, Froben, Stephanus, and Elzevir editions. Its Department of Manuscripts contains over 4,000 religious codices, manuscript gospels, etc., and about 200,000 historical documents and archives relating to the Greek War of Independence.

The National Library has always suffered from lack of sufficient funds to acquire foreign books, hence its collection of such current books is very limited and insignificant.

THE LIBRARY OF PARLIAMENT

This library is also a legal deposit library. It was established in 1845 and was moved in 1875 to what is presently called the Old Parliament Building, now the Ethnological Museum of Greece. Since 1935 it has occupied its present site in the Parliament Building, which formerly was the palace of the first king of Greece, King Otto.

Its present collection exceeds 1,000,000 volumes, and it has the most complete collection of Greek newspapers and periodicals.

Because of its proximity to the legislative body, this library has always had more funds for the purchase of foreign books and, hence, has a much better collection of such books than the National Library. It has also attracted significant gifts of private libraries, the most important being that of Jean Psichari, the well-known Greek linguist and language reformer who lived in Paris. This private library, 35,000 volumes, was acquired through funds made available by Emmanuel Benaki. It has also attracted the private libraries of deceased political figures of modern Greece, such as those of G. Kafantaris and Ioannis Metaxas.

The library also has a valuable collection of incunabula, codices, eleventh to fifteenth century manuscripts, and archives relating to modern Greek history.

The Library of Parliament functions as a public library, and is open and accessible to the general public. In fact, its public service policy is more liberal than that of the National Library, which still places certain restrictions on its readers. It has recently undertaken a period of reorganization which has already resulted in significant progress toward better service for the public: new rooms to house the incunabula and postincunabula books, special reading rooms for researchers, new by-laws regulating operations, and an active publication program of historical documents.

Under the new by-laws, all new personnel must have a library degree. In this respect and in its attitude toward the public-at-large, the Library of Parliament is far more advanced than the National Library.

Academic Libraries

Most of the institutions of higher learning are concentrated in the Athens-Piraeus area. The rest are in three other provincial towns: Thessaloniki, Patras, and Ioannina.

THE UNIVERSITY OF ATHENS

The University of Athens does not yet have a campus, a central library, or a central catalog. This is due to its historical development, with its schools scattered in the city. At present a new campus is being developed at the foot of Mt. Hymettus and plans call for a central library building.

At present the departments of the various schools of the university have their own collections and have special funds for their collection enrichment. The servicing of these collections is, as a rule, done by assistants to the chair who are graduates of that particular department but have no special training in library work. As a result, there is a great variety of systems used in cataloging and classifying these collections, and, as these collections are housed in various parts of the university buildings, there is very little horizontal communication between those servicing the collections. Each department tends to become self-sufficient, and there is lack of cooperation in developing a central catalog on the basis of consistent principles for the benefit of all faculty, students, and research workers. Borrowing activity is completely lacking.

TECHNICAL UNIVERSITY OF ATHENS (ETHNICON METSOVION POLYTECHNEION)

This institution has a central library and a central catalog. In addition it has a number of departmental collections serviced by assistants to the various chairs. Materials circulate freely to faculty and students. The present collection amounts to 120,000 volumes. In addition the library subscribes to 700 periodicals. A new campus is presently being developed and will feature a central library building. Occupancy is planned for 1980. A professionally trained librarian is in charge.

HIGHER SCHOOL OF ECONOMIC AND COMMERCIAL STUDIES, ATHENS

The school has a central library, a central catalog, and ample space for readers.

PANTEIOS HIGHER SCHOOL OF POLITICAL SCIENCES

There is a central reading room and reference collection and a number of departmental collections serviced by assistants to the various chairs. The library is currently undergoing reorganization.

Other institutions of higher education in the Athens-Piraeus area with limited library resources are the following: Higher School of Fine Arts, Higher Industrial School at Piraeus, and Higher School of Agriculture.

THE UNIVERSITY OF THESSALONIKI

The university, built on a campus in the heart of the city, has a central library collection apart from those of the various departments. A new library building, still unoccupied, has been built. The library is going through a period of reorganization, and there is a professionally trained librarian on its staff.

THE UNIVERSITY OF PATRAS

This university is quite new. An international library expert has already surveyed the needs of the university in terms of library development plans.

THE UNIVERSITY OF IOANNINA

This is the newest of all Greek universities. Its resources are at present very limited.

Public Libraries

Public libraries in Greece come under various authorities. Some come under the jurisdiction of the General Directorate of Cultural Affairs of the Ministry of Culture and Science, while others come under the authority of the Ministry of Interior through the municipal authorities, and still others are established by cultural and literary societies. Almost all, with very few exceptions, have so far lacked adequate funds, trained personnel, and attractive quarters. This has resulted in poor catalogs, unwieldy classification schemes, static book collections, and very limited service to the community.

The larger cities, in general, fare better than the small provincial towns, whereas the villages experience no library service at all. It is believed a new bookmobile service, mentioned below, will remedy this situation.

All provincial capitals are on record as having libraries. However, no evaluation of their impact and service has even been attempted. It is suspected, as things stand at present, that the service provided is not satisfactory.

This type of library, whose existence so far has been very shadowy, is now entering a new era of development. By recent decree five central, later to become seven, libraries have been established. The towns where they are located coincide with the seat of the regional ministry. The central libraries will be responsible for library development of the region and will be serving it by means of bookmobiles that have already been acquired. This development seems to be the most significant one in the last 25 years, because most of the public libraries have not been coordinated so far and there seems to have been no integrated plan for their development.

At present the large cities and towns all have a central public library which, as a rule, comes under the municipal authority, but no branches. Thus neither Athens nor Piraeus, an urban complex of about 2 million inhabitants, has any branch library. Thessaloniki fares better, for besides the central collection it operates two small branch libraries and runs a bookmobile service.

Of the rest of the provincial public libraries, those in the following towns are noteworthy:

Aigina (Kapodistrias Library)
Agrinion (Papastrateios Library)
Cephalonia (Korgialeneios Library)
Chania of Crete (Malmeios Library)
Chania of Crete (Municipal Library)
Corfu (Library of the Literary Society)
Halkis (Public Library)
Herakleion of Crete (Vikelaia Municipal Library)
Hermoupolis on the island of Syros
Hierapetra of Crete (Literary Society Library)
Ioannina (Zossimaia Public Library)
Kalamata (Public Library Society)
Leros (Municipal Library)
Nafpactos (Papacharalambeios Library)
Nauplia (Palamedes Library)
Patras (Municipal Library)
Pyrgos, in the province of Elis (Municipal Library)
Xanthe (Municipal Library)

The public libraries that flourished during the period of the Greek Enlightenment and the one following it immediately must, under the current concept of public library functions, be classed as research libraries. Such are the libraries in Andritsaina, Chios, Demetsana, Kozani, Meleai, Siatista, and Zagora.

Libraries established by foreign diplomatic missions function as public libraries. These are: the American Library in Athens, the American Library in Thessaloniki, the American Library in Patras, the Library of the British Council in Athens, the Library of the Goethe Institute in Athens, the Library of the Italian Institute in Athens, and that of the French Institute in Athens. All these libraries provide outstanding library services to the Greek public by supplying much needed materials in the sciences, the humanities, and the arts while at the same time acting as demonstration units of what good library service to the public means. Most of these libraries also provide interlibrary loan services from their respective countries.

Finally the Athens Y.W.C.A. Library and that of the Hellenic-American Union in Athens are noted for being the only Greek libraries in the heart of Athens available to the general public and from which books may be borrowed.

School Libraries

The modern concept of a school library at the elementary and secondary levels is lacking almost completely. What is to be found normally is a small collection of books either in classrooms or staff rooms. Most of the time this collection, especially at the secondary school level, is teacher-oriented rather than student-oriented. Accessibility, either physical or through a catalog, is very limited. So is the availability of professional librarians to service the collection and to serve the school population. There are no more than ten professional librarians working in school libraries in the whole country. Inadequate funds and lack of space tend to make

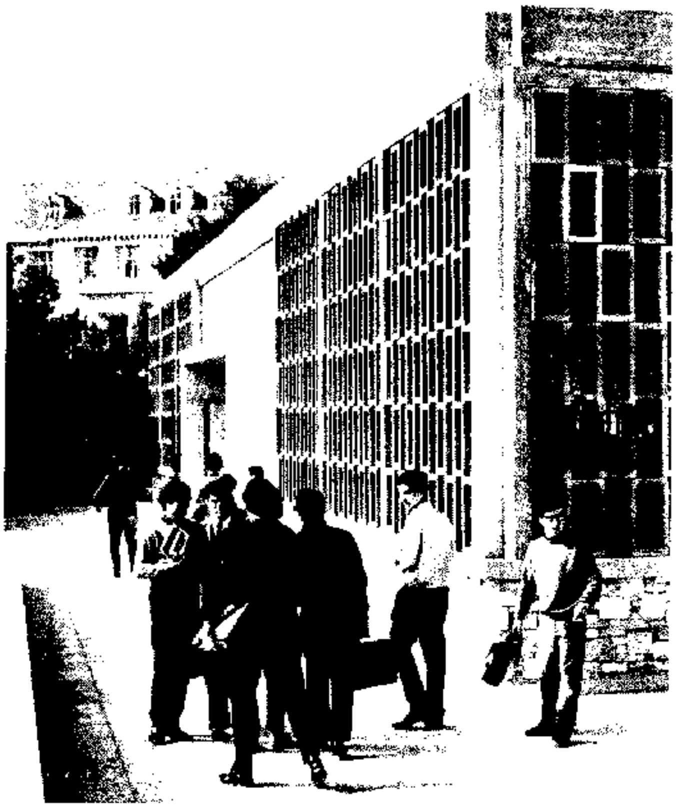

FIGURE 2. *Athens College Library, Athens, Greece.*

these collections static and decrease their impact as educative media. In addition, the absence of public library service to children means that a large segment of the school population has no publicly-financed outlets of library service.

Certain outstanding school libraries in the country, however, are associated with private institutions: Anatolia College in Thessaloniki, Athens College and Pierce College in Athens. These three institutions, members of the Near East College Association, are American-sponsored high schools for Greek students. They all have open stacks, engage professional librarians, and their books can be borrowed for home use. The Athens College Library, in particular, is pioneering library development in the country (see Figure 2).

Other schools which have established adequate libraries are the Anavryta School, the First Public Gymnasium at Plaka, and the Public Gymnasium of Drapetsona; all three are in the Athens-Piraeus metropolitan area.

Libraries in Ministries and Public Corporations

Central Ministries have libraries that are at various stages of development and organization. Noteworthy are the collections at the General Directorate of Public

Administration of the Ministry of Government Policy, the Ministry of Public Works, the Ministry of Mercantile Marine, Transport and Communications, the Ministry of Education, the Ministry of Agriculture, and the Ministry of Justice.

On the other hand, public corporations have undertaken a very serious effort during recent years to develop and organize their collections. Outstanding among these are the Public Power Corporation Library, the Organization for Telecommunications Library, and the Library of the Organization of Employment and Manpower.

It is within this general effort that the state has in recent years begun a series of intensive seminars in librarianship for civil service employees to staff most of these libraries.

Research Libraries

The research library is the one that has developed fastest in Greece, especially during the post-war period. The reason for this is the pressure on the part of research institutions to have up-to-date information and materials. These are the libraries that employ most of the professional librarians. A number of the research institutions with good libraries are public corporations, supported by the state budget; others are private corporations. As a rule, they have adequate funds and ample quarters for readers and materials.

In the field of pure sciences, the most outstanding collection is at the Nuclear Research Center "Democritus" Library at Aghia Paraskevi, a suburb of Athens, which operates under the authority of the Greek Atomic Energy Commission. Its collection of over 1,000 titles of scientific periodicals is outstanding. So are its physical quarters.

Also outstanding is the Library of the National Research Foundation in the heart of Athens, a most up-to-date unit. The library houses scientific periodicals only; 1,400 titles are received regularly at present. Plans of operation for this library call for its becoming the central library for scientific periodicals of the country. It will tend to develop along lines similar to the National Lending Library at Boston Spa in England.

An outstanding collection in its field is to be found at the Benaki Plant Pathology Institute in Kifissia, a suburb of Athens. Its library has the most up-to-date collection of books, periodicals, and reprints on plant pathology.

Three other research institutions have developed excellent resources in their respective fields: The Center of Economic Planning and Research, the Greek Productivity Center, and the National Social Sciences Research Center, all in Athens. These centers were established within the last 20 years and have grown very rapidly to satisfy the needs of their research staff.

Certain banks in Athens have also built up excellent collections in the fields of economics and public finance: the Bank of Greece, which is the state central bank, the National Bank of Greece, the Commercial Bank of Greece, and the Agricultural

Bank of Greece. These libraries are headed by professional librarians. Their resources are available to the general public for consultation and reference.

Significant research collections are those of the archeological institutes and museums in Athens whose availability to the general public, however, is very limited. These are the Greek Archeological Society, the American School of Classical Studies, the British School (of Archeology) at Athens, the German Archeological Institute, the Austrian Archeological Institute, the Swedish Archeological Institute, the Italian School of Archeology, the French School of Archeology, the National Museum at Athens, the Benaki Museum, the Byzantine Museum, and the National Gallery.

Other strong research collections are associated with the Athens Center of Ekistics in the fields of City Planning, Architecture, and Art, and the Eugenides Foundation in Athens in the fields of pure science.

The libraries associated with the following institutions have strong collections in their respective fields: Institute of Ocean and Fishing Research in Athens, Technical Chamber of Greece in Athens, Institute of Geology and Sub-surface Research in Athens, National Statistical Service of Greece in Athens, Association of Daily Newspaper Editors of Athens, Athens Lawyers Union, State General Chemistry Laboratory in Athens, and Society for Macedonian Studies in Thessaloniki.

The Academy of Athens, besides its own collection, has established a number of research centers with strong collections in their respective fields of research: Research Center for the Study of Modern Greek History, Research Center for the Publication of the Dictionary of the Modern Greek Language, Research Center for Greek Folklore, Research Center for Medieval and Modern Hellenism, Research Center for the History of Greek Law, Research Center for the Publication of Works of Greek Authors from Ancient Times to the Fall of Constantinople, Research Center for Astronomy and Applied Mathematics, and Research Center for Greek Philosophy.

An outstanding collection on modern Greek history is found at the Gennadios Library in Athens, founded in 1921. It is strong in works on the Eastern Question, travel accounts on Greece, modern Greek history, old Greek school textbooks, and rare editions of works of ancient Greek authors. It also contains a collection of Byroniana.

A type of library that has developed very slowly in Greece is the medical research library. In the last 5 years, however, a number of hospitals have moved in the direction of organizing their existing collections and appropriating increasing funds for the acquisition of research materials. More important, however, is the fact that hospitals, at an increasing rate, are hiring professional librarians, graduates of the Library School, to organize and service their collections.

An outstanding medical library is at the Evangelismos Hospital in Athens. Within the last 5 years this library has made noteworthy progress in all fields of library management and public service. It is presently the only medical library, if not the only library in the country, that operates continuously from early in the morning till very late in the evening. It also stands out as the medical library with the largest professional staff. Its resources are available to the general public for reference and consultation.

Other medical libraries in Athens which employ professional librarians and are going through a period of library reorganization are the following: Cancer Institute, Hippocrateion Hospital, Athens General State Hospital, Alexandras Maternity Hospital, Children's Hospital, the Red Cross Hospital, and the Piraeus Cancer Institute.

Noteworthy for its research value is the library of the Geroulanos Foundation, formerly of the Sbarounis Hospital. This library is at present inactive and available on a limited schedule.

Provincial hospitals have very limited library resources.

Among the outstanding rare research material in Greece is that found in the monasteries and particularly in those on Meteora, in Central Greece, and the twenty monasteries on Mount Athos: Laura, Vatopedi, Rossicon, Chiliandari, Everon, Esphigmenou, Kultumush, Pantokratoros, Philotheou, Karakalou, St. Paul, St. Denis, St. Xenophon, Dochiariou, Constantinou, Zagraphou, and Stavronikita.

The libraries of the monasteries on Mount Athos date as far back as the tenth century when the monasteries were founded. These monasteries established scriptoria for copying liturgical and religious works. In addition, they were enriched with gifts from scholars and clergymen, and became important centers of scholarship during the Byzantine era. With the fall of Constantinople in 1453, the collapse of the Byzantine Empire, the emigration of scholars to the West, and the development of new centers of scholarship in Europe, the scholarly activity in the monasteries fell into a period of decline, followed by a period of depletion of their resources through pillage, ignorance of the monks, and fire. Despite all these catastrophes, there are still approximately 11,000 codices in these libraries.

An outstanding collection of manuscripts, rare books, and archives is found on the Island of Patmos, in the Monastery of St. John, founded in 1088.

GEORGE M. CACOURIS

GREECE, LIBRARY EDUCATION IN

Historical Background

Up to 1961, the year that the Y.W.C.A. Library School started operating, the only formal training in librarianship available for Greeks was that offered by library schools abroad, mainly in the United States or in Great Britain. In the postwar period a number of people had, in fact, been trained abroad, and on their return assumed the directorship of some of the still most prominent libraries in Greece.

However, their number was very limited and not sufficient for a breakthrough in library development.

In the early 1950s, after the country had gone through a devastating war and the ensuing civil strife, a need began to be felt for some kind of training for those already employed in libraries, state, public, or private, and who had had no experience in modern methods of administering and organizing their collections.

To satisfy this particular need, the American Library in Athens organized two brief training institutes for library employees who had had no training. The first series of these Library Training Institutes was organized by the American Library in Athens in cooperation with the United States Information Service in Athens late in 1955 and early in 1956. It was held in five provincial capitals successively: Kavalla in Northern Greece, Ioannina in Western Greece, Herakleion on the island of Crete, Patras in Peloponnese, and Halkis on the island of Euboea. The institutes were attended by employees of libraries in these towns and in the surrounding greater area. Each of the sessions lasted for 2 days and included elements of practical knowledge needed for organizing a collection rudimentarily: cataloging, classification, pamphlet material, lending systems, etc., and a discussion of the current problems the libraries in the area faced.

The second Library Training Institute was held a year later, in the summer of 1957, and was more elaborate and advanced in concept. It was organized by the American Library in Athens in cooperation with the Library of Athens College in Greece, a Greek-American-sponsored institution and a member of the Near East College Association. This training institute, which lasted for 2 weeks, was attended by sixty library employees from Athens and from all over Greece. They were housed on the Athens College campus and had daily training sessions in the institution's library.

This seminar is considered to have been a landmark in the sense that it brought into focus the great need for proper library training. It is very significant, too, that at the end of this seminar the first Greek bookmobile, a gift from UNESCO, was dedicated by the Greek Minister of Education.

Between the years 1957 and 1960 there was no development in library training. However, in 1960, at the invitation of the Greek Government, UNESCO sent an expert, Dr. Leon Carnovsky, Professor at the Graduate Library School of the University of Chicago, to examine the need for establishing a library school in Greece. His report *(1)* recommended the establishment of a 4-year undergraduate school as part of the School of Philosophy of the University of Athens.

This study was followed up, in 1962, by a second UNESCO expert, Dr. Preben Kirkegaard, Rector of the Royal Danish School of Librarianship, in Copenhagen, who made similar recommendations, with the difference that the proposed library school should be attached to the School of Philosophy of the University of Thessaloniki (Salonica) *(2)*.

Despite these reports, no state library school at the undergraduate level has developed.

TABLE 1

Curriculum of the Y.W.C.A
Library School in Athens

Course	Periods/week
Archives Organization and Administration	2
Cataloging	4
Classification	4
History of Modern Greek Literature	2
History of Writing and Printing	2
Library Organization and Administration	4
Reference Work and Bibliography	2
TOTAL	20

The existing vacuum was filled in 1961 by the establishment of the Y.W.C.A. School of Librarianship to train library assistants.

Library School Education

Formal library training in Greece is provided only by one school operating since the academic year 1961–1962 under the auspices of the Athens Young Women's Christian Association. It is housed in the main Y.W.C.A. building in downtown Athens.

It was accredited by the Greek Ministry of Education in 1963, so that its graduates now also take official examinations conducted by the official authorities and are provided with state certificates.

Candidates for admission must hold at least a secondary school degree and know one foreign language well, preferably English. They are admitted on the basis of a written competition and a personal interview.

The faculty of the school is made up of professional people who hold full-time professional jobs in libraries in Athens and who have received their training in graduate library schools in either the United States or Great Britain. Each faculty member teaches only one course, the maximum teaching load being 4 hours per week.

To make it possible for those who already work in Greek libraries to obtain formal training, the school operates daily in the evening from 4:00 to 8:00 P.M. This schedule also allows the staffing of the school with librarians who have had formal library training, a wide experience in administering libraries, and who are familiar with the current needs of the Greek libraries.

The curriculum has so far reflected these needs (Table 1).

Besides formal courses, the students receive practical training in a number of libraries in the Athens area whose organizational and administrative structure is

TABLE 2

Athens Y.W.C.A. Library School
Enrollment

Academic year	Number of graduates	Males	Females
1961–1962	12	1	11
1962–1963	25	3	22
1963–1964	22	1	21
1964–1965	18	1	17
1965–1966	19	—	19
1966–1967	19	3	16
1967–1968	21	—	21
1968–1969	20	1	19
1969–1970	24	4	20
1970–1971	15	1	14
1971–1972	26	1	25
TOTAL	221	16	205

considered by the faculty to be such that it will enhance their teaching. Practical work is supervised by the librarians in charge of these libraries.

The school has introduced into Greece, through its graduates, modern methods of library organization and administration, and through its American and English-trained faculty systems and methods prevalent in these countries, such as the Anglo-American Cataloging Code, which has been translated and adopted to suit Greek needs, the Dewey Decimal Classification and the Universal Decimal Classification, open stacks and free access to book collections, library cooperation, and has also made possible the existence of a viable professional Library Association.

Official Library Seminars

The number of the graduates of the Library School (Table 2) cannot at this stage satisfy the needs of what seems to be an expanding library scene and increasing public awareness of the need for special skills. This calls for imparting some basic skills and library organization knowledge to employees of state and public corporation libraries through short courses.

A forerunner of the recent developments of this line of training were two seminars organized by the Library of Athens College in cooperation with the Director of Letters and Arts of the Ministry of Education.

The Library of Athens College is one of the most up-to-date units in the country. It was built with funds provided by the Agency for International Development (A.I.D.), a U. S. State Department Agency. Besides serving the college population, the library's policy has been to enhance library development in the country.

For this purpose, funds were allocated to conduct two series of training seminars: one for graduates of the Y.W.C.A. Library School and one for employees of libraries who had had no training in library work. The two series lasted for 2 months each, October–December 1967 and January–March 1968. They were attended by 135 people. It is significant to note that the charter of the Greek Library Association was drawn at the end of these seminars in March 1968.

It was during these seminars that two other significant projects were conceived: the Union Catalog of Books in Libraries in the Greater Athens Area, and the Union Catalog of Scientific Periodicals in Greek Libraries. These two projects have since been implemented.

By 1970 the training in library work of civil service and public corporation library employees had become a state responsibility. Within the general framework of in-service training of its employees, the state set up the first library training seminar in February 1970. The program is officially executed on a contract basis by the Y.W.C.A. Library School, which underscores the understanding by the state of the need for specialized training by specialists associated with a professional school.

This first seminar lasted for 10 weeks, Monday through Saturday, 8:30 A.M. to 1:30 P.M., and was attended by twenty-nine civil service employees under the auspices of the General Directorate of Public Administration of the Ministry of Government Policy.

The second seminar was held particularly for employees of the Library of the Greek Parliament, one of the largest and most outstanding libraries in the country, which is also a central depository library. It lasted from May 11 to July 11, 1970.

A third similar seminar was held in 1971, October 4 to December 13, for employees of state and public corporation libraries. These intensive training seminars will continue at a planned rate of one per year.

At the same time the state is setting up a plan for training library employees by providing scholarships for postgraduate studies in librarianship abroad.

It is through the Library School, the Training Seminars, and the contemplated special studies abroad that the personnel needs will be resolved in the future.

The Greek Library Association

The charter of the Greek Library Association was drawn up in March 1968 and officially approved in 1969. Its first board was elected in November 1969.

There were many attempts before that date to establish a professional association, which failed for lack of a broad base of membership.

The establishment of the Greek Library Association was the result of the prevailing trends in library development, and the need felt by those engaged in library work to identify with a professional organization and for better professional communication among librarians and libraries.

The association aims to promote library development in the country, to promote librarianship as a science, to assist in the development of appropriate legislative measures that will tend to enhance the proper functioning of libraries at all levels, and to make the state and the public increasingly aware of the significance of libraries for the cultural and technological development of the country.

To broaden the base of participation, and thus increase communication among those engaged in library work, the association's provisions for membership are drawn along very liberal lines: any Greek citizen who has been engaged in library work for at least a period of 6 months is entitled to membership. This condition is waived in the case of library school graduates.

Communication among members is carried out through meetings in Athens, public functions, and the issuance of a bulletin, while broader participation of members is achieved through the functioning of committees dealing with Documentation, Cataloging and Classification, Union Catalog of Books, Public Affairs and Communication, and other matters of mutual interest.

Membership is still concentrated in the Athens metropolitan area, which also reflects the fact that the largest concentration of library resources is to be found in this area.

In May 1970 the Greek Library Association was accepted as a member of the International Federation of Library Associations and sent an official delegation to its 37th General Council, held in Liverpool in 1971. This is the first time that Greece was represented at any of I.F.L.A.'s meetings.

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George M. Cacouris

GREEN, BARTHOLOMEW

The first printer to set up a press in Canada, Bartholomew Green, Jr., was born in Cambridge, Massachusetts, in 1699, the son of Bartholomew Green, printer to the governor and Council of Massachusetts, and grandson of Samuel Green, Harvard College's printer from 1649 to his retirement in 1692.

In 1734 Bartholomew Green, Jr., formed a partnership with John Bushell and Bezoune Allen in Boston. He moved to Halifax, Nova Scotia, in 1751. (Halifax had been settled by the British Government in 1749, 36 years after France lost sovereignty over mainland Nova Scotia under the Treaty of Utrecht. Although English sovereignty had been asserted as early as 1497 and Champlain established a French settlement at Port Royal in 1605, neither England nor France had brought a printing press to what is now Canada over the period of 300 years between Gutenberg's invention and the arrival of Green and his press in Halifax.)

Green died shortly after his arrival and, although it seems to be generally accepted that he did some printing, none of his work has survived. Fortunately, John Bushell, one of his two Boston partners, arrived in Halifax soon after Green's death and established himself in business with the Green equipment. He produced *The Halifax Gazette*, Canada's first newspaper and advertising medium, in 1752 (first issue dated March 23, 1752) and his first legal publication, "An Act for the Relief of Debtors," in December 1752.

Bushell died in 1761 and was succeeded by Anthony Henry (Anton Heinrich), whom he had taken into partnership 3 years earlier. Henry was later appointed King's Printer in Nova Scotia.

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J. CLEMENT HARRISON

THE GREGYNOG PRESS

The Gregynog Press was the last of the major British private presses to be established, being founded in 1922 at Gregynog Hall, near Newtown, Montgomeryshire, by Miss Gwendoline and Miss Margaret Davies, sisters of the first Lord Davies of Llandinam. Their original intention had been to set up a crafts center at Gregynog, but of the various crafts envisaged, bookmaking alone survived. Their aim was to produce a series of well-printed, illustrated, and bound books in the hope of stimulating an interest in Wales in the fine book and thereby of encouraging the art of better bookmaking within the Principality. By publishing items of Welsh interest they further hoped to foster and promote the study of Welsh literature. Though only eight of the forty-two books published are in the Welsh language, many of the others have Welsh associations.

The press became a limited company in 1928, its affairs being managed by a small board of directors consisting of the two sisters, Dr. Thomas Jones, deputy secretary to the cabinet, who was a close personal friend, and W. J. Burdon Evans, a barrister, who was their financial adviser. Thomas Jones acted as chairman throughout the life of the press and was instrumental in securing the services of suitable authors, editors, and translators who were drawn largely from his wide and varied literary acquaintance.

The Gregynog stables and coach houses were converted into workshops, and every stage of the bookmaking process, with the exception of papermaking, was carried out by the staff, working under one roof. Robert Ashwin Maynard, who had spent most of his working life as a scenic artist, was appointed as first controller of the press in July 1922. Assisted by John Mason, the first binder to the press, he produced the first book, *Poems by George Herbert*, selected by Sir Walford Davies, which was published in December 1923. In February of the following year Horace Walter Bray joined the staff as resident artist. Between then and 1930 Maynard and Bray were responsible for the design and illustration of another seventeen books which are characterized by sound typography, pleasing woodcut illustrations which were sometimes hand-colored, and well-designed and executed woodcut initials. Kennerley type was used for the first four books, thereafter a Monotype caster was acquired, and subsequent books appeared in a variety of common book types, the most frequently used of which were Baskerville, Bembo, Perpetua, and Poliphilus. After the first book, which was printed on an Albion handpress, all work was printed from handset type on a Victoria platen press using handmade paper from various mills. Presswork during the period 1927–1936 was by Herbert John Hodgson whose skill was much admired by rival presses.

The most notable works to appear during this first period were as follows: *The Life of Saint David*, edited by Ernest Rhys, 1927, printed in Poliphilus type in blue, red, and black, and bound in limp vellum, which has a beautifully restrained engraved title page, twenty-five hand colored woodcut illustrations by Maynard and Bray, and paragraph marks drawn by hand in red ink. *The Autobiography of Edward, Lord Herbert of Cherbury*, 1928, a lordly folio printed in Poliphilus and Blado types, has a magnificent title page decorated with a hand colored shield bearing the Herbert arms and is illustrated with eight exceptionally fine wood engravings by Bray. The illustrations and the formal dignity of the type, together with several chapter openings marked by long woodcut initials, printed in red, make of this book an almost flawless period piece. The most ambitious of the books in Welsh to come from the press was the *Psalmau Dafydd*, 1929, a slim quarto volume, printed again in Poliphilus in red, blue, and black. This has an ornate wood engraved title page which may appear somewhat over decorated to some eyes but which lends the book a decidedly Celtic flavor. The remaining decoration consists of openings with foliated borders and wood engraved initials. Perhaps the richest decorative features to be found in any Gregynog book are the initials designed and engraved by Maynard for *The Stealing of the Mare*, by Lady Anne and Wilfred Scawen Blunt, 1930. Here the chaste Garamond type on heavy Japanese vellum is splendidly complemented by the gay hand-coloring and gold of the floriated initial blocks. In Lamb's *Elia and The Last Essays of Elia*, two volumes, published in 1931, we see another side of Bray as illustrator. Each essay is prefaced by a small wood engraving of considerable wit and charm, entirely in keeping with the author's text. Though soberly dressed and lacking any pretensions to grandeur, this book is one of the most successful to come from the press. A statuesque dignity marks the last work to be designed by Maynard and Bray. This is the two volume folio edition of *The Plays of*

Euripides, translated by Gilbert Murray, 1931. Here Bembo and Fairbank's italic type are spaced with great ingenuity to reduce the irregularity of the verse shapes. The illustrations are simple wood engravings by Maynard and Bray drawn from Greek vase paintings in the British Museum.

Having firmly established the reputation of the press, Maynard and Bray left early in 1930 to found the Raven Press. The eighteen works which they created are a monument of typographic dignity and restraint and set a standard only rarely achieved by those who came after.

Maynard was succeeded by William MacCance, an artist, as controller, and Bray's successor was Blair Hughes Stanton who had already found fame as a wood engraver. The majority of the books produced during the ensuing 3 years were primarily illustrated books in which the text may be regarded as subordinate. While there was a marked drop in typographic standards, artistically the books have great merit. The extraordinary fineness and delicacy of Stanton's engravings, so fine that they might almost have been engraved in metal, required presswork of a high order which was ably supplied by Hodgson. Japanese vellum was very much favored at this period, and its smooth surface certainly enhances these detailed decorations. The most striking books, to emanate from the MacCance-Stanton partnership were Milton's *Comus,* 1931, which displays some very fine costume engravings by Stanton; the conspicuously decorative *Fables of Esope,* by William Caxton, with thirty-seven lively engravings by MacCance's talented wife, Agnes Miller Parker, in which the page unity is somewhat fragmented by MacCance's over-large decorative woodcut initials; and the two startling folios, *The Revelation of Saint John,* 1933, and *The Lamentations of Jeremiah,* 1934, the first printed in black and red and the second in black and blue, which allowed full reign to Stanton's manual dexterity and power as an imaginative artist. Agnes Miller Parker's charming wood engravings for *Twenty-one Welsh Gypsy Folk-tales,* collected by John Sampson, 1933, are unfortunately rendered less effective by being too closely crowded by the type areas. *Four Poems by John Milton,* 1933, is one of the happier combinations of type and wood engraving of this era, the long, narrow type areas combining well with the elongated figure engravings. Other contemporary books have decorative initials designed and cut by MacCance, frequently printed in a favored combination of sepia and black, though these are not uniformly successful as decorative devices. One typographic outrage was that perpetrated on the title page to Butler's *Erewhon,* 1933, where the imprint is made to run vertically from the foot of the page, but fortunately this was a rare lapse. One sad feature of the period under discussion is that plans to use engravings by Stanton's wife, Gertrude Hermes, never came to fruition. MacCance and Stanton left the press in September, 1933, and never again was Gregynog to have either a resident controller or a resident artist.

Shortly afterwards Loyd Haberly, an American who had his own private press at Long Crendon in Buckinghamshire, was appointed controller on a part-time basis. His first book, *Anne Boleyn and Other Poems,* 1934, was his own literary creation. Of the five books designed by Haberly, only one has pretensions to any real typographic merit. This was Xenophon's *Cyrupaedia,* 1936, which, despite the fact that his treatment of Greek orthography was castigated by the classical authority, Professor H. W. Garrod, in a contemporary *Observer* review, remains a handsome folio printed in Poliphilus type with chapter heads and marginal notes in red and hand-colored woodcut initials designed by Haberly. Its weakest point is the title page which appears somewhat overcrowded with capitals. In searching for a new type to be used exclusively by the press, Haberly chose as a model the type used by Johann Neumeister of Mainz for his edition of Dante's *Divina Commedia* printed at Foligno in Italy in 1470. This was redrawn by Graily Hewitt, the punches cut by Edward Prince, and the matrices made by the Monotype Corporation. Its one and only public appearance in Britain was in the Gregynog edition of Robert Bridges' *Eros and Psyche*, 1935, which was illustrated with drawings by Sir Edward Burne Jones, redrawn by Dorothy Hawkesley, and further ornamented by initial capitals designed by Hewitt. The new type was severely criticized by C. H. St. John Hornby, Stanley Morison, and others and was never again used by the press for a book, though it was used to print the text of an old Welsh carol which the Davies sisters used as a private greeting card at Christmas 1935.

The last controller of the press also worked in a part-time capacity. He was James Wardrop who was on the staff of the Victoria and Albert Museum. By this time Hodgson had left and presswork was in the capable hands of Idris Jones, who after World War II was to become printer to the National Library of Wales. Wardrop was neither an artist nor a printer but had given instruction in book production at evening classes sponsored by the London County Council. His approach to typography was both formal and traditional, and the books produced under his direction, with one exception, are not outstanding. The exception is, however, generally regarded as one of the greatest achievements of the press. This is *The History of Saint Louis,* by John, Lord of Joinville, translated from the French by Dr. Joan Evans, 1937. It is a superlatively rich folio printed in sixteen point Poliphilus, with marginal rubrics in Blado and initials in red and blue, designed by Alfred Fairbank. Seventeen large hand-colored armorial shields, designed by Reynolds Stone, are printed, one at the foot of each page. Two decorative maps, specially designed by Berthold Wolpe, are also included. The most impressive feature of the book is undoubtedly the use of several handsome initial openings, one of which, at least, is reminiscent of the famous opening to the Doves Press *Bible.*

Three books, undistinguished but well printed, were produced for private circulation. They were *Elphin Lloyd Jones: a Memoir,* 1929 (Elphin Jones, who was the younger son of Dr. Thomas Jones, was killed in a road accident); *A Theme with Variations: Speeches and Articles,* by Thomas Jones, 1933; and *John Davies: A Memoir,* 1938.

Bindings

A significant feature of the Gregynog Press books are the special full leather bindings which were used for between fifteen and twenty-five copies of each edition.

No other British private press paid anything like the attention to the binding of its books as did the Gregynog Press. That it did so was entirely due to George Fisher, the master binder, who from 1925, for almost 20 years, presided over the bindery. Prior to his arrival the books had been casebound in buckram or with cloth spines and paper-covered boards. The bulk of each edition remained so treated until the last 6 years when the majority of the ordinary bindings were also executed in full leather, though less handsomely decorated than the more expensive volumes. The special bindings, most of which were covered in levant morocco, were the work of George Fisher himself, with the exception of one or two produced in the final years of the press when he was assisted by his apprentice, John Ewart Bowen. now chief bookbinder to the National Library of Wales.

Fisher had been apprenticed in his youth to Rivière's, the fashionable bindery in London's Regent Street where he had been responsible for some very high class work. When appointed to the staff of the Gregynog Press in 1925, on the recommendation of the celebrated binder, Douglas Cockerell, he had deserted bookbinding for farming and had done no binding for 10 years. He was to become the longest serving member of the press staff, staying on after the closure of the press until all the special bindings were completed. These bindings, superbly executed in every detail, distinguished by sound forwarding and faultless tooling, remain as the testament of one of the great craftsmen of our time.

Fisher was not trained as an artist, and the most artistically pleasing bindings are those designed by the various artists or controllers. Designs emanating from the Maynard regime tend to be basically geometric, and though pleasing they fail to excite the imagination as do some of the later bindings designed by Stanton and MacCance. Bray's design for *The Life of Saint David*, edited by Ernest Rhys, 1927, is plain and yet satisfying, combining the simplicity of a large outline Celtic cross in gilt, surrounded by a single gilt rule, with the richness of the scarlet levant morocco on which it is tooled. The same might be said of Maynard's design for Thomas Love Peacock's *The Misfortunes of Elphin*, 1928, also bound in scarlet levant, where each cover is framed with a single gilt rule, and the upper cover carries the design of two hand-held goblets, with liquid being poured from one to the other.

The only two bindings designed by MacCance are both of considerable interest. *The Fables of Esope*, 1932, bound in biscuit-colored levant has a front cover decoration consisting of an intricate arrangement of the letters of the word ESOPE onlaid in reddish brown leather with the remainder of the title and the author's name tooled in blind and gilt. This is surrounded by ruled frames which continue to the lower cover where they terminate in a small rectangle enclosing the press device. His design for Sir Robert Vansittart's *The Singing Caravan*, 1932, bound in deep orange polished oasis, has a complex arrangement of lines, extending over both covers, enhanced by small shapes of black onlay. This binding is peculiar in that it incorporates an Eastern type fore-edge flap.

By far the most interesting as a group are those bindings designed by Stanton, employing mainly abstract designs and incorporating gold and blind tooling and colored onlays. These are to be found on Milton's *Comus*, 1931; *Caniadau gan*

W. J. Gruffydd, 1932; Butler's *Erewhon,* 1933; *The Revelation of Saint John,* 1933; *Four Poems by John Milton,* 1933; *The Lamentations of Jeremiah,* 1934; *The Star of Seville,* attributed to Lope de Vega, 1935; Fulke Greville's *Caelica,* 1937; and *The Lovers of Teruel,* by Hartzenbusch, 1938.

A mere ten of the special bindings were actually designed by Fisher himself. Of these perhaps the most satisfying is that on Fortescue's *The Story of the Red Deer,* 1936, bound in reddish brown polished oasis. The two covers and the back are treated as an all-over design, tooled in gilt with a repeat design of two different alternating fir tree tools, with light gilt lines above and heavier ones below, a design inspired by the sight of a fir grove, bordered by ploughed land, in a shower of rain. Technically the most ambitious design, if not artistically so, is that on Xenophon's *Cyrupaedia,* 1936, designed by Lady Cartwright, where the covers bear an intricate decoration of onlaid strapwork in six colors and outlined in gilt. A copy of this, formerly belonging to Major J. R. Abbey, was sold at Sotheby's in 1967 and realized £380, the highest price paid to date for a Gregynog binding. All the special bindings are sewn on cords, most having raised bands, and have hand-sewn headbands to tone. With few exceptions endpapers are white or cream; there are no doublures.

The press closed in 1940, soon after the onset of World War II, having printed forty-two books for sale in editions ranging from 150 to 500 copies, and three books for private circulation. In addition a considerable amount of more ephemeral material was also printed, including programs for the festivals of poetry and music held at Gregynog each year between 1933 and 1938, a large number of services, a variety of Christmas greeting cards, concert programs, conference programs, press prospectuses, and other material. Many of these items have now become collectors' pieces in their own right, as much care having been lavished upon their production as on the books. A tree-crowned hill in the vicinity of Gregynog Hall provided the inspiration for the most frequently used press device which is found in a variety of forms. During the early 1930s a device composed of a large shell was also used.

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THE GROLIER CLUB

The Grolier Club of the City of New York, to give it its official title, was founded in March 1884 by nine men from different professions but with a great common interest—the love of fine books. Some of them were collectors of old and beautiful books; others were interested in developing the modern production of beautiful books: still others in assembling collections of the works of the great authors. These three strands have provided the basic texture of the Grolier Club throughout its history.

To implement their interests the founders proposed three activities for the Club: exhibitions, publications, and the maintenance of a reference library on the subject. Members were to be men devoted to these purposes: collectors, librarians, printers, and booksellers. Since 1884 there have been over 100 major publications, almost 500 large exhibitions, and the library has increased to over 50,000 volumes. The membership has grown from the original nine to over 600. All of its activities take place in its building, located at 47 East 60th Street in New York City.

The club was named after Jean Grolier, a sixteenth century treasurer of France and one of the greatest book collectors of all time. His ex libris perfectly expresses the sentiment of a true collector—*Ex libris Joannis Grolierii et amicorum* (from the library of Jean Grolier and his friends). Grolier was born in 1479 in Lyon and accompanied his father, treasurer of war, with the French armies invading Italy. He succeeded his father and continued on in a long career (he died at eighty-six) to become one of the six treasurers of France. He early expressed his interest in learning and was a patron of scholars and printers. He began collecting books in his twenties, most particularly the publications of Aldus Manutius. He acquired a taste for the fine Italian leather bindings of the time and was probably the chief promoter of fine binding in France from the 1530s to his death in 1565. Of his library about 600 volumes have survived, although he is reputed to have had over 3,000. Since the early eighteenth century they have been much prized as collector's items and the list of later owners of Grolier binders is an honor-roll of great collectors of books.

The long series of major publications of the club began with a limited edition of the *Decree of Star Chamber*, an important text in the history of censorship. By 1900 several important books had been issued and were much praised not only for their scholarly value, but also for their physical appearance. (It was about this time that a small firm was established using the word "Society" instead of "Club" and issuing limited editions in imitation of Grolier Club publications. It almost failed until it acquired *The World Book*, a children's encyclopedia. It has since become much larger and has lost track of its origin.)

As guides to the exhibitions, checklists or handlists were issued. But these were considered too small for some of the important exhibitions, and thus began a series of abundantly illustrated catalogs with full bibliographical apparatus. The most influential of these have been designed to act as guides to collectors—*One Hundred Books Famous in English Literature, One Hundred Influential American Books, One Hundred Books Famous in Science.*

But not less important than these have been the publications issued as specimens of the printer's art in the twentieth century with works designed by America's leading typographers, including Theodore De Vinne, Walter Gilliss, D. B. Updike, John Henry Nash, Bruce Rogers, Frederic Goudy, Elmer Adler, and Joseph Blumenthal.

The library, often to the suprise of many, is not a rare book library. Its 50,000 volumes are reference works, with a few examples of fine printing and binding. It has two main collections: works on bibliography and the history of printing and manuscripts, used primarily for its exhibitions and publications; and an unsurpassed collection of book auction and booksellers' catalogs from the seventeenth century to the present, the basis for the serious study of collecting and the transmittal of books. Like the exhibitions and the publications, it is open to the public and many important works have been produced from its resources, such as De Ricci's *Census of Medieval and Renaissance Manuscripts in the United States.*

On May 4, 1884, four months after its founding, The Grolier Club held its first exhibition—"Etchings, from Durer to Whistler." In 3 days it was seen by 600 visitors. The second exhibition was one of "Illuminated Manuscripts," probably the first of its kind held in this country. The next exhibitions produced some of the early publications of The Grolier, including Theodore Low De Vinne's *Historic Printing Types,* Robert Hoe's *Bookbinding as a Fine Art,* and William Mathews' *Bookbinding Practically Considered.*

These exhibitions were followed by "Original Drawings for Book Illustrations" and "Photomechanical Processes in Book Production." The president summed up these displays in his annual report:

> The exhibition of "Illuminated Manuscripts," while illustrating especially the earliest form of fine books, gave also examples of many fine bindings. The "Original Drawings" served to show the relation of the arts of original design and engraving to modern book-making. The exhibition of "Photomechanical Processes" exemplified the newest phases of book production.

The third President, Beverly Chew, introduced a different kind of exhibition—autograph manuscripts, first editions, and letters of famous authors. With this, the general scope of The Grolier exhibitions was determined.

The largest number have been devoted to prints and illustrated books, quite naturally as the best suited for exhibition. These have included displays of the work of Whistler (seven exhibitions culminating in the Grolier publication in 1910 of the great catalog of *The Etched Work of Whistler*), Beardsley, Pennell, Degas, D. Y. Cameron, Haden, Durand, Burt, Chaplin, Zilcken, Grivaz, Rajon, Abbey, Legros, Gaillard, E. D. French, Spenceley, Ruzicka, Woodbury, Beurdeley, Laboureur, and Arms among the contemporaries. Earlier names include exhibitions devoted to Dürer, Rembrandt, Callot, Piranesi, Goya, Daumier, Gavarni, Turner, Meryon, Corot, Leech, Cruikshank, Gosden, Rowlandson, Winslow, Homer, Manet, Cassatt, Caldecott, and Greenaway. There have also been displays by period: in the fifteenth and sixteenth centuries, Italian, German, and English; in the eighteenth century, French and American; in the nineteenth, American and English; in the twentieth, French, German, and American—and by type: lithographs, etchings, engravings, posters, fashion plates, early woodcuts, colored engravings, mezzotints.—or by subject: naval prints, plant illustrations, caricatures, imagerie populaire, sporting prints.

One area of particular interest to collectors, and well represented in Grolier exhibitions, is portraits. There have been displays of portraits by Nanteuil, Desboutin, Faithorne, St. Memin, and Flameng, and of portraits of Lincoln and Washington, and of English authors, women writers, French writers, and the American Revolution. From this special area has come the Grolier publication of *Engraved Portraits of Washington* (1904), and from the general field of prints, such books as *The Boston Port Bill* (1904) on contemporary caricatures, and David McNeily Stauffer's *American Engravers Upon Copper and Steel* (1907).

The most comprehensive field has been that devoted to literary subjects. The object has always been to make an expert's exhibition. From this have resulted the many bibliographically authoritative catalogs. The best known of these catalogs are the four volume *Langland to Wither to Prior* (1893–1905), the two volume *One Hundred Books Famous In English Literature* (1902), and the *Bibliography of William Blake* by Geoffrey Keynes (1921). Among the important exhibitions of individual authors were those devoted to Keats, Tennyson, Spenser, Chaucer, Dryden, Hawthorne, Blake, Milton, Johnson, Thackeray, Pope, Dickens, Stevenson, Shakespeare, Shelley, Molière, Lamb, Byron, Kipling, Walpole, Pepys, Kenelm Digby, Hardy, Beerbohn, Emily Dickinson, Swift, Henry James, Cooper, Shaw, Thoreau, Whitman, James Boswell, W. S. Gilbert, and Edward Lear. Broader subjects included early Italian literature, dramatic folios, English novels, early English literature, Spanish books, romances of chivalry, little magazines, American women writers, *The Oxford Book of English Verse,* authors at work, important books in English 1901–1950, Elizabethan books, modern poetry, second editions, Pulitzer Prizes, American literature of the South, the 1920s, the Restoration, Italian Influence on American literature, Irish literature 1865–1939, Shakespeare's rivals, parnassian and symbolist poetry, and exiles and expatriates.

Another important field of interest is that of fine printing. Among individual printers and presses whose work has been shown at The Grolier Club are Gutenberg, Aldus, Tory and Oronce Fine, Bodoni, Chiswick Press, Bulmer, Gilliss, Kelmscott Press, DeVinne, Bruce Rogers, Updike, Goudy, and Elmer Adler. There have been as well many exhibitions illustrating the printing of all periods from incunabula to modern times, particularly elaborate having been the shows of *Early Printed Liturgical Books*, *Modern Fine Printing,* and *Modern German Presses* (for which the labels were printed at The Bremer Presse).

Closely allied to printing is binding and some of the exhibitions have been the equal of any ever held. These include the bindings to 1800 and bindings after 1800 mentioned above, as well as bindings 1860–1890, historic bindings from the libraries of famous collectors, American, Old English, mosaic, silver, embroidered nineteenth century, contemporary American (1956), and Renaissance bindings. In 1965 the most important, the exhibition of bindings from Grolier's Library, which showed seventy-four books from American collectors, was held.

A field not too often but always splendidly represented is illuminated manuscripts. The second Grolier exhibition, in 1884, was on this subject, which was repeated in 1892. In 1917 came the first show of Persian manuscripts, in 1962 one of Persian and Indian. These were followed in 1962 as well by a display of a selection of items listed in the supplement to De Ricci's *Census of Medieval and Renaissance MSS. in The United States*, and in 1966 by an exhibition of the book of Eastern Christendom, including Byzantine, Slavonic, Armenian, Coptic, Syriac, and Ethiopian manuscripts.

An interest most natural to this country is Americana, shown in great variety. These include *50 Famous American Books* (1888), *Early American Printing, American Broadsides, Books of the Middle West, Famous Trails of the West, Books and Manuscripts Relating to 1777,* and *Lewis and Clarke*. Two important catalogs were issued for the exhibitions of *100 Influential American Books* and *Historical and Literary Americana*. There have been particular shows of *Benjamin Franklin* and *George Washington*. A more purely local interest was *New York City Maps and Views* (1897) (which was repeated in 1915 with the publication of the first volume of Phelps Stokes' *Iconography of Manhattan Island*), and *New York City 1626–1942*.

Of recurring interest (reflecting the collecting activities of a past-president Irving Olds, and a former member, Franklin D. Roosevelt) is the subject of the American Navy, show in *American Privateers in 1812* and *American Naval Prints*. Other American illustrative work was presented by exhibitions of *Currier & Ives, American Silhouettes, Engravings by Paul Revere, American Caricatures,* and *Views of American Colleges*.

There have been several smaller areas of interest. One which has persisted longest is Japanese books and prints, of which there were four exhibitions between 1887 and 1917, culminating in the two *Japanese Figure Prints* (1923) and *Japanese Landscape, Flower and Bird Prints* (1924), both documented by the excellent catalogs of Louis V. Ledoux. Since that time there have been two other Japanese shows, as well as three exhibitions of Chinese books and manuscripts.

The interest in science in the Grolier was first displayed in the exhibition of *Alchemy and Chemistry* (1891) and carried through *Anatomy* (1925), *Navigation* (1938), *Aeronautics* (1940 and 1958), *Botany and Horticulture* (1943), *Lavoisier* (1952), *Freud* (1956), and *Natural History* (1957) until it, too, culminated in a large exhibition, *100 Books Famous in Science* (1958), again documented by an excellent bibliography, prepared by Harrison D. Horblit.

Other areas have claimed the Grolier's attention from time to time. Bookcollecting itself was represented by exhibitions of book clubs, Dibdin, book collectors, collector's choice, and Grolier 75. Calligraphy has been displayed twice, sporting literature four times (two of them devoted to angling). Criminal life was seen in pirates and highwaymen, crime, and spies; travel and exploration in polar expeditions, the China trade, travel in Tudor and Stuart England, treaties and maps, the sea in literature, and there have been three exhibitions devoted to music.

Added to all these have been some unique exhibitions including one of unique books. There have been single shows of fans, vers de société, architecture, magic, precious stones, radical literature, the circus, tobacco, faith healing, autobiographies, odd volumes, books on vellum, gastronomy, demonology and witchcraft, boys' books, association copies, and dedication copies.

This brief review of the Grolier's exhibitions is barely more than a list. To fill it out one must call to mind the sources which were available, such as the great collections of Robert Hoe, Beverly Chew, Brayton Ives, Samuel Avery, E. D. Church, Rush Hawkins, E. B. Holden, R. B. Adam, Frank Bemis, C. F. Bishop, Lucius Wilmerding, W. K. Bixby, R. T. H. Halsey, Frank Hogan, Louis Ledoux, Morris Parrish, Marsden Perry, William A. White, Stephen Wakeman, Carroll Wilson, and Mortimer Schiff. Many of the treasures of these great collections have been seen at the Grolier Club.

With the steady flow of rare books into institutional libraries, The Grolier Club has come to draw heavily upon them. Where its purpose had been to display private collections, now it displays material from private and from many institutional collections—a circumstance that otherwise occurs only when very grand exhibitions are prepared.

Hearkening back to its beginnings, The Grolier Club however, has continued to rely upon its members collections. About 10 years ago it began a series of "small exhibitions," each one drawn from a single member's collection. To date there have been twenty-seven exhibitions on such topics as forgeries, community literature, children's books, natural history, Charles Lamb, French literature, American binding, Aldines, English literature, Victorian novels, Cobden Sanderson, The Kelmscott Press, French lithographs 1815–1860, Kipling, Joshua Reynolds, Wilde, Beerbohm, illustrated incunabula, Americana, voyages to the Far East, Renaissance binding, and Toulouse Lautrec. These small exhibitions give new strength to the large exhibitions, supplementing and heightening them and renewing the pledge implicit in the ex libris of the patron Grolier *et amicorum*.

GABRIEL AUSTIN

GROUP DYNAMICS

Group dynamics is involved with the ramifications of information surprise and its utilization in the group context. Certain roles must be avoided and others played if participants are to become effectively involved in the group process. In general terms, information surprise is generated by the participants themselves in the group interaction. Back-up sources and data-retrieval strategies are employed only when the resources of the participants themselves are exhausted.

Consequently, the group process is a cybernetic system encompassing participant intentions and behavioral outcomes in dynamic disequilibrium. This phase of the process appears to be analogous to that descriptive state known as introspection in intrapersonal communications. The group building and maintenance roles offset negative hindrances within the process, while the leadership roles enable the group to interact with the environment as an interpersonal problem-solving system.

Group dynamics along with counselor (*1*) and floating (*2*) librarianship will help to extend library and information science beyond its current preoccupation with library infrastructure into a communications profession. The functions of change agent (*3*) and communications leadership (*4*) are essential to the role of profession in society. On the other hand, informatology may yet develop as the coordinating infrastructure of the disciplines. The primary objective of the disciplines is to create new knowledge (*5*), while the professions are involved with the surprise value of information in the lives of individuals, groups, and the community (*6*).

Neither the term "group dynamics" nor "group work" appears in the librarians indexing service (*7*). A careful analysis of the index structure reveals that even the infrastructure of group services is indexed under other headings. As a result of abstracting a sample of the articles dealing with the topic, it was that the content of these articles is almost exclusively concerned with the operations and programmatic aspects of services to groups. Apparently only the deployment of infrastructure resources (material and human) is of concern to librarians, and not the communicative and professional aspects of group dynamics.

As a result, it appears that group work as yet is neither an explicit nor primary professional concern of library and information science. However, it is frequently assumed that the profession related to the infrastructure concerns of library and information science is one of the social sciences. If so, then some extrapolation will have to be made from the general inventory of social science knowledge (*8*), based upon a theory of a relevant social profession (*9*) associated with the infrastructure of communications. Models of this process (applying social science research to professional objectives) are of course available in other professions—education, nursing, social work. Consequently a literature search and codification based upon, for example, *Research in Education* (*10*) is much more productive for anyone interested in the topic of group dynamics.

Librarians have had some experience with the group process, even though the early report *Libraries and Adult Education* (*11*) was not particularly enthusiastic. The report admitted that discussion groups are essential to personal development, but also pointed out that the individual patron should not expect to find group services offered by any library. It was considered to be sufficient that the librarian furnish complete and reliable information concerning local opportunities for group experiences outside the library. It was not until after Chancellor's contribution in 1939, *Helping Adults to Learn* (*12*), that a few librarians began to tolerate the group process as a serious method for adult learning. Actually, the development of programs based on 16mm film did as much as anything to promote group work in library service.

Group work in libraries received its first major impetus with the American Heritage Project of the American Library Association. This project was financed by the Fund for Adult Education from 1951 to 1955, and as part of the Library Community Project through 1957 (*13*). The American Heritage Project enabled many librarians throughout America to sponsor discussion groups on basic issues in American democracy. Librarians learned discussion techniques and a manual was prepared for the profession (*14*). However, while some few librarians may admit that discussion groups have an educational value, all too many of them still insist that all group activity should be planned and executed for the sole purpose of attracting people who have not responded as individuals to library service (*15*).

In order to understand the role of the group process in library service, it is necessary to turn to the work of a nonlibrarian. Powell's *Education for Maturity* (*16*) still stands as a basic reference for librarians with its humanistic orientation to the benefits of group work and to ways in which discussion techniques can be employed effectively. Powell demonstrates that the group experience is one which helps a person to respect himself in his relations with others and strengthens the social maturity of his personality. Active growth occurs within the group because all members can contribute to the growth of every other member.

Librarians have long been familiar with the developmental tasks and values of individuals. However, they do not yet generally have a similar appreciation of the developmental tasks and values of the group. A group is a minimally structured social environment in which the members can learn much about themselves, about others, and about group behavior by observing and analyzing what happens in the group. Out of this somewhat ambiguous situation, group members are invited to build some sort of structure and organization.

The attitudes of patrons who use information centers may be changed or reversed, but some continuing catalytic influences other than document transfer (circulation) and data retrieval (reference) must be used to change them. The interactive group is a powerful tool for such catalytic activity. The group replicates in microstructure the dynamics of the real world and permits the working out of essential elements. The group can focus on an examination of its own processes. This dynamic process enables participants to analyze and learn from what happens. It provides an instrument to detect interpersonal problems which are projected onto and demonstrated within the group. The group process accelerates the development of significant and positive relationships among participants that will bear the stress of problem analysis, and mobilize such participant attitudes as will produce effective collaboration and problem solving.

The group work of librarians has been largely limited to "great books" discussions among patrons who have attained a certain cultural level (*17*). While this is a pleasant exercise which may encourage a few more people to help increase document delivery, such activities have little impact on the actual needs of a community. Librarians and especially information specialists have seldom seriously considered communicative activities as constituting a major method for effecting change in human behavior in real life. Few people are interested in knowledge for its own sake. Certainly citizens in the emerging neighborhoods of the underprivileged community, for example, are impatient with any information that is not immediately useful. Group sessions that are not based on the actual living conditions of poor people are irrelevant and exhibit the doctrinaire approach of white racism.

Consequently, the major criterion of group programs should be proficiency in achieving results for real people. The librarian must ensure that the information provided and the skills developed are immediately relevant to action involvement. Since, however, real-life skills are often too complex and too interrelated with the activities of others, the librarian is faced with the necessity of creating conditions within which many communicative activities can occur. Each interpersonal interface and each group encounter is but one element in, or sample from, the continuing enterprise of community development.

It was not until the Institute on Discovery Management in 1971 that developmental group dynamics was melded with the service objectives of library and information science. The publications of the institute (*18,19*) were an affirmation and extension of Powell's enthusiasm for the group process in libraries. These publications also provide a theoretical, experimental, and methological base for the role of the librarian as an active change agent. The methodologies employed rest squarely on the principles of group dynamics and have the potential for revolutionizing the librarian's self-image.

There is an inclination among librarians and information specialists to consider that the methods of group dynamics will enable unscrupulous people to manipulate groups more easily toward their selfish ends. But group trainers are careful more often than not to ensure that new knowledge and skill acquired by participants are accompanied by a growth in the understanding of ethical and social purpose (*20*). In fact, the essential elements of group dynamics training are antimanipulative in effect. Considerable effort is made to ensure that leadership is obtained as well as training in the collection and examination of data about what is happening in the group (*21*).

Another characteristic of group behavior which is often feared is the supposed loss of individuality. However, probably the best way to preserve individuality is to give each individual the knowledge and skills necessary to diagnose and withstand the forces toward conformity in modern life and at the same time learn how to express his individuality constructively. Of course, group dynamics does bring into the open some part of a person's feelings, but group trainers are skillful in preventing the traumatic overexposure of both emotions (*22*). On the other hand, nothing may be more tyrannical than the librarian's own groups where members are unsophisticated about the process and the dynamics. In any event, where content is stressed over process as in much library group service, some introspection about the dynamics should be encouraged.

Group dynamics in the general sense is used to designate what is happening in groups at all times whether anyone is aware of it or not. The nature and direction of a group's dynamic movement is determined by forces exerted on the group from within itself as well as from the outside (*23*). The interaction of these forces and their concomitant effects determine why groups behave as they do. There is a considerable literature on group dynamics as any of several compilations (*24–26*) will indicate. Since research and field experimentation in group dynamics often go hand-in-hand, the predictive power of its findings is especially powerful.

The field of study known as group dynamics research sets up hypotheses based on communication as well as social science theory and then tests them using such techniques as observation of laboratory and natural groups. From the factual findings, researchers have developed classifications of group phenomena and general principles in order to guide applications in the group process. There is a close relation, however, between basic and applied knowledge whether in industry, military services, educational institutions, voluntary organizations, social agencies, or local community library service. As Lewin (*27*) has observed:

> In the field of group dynamics, more than in any other psychological field, theory and practice are linked methodologically in a way which, if properly handled, could provide answers to theoretical problems and at the same time strengthen that rational approach to our practical social problems which is one of the basic requirements of their solutions.

Although men have lived together for millennia, it was not until the second quarter of the present century that specialized research was undertaken in small group processes. Lindeman (*28*) was among the first to challenge the speculative character of most of the sociological studies of the group, and he suggested an empirical method for the study of group functions. Under the influence of Dewey's analysis of experiential thought as a problem-solving model, Follett (*29*) placed considerable emphasis on the leadership of function as opposed to the leadership of position or personality. Freudian psychology has also promoted a continuing line of inquiry into group formation and control (*30*). Much of this early theorizing was based upon the analysis of leadership traits (*31*). However, of the hundreds of traits identified in numerous studies, there is a very low order of correlation which would indicate a common set of leadership traits.

The factor analysis approach to group dynamics appears to be a derivative of earlier studies of leadership traits. Cattell (*32*) has sought to determine the major dimensions of groups by identifying such key elements as energy, ability, and leadership. The term "syntality" was used by Cattell to define that aspect of the group that is analogous to the personality of the individual. On the other hand, the formal organizational approach has been developed by Shartle (*33*). Interactions in organizational systems and detailed descriptions of formal structure were analyzed in order to determine the nature of leadership in formal organizations.

Despite the work of these early researchers and others, it was Lewin who in his field theory laid the basis for the modern study of group dynamics. A field is comprised of a number of variables which affect the behavior of that system which is called a group. The strength and direction of these forces determine the movement of the group according to laws that govern its operation. According to Lewin (*27*) the important characteristic of field theory is in the way the analysis proceeds:

> Instead of picking out one or another isolated element within a situation, the importance of which cannot be judged without consideration of the situation as a whole, field theory finds it advantageous as a rule to start with the characterization of the situation as a whole. After this approximation, the various aspects and parts of the situation undergo a more and more specific and detailed analysis.

Other approaches to the study of group dynamics have used case analyses extensively. Psychoanalysis (*34*), employing the therapeutic group, focuses on elements in the group process that affect personality growth. The social work group approach, on the other hand, studies the narrative records of group workers in order to extract generalizations from a series of case histories. Social group work was concerned at an early date with personality development, but in later years emphases have shifted toward a study of the effect of leadership and group interaction upon personality development (*35*).

Sociometrics has been employed to study the social and intersectional aspects of group life, especially the emotional quality of interpersonal relationships among various group members. The development of a psychological structure in the group can be traced from data obtained from sociometric tests (*36*). Related to sociometrics is the interaction analysis of Bales (*37*). Elaborate devices have been developed to observe, without causing disturbance, the overt behavior of individuals in intersection with one another and their environment.

Growing out of the sociometric and interaction analysis approach to group dynamics is an identification of the requisite functions of group activity (*38*). The group building and maintenance roles contribute to the building of relationships and cohesiveness among the membership. On the other hand, the group task roles help the group to do its work, that is, propel the group towards its goals. Taken together, both sets of roles work to offset detrimental self-centered behavior, or nonfunctional roles as they are sometimes called.

Psychointeractive Considerations

Since groups are collections of individuals, an understanding of the behavior of groups has to start with an understanding of individual behavior. Communication science makes abundant use of the findings about individual behavior from related sources (*9,26*) in order to understand the causes and dynamics of the behavior of individuals in groups as well as relate such behavior to more comprehensive models. One of the most comprehensive models available is that of the adaptive control organism (*39*) which encompasses the elements of a cybernetic system (*40*).

The adaptive control organism is a network of forces and elements which exist in almost continuous interaction in order to escape entropy and achieve the elusive state of homeostatis. Figure 1 represents the major variables which have been identified in the adaptive control organism and which determine the patterns of homeostasis. This representation may be considered as an oversimplified version of the psychointeractive dynamics of any one individual. By considering these elements, however, it will be easier to understand the dynamic interplay of these forces, as well as the role of the symbolic structuring processes of reasoning, planning, intending, imagining, and thinking.

A study of the lifestyle forces of any individual suggests that the attitudes, values and habits developed in the family, as a primary group, strongly influence his feelings and behavior toward leaders, authorities, and other group members (*41*). The individual in the group tends to act out the drama of his past within the group

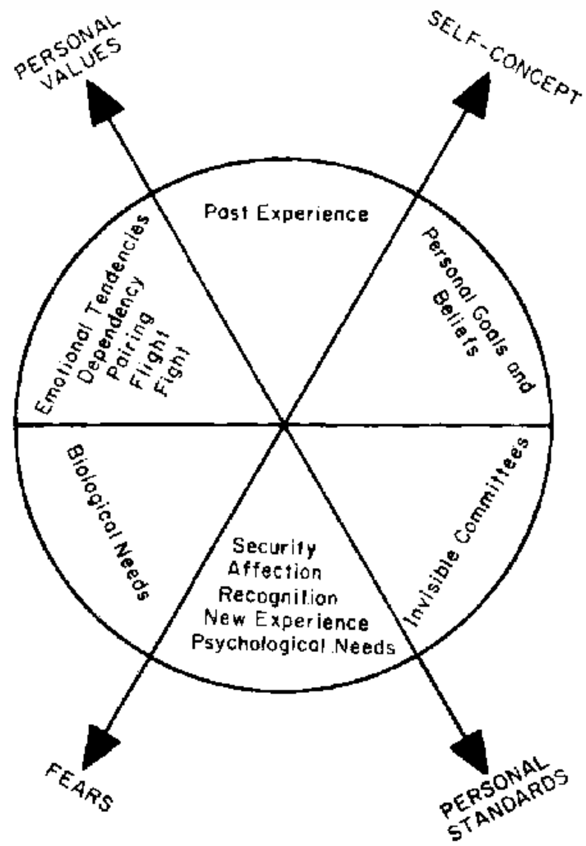

FIGURE 1. *Individual adaptive control organism.*

context. If certain patterns of behavior previously achieved desired results, or were comfortable in previous groups, the individual will tend to repeat these patterns. Personality tendencies (or valencies) especially relevant to group behavior include fight, flight, pairing, and dependency (*42*):

> An individual who has a strong valency for fight tends to express hostility freely in the group. A strong valency for pairing indicates a tendency to express warmth freely and to wish to establish close relationships with others. A strong valency for dependency indicates a tendency to rely on others for support and direction; and a strong valency for flight indicates a tendency to avoid, in some way, the interactive situation. . . . Such tendencies reside in the individual and form part of an habitual or stable approach to group interaction.

Although the biological and psychological needs of the individual are well known to others, they are seldom taken into account by the librarian and information specialist. Nor does it appear that librarians are above moral judgments even when the basic needs for security, affection, recognition, belonging, or new experience are being considered. Only a professional change agent appears to realize the implications of the fact that it makes about as much sense to blame a person for needing recognition as it does to blame him for being hungry. If a need for recognition is causing an individual to irritate the group by monopolizing discussion, the fault is not in the need for recognition but in an inability to satisfy such a need in socially acceptable ways.

Individual behavior is also determined by associational forces and such other factors as goals and ideologies which arise from involvement in peer and reference groups (*43*). In one sense, every time an individual makes a decision, several of these so-called invisible committees representing these covert affiliations begin to pressure him to act in certain and often conflicting ways (*44*). Whatever he does, the individual often has the feeling that he is being judged by these reference groups according to their purposes, standards, values, and goals.

While the study of individual behavior is important, it becomes of increasing significance only when the individual enters into the interactive environment of the group adaptive control organism. A collection of individuals is not necessarily a group. It is only when they become an interactive adaptive control organism with a definable membership and group consciousness that a sense of shared purpose develops, as well as the ability to act in a unitary manner. Participants communicate with and influence one another in order to accomplish the purposes for which they joined the group. A representation of this process is presented in Figure 2.

A group can be considered to be a communication system. There is a boundary between the group and the rest of the environment even though the outside world affects what goes on within the group. The boundary is comprised of the variables

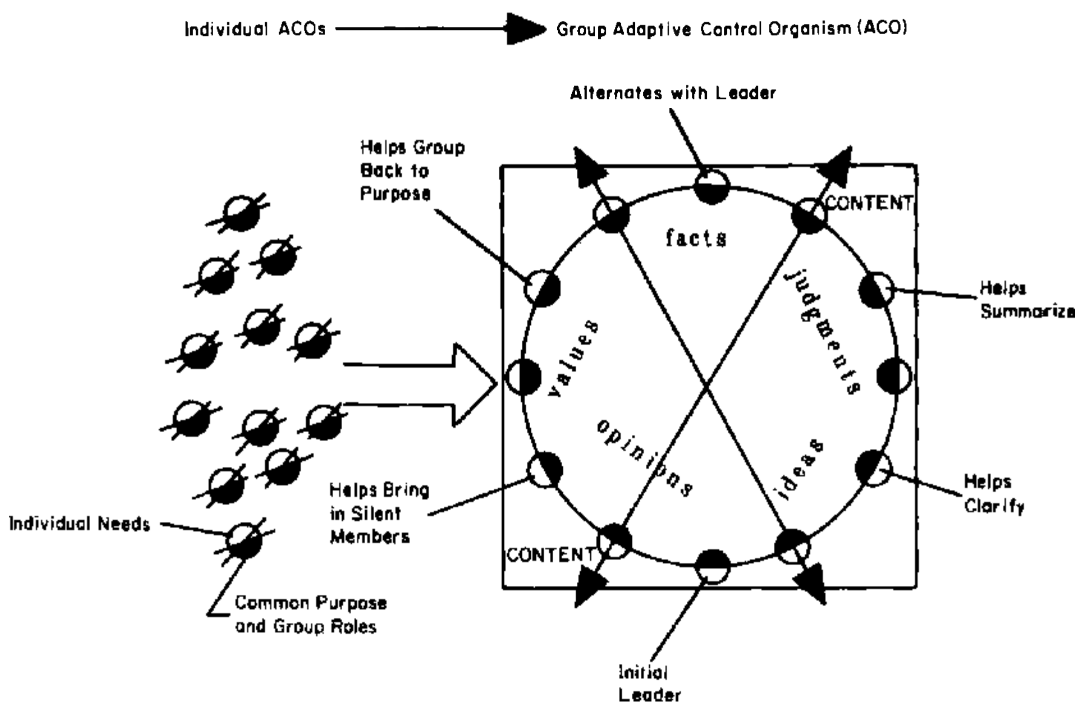

FIGURE 2. *Group adaptive control organism.*

in the group dynamic process. A message from one member stimulates feedback from the others. In a runaway system, discussion will take off in any direction and as a result subsystems will develop. Whether there is a single person or several guiding the discussion and keeping it on the track toward certain goals, this process is similar to the control factor in a cybernetic system. The parameters of the system exist as environmental factors limiting the group, such as time or limits on the knowledge possessed by the group. New information from the environment has effects on the group and may be in the form of new knowledge or skills which will change the attitudes, goals, and behaviors of the group.

There are, in general, two types of groups (*45*), although in practice the overlap in characteristics is frequently extensive. Membership in the psyche group is completely voluntary and tends to be homogenous. People belong to these psyche or social friendship groups for the emotional satisfaction to be obtained and for the enjoyment of being with like-minded people. Socio groups, on the other hand, usually have explicitly formulated goals and operate by more or less formal rules and procedures. Groups such as committees, boards, staffs, and action groups exist to accomplish some task such as work assignments or volunteer services. Membership in the socio group tends to be more heterogenous and is usually a function of the resources needed to do the work required.

However, as one looks at groups more closely, it becomes apparent that the psyche and socio groups are not so much entirely different groups as they are different dimensions of all groups. Few groups can ignore either the psychic dimension of emotional involvement, morale, interest, and loyalty, or the socio dimension of stability, purpose, direction, and sense of accomplishment. Without work, various group members may become dissatisfied and begin to feel guilty because nothing is being accomplished. Without friendship, on the other hand, members may feel that the group is cold, unfriendly, and unpleasant. In any event, there are a number of properties or characteristics of all groups:

> An historical background, or lack of it, influences group behavior, particularly in the strength of goal commitment.
>
> At any given moment every group has a particular participation pattern which may remain consistent or vary from time to time.
>
> Communication usually varies directly with group participation.
>
> Cohesion and atmosphere are functions of the morale, attraction of the group for its members, and the interest of members in the group's activity.
>
> Acceptable membership behavior is incorporated in a set of standards (ethics) which frequently remains implicit rather than openly stated.
>
> Sociometric patterns grow out of, and follow the subtle relationships of, friendship and antipathy.
>
> Obvious structure makes a division of labor possible, while unobtrusive and dynamic structure provides the motivation for task accomplishment.
>
> Formality of procedure usually varies directly with the range of decision-making required of the group.

Leadership, in the popular mind, may be an important dimension of group dynamics. But research fails to identify any set of functions that are universally the peculiar responsibility of a designated leader (*46*). Leadership is generally a function of the interaction of such variables as the attitudes and needs of group participants at a particular time (*47*). Various members of the group can perform leadership functions in various ways and at various times in the life of any group. In contrast to a fixed set of leadership functions, group dynamics literature (*48*) differentiates three styles of leadership: authoritarian (policy determined by leader); democratic (policy results from group discussion assisted by leader); laissez-faire (complete freedom for group members with little if any leader participation).

The purpose of the scientific method is to describe nature and enumerate its functions in general principles and laws. The objective of the technological method, on the other hand, is to develop socioeconomic policies by which man can control nature for teleological ends. Technology in group dynamics is the set of methods and procedures which participants use in acting out their interests and in satisfying their concerns (*41*). Research into the nature and function of group dynamics has influenced the social technology of working with groups in at least four areas: leadership and membership training (*49*); invention of new techniques (*50*); intracultural aspects of groups and large meetings (*51*); and community relations and social change (*52*).

Leadership training originally consisted of selecting individuals who were supposed to have the "right" traits for leadership roles (*14*). Such a leadership corps was then indoctrinated with the knowledges and skills required in particular positions such as committee chairmen (*53*), discussion leaders (*54*), instructors for particular subjects (*55*), or in the managing of organizations (*56*). This dimension of the group process is sometimes referred to as the vocational training aspect of group dynamics. It remains, however, an important area of concern (*57*) for most of the groups with which the librarian works on a day-to-day basis (*17*).

As a result of group dynamics research, there has been a movement away from vocational training in leadership to a more generalized understanding of group behavior on the part of the participants which is applicable to all groups in all situations. The implication of this shift in emphasis has been that all participants, not just the designated leader, are being trained in the skills of group participation and leadership. This dimension in group dynamics recognizes that leadership within a group frequently shifts and evolves as situations change. In many instances the most effective training is done with the group as a whole in terms of its own continuing experience.

Factors such as participation, ego involvement, and the role of experience in the learning process have been found to be particularly crucial to the life of a group. The discovery of these functions in group dynamics has led to the development of many new techniques, some of which are applicable to the small group and others to the large group. Since the fad of group dynamics has today become almost a universal panacea, it might be well to remember the cautionary words of Thelen (*41*):

> A technique is in itself neither good nor bad, but it can be used effectively, with little consequence, or disastrously. Role playing out of place can be gruesome; buzz

> grouping when there is nothing to talk about is downright embarrassing; discussion by a panel of 'experts' who have had no experience relevant to the needs of the group is simply maddening; problem censuses before people feel able to formulate their "real problems" stick them with goals they will reject later; audience listening teams with no opportunity to report back get angry, and so on. I should say that these new techniques should not be assimilated as part of the orthodoxy of a new religion, and they should not stand for "group dynamics."

Many of the new techniques are an attempt to give large group meetings, which occupy such an important place in the American way of life, some of the qualities and advantages of small face-to-face groups. Certain techniques have been developed to meet this purpose such as listening teams and group interviews. Other techniques have been developed to help participants realize the importance of experience in the learning process such as role playing, case study, nondirective discussion, and skill-practice exercises. In order to promote group self-evaluation, still other techniques have been developed for data collection: postmeeting reaction forms, sociometic tests, interaction charts, process observers.

The area of community relations and social change is an area that has profited from the applications of research findings in group dynamics (*58*). These findings have been applied to the numerous kinds of conflict situations that develop in the normal course of community living such as labor–management disputes, race relations, and interagency rivalries. An increasing number of groups employ educational processes (*57*) along with action processes (*59*) in order to improve their efficiency and increase the value of participation to members. As a result, there appears generally in society to be a more democratic spirit developing for shared planning as well as for leadership in organizational life.

The purpose of the new technology of group dynamics is to encourage the development of an understanding of the forces at work in groups, a sensitivity to the needs of individuals and groups, skill in diagnosing human relations problems, as well as the development of the ability to learn from actual experience. Bradford (*60*) maintains that change in individual behavior must be sought so that individuals can become appropriate and effective participants:

> This viewpoint necessitates looking at forces of resistance to change both within the individual and in his total situation as well as at the process of changing. Instead of thinking about ways of "teaching" facts, it is necessary to analyze the conditions which keep the individual from changing, the requirements to help him change, and the supports necessary to help him maintain this change.

This approach to the technology of training involves diagnosing the needs for change, as well as the forces which resist change and the motivations for change within each particular situation. Once the diagnostic is done, then a training program can be designed which includes a number of elements and methods for change. A number of training designs exist such as laboratory group; theory sessions; skill practice; participative cases; and project, special interest, and application groups. Skill practice groups, for example, use role playing, case method, or discussion in order to develop the skills of diagnosing group problems, being sensitive to the feelings and needs of others, and observing group interaction. Training and practice is also given participants to increase flexibility in performing various member roles: leading discussion, interviewing, and planning meetings and workshops.

Participants in a laboratory group have the experience of constructing without blueprint or direction an organism which has goals, structure, procedures, standards, and the other elements of group life. No one tells the group what to do, but the trainers help participants to analyze their behavior as they go about forming the group. Theory sessions, on the other hand, are largely instructional presentations of such topics as group characteristics, new member roles, leadership, group roles, motivation, productivity, problem-solving, and organizational and social systems.

Participants assemble in special interest groups according to occupational or functional interest for the purpose of broadening and deepening knowledge of the particular interest such as supervision, board operation, staff management, membership recruitment, community organization, and public relations. Application groups, which are often homogeneous in terms of occupation, geographic location, or institutional affiliation, plan strategies for transferring what learnings they have acquired from the laboratory to back-home situations. The transfer method is usually project-oriented such as a newsletter, social events and meetings, or report preparation. Participation in the project group often provides opportunities to experiment with ways to improve group productivity.

Participation groups are in effect mass role playing exercises or stimulations (*61*) in which all participants experience the problems that arise in the relationships among various kinds of groups in a library–community context (*58*). Participants play roles associated with typical community groups, organizations, and agencies and act out what they should do in order to solve particular problems. Observers collect data about the behavior of participants as they become absorbed in the simulation. As data are reported, an analysis can be made of what happened and why. Participative simulation reinforces laboratory group work in helping group members learn how to learn from analyzing their own behavior.

An integrated individual is one whose group affiliations are unified and noncontradictory. The values and norms of various group affiliations to which any individual belongs frequently overlap and duplicate one another (*62*). As yet, the problem of the individual's integration of his various group memberships has not received sufficient research attention. The differences between small groups laboratory models and ongoing situations should be reduced by connecting them with actual social situations (*63*). The use of realistic settings, of group developmental histories, and of problems centered on the actual needs and concerns of participants would help to bridge this gap. Experimental study should be part of a chain of studies whose propositions for testing have been suggested by field research. Attempts are needed which predict on the basis of laboratory study how individuals or groups will behave in actual social situations.

Sensitivity training is a social vehicle for helping individuals increase their effectiveness in self-actualization and social maturation (*64*). The purpose of sensitivity training is more reeducative than reconstructive, although for some it has a therapeutic outcome as indicated by greater personal effectiveness, deeper satisfaction, or reduced personal tensions. As participants begin to experiment among themselves, they find satisfaction in being more open with appropriate expressions or feelings, whether negative or positive, in their relations with others (*65*). The ability to exchange candid feedback with others, that is, authentic communication, and the working out of meaningful relationships may be carried over into the daily life of the individual.

Group dynamics is an interactive process within which small groups of individual participants are involved. No specific upper limit has ever been fixed as to the size of a small group, except that all participants must be able to engage in direct personal relations. However, an upper limit is implied if one accepts Homans' definition of a group as "a number of persons who communicate with all others not at second hand through other people but face-to-face" (*66*).

Small-group interaction rests on shared contacts and values. In free-forming groups this need for consensus is evident and a product of individual needs for acceptance and respect. Since the world is a complex place with many sets of values, individuals frequently find themselves in forced choice groups. Nevertheless, the forced choice group (e.g., fellow workers) does have the factor of frequency of personal contact built into it which in itself helps participants to handle conflict (*67*) and tends to bring them together toward shared values. Based upon the findings of social science research, the more people associated with one another as equals, the more they come to share values and norms, attitudes and feelings, tastes and beliefs.

If a group gets very much larger than fifteen to twenty individuals, it begins to break up into subgroups that enable dissatisfied members to share in the attention they have a right to expect from other participants. Unlike a formal organization which usually has a written constitution, the rules and regulations in a small group are more flexible and much more tacitly understood. Personal contact becomes a group method for handling ambiguity and instability. Personal contact helps members reduce uncertainty and settle on a position. There is then some maximum in group size wherein information can still have surprise value to all participants and not lead to a runaway system (*68*).

Group dynamics is the interactive processes of small-group behavior. The behavior of small groups is a microcosm of social activity which includes the variables of individual behavior as well as the constraints of the socioeconomic environment. The primary law of animate activity or kinesics (*69*) is the reward–punishment principle of learning theory and research. Social behavior of animate beings is an exchange between individual adaptive control organisms (*40*) of goods or rewards in different amounts and of different values. If social behavior is conceptualized as a generalized economy (*70*), then behavioral psychology may contribute to the intellectual unification of the social sciences by detailing the behavior of individuals in interaction and the simpler social structures which emerge from such activity.

Variables in the Process

In the past there have been two approaches to the study of small groups: the psychological (*27*) and the sociological (*71*). The psychologists emphasized experimental and survey methods to the extent of employing groups artifically constituted for research purposes. Quantitative measures of behavior and the variables were analyzed statistically and by correlation analysis. The sociologists were more likely to use the techniques of field work and nondirective interviewing on real groups. Instead of statistical testing, qualitative descriptions were worked out in the social structure of the group being observed. Today both approaches are used; the findings of field work suggests hypotheses and provide a matrix within which the results of psychological experimentation can be interpreted.

In contrast to the psychological and sociological, the behavioral approach to the study of small-group processes is a combination of the two. The behavioral approach appears to be the conclusion of Berelson in his study of human behavior (*9*) and is succinctly indicated by Homans (*72*). Homans points out that fundamental to behavioral theory is the basic principle (almost a law) of learning psychology:

> Behavior is social when the activities of each of at least two men reward (or punish) the activities of the other. Accordingly, the propositions of behavioral psychology may be used to explain the characteristics of social behavior, which is the real subject of small group research.

Group participants are motivated to change in the direction in which control (leadership or influence) has been validated by consensus. The more individuals participate, the more important the issue becomes for the group and the surer the group is about what the criteria are for truth or correct behavior. Group instability occurs as the standards external to the group are either indefinite or the product of one strong-willed source. Homeostasis and control vary directly with the growth of standards. The group process tends to set standards for a whole range of individual behavior, not simply for those activities which come within the jurisdiction of any single group by itself.

The following components may serve as indicators of a group's effectiveness in promoting cultural change by any participant: quality and quantity of output (performance), ability to maintain itself (viability), and continuing member participation (satisfaction). These components or behavioral outcomes contribute to the change in knowledge, skills, attitudes, adjustment, or personality of the individual members of the group. There may be long-term relations between these different types of group effectiveness, but in the short run these outcomes may vary independently of one another. The following determinants (*24*) appear to be crucial for group effectiveness:

> Strength of the values associated with effective task performance.
> As cohesiveness increases, the more participants will expend effort to comply with norms and achieve goals.

A difficult but attainable task will stimulate more effort than one which is perceived as too easy or too difficult.

The abilities, information, and experience of group members as well as the division of labor has to be relevant to the tasks imposed.

The appropriateness of leadership style is central to the tasks expected and the role of participants in the group.

Dynamics such as these occur because the group provides rewards for proper behavior and punishment for improper behavior. The rewards are support, reinforcement, security, morale, encouragement, protection, and especially rationale as distinct from rationalization. The punishments may include ridicule, dislike, shame, and the threat of expulsion. These rewards and punishments may sound intangible but they are extremely effective (*73*). "Such values are not material, like money, but are often more valuable—not only from the larger community in the form of fame, but within the intimate personal group in the form of love" (*74*).

Consequently, even in informal groups, members rank themselves depending upon the extent to which they represent or are able to realize the values of the group. There is a built-in psychological reward for participants who go along with the group. For those who deviate, the group process temporarily suspends discussion and persuasion in order to bring them into line, employing disapproval, lowered ranking, and finally outright expulsion. Those expelled may form their own group with different criteria for membership and standards for ranking. Those who cannot find acceptance within the so-called socially legitimate groupings may require the advocacy of floating librarians (*58*) in order to avoid the borderline groupings of illegitimacy, delinquency, or crime. In any event, every person needs not only group encounter, but effective counseling (*75*) for group participation.

The professional advocate must have an informed sense and understanding of the conditions under which individuals encounter one another and form into developmental groups. Persons with similar concerns for acceptance, for recognition, and for stabilizing their interpersonal perceptions may find themselves outside the established channels of custom or law as well as the prevailing arrangements of social organization. In such instances they will tend to interact among themselves. Repeated interaction leads to the differentiation of the roles and functions which help the group to meet its goals. The norms established and maintained become aspects of each participants conscience (*76*). The advocate must be able to anticipate or help to shape the process of structure and norm development within the group (*77*). Both the environmental setting and the information space become of increasing importance for the behavioral alternatives they encourage or permit (*62*).

Disruptive tacts have of course been used for revolutionary change and presuppose some system of choice. Disruptive tactics (*78*) are preceeded by a choice made on the basis of moral and ethical considerations as well as on the basis of strategic objectives. Strategy requires a long-term plan of action which is based on some theory of communication, while tactics are the more recurrent methods of action. Whatever the reality may be, different perceptions of what change will mean to each party in an encounter situation are significant in determining their responses (*79*).

TABLE 1
Strategies of Organized Behavior

If change is perceived as:	Then the response:	Then the mode of intervention:	Then the tactics:
Rearrangement of resources	Consensus	Collaborative	Joint action Cooperation Education
Redistribution of resources	Difference	Campaign	Compromise Arbitration Negotiation Bargaining Mild Coercion
Change in status relationships	Dissension	Contest or disruption	Clash of position within accepted social norms Violation of normative behavior (manners) Violation of legal norms
Reconstruction of entire system	Insurrection	Violence	Deliberate attempts to harm Guerilla warfare Deliberate attempt to take over government by force

A strategy for change might utilize tactics from one or more modes of intervention (see Table 1) simultaneously, depending upon the goals of the action system and the organizational context within which it operates (*80*).

The process of group formation is of concern to any profession but especially to those with an advocacy role to fulfill. Group formation depends to a considerable degree upon the material and ideational features and facilities of the environment as well as the relation to other groups whose activities and aims impinge favorably or unfavorably upon those of the group in formation (*81*). There are four major essentials in the process of group formation: repeated interaction growing out of a common motivational base; structure (organization) development consisting of roles and statuses; formation of rules, traditions, values, and norms; and differential attitude and behavior development among participants over time. Even the mere presence of other persons has some effect on behavior and task performance which over time begin to assume regularities. Sherif (*82*) indicates three objective ways by which norm development and regularity can be detected:

> By observing similarities and regularities in the behaviors (word and deeds) found among one set of persons but not another set in a similar situation.
>
> By observing correctives (sanctions) for certain behaviors and praise or reward for others. Reactions to deviations are among the best evidence of the bounds of acceptable behavior. These may range from disapproval, frowns and correctives to threats and actual punishment.

By noting the increasing similarity or convergence overtime in the behaviors of individuals who initially behaved differently. For example, the entrance of a new member into a group provides an opportunity to detect the existence of its norms.

Group participation is essential to a professional leadership role (*83*) because it is more effective to influence people as group members than as isolated individuals. Group leadership is a function of the ability of an individual(s) to personify group norms (*84*). Intellectual leadership provides initiative, guidance, new ideas, and proposals for solutions. Social leadership, on the other hand, engenders mutual acceptance, liking, harmony, and congeniality. In most groups intellectual leadership is deemphasized in favor of the popular role. Most participants will choose to be liked the best rather than to have the best ideas (*85*). Leadership consequently may be considered to be a function of motivation, expectation of success, and incentive for accomplishment.

The implication of leadership functions is that there is an inherent alternation between the task roles and the group building and maintenance roles (*86*). Whenever a task has to be performed, like forming a committee or incorporating new information, tensions appear among participants. Various opinions appear and solutions are proposed in an effort to achieve harmony or at least tolerance. The surprise value of information is seldom a pleasant experience (*40*). In the group, there is usually more verbal and nonverbal behavior having to do with personal requirements than there is with intellectual problems (*87*). Group participants will engage in active discusssion to determine goals, choose methods of procedure, and decide on problem solutions as an involvement by right in the social game. Even when participants are aware that group self-direction may be a pretense or a game, this involvement allows individuals to save face by feeling that they are determining events which matter to them.

Interest in the group process is diverse and lively (*88,89*). Possibly most influential in the application of group research for societal improvement has been the adult training group utilized by the National Training Laboratories (*21*). A considerable T-group technology has been developed (*90,91*). The function of the T-group changes people selectively (*92*). Overly dominant persons become less dominant, while overly affectionate persons become more discriminating. Despite certain faddish characteristics (*93*), human relations training is directed at a change in a positive direction of participants, attitudes toward each other. Systems training, on the other hand, is directed toward the interpersonal relations in a management working unit (*94*).

Sensitivity training as an aspect of group dynamics has become a farily widespread phenomenon in American life, especially among urban groups. Obviously, training in sensitivity is valuable for individual learners as well as for family life, industry and government, community affairs, and other settings. Reactions to sensitivity training range from enthusiasm for its dynamics to the view that it is trivial, immoral, subversive, or emotionally damaging. However, under competent trainers, the process of group dynamics can help participants encounter more productive ways of behaving with and relating to others (*95*).

Since the group dynamics process is heavily oriented toward human relations training and member satisfaction, decision making is an inevitable concern of some people, particularly those in organizations. Any discrepancy which may exist between the validation by consensus and administrative decision making exists, if it exists at all, largely in the differences in nature between groups and organizations. It may reside in the degree of formality and representativeness of the process within each system. Decision theory (*96*) and game theory (*97*) are areas in the administrative process which have been proposed for critical analysis, but research developments in the field have not yet been codified. Nevertheless, it appears that the *style* of decision making has a significant effect upon others in the organization. Specifically, if the administrator confines his behavior to making decisions about the decision-making process rather than making terminal decisions for the organization, his behavior is more acceptable to associates and subordinates (*98*).

Decision making consists of choice on the basis of insufficient evidence, and involves the notions of risk and probability as in consumer choice, business ventures, and game theory. Decision making encompasses the ramifications of the problem-solving process and emphasizes the importance of communication: giving orders, receiving approval or criticism, transmitting information, and proposing action. Of course, many of the leadership functions which are performed by participants in small groups are executed in organizations by rules and regulations (*99*). Participation in small groups, therefore, appears to be an essential preparation for any individual in more formal decision making (*18*). In any event, it should be pointed out that leadership is not necessarily isomorphic with administration (*100*).

Decision making in a group is a process of social and environmental management or self-management by the group whether the decision is by vote or consensus (101). Most groups exercise some degree of self-management in making decisions or over what items should appear on their agendas. When individuals are asked to participate in decisions concerning topics for consideration, they usually run into the conflict between desirable group goals and self-oriented needs. Participant satisfaction tends to increase with cohesiveness and procedural structuring, though not necessarily with the spread of participation. However, satisfaction, at least in organizational processes, is not a sure criterion of high group production or of the external validity of its decisions (*102*).

A group can be considered as a number of persons, each of whom may interact with every other member. If the group is too large, rarely beyond fifteen to twenty participants, the requirement of interaction of all members cannot be met. Small group research seldom studies the behavior of the total group but rather the characteristics of the interaction among participants. In fact Homans (*103*) considers such interpersonal activity as elementary social behavior. A variety of models have been proposed for small-group interaction analysis: a network of interacting dyads (*104*), a single organism (*105*), a communications web (*106*), and intergroup struggle (*107*).

Apparently the one essential characteristic of the small group is the interactive process among the participants. The spoken record or verbalized content may hold considerable interest value to the participants. But more often than not, the knowledge, art, and methods of such subject-discipline content is employed by the members to engender and resolve interpersonal conflict. The individual joins with others to develop and maintain a group process which is both the environment and the instrument for his own activity. As a result, the participant learns something from these experiences which will enable him to behave more effectively in similar types of activities when encountered in the future (*108*).

The on-going activity of the group process benefits each participant to the extent that it is seen as teleological. The group enterprise, in a sense, has to reach beyond itself so that participants can relate their experiences to the experiences of others and thus gain an increment of insight and autonomy. Information is essential and may comprise a common body of discourse, as in formal communication so that each participant may compare his own experiences with those of others in other times and places (*109*). In group dynamics, however, each participant is called upon, more often than not, to supply the necessary information interventions in the transactional processes: individual inputs, goal setting, role development, culturalization, commitment, and even growth (*110*).

Since the information interventions in the group process are supposed to be supplied by the participants themselves, the concept of leadership is a shared interpersonal influence central to group action. Leadership consequently is comprised of a set of behaviors (task roles) that bring the group closer to achieving its goals (*111*). Each participant seeks to be part of the larger picture, i.e., the group, in order to make his life significant by merging personal identity with group destiny. In the process the individual begins to sense the universality of his own thoughts and feelings. Each participant incorporates or integrates the group membership into his own personality. Consequently, each participant is changed by means of the interactive processes of his group membership.

Learning, growth, and change of behavior may take place in both training and therapy groups. However, the training group deals primarily with the here and now of personal behavior, with little or no emphasis on the past. There is no deliberate attempt made to delve into the unconscious. Participants in a training group are assumed to be emotionally healthy and possess the ability for self-actualization. The following learnings become internalized and constitute a base upon which the socialized individual can seek further growth in other situations:

> Each individual learns how to learn, to observe, and analyze his feelings, attitudes, and those of his fellows, as well as his interchanges with other members of the group.
>
> In learning how to learn, one also learns how to give help, give feedback, and extend oneself to others.
>
> As individuals learn to observe and analyze their own and other participant's reactions, a desired atmosphere for further learning is built—certainly an objective of library communication.

Groups under development initially encounter some problems which result in division or divisiveness. In such instances participants move not toward resolution of the problem or conflict but rather toward a paradoxical situation. The ambiguity and apparent lack of goals in any beginning group creates needs for clarification. One part of the group may want a strict, explicit business agenda. Another faction may see only the need to explore feelings and interpersonal relationships. As the group matures, it will move *not* toward a resolution in favor of one faction or the other, but rather towards exploring both goals (*112*). The goal is to learn about and take responsibility for one's own self in the here and now of the interpersonal setting:

> The core of the theory of group development is that the principal problems or issues the group must solve are to be found in the orientations toward authority and intimacy which members bring to the group. Rebelliousness, submissiveness, or withdrawal (as the characteristic response to authority figures), destructive competitiveness, emotional exploitiveness, or withdrawal (as the characteristic response to peers), prevent consensual validation of experience. The behaviors determined by these orientations prevent the setting and clarification of, and movement toward, group-shared goals (*21*).

Beneath the manifest or overt behavior (verbal or nonverbal) in the group, there is a hidden agenda or level of meaning which is largely unconscious and to which the overt behavior is related. The hidden agenda tends to be common and shared group problems, or tensional states which may be reflected in the group's interactive process. Close observation is usually necessary in order to perceive the hidden problem. Sometimes the content of the discussion may be the best clue as to what issue is uppermost in participants' minds when they find it difficult to confront it directly:

Content	Process
Talking about problems of authority in the real world may mean that:	. . . there is a leadership struggle going on in the group.
Talking about how bad the group meetings sponsored by the information center usually are may mean that:	. . . members are dissatisfied with the performance of their own group.
Talking about library staff members who don't really help anybody may mean that:	. . . there is dissatisfaction with the leader or trainer role in the group.

The expression of feelings and the receiving of another's real feelings about one's self are essential aspects of growing groups. Videotape recordings are often used to highlight aspects which are otherwise denied or to bring more subtle aspects into awareness. Behavior and attitude patterns which have been learned in any members earlier life may be exhibited in the group. A group can assemble and continue in existence for a number of reasons: identify with others working on a similar problem; define reality by testing how many participants need to see something in the same way for it to become real; or experience the learning involved in a leadership role.

Whatever the initial motivation may be, Lifton (*113*) enumerates a number of characteristics (objectives) that are typical of mature groups:

> Increased ability to be self-directed (not dependent on leader) and tolerant in accepting the fact that progress takes time.
> Increased sensitivity to personal feelings and the feelings of others.
> Improved ability to withstand tension, frustration, and disagreement.
> Perceive common denominators which bind the group together as well as areas of individual difference.
> Ability to anticipate realistic behavioral results and to channel emotions into more socially acceptable ways of expression.
> Flexibility in changing plans and methods as new situations develop.
> Decrease in time needed to recover from threatening group situations. Peaks and valleys of emotional crises become less pronounced.
> Increased efficiency in locating problems, engaging in problem solving, and providing help to individuals as needed.

Research in small group processes has shifted in recent years. During the 1950s topics such as cohesiveness, norms, structure, and decision making were popular research targets (*114*). These elements have been largely codified in the literature of group dynamics (*24*). Other topics were studied more intensively during the 1960s including attraction, hostility, conformity, and communication. As a result of these findings, the degree of group participation varies directly with a series of filtering factors which develop during the growth of interpersonal attraction (*111*). Apparently proximity, physical attraction, and social status operate initially, whereas consensus on values develops somewhat later and need fulfillment still later.

All of these elements which have been considered in the group process are fundamental to the infrastructure of group dynamics. Beyond these considerations is the question of communication and, as a result, current attention has moved to exploring the relationships among individual characteristics, role expectations, and the position of the participant in a network. Concerns such as these open up the communicative areas of group performance and group effectiveness (*115*). Communication encompasses the interchange of pertinent information among those involved in a group process as well as the changes which are indicative of and result from verbal and nonverbal behavior. Communication involves a common (or lack of it) cognitive orientation, i.e., the definition of the situation through interaction and evaluation, or the arrival at common value judgments, as well as the attempts of group members to influence each other's behavior. Schmuck (*111*) has emphasized the effect of emotions on the communication of content:

> Every person in communication with another is confronted with cognitive and affective dimensions. Feelings are an integral part of relationships and the attitudes that persons hold toward each other influence their communications about work. Moreover, task interest and emotional experiences should be integrated for the maintenance and growth of a relationship.

Obviously, interpersonal relations in the group process are a function of the words participants employ and the actions they manifest. Words and actions constitute the matrix within which communication occurs. Despite the various analyses which have been made, these verbal and nonverbal behaviors serve as the currency of group dynamics as well as the operational context within which much small group research has been conducted. Barnlund (*26*) has made an attempt to synthesize the findings of this operational research (*9*) and to propose avenues for systems analysis and research based upon cybernetic models of communication (*40*).

Groups vary in the number and combination of characteristics almost as widely as do individuals. Despite the differences, a number of elements appear to be common to all groups which consist of people who classify themselves together because of some common characteristics. The group must also have a psychological bond strong enough to contain its divergent tendencies. The variables which constitute this bond include such elements as size, composition, structure, cohesiveness, tasks, culture, and effectiveness.

Every group provides an audience effect for the participant which varies in strength with the number of participants. As the size of the group increases, the intellectual functioning of its members tends to deteriorate. Members may become overmotivated, more distracted by new information and different perspectives, or more conventional and cautious in their thought processes in order to take into account anticipated reactions of an audience (*116*). On the other hand, when a number of individuals are confronted with a common problem, the stimulation of group activity can be conducive to effective problem solving.

Group problem solving depends upon the ability of participants to think within the group context as well as the way in which individual contributions are assembled, coordinated, and assessed in order to produce the group solution. In so doing, it must be kept in mind that inequality of participation increases with group size (*117*) as well as the difficulty of keeping track of the contributions of various members and of coordinating and assembling them. Participant satisfaction tends to vary inversely with group size. The larger the group becomes, the more absenteeism there is, as well as the more formality and internal conflict.

Variations in the composition of a group, including personality, intellectual, and demographic characteristics, have an effect upon group performance (*24*). To an extent, groups composed of individuals with dissimilar but complementary characteristics are more productive than homogeneous groupings (*118*). Despite diversity, certain sociometric patterns of interaction develop and characterize the composition of any group (*119*). Sociometric patterns are usually related to the psyche purposes of group activity (*120*) rather than to the sociotask goals even though they may not be unaffected by the sociometrics.

Another way of considering the composition of a group is from the structures which operate within it and which are also affected by the demographic and other characteristics of the participants. Structure refers to patterns in which participants relate to one another as a result of free association and not according to the infrastructure organizational charts of library and information science. There is usually a correspondence among the different structures within a small group (*121*). An individual who holds a central position in the communication structure, for example, is likely to have an important role in other structures such as power, friendship, or prestige.

The cohesiveness of a group appears to be a function of the perception by participants of a common fate (*122*) which includes congeniality, loyalty, and receptivity. Cohesiveness provides the existential criteria for both the identification of a group as well as whether the action of any participant can be attributed to the group or to himself personally. Group cohesiveness like social cohesion is related to such structural considerations as communication patterns and also to task effectiveness and performance.

The output of a group upon its environment is a product of group tasks. Tasks differ to the extent in which they permit division of labor and specialization of function. Task structure determines to a significant degree the types and amounts of interaction and communication within the group as well as the sequencing and organization of its activities. If the superior performance of a certain task places one participant in a central position, then he is likely to have higher status within the group (*123*). The problem of dividing tasks, of sequencing them, and of helping each other to accept roles and provide resources consumes an enormous amount of group activity.

The interactional process of interpersonal communication seems to be the one common characteristic of all small group activity. Various models of communication (*26*) have been proposed to account for the interactional processes, for example, the 5-W's model of Lasswell (*124*) or Gerbner (*125*). In addition, various methods of content analysis (*126*) have been used. However, the most widely used system for categorizing interactions was developed by Bales (*127*). The twelve original categories were later expanded (*38*) and include three major groupings of behavior: nonfunctional roles, group building and maintenance, and task analysis and development. Over time, the interaction process tends toward repetitive patterns which become group norms, styles, traditions, or customs.

One of the major instrumental functions of interaction is helping to establish the social reality of group culture and its norms (*128*). Norms tend to develop in areas that are relevant to the group's functioning and are more often developed for overt behavior than for individual beliefs. It is relatively common for an individual to experience conflict when he belongs to groups with different norms. This phenomenon is one explanation for not only the hidden agenda of group meetings but also the deviations of conformity and nonconformity (*129*). In any event, groups are likely to develop idiosyncratic cultures if they are isolated (socially or geographically), if they conflict with other groups, or if their task environment is unique.

The culture of a group is composed of its values, beliefs, and goals. The acceptance of a group's culture on the part of a participant is often equivalent to a change in culture and thus is basically a reeducational process (*130*). For an individual to accept a new sytem of values and beliefs he must come to value his membership in the new group. In other words, the group becomes an effective instrument for his own behavioral change (*131*). It is this phenomenon of acceptance that has come to dominate the ever-expanding field of human relations training.

Summary and Conclusions

Group work is a communicative process employed for such purposes as to reaching decisions, coming to agreement or group action, and providing a learning opportunity for individual participants. The group process is a unique learning experience because all partcipants are involved in both the teaching and learning enterprise. Librarians can sponsor group activity for all of these reasons, even though as yet they appear to be mainly adept at readers advisory and reference work where the individual reads a book, sees a film, or listens to a lecture.

In group work the quality of the communicative process is determined by the leadership, the group, and the content. There are, of course, other elements outside the group, and over which it has no immediate control, which also affect communication such as the climate of thinking in the community as well as local and national attitudes towards freedom and inquiry. In any event, each of the major components functions not in isolation but in a dynamic interrelationship with one other.

Although the group is not the only situation in which learning can and does occur, it is unique in one important respect. In formal learning situations, the individual and the material from which he learns are the only components required, and the learning consists of direct communication between the two. In the group, on the other hand, other people are involved. While the person reading a book, seeing a film, or listening to a lecture is interacting only with the ideas presented, the member of a discussion group is also interacting with others and with the leader.

Group dynamics considers the components of a cybernetic system in interaction. It presumes that any profession using group processes has examined its social objectives and methods in relation to a cybernetic model of communication. This does not appear to be the case in library and information science, which may in part account for the paucity of a library-related literature of group dynamics. It is apparent that librarians do not understand the rationale for group dynamics because their tradition of programming for the individual keeps getting in the way. The librarian who can specify human behavioral outcomes for group participation will determine the nature of communications and ultimately change his approach to the groups in which his patrons participate.

Group dynamics is an area of concern largely irrelevant to the infrastructure of library and information science. Most of the group activities reported by librarians as constituting group services are neither purposeful nor sequential and cumulative. Few librarians and even fewer information scientists understand the purposes for group activity nor do they have the ability to realize activities to meet those purposes. At best, group work in librarianship is a public relations method for seeking out individuals and inducing them to use the library. It is upon this single and simple proposition, with few if any exceptions, that all group work in libraries is conducted.

It is easy to complain about a lack of commitment to and development of group dynamics for library and information science. It is quite another thing to venture suggestions or guidelines for the profession to consider in relation to the fundamental and significant developments which have taken place in group dynamics. The following set of questions may serve in some part to precipitate such developments, particularily in relation to the group building and maintenance roles necessary for any productive group activity. These questions may serve librarians as hypotheses, validated in the literature of group dynamics, to be verified in the contexts of library and information science:

> What is the librarian's orientation to the group? Are the needs and values, for which information is sought, determined by the group and dependent upon its initiative? If so, is the librarian a passive information retriever?
>
> Do group methods (dynamics and group network theory) constitute the matrix of relationships within which the group identifies its concerns? How are discussion techniques employed as a general method for solving problems and meeting needs?
>
> Compare and contrast the librarian's methods in working with discussion groups vs. action groups? For what reasons and how are individuals counseled to participate in groups?
>
> What is the role of volunteers in library public services and their function in satellite groups, such as "Friends of Library?"
>
> How are sensitivity sessions, discussion groups, "training laymen in the use of the library", lectures, forums, and panels used as alternative methods (or in combination) for the group to consider, and why?
>
> How are groups exposed to information so that communication may occur? Specifically, how is "information" retrieval done for the group?
>
> How are group methods and dynamics related to library personnel administration, and specifically to the rationale and development of continuing in-service training for more effective public services?
>
> What are the problems of communicative effectiveness in library services? What are the principles and methods used to resolve communication problems?

Library service may perform a communicative, not a controlling social function. It supposedly is cooperative, not manipulative. If so, communication service will have to be developed for those who need and want to make use of it in order to facilitate adjustment, to foster constructive relationships, and to attain specific individual ends. Professionals maintain a sensitive awareness of what happens to people who decide to make information kinetic and meaningful to their lives. Even though the outcome rests with the information user, the communicator's skill is consistently addressed to enlisting an honest and responsive involvement of persons in the communication process.

Group dynamics seeks to facilitate the individual's contribution to the communicative experience by clarifying alternatives and their consequences, by analyzing factors that enter into choice, and in the evaluation and relation of the information elements to individual objectives, available resources, and to the applications sought. The core of the process for the group work librarian is a disciplined use of himself in direct relations with people, and in the strategic, immediate, and economical exploitation of information sources wherever these need to be located.

The librarian is a representative of a social agency which determines, by its choice of purpose and policy, the limits within which the professional person can operate. Purposes and policies by the way in which they are developed can either create opportunities for group dynamics or set up limits to the librarian's involvement in the process. The library agency should be able to introduce group purposes and interrelationships into the development of the individual, as well as a stake in the outcome which the larger community has in the basic social structures within lesser relationships must find a role.

Group dynamics can help librarians accomplish their professional objectives, especially in their deliberately directed efforts to assist groups in attaining unity of purpose and action for general or specific objectives. The group process facilitates social adjustment through the attainment of tangible and specific ends. Group dynamics is a long-term method, not a goal, which the library as a coordinating structure shares with all other agencies and organizations. The community is also composed of many powerful and often discontented forces that take a much longer time to become integrated than do individuals and face-to-face groups.

The purpose of group activity is to provide members with the opportunity to improve their group skills, and to be better group participants. The discussion deals with any problems which may come up in the group with a focus on the present. The group considers only those things that arise within the group; they do not take topics or problems from outside. A healthy group does not fasten on the psychological problems of the members, but on their social skills and how each participant relates to other people. This function might be of especial value to librarians, who do not have a widely known reputation as experts in social relations.

Not only can people learn from librarians and materials, they can learn from discussion with peers. They may not always need to learn skills, but they can learn empathy, self-confidence, and increased understanding of themselves and others. Through talking with others, they can see that others have the same problems. They can work together to solve problems held in common. With an understanding group leader, who encourages people in the group to speak out on what they think and treats them as intelligent human beings, group members can grow in self-confidence and feel that they have worthwhile ideas. The chance to talk out problems and grievances with like-minded people, without fear of being rejected, is a valuable experience.

By adding a group dimension to its program, the librarian can move from being a passive community resource to an active communications agent. Libraries, with their traditions, resources, and educated personnel, are the appropriate and logical agency to sponsor group study, especially as group study tends to be oriented to communications media. Most particularly, a group study program can deepen and enrich the group effectiveness of the library staff.

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GUATEMALA, LIBRARIES IN

Introduction

Guatemala is one of the republics of the Central American Isthmus. It borders on the north and west with Mexico; on the east with British Honduras, the Atlantic Ocean, Honduras, and El Salvador; and on the south with the Pacific Ocean. The territory is very mountainous, a fact that has made communications rather difficult. Since the 1930s and 1940s, however, a great effort toward the opening of roads to make transportation possible all over the country has been promoted.

The climate is agreeable most of the year in the central plateau. The lowlands are rather warm while the highlands may sometimes be extremely cold.

According to the last population census, carried out in 1964, and to the publication *Anuario Estadístico de la Dirección General de Estadística* (*1*), the population of Guatemala is 4,287,997 with 2,172,456 males and 2,115,541 females. Of these, 2,479,055 are ladinos (not exactly a race but a term used to designate those who, although with an admixture of Indian blood, have been integrated into the Occidental way of life) and 1,808,942 Indians. The territory extension is 131,854 square kilometers with a population density of 50.4 inhabitants per square kilometer. Reference 1 shows that the groups of population are distributed in an uneven fashion throughout the country; the highest density of the population is concentrated in the highlands while in certain places the population is so low that it does not even reach one inhabitant per square kilometer.

The Indians still live in very close communities, and this is probably one of the main factors that has prevented the integration of this ethnic group into the rest of the population. The Indians still keep their languages as well as their costumes, practices, and habits, but they differ strongly from one group to another.

Most of the population belongs to the Catholic Church, but a number of Protestant churches have centers scattered throughout the country. Although most of the Indians are Christians, they still keep their ancient pagan rituals.

Politically, Guatemala is divided into twenty-two departments, all of them dependent on a central government concentrated in the capital of the country.

EDUCATION

Education in Guatemala depends on the Ministry of Education, and local authorities have very little or no influence in this activity. Education is secular, free, and compulsory as far as primary school is concerned. Secondary education is free but not compulsory. Higher education is free except for the fact that a small tuition fee is required to enter the university. There are primary schools scattered through the country, but they still lack adequate buildings and equipment. Secondary education is offered in certain parts of the country, but these centers cannot absorb the school population in need of this level of education. Higher education, of course, is not as common, but in the last decade important programs in the development of universities have been carried out, and at present there are five universities. There is one national university, supported by the state but autonomous in its action; the other four are private but do not offer as many subjects. The national university has schools of law and social sciences, medicine, engineering and architecture, chemistry and pharmacy, economics, dentistry, humanities, agronomy, and veterinary science. The private universities have concentrated their efforts mostly on law, humanities, economics, social sciences, and all types of engineering.

The literacy index in 1970 was 37% of the population according to the Ministry of Education, which means that approximately 63% still are illiterates. The figure of 37% should be taken with reserve since many of them are not functional literates as they do not participate actively in the cultural life of the country.

History of the Library Movement

Little is known about libraries during pre-Columbian times. Since few documents have been found and studied, there is so far no evidence of any organized collection even though the Mayan civilization had been one of the extraordinary ones in the world. The documents called Codex that have been found have been studied from the historical point of view, but not as part of any possible collection. Unfortunately, they are scattered in different museums throughout the world.

A number of collections were developed during colonial times in the convents and monasteries founded by the European conquerors. Among them the most important ones were: Colegio de Santo Tomás de Aquino; Colegio de San Lucas and Colegio de San Francisco de Borja of the Society of Jesus; Colegio Conventual de Santo Domingo; Colegio Conventual de San Francisco de Guatemala; and Colegio Anexo al Convento de Nuestra Señora de la Merced.

During the sixteen century the first school in Guatemala was founded by Francisco Marroquín, a clergyman. From then on a number of schools, mainly attached to religious orders, were developed. The order of the Bethlemites created the first school for indigent children. At the end of the eighteen century another clergyman, Cayetano Francos y Monroy, became one of the precursors of public education. Due to his interest in education, the schools of San José de Calasanz and San Casiano were created. At the same time the influence of British philosophers was making inroads through the Americas, and the new methods of teaching developed by Rousseau were also influencing education. It is of interest to note that Cayetano Francos y Monroy recommended a number of books and authors that should be included in the schools that were a product of his interest in education (*2*). *The Castillian Grammar of the Spanish Academy and Its Orthography; Dictionary of the Castillian Language;* and *Historical Cathechism* by the Abad Fleury; *Historic Compendium of the Religion* by Josef Penton; *The Art of Writing* by Francisco Javier de Palomares; *The Method of Writing* by Pedro Díaz Morante; *The Art of Writing by Rules and Without Models*, anonymous; and *Brief News of All Principal Rules of Practical Arithmetic* by Juan Joseph de Padilla.

This was the education picture up to 1871 when the liberal revolution led by Justo Rufino Barrios took place. During his administration the schools of San José de Calasanz and San Casiano were relegated to second place compared with those developed by the liberal revolution.

During this period the *Sociedades Económicas de Amigos del País* were founded, and there was a general increase of culture.

The foundation of the University of San Carlos by the Real Cédula dated January 31, 1676, and signed by King don Carlos II in Madrid, is probably one of the landmarks in the development of the libraries, since the creation of schools of different disciplines gave raise to special collections as part of the university. Although not for the use of everybody, they were available to scholars.

Actually the activities at the university began in November 1677. In 1681 the first courses were offered, and they included the schools of theology, philosophy, Cakchiquel (the local Mayan language), law, canon law, and medicine.

The introduction of printing gave a great impetus to the development of libraries which were constituted mainly by religious materials at that time. The printing press was introduced in Guatemala between 1659 and 1660; it was brought by Fra Payo Enríquez de Ribera (*3*). The first printer was José de Pineda e Ibarra and the first book printed was a theological work, *Explicatio Apologética*, in 1663. The bibliography of the first books printed in Guatemala was published by Toribio Medina (*4*).

After 1821, the year of independence, there were a number of efforts to establish libraries which could be used by all the people, but unfortunately the problem of illiteracy prevented the demand that a more literate population would have promoted.

By 1871, after the liberal revolution ended, new leaders came into power. They were strongly influenced by the liberal doctrines developed in Europe, and they created public education, making it free, compulsory, and secular, at least for the primary school. From then on the demands of the population for education and centers for reading became stronger and stronger. As a consequence, and because of this liberal movement, the government decided to create the National Library (*5*) on October 18, 1879 by a decree that reads as follows:

> National Palace, Guatemala, October 18, 1879. Considering: that one of the most efficacious means to disseminate all kind of useful knowledge is the foundation of public libraries; that this capital even though important lacks a social institution where everybody can enter to acquire the instruction they seek by the reading of selected materials; that the concerned authorities have already dictated the needed measures to bring from Europe the most selected works on the different disciplines of human knowledge, the President agrees to:
>
> 1. The foundation of a public library in this capital taking advantage of one of the most adequate rooms of the building of the Sociedad Económica.
> 2. Provide it with the books and elements that the Sociedad already has and those that exist in private libraries of the University, Military Academy, School of Arts and Crafts, and those that belonged to the confiscated convents; and
> 3. The drafting of rules and regulations that will determine the organization and convenient arrangement of the library for public service.
>
> Be it given. Signed by the President.

It would be a mistake to give credit only to the liberal revolution for library development because, as mentioned above, efforts to open such cultural centers were made earlier. Among the libraries in existence at the time were those of the Recoletos, the Bethlemites, the School of Arts and Crafts, the Seminary, and the Sociedad Económica.

The first set of rules and regulations for the National Library were drawn on October 27 of the same year. They stated that the new institution would be a part of the Education Department, and that a librarian, as well as the necessary helpers, was to be hired. The library collection was to be divided into five main categories: law, medicine, physics and mathematics sciences, humanities, and miscellaneous. The last part of these rules is concerned with the creation of two catalogs, a general one by subjects and the other to list the collection in alphabetical order. These rules also included the duties as well as the responsibilities of the librarian. They refer to the personnel obligations and the arrangement of the library collection. These rules also obliged printers and publishers to send the library two copies of each publication they edited and printed.

In a further decree of October 29 of the same year, the name "National Library" first appears; in the two earlier decrees it was called only "The Library." This decree also created the law of copyright:

> *Article 26:* The nation is the owner of the manuscripts of the public archives, consequently they cannot be published without permission from the government.
>
> *Article 29:* Of every book printed, the author shall present four copies, one will be deposited in the National Library, another in the National Archives and the rest in the Ministry of Public Education, the same kind of deposit will be needed for each new edition or translation of the book.

By the year 1880 the National Library had a reading room with contributor members who, for a small annual payment, could have the same privileges as the honorary members, a group formed by scholars.

The library began with a collection of about 15,000 volumes which belonged to the Sociedad Económica, the university, the Military Academy, the School of Arts and Crafts, and some that came from religious associations. It was very difficult both to house the collection and to group the materials according to the categories already established. All these arrangements delayed the formal inauguration, which took place on June 24, 1880, though a reading room had already been in use. Due to the fact that the library was first opened in the building of the Sociedad Económica, the middle class was not very anxious to make use of the facilities; even less anxious were those of the lower social classes. This fact and other political reasons led to the moving of the National Library to other quarters more adequate for its purpose. By 1892 the National Library contained 19,400 volumes.

For most of its history the National Library has been under the direction of persons that knew nothing or very little about librarianship. From 1944 up to the present, however, the situation has changed completely, and the National Library has been under the direction of leading Guatemalan librarians. Unfortunately, by the government mandate No. 55 of April 1967 the periodical publications section became a separate unit and, at present, although housed in the National Library building, it functions with complete independence. It is now a library in itself with a collection consisting mainly of periodical publications of Guatemala and other Central American countries.

It can be said, then, that the nucleus of library service is the National Library, which plays a dual role since it functions both as a national library and a public library.

Present Situation

There are fifty-four libraries in Guatemala which depend on the National Library for both their collections and budgets. In addition, there are fifteen libraries supported by United States Aid for International Development and the community while the National Library gives technical assistance.

By June 30, 1972 the National Library had a collection of 354,342 volumes, a program that varied from story-telling to art exhibits, and training programs used for the orientation of teacher librarians.

At present the National Library has the following sections: technical service, circulation department, reference department, children's department, department of branch libraries, and the administrative offices.

Besides the National Library there are a number of public libraries, either with collections on all kinds of subjects or with special collections, such as the Association of El Porvenir de los Obreros and the Unión Central de Pilotos Automovilistas (UCPA). Unfortunately, they do not completely fulfill the objectives of public libraries because the budgets on which they operate do not allow for the improvment of their collections or their installations. Furthermore, they do not have qualified personnel for the organization of their material.

There is great interest in the development of school libraries. This should be a great help for those entering centers of higher education.

In 1968 Roberto Juarroz, an expert from UNESCO, carried out a study on the library situation in Guatemala and wrote a report entitled "Plan para el Desarrollo de las Bibliotecas Públicas y Escolares." His report included some statistics for 1966 which showed a total of 149 libraries in the country distributed as follows: eighty-three national, twelve municipal, and fifty-four private, with the highest concentration in Guatemala City, where there were twenty-four national, three municipal and twenty-one private. There were 344 school libraries distributed as follows:

Public urban primary schools	154
Public rural primary schools	105
Private urban schools	26
Private rural primary schools	11
Urban secondary schools	15
Public rural secondary schools	3
Private urban secondary schools	30

Only 18 of these libraries were organized.

The *Guía de Bibliotecas de la América Latina* (6) indicates that in 1963 there were forty-one libraries in the whole country. Thus, the number of libraries increased almost threefold. However, when the 1963 publication was being prepared there were a number of libraries that did not answer the questionnaires and consequently were not included in the publication. On the other hand, it is very likely that the 1966 figures may have taken into consideration small collections that cannot in truth be called libraries.

Of special interest is the opening of libraries at the school level, because this practice will enable the students to make proper use of centers of information when they enter higher education. There is a great difference between the students coming from schools where they have been accustomed to use a library, and those whose first contact with a library is when they enter the university.

The present library situation in Guatemala is improving in several ways: (1) through the implementation of a law that makes it compulsory for each student receiving a teacher's diploma to teach six illiterate adults how to read (7), which means that there will be more potential readers, and thus a demand for better library service; (2) through the demands of scholars, scientists, and specialists for better dissemination of information; and (3) through the recognition of librarianship as a profession, which in turn is creating a demand that professionals be in charge of information centers.

However, the library promotion program is mainly in the hands of government agencies or international institutions and organizations. The participation of private enterprise is practically nil.

Of special interest is the effort that the National Library is making with the children's section, where there are story telling, theatre, movies, and orientation programs. A consequence of this will be an adolescent population that is better prepared to use the libraries in secondary schools and at the university level.

There are a number of special libraries at the national and regional level, that should be mentioned, especially because of their holdings, programs, and potential. One of them is the library at the Bank of Guatemala, a state institution, which specializes in economics with a collection of 60,000 volumes and 500 periodical titles. Although a specialized library, it has an extension service that has developed twenty-two libraries at the department level, very much in the fashion of county libraries. These libraries have been furnished with collections of a general content and are continuously fed with new materials. As would be expected, the basic collection includes the literary production of Guatemala. The technical processes are carried out at the bank's central library, where a record of all materials is kept. A project to open two more of these libraries possibly during the 1972–1973 period, is in progress.

As has been mentioned, there are four private universities and each of them has a central library with collections that cover the disciplines included in their curricula. At the National University each school (engineering, regional school of sanitary engineering, architecture, chemistry and pharmacy, humanities, medicine, veterinary science, agronomy, law, dentistry, and economics) has its own library which is administratively and technically independent from the central library. At present, however, efforts are being made to create a union catalog, but so far only six of the schools are represented; the schools of agronomy, law, and economics still remain to be incorporated. It may be of importance to mention that the ultimate objective of the union catalogue is to become a national one. As part of this project the Bank of Guatemala and the Instituto Centroamericano de Investigación y Tecnología Industrial (ICAITI) are already participating.

For many years the libraries of the schools of medicine and dentistry were separated units, but due to the efforts of the librarians and the understanding of both faculties, they merged a few years ago as one integrated collection serving both schools. As could be expected, these schools have the best library in the National University, as far as collections and organization.

There are a number of libraries in different government offices, as well as in private institutions, such as the specialized collection of the Dirección de Investigación Agrícola which deals with agricultural sciences. The library of the Social Security Institute, besides the materials that may be of use for the office personnel, has a collection of general content for public use.

At the regional level libraries of the Instituto Centroamericano de Investigación y Tecnología Industrial (ICAITI) and the Instituto de Nutrición de Centro América y Panamá (INCAP) deserve mention. The former has a collection which includes United Nations documents and materials on production, chemistry, and industry. The latter has a special collection in nutrition and allied disciplines. These are the only two institutions that have an agreement for interlibrary loan.

ICAITI is the only institution in Guatemala whose librarian is a biologist with library training. The rest of the libraries in Guatemala are in the charge of graduate librarians or persons who have had training courses but not an academic degree.

Future Development

The national education plan for the Republic of Guatemala for the years 1969–1972 (*8*) includes Project No. 7 which is dedicated to library development. Its main objectives are the organization of the department of public libraries, an annual increase in bibliographic and audiovisual materials, and an increment during the 4 years of 100 volumes monthly for the mobile unit to reach 4,800 volumes plus the 500 volumes which form the basic collection. This is a concern of the National Library. As for the public libraries, the program aims to increase the bibliographic and audiovisual materials of the public libraries; to increase the in-service training of the personnel in charge of the public libraries; to integrate the Friends of the Library Club in each public library; to promote the creation of mini-libraries for rural areas in need of them; to promote the creation of the "Casas de Cultura"; and to promote the organization of children's sections within the public libraries.

For public school libraries the program contemplates the creation of the following: a national service for school libraries under the supervision of the general director of education; ten pilot school libraries per year; a pilot school library for students of secondary school in Guatemala City with a collection of 2,000 volumes and facilities for 240 students; twenty-one school libraries for middle education of 1,000 volumes each and facilities for seventy-two readers; a central education library in the Ministry of Education with a basic collection of 1,000 volumes with facilities for seventy-two readers; ten education libraries in the different Guatemalan States with a basic collection of 200 volumes in each one; ambulant deposits for books and serial publications for primary schools that do not own libraries; and twenty school libraries for primary schools. In addition, an increment of twenty posts for school librarians and the allotment of twenty scholarships per year starting in 1969 were approved.

The project also includes the organization of intensive courses of 6 months for the training of library personnel in the library school of the Department of Humanities of the University of San Carlos; the organization of basic courses of 4 weeks in the National Library; the allocation of 3 scholarships per year for regional courses; and a request for help to UNESCO.

Finally, the project includes the writing of regulations for the legislation about libraries or a supplementary chapter about them in the legislation for national education; the creation of a national fund for the libraries; and a request for a regular subsidy from the departmental and municipal governments.

If the objectives contemplated in this project can be accomplished, the library situation in Guatemala by 1973, if not ideal, at least will meet the minimum requirements for a developing country.

INCAP is the only institution that has made an effort to develop a documentation center (9). Unfortunately, due to budgetary limitations the project was terminated in 1970.

There is a project at the government level for the development of a documentation center in the field of education, which if established will have the following activities:

1. The centralization of all the documentation on education including
   (a) Laws, decrees, regulations, etc.
   (b) Survey reports.
   (c) Statistics.
   (d) Theses.
   (e) Papers and reports presented in conferences, seminars, congresses, etc.
2. The organization and storage of information according to modern techniques.
3. The analysis, interpretation, and dissemination of the information.
4. The compilation of bibliographies on education.
5. The coordination of all activities and resources of educational information existing in the country.
6. The promotion of information exchange at the regional and the international level through an effective system.
7. At a later stage the development of a national network of educational information which will function in the departmental supervisions and the school districts, centralizing technical processes and expanding services progressively.

The technical assistance of UNESCO has been requested for the development of this documentation center.

A new trend in Guatemala is the interest of each new government office for the integration of its information center. If this trend continues and private enterprises begin to follow it, the country will be well equipped in regard to documentation centers.

This work has been possible mainly through personal interviews. The authors wish to thank the personnel of the different libraries, who were approached, for their help in making available the information requested.

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RAQUEL FLORES
ROSARIO DOMÍNGUEZ
EVA DE SAGASTUME

GUYANA, LIBRARIES IN

Geographically situated at the northeastern corner of the South American continent, Guyana is considered to be the southernmost part of the West Indies. It has always maintained stronger cultural relations with the Caribbean Islands and Britain than with other South American countries and this trend seems to be continuing. Culturally speaking, the country was, is, and presumably will always be thought of as part of the Caribbean with all the inhabitants from at least six major races speaking English—or a creolese version of English—as their mother tongue, with a similar lilt in their voices. The country is developing at a reasonably fast pace: "the unknown hinterland" is in the process of transformation and change; roads are being cut through the forest, such as the Guyana-Brazil self-help road; new mining settlements are being built, such as Kwakwani; large-scale farming projects are underway in the Rupununi; and several new industries are springing up at the coastal settlements, such as cooperative food canning and dairy products.

The libraries of Guyana are all, in one way or another, part of a network whether they in fact operate as part of a system or not. There is not a national system for the libraries as yet, but there are subsystems of collaboration instead; some are in need of coordination, others are already on the path of harmonizing efforts. The best known system is the public library with nearly fifty library centers located in schools, villages, and five prisons, and its three branches. The second system is a set of governmental libraries, primarily concerned with serving their own departments but connected—with some measure of cooperation—with one another. The third system is the University of Guyana Library, linked with some special libraries for the purposes of reading, reference, cooperative listing, and interlibrary loan. The last system is the now ailing Sugar Producers' Association Library, which until very recently supplied twenty-three sugar estates with books for loan and had a substantial reference collection.

The Archives—the only institution that bears the "national" title—has a depository storehouse at Mackenzie. The essential point about library service in Guyana is that the main libraries are all situated in or around Georgetown, the capital, which comprises 180,000 people—one-fourth of the country's total population. All vital information proceeds from or is channelled into Georgetown. The British Council Library, the United States Information Service (U.S.I.S.) Library, and the country's most remarkable society library, the Guyana Society Library, are in the near vicinity of one another in the capital.

Within the framework described above, there are three dozen libraries that operate with some measure of success and proficiency. At best they have an annual budget, are professionally staffed, and have a regular readership or a special community to be served. With book and periodical collections that grow in size, some are so-called "unorganized libraries," which—irrespective of size—should really be called fluid collections of books and periodicals.

The most notable libraries in Guyana are the Public Free Library, the University of Guyana Library, the Guyana Medical Science Library, the Guyana Society Library, the John F. Kennedy Library of U.S.I.S., and the British Council Library.

The Public Free Library was established in 1909 by a gift of the Carnegie Trust Fund. It is now partly financed by the Treasury and partly by donations through the City Council, Georgetown. Situated at the corner of Church and Main Streets in the center of Georgetown, it occupies a well-designed two-story building which stands in spacious grounds surrounded by tropical flowers. Its entire stock comprises over 100,000 books and several hundred titles of periodicals, but only the major portion is housed in the center of the city, the rest is looked after by the branch or community lending services. The loan of phonograph records is restricted to Georgetown. The reference collection of the main library is rich in cuttings, reports, and books relating to Guyanese or West Indian topics. The library is a depository of UNESCO. It uses the Dewey Classification. The children's service of the library is truly remarkable for its control and efficiency, not only ensuring the swift flow of loans, but organizing story hours, film shows, and exhibitions as well. The library has a staff of forty with a core of professional librarians in command, headed by Mrs. Stella Merriman, F.L.A.

The University of Guyana Library was established in 1963 with several hundred books donated by the members of staff and the British Council. In 1971 it has 40,000 books, 600 serials, 3,000 pamphlets, 150 maps, four special collections (Caribbean, Staff, Rare books, Manuscripts), and a growing stock of nonbook materials (films, tapes, phonograph records) with a microfilm reader, tape recorder, and record player all to be used as reference equipment. The library is a depository of the United Nations with a selective acquisition policy. The library is situated in a new glass and aluminum three-story building 5 miles out of Georgetown in the middle of the University Campus at Turkeyen. Its readership includes 1,300 students, 150 teachers and administrative staff, and a host of special readers, such as notable members of the community and special students in the region. It has an annual budget of $100,000 supplied by the Treasury, but is aided by gifts from Britain, the United States, and some generous members of the public. Th library has a staff of twenty-seven, nine of whom are professionally qualified. The librarian is Thomas Kabdebo, M.Phil., A.L.A.

The Guyana Medical Science Library was established in 1964 to serve the medical profession and allied skills, such as nursing and medical technology, in Guyana. Situated in the Public Hospital compound in Thomas Street, Georgetown, the Medical Library has a collection of 4,000 books and pamphlets and about 200 titles of periodicals. It is financed by the Ministry of Health and is under the direct control of a Board of Governors recruited from the medical profession. The librarian is Miss Maurine Wren.

The Guyana Society Library, formerly the Library of the Royal Agricultural and Commercial Society, is situated in Church Street, Company Path, Georgetown, next to the Guyana Museum. It bears some affinity with the museum inasmuch as it had been controlled by the same board until last year. In a sense the Guyana Society Library is the oldest library in the country as its original parent institution was founded in 1844 and some of its books and journals show an unbroken continuity back to 1882. The library is particularly rich in rare books dealing with the Amerindians of Guyana, but it also has a notable loan collection: some 16,000 books and 800 phonograph records. The librarian is Miss Nellie Martins.

The John F. Kennedy Library of the U.S.I.S. was opened to the public in November 1955. Having started as a reference library, the John F. Kennedy Library now has over 7,000 registered borrowers and it lends to groups outside of Georgetown. Situated in Main Street, near the American Embassy, the library has a stock of over 12,000 books, 500 records, and a fine selection of United States newspapers and periodicals on current subscription. It is financed by the United States of America. The librarian is Mrs. Grace Horton.

The British Council Library is situated in Carmichael Street, Georgetown. It has a small branch library in New Amsterdam, Berbice. The main library, carrying 90% of the stock, contains over 7,000 books; 100 British newspapers and periodicals; a collection of prints, photographs, and music scores; tapes; and about 400 films. It is financed by the British Council and administered by its Resident Representative in Georgetown. The librarian is Mrs. Phyllis Sheppard.

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THOMAS KABDEBO

H

H. W. WILSON

The H. W. Wilson Company

The H. W. Wilson Company, established in 1898 in Minneapolis by Halsey William Wilson (1868–1954), describes itself as the world's largest publisher of indexes and reference works for libraries. An outgrowth of a bookstore founded, in turn, in 1889 on $200, the publishing firm as it approached its seventy-fifth anniversary could claim subscribers in more than 100,000 libraries of some 125 countries.

Located in the Bronx Borough of New York City since 1917, the firm prepares and publishes: indexes to magazine articles, a bibliographic record of new English-language books, evaluative works, and aids to reference and library practice. Its bibliographic data is used widely for cataloging library materials. The best known of its publications and services, perhaps, are the *Cumulative Book Index, Readers' Guide to Periodical Literature*, and the standard catalog series.

Other contributions to and associations with the library and information fields include: the development of techniques for cumulative bibliography on a large scale; the creation of subject headings—some 100,000 for one index alone; liaison with the library community through the Committee on Wilson Indexes, Reference Services Division, of the American Library Association; the employment of many professional librarians; assistance to library school students and library education programs through the H. W. Wilson Foundation; and the sponsorship and administration of library award programs.

Most of these developments were initiated by H. W. Wilson, who presided over his firm for more than 53 years, devoting most of his life to this bibliographic enterprise. Thus the corporate history most properly begins with some background on Wilson himself (see also the following article on H. W. Wilson).

Halsey William Wilson was born to Althea (Dunnell) and John Wilson, a tombstone cutter, in Wilmington, Vermont, on May 12, 1868. Both parents died of tuberculosis before Halsey was three. His childhood consisted largely of farming chores for his grandparents in Massachusetts and later for an aunt and uncle near Waterloo, Iowa. After 2 years in a Wisconsin boarding school, Wilson entered the University of Minnesota's preparatory school. Although he continued going to school at the University intermittently until 1892, a series of enterprises, first to make ends meet, soon became all-consuming and he never completed his university studies. One such enterprise involved a small amount of printing equipment which he bought from a church pastor's son and hauled into the corner of a room he shared with one Henry S. Morris. "My roommate made no objection and there was no law at that time forbidding us to sleep in a printing plant," Wilson reflected 60 years later.

The equipment was a small source of additional income for Wilson—and the beginning of a long preoccupation with the printing process and its relation to bibliographic publishing.

In 1889 another enterprise was born. Wilson borrowed $100 from fellow students, put it together with Morris' $100, and with his roommate on December 4 established the firm of Morris & Wilson, Booksellers.

The need for a retail outlet to provide textbooks to faculty and students was great, and the business prospered, moving from bedroom to university basement. Wilson bought out Morris' share about 3 years after the latter graduated, and in 1895, confident about the future, he married Justina Leavitt, his lifetime companion, skilled editor, and women's suffragette—but first, sharer of an apartment at 227 Eighth Avenue, S.E., with her husband and the *Cumulative Book Index* (*CBI*) which came into their lives in 1897 (see Figure 1).

Wilson's interest in—his reverence for—books and libraries was not limited to the transactions of his bookselling business. It was bookseller Wilson who, in the path of an approaching blaze, emptied out the college library late one night before he attended to his own bookstore in the same building. It was Wilson who, operating his bookstore a mere 5 days out of the week, decided to work the remaining 2 days in the new Minneapolis Library. He was so valuable there on the Sunday "skeleton" crew that the library director considered him every bit a librarian staff member and colleague.

Wilson's first acute symptom of what became a bibliographic compulsion was to offer a personalized service—what is today called selective dissemination of information—whereby he would "call the attention of those interested in particular lines of study to new books, reviews, and magazine articles in their subjects." Such service, however, meant bibliographic searches through many publishers' catalogs and uncumulated weekly lists of new books, fifty-two a year. Wilson wrote:

> Our problem was further complicated by the announcement in 1897 that *Publishers' Weekly* would cease publication of its mid-year number, listing books published for six months. We considered the problem carefully and came to the

THE MONTHLY

Cumulative Book Index

227 Eighth Avenue S. E., Minneapolis, Minn.

Vol. I, No. 1. MINNEAPOLIS, MINN., FEBRUARY 1, 1898. $1.00 per year.

Houghton, Mifflin & Co.'s February Books.

English and Scottish Popular Ballads.

Edited by Prof. F. J. Child. Part X., completing the work. With a Portrait of Prof. Child and a Biographical Sketch by Prof. G. L. Kittredge, $5.00 *net*.

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Complete in 5 imperial 4to volumes, $5.00 *net*.

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AND OTHER STUDIES.

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A Novel. By Ellen Mackubin. 16mo, cloth, $1.00; paper, 50 cents.

A fresh and stirring story of army and frontier life by one who is intimately acquainted with it and tells a story very well indeed.

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A Novel. By Virna Woods. 16mo, cloth, $1.00; paper, 50 cents.

A capital story of California, such as Stevenson might have written. It has elements of uncommon interest, a fine assortment of mystery, a satisfactory clearing-up, and sustained readableness.

Sold by Booksellers. Sent, postpaid, by

Houghton, Mifflin & Co., Boston, 11 E. 17th St., N. Y.

FIGURE 1. *Title page of the first* Cumulative Book Index, *marking the very beginning of the H. W. Wilson bibliographic publishing enterprise, February 1, 1898.*

> conclusion that what was needed was a combined monthly listing of the new publications of all publishers which could be cumulated at intervals so that searching could be reduced to a minimum. And so the study of this problem led to the decision to publish the *Cumulative Book Index*.

In 1898 Wilson had access to all the well-known retrospective catalogs of American bibliography, except, of course, his own and those of Evans, Shaw, and Shaw and Shoemaker, which were published in the twentieth century. But he was essentially a seller of current trade books, and only *Publishers' Weekly* (*PW*) could aid him in his offer to call attention to new titles *as they were issued* in a particular subject area. And thus he decided to publish *CBI* when expenses forced a curtailment of Leypoldt's semiannual *PW* record.

Wilson planned carefully. History was filled with tragedies of others who had succumbed to the bibliographic urge. Roorbach, for instance, made such small profits from his monumental project of 20 years that he had to seek one further means of support after another, and finally died while traveling as a book salesman. For the *CBI*, several basic decisions had to be made which in modern times hardly seem a part of information science—and yet they were crucial.

> First consideration was the matter of the style and size of type to use in the new index. It was found that eight point type would mean twice as much paper and press work as compared with six point. But the type must be legible for average eyes. Then the length of line that would be satisfactory to the reader was important. If lines are too short they are not good, and too many lines make more work in checking cumulations. Long lines are not economical when used with short runovers. A medium-length line has proved most efficient from every standpoint. . . .

So wrote Wilson in 1948, and almost a quarter century later the type and format chosen in the nineteenth century—the combination that yields the Wilson "look"—was in use with only slight modifications based on improvements in the printing arts (see Figure 2).

Continuing his look back over the first 50 years of bibliographic publishing, Wilson pointed out that, in addition to format, the

Man
Burnet, F. M. Dominant mammal. Aus$5.25 '70 Heinemann. W. (Australia)
Campbell, K. Body and mind. £1.95 '71 Macmillan (London)
Hampshire, S. N. Freedom of mind. $9 '71 Princeton univ. press
Passmore, J. A. The perfectibility of man. $14.95 '71 Scribner

Influence of environment

Addresses, essays, lectures

Aboriginal man and environment in Australia. Aus$12.50 '71 Australian nat. univ. press

Congresses

The impact of civilization on the biology of man. Aus$6.95 '70 Australian nat. univ. press

Influence on nature

Anderson, P. K. comp. Omega. pa $5.95 '71 Brown, W.C.
Arbib, R. S. The Lord's woods. $6.95 '71 Norton
Burch, W. R. Daydreams and nightmares. pa $3.95 '71 Harper
Chute, R. M. comp. Environmental insight. pa. $4 '71 Harper
Environmental quality in a growing economy. pa $1.95 '71 Johns Hopkins press
Stone, G. C. ed. A new ethic for a new earth. pa $1.95 '71 Friendship press

Man (theology)
Jenkins, D. E. What is man? pa $1.95 '71 Judson press
Reid, C. H. 21st-century man—emerging. $4.95 '71 Pilgrim press

FIGURE 2. *The Wilson "look," from the* Cumulative Book Index, **75***(3), 338 (March 1972).*

> other basic problem in working out plans for the *CBI* was the way in which material could be cumulated from one issue into the following issue. . . . A method was worked out whereby type was kept standing from each issue, and the metal linotype slugs filed into the new alphabet for the next issue, making a combined or cumulated number. This filing of the linotype slugs was one of the early problems, but so experienced did the workers become that soon they could file the metal slugs as quickly as they could file cards.

Another difficulty was the storing of the metal, necessary for this cumulative process. Within 50 years the amount of machine metal which had to be held for cumulations amounted to 60,000 pounds in several thousand galleys. Luckily, Wilson had moved the business out of his apartment some 59,900 pounds earlier—not long after the first number of *CBI,* a pamphlet of 16 pages, was issued in February 1898.

Although the concept of cumulated lists was not new, most publishers considered the task prohibitive because of the vast amount of type resetting necessary for joining new with old. But Wilson's technique of interfiling used slugs was so effective that even today's well-known automated methods for producing cumulated printouts are not being accepted as a substitute without enormous and elaborate comparisons of cost and effectiveness.

Watching the speeding fingers of the company's interfilers as new grey slugs are flicked in among ink-blackened ones is always an impressive sight. But there is a great deal more to bibliographic cumulation than simple mechanical filing; for instance, the approximately 36,000 lines of type for every 200 pages of a publication include thousands of subject headings and subheadings that must be carefully deleted by editors and interfilers when entries are brought together in a cumulated issue, leaving just one set of headings. There are also such delicate concerns as keeping the height of old and new slugs uniform to within less than a thousandth of an inch. Any more variation and the high slugs will be flattened as they go through one press run after another.

The intellectual tasks are so overwhelming as to dwarf the technological problems. Wilson's librarian/indexers, to keep pace with current literature and terminology, must develop thousands of new subject headings—and of a quality that befits one of the standard sources of descriptors for information storage and retrieval. The headings must be suitable for use in libraries serving many types of clientele, they must be accurate, and related subjects must be kept together alphabetically whenever possible.

Next, how to decide the frequency of cumulation? To cumulate each issue of a monthly bibliography is so expensive that only the greatest demand for its use is likely to provide the necessary support. Also, to keep costs down, the periods of cumulation must be farther apart as the year advances; for although a modest 2-month cumulation might be feasible, what is the economy of a huge 10-month cumulation just 2 months before the full year's volume? Then, having decided the yearly schedule, one must work out the longer-range periods of cumulation in terms of use and demand: every 2 years? every 5 years? But the greatest challenge of all, perhaps, is the editorial. One editor wrote

> It is only when the combined galleys are before you that you realize what a tremendous lot of revision is going to be necessary before the finished product appears. It is not only the errors which creep into a cumulation which have to be corrected; subject headings and names sometimes have to be revised from one year to the next.

Wilson also had to decide at the outset the type of arrangement that would be most useful in *CBI*—and in each subsequent publication. Separate author, title, and subject arrangements? Classified subject listings, or alphabetical? The dictionary arrangement of *CBI* came only after experimentation with the first five numbers.

Pittsburgh bookseller W. W. Waters was the first subscriber in the history of the company's publishing/indexing service. "It seems too good to be true," he wrote of CBI, enclosing the subscription price of $1. But the first month brought only twenty-five more subscribers, the first year fewer than 300, and for several years various improvements kept expenses in excess of the income from new subscribers.

CBI's later success would have been most uncertain without the dedication and skills of one Marion E. Potter, whom Wilson hired in 1898 as full-time editor of the index. Petite, charming, insuppressible, and indefatigable, Miss Potter went on to serve the company for 55 years before her death in 1953, a year before her lifetime employer's.

With Wilson's encouragement she contributed immeasurably to library service during her terms as editor of *CBI*, *Readers' Guide to Periodical Literature*, *Children's Catalog*, and *Industrial Arts Index*. But in the firm's first home outside the Wilson apartment, a small room in the university YMCA, she almost despaired under the pressure of deadlines, the crowded conditions, the fumes of the type cleaner, and such nightmarish errors that appeared from time to time as: "Baptists, see also Drunkards."

Miss Potter could scarcely catch her breath after the *CBIs* began to flow smoothly when Wilson undertook a second major publication, *United States Catalog*, to which she compiled the author index. This combined trade list of books in print in the United States was first issued in Autumn 1899 with a title index compiled independently by the librarian of Bloomington, Indiana. The three completely revised editions of 1902, 1912, and 1928 were each organized into a single author-title-subject alphabet. Although the *Catalog* emerged as the Wilson Company's bibliographic leviathan while the monthly and annual *CBIs* were relegated to the status of supplements, it is the *CBI* which today stands as the record, by year, of the United States (and other English-language) publishing output. The *Catalog*, a normal baby of 7½ pounds at birth, by 1928 had grown to 190,000 in-print titles and 27 pounds. Like each prehistoric evolutionary victor who "became of victim of his success and then could not turn backward; . . . prospered and grew too large," the *Catalog* became prohibitively expensive to produce. The decreasing life-in-print of the average book further persuaded Wilson to concentrate on a bibliography of record, rather than a soon-outdated catalog of book merchandise, and the *CBI*, which in 1929 became a "world list of books in English," continued the series as a chronological as well as current bibliographic author, title, and subject guide to imprints.

Now based as much as possible on first-hand examination of materials being indexed, the company's editorial procedure at first required only the publishers' catalogs. Perhaps it was one unforgettable letter, sent in regard to a privately-printed volume, that reinforced for Wilson a most critical element of bibliography: that books and articles are products of human labor, representing dreams, hopes, passions, suffering, and creativity that can never be fully recorded; therefore, let the record of the creative product itself be a sensitive and accurate guide for all who might seek out the original contents. (The unforgettable letter was from an author explaining to the editors of the first *U.S. Catalog* that the revision of his book had not been completed "owing to an unfortunate train of mishaps, including fire, Pasteur treatment on account of the bite of a rabid cat, blood poison, three surgical operations, and a number of minor misfortunes—not helped by a depression and several printers' strikes. . . . I am sorry to send out a book not entirely revised, but the loss of five months' time, about $20,000 in cash, and a square foot of skin interfered with my previous plans.")

Wilson moved his operation to the top floor of another building and then, in 1900, to a two-story structure. Bookstore and publishing office occupied the main floor, and the second floor was rented for college parties. The *CBI* had just begun to bring income a little closer to deficits when Wilson hired his old roommate, Warren C. Rowell, to carry the catalogs as a side line on his book selling tours. By 1904, after Rowell had been hired full-time and installed in New York as the East Coast Representative, the *CBI* was established nationally.

When, 3 years earlier in 1901, Wilson published the first *Readers' Guide* (initially a supplement to the *CBI* indexing just seven periodicals), it marked not only the beginning of an American institution even more familiar than the Wilson book catalogs, but the inception of two traditions which have become an integral part of the Wilson endeavor itself: an unprecedented cooperation between publisher and the library community—what one writer called a "synergy"—and the service basis of dividing up bibliographic costs.

In his 1948 reminiscences, Wilson wrote:

> I began . . . to attend meetings of book-sellers and librarians and listen and ask questions . . . I heard in those first library meetings discussions of the problem of keeping, storing, and even binding of periodicals. Also the difficulty of finding certain subjects while waiting for the volumes of Poole's Index.* Librarians of smaller colleges questioned whether they should keep back issues of periodicals at all. This need for a current index to periodicals having been proved by discus-

* *Poole's Index to Periodical Literature,* ultimately covering 1802–1907, was coming out only every 5 years, and W. I. Fletcher's supplemental monthly *Cooperative Index to Periodicals,* even with the blessings of the American Library Association, had become an annual by 1890. The *Cumulative Index to Periodicals* of the Cleveland Public Library went from monthly in 1896 to quarterly 3 years later, and appeared doomed until Wilson absorbed it in 1903 from a private publisher.

sions in library meetings, it seemed to be the wise thing to begin at once. *The Readers' Guide to Periodical Literature* started publication. . . .

At that time, some indexes were published on cards, selling parts separately, so that libraries could order index cards for the periodicals desired, paying only for the service received. In the case of *Readers' Guide* they had to pay for the whole index whether or not it was useful to them. We considered printing *Readers' Guide* on cards, and did some figuring as to costs. . . .

The fact that from the publishing standpoint it would be sixteen times cheaper to print the whole volume than separate parts finally led us to the idea of the "service basis" of charge, in which a library could pay in proportion to its use, as based on the periodicals it received. This made it possible for more small libraries to start buying the index, and with the increased volume, the index was more economical for all subscribers. This service basis plan of charge . . . after proving reasonable and acceptable . . . was applied to other publications. . . .*

Through the years our method of talking things over to learn what was needed in libraries, and the form in which these needs could best be met grew constantly more important. This was my policy when preparing plans for new publications: First, listen to the advice of prospective supporters of a project. If the project is important it will be discussed in librarians' meeting and journals. Then scan the field and study what has been done and why there may have been failures and successes. Consult and secure advice from librarians who may be expected to have an interest in the project. Then the final question: "If this is a good plan and if we proceed with it will you plan to subscribe for it?"

Things began to move fast now for the Wilson Company, now that its founder had discovered how to succeed in the library business—but not without trying. For he was still required to run the book and stationary business to support his bibliographic urge. To get the most out of his staff workers, who did not necessarily share his compulsions, he had to exhort them: "Is it with enthusiasm that you begin the daily task or is it with a sense of heaviness and inertia? What is the matter?"

Whatever it was, he was able to work it out; and the staff—led by Miss Potter and by the new editor of *Readers' Guide*, Anna L. Guthrie, a graduate of the New York Public Library School—did not let him down.

In 1903 the firm was incorporated with the aid of booktrade, university, and library friends, who bought shares of preferred stock. Soon after, Wilson obtained a loan for and sold stock in a second company, established only for the purpose of erecting a building and leasing it to the first company. It was an expeditious way to finance a new home for the business, and one which impressed a Minneapolis banker as an act of pure courage.

The building itself was an attractive one of 16,500 square feet, boasting "the third largest concrete trusses in the United States"—and a fine location for the

* Similarly, when it has proved reasonable and acceptable, a flat rate has been applied to publications previously on the service basis. For periodical indexes, the criteria are: 1) a substantial number of subscribers; and 2) each subscriber taking a substantial number of titles indexed. Thus, in 1961, both *Readers' Guide* and *Abridged Readers' Guide* went from the service basis to a flat rate that could be afforded by virtually every library.

FIGURE 3. *The first "home of its own" for The H. W. Wilson Co., completed in 1905, and situated directly opposite the University of Minnesota campus, Minneapolis. The street level was the bookstore, and the building served also as the home of the* Cumulative Book Index, U.S. Catalog, Readers' Guide, *and* Book Review Digest *in that first year.*

bookstore, directly opposite the main gateway to the campus (see Figure 3).

Into this three-story building Wilson brought the *CBI, U.S. Catalog, Readers' Guide,* and a fourth service he had begun in 1905, *Book Review Digest* (*BRD*). The new building on 14th and University Avenues lasted only until 1923, when it was torn down for a railroad widening. But man's intellectual monuments endure, and the *BRD,* almost an instantaneous success under editor Clara E. Fanning assisted by Justina Wilson, was still going strong after its sixty-fifth birthday in 1970. Perhaps the key to its longevity is in the ever-increasing need for a quick consensus of authoritative opinion in book evaluation and selection. As the publishing output increases, as the last restrictions on controversial or taboo subjects are lifted, the librarian has less time but more need to justify each selection. Somehow, the *BRD* managed from the start, when it surveyed forty reviewing publications, to achieve brevity in its excerpts without compromising a fair representation of opinion on the reviewed titles. For many of these works were likely to be judged on the basis of *BRD's* evidence alone.

The year 1905 also marked the triumph of the cumulative method as applied to *Reader's Guide* (*RG*), when a 5-year (1900–1904) volume was issued. *RG*'s dictionary arrangement, with uniform subject headings, had never been achieved in an American periodical index before.

The *Debaters' Handbook Series* was launched in 1907 to serve a need for reference materials on current topics. It is perhaps most significant in that it evolved by 1922 into the *Reference Shelf*. In its first 50 years this series provided concise and authoritative background information on controversial concerns ranging from prohibition repeal (1923) to the crisis in the Middle East (1969). But debate was a fine art and a widespread activity earlier in the century, and, from the time Wilson lent out the original sources he had used for indexing to the present, when several guides for speech and debate are still published, the firm has had what might be thought of as a librarian's interest in trying to make sure all the pertinent facts are available before any verbiage issues forth from panel or podium.

To edit the handbook series, Wilson hired a hard-working Phi Beta Kappa university graduate named Edith M. Phelps, who became an outstanding and long-term officer of the firm. Company secretary in 1907, she retired 40 years later as editor of general publications and manager of foreign sales.

The period before Wilson left Minneapolis in 1913 also saw the publication of the 1912 edition of *U.S. Catalog*, another *RG* cumulation (1905–1909), dozens of general titles (Wilson acted as the unofficial University of Minnesota Press) and the following new ventures:

> *Library Work:* A digest of library literature, covering the years 1905–1911, issued quarterly, and edited by Anna Guthrie, a forerunner to *Library Literature* and *Wilson Library Bulletin*.
>
> *Eclectic Library Catalog:* A forerunner of *Abridged Readers' Guide*.
>
> *Fiction Catalog* (1908) and *Children's Catalog* (1909): The first of what became the Standard Catalog Series of evaluative, selective bibliographies. In 1971 *Fiction Catalog* was in its eighth edition, *Children's* in its twelfth.
>
> *Readers' Guide Supplement* (1907), the forerunner to *International Index* and later *Social Sciences and Humanities Index*, extending indexing service to materials used in college, reference, and special libraries.

But the major development of these years in terms of growth was probably the agreement the Wilson firm negotiated in 1911 with the R. R. Bowker Company, then as now its friendly competitor in the publication of current national bibliography and various library tools and literature.

Richard Rogers Bowker, owner of *Publishers' Weekly* since Leypoldt's death in 1884, had reinstituted cumulations of that record—this time quarterly and annual—just a few months after *CBI* had been launched to fill the need left by the demise of the semiannual *PW*. Competing with *RG*, Bowker also published an *Annual Literary Index* including periodicals for 1892–1904 and an *Annual Library Index*, 1905–1910, which contained as one of its sections a periodical index in dictionary arrangement. Also overlapping somewhat were Wilson's *Library Work* with Bowker's *Library Journal*, as well as *U.S. Catalog* with Bowker's periodical supplements to his in-print catalog of 1876, *American Catalogue*.

What developed was a gentlemen's agreement between two dedicated men suffering from the bibliographic urge, but not from an absence of practicality. Bibliographic publishing was such a difficult and tenuous business that it was to everyone's advantage for a firm not to dissipate its precious time and funds in a competitive struggle. In a tribute to Bowker, Wilson recalled that "when he might have regarded us as competitors in a limited field, he looked upon us rather as fellow members of his profession. . . ." Thus it was in good faith that, under the new agreement, Bowker suspended the quarterly and annual *PW* cumulations, the *American Catalogue* supplements, and the periodical index. Wilson agreed to take up the responsibility of more thorough coverage and more frequent cumulation in *CBI,* add to *RG* the magazines Bowker had indexed, and transfer to Bowker the much-promoted directories of booksellers and librarians which the Wilson staff had been compiling since 1904.

If the agreement does not now seem to be in the greatest tradition of American free enterprise and competition, one must bear in mind once more that a nation's publications and the information they contain constitute a national resource; it is actually a credit to the American system that private enterprise has been responsible for producing the guide and intellectual keys to the resource. A part of this responsibility is a fair and ethical distribution of the work that each entrepreneur can accomplish best, whether it be by initial agreement or by brief experimentation in open competition.

By 1913 the Wilson Company had grown to a point at which a move to the Eastern center of publishing was possible—and essential. There were some 100 employees, assets were in the $150,000 range, and "five of the great Mergenthaler machines" were "in constant motion all day long and often through the night." With the increased responsibilities for *CBI,* and with the *RG* indexing 98 magazines, it was essential to be near the many publishers—and subscribers—in the East. Wilson reluctanly sold the bookstore that had been the good angel of his library services for so long, and, in midsummer of the year, moved circus-like from Minneapolis in a caravan of twelve freight cars.

The company set up shop in a large converted garage about 20 miles outside of New York City in suburban White Plains. This quiet town was thus the birthplace of what became some of the world's best known library and reference aids: *Industrial Arts Index, Agricultural Index,* and the *Wilson Bulletin.*

Miss Potter was the first editor of *Industrial Arts Index,* initially part-time, but soon devoting more than full-time to it in what was to be a 40-year editorship. Beginning in 1913, the index was superseded in 1958 by *Business Periodicals Index* and *Applied Science & Technology Index.*

Agricultural Index, which first appeared in 1916, enjoyed a 48-year history under its original name and has continued as *Biological & Agricultural Index,* reflecting the range of materials it has covered since the beginning.

The first number of the *Wilson Bulletin* was a 16-page issue dated November 1914 and edited by Edith Phelps. It promised to appear occasionally with the purpose of providing "timely information regarding the firm's new undertakings . . . and a complete list of all the Company's publications." That purpose accounted for its original free distribution (up to 1934) on request from Wilson subscribers. But it was a second stated purpose that has accounted for the growth of the magazine—now the *Wilson Library Bulletin*—into a monthly professional journal reaching tens of thousands of paid subscribers—an estimated 100,000 readers—in every state and all parts of the world. For in the first issue the editor also expressed her hope "that this bulletin may serve as a clearing house of ideas for those engaged in the common work of bringing the resources of the library within reach of the public."

So important has this function been to the Wilson firm that, even when in 1966 the *Bulletin* turned over the last remnants of its "house" news to a separate publication (*The Lighthouse*), the company continued to subsidize the magazine on a basis that would keep it as editorially healthy and independent as it had been throughout the growth years.

About twenty key staff members had been able to move to White Plains with the firm, and a new staff had been built up around them. But by 1917 Wilson's eagerness to be in New York City itself and in a business headquarters he could own and improve at will prompted him to hold back on new ventures for a while and devote a great amount of energy to another move.

He chose a rock-bound structure on the East bank of the Harlem River in the Bronx Borough only after surveying numerous other possibilities. Again, his foresight was borne out by history, for after 55 years both the editorial offices and printing plant were occupying the original five-story brick building and three adjoining buildings added in 1929, 1938, and 1957.

The 950 University Avenue site was a colorful one, made even more colorful by the 1929 eight-story building surmounted by a dummy lighthouse and towering a total of 250 feet above the river. Beneath the lighthouse was an open book, and to this day the superstructure symbolizes guidance "to those seeking their way through the maze of books and periodicals" (see Figure 4).

FIGURE 4. *The present-day buildings of The H. W. Wilson Co. (Photograph by Arthur Plotnik.)*

In the 1920s Wilson shaped his staff into a close-knit and dedicated group; improved his ongoing publications; took a temporary interest in business books, cooperating with Newark Public Library to produce the *Modern Executive's Library;* turned from the magazine subscription and Wilson Package Library (lending of source materials) enterprises, which he had discontinued earlier, to the enlargement of his Periodicals Clearing House, begun in 1910; and produced the *Union List of Serials.*

Although the Clearing House was sold in 1955 to Kraus Periodicals, Inc., at its mid-century peak it was the largest back-number periodical supply house in the world, stocking some three million odd issues, a hundred thousand volumes of bound copies, and a thousand complete sets. When John Lawler, author of an excellent history, *The H. W. Wilson Company,* recalled his research visits to the Wilson firm, he especially remembered "the dark catacombs created by the towering shelves of back-number magazines. As I hurried through these narrow passages, I always expected the shelves to collapse, crushing me between *Harper's Magazine* of 1875 and the *Century* of 1905. . . ."

It was clearly not in the best interests of libraries to have to track down and purchase periodicals from clearing houses every time a client needed to examine them. What was needed was a union list, locating the serials held by a number of libraries, as a guide toward interlibrary loan, reference, and research. Wilson worked some 15 years on the problem before he issued in 1927, on a nonprofit, cooperative basis with the American Library Association and participating libraries, the first *Union List of Serials,* providing locations of some 75,000 titles in 200 libraries across the United States.

The first edition of this massive guide grew out of a project to create a regional union list for the North Central states, but when it became evident that only a national list with guaranteed support would be economically feasible, Wilson went to ALA. There, at the midwinter meeting of 1921, an advisory committee was appointed, and soon after, Wilson was distributing enormous checking lists of serial titles to be filled in by the cooperating libraries.

About 10 years after the first edition a second ALA advisory committee was formed to help coordinate publication of a new edition that would cover more libraries. Wilson, who had put all surplus income into a 1931 supplement to the original list, was ready and eager to take on the burden of editorial work; but Committee Chairman Donald B. Gilchrist felt that the work could be accomplished more efficiently and economically at the Library of Congress. Unbeknown to Wilson, Gilchrist had secured a $48,000 Rockefeller grant and set up an editorial office with editor at the library. A rather nippy correspondence ensued when these facts came to Wilson's attention; but, considering the complexity of this enormous cooperative enterprise, not to mention the personal involvement of bibliographiles and their projects, the issue was resolved in good order. Wilson retained the rights of publisher, waiving profits, the committee was responsible for preparation of copy, and the Second Edition appeared in 1943—some 115,000 titles in more than 600 libraries. The Third Edition, published in 1965, required five volumes to list its 156,499 titles in 956 libraries of the United States and Canada.

WILSON AND THE AGE OF INDEXING

Because he had worked out so many problems on his first two periodical indexes, Wilson was now able to introduce his indexing services in one area after another, expanding his coverage not only to more periodicals but to literature collected in books, materials in pamphlets, brochures, broadsides, and even nonprint materials. By the end of the 1920s he was already publishing *Index to Legal Periodicals* for the American Association of Law Libraries (in 1961, when approached by the association, the firm agreed to purchase the index and bring the editorial offices from Harvard Law School to University Avenue) in addition to the *Reader's Guide* and the *International, Industrial Arts,* and *Agricultural* Indexes. Next the firm created such new reference services as the following, all of which have survived into the 1970s:

Education Index (1929–)
Art Index (1929–)
Vertical File Service Catalog, later *Vertical File Index* (1932–)
Essay and General Literature Index (1934–)
Abridged Readers' Guide (1935–)
Library Literature (1936–)
Bibliographic Index (1938–)
Biography Index (1946–)
Play Index (1949–)
Short Story Index (1953–)

These indexes are all issued periodically—at regular intervals—although the frequency varies from monthly (*Education Index*) to every 5 years (*Play Index, Short Story Index*), and the source of indexed material—from a list of journals or from a broader body of new literature—also varies.

Other indexes were created which began with a large basic volume to be supplemented by later volumes from time to time. For instance: *Index to Children's Poetry,* 1942, 1954, 1965; *Index to Reproductions of American Paintings,* 1948, 1964; and *Index to Reproductions of European Paintings,* 1956.

Still other interesting index titles selected from the complete list of Wilson publications, not all of them with supplements, are *Index to St. Nicholas, Song Index, Debate Index, Speech Index,* and *Index to Vocations.*

The feat was not so much to publish as many indexes as possible, but to meet the challenge of creating *quality* indexes in the face of constant general and specialized problems.

Of the thousands of such problems intrinsic to indexing, just a few are cited below:

> Space is at a premium, so the editor must decide how fully each article is to be indexed.
>
> When the size of an index increases, there are more headings. The more headings, the greater need for specific headings; the more specific headings, the more time it takes to assign them.
>
> Each profession and line of work has its own vocabulary, further complicating the assignment of headings.

> Updating a heading means new cross-references, new problems for old users. For instance, in early Wilson indexes it had to be decided when to change Kinematograph to Moving Pictures, Wireless Telephone to Radio, Flying Machines to Airplanes. It was no simple matter at the time.
>
> Publishing several indexes in-house necessitates a schedule that avoids "dead" time on the presses or, for that matter, any other area of production; the deadline pressures can resemble those of a newsroom!

Closely related to indexing itself is the evaluation of what is *worth* indexing and the creation of useful subject headings. In regard to the first area, Wilson recognized the need for evaluative bibliographies as early as 1909, when he published the first of what was to become the Standard Catalog Series. This initial list of books recommended for library purchase was *Children's Catalog,* and it was followed in 1918 by *Standard Catalog for Public Libraries,* a list of nonfiction books (since 1969 called *Public Library Catalog*). These and *Fiction Catalog* (1942) are published in new editions every 5 years and are updated with annual supplements, as are the widely utilized lists *Senior High School Library Catalog* (begun in 1926 as *Standard Catalog for High School Libraries*) and *Junior High School Library Catalog* (1965). Not only does the series provide recommended titles, but also full cataloging information for each book, descriptive and critical annotations, ordering information, and elaborate analytical indexing.

Creating useful subject headings, the second library art related to indexing, has advanced immeasurably with the publication by Wilson of the Sears lists (from the first edition in 1923, edited by Minnie Earl Sears, to the 10th edition, 1971, *Sears List of Subject Headings,* edited by Barbara Marietta Westby). The primary emphasis in the Sears lists has been *usefulness* in small to medium-sized libraries.

LIBRARIANS AND THE WILSON COMPANY

Neither standard catalogs nor subject heading lists nor, for that matter, any library service of the Wilson Company could have been developed without the historic and ongoing cooperation of the library community itself. Several incidents of close cooperative work with librarians have already been described, but the relationship between the Wilson firm and its clients is more than incidental; it has been institutionalized in every way possible.

Below are a number of the ways in which librarians and the Wilson firm have come together:

> Wilson himself, to keep in touch with library problems, attended some forty plus ALA conferences and forty more midwinters, probably a hundred state gatherings, and two or three hundred local ones.
>
> The firm encourages membership of its professional staff (some eighty librarians in 1971) in appropriate library associations to the extent that it pays their annual dues and, in many cases, expenses of attending conferences. The staff members commonly hold association office or work with library committees, lending their special expertise and bringing back valuable ideas and perspectives for better service. In the late 1960s it took almost a full page of an annual report to list the

offices held and awards won by Wilson staff members at ALA. Later reports list the major awards to Wilson officers from the Catholic Library Association, Special Libraries Association, and American Association of Law Libraries, among other citations.

The Wilson indexes, already based on the expressed needs of its library subscribers, in 1950 came under the special scrutiny of the company itself—notably Sarita Robinson, then editor of *Readers' Guide*, who thought that the system of librarians choosing magazines to be indexed might run the danger of perpetuating the status quo: Librarians might not vote for new, worthy magazines because they were already subscribing to older, less useful—but indexed—titles. Two years later, 1952, marked the formation of the Committee of Wilson Indexes of ALA's Reference Services Division, an impartial group that has included many outstanding librarians studying in depth one index after another. In its first 10 years the committee studied seven indexes, and 349 periodicals not previously indexed were added to the Wilson services, with better balanced subject coverage as a result. The committee's study of the *Industrial Arts Index* resulted in its division in 1958 into *Applied Science & Technology Index* and *Business Periodicals Index*. One reference librarian described the achievement as "second only to the splitting of the atom in our time."

The Standard Catalog Series, too, has long benefited from participation by librarians in the selection procedure for recommended works. Developed in 1969 was a method by which expert advisory groups help nominate titles for voting lists, from which final selections for the catalogs are made by librarian consultants —who, in turn, are chosen with the help of the appropriate bodies of the American Library Association.

In the area of general publications the firm has worked with libraries in assessing the need for such specialized aids as *Commonsense Cataloging, An Introduction to Children's Work in Public Libraries*, and *United States Government Publications*. In addition, by such respected editors of general publications as John A. Jamieson, outstanding librarians have been encouraged to share with the profession their philosophies as well as technological expertise. Among the former are the ideas of the late LeRoy Merritt, preserved in *Book Selection and Intellectual Freedom*, and exemplifying the latter is the authoritative advice of Rutherford D. Rogers and David C. Weber in *University Library Administration*. The usefulness to librarians of some of these general publications is attested to by a heavy and prolonged demand for them—for instance, for some 60,000 copies of *The School Library at Work* over a dozen years—which in turn enables the publisher to take on important professional works of uncertain sales potential.

As the need for professionally cataloged, quickly delivered card sets has arisen, the firm has produced, since 1939, Wilson Cards for librarian-selected titles. The extent of this service has been adjusted according to the quality of card sets available to librarians from other sources, and thus might be thought of as a semi-cooperative activity.

Among other exchanges between librarians, information scientists, and the Wilson firm are special tours of the company plant given to many hundreds of library school students and practicing professionals each year; Wilson exhibits and special functions at dozens of professional association meetings; the wide dissemination of library-directed ideas in the *Wilson Library Bulletin*; and the professional award programs sponsored by the company and activities of the H. W. Wilson Foundation (see under separate headings).

Finally, the Wilson firm has maintained liaison with leaders of the library world not only by hiring a number of them to staff positions, but by naming to its board of directors such figures as Rutherford D. Rogers (1969), Yale University Librarian; William S. Dix (1971), Librarian of Princeton University; James Humphry III (1965), Chief Librarian of The Metropolitan Museum of Art in New York until 1968—when he became a vice president of The H. W. Wilson Company; and John Fall (1957), formerly Chief of the New York Public Library Economics Division, and Board Chairman of Public Affairs Information Service. (Other Wilson board members as of 1972 were Howard Haycraft, chairman; Leo M. Weins; John Jamieson; Florence Arnold; William A. Zeigler; and Edith M. Phelps.)

It may be that such an unusual and institutionalized cooperation between firm and client on so many fronts has contributed, more than anything else, to the continued growth of the company in the years following the great surge of new indexes.

MODERN GROWTH

It was an early admonition of Wilson's that his firm's story should be one of growth and not bigness. "If we ever feel big," he wrote, "it is only in terms of our former littleness."

By American corporate standards, the firm is to this day a modest one. No outside interests are involved in ownership or operations. Sales have provided moderate dividends to hundreds of employee stock holders and others associated with the company. Profits have been sufficient to maintain corporate viability and to explore new service possibilities. But as one of the few enterprises to take on relatively large-scale bibliographic projects and survive at all, it is proud of those watermarks that can be measured in figures:

1938: Some 10,000 libraries subscribing to services.
1944: Sales exceed $1 million for the first time.
1963: Sales exceed $5 million, having doubled in 8 years.
1971: Assets and sales exceed $10 million; libraries subscribing to services exceed 100,000.

Much of this growth, of course, must be attributed to the general growth of population, schools, and libraries in America, and to the government aid to education which enabled so many libraries, large and small, to add a new dimension to their services. But, whatever the national circumstances, bibliography is always a precarious trade at best, and it is as much to the credit of the two presidents succeeding H. W. Wilson as to any other factor that the company continued to grow.

Howard Haycraft was promoted from vice president to president of the firm in 1953 after Wilson, relieving himself of his administrative duties at the end of 1952, became chairman of the board. Haycraft served as president until 1967 when he, too, made the transition to board chairman. Journalist, author, and man of varied humanistic interests, he guided the firm smoothly through an era of enormous social change, of national affluence, and of demands that taxed the resources of almost every educational publisher.

Leo M. Weins, the firm's third president, combined a lively and long-term interest in the library/information field and an exceptional business sense in his rise from company controller and chief of business services in 1957 to vice president in 1963 and—upon Haycraft's election to board chairman—president and treasurer in 1967. Putting the company on its firmest financial footing early in his term so that it could weather—as it had to—the economic difficulties of the nation just a few years later, Weins did not fail to carry out the humanistic traditions of his predecessors. His regard for the welfare of his staff, the neighborhood community, and the library profession resulted in many measurable as well as intangible benefits for these groups by the time he entered his fifth year of office.

THE WILSON SERVICES

The Service Basis

Is the H. W. Wilson Company a publisher or a service? It calls itself a publisher, and yet sets service charges for many of its activities. Most of its products come out in "published," bound form, and yet the amount of service each provides is bound only by the characteristics of each customer.

The answer is that the company is both publisher and service agency, and, conceptually, its activities can generally be divided as follows:

Publishing. Books prepared by outside authors, but edited, printed, and manufactured at the company.

Services. Indexes and bibliographies not only edited, printed, and manufactured on the premises, but also *authored* or *compiled* there by staff members who, in effect, are performing desired information services on a cost-sharing basis.

Wilson also considered that these services—which were generally in book form only because it was so much more economical than such "output" as separate cards—should be *priced* as services if they were to survive on a self-sustaining basis—and an equitable one. For, he reasoned in the terminology of the day, "It would be quite as fair to charge a flat rate for electric light in the laborer's cottage and the magnates' mansion as to demand equal support for indexes from the struggling village library and the prosperous metropolitan institution." Thus, with the *Readers' Guide* at the beginning of the twentieth century, he inaugurated the service basis method of charge based on the principle that each subscriber should pay in proportion to the amount of service he used. Further, the service basis, for indexing and bibliography essential to a given number of libraries, was designed to result in lower prices for large as well as for small user. With an evenly-divided flat rate, small libraries would tend to drop out, the cost would increase to those remaining, and eventually those libraries unable to meet the demands of their patrons without the Wilson services would be bearing the full—and enormous—cost of them.

How to "meter" fairly the use that each library derived from a service and thus how much it should pay was always a delicate problem, since library use cannot always be measured in purely quantitative terms. Various systems tested over the years evolved, by 1970, into the following:

> *For periodical indexes.* Subscribers pay according to the number of periodical titles they receive of those covered by the index. The rate for each periodical title is determined by the amount it costs Wilson to index it divided by the number of index subscribers who receive that title.
>
> *For book indexes.* The amount a library spends annually for books (based on a 3-year average) determines its category for sharing the cost of each index.

In 1923 Wilson remarked that "it is encouraging to record that approval of the service basis has become almost unanimous." But in the late 1930s and early 1940s a number of studies of the service basis emerged from the research library community—a group generally paying higher charges—and criticisms, defenses, and criticisms of the defenses flew back and forth. An excellent summary of this controversy, which produced a storm of documents, appears in John Lawler's 1950 history of the firm, previously cited. But basically it was an accounting war, with one side trying to show that profit, not equity, was the basis of the system, and the company responding with ever-open books and documents attesting to its integrity.

That integrity was eventually borne out in a 1945 report for the Association of Research Libraries by Stanley F. Teele of the Harvard Graduate School of Business Administration. Teele concluded that Wilson's profit record was "wholly reasonable" and recommended that "all library associations set up or continue regular liaison activities with the Wilson Company to iron out specific details of service and pricing, but that the basic pattern of the Wilson Company's pricing be accepted, and that, in general, the judgment of the management be allowed full scope."

It should be noted that *not* all Wilson bibliographic and indexing services were priced on the service basis; for some, such as *Biography Index, Readers' Guide, Abridged Readers' Guide,* and *Literature Index,* it has been possible to establish a marketable flat rate even though the number of entries is considerable. The firm's catalog provides prices for flat-rated items. Service basis charges are worked out with each customer.

Categories of Services—A User's Practical Guide

The following are the major Wilson materials grouped according to the type of service that users might be seeking. The uses of some materials are manifold, of course, and several other user-oriented groupings are possible. (Some of these publications are discussed earlier in their historical context. Others appear in this Encyclopedia under separate headings.) All titles below were in print as of January 1972.

- General and specialized indexing
  - The periodical indexes
    - *Readers' Guide to Periodical Literature*
    - *Abridged Reader's Guide*
    - *Nineteenth Century Readers' Guide to Periodical Literature*

Social Sciences & Humanities Index
Applied Science & Technology Index
Art Index
Biological & Agricultural Index
Business Periodicals Index
Education Index
Index to Legal Periodicals

Indexes to materials in books, pamphlets, etc.

Essay and General Literature Index
Short Story Index
Play Index
Index to Children's Poetry
Index to Reproductions of American Paintings
Index to Reproductions of European Paintings
Bibliographic Index
Vertical File Index

Recordkeeping of the world's books in English

Cumulative Book Index

Compiling information for book selection and cataloging

Book Review Digest
Children's Catalog
Junior High School Library Catalog
Senior High School Library Catalog
Fiction Catalog
Public Library Catalog
The World's Best Books
Gateways to Readable Books

Providing information about people

Note: Not treated in the preceding text, which focuses on the history of Wilson indexing and bibliographical services, are the biographical materials issued by the firm which have nevertheless constituted one of its major areas of publishing. The two periodical titles in this group are:

Current Biography (1940–), a popular monthly and yearbook of articles on people in the news, compiled by a staff of professional writers at the Wilson Company from current authoritative sources.

Biography Index, (1946–), a quarterly guide to biographical material appearing in the 2,000 periodicals indexed at Wilson and in many other sources.

Other major titles in the biography group are:

American Authors: 1600–1900
British Authors Before 1800
British Authors of the Nineteenth Century
European Authors: 1000–1900
The Junior Authors series
Twentieth Century Authors
Composers Since 1900
Great Composers: 1300–1900
Popular American Composers
People in Books

Reference sources

Ready reference

Famous First Facts
Who Was When

Facts About the Presidents
The American Book of Days, etc.
Background reference for research and debate
The Reference Shelf series
Debate Index
Quotations for Special Occasions
Representative American Speeches, etc.
Professional materials
Library practice
Commonsense Cataloging
Sears List of Subject Headings
An Introduction to Children's Work in Public Libraries
University Library Administration
United States Government Publications
Decimal Classification and Index (distributors)
Library Displays
The School Library at Work, etc.
Current awareness
Wilson Library Bulletin
Library Literature
Location of serial publications
Union List of Serials in Libraries of the United States and Canada
Catalog cards
Sets for approximately 3,000 selected new titles per year.

LOOKING FORWARD

One can only speculate on the future growth of The H. W. Wilson Company. Much depends on government aid to education and the new directions slowly developing for the local financing of schools and libraries. These factors and the economic health of the nation will affect all educational publishers. But many of Wilson's services are uniquely tied to the health of the periodical press, which is not famous for its stability; with the demise of the *Saturday Evening Post, Look,* and *Life,* no magazine can feel secure about the future. Increased postal costs and competition from television threaten the welfare of all periodicals. There are further perils on the book end of company operations. New and inexpensive methods of reproduction and printing have opened the floodgates to ephemeral publishers—the bedroom presses, underground presses, presses in every institution—grinding out books and semi-books by the tens of thousands. The publisher of a permanent cumulative bibliography of books in the English language has a responsibility not to clutter the record with works that are truly ephemeral—but how to decide which books these are? If one-time bedroom publishers are excluded, no work of The H. W. Wilson Company can appear in its own catalogs!

The print media itself is threatened by the handy packaging of information in audiovisual forms, now including videotape cassettes. Although the book industry reported healthy sales in the early 1970s, sales are no indication that people are still turning first to print media as a source of information. Libraries themselves, perhaps the last stronghold of the printed word, have wisely supplemented their print collections with AV materials; but some have embraced AV with such religious fervor as to underplay the value of print both for reference and in-depth research, not to mention the deeper wisdoms that print is best suited to contain.

A further matter of concern in the future of The H. W. Wilson Company is that of competition. Although still the leading periodical indexer by far, the firm no longer pre-empts the field. Whether or not this is a good development for index customers is debatable. Wilson believed that "competition is likely to be the death rather than the life of the bibliographical trade, for it tolerates 'the good that is the enemy of the best' and draws away some support which is necessary to keep the 'best' up to its high standard." The Wilson gamble for the future is that broader coverage and the high quality gained from long experience will distinguish it favorably from its competitors and draw continued support, rather than a corp of salesmen—which it has never had—or the cutting of corners for cheaper prices.

This policy does not mean that the firm eschews efficiency and modernization. Efficiency must be almost an obsessive characteristic for any private bibliographic enterprise, and so has it been at Wilson. Highlighting the company's approach toward technological modernization was the appointment, in 1969, of Michael P. Barnett as director of research and development. An expert in information transfer technology, Dr. Barnett authored *Computer Typesetting—Experiments and Prospects* (MIT Press, Cambridge, Massachusetts, 1965), an appropriate background for his long-term analysis of automation prospects at Wilson.

If the future seems threatening, it must be remembered that continued growth has given the firm a very strong base. In quantitative terms, based on 1971 yearly figures, the company with its staff of 607 indexes 1,983 magazine titles and catalogs some 35,000 books. Much of the 5.5 million pieces of mail sent out relates to the 340,000 subscriptions of 101,000 customers in 140 countries around the globe!

But whether looking back or looking ahead, one cannot do justice to the Wilson contribution to library service and information retrieval with figures alone. Oliver Wendell Holmes put it in metaphorical terms when describing the exasperation of dealing with unindexed information. "Who wants a lock without a key, a ship without a rudder, a binnacle without a compass, a check without a signature, a greenback without a goldback behind it?" The Wilson key to information is a valued one.

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ARTHUR PLOTNIK

Halsey William Wilson

Halsey William Wilson was born on May 12, 1868, and died March 1, 1954. In that ample lifetime, after a spartan boyhood in rural Minnesota, he founded the bibliographic publishing company that bears his name; perfected cumulative publishing techniques; created a standard work of American national bibliography and the only universal English-language publishing record; developed the art and practice of periodical indexing to new levels; instituted the "service basis" of payment for indexing and bibliographic work, enabling small libraries to afford needed services; and pioneered in union lists of library holdings, printed-catalog-card service, and books for library practice. The subject of innumerable tributes in the library world and of articles in the national press, he received the Joseph W. Lippincott Award for Outstanding Achievement in Librarianship (1950) and an honorary doctor of letters degree (Brown University, 1939) among many other awards and honors.

A hard worker throughout his life, he dedicated such energy to the publishing

FIGURE 1. *Halsey William Wilson (1868–1954).*

enterprise he founded in 1898 and presided over for some 54 years that the highlights of his biography are inextricably tied to the history of the firm (see *The H. W. Wilson Company*). But by no means did he lack character as an individual and human being; on the contrary, his personality was a unique blend of Heartland generosity and Yankee ingenuity, unforgettable to virtually all who met him. He was a descendant of Roger Williams, Anne Hutchinson, and a Quaker martyr, growing up in the age of Carnegie, Rockefeller, Gould, and Fisk. To some extent, his story typified the great American dream of the time: he was a poor boy, the son of Althea (Dunnell) and John Wilson, a tombstone-cutter. His parents died before he was three, and he quickly learned the meaning of hard work doing farm chores for his grandparents in Massachusetts and later for an aunt and uncle in Iowa. He attended a boarding school and (part time, 1885–1892) the University of Minnesota, sold textbooks to students, dropped out, and built up a bookselling business with virtually no capital. In 1898 he and Justina Leavitt Wilson, whom he had married 3 years earlier, established and operated the publishing firm in one room of their apartment with little more than courage and conviction. Publishing only the *Cumulative Book Index,* he withstood a 40% deficit the first year of business, and, for several more years, overcame hard times with additional publications. But he perservered, and what could be more in tune with the American dream than the story of the firm's first new building, as told by a prominent Minneapolis banker in 1906?

> Now there are many examples of wonderful initiative in our national life. This is the country of initiative and courage. But I don't want to speak about these great names. It seems to me that they are dazzling. I would rather speak about those natural and simple examples of initative and courage that we can see around us.
> I have seen a young man in our neighborhood build a $28,000 building on a $6,000 lot, with only a little over $1,000 investment.

The banker described Wilson's down payment, his mortgage, how he organized a building corporation, sold preferred stock, moved his business in and rented the top floor at $15 a night for parties.

"You might say to me," he concluded, " 'That building is built by capital,' but I say to you that building is built by courage.' "

As inventive as he was courageous, Wilson probably could have succeeded at any number of lucrative commercial ventures. What, then, induced him to pursue a challenge more suited to the enthusiasms of librarians than of turn-of-the-century capitalists?

One answer he himself gave is that, throughout his life, he shared with the best librarians "a disease that has no official name but which might be called the Bibliographic Urge."

"No cure is forthcoming," he observed. "The malady is almost always financially fatal. The only known relief is a large dose of practicalism to antidote the idealism of the patient."

And yet, it was this "malady," combined with other characteristics, that enabled

Wilson's own version of the American dream to culminate in a profitable enterprise serving some 100,000 libraries throughout the world as it approached its seventy-fifth anniversary in 1973.

CHARACTER SKETCHES

When Creighton Peet wrote his profile of H. W. Wilson in the *New Yorker* of October 29, 1938, he titled it "A Mousetrap in the Bronx" and referred to the 10-cent mousetrap on one of Wilson's bookcases as symbolizing that the Company's indexes are *better* indexes. That they were was no accident, for Wilson's superior products were mainly a reflection of his own superior qualities. He was a better human being.

Upon his death, Marie D. Loizeaux, then editor of the *Wilson Library Bulletin,* wrote of him:

> The Boss is gone . . . Halsey W. Wilson was a great man, a pioneer, a benefactor of libraries, a boon to scholars and students. But we are apt to forget that; he was so modest a man, so 'unbosslike,' so approachable, so friendly, so completely devoid of 'airs,' that we rarely thought of him as the leading bibliographic publisher of the world.

It is difficult to find sentiments contrary to these among the dozens who wrote of Wilson or who still remembered him years after his death. Even faults, such as stubborness, which in others might have become tragic flaws, Wilson somehow managed to turn into virtues. Howard Haycraft, who succeeded him as president of the firm, wrote in "An Informal Reminiscence" in the fall of 1954:

> I would add that never was a man so impervious to opposition, so heedless of possible ridicule, once he felt that he was on the right course. Never was anyone more fearlessly ready to say, "They're all out of step but me." And the amazing thing is how often he was right!

One example was Wilson's determination to undertake an expensive feasibility study regarding a continuing, cumulative supplement to the first *Library of Congress Catalog of Printed Cards*. No gain was foreseen for the company, and, indeed, there was none. But for the library world the gain was immeasurable, and Luther Evans, then librarian of Congress, paid handsome tribute to Wilson's persistence. Now, in every supplement to the library's *National Union Catalog,* there appears a credit to Halsey William Wilson for proposing a plan adopted with some modifications in 1947.

Haycraft also recalls with deep fondness for his predecessor the many employee benefits Wilson instituted, and that "no one who came to Mr. Wilson in trouble was ever sent away without help in some form." But he adds:

> To make Wilson a plaster saint would be a disservice to him. . . . I should perhaps tell you that he had a temper . . . And he had the New Englander's capacity

> for a righteous, satisfying grudge, though never for a mean or petty reason. Nor will I pretend that his famous pertinacity was altogether an unmixed blessing to those who worked with him. No idea, once held, was ever forgotten; and even those rare publications that had failed had the disconcerting habit of popping up—like King Charles's head in David Copperfield—disguised as new proposals.

Although his life style remained spartan—until later years when he bought a fine old home and real estate in Yorktown Heights, New York—and although he did not smoke and could not abide drinking, he was by no means a humorless or unsociable man. Beloved by his staff and colleagues, he had a whimsical quality in his turn of a phrase, and one had to watch "for the warning twinkle that meant a particularly horrendous pun was on the way." He loved after-dinner stories, and as Harold Workman Williams he wrote a series of toastmaster's handbooks—one could never tell when he might come up with such divergencies from his primary mission of bibliographic publishing.

But Wilson, who also developed successful debate and topical reference series, was a thoughtful and well-informed man beyond his bibliographic interests; and, although he was not a fanatical reader of books, he was a bookman of the first order. His little handbook, *The Bookman's Reading and Tools,* so useful, charming, and inspiring, leaves no doubt of this quality.

Wilson was a better human. Because of it, and because of his better mousetrap in the Bronx, he could make the world a vastly better one in a bibliographic way.

ARTHUR PLOTNIK

The H. W. Wilson Awards

In cooperation with the appropriate library organizations and with the help of many librarians in the field, The H. W. Wilson Company sponsors a number of awards programs to encourage and recognize outstanding achievement in various aspects of professional life and library services.

The oldest and, by number of entrants, most popular of these major programs is the John Cotton Dana Library Public Relations Awards Contest, which began in 1946 and was named after the great Newark Public Library director, professional leader, and pioneer in publicity to stimulate use of library resources. With policy set by a Public Relations Section committee, Library Administration Division, American Library Association, the annual awards contest for outstanding public relations programs is open to every type of library and draws entries from all parts of the globe: in 1971, some Australian and Uruguayan publicity programs were among those received for judging by the committee.

Formerly called the John Cotton Dana Publicity Awards Contest, the name and scope of the competition was broadened for the 1972 and later awards to include all aspects of a public relations program in addition to its printed publicity materials. Libraries provide samplings of the program in scrapbook format. The awards are presented at the American Library Association annual conferences in a ceremony that has earned favorable and widespread publicity for the winners. Full details of this and other Wilson award programs are available from the firm at 950 University Avenue, Bronx, New York 10452.

In 1959, at the Fiftieth Anniversary Conference of the Special Libraries Association, the first SLA Chapter Award for recruitment was presented with the sponsorship of the Wilson firm, which has had many staff members active in this association over the years. The cash award, presented annually, is expected to change in emphasis according to the needs of the special library profession, but the Wilson firm will continue to participate in SLA programs to encourage excellence in this manner.

The first winner, in 1960, of the annual H. W. Wilson Library Periodical Award went on to become editor of the *Wilson Library Bulletin* 8 years later, but no ulterior motive was present then or later in giving a cash award for "the library periodical which makes the greatest contribution to librarianship, national publications excluded." Originating in the ALA Library Periodicals Round Table, governed by a subcommittee of the ALA Awards Committee, and presented at the ALA annual conferences, the award in its first 10 years went to: *California Librarian, North Country Libraries, The Bay State Librarian, California Librarian, PNLA Quarterly, Ohio Library Association Bulletin, British Columbia Library Quarterly, California Librarian, Missouri Library Association Quarterly,* and *Synergy.*

Occasional, one-time competitions sponsored by the firm include two that were administered by the *Wilson Library Bulletin:* a library photography contest and children's art contest. The latter, for which materials had to be submitted through librarians, received some 1,334 entries.

Recruitment to librarianship, which in terms of quality is always of utmost importance, became a particularly acute concern of the profession in the mid-1960s when there was said to be a national shortage of some 100,000 librarians. The H. W. Wilson Library Recruitment Award was thus established in 1965 with quantity as well as quality in mind, although the emphasis returned to the latter when the shortage diminished over the next 5 years. An annual cash award is presented by the company through the American Library Association to a group, if any, that has shown the most outstanding development of a sustained program of recruitment. The first five winners were the Pennsylvania State Library, Pioneer Library System (Rochester, New York) Brooklyn College Library of the City University of New York, California Library Association, and Ilinois State Library Careers Center. The awards are presented at ALA annual conferences.

ARTHUR PLOTNIK

The H. W. Wilson Foundation

Throughout his career, Halsey W. Wilson engaged in a spontaneous sort of philanthropy, whether it was to send books to hospitals, prisons, and schools in the early days; or, on occasion, to replace without charge Wilson materials that a library had lost through fire; or to give personal donations to his favorite charities. But after his wife, Justina, died in 1955, a year after him, his estate passed by his direction to a charitable foundation they had established primarily for the benefit of former employees. While this original purpose and other employee benefits have been achieved over the years with foundation money, it has also been possible to make grants to the library profession at large, particularly in the areas of library recruitment and education. In 1957, at the midwinter ALA meeting in Chicago, the first of a series of scholarship grants was announced that would, within the first 15 years, help recruit and support some 150 outstanding students at library schools. Presented to each graduate library program accredited by the American Library Association, the scholarships—which are awarded by the schools themselves—began at $500 each and grew to $2,000 by 1965. The grant program is renewed in 4-year cycles, during which a number of grants equal to the number of accredited schools is distributed, the order determined by a drawing of names. When the program began, some schools had never before received a scholarship for disposition, and were profuse in expressions of appreciation. At that time there were only 35 accredited graduate programs. It appeared that the number would double within 20 years, by 1977. In just the 4-year cycle ending in 1972, more than $100,000 was distributed to schools in the United States and Canada.

Also in the interests of library education, a foundation grant of $75,000 over a period of 6 years was made in 1965 on a matching basis to the American Library Association. Along with later grants totaling some $142,000, these funds made possible the establishment and activities of an ALA Office for Library Education whose achievements, over those years, were manifold. Lester E. Asheim, former head of the ALA International Relations Office and noted for the Asheim report on library manpower which appeared in 1967, was the first director of the office.

Other grants from this relatively modest but exceptionally library-directed foundation include those to aid flood-damaged libraries in Florence, Italy; the celebration of National Library Week, programs concerning blind and physically handicapped readers, and activities of the Special Libraries Association and Catholic Library Association.

ARTHUR PLOTNIK

HAINES, HELEN E.

Best known as the author of *Living with Books; The Art of Book Selection* and *What's in a Novel?*, Helen E. Haines was also a bibliographer, editor of *Library Journal*, ALA official, library consultant, book reviewer, public speaker, and educator. Yet she received no formal education, held no professional degree in librarianship, and was never a librarian.

FIGURE 1. *Helen E. Haines, 1872–1961.*

She was born in New York City on February 9, 1872, the eldest of five daughters of Benjamin Reeve and Mary E. (Hodges) Haines. Her education was provided by her mother and private tutors. The Haines mother and daughters eventually settled in the "Pratt" section of Brooklyn. Among their friends was Mary W. Plummer, a librarian at the Pratt Institute, who attempted to secure a position for Miss Haines on the library staff. The appointment was not granted because Miss Haines lacked the necessary course in library training. Instead, she found employment as a secretary to an engineering firm. Recognizing how ill-suited this position was to Miss Haines' talents, Miss Plummer again interceded, this time successfully, by persuading her friend R. R. Bowker to hire the young lady as his secretary and editorial assistant for *Publishers' Weekly* and *Library Journal* which were both produced in the office. The appointment began in February 1892, within a few days of Miss Haines' twentieth birthday. Four years later she was promoted to the position of managing editor of *Library Journal* after having served an invaluable apprenticeship under Paul Leicester Ford and Charles A. Cutter, editors of the journal. She held other responsibilities as well, some of which were quite independent of *Library Journal*. For example, she assisted in the compilation of *American Catalogue, Annual Literary Index, State Publications*, and *Publishers' Weekly*, all Bowker publications.

One of the duties of the managing editor of *Library Journal* was to prepare the Proceedings of the ALA which were published as a special annual number of *Library Journal*. This responsibility automatically carried with it the office of recorder. In time Miss Haines was also appointed to the ALA Council. Her efficiency and tact in the performance of these offices won for her important friends, including Melvil Dewey and Charles A. Cutter with both of whom she maintained a personal correspondence until their deaths. In 1906 she was elected second vice-president of ALA. An outstanding career seemed to lay ahead.

However, toward the end of 1906, exhausted by overwork and illness, Miss Haines had a serious physical breakdown. Her attempted resumption of work in April 1907, after several months' convalescence, was premature. Her illness, tuberculosis, although arrested, had left her debilitated. She resigned her position with the Bowker Company and her ALA offices in March 1908. Urged by her physician to live in a milder climate, she left for the West with her mother and three of her sisters. She was granted a small annual pension by Andrew Carnegie.

The Haines' original destination was Fort Collins, Colorado where a family friend resided who had recovered in that city from tuberculosis. Their stay was brief, for Miss Haines found the elevation uncomfortable and the setting too rustic. Pasadena, California was her next and final residence. Noted for its moderate climate and pure air, it was at the time a popular locale for persons with pulmonary disorders. Its cultural and literary traditions and its proximity to the libraries of that area were also attractive features.

Miss Haines' reputation preceded her, and California librarians were soon in contact with her. She quickly understood and appreciated the problems relating to library development in her adopted state. Some of these she explained to a wide professional audience in her *Library Journal* article "Library Legislation in California." Other articles by Miss Haines on a variety of subjects were published during her first years in Pasadena.

Much of her time was spent in reading on a broader and more systematic scale than had been possible for years. As she read she made critical and descriptive notes. In time, these formed a rich repository of information upon which she drew heavily in her teaching and writing, particularly in *Living with Books*. Book reviews were part of her reading program. She found much to criticize in them. Her 1910 article "Present Day Book Reviewing" first presents most of the ideas on competent book reviewing which she was eventually to develop more fully in her books. That same year the appearance of her book column "The Library Table" in the Pasadena *News* inaugurated an association with that newspaper and its successors which was to last 40 years. Unfortunately, these excellent reviews, which represent some of Miss Haines' best work, are not readily available to the large audience they deserve.

By 1914 Miss Haines' health had improved sufficiently for her to be able to give occasional lectures to the training class of the Los Angeles Public Library on the subjects of book selection, publishing, and trade bibliography. The training class evolved into a library school at about the same time that Miss Haines became a member of the regular faculty of the school. She was an excellent teacher, and her contributions to the program were significant.

Her influence in the Los Angeles Public Library extended beyond the library school, for the library director, Everett Perry, found her to be an invaluable ally and advisor in his campaign to modernize the library's antiquated system. In 1915 she and Margaret W. Brown of the Iowa Library Commission compiled much of the data used by the Municipal League of Los Angeles in its forward-looking *Report of the Social Welfare Committee of the Municpal League on Library Facilities in Los Angeles*. The recommendations of this report could only have pleased Mr. Perry.

During the next few years Miss Haines' teaching reached far beyond Los Angeles through her association with two correspondence programs, one offered by the American Correspondence School of Syracuse, New York, the other the Home Study Course in Book Selection given by Columbia University's School of Library Service. In the early 1920s she presented occasional lectures on fiction in Sidney B. Mitchell's book selection course in the Department of Library Science at the University of California at Berkeley. Her list of representative modern novels was part of the required reading for Mr. Mitchell's students.

The decade of the 1920s was a busy period for Miss Haines—writing, public speaking, teaching, book reviewing, consulting. Her schedule was too taxing, and she decided reluctantly in 1926 to resign her full-time teaching position in the library school of the Los Angeles Public Library. She continued to lecture there occasionally until the school's demise in 1932. Her association with the library continued, however, for she was appointed a public lecturer. Her talks on "best books," subject literature, and book reviewing were popular in Los Angeles and neighboring cities, and attracted a wide and appreciative audience of laymen and librarians. This phase of her career proved to be invaluable in that it provided the opportunity for Miss Haines to acquire a real command of contemporary literature. It also gave her a profound understanding of the tastes and prejudices of the public library's patrons.

In the early 1930s she began writing *Living with Books* at the suggestion of Dean Charles C. Williamson of the School of Library Service at Columbia University. Actually, much of the book was already written, for Miss Haines acknowledged that the first edition stemmed directly from the Home Study Course in Book Selection which she offered for several years for Columbia University. Dean Williamson's encouragement, which subsequently took the form of a grant from Columbia University, provided both the means and the impetus for Miss Haines to bring her material up-to-date and to expand certain sections in the Home Study course.

Living with Books, published in 1935 by Columbia University Press in the series "Studies in Library Service," was a tour de force. Nothing quite like it had been seen before. It displayed an unusual combination of authority, discrimination, and common sense and was written, as well, in an attractive style. Teachers of book selection throughout the country seized upon it as a textbook, to be used exclusively or as a counterbalance to the more technical literature. Among practicing librarians, particularly public librarians, it was very popular, perhaps because it articulated so well these librarians' own views on the nature of book collecting which they felt were being challenged at the time by the "new" library science. Book dealers found it a useful companion to standard book lists. It was enjoyed by laymen. Miss Haines had written a best-seller in library literature, and her national reputation was made.

She returned to teaching in 1937, presenting a course in book selection at the University of Southern California's School of Library Science, the successor to the Los Angeles Public Library's school, during the academic year, and at Columbia University's School of Library Service in the summer term. This pattern was maintained for several years. Also at this time a close association was established with the California Library Association's Committee on Intellectual Freedom when in 1937 she became its chairman. She served in this office for a decade. She was an outspoken advocate of intellectual freedom and a vigorous opponent of library censorship.

Her second book *What's in a Novel?* was published by Columbia University Press in 1942. In this work Miss Haines was able to amplify fully the two-chapter treatment of fiction in *Living with Books*. To appreciate the focus of *What's in a Novel?* one must realize that during much of Miss Haines' career all contemporary fiction was regarded by most librarians with disdain or uneasiness. One of her chief interests, which took the form of book reviews, book talks, and articles, was the rehabilitation of this genre, particularly among librarians. In *What's in a Novel?* she hoped to reach as wide an audience as possible. Knowing public librarians and their patrons so well, she chose a middle ground between the extremes of the "great books" and of the cheap, sensationalist literature. She also avoided the subject of censorship and the controversial novel, not from lack of interest but from the conviction that so complex a topic could not be adequately treated in her book. Her goal was to exhibit the richness and variety to be found in the mainstream of contemporary fiction. Reviews were generally favorable but not so enthusiastic as those of *Living with Books*. There were, for example, references to her apparently "middle-brow" orientation. *What's in a Novel?* fell short of the popularity of *Living with Books*.

The popularity of the latter occasioned a second edition in 1950. The new edition was fully revised by Miss Haines to record the profound changes made in literature and in reading habits by world events of the preceding 15 years. Where she had seemed to avoid the controversial in *What's in a Novel?*, she gave it full treatment in the revised *Living with Books*. Most reviewers appreciated this feature. However, Oliver Carlson's "A Slanted Guide to Library Selections" in *The Freeman* [**2,** 239–242 (January 14, 1952)] was of the opinion that works by communists and pro-communists were overly represented and that Miss Haines had become a propagandist for communism. This review was answered in the *ALA Bulletin* [**46,** 105–110 (April 1952)] by Elinor S. Earle's "Reply to Carlson." Miss Earle's rebuttal rested heavily upon Carlson's practice of quoting passages from *Living with Books* out of context.

A fitting finale to Miss Haines' long and distinguished career occurred during the 1951 annual convention of the ALA when she was named the recipient of the 1950 Lippincott Award for outstanding achievement in librarianship. Miss Haines came to Chicago to deliver an eloquent acceptance speech which was appropriately entitled "Living with Books." During the last 10 years of her life she lived in retirement. She died in 1961 in Altadena after a long illness.

In the year that Miss Haines received the Lippincott Award, the ALA was celebrating its seventy-fifth anniversary. Miss Haines' career spanned all but fifteen of those years. To many of her colleagues and students she represented a bridge between the past, whose American library pioneers she knew personally, and the present, of which she was so diligent to remain a part. Her influence, like her career, took different forms. She published widely in library and trade journals. Her work as an editor and compiler contributed significantly to the development of American book trade bibliography. She played an important role in the history of *Library Journal* and the ALA. She was an expert organizer and administrator. Her book reviews and public lectures attracted a wide audience of laymen to books and to public libraries. However, her greatest impact was upon education for librarianship.

A SELECTED BIBLIOGRAPHY OF BOOKS AND ARTICLES BY HELEN H. HAINES

Miss Haines published nearly eighty articles and 800 book reviews in addition to her books. This bibliography is limited to her more important works and to works referred to in the text of this article. For a more complete listing see Mary R. Sive, "Helen E. Haines, 1872–1971, An Annotated Bibliography," *J. Lib. History,* **5**, 146–164 (April 1970).

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ROBERT D. HARLAN

HALL & CO., G. K.

G. K. Hall & Co. specializes in the publication of library catalogs, cumulated indexes, and bibliographies for bibliographic research, and in the large-print edition of current fiction and nonfiction for those who cannot read conventional print with ease. In addition, through its subsidiary Gregg Press, the company offers extensive scholarly reprint publishing programs.

Garrison K. Hall founded the company as Micro-Photography Co. in 1942, to do general service microfilming. In 1943 he pioneered the first mechanical feeder for a microfilm camera and over the next few years the company devoted considerable attention to the storage and security of business records, filming millions of canceled checks, stock certificates, and similar documents.

In 1946 the company began to apply microfilm technology to bibliographic research materials. The Gray Herbarium at Harvard University sought a way to duplicate its unique and extensive card index of worldwide literature published on new plants (1886). Working from a microfilm of the cards, the company produced the duplicate by making projection prints. Once it became known that duplication was possible though expensive, a number of institutions with similar research interests sought duplicates of the index. Early in the 1950s, however, it became technically possible by xerographic process to make offset printing plates directly from microfilm, enabling easier and less expensive duplication. The company applied this new technique to the Gray Herbarium Index and by 1956 had produced fifty copies of the card sets.

The next development was a shorter step: the reproduction of library card indexes and catalogs in book rather than card form. Refining the technique further, the company, collaborating with Columbia University, published its first book catalog in 1958, *The Catalog of the Avery Memorial Architectural Library*. In rapid succession there followed important catalogs and indexes from the United States Department of Agriculture, the Research Libraries of the New York Public Library, the Psychology Library at Columbia University, and the Metropolitan Museum of Art. In 1959, the company's name was changed to G. K. Hall & Co.

At the same time the company also developed and applied microfilm technology to the complex problems of cumulating indexes. In 1954 the Middlesex (Massachusetts) County Registry of Deeds sought help in merging its 19 separate indexes to grantors into a single alphabetical sequence of 5 million lines of entry. Up to that time, extensive retyping and proofreading had effectively prevented cumulation. The company eliminated the problem by microfilming the original index books, making prints on paper and then cutting, mounting, and merging the entries into one sequence. The consolidated index was then reproduced for the Registry by xerographic process. Building on this experience and developing the technique further, the Company began the cumulation and publication of a series of indexes extremely important for bibliographic research. The first two were announced in 1960: *Cumulated Magazine Subject Index, 1907–1949*, and *Cumulated Dramatic Index, 1909–1949*, both in collaboration with F. W. Faxon of Boston, publishers of the annuals.

By the end of 1960 G. K. Hall & Co. had published thirty-six catalogs, indexes, and specialized publications in library science. During the next decade the company expanded its publications broadened and deepened its subject coverage, and perfected its publishing techniques. By the end of 1971 over 300 Hall reference publications were available to the library world. With some notable exceptions they consist of bibliographies, cumulated indexes, and catalogs of distinguished library collections all over the world. In size they range from one to 183 volumes, and in subject coverage they reflect nearly all the bibliographic concerns of contemporary research from classical studies to nuclear fusion.

The notable exceptions, over twenty, consist of bibliographic calendars, checklists, classification aids, necrologies, and dictionaries. Typical of this unusual kind of publication is the five-volume *Biographical and Bibliographical Dictionary of the Italian Humanists and of the World of Classical Scholarship in Italy, 1300–1800.*

Compiled by the late Professor Mario E. Cosenza on index cards in his own hand during the 50 years of his scholarly life in Renaissance studies, the dictionary lists all the variant forms of humanists' names, all editions of their known works on the classical authors, the editions of all original works by the humanists themselves, and the works by other scholars on the lives and works of the humanists. Biographical sketches are included as well and a one-volume supplement was published in 1968.

Increasingly since 1960, bibliographies have formed an important part of the Hall publishing program. Sometimes they are the work of a lifetime, like the *Stendhal Fichier,* compiled by François Michel. It consists of 15,000 entries and constitutes an encyclopedia of information about Stendhal and the Romantic Period of French literature. Sometimes they are the work of shorter but equally intense study, like the *Bibliography of Russian Emigré Literature, 1918–1968,* compiled by Dr. Ludmila A. Foster. This bibliography is the first comprehensive compilation and scholarly arrangement of Russian emigrant literature. Over twenty such bibliographies have been published so far, with thirty in preparation.

To date, G. K. Hall & Co. has published thirty-eight cumulated indexes, ranging in subject matter from retrospective interests like the *Genealogical Index* of the Newberry Library to contemporary issues such as the author and geographical cumulations of *Population Index Bibliography,* compiled at the Office of Population Research at Princeton University. The company's staff has cumulated five indexes with three in preparation. Of the remaining thirty-three, eight have been authored by individuals working alone and the balance have originated in libraries of professional associations. The smallest is one volume and the largest eighteen. In general they provide multiple access to information which is otherwise extremely difficult to control: abstracts, anthologies, journal articles, festschriften, technical reports, and the like. The author and subject cumulations of *Psychological Abstracts,* which the company has published in collaboration with the American Psychological Association and Columbia University, is a case in point. The author cumulation in effect is the bibliography of nearly every psychologist from 1894–1968; the subject cumulation enables researchers to find in one place all references to published abstracts, 1927–1968. In 1970 the company's first computer-assisted publication appeared: *International Labour Documentation: Cumulative Edition 1965–1969.* Prepared by the staff of the Central Library and Documentation Branch of the International Labour office in Geneva, it consists of 250,000 abstracts dealing with the field of worldwide labor and three indexes arranged by author, subject, and geography. Other computer-assisted publications are in preparation.

The largest number of Hall publications are library catalogs of distinguished research collections. Excluding supplements, over 180 have been published to date. The average catalog is thirteen 10 $\times$ 14 inch volumes, with three numbering over 100 volumes each, eight over thirty-five, and forty-eight in the one- and two-volume range. International in both scope and origin, nearly 30% of all catalogs have originated in libraries and research institutes outside the United States. The first foreign catalog was published in 1961. Ten years later fifty-one had been published, representing research collections as distant as Australia and Lebanon, as dissimilar as Alpine Association Library in Munich and the Ecumenical Library of the World Council of Churches in Geneva, as distinguished as the Biblioteca Nacional de Antropología e Historia in Mexico City and the National Art Library, Victoria and Albert Museum, London. The very diversity of foreign originating institutions indicates the range of subject coverage. Representative among them are the American School of Classical Studies in Athens, the Arctic Institute of North America in Montreal, the Commonwealth Relations Office in London, the Deutschen Archaeologischen Institute in Rome (archaeology), the Foundation Nationale des Sciences Politiques in Paris (political science), the Herder-Institut in Marburg/Lahn, Germany (East European studies), the University of Ibadan in Nigeria (Africana), the International Instituut voor Sociale Geschiedenis in Amsterdam (social history), the Kunsthistorischen Institut in Florence (art history), the London School of Oriental and African Studies, McGill University's Blacker-Wood Library in Montreal (ornithology and zoology), the National Libraries of Ireland and Scotland, the Provincial Archives of British Columbia at Victoria (Pacific Northwest and Alaskan studies), the Royal Institute of International Affairs, and the University of Singapore (Malaysian studies).

Between 1959 and 1972 G. K. Hall & Co. published 129 catalogs from American libraries. By 1971, for instance, fourteen catalogs of special collections held by the Research Libraries of the New York Public Library had appeared, covering English and American literature, Afro-American studies, Judaica, rare books and manuscripts, Slavonic studies, American history, cartography, and Orientalia. The Harvard and Columbia University Libraries are the source of catalogs in law, education, psychology, architecture, and ethnology, business administration, urban planning, comparative zoology, fine arts, and medicine. In addition to two large general catalogs, the University of California has been the source of specialized catalogs in Americana (Bancroft Library), agricultural economics (Giannini Foundation Library), public affairs (Institute of Governmental Studies Library), oceanography (The Scripps Institution), and water sciences (Water Resources Center Archives). Other American colleges and universities such as Brown, the University of Chicago, Dartmouth, Howard, the University of Hawaii, the University of Illinois, the University of Michigan, Northwestern, Princeton, Stanford, the University of Texas, Tulane, Union Theological Seminary, and Yale have originated forty-one catalogs reflecting specialized strengths as diverse as Asian studies and transportation.

Large and important catalogs have come from the Library of Congress, the Smithsonian Institution, and other government agency libraries, among them the Departments of Agriculture, Health, Education and Welfare, Housing and Urban Development, Interior, and the United States Geological Survey. Public libraries across the country from Los Angeles, California to Bangor, Maine have been the source of twenty-six catalog publications with subject areas ranging from automotive history to Western Americana. Special libraries like the American Geographical Society, the John Crerar Library, the Engineering Societies Library, the Folger

Shakespeare Library, the Newberry Library, and the New York Academy of Medicine have provided thirty-six catalogs which focus on research interests as distinct as genealogy and science and technology. The company has also published important catalogs from the libraries of historical societies, museums, and galleries, among them the Bishop Museum in Honolulu, the Canal-Zone Library-Museum in Panama, the Fogg Art Museum at Harvard, the Freer Gallery of Art in Washington, D.C., the Mariners Museum in Newport News, the Massachusetts Historical Society, and the Metropolitan Museum of Art.

G. K. Hall & Co. reference publications serve the specialized bibliographic needs of libraries, particularly in reference work and technical services, author and subject bibliographies, bibliographic verification, interlibrary loan, literature searches, location of scarce material, models for cataloging and collection development, and research trip planning. The company's editorial policy has a double focus: identification of the best available source of bibliographic information and publication in whatever form it may exist and wherever it may be. In addition a policy of keeping publications current by supplementation is maintained. By the end of 1971, for instance, ninety-four supplements had been issued.

Because of their specialized orientation and origin, G. K. Hall reference works are small-quantity publications. Where the research need for the information is demonstrated and the best source is identified, policy is to attempt publication, however circumscribed the demand may be. This has meant publishing as few as thirty-five copies in some instances. In 90% of the publications, the original form of the material is index cards. Sometimes they are new and printed, sometimes old and either typed, duplicated, or handwritten. More often the cards are a combination of these and, as human documents, bear the marks of long use. Beyond considerations of classification, sequence, bibliographic accuracy, and legibility, the materials are normally reproduced in bookform "as is" unedited. General procedure is to microfilm in page format at the originating institution. As a result, staff photographers travel all over the world. Once photographed, the material is reproduced directly from the master film, printed by photo offset, and bound by over-sewing. Except for binding, all work is done at the company's headquarters, acquired in 1963, at 70 Lincoln Street, Boston, Massachusetts. Technical specifications meet the highest library standards.

In 1969 G. K. Hall & Co. was purchased by the International Telephone and Telegraph Corporation, joining its Educational and Publishing Services Group. Garrison K. Hall, under whose leadership the company achieved a preeminent position in the international library world, became chairman of the board and retired in late 1970.

In 1971 the company began to diversify its library publishing programs. Aware of the need for best-selling fiction and nonfiction by those who cannot read standard print with ease and concerned to further utilize its extensive experience with small-quantity publications, the company established its Large Print Division. Titles are selected on the basis of current appeal and include best-sellers and the latest books by noted contemporary authors. Produced in accordance with generally accepted national design standards established by agencies serving the visually handicapped, each book is completely reset in 18 point Times Roman type. For ease of handling they measure 6 $\times$ 9 inches and weigh about the same as standard print editions. For ease of reading they are printed on special paper and bound in durable hard-cover to lie flat. To date forty-eight titles have been published, with sixty planned annually. A similar program for the best in current juvenile books is in preparation.

Late in 1971 the company purchased Gregg Press, Upper Saddle River, New Jersey, a firm well-known for scholarly original and reprint publications in American literature and history. Founded by Newton K. Gregg and Charles S. Gregg in 1963 as the North American sales organization for Gregg Press Limited (now Gregg International Publishers), Gregg Press began publishing under its own imprint in 1967. To date, 424 titles have been published, of which ten are original publications. The largest of the latter is the eight-volume *American Activities in the Central Pacific, 1790–1870.* Edited by R. Gerard Ward, it is the first published history, geography, and ethnography for 315 Pacific Ocean Islands. Among the most remarkable of the originals is John Harris' *A Catalogue of British Drawings for Architecture, Decoration, Sculpture and Landscape Gardening, 1550–1900, in American Collections,* in effect an encyclopedia on the impact of English architecture in America.

Gregg's facsimile reprints are generally published in series and designed for research in aspects of American studies. Perhaps the best known is "Americans in Fiction," edited by Professor Clarence F. Gohdes of Duke University. It consists of seventy nineteenth-century American novels chosen for their importance in revealing the development of American social and literary history, culture, and folkways. Three other research series have recently been published. "The Muckrakers" is a selection of thirty-nine significant American novels published between 1836 and 1971, which exposed and castigated social abuses, propagandized, and offered utopian or revolutionary solutions to the miseries of society. "The American Humorists" is a collection of twenty-eight books published between 1819 and 1906, portraying the nature and development of American humor and its role in United States history. The third, "America and the Pacific," comprises a series of eighteen titles in thirty-three volumes, both reprints and originals, relating to American research in the Pacific Basin. In collaboration with three distinguished libraries, additional series are in preparation dealing with nineteenth-century minority education, pre-Confederation Canadian literature, and the three sides of the American Revolution; the Loyalists, the British, and the Americans and French.

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THOMAS M. FINN

HAMMER (VICTOR) PRESS

Victor Hammer—painter, sculptor, architect, calligrapher, typographer, punch-cutter, and printer—was above all a master craftsman (see Figure 1). Each of his many endeavors was approached in the same meticulous and skillful manner. His outstanding printing efforts were no exception.

Hammer was responsible for the establishment of four different presses in Europe and the United States. The Stamperia del Santuccio, established in 1929 in Florence, was also operated in Kolbsheim (France), Grundlsee (Austria), Vienna, and in the United States at Lexington, Kentucky. The Wells College Press and the Hammer Press were established in 1939 in Aurora, New York. The Anvil Press, with Hammer supervising the planning, printing, and binding, was established in 1952 by friends in Lexington, Kentucky.

Many of Hammer's books (and all of the Stamperia del Santuccio imprints) were printed in his own uncial types. His first two uncial types, the Hammer Unziale (cut by N. Schuricht) in 1923 and the Samson (cut by Paul Koch) in 1928 were pro-

FIGURE 1. *Victor Hammer at his type-cutting bench. The small binoculars over the notched vise magnified the face of the punch for better viewing. (Photograph by Mr. Martin Jessee.)*

duced under Hammer's supervision. Hammer himself cut the Pindar in 1935, the American Uncial in 1943, and the Andromaque cursive uncial in 1959.

Victor Hammer was born in Vienna on December 9, 1882, in the oldest section of the city. He lived and played in and around the old University Square, surrounded by seventeenth century Baroque architecture. This proved to be an important influence upon his life: "But in truth, I can still say (in 1965) that all of my childhood was spent in the seventeenth century, and my vision of the world has been shaped by that century and its architectural forms."

When Hammer was fifteen, he joined the studio of the architect and city planner Camillo Sitte as an apprentice. The following year he entered the Vienna Academy of Fine Arts and during the next 10 years studied with the painters Christian Griepenkerl and Heinrich Lefler, and the sculptors Edmund von Hellmer, Hans Bitterlich, and Anton Hanak. He was awarded a government traveling grant in 1908 and visited Munich, Paris, and several Italian cities, returning to Vienna in 1910. At this time, portrait painting was his main activity. He joined the Viennese Secession in 1913 for a brief period, and during World War I served first in combat and later as a war artist. After the war he returned to Vienna where he resumed his painting and continued his architectural studies with Heinrich Tessenow. Although painting was his chosen medium, he experimented with all the graphic techniques, including the mezzotint which he perfected in his own work.

A frequent traveler, usually on painting commissions, Hammer spent a great deal of time in foreign countries. His longest stay abroad was from 1922 to 1934 in Italy, where he established his first press, the Stamperia del Santuccio, in Florence in 1929. The name of the press, "the press of the small saint," honored the nameless little saint whose statue stood in a niche beside Hammer's doorway in the Via San Leonardo. The press, the first of two wooden presses built by Hammer in his lifetime, was constructed with the help of local craftsmen.

Hammer believed in the apprentice and workshop tradition and had several talented people working with him while he was in Italy. Among them were Fritz Kredel, Paul Koch, Fritz Arnold, and Edgar Kaufmann, Jr.

Hammer left Italy in the early 1930s and lived for 2 years in London before moving in 1934 to Kolbsheim in Alsace. There he designed and built a private chapel (and its furnishings) for his friend A. de Grunelius, continued his printing, and saw the casting of his third uncial type, Pindar. In 1936 he returned to Austria, and in 1939 became a professor at the Academy of Fine Arts in Vienna.

When the Germans took over Austria in 1939, Victor Hammer and his wife came to the United States. His first position was as professor of Fine Arts at Wells College in Aurora, New York. He resumed his portrait painting and printing activities and installed two hand presses, one at the school and one in his home: the Wells College Press and the Hammer Press, respectively. With his son Jacob, who had now joined him in America, he produced a number of publications, particularly the *Aurora* and *Mesa* series edited by his friend Herbert Steiner.

In 1947, Victor Hammer declined an invitation to return to the Vienna Academy. The following year a mandatory retirement age forced him to leave his professorship at Wells College, and in the fall he accepted a position as artist-in-residence at Transylvania College in Lexington, Kentucky, where he remained until his retirement in 1953. During these years and until April of 1967 he was involved in the production of over a dozen books by both The Anvil Press and his own Stamperia del Santuccio.

As a painter he completed five of his allegorical paintings in tempera on gold ground, and a number of portraits, including those of the composer and singer, John Jacob Niles; his friend Thomas Merton; Mayor Charles Farnsley of Louisville; and two Transylvania College Presidents, Dr. Raymond McLain and Dr. Frank Rose.

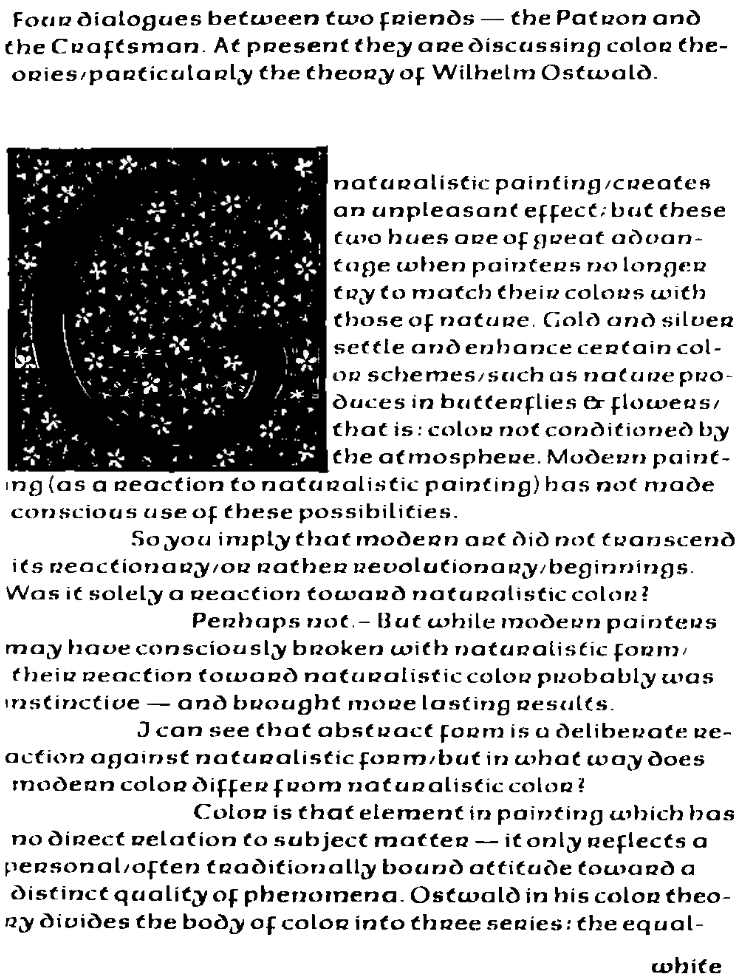
Victor Hammer died July 10, 1967, at the age of 84. The burial service, held in the old country graveyard of Pisgah Church in Woodford County, Kentucky, was read by Raymond McLain, who with Joseph C. Graves and R. Hunter Middleton had brought Victor Hammer to Lexington in 1948.

Victor Hammer lived and worked the last years of his life with Carolyn Reading Hammer, whom he had married after the death of his first wife, Rosa Fuhrman, in 1954. The activities of the Stamperia del Santuccio and The Anvil Press are carried on by Mrs. Hammer, who had absorbed much of Victor Hammer's thinking and learned, under his tutelage, his techniques of printing on the hand press.

Victor Hammer's early calligraphic ideas were to dictate the form and direction of his book printing a few years later. His interest in the Roman uncial of the fifth to seventh centuries began with his early experiments in calligraphy. "Instinctively I chose my models from uncials and half-uncials. Straight Gothic and Humanistic hands did not interest me at all. That was a dead end; they could be copied but could scarcely be developed; at least that was my feeling. . . ." While copying manuscripts in the uncial letter, Hammer discovered the contradiction between language and script. He observed that a page of his uncial hand was not as pleasing in German as it was in Latin, the language in which the uncial had been developed. In his *Digressions on the Roman Letter*, he wrote; "The language in which one writes or for which one cuts a type, determines its apperance; each language demands its own written or typographic garb, made to fit. Otherwise it looks awkward, ugly and tasteless." By experimenting with his uncial hand, Hammer minimized the ascenders and descenders and rounded the letters significantly to help the line flow more freely. "I tried to avoid holes in the line by arranging my letters like a string of pearls." The resulting letterform was an uncial that he felt would work equally well in Latin, German, French, English, and Italian, and proved to be a model for his uncial typefaces a few years later.

Victor Hammer had no great expectations concerning the popularity of his uncial types with contemporary designers. He justified his efforts for two reasons: first, the uncial types were appropriate for his own printing needs; and second, because of his concern with the relationship of letterforms to language, he felt obligated to do something about it and, in so doing, to encourage others to explore the possibilities even further.

Hammer had definite preferences regarding the character and form of his books.


Four dialogues between two friends — the Patron and the Craftsman. At present they are discussing color theories/particularly the theory of Wilhelm Ostwald.

naturalistic painting/creates an unpleasant effect; but these two hues are of great advantage when painters no longer try to match their colors with those of nature. Gold and silver settle and enhance certain color schemes/such as nature produces in butterflies & flowers/ that is: color not conditioned by the atmosphere. Modern painting (as a reaction to naturalistic painting) has not made conscious use of these possibilities.

So you imply that modern art did not transcend its reactionary/or rather revolutionary/beginnings. Was it solely a reaction toward naturalistic color?

Perhaps not. – But while modern painters may have consciously broken with naturalistic form/ their reaction toward naturalistic color probably was instinctive — and brought more lasting results.

I can see that abstract form is a deliberate reaction against naturalistic form/but in what way does modern color differ from naturalistic color?

Color is that element in painting which has no direct relation to subject matter — it only reflects a personal/often traditionally bound attitude toward a distinct quality of phenomena. Ostwald in his color theory divides the body of color into three series: the equal-

white

FIGURE 2. *Example of Hammer's two-color initials. Technique involved removing the letter element for separate inking, then returning it to its original position in the plate for printing.*

His uncial types set with unjustified margins are a dominant characteristic of his books. Ink colors are confined to black, with some red and blue lines, on white handmade paper. Ornamentation is limited to criblé initial letters, his two-part (two-color) initial letters cut in brass (see Figure 2); woodcuts and brass portrait engravings.

The following list is a representative selection of Victor Hammer's press imprints.

	Type	Year	Place
Books of Stamperia del Santuccio:			
Samson Agonistes: John Milton	Samson	1930	Florence, Italy
Bacon's Essays: Francis Bacon	Samson	1931	Florence, Italy
Fragmente des Pindar: J. F. Hoelderlin	Pindar	1935	Kolbsheim, France
Sonetti: Torquato Tasso	Pindar	1939	Vienna, Austria
Gedichte: J. F. Hoelderlin	American Uncial	1949	Lexington, Kentucky

	Type	Year	Place
Books of Stamperia del Santuccio:			
Three Fragments: Conrad Fiedler	American Uncial	1951	Lexington, Kentucky
Four Dialogues: Victor Hammer	American Uncial	1956	Lexington, Kentucky
Memory and Her Nine Daughters, the Muses: Victor Hammer	American Uncial	1957	Lexington, Kentucky
The Solitary Life: Thomas Merton	American Uncial and Andromaque	1962	Lexington, Kentucky
Concern for the Art of Civilized Man: Victor Hammer	American Uncial	1962	Lexington, Kentucky
Wells College Press:			
Jeanne D'Arc: Peguy (printed for Pantheon Press)	Spiral	1943	Aurora, New York
The Three-Cornered Hat: Alarcón (woodcuts by Fritz Kredel)	Spiral	1946	Aurora, New York
The Mesa & Aurora Series: edited by Herbert Steiner	Garamond	1945–1947	Aurora, New York
A Dialogue on the Uncial between a Paleographer and a Printer: E. A. Lowe and Victor Hammer (for The Society of Typographic Arts, Chicago)	American Uncial	1946	Aurora, New York
Hammer Press:			
Blutiger Kehraus: Fritz Kredel	Garamond	1948	Aurora, New York
Journey to the Coastal Marsh: James Feibleman	American Uncial	1946	Aurora, New York
The Anvil Press:			
Oration on the Dignity of Man: Pico della Mirandola	Emerson	1953	Lexington, Kentucky
The Booke of the Duchesse: Chaucer	American Uncial	1954	Lexington, Kentucky
The Four Gospels (4 volumes)	Jessen	1954–1955	Lexington, Kentucky
Sonnets: Shakespeare	American Uncial	1956	Lexington, Kentucky
Francisca and Other Stories: J. P. Hebel	Jessen	1957	Lexington, Kentucky

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WILLIAM HESTERBERG

HAMPSHIRE COLLEGE LIBRARY CENTER

The Harold F. Johnson Library Center at Hampshire College, in Amherst, Massachusetts, both as a physical plant and as an operating system, has been designed as a conscious effort to meet the need for change during the next decade.

Hampshire College is an independent, experimenting liberal arts college which opened for students in September 1970; it is intended specifically as a national pilot enterprise for innovations in American higher education. Hampshire was brought into being through the initiative of faculty and administrative leaders of four institutions in the Connecticut Valley of Massachusetts: Amherst, Mount Holyoke, and Smith Colleges, and the University of Massachusetts. It is the result of planning begun in 1958, and its establishment was approved by the trustees of its four neighboring institutions.

Hampshire plans to have a student body of approximately 1,500 by the middle of the 1970s, and may expand in time to 3,600 students. The history and character of the early planning for Hampshire College are detailed in *The Making of a College* (*1*). This volume, which elaborates the intentions of Hampshire College, is not considered a static blueprint, but a thorough approximation of all aspects of the college's planning.

It is in this setting, then, that the Library Center has been designed. The experimenting posture and concern with communications at Hampshire College provide a context for the development of a new kind of institution, a successor to the traditional book library. Changes in technology, curricular design, costs, types and mobility of students, and patterns of learning are taking place so fast that a critical look at the library is imperative. It is necessary to find new library configurations—of people, space, materials, and concepts—that will break the circle of increased cost and decreased effectiveness within the institution. In the 1970s librarians will be forced, by economics and technology, to examine rather closely what the library does and what it could do, so that it can be a productive participant in the learning process and in the community.

Whatever the reasons—and some are legitimate—the library has changed from a humanistic institution (which many mistakenly think it still is) to a supply depot concerned with inventory and control. This processing of packages called books also has blinded the colleges to the potentially more dynamic role the library could play as a major channel of communication and a major processor of knowledge, both factual and fanciful, in all media. This role implies a change of function as well as attitude by librarian, by user, and by administrator.

If libraries are to maintain—or more properly to regain—their relevance, it will be necessary for library planners to include the totality of media in their thinking. Educational technology and the nonbook media are essential elements in the library's search for educationally relevant solutions to the problems of undergraduate education. We cannot safely predict what the library will be in 1975 or 1980, but we can prepare ourselves for change. These changes will not come as spectacular technological breakthroughs. Rather, they will come as experience, opportunity, and imagination allow experimentation with and analysis of innovative technology in the library and in the educational process. Library planners must consider the space, equipment, and staff necessary to adapt to change, as well as the opportunity to develop a posture of experimentation within the library and related communication systems, and toward the learning process itself. The use of video systems for remote scanning of images and even text, for example, will require a new look at the function of storage and collection. Change, however, is not entirely dependent on finance. Rather, it depends more on establishing priorities, deciding what is trivial and what is important—in short, rethinking the library.

It is within this context that the Hampshire idea of the Library Center, an extended and experimenting college library, has grown. *Extension* implies that the activities, operations, and collections must encompass more than those of the conventional book library, not as discrete clumps of materials or sets of unrelated activities, but rather as a continuum where print, sound, and image are merged. *Experimenting* implies that the library must adopt a continuing critical and innovative attitude toward both its internal processes and the interfaces with its publics.

Regardless of what the future holds and of the desirability for a quantum jump in services and organization, we know the library must serve the patterns of teaching and learning that a faculty uses in 1970. We live and work and learn in a real world. Therefore, in designing the Library Center, the legitimate question became: Given the validity of the extended library concept, what kinds of space and what range of operations should be planned in 1970 in order to support rather than restrict the development of these ideas during the 1970s. It is worth emphasizing that the criteria enumerated and discussed below establish both the goals of the Hampshire College Library Center and the boundaries within which these goals will be pursued.

1. The extended library should include, both physically and administratively, the following activities:
   a. the conventional library including collections and systems for all media
   b. a display gallery
   c. a bookstore
   d. an information transfer center, integrating educational technology and computer support to instruction and learning
   e. conduit connection from the Library Center to all points on the campus, including student rooms
   f. duplication services
2. A major long-range goal is to integrate all of these activities in a functional type of organization. This was not possible in 1970 because people saw themselves in specialized roles; e.g., librarian, bookstore manager, instructional technologist, etc.
3. Systems and procedures should be examined carefully to ascertain their usefulness and economic cost. The Library Center should adopt an open-ended and experimenting posture. All elements of the system should be open to scrutiny, with two principal goals in mind: economy of operation and improvement in user services and instructional support.
4. There are good collections, totaling about 2.5 million volumes, at the four neighboring institutions. Hampshire's library should not attempt to build research collections, except in highly limited and well-defined subjects of specific relevance to the college.
5. The book collection should never exceed 150,000 volumes for approximately 1,500 students. A more likely figure is 100,000. Microforms should be used extensively for periodicals and serials. Approximately 33% of the collection should be in nonprint media. All materials in the collection should be accessible through one source, the public catalog.
6. A machine-readable base should exist for all items. If not in MARC format, the record should include an access point to available MARC records, both present and future.

7. The Library Center should participate—indeed should be a catalyst—in cooperative efforts among the five institutions relevant to communications, to display, and to library, information, and media networks.
8. There should be an emphasis on orienting the total system toward the user:
   a. commercial processing should be used for all media (or cooperative processing if this become feasible)
   b. the library should be ubiquitous on the campus—by both electronic means and by personal presence
   c. students should participate in operational decisions and even in policy-making processes.

The Building

To meet these criteria, a five-story building with 63,000 square feet was constructed in what eventually will be the center of the campus, ringed by a mix of student residences, academic offices, classrooms, and laboratories (see Figure 1). The top two floors include bookstacks for about 150,000 volumes, carrel seating for 180 students with conduit connections, faculty carrels, two lounges with forty-five additional seats, a microform area with a capacity of about 30,000

FIGURE 1. *The Harold F. Johnson Library Center, Hampshire College, Amherst, Massachusetts.*

microforms and six readers, a periodical area with twenty seats, two group study rooms, two typing rooms, and a special collections room.

The first or main floor includes a wide range of activities and is intended to present a feeling of total media use from print to sound to image, as well as the variety of options open to users as they enter the building. As one enters at the split level between ground and first floors, he looks down into a display gallery at the right. As he comes up a half flight to the main floor, he has directly in front of him a rear screen multi-media display. Off to his right is the bookstore and along the same corridor are balconies overlooking the gallery. To his left is the library. The bookstore has some 2000 square feet, including office and storage.

On this floor in the library the user is also presented with a range of options in media: the reference collection, open and closed listening carrels, film screening rooms, nonprint media collections, a slide browsing area, and a small conference room. The reference area includes (1) a large reference and information desk directly opposite the entrance; (2) shelving for 3,500 volumes, (3) seating for twelve users and public catalog.

The loan desk includes reserve book shelving for 2,400 volumes, as well as 210 linear feet for nonprint media shelving. The loan desk has provision for an automated system with conduit going to both a keypunching room and to the computing center, both on the floor below. The technical services area is just behind the loan desk, and includes office space for the assistant director for technical processing. Near the loan desk are eight acoustic listening carrels and eight open carrels. There are also two film screening rooms and a film information center. The administrative area in the southwest corner includes office space for the director of the Library Center, the director of Educational Technology, the associate director for Media Resources and Services, secretarial space, a reference office with working space for three persons, and a conference room for twelve to fourteen persons. A stairway here goes down and provides direct access to the computing and duplicating areas on the ground floor and to the studio and information transfer activities in the basement.

The ground floor also includes a wide variety of functions and activities. The most interesting is the display gallery (2,140 square feet), the central portion of which rises three floors. There are one-and-a-half story alcoves off this central gallery core. The gallery opens up on the main lobby at this level and has a glass wall on the stairway side. Directly across the corridor from the gallery is the campus Post Office. The duplication services are also located here. A sorting and keypunch area and a receiving and storage space open directly on a loading dock.

The basement level is divided into two parts; a mechanical space and an area devoted to information transfer activities. The activities of the latter center around two principal areas: the studio and the communications central. The studio has 600 square feet, of which approximately 70% is two stories high, and a control room. The studio area also includes space for film editing, darkroom, graphics, and storage. Two extra rooms provide a fair amount of flexibility and uncommitted space for future use. A communications central provides space for bringing signals into the campus from outside and distributing them on campus as required. It also provides the space and equipment for initiating signals for campus distribution by cable. It is directly connected to the studio and transmits live within the system.

Style of Operation

One of the basic objectives of the Hampshire College Library Center is to explore ways of orienting the academic library to the user through better understanding and exploitation of the college environment in which the library exists and through the development of methods by which the library can respond better to the needs of that environment. We wish to explore the notion that the library is not a place, but a process, and that mere warehouseing and servicing is only the first step in the process. The library should be a process that permeates the campus.

In order to understand how we view these activities, it is necessary to present briefly some assumptions concerning the style of operation. We believe the library, as conventionally accepted and viewed, has a potential for education and learning that is largely unrealized. At least two things are necessary to help exploit this potential.

First, the image of the library as a single place or building on the campus must be changed. This implies that staff and student assistants spend as much time outside the library as inside. Questions and problems, which could be assisted if not answered, do not suddenly come into existence when a user enters the front door of the library. They start in a classroom, a laboratory, a seminar, or most importantly, in that penumbral fringe of education, the bull session. The library should be present in some personal form at the point where these questions originate, where the need for an answer arises.

Second, we feel that much would be gained by making the library's public part of the process of exploiting the unused potential. As a library serving an undergraduate liberal arts college, students are the Library Center's major public. It is critical that they be made part of the process, rather than mere suppliants who come in the door. The idea of experimentation centered in the library offers an opportunity to study and to experiment with the processes of communication, learning, and personal growth that take place in the library. Students should be closely involved—if not the prime movers—in the development of media presentations, of reference and information services, and of orientation programs. The process of true learning is one of participation and discovery, and it is within this context that students could be the beneficiaries. Such an approach will help break down some of the barriers that now exist between library and user. As a subject for controlled experimentation and communication, students will become more aware not only of the problems facing libraries, but also of themselves as learners and information-seekers.

Another assumption is that libraries are very frustrating systems to use. This occurs principally for several related reasons. The library contains highly structured packages; i.e., books, periodicals, etc., and its accessing systems are highly formalized. Yet the inquiries that come into the library are highly unstructured, i.e., loose, naive, ambiguous, because they are real questions from a real world, reflecting what Whitehead has called the "radically untidy, ill-adjusted character" of reality. Conventional library systems are of very little help here. We believe that the system best able to display itself in a useful functional way for the inquirer will be the most effective. One of our concerns will be to see if there are ways of improving the "merchandising" of the content of the college library. This brief discussion should not imply that the Hampshire College Library Center will solve all of these problems. What we are basically trying to do is to create an environment, an environment which encourages both a change in library style and, concomitantly, a change in the patterns of library use. This is *the* long-range program in orienting the library to the user, rather than insisting that the user adapt wholly to an "unnatural" system.

Several interrelated activities are projected for the Library Center so that it faces its publics rather than its materials, the front door rather than the back door.

> Research on what users do and do not do in conventional libraries, using a small group of students who are willing to observe themselves critically over a period of several years.
>
> A greatly expanded orientation program utilizing all media as necessary both in and outside the library.
>
> A program aimed at developing student reference assistants for service in the library and to act as information resources in the residences and classrooms.
>
> A gallery program designed to augment and extend the educational experiences by experimenting with all forms of expression in a public manner, utilizing student talents and interests as a major base upon which to build.
>
> A bookstore to broaden the options open to the campus community, leased for operation to a local bookstore but reporting to the director of the Library Center.

To meet these objectives and to keep our options open for the future, our approach to systems has had to be ad hoc and opportunistic. One of our major objectives, for example, is to be able to deal with all media formats through the same systems of ordering, processing, storing, lending, accessing, and disseminating. The user should be able to approach all media packages through similar routes. The interface between user and library should be the same whether he wants a film, a recording, or a book. That is, he should be presented with one catalog for all media, one reference librarian for all media, one storage scheme for all media. On the library side of this interface, the systems and processes side, everything militates against such integration. In addition the supporting marketing and commercial interests are widely dispersed, frequently incompatible and unstandardized, and much of the equipment and systems is in an incipient untested state. This does not allow for the easy development of systems.

We have, however, made several choices. The Library of Congress Classification system is used for all media. This allows the future option of integrated shelving. In addition a machine-readable catalog card is generated for all items and the L.C. classification, together with media designators, allows the generation of special subject and media lists. There is one public catalog for the search for anything in the collection. We are not yet ready to abandon the conventional card catalog.

A second major choice was that as much material as possible should be processed commercially. Our experience of several years, at the time of writing, indicates that this can cover about 60% of the materials with varying degrees of satisfaction. The major problem appears to be the turnaround time necessary for the complete process; that is, from time of order until a shelf-ready item is ready for public use.

Communication Systems

From its beginning, Hampshire College has maintained a lively interest in the technologies of communication, of data storage and retrieval, of information transfer—in short, of those technologies which show promise of encouraging and assisting valid educational change and improvement. The production and switching facilities of the Information Transfer Center (INTRAN) within the Library Center are an essential element in this search for economic and educationally relevant solutions to the problems of undergraduate education.

In the spring of 1971 a cable television system was installed which linked the studio and communication center in the Library Center with student lounges in the residence halls, with the dining commons, with administrative and faculty offices, and with locations in the Library Center. This is seen as a pilot system. The system is two-way in character, conveying signals from appropriate locations to the Library Center, through a switching matrix into which additional signals are inserted, and out again to various reception locations.

The television reception portion contains broadcast channels from the three major networks, one educational channel, and the FM radio band, as well as four on-campus closed circuit television channels and one audio-only channel for reception through ordinary television sets. One channel is a "bulletin board" for daily announcements, classified ads, local news, etc. On another channel there is a continuous presentation of a national newswire service. At present this is a straight teletype news service with television camera to convert the teletype image into video signal for transmission through the system.

By routing all signals through the video and audio switching matrix, Hampshire's existing equipment (videotape recorders, film and slide television projectors, the studio, and possible channels from the Amherst CATV system) may be seen at any of the receiving locations. In addition portable television camera equipment may be utilized from a number of campus locations to transmit "live" presentations to all viewing locations or to record events on the videotape recorders in the Library Center. Spare capacity is built into the system to provide future opportunity to accept images from Touch Tone telephone-operated microfilm readers, and to feed any of the input signals directly to viewing rooms in carrels in the Library Center, into the Amherst CATV system, and possibly to an Instructional Television Fixed Service transmitter for transmission to the five colleges.

By adding terminal equipment such as film chains and VTRs, the capacity of the trunk cable network may be expanded in the future to accommodate twenty or more conventional television channels outbound from the Library Center and additional channels inbound from the classroom building and residence quadrangle. Spectrum within the cable may also be utilized for non-televised services in either direction such as data transmission, multiple audio channels for individual use, remote control of apparatus, or the monitoring of building service equipment. The addition of Touch Tone telephone pads to instruments in the existing telephone system with suitable interface equipment at the receiving end appears to be the most economical remote machine control method for purposes such as the control of microform readers. At minimum the Touch Tone system, based on a filter at the head end to detect tones, can be used to stop, start, and reverse a program, if control has been turned over to the user. Eventual development of this attribute can be used, for example, to zoom cameras or, with special logic circuits, to provide a memory for queries in information retrieval using microforms as the basic storage unit. The combination of tones would provide the specific search requirements.

There are many uses for the system described here. Some of these are straightforward and have a high probability of utility given present information. Others are less well-defined; and it is with these that experimentation will produce the most valuable information, not only for our own future development but for other institutions which may wish to make use of our experience. As an experimenting library, the Library Center will be concerned with many kinds of questions. How, for example, can users of the system best be given means to control transmission of information? Can a relatively small number of channels serve the needs of a population the size of Hampshire's? What formats of information presentation are both effective and economical? How can we provide for user response during the course of a presentation? Can we provide access through such a system to material, such as microfilm, not usually associated with television?

The first 2 years of operation of the Library Center convinces us that we have the framework for a reorientation for the academic library. Experience and testing during the 1970s will be important to determine if we are on the right path and if, indeed, the academic library has the capacity for total service and can be oriented to the user.

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ROBERT S. TAYLOR

HANSON, J. C. M.

J. C. M. Hanson, chief compiler of the Anglo-American cataloging code of 1908, was the one man more responsible than any other for the form and content of the Library of Congress printed catalog cards at the beginning of the twentieth century and for their acceptance by the majority of American libraries. The latter led to an unprecedented national standardization in cataloging practice which Hanson, as one of the pioneers in international cooperation in cataloging, urged as an international model.

Hanson was born on March 13, 1864, at Sørheim, a farm in the district of Nord-Aurdal in the Valdres Valley of Norway. He was christened Jens Christian Meinich Hansen, but he allowed his boyhood friends in Iowa to change his forename to Jim which, to his later regret, he formalized as James. The change in the spelling of his surname, from Hansen to Hanson, was gradual and inconsistent, a practice not uncommon among Norwegian-Americans at the time. By 1897, however, he had adopted "J. C. M. Hanson" as his invariable signature.

Hanson was the sixth of the eight children, and second son, of Gunnerius (Gunnar) and Eleonore (Röberg) Hansen. Gunnar Hansen was both a government official and a landowner, but the economic conditions in Norway were not favorable and the family was large. Like so many other Norwegians, both the Hansen and Röberg families had relatives in the United States. Of particular importance to the future of the young Jens was Mrs. Hansen's half-brother, Hans Röberg, who had settled in Decorah, Iowa. He offered an American education at Luther College in Decorah to one of the boys of the family and, in 1873, the 9-year-old Jens was sent in the company of the Reverend Ove J. Hjort for the 3-year preparatory course given at the college.

Although Hanson arrived in Decorah in August he was not allowed to enroll until the following year when he was 10. Luther College was still predominantly Norwegian in 1874 and its curriculum was modeled on the Latin course of Norway's school system. During Hanson's first years at the college most of the instruction was given in Norwegian. Although English later became predominant, Hanson's writing retained Germanic constructions and he frequently complained of a lack of ease in speaking.

The original plan had been for Hanson to return to Norway at the end of 3 years after completion of the preparatory course. Crucial to his future was his failure to pass the final examinations in 1877. Both the president of the college, Laur Larsen, and the pastor, Nils J. Brandt, a long-time friend of the family, came to Hanson's rescue and urged his parents not only to allow him to repeat the third year program but also to stay for the 4-year college course. Hanson remained to receive his degree in 1882. By then he had become an American, most notably perhaps in his love for baseball, but also because of his feeling that here was his real home, that he would be "something of a stranger" in Norway.

After graduation Hanson was vaguely planning to follow some of his friends who were migrating further West, particularly to the Dakotas. Instead he was persuaded by the Reverend U. V. Koren that the theological seminary, not the Dakotas, was the proper goal for a Luther graduate. The fall of 1882 found Hanson enrolled in Concordia Seminary in St. Louis. The 2 years at Concordia were not happy ones. On the credit side, he did learn to speak German fluently since the course work was conducted in either German or Latin; only the course in logic was given in English. He had, however, become increasingly convinced that he had no call to the ministry. The lack of adequate financial support was, moreover, so overwhelming a problem that continuation for the third and final year would have been exceedingly difficult even if he had wished to remain.

In 1884 he accepted a position as principal and teacher at the parochial school of Our Saviour's Church (Norwegian Lutheran)) in Chicago and served as *klokker* and superintendent of the Sunday school. He supplemented his income in summers by pitching for various baseball teams and in winters by teaching English to adult Scandinavians in the Montefiore Evening School operated by the Chicago Board of Education.

By 1888 he had saved enough money for a year's graduate study at Cornell University. For the second year at Cornell he was awarded the President White Fellowship in history and political science. In the course of his research in the library he became well acquainted with the librarian, George William Harris. It was Harris' influence, according to Hanson, which determined his choice of librarianship for his life's work.

Hanson began his professional career in 1890 at the Newberry Library under William Frederick Poole and his distinguished staff. For 3 years Hanson received sound technical training in dictionary cataloging according to Cutter's *Rules* and learned from experience the shortcomings of Poole's classification system. Here too he formed his lifelong friendship with Charles Martel who joined the Newberry staff in 1892.

In 1893, through the interest of a former professor at Cornell, Charles Kendall Adams, newly appointed president of the University of Wisconsin, Hanson received the appointment as head cataloger. In the choice of a new classification scheme, Hanson joined the librarian, Walter McMynn Smith, in preferring Cutter's Expansive Classification over the Dewey Decimal Classification. Because so few parts of Cutter's seventh classification were available, many local expansions of the sixth (for medium-sized libraries) had to be developed. Hanson came to the conclusion that Cutter's notation was unnecessarily difficult and disliked particularly the "irregular sequence of letters and the arbitrary use of preliminary numbers." Although it was too late to change the notation at Wisconsin, he devised a modification of the notation in which he used only one or at most two letters for the major classes and under each class a straight series of numbers, each number standing for a subdivision, with Cutter numbers for the individual books. Some trial applications of the scheme, chiefly in history and geography, proved satisfactory and his general outline of the notation, penciled on large sheets of paper, was to be useful to him when, in 1897, he received another opportunity to completely reclassify a library collection.

For the new dictionary catalog at Wisconsin, Hanson adopted Cutter's rules in the "full" form as used at the Newberry Library but modified by the discussions at the World's Library Congress, particularly the proposed modifications of Cutter's controversial Rule 97, "A work treating of a general subject with special reference to a place is to be entered under the place, with merely a reference from the subject" (*1*). This experience, too, was incorporated in the subject headings adopted at the Library of Congress.

In August 1897 the new Librarian of Congress, John Russell Young, appointed Hanson as chief of the catalog department. Hanson's arrival on September 15, 1897, marked the beginning of the library's bibliographical reorganization accompanying the move into its new building. Apart from the organization and administration of the work, the three large areas in which Hanson's imprint is still evident are the Library of Congress Classification, the subject headings developed for the new dictionary card catalog, and the cataloging rules for entry and description adopted for the new catalog.

Hanson always named Charles Martel as the "chief architect" of the Library of Congress Classification. (Martel was Hanson's assistant and, after some delay, his successor as chief of the catalog department.) The conception of the scheme and its notation were, however, the results of Hanson's work. Too, he carried the major responsibility for convincing Young of the need for reclassification. The influence of Ainsworth Rand Spofford, Young's predecessor who had remained as assistant librarian, had also to be considered. Spofford was opposed to close classification in general and Dewey's "most ingenious scheme" in particular (*2*). Hanson said much later that Cutter's classification was "the chief guide" for the new classification (*3*), but Spofford was also critical of Cutter's scheme "on the score of overrefinement and aiming at the unattainable" (*4*). The new scheme was understandably presented therefore merely as an eclectic one "combining the best features of those in use in other reference libraries" and the emphasis was on the notation, "a shorter mark than any other ever devised" (*5*).

The reclassification of all the "works on writing, printing, bibliography, and library science" in the old Chapter 38, Literature and Bibliography, to the new scheme was begun late in January 1898 and was reported as having been completed by September 1898 (*6*). The reclassification is said to have been discontinued following the completion of Class Z (*7*) but some reclassification was being carried on in January 1899 (*8*). It was suspended officially, however, when, after Young's death on January 17, 1899, Herbert Putnam was appointed to succeed him on April 5, 1899.

Putnam had hoped that adoption of an existing scheme would lead to its national acceptance and uniformity in classification (*9*). His preference for Dewey's decimal scheme was based primarily on the "convenience of the notation" (*10*). Hanson shared with Martel the burden of convincing Putnam of the deficiencies in Dewey's scheme. Hanson wrote the long defense of the notation (*11*) and the recapitulation of the reasoning in 1897 which had resulted in the rejection of the existing schemes (*12*). As Hanson became more immersed in the catalog rules, Martel became the chief spokesman for the classification. Hanson thereafter limited his own role to his responsibility as chief of the division and to support of Martel as his chief classifier.

In adopting the dictionary form for the public card catalog, Hanson made important modifications of the dictionary principle. He was convinced that a strict adherence to the dictionary principle, with its dispersal of the material under minute subjects, would be wholly undesirable in a catalog of the size anticipated for the Library of Congress. In his opinion the user's interest would be served best by bringing together related topics insofar as it could be done without reverting to the alphabetico-classed principle (*13*). The subject headings adopted for the new catalog were therefore a blend of the two divergent principles: the dictionary and the alphabetico-classed. One of the more important modificatons of the dictionary principle was Hanson's deliberate inversion of "independent headings" in order to bring a number of related headings into the same part of the alphabet, e.g., Insurance, Fire; Insurance, Life; etc. Such "independent headings" were not to be confused with subjects which might be subordinated to another. This distinction was lost later when, in the second edition of the subject headings list, many of the inverted headings were changed to subdivisions (*14*). The printing of the subject headings as tracings on the catalog cards was a factor which contributed directly to the popularity and widespread use of the Library of Congress cards. With the publication of the library's *List of Subject Headings*, its pattern of subject headings became increasingly the established practice in American libraries.

In beginning the new catalog during Young's brief administration, Hanson laid the groundwork for the later success of standardization in cataloging by his careful and considered adoption of rules which seemed most likely to be acceptable to a majority of libraries. The resulting style was eclectic, based on Cutter's *Rules for a Dictionary Catalogue* as compared with the ALA rules and supplemented by suggestions "freely adopted" from other codes (*15*). There were also some concessions to previous Library of Congress practice, e.g., minimal capitalization (*16*). Paramount were the requirements of the copyright law, e.g., "a complete transcript of the title entry," because the entries were prepared for the subdivision *Books Proper* in the *Catalogue of Title Entries of Books and Other Articles Entered in the Office of the Register of Copyrights, Library of Congress* (*17*). Young had suggested the cooperation between the copyright and catalog departments in order to avoid duplication of work. The entries as published, beginning in the May 1898 issue, were enthusiastically approved in the library press (*18*). The first step toward centralization of cataloging at the Library of Congress had been taken.

The sale of the cards was not to come until October 1901 after Putnam had made the necessary legal and staffing arrangements. The movement toward that end had begun, however, at the ALA meeting in 1900. Late in 1900, Hanson was appointed chairman of the Publishing Board's Advisory Catalog Committee which was charged with the revision and expansion of the ALA rules as the authoritative base for further cooperative efforts in cataloging. As chairman of the committee and editor of the resulting *Catalog Rules: Author and Title Entries,* commonly referred to as the Anglo-American rules of 1908, Hanson's greatest contribution was his success in harmonizing the numerous divergent views on the disputed points in the cataloging practice at the time. Hanson's "thoroughness and patience" (*19*) must have been sorely tested because, as he pointed out,

> it is not only difference of opinion on religious and political questions that can arouse men's souls. Some of the librarians of the period seemed to regard their stand on such matters as the proper entry of the name of a British nobleman, a much married lady . . . [etc.] as something on which their consciences would permit no compromise (*20*).

In the work on the rules Hanson is most often considered the prime architect of what he recognized as the "labyrinth of corporate entry" (*21*). An analysis of the codes of rules in use at the time and those adopted for the Anglo-American code reveals, however, that his principal work here, as elsewhere in the code, was the result of a compromise. There was, on the one extreme, the no exceptions rule of the ALA code of 1883, which almost no libraries followed without modification, and at the other extreme the numerous exceptions allowed by Cutter's popular "fifth plan." Hanson's work, therefore, consisted of extending and codifying into a more systematic pattern the seemingly intuitive rulings in Cutter's "fifth plan" (*22*).

Monumental as his work on the code was, he crowned it by his skill in the negotiations with the Catalogue Rules Committee of the Library Association. Of the 174 rules in the American draft, complete unanimity was attained on all but eight.

Throughout the work on the cataloging code, which lasted almost 8 years, Hanson carried forward the cataloging and concurrent recataloging in the Library of Congress. It can be said that the agreement on cataloging rules and even the inauguration of the printed catalog card distribution service of the Library of Congress, important though they were, would have been nullified if the catalog entries produced under Hanson's direction had not established such a high standard of excellence.

The climate in library organization was such, however, that Hanson felt the necessity of moving into more direct library administration. For 17 years he served as associate director of the University of Chicago libraries where he again undertook the reorganization of a bibliographically chaotic library into a cohesive whole. Throughout these years Hanson continued his support of the centralized cataloging services offered by the Library of Congress and urged the expansion of cooperative cataloging projects to lighten the cataloging burden of individual libraries.

With his appointment in 1928 to the faculty of the newly established Graduate Library School of the University of Chicago, Hanson entered not only a new field but also a new era in which he received much of the recognition and status denied him for the greater part of his library career. He also taught at Michigan for several summers, and each spring from 1929 to 1932 he gave a series of lectures on classification at Columbia.

In 1928 Hanson had undertaken another international assignment by serving as leader of the team of American cataloging experts sent to assist in the reorganization of the Vatican Library. Even after his retirement, in 1934, he continued to work for international cooperation in cataloging as the only route for the future. In furtherance of this cause, he compiled his monumental work, *A Comparative Study of Cataloging Rules Based on the Anglo-American Code of 1908: with Comments on the Rules and on the Prospects for a Further Extension of International Agreement and Co-operation*. Hanson's concern for international cooperation in cataloging was extended to include a belief in international cooperation as the basis for world peace.

Hanson has been described as a "blond giant" (23) and his athletic prowess, particularly in baseball and swimming, was somewhat unusual for a librarian. His scholarship and erudition, including facility in sixteen languages, and the "bedrock" integrity of his character inspired respect; his kindliness, modesty, and generous spirit evoked the affection of his colleagues and students. Among the honors that came to him was appointment by the Crown of Norway as Commander of the Order of St. Olav in 1928, and in 1931, Luther College conferred on him the LL.D. degree.

On November 26, 1892, Hanson married one of his former parochial school pupils, Sarah Nelson. Their five children were: Karl Burchard, who died in 1936, a few weeks before the death of Mrs. Hanson; Valborg Charlotte (Mrs. J. E. Enerson); Eleanore Bergliat (Mrs. J. H. Rustman); Thorfin Armand; and Harold Beck. Hanson died November 8, 1943, at Green Bay, Wisconsin, and was buried in the Lutheran cemetery at Ellison Bay, 4 miles north of his home at Sister Bay.

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EDITH SCOTT

HARRY S. TRUMAN LIBRARY

> This Library will belong to the people of the United States. My papers will be the property of the people and be accessible to them. And this is as it should be. The papers of the Presidents are among the most valuable sources of material for history. They ought to be preserved and they ought to be used.
>
> HARRY S. TRUMAN

These words, carved in a huge block of the Indiana limestone that is the facing of the building, express the philosophy of the Harry S. Truman Library.

Introduction

The Truman Library was formally established on July 6, 1957, in a ceremony attended by numerous dignitaries including former President Herbert Hoover and Eleanor Roosevelt, and several thousand other guests. Chief Justice Earl Warren delivered the dedicatory address. Originally conceived by President Harry S. Truman, the plan to found the library was implemented by a few close friends and associates, and the library was built in his home town of Independence, Missouri. Some 17,000 individuals and organizations donated more than $1,750,000 toward its completion. At its dedication the building was given to the federal government for administration.

The structure itself is a 700-ft long, one story, full basement, modern building encircling a large secluded courtyard (see Figure 1). Six tall supporting limestone columns set off an imposing entrance to the main lobby of the library's Museum. Situated at the summit of 13 acres of gently sloping land, a gift of the city of Independence, the building and its setting provide an impressive scene for the library visitor or mere passerby. The Truman family home is a short distance from the library. Mr. Truman's suite occupies one wing of the building, and for 9 years he came to his office almost every day to work with his personal staff.

The Truman Library is a library in the generic sense of the term, uniting as it

FIGURE 1. *Exterior view of the Harry S. Truman Library. (Courtesy Harry S. Truman Library.)*

does three separate functions. It served as Mr. Truman's office, where he could write and study and also receive visitors. It is a research institution combining an archives of approximately 10 million documents and a depository for books and audiovisual materials. It is also a museum which offers for the public's enjoyment and enlightenment displays relating to Mr. Truman's career and to the office of the presidency.

The Museum

The Harry S. Truman Library Museum is the only part of the library viewed by the general public. Inside the spacious lobby is Thomas Hart Benton's striking mural *Independence and the Opening of the West* (see Figure 2). This painting, a tribute to Mr. Truman's home town, in a panorama of vivid color celebrates Independence's time in history as the jumping-off place for the pioneer movement to the West.

Throughout the museum are displays of historical documents relating to the presidency and art treasures given to President Truman by heads of state and ordinary citizens who wished to show their esteem or affection for both the office and the man. Among the gifts on display are a selection from a large collection of original political cartoons, the table upon which the United Nations Charter was signed, a piano that President Truman played in the White House, and a White House limousine. Other exhibits include a full-size reproduction of President Truman's White House office (see Figure 3), a large scale model of the battleship U.S.S. *Missouri,* the Japanese surrender document which was signed aboard the *Missouri,* and drafts or documents written by all the presidents of the United

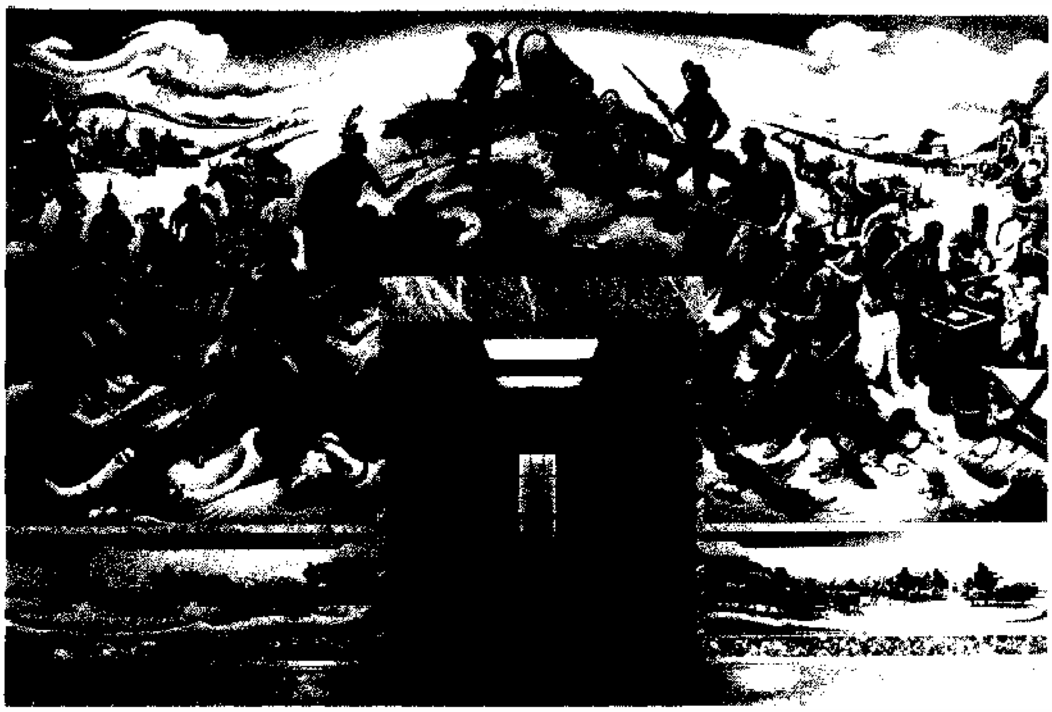

FIGURE 2. *Thomas Hart Benton Mural* Independence and the Opening of the West *in the Harry S. Truman Library. (Courtesy Harry S. Truman Library.)*

States. The Marshall Plan, the Berlin Airlift, the "Whistlestop" campaign of 1948, and the creation of NATO are among events of this period which are highlighted in displays.

Although performing distinct functions within one institution, the museum and the research area are harmoniously interdependent. Fulfilling an often expressed wish of Mr. Truman, the museum conveys to the people a better understanding of the presidency and through it of their government. Much of the museum's meaning might be lost without its association with the papers and other historical materials that are in the research section of the library; also much of the background information about the exhibits could not be obtained except through these papers. Conversely, the student in the library's Research Room would miss some of the color and tone of the Truman period without the museum.

Research Activity

The central focus of the Truman Library's activity is the research area. The primary purpose and responsibility of the library is to preserve and make available for research the papers of President Harry S. Truman.

The files a president accumulates while in office have been judged to be his pri-

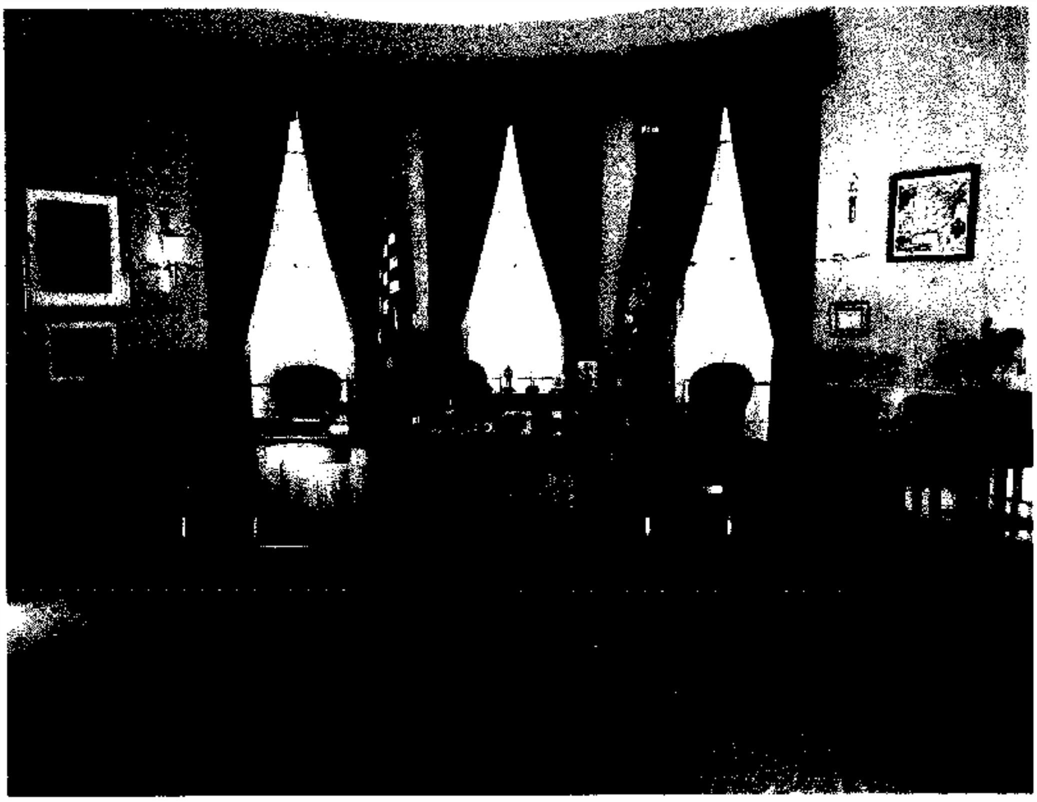

FIGURE 3. *Reproduction of the president's office in the White House at the Harry S. Truman Library (Courtesy Harry S. Truman Library.)*

vate papers. Since George Washington every president, or heir if he did not survive his term in office, has taken his working files with him. Cabinet officers, diplomats, and members of Congress have often found the line between public and private property, in their officially accumulated papers, difficult to discern and usually conform only to rules of decorum in deciding what are their own papers. The division between public and private, personal and official, regarding a president's papers are at least equally as obscure. However, because the office of the presidency was created by the Constitution and not by statute, presidential papers have always enjoyed privileged status. They are considered confidential files rather than part of the official public record, and because of our government's concept of separation of powers it is believed that the privacy of a president's papers can be protected only if the president retains the right of their disposition.

Not until recent times has the realization of the great historical value of these papers resulted in a systematic approach to their preservation. Franklin D. Roosevelt was the first president to turn his papers, books, and gifts over to the federal government. President Truman, in following Roosevelt's example, established both a precedent and what is becoming a tradition. In 1955, with the passage of the Presidential Libraries Act, permanent provision was made by Congress for the housing and care of the material of any president who wished to present them to the Nation. Roosevelt's predecessor, Herbert Hoover, and thus far all subsequent presidents have done this, and each of these presidential libraries is staffed and operated by the National Archives and Records Service of the General Services Administration.

The Truman papers originally filled over 400 filing cabinets and are estimated to number about 5½ million sheets of paper. In addition to the Central Files of the White House, other files that were transferred to the government by Mr. Truman were the records of the White House Official Reporter and the White House Social Office, and files of a number of members of Mr. Truman's White House staff. Mr. Truman's gift also included his senatorial papers and the papers accumulated by him during his brief term as vice president.

To ensure the preservation of the millions of papers covering Truman's time in office from 1945 to 1953 and the other manuscript collections, they are kept in specially equipped steel and concrete stack areas in which temperature and humidity are scientifically controlled.

A principal mission of the library has been the effort to acquire the personal papers of men and women who were associated with Mr. Truman during his career. The long list of persons who have already given their papers to the library include cabinet members, subcabinet level people, officials in the independent regulatory agencies, White House staff members, and individuals who knew Mr. Truman during his early life in Missouri. To many scholars these personal collections have proven as significant a source as the White House papers themselves. The library is attempting to gather as many such collections as possible, thereby bringing together in one place as complete a record as possible of the Truman career and administration.

To help fill gaps that exist in the written record an oral history program was begun by the library in 1963. Since then interviews have been taped with people in all parts of the United States and in Europe. This work, carried on chiefly by two trained interviewers on the library staff, has been concentrated mainly on persons associated with Mr. Truman in his pre-senatorial days, where there is a dearth of material, and on the White House staff members. Through their recollections, guided by a skilled interviewer, the library is obtaining factual information in areas where little information can be found in formal records. One interviewer is based in Independence and the other is in Washington, D.C. Shortly, a third interviewer will begin to gather information in the area of foreign relations. The interviews are recorded on tape and a transcript is made available to researchers under certain temporary restrictions.

The library also collects, by way of purchases and gifts, printed material for the use of both researchers and staff members. Books, pamphlets, periodicals, and newspapers are selected for the relevancy of their content to Mr. Truman's career and to the history and nature of the presidency as an office. Audiovisual materials relating to Mr. Truman and his administration are also available to the researcher.

This collection, consisting of photographs, sound recordings, and motion pictures, is used by historians, speech students, persons preparing documentary film, and authors seeking illustrations for their publications. Facilities to reproduce most of this material and also to copy documents and portions of printed items are available to users of these collections.

Nearly one-half of the people who have studied at the library so far have been candidates for Ph.D. or M.A. degrees, most of them working in the field of history and political science. Other researchers have been professors pursuing advanced scholarly projects, journalists, biographers, and free-lance writers working on books or magazine and newspaper articles. They have come from almost every part of the United States and from many areas of the world; their subjects are as varied and wide-ranging as their individual backgrounds.

The papers, oral history transcripts, books, and audiovisual materials which these people use make up what is the prime source of the Harry S. Truman Library. The quality of these collections determines the value of the library to its user today and in the future, and in effect will have much to do with deciding the quality of the history that is written of the Truman period. For additional information about these holdings one should consult *Historical Materials in the Harry S. Truman Library*. This booklet, prepared and periodically revised by the staff of the library, is designed to serve as an introduction to the library's materials and a guide to their use.

The Harry S. Truman Library Institute

A very important stimulus to the use of these materials has been the Harry S. Truman Library Institute for National and International Affairs. This is a private, nonprofit corporation whose board of directors includes a number of former associates of Mr. Truman, who was actively interested in the library. Also on the board are the presidents, or their representatives, of several Middle Western universities offering graduate programs in history and several scholars chosen because of their eminence or their special interest in the Truman period. The institute provides grants-in-aid to individuals who are working in the Truman period; awards the David D. Lloyd Prize every 2 years for the best book published during that biennium, dealing with the Truman period; and in even years it has sponsored seminar-type confrences of scholars at the library at which some aspect of the Truman administration is examined. The institute also sponsors a Special Research Project engaging scholars to study and write on particular subjects within the library fields of interest which deserve major attention.

The institute, which was incorporated the same year that the library opened, is entirely financed by nongovernment funds. The initial contributions to this fund came from Mr. Truman, who gave to the institute the honoraria that he received from his lecture appearances. Individuals have donated to the institute through the years, and over 1,000 persons have enrolled as Honorary Fellows, many of them continuing to give $25 or more every year. When enough gifts and bequests have accumulated, the library institute hopes to form an endowment.

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JOHN T. CURRY

HARVARD UNIVERSITY LIBRARY

The Harvard University Library was founded in 1638 and its collections were reported, on July 1, 1971, to contain 8,606,842 volumes and pamphlets in addition to many thousands of manuscripts, microforms, maps, photographs, slides, etc. It is the oldest library in the United States and the largest university library in the world.

The statutes of the university specify that "The University Library consists of all the collections of books in the possession of the University," provide that the director of the University Library shall be a member of each library committee, and require the librarian of each library to report to him annually. A union catalog is maintained in the Widener building. In other respects, however, the library is a federation of more than ninety libraries; many of these are responsible primarily to the dean of a faculty or the director of a research institution, and a few are located as far from Cambridge as Italy, Texas, and the District of Columbia.

This article, which deals first with the Harvard University Library in general and then with individual units and subject collections, is divided into thirteen sections, as follows:

I. Relationship of the Library to the University
II. Administration and Finances
III. Personnel
IV. Physical Plant
V. Collections in General (Content, Selection, and Bibliographical Organization)

I. Relationship of the Library to the University

Students at Harvard in October 1971 numbered 15,686, of whom 6,073 were undergraduates, 9,004 were candidates for advanced degrees, and 609 were special students or persons enrolled in various advanced nondegree programs. Of the undergraduates, 1,295 were women, technically enrolled in Radcliffe College, but attending the same classes and receiving the same degrees as the men in Harvard College. The candidates for advanced degrees were in the following graduate schools: Arts and Sciences (2,812), Business Administration (1,809), Dental Medicine (72), Design (453), Divinity (273), Education (597, plus 165 candidates for the A.M. in Teaching, a program sponsored jointly by Arts and Sciences and Education), Government (145), Law (1,796), Medicine (638), and Public Health (244).

Officers of the university number some 8,000—more than 5,000 officers of instruction, 1,300 officers of administration, and 1,700 other holders of corporation appointments. There are approximately 6,000 employees.

Harvard College was founded by a vote of the General Court of the Colony of Massachusetts Bay on October 28, 1636, and a charter granted by the same body on May 31, 1650 is still the fundamental law of the university. There are two governing boards. The corporation—officially styled The President and Fellows of Harvard College—is the oldest corporation in the country; it consists of the president, five fellows, and the treasurer. Subject to the consent of the overseers, it elects replacements to fill vacancies in its own membership. All property of the university stands in the name of the president and fellows; every faculty is subject to their authority; all changes in policy or in the University Statutes require their consent; and all degrees are voted and all appointments are made by them.

The Board of Overseers consists of the president and treasurer *ex officio* and thirty members, five of whom are elected each year to serve 6-year terms. The electorate consists of all persons holding Harvard degrees with the exception of officers of instruction or administration other than *emeriti*. The overseers have a veto power; major actions of the corporation, including appointments for more than 1 year of officers of instruction or administration, are not valid without their consent. The overseers have more than forty visiting committees which regularly visit and report on the various faculties, departments of instruction, and other institutions; one of these is the Committee to Visit the University Library. The chairman of this committee is a member of the Board of Overseers; its thirty-odd members are individuals (not necessarily Harvard graduates) particularly interested in the library, and they include several of its major benefactors.

There are nine faculties: Arts and Sciences (which is responsible for both Harvard College and the Graduate School of Arts and Sciences), Business Administration, Design, Divinity, Education, Government, Law, Medicine (which includes Dental Medicine), and Public Health. Each of the faculties maintains one or more major libraries, except that the Francis A. Countway Library of Medicine serves both Medicine and Public Health. In addition, there are numerous research institutions—institutes, museums, observatories, etc. Most of these are related administratively to the Faculty of Arts and Sciences, and several of them have substantial research libraries. The deans of the various faculties and the directors of research institutions are administrative officers to whom Harvard librarians report, and library budgets form part of the budgets submitted to the corporation by these deans and directors. Harvard's financial tradition is "every tub on its own bottom"; each faculty and institution is expected to depend on "its own" funds—income that it generates and returns from endowment funds designated by terms of gift for its use—rather than upon appropriation of general university funds.

II. Administration and Finances

THE UNIVERSITY LIBRARY

The director of the University Library is chairman of the University Librarians' Council, which is made up of associate and assistant university librarians, the chief librarians of the various faculties, and the librarian of the Harvard-Yenching Institute. He is a member *ex officio* of the University Library Committee, an advisory body with a membership that includes the chief librarians of major Harvard libraries and the professors who are chairmen of their library committees. The director is also a member *ex officio* of the library committee of each faculty, department, and research institution.

Officers responsible to the director include the librarian of Harvard College (who is also responsible directly to the Dean of the Faculty of Arts and Sciencies), the curator of the University Archives, the editor of the *Harvard Library Bulletin,* and the head of the Development Office. The librarian of each Harvard library reports to him, but is primarily responsible to a dean, department head, or director of a research institution. In his advisory and coordinating activities, the director is assisted by several assistant and associate university librarians, including the officers who are responsible, in the College Library, for building planning, cataloging, data processing, personnel, public services, and resources and acquisitions.

THE COLLEGE LIBRARY: GENERAL COLLECTIONS

The statutes provide that "The collection known as the Harvard College Library is for the general use of the whole University, but as it is in a special sense the

Library for the Faculty of Arts and Sciences, it is included as a sub-department of that Faculty." The librarian of Harvard College is its administrative head. Major officers reporting to him are those in charge of building planning, the Business Office, and the Personnel Office; the heads of four departments (Catalogue, Data Processing and Photographic Services, Public Services, and Resources and Acquisitions) based in the Widener building; the Houghton Library (rare books and manuscripts); the Fine Arts Library (located in the Fogg Museum); the Lamont Library (undergraduate); the Hilles Library (the Radcliffe College Library, primarily for undergraduates, which was attached administratively to the Harvard College Library in 1971); and the Science Center Library (to be opened in 1973).

The Carl H. Pforzheimer University Professor is *ex officio* chairman of the Library Committee of the Faculty of Arts and Sciences (the faculty advisory committee for the Harvard College Library), as well as of the University Library Committee, which has been mentioned above. It has also been noted that college library officers in charge of building planning, of personnel, and of the four departments based in Widener have university-wide responsibilities for advice and coordination, and hold appointments as assistant or associate university librarians. One anomaly within the college library departments should be noted: three divisions—Hebrew, Middle Eastern, and Slavic—handle selection and acquisition of materials within their scope as well as cataloging and specialized reference service. The first two are divisions of the Catalogue Department; the Slavic Division is attached to Resources and Acquisitions.

On July 1, 1971 the central collections of the Harvard College Library, including the Harvard University Archives and Harvard books in the New England Deposit Library, contained 3,722,327 volumes and pamphlets, or slightly more than 43% of total Harvard University Library holdings.

THE HOUSE LIBRARIES

Most Harvard freshmen live in dormitories in the old College Yard or at Radcliffe; there are nine residential houses, each with its own library (selected primarily to provide general reading and material for tutorial work), for the three upper classes, and a tenth house library (Dudley) serves undergraduates who do not live in a residential house. Librarians of these house libraries, normally graduate students, are selected jointly by the house masters and the librarian of Harvard College; each reports to a library committee of his own house, and is advised and supervised by the librarian of the Lamont Library. Holdings of the ten house libraries, as of July 1, 1971, numbered 118,952 volumes and pamphlets.

DEPARTMENTS AND DIVISIONS OF THE FACULTY OF ARTS AND SCIENCES

The twenty-seven libraries maintained by twenty-three departments or divisions of the Faculty of Arts and Sciences vary widely in function as well as in size. Nine of them, housed in the Widener or Lamont buildings (Afro-American Studies, Celtic, Classics, English, History of Science, Linguistics, Near Eastern Languages and Literatures, Palaeography, and Sanskrit), are noncirculating; they duplicate holdings of the general research collection and are primarily useful to graduate students who need to be assured of access to basic works in their subjects. Similar purposes are served by two libraries—Mathematics, and Statistics—that will move to the Science Center in 1973, and by the libraries for History, Modern Languages, Philosophy, Psychology, and Social Relations. The Government Department maintains a Data Center, chiefly for tapes and punched cards. Departments of the faculty also provide small collections for Biochemical Sciences Tutorial, Classics Examinations, and the Committee on Experimental Geology and Geophysics, as well as the undergraduate Jefferson Physics Library, which will be absorbed by the Science Center Library. At the other extreme, six departments of the Faculty of Arts and Sciences have libraries which constitute Harvard's research collections for major subjects or subdivisions thereof. These departments are Biology (Biological Laboratories Library), Chemistry, the Division of Engineering and Applied Physics (Gordon McKay Library), Geology, Music (both the Eda Kuhn Loeb Music Library and the Isham Memorial Library of Early Instrumental Music), and Physics.

Ultimate administrative responsibility for all the libraries in this group rests with the chairmen of departments of the faculty, but the smaller collections are staffed by student assistants, and those in the Widener and Lamont buildings are supervised by members of the Public Services Department of the college library. In 1966 the position of science specialist in the Harvard College Library was established, and this officer, who will head the Science Center Library when it is opened, has been responsible for advising and furthering the coordination of science libraries of departments as well as those attached to the scientific research institutions.

On July 1, 1971 the libraries of departments and divisions of the Faculty of Arts and Sciences were reported to hold 390,763 volumes and pamphlets, of which some 58% were in the three largest of these libraries—McKay, Music, and Chemistry.

LIBRARIES AFFILIATED WITH THE FACULTY OF ARTS AND SCIENCES

The thirty-eight libraries of centers, offices, and research institutions affiliated with the Faculty of Arts and Sciences are also a highly diverse group. Ten are located outside the Boston area. The Biblioteca Berenson is at Villa I Tatti near Florence, Italy. The Center for Hellenic Studies and the Dumbarton Oaks Research Library and Collection (which maintains the library of the Bliss Pre-Columbian Collection and a Garden Library in addition to its Research Library for Byzantine studies) are in the District of Columbia. Stations of the Astronomical Observatory in Fort Davis, Texas, and Harvard, Massachusetts, have small working libraries, and there are libraries at the Harvard Forest in Petersham, Massachusetts, and the Harvard Black Rock Forest in Cornwall, New York. The university still lists among its possessions the library of the Atkins Garden and Research Laboratory near

Cienfuegos, Cuba. Perhaps it should be observed that, important as some of these outlying collections are in their special fields, all of them together account for less than 2.5% of total Harvard University Library holdings.

Only some 70,000 volumes and pamphlets (less than 1% of total holdings) are in the seventeen libraries of offices, research centers, and other institutions that support working rather than research collections. These serve the Busch-Reisinger Museum of Germanic Culture, the Cambridge Electron Accelerator, the Center for International Affairs (two libraries), the Center for Middle Eastern Studies (two libraries), the Committee on Extension Courses, the East Asian Research Center (two libraries), the Harvard Economic Research Project, the Health Services, the Nieman Fellows (in journalism), the Personnel Office, the Placement Office, the Russian Research Center, the Warren Center for Studies in American History, and West European Studies.

The Milman Parry Collection of Oral Literature and the Rubel Asiatic Research Bureau Library (fine arts) are relatively small but highly specialized research collections. For the biological sciences, some 460,000 volumes and pamphlets are provided by six libraries—the Museum of Comparative Zoology, the Arnold Arboretum and Gray Herbarium (which share a single library staff), the Farlow Reference Library (cryptogamic botany), the Economic Botany Library of Oakes Ames in the Botanical Museum, and the Oakes Ames Orchid Library. The other research collections in this group of libraries affiliated with the Faculty of Arts and Sciences are the John G. Wolbach Library of the Harvard College Observatory (20,616 volumes), the Peabody Museum of Archaeology and Ethnology Library (102,405 volumes), and the Harvard-Yenching Library (474,349 volumes), where most of the university's holdings in East Asian languages are concentrated.

Legally, Harvard-Yenching belongs to a corporation other than The President and Fellows of Harvard College, but this does not materially affect the relationship of its library to the University Library system. As has been noted, the science libraries in this group, like those of faculty departments, have been advised and assisted since 1966 by the Science Specialist in the Harvard College Library.

LIBRARIES OF OTHER FACULTIES

Five of the faculties other than Arts and Sciences call for no special comment with regard to library administration. These are Business Administration (Baker Library), Design (Frances L. Loeb Library), Divinity (Andover-Harvard Library), Education (Monroe C. Gutman Library-Research Center and special Programmed Instruction Library), and Law (Law School Library).

The Faculty of Public Administration is responsible for the John Fitzgerald Kennedy School of Government; in addition to its Littauer Library it maintains special libraries for the Fiscal Policy Seminar, Collective Bargaining Seminar (Industrial Relations Library), and the Science and Public Policy Program. Littauer is unlike the libraries of the other graduate schools: except for its public administration and state document collections, it does not have extensive research materials that are not to be found elsewhere in the university, and a major function of Littauer is to serve as a departmental library for students enrolled in economics and government programs of the Faculty of Arts and Sciences. Funds from the budget of the Harvard College Library help to support the Littauer and Industrial Relations Libraries, and the administrative relationship is close.

The Francis A. Countway Library of Medicine is also unique. It is the library of both the Faculty of Medicine (which includes both the Medical School and the School of Dental Medicine) and the Faculty of Public Health. Moreover, it combines the resources and services of the Harvard Medical Library and the Boston Medical Library, a private library founded in 1875 by a group of Boston doctors, which retains its corporate identity and shares responsibility for both administration and financial support of the Countway Library. There are three additional Harvard libraries in the medical field: the Center for Population Studies Library (serving a department of the School of Public Health), the Library of the Center for Community Health and Medical Care, and the Lucien Howe Library of Ophthalmology.

Total holdings of the libraries of faculties other than arts and sciences were reported, on July 1, 1971, to number 3,032,059 volumes and pamphlets. The chief administrative officer of each faculty is a dean, to whom the librarian of the faculty is primarily responsible.

FINANCES

While there is increasing consultation on budgets throughout the university library, there is no Harvard University Library budget; indeed, the budgets of many small library units are deeply buried in the budgets of departments or institutions. Expenditures, however, are reported annually to the director, and totals for the fiscal year 1970/71 were $1,824,250 for books and periodicals, $337,339 for binding, $5,709,481 for salaries and wages, $678,376 for retirement and health programs, $978,360 for building maintenance charges (for the college library, Museum of Comparative Zoology, and Countway Library only), and $1,090,826 for other purposes, making a grand total of $10,618,632. Hilles expenditures are included in these figures, though it did not technically become a part of the Harvard University Library until the close of the fiscal year in question. The central collections (Widener, Houghton, Lamont, and Fine Arts) accounted for $5,369,163 of the total.

It is a remarkable fact that, until very recent years, all funds for the purchase of books and other research materials for the central collections were financed by gifts for current use and by the income of endowed book funds, the earliest of which dates from 1774. The Faculty of Arts and Sciences now appropriates some funds for acquisitions, but only a fraction of the amount received from endowments. It should be noted also that, under an arrangement approved in 1949, half of the general overhead of the college library is paid from unrestricted funds of the university; this was voted by the corporation "in recognition of the place of the

Harvard College Library among the major repositories of the scholarly world, and in view of their [the Corporation's] continuing obligation to assist in the advancement of learning and its perpetuation to posterity."

COORDINATED DECENTRALIZATION

The administrative and financial structure of the university library, as of Harvard generally, has been characterized as one of coordinated decentralization. There are evident difficulties—e.g., in communication, in building collections without neglecting some subjects or needlessly duplicating holdings in others, in adopting and then in adhering to consistent salary scales and other personnel standards. The user cannot expect to find uniform hours of opening, loan regulations, cataloging codes, or classifications throughout the system. Flexibility, however, is among the advantages—the relatively small and independent unit may respond to the needs of its particular clientele more readily than a centralized system could do. Neither intellectual nor financial responsibility is assigned to a remote or monolithic bureaucracy; a close relationship is encouraged between each unit of the library and those students and professors who chiefly depend on it. There has been increasing emphasis on coordination during recent years, but the objective has been to strengthen the library units that make up the system, not to absorb them.

III. Personnel

The staff of the university library in 1971 (with part-time and hourly employees, including students, counted on a full-time-equivalent basis) numbered 846, of whom 228 (or 27%) were classified as professional librarians and held corporation appointments as Officers of Administration. Approximately 49% of the staff was attached to the central collections of the Harvard College Library.

By 1972 the personnel program originally formulated in 1958 (*1*) had been modified in some details, and further changes, proposed by an elected Study Committee of the professional staff, were under consideration; both staff and administration, however, continued to support the basic principles of the 1958 program. It recognizes "that the library's professional staff is a group within the university fully as professional as the teaching faculty and entitled to comparable perquisites," but reflects a conviction that the library staff should "stand on its own feet as a distinct professional group with a personnel program specifically designed for it." Librarians are appointed as Officers of Administration, not as Officers of Instruction; the two groups have the same insurance and pension plans, but the Officers of Administration have only a 1-month vacation and are not eligible for sabbatical leaves. There are "up or out" features in the ranking and appointment system for librarians, but on a different schedule and basis from those of the faculty system, and periodic evaluation and review procedures are designed to fit the library rather than the faculty situation.

Prior to 1937 Harvard very rarely employed a library-school graduate. By

1957 approximately half of the professional staff held degrees in librarianship, and more than three-fourths did so by 1971; but the adoption of inflexible requirements is not favored.

THE INTERNSHIP PROGRAM

There is no school of librarianship at Harvard, but the Harvard Library, through an intership program that was developed during the 1950s, has been enabling carefully selected college graduates to earn professional degrees at other institutions while working in the library. More than 120 persons had completed this program by 1971, and some 40 were then enrolled in it. In addition to their salaries as full-time employees, interns are reimbursed for half of their tuition costs and are allowed 70 free hours per year for study or class work as well as a month's vacation; flexible working schedules are arranged in so far as is practicable. There is a salary differential for those who enter the program with advanced degrees in academic subjects. The program normally requires 2 to 3 years.

IV. Physical Plant

Units of the library occupy all or part of sixty-four different Harvard buildings; in 1972 the total area devoted to library purposes was approximately 1,350,000 sq. ft., to which more than 200,000 sq. ft. were soon to be added by buildings then under construction or in the planning stage.

The following account deals only with the Harvard College Library. For other library units that occupy buildings of their own or major portions of buildings, see Section XII (Other Harvard Research Libraries and Their Collections), particularly the following sections: Anthropology (the Tozzer Library of the Peabody Museum), Astronomy (the John G. Wolbach Library of the Harvard College Observatory), Business Administration (Baker Library), Design (the Frances L. Loeb Library), Education (the Monroe C. Gutman Library-Research Center), Law (Langdell Hall), Medicine (the Francis A. Countway Library), Music (the Eda Kuhn Loeb Library), Public Administration (the Littauer Library), and Theology (the Andover-Harvard Library).

Most of the Harvard College Library is housed in the Widener, Houghton, and Lamont buildings (447,000 sq. ft. in all); these are connected by tunnel, and a fourth adjacent central unit, the Pusey Library (87,000 sq. ft.) was being planned in 1972; $8,000,000 was in hand for its construction. In addition to these four central units, the college library includes the Fine Arts Library (housed in the Fogg Museum), the Hilles Library at Radcliffe, and the Science Center Library; it also occupies rented storage space in the New England Deposit Library.

WIDENER LIBRARY *(2)*

Widener was opened in 1915 (see Figure 1). The architect was Horace Trum-

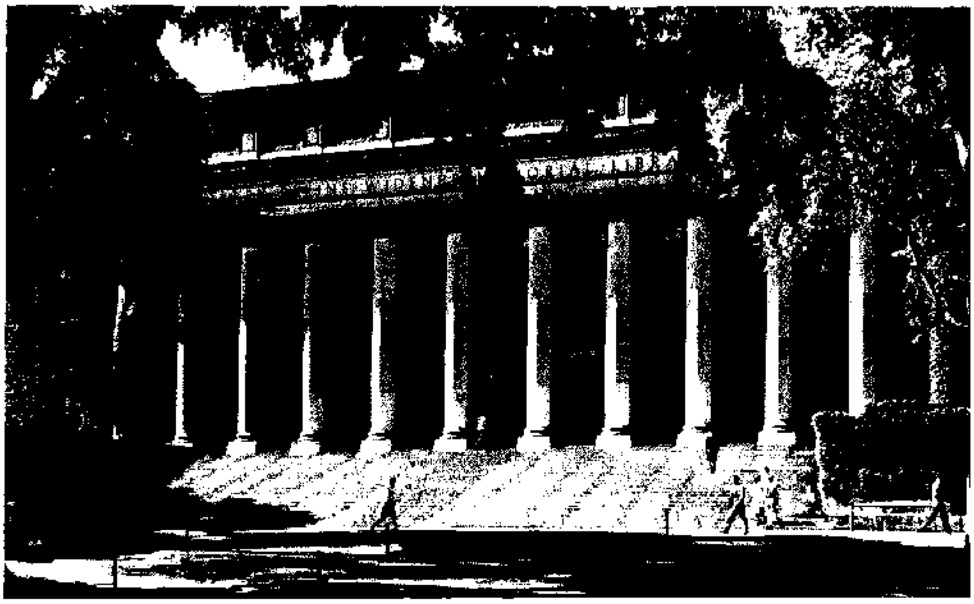

FIGURE 1. *Harry Elkins Widener Memorial Library. (Photograph by Walter R. Fleischer.)*

bauer, and the building was given by Mrs. George D. Widener in memory of her son, Harry Elkins Widener, who was lost when the *Titanic* sank in 1912. Floor areas total approximately 300,000 sq. ft., and noteworthy features include the 410 stalls (or "carrels," as they would be called elsewhere) in the stacks for graduate students and 110 faculty studies. Ten levels of stack, with one floor above them housing studies and special collections, form the East, South, and West sides of the building; at its center, between two light courts, are the Widener Rooms, containing Harry Widener's remarkable personal collection (see Section X below). Widener is the headquarters of the University Library, housing the office of the director, the Union Catalogue, and college library departments responsible for cataloging, data processing and photographic services, public services, and resources and acquisitions. Several small special libraries are also located in the building.

HOUGHTON LIBRARY (*3*)

Houghton (34,000 sq. ft.) was opened in 1942. The architects were Perry, Shaw, and Hepburn, and the donor was Arthur Amory Houghton, Jr. The air-conditioning system was designed to provide optimum conditions for the preservation of rare books and manuscripts, a new kind of special cool lighting was used in display cases, and stack shelving was intended to minimize the danger of damage to bindings. Houghton is the university's central repository for rare books and manuscripts, though a number of Harvard libraries have their own special collections of such materials. It also houses the Department of Printing and Graphic

Arts. Both a bridge and a tunnel connect Houghton with Widener; there is also a tunnel to the stack beneath Lamont.

LAMONT LIBRARY (*4*)

Lamont (113,000 sq. ft., including the two levels beneath the building that serve as additions to Widener and Houghton, with which they are connected by tunnel) was opened in 1949 (see Figure 2). The architects were Coolidge, Shepley, Bulfinch, and Abbott, and the major donor was Thomas W. Lamont. As the first separate undergraduate library in a university, Lamont was something new; the idea has been adopted or adapted by many other institutions. The building provided completely open stacks and a wide variety of accommodations for readers.

PUSEY LIBRARY

By 1966 the stacks in Widener were overcrowded and it was impossible to provide studies and individual stalls for more than a fraction of the professors and students who needed them. An annex or addition appeared to be essential because decentralization had already gone so far that only closely interrelated subject collections remained in Widener. A fund-raising campaign was undertaken, and at commencement in 1971 it was possible to announce that the addition to the college library would be named for Nathan M. Pusey, who was then retiring as president of the university. The Pusey Library is being designed as the first step in a long-

FIGURE 2. *Lamont Library, with a portion of Houghton Library at the right.*

range plan for use of the site area, and is to be integrated as closely as possible with Widener and Houghton and their present annexes beneath Lamont.

THE SUSAN MORSE AND FREDERICK WHILEY HILLES LIBRARY (5)

Hilles (100,000 sq. ft.) was opened in 1966 (see Figure 3). The architects were Harrison and Abramovitz, and the building was named in honor of the major donors, Mr. and Mrs. Hilles. It is located in the Radcliffe dormitory area, approximately three-quarters of a mile from Widener and Lamont. The building was so attractive that it was heavily used from the outset by Harvard men; with residential integration of Harvard and Radcliffe students, Hilles functioned as a second undergraduate library for the university and, under a new arrangement between Harvard and Radcliffe, it became an administrative unit of the Harvard College Library on July 1, 1971. (For its collection, see Section VIII below.)

THE SCIENCE CENTER

Another unit will be added to the Harvard College Library in 1973, when library facilities will be opened in the university's new Science Center. The library space in this building will house an undergraduate science library, to which relevant materials will be transferred from Lamont, and a general and retrospective science collection. The research collection for mathematics will also be trans-

FIGURE 3. *The Susan Morse and Frederick Whiley Hilles Library. (Photograph by Lynn McLaren.)*

ferred from Widener, and the departmental libraries for Mathematics and Statistics will move to the Science Center.

STORAGE IN THE NEW ENGLAND DEPOSIT LIBRARY

More than 300,000 volumes belonging to the Harvard University Library are stored in the New England Deposit Library, a cooperative "libraries' library" that was opened in 1942. This is located on a site adjacent to the Harvard Business School, and is linked to Harvard libraries by regular messenger service.

V. Collections in General

An account of individual Harvard Library collections and their content will be given in Sections VIII–XII below. An overall view must take account of the fact that a university library of more than 8,600,000 volumes can be assumed to have exceptional resources in many fields. Indeed, since strength and weakness are highly relative terms, some Harvard collections that seem weak or undistinguished might appear to be strong if they formed part of a much smaller library.

In history, in literature and the humanities generally, in the biological sciences, in law, anthropology, business administration, medicine, city and regional planning, and many areas of theology, the library clearly has great strength. It is weakest in subjects in which the university had developed few, if any, programs of teaching and research—agriculture, technology generally, and many subdivisions of engineering and related subjects. The strength of the Massachusetts Institute of Technology, which is less than 2 miles from Harvard Square, has been a factor in development of Harvard research programs and library resources; the desirability of avoiding needless duplication has always been recognized.

From a regional or geographical point of view, the Harvard Library is very strong for the United States and Canada, for European countries, including the Slavic nations, for the Far East and for the Middle East. Its Latin American holdings are somewhat less distinguished. For South and Southeast Asia and for Africa, while its collections of western-language publications are extensive, its holdings in most of the vernacular languages are relatively weak.

SELECTION AND ACQUISITION

Many subjects are the province of special libraries and there is great diversity in selection procedures. Even in the Harvard College Library, which is not so much a truly general library as a collection of languages and literatures, history, and the social sciences, the selection and acquisition of rare books and manuscripts is a responsibility of the Houghton Library staff, and there are special divisions for Hebraica and Judaica, the Middle East, and Slavic languages. For the rest, the work of the Book Selection Division of the Resources and Acquisitions Department is now organized on a language and area (rather than a subject) basis.

National bibliographies are the chief sources used in selecting current publications of countries for which they are available. Faculty participation is welcomed and faculty advice is often sought, but most of the work is done by selection specialists on the library staff.

Aside from its subject responsibilities under the Farmington Plan, the Harvard Library has made very little use of blanket orders. Its exchange program has been concentrated on those countries and types of publication for which commercial acquisition channels are inadequate.

BIBLIOGRAPHICAL ORGANIZATION

Diversity of cataloging codes and classification systems has been cited above as among the results of decentralization. A Union Catalogue (main entries) of the university library is maintained in Widener. The Widener "Public Catalogue" is a conventional dictionary catalogue of the collections in Widener, Houghton, and Lamont; a subject approach to other collections is provided only by their own catalogs. Materials in the Greek and Cyrillic alphabets are included in the Union and Public Catalogues, but Hebrew and Yiddish, Far Eastern, and Near Eastern languages are covered by separate catalogues.

Increasing portions of the collection have been listed in book-form, published catalogs during recent years. The Widener Library shelflist is being converted to machine-readable form and the computer printouts are being published, class by class (*6*). Included in the volume or volumes for each class are a classification schedule, a classified listing of books by call number, an alphabetical listing by author and title, and a chronological listing. The library has also published its *Catalogue of Arabic, Persian, and Ottoman Turkish Books* (1968, 5 vols.); *Catalogue of Hebrew Books* (1968, 6 vols., and *Supplement,* 1972, 3 vols.); *Dictionary Catalogue and Shelflist* of the Theodore Roosevelt Collection (1970, 5 vols.); catalog of *The Kilgour Collection of Russian Literature, 1750–1920* (1959); and *French Sixteenth Century Books* (1964—part I of the *Catalogue* of the Department of Printing and Graphic Arts). *Core Collection: An Author and Subject Guide* is now an annual publication of Baker Library, which has also published the *Catalogue* of its Kress Library of Business and Economics (1940–1964, 3 vols., and *Supplement,* 1967). *A Classified Catalogue of Korean Books* (1962–1965, 2 vols.) has been published by the Harvard-Yenching Library. Commercial publishers have issued the catalogues of Baker Library (Hall, 1971, 32 vols.), the Design Library (Hall, 1968, 44 vols., and 2 vol. *Supplement,* 1970), the Fine Arts Library (Hall, 1971, 15 vols., and supplementary volume for *Catalogues of Auction Sales Catalogues*), the Law School Library *Catalog of International Law and Relations* (Oceana, 1965–1967, 20 vols.), the Museum of Comparative Zoology (Hall, 1967, 8 vols.), and the Peabody Museum of Archaeology and Ethnology Library (Hall, 1963, 54 vols., and *Supplement,* 1972, 12 vols.).

There are nearly as many classification systems in use at Harvard as there are libraries, though a trend may be indicated by the fact that the Gutman Library of the Graduate School of Education is being reclassified into the Library of Congress system and the Andover-Harvard Theological Library adopted that system in 1971 for future acquisitions. The collections in Widener are classified in a system that was developed after 1877; it influenced the Library of Congress classification to some extent and has been influenced by published Library of Congress schedules; arrangement within subjects is often similar, but Harvard and Library of Congress notations are completely different.

VI. Services

SERVICE TO THE HARVARD COMMUNITY

The Harvard Library has been described as "the largest library in the world that permits most of its users access to the stacks that contain most of its books." Except for manuscripts and rare books in the Houghton Library and other special collections and for a few volumes on closed reserve for course use, there are few restrictions on access to the bookstacks by members of the university. Recorded loans, consequently, represent only a fraction of total use; even so, circulation records show more than 1,600,000 loan transactions during 1970/71, of which more than 1,010,000 were in the College Library. The Widener circulation system is automated. Rapid copying services are available throughout the university library, and are heavily used.

Reference services are supplemented by the guides and some of the other publications that will be mentioned below. The general Harvard policy has been to help readers to learn to use the library rather than to find the answers to their questions for them. There are variations; Baker Library, for example, traditionally has provided more reference assistance for faculty and students than most of the other units.

SERVICES TO NON-HARVARD SCHOLARS

Restrictions on use of the library by outsiders have been imposed, in general, only to the extent that has seemed necessary in order to prevent such use from seriously impairing service to the Harvard community. Undergraduate collections are open only to members of the university, but the Houghton Library's rare books and manuscripts, while they must be used in the building, are accessible to scholars "as freely as is consonant with their conservation and orderly administration." Fees for use of Widener have been increased during recent years, but scholars resident in the vicinity may be granted use of books in the library without fee for 1 month in any 1 year, and visiting scholars may have this privilege for 3 months without charge.

The Widener Library lends some 10,000 volumes per annum on interlibrary loan, while borrowing only about 1,300 from other institutions. Undoubtedly the most extensive extra-Harvard service is provided by the Countway Library of Medicine. Its clientele includes members of the Boston Medical Library and of the Massachusetts Medical Society in addition to Harvard students and officers; it is also the Regional Medical Library of New England under a program supported by the National Library of Medicine, and annually supplies more than 50,000 documents on interlibrary loan or in photocopies in lieu thereof.

PUBLICATIONS

In all, the library or one of its units is the author or publisher (or both) of more than 430 volumes now in print, in addition to nine periodicals, seven annuals, and some sixty reproductions and postcards published by the Department of Printing and Graphic Arts. The *Widener Library Shelflist,* which has been mentioned above, began publication in 1965 and more than forty volumes of it had appeared by 1972, while the fourteen catalogs that have been listed, with their supplements, run to a total of 217 volumes. Many of the publications originating with individual units or collections of the library will be mentioned in the accounts of these units or collections that form the latter portion of this article, but a few general publications of the university library should be noted here:

The *Harvard Library Bulletin* was issued three times a year from 1947 through 1960; in 1967 it was revived as a quarterly. Articles in the *Bulletin* are devoted to the library and its collections, to research based on materials in Harvard libraries and museums, and to interpretation of developments in the world of books and scholarship. One regular feature is a current bibliography which attempts to list all publications of which the Harvard Library or one of its units is the publisher, the author, or the subject. Forerunners of the *Bulletin* include a series of *Bibliographical Contributions* (sixty numbers, 1878–1911, most of which have recently been reprinted), *Harvard University Bulletin* (1876–1894), and *Harvard Library Notes* (1920–1940).

A small monthly, *The Harvard Librarian,* has been issued since 1957 to report news and give brief accounts of library collections and activities; since 1968 there has also been a weekly news-sheet for the staff, *HUL Notes*. The *Annual Report* of the Harvard University Library has appeared as a separate publication since 1877/78; it is preprinted from the *Report of the President of Harvard College and Reports of Departments,* and includes a tabulation of acquisitions and expenditures for all units of the library. Two important special reports are Keyes D. Metcalf's *Report on the Harvard University Library, A Study of Present and Prospective Problems* (1955) and *The Harvard University Library, 1966–1976, Report of a Planning Study . . .* by Merle Fainsod and Douglas W. Bryant (1966).

A series of *Guides to the Harvard Libraries* began publication in 1947, and No. 3 (frequently revised), entitled *The Research Services of the Harvard College Library,* includes useful general information. Though its most recent (4th) edition appeared in 1934, *The Library of Harvard University: Descriptive and Historical Notes* (often cited as "Potter" because this edition was compiled by Alfred Claghorn Potter) is the most comprehensive single account of the university library, and its descriptions of subject collections are still useful. A much briefer general account of the library and its history, *Harvard University Library* by Rene Kuhn Bryant, was published in 1969.

INTERLIBRARY COOPERATION

Cooperative efforts to increase resources and improve services have included participation in cataloging projects and in the Farmington Plan. The Foreign Newspaper Microfilming Project, which the Harvard Library began in 1938, was subsequently transferred to the Center for Research Libraries, and Harvard became the first East-coast member of the Center in 1966. The Countway Library is a participant in the State University of New York Biomedical Communications Network and is a regional search center for the national Medical Literature Analysis and Retrieval System (MEDLARS). Locally, Harvard had a leading role in establishing the New England Deposit Library for cooperative storage of infrequently used materials. With the Massachusetts Institute of Technology it is now considering the possibility of a joint library of digitally recorded materials in computer format. The Andover-Harvard Library of the Harvard Divinity School is supporting the cooperative library program now being developed by the Boston Theological Institute, an organization formed in 1967 by seven Boston-area theological schools.

VII. General History of the Library

THE SEVENTEENTH CENTURY

John Harvard died on September 14, 1638, less than 2 years after the General Court of the Colony had voted to establish a college and only a few weeks after the first classes had been held. Harvard was only thirty-one; he had been awarded an M.A. by Cambridge University (Emmanuel College) in 1635, and had come to Massachusetts in 1637 to serve as a minister in Charlestown. He left to the infant institution half of his estate, amounting to £779 17/2, and all of his library, which contained some 400 volumes. The college was named for him by vote of the General Court on March 13, 1639.

John Harvard's books, more than three-fourths of which were theological treatises (7), were highly relevant to the curriculum and purposes of the seventeenth-century college. By far the largest acquisition of the century was the library of another dissenting minister, Theophilus Gale (1625–1678), who bequeathed a collection that for many years constituted more than half of the entire college library.

A dwelling house was the first home of the new college; by 1640 the first building constructed for the college was ready to receive the library, which remained there until 1676, when it was moved to the first Harvard Hall. Daniel Gookin was paid 50 shillings "for his paines in removing the library." He was the third in the line of librarians of Harvard College; the first recorded appointment of a librarian was on March 27, 1667, when Solomon Stoddard "was chosen Library keeper."

A code of "Library Laws" adopted by the overseers also dates from 1667. Books were to be borrowed and returned between 11 A.M. and 1 P.M.; the normal loan period was 1 month, but there was to be "no lending or removing out of the Library the new Globes or books of extraordinary vallue . . . but with very great caution & upon extraordinary occasion." Twice a year, all books were to be "actually called in & sett in their places," and at the end of his 2-year term the librarian was required to "make good" any books that were missing.

THE EIGHTEENTH CENTURY (*8*)

The library's first printed catalog, listing approximately 3,500 volumes, was published in 1723, with supplements in 1725 and 1735. Slow growth continued until, in January 1764, all but 404 of the books accumulated over more than a century and a quarter were lost when Harvard Hall burned to the ground. Only one of the surviving volumes, John Downame's *Christian Warfare Against the Deuill, World and Flesh* (1633–1634) has been conclusively identified as having formed part of John Harvard's original bequest. (It was charged out—overdue—on the date of the fire.)

The Provincial General Court, which had been driven from Boston by a smallpox epidemic, was occupying a portion of Harvard Hall at this time, and it appropriated public funds for construction of a new Harvard Hall (still standing), which was ready to house the library in 1766. In response to an appeal for help, some 4,350 volumes, including 1,300 from John Hancock, were donated.

Members of the Hollis family never visited America, but they were the library's greatest eighteenth-century benefactors. Thomas Hollis (1639–1730) contributed advice on management in addition to books; he wrote in 1725, "Your library is reckond here to be ill managed, by the account I have of some that know it, you want seats to sett and read, and chains to your valluable books . . . you let your books be taken at pleasure home to Mens houses, and many are lost . . . if you want roome for modern books, it is easy to remove the less usefull into a more remote place, but do not sell any, they are devoted." Thomas Hollis of Lincoln's Inn (1720–1774) redoubled his gifts after the fire (*9*). A contemporary described him as "a bigotted Whig, or Republican; one who mis-spent an ample fortune in paving the way for sedition and revolt in this and the neighboring kingdoms, by dispersing democratical works, and sometimes highly ornamented with daggers, caps of liberty, &c." Harvard Library copies of books given by Thomas Hollis of Lincoln's Inn include some on which he had the owl (a symbol he used to designate theological or philosophical works) stamped upside down on the binding spine as an indication that, though he gave the book, he disapproved of its content (*10*). The first of the Harvard Library's book funds was a legacy from him; it has paid for many hundreds of volumes over the past two centuries.

Revised and expanded "Library Laws" of 1736 were no more liberal than those of 1667; indeed, they appear to have reduced hours of circulation from 2 per day to 3 per week—on Fridays only, from 11 A.M. to 2 P.M. New "Laws" adopted in

1765 recall the recent conflagration, providing that "No academical Exercises shall be allow'd in the Library; Nor shall any Candle or Lamp be ever carried into it." There are detailed instructions: "The Librarian shall take Care, That the Library be well air'd one Day in a Week at least, if the Weather permit; That it be swept & dusted once in a Month or oftner if necessary; That a Fire be made in it one Day in a Month, from the last of October to the last of April, Vacation Times alwaies excepted. The Librarian or his Substitute shall constantly be present, while there is a Fire, & shall see it thoroughly extinguish'd by Day Light."

An interesting innovation of 1765 was the provision that "There shall be a part of the Library kept distinct from the Rest as a *smaller Library* for the more Com̃on Use of the College. When there are two or more Setts of Books, the Best shall be deposited in the great Library, & the Others in the great or small library, at the Discretion of the Com̃tee for placeing the Books. This Com̃tee shall also lay apart, & wth the Assistance of the Librarian prepare a Catalogue of such Books, as They judge proper for the smaller Library." As a result, in 1773 a 27-page select catalog of books in most frequent use by undergraduates was printed.

Seditious and republican (or even democratical) principles had been disseminated by Thomas Hollis of Lincoln's Inn and the library that he aided; Revolution broke out in 1775. Samuel Phillips, Jr., wrote in his diary, of the Battle of Bunker Hill, "Amid all the terrors of battle I was so busily engaged in Harvard Library that I never even heard of the engagement (I mean the siege) until it was completed." Soon afterward, however, Harvard buildings served as barracks for the Continental Army, the college moved to Concord for several months, and it was not until May 1778 that a committee of the overseers could report that all the library's books had been returned from Concord and other neighboring towns to Cambridge.

A manuscript subject-catalog was developed during the 1780s and was combined with an alphabetical list of pamphlets as the basis for a printed catalog that was published in 1790. By this time only about a quarter of the books were theological, and major poets and dramatists were fairly well represented in the collection.

THE EARLY NINETEENTH CENTURY

The acquisition in 1818 of the Ebeling Collection of Americana is clearly a landmark in the library's history. This was purchased for the library by Colonel Israel Thorndike; it consisted of 3,500 books, supplemented by numerous maps, manuscripts, and other materials, and it is believed to have been the finest collection on America then in existence. Henceforth the Harvard Library could justly claim to be a research library in the modern sense of the term, particularly since its Americana holdings were soon materially further strengthened by the David B. Warden collection (presented by Samuel Atkins Eliot in 1822) and by the collection of Obadiah Rich (1830).

Joseph Green Cogswell was instrumental in bringing the Ebeling Collection to Harvard, and he was librarian of Harvard College from 1821 to 1823. He is better known for his later achievements as organizer and first superintendent of the Astor Library and consequently as a major figure in the history of the New York Public Library, but one enduring result of his brief administration at Harvard was the adoption of a subject-classification system for shelving books, replacing the traditional plan of keeping together those presented by each donor.

This period also saw the establishment of the first separate libraries for the professional schools—Law in 1817, Medicine in 1819, and Divinity in 1826. Many major research-institution libraries date from the second half of the century. More space for the college library was provided in Harvard Hall in 1815, and the third (and last) general printed catalog appeared in 1831, but major innovations in building and in cataloging were to come a little later.

1841–1897: SIBLEY AND WINSOR

In 1841 the library for the first time occupied a building of its own, a building that had been designed for its use. Gore Hall followed in exterior design the lines of King's College Chapel of Cambridge University, and was described as "a very pure specimen of the Gothic style of the fourteenth century in its form and proportions"; the architect was Richard Bond. An addition to this Gothic structure in 1877 was more innovative; accommodating some 235,000 volumes, it was the first example of a modern library bookstack. In 1895 the interior of the old Gore Hall was torn out to make room for a three-story stack topped by a reading room; at the same time, electric light was installed, and the college library, for the first time in its history, could be opened after dark.

John Langdon Sibley (*11*) became assistant librarian in 1841, the year Gore Hall was opened; to 15 years in that position he added 21 (1856–1877) as librarian of Harvard College. It was not his fault that Gore Hall outlasted him; he tirelessly waged a campaign for a more satisfactory building. As a builder of the collections, however, he was remarkably successful; the library's holdings increased during his 36 years from 41,000 to 164,000 volumes, and he recognized the value of ephemeral materials such as pamphlets and newspapers as well as manuscript diaries and letters. Sibley was proud of having acquired "the name of a sturdy beggar," and his solicitations followed Harvard graduates to all regions of the country and into both Union and Confederate armies.

Development of a card catalog began about 1848; this was for staff use only, but in 1861 the assistant librarian, Ezra Abbot, started a two-part public card catalog—an index of authors and an index of subjects. The latter was a species of classed catalog. This two-part catalog did not give way to a modern dictionary catalog until 1915 (*12*).

Justin Winsor had been chief librarian of the Boston Public Library for 10 years and had recently been chosen by the American Library Association to serve as its first president when, in 1877, he took office as librarian of Harvard College, beginning a 20-year administration. A distinguished historian, he continued Sibley's collection-building, but emphasized service to scholarship; in his first report at

Harvard he declared that "The mere accumulation of books is not in itself sufficient; a great library should be a workshop as well as a repository." There was extensive reclassification of collections during his administration, and he greatly expanded and improved the reserved book system. Free access to the bookstacks was granted to professors and graduate students.

1897–1937: THE COOLIDGE ERA (*13*)

The corporation made an abortive attempt in 1880 to require centralized acquisition and cataloging, but departmental, research-institution, and professional-school libraries continued to go their own ways and no officer was responsible for trying to coordinate them until 1910, when a director of the university library was first appointed. Archibald Cary Coolidge, who served as director from 1910 until his death in 1928, may not have succeeded in solving some of the library's problems of coordination, but his contribution to the development of its research collections is unequalled. Able and energetic, he had remarkable vision as well as a substantial personal fortune, which he gladly used for buying books. He had given important collections of German, Latin American, and Scandinavian history to the library before he became director. Most noteworthy of all was his success in building up strong resources in Slavic history and literature at a time when only a handful of American scholars were prepared to use them; in this, it has been said, he "anticipated Faculty needs by fifty years."

The problem of Gore Hall and space for the central research collection was solved, for the next 20 years at least, when the Widener Library building was given to Harvard by the mother of Harry Elkins Widener. Since a part of the new building covered the site of Gore Hall, there was a difficult period of improvised housing for the library during construction (1912–1915).

The first seven house libraries date from the administration of Robert P. Blake, who was director from 1928 to 1937. The "house plan" of dormitories was made possible by the gift of Edward Stephen Harkness, a Yale man, who provided similar accommodations for students at his alma mater (there they are called "Colleges").

RECENT YEARS

Keyes D. Metcalf (*14*), director of the university library and librarian of Harvard College from 1937 to 1955, was a library-school graduate, unlike any of his predecessors in either position, and had been a member of the staff of the New York Public Library for more than 25 years. The first major problem that he faced at Harvard was to provide space for the central collections; the Widener building, though only 22 years old, was nearly full. Instead of advocating construction of an enormous and costly new central building, he soon developed a program under which Widener, supplemented by four new units, would continue to house as much as possible of the general research collection. The new units would be a building for rare books and manuscripts, a cooperative storage library for infrequently used materials, a separate undergraduate library, and underground stacks beneath the portion of the College Yard adjacent to the central library buildings. Two of the four new units were opened in 1942 (Houghton and the New England Deposit Library). The undergraduate library (Lamont) followed in 1949, and two levels of stack beneath it, connected by tunnel with Widener and Houghton, constituted the first installment of underground stack. The Pusey Library, on which construction is scheduled to begin during 1973, will provide further underground stack; it is a logical outgrowth of the Metcalf plan.

As the first separate undergraduate library in a university, Lamont was the first of a species that has multiplied during subsequent years; the building itself had a noteworthy influence on library architecture, and separation of undergraduate and research services enabled Harvard to improve both substantially. The Houghton Library was also advanced for its time and it facilitated better service, but its most striking effect was upon donors of rare-book and manuscript collections; many of the most valuable gifts of the past 30 years might not have come if the library had been less well prepared to provide for their care, preservation, and scholarly use.

In 1937 the library staff was very largely made up of men and women who had come to it without experience or special training in librarianship, and few of them ever left it to take positions in other libraries. Recruitment of many library-school graduates by Mr. Metcalf brought the staff into the national community of librarians; he built up a strong staff that has been drawn upon during recent years by libraries from coast to coast. The revolution in personnel and personnel policies continued under Paul Buck (*15*); his administration (1955–1964) brought the personnel program of 1958 and the intership program, both of which have been described above.

Major buildings opened during recent years include the International Legal Studies wing at the Law School (1959), the Andover-Harvard Library (1961), the Countway Library of Medicine (1965), Radcliffe's Hilles Library (1966), the Frances L. Loeb Library in Gund Hall (1972), the Gutman Library-Research Center for education (1972), and an addition to the Eda Kuhn Loeb Music Library (1972). Plans for the Science Center Library and the Pusey Library have been mentioned above.

There is a reference earlier in this historical account to the library's third and last general printed catalog of 1831. The 1960s, however, evidently began a new era in catalog publication; 217 volumes of book-form catalogs have been enumerated in Section V above (all but five of them dating from 1963 or later years), and the computer is making it possible to publish a book-form shelflist for Widener (*16*).

Unlike their predecessors as director, Keyes D. Metcalf and Paul Buck also held appointments as Librarian of Harvard College. In 1964, when Merle Fainsod succeeded Professor Buck as Carl H. Pforzheimer University Professor and director, no librarian of Harvard College was appointed, but Douglas W. Bryant, in the new post of university librarian, was designated by University Statute as "the chief executive officer of the College Library." Mr. Bryant became director in 1972 and retained the title university librarian, but a librarian of Harvard College was appointed (Louis E. Martin), who is responsible for administration of the college library. Under the new arrangement, the Carl H. Pforzheimer University Professor continues to be *ex officio* Chairman of the University Library Committee and of the Library Committee of the Faculty of Arts and Sciences.

Directors of the University Library

1910–1928	Archibald Cary Coolidge	1955–1964	Paul Herman Buck
1928–1937	Robert Pierpont Blake	1964–1972	Merle Fainsod
1937–1955	Keyes DeWitt Metcalf	1972–	Douglas Wallace Bryant

University Librarian

1964– Douglas Wallace Bryant

Librarians of Harvard College

(A brief biographical account of each librarian from Stoddard to Sibley appears in Harvard University Library: *Bibliographical Contributions*. No. 52 [1897]).

1667–1672	Solomon Stoddard
1674	Samuel Sewall
1674–1676	Daniel Gookin
1676–1679	Daniel Allin
1679–1681	Daniel Gookin
1681–1690	John Cotton
1690–1693	Henry Newman
1693–1697	Ebenezer Pemberton
1697–1701	Nathaniel Saltonstall
1701	Anthony Stoddard
1701–1703	Josiah Willard
1703–1706	John Whiting
1706–1707	John Gore
1707–1709	Nathaniel Gookin
1709–1712	Edward Holyoke
1712–1713	Thomas Robie
1713–1714	John Denison
1714–1718	John Rogers
1718–1720	William Welsteed
1720–1721	William Cooke
1721–1722	Joshua Gee
1722–1723	Mitchel Sewall
1723–1726	John Hancock
1726–1728	Stephen Sewall
1728–1729	Joseph Champney
1729–1730	Joseph Pynchon
1730–1734	Henry Gibbs
1734–1735	Samuel Coolidge
1735–1737	James Diman
1737	Samuel Cooke
1737–1741	Thomas Marsh
1741–1742	Belcher Hancock
1742–1743	Benjamin Prat
1743–1748	Matthew Cushing
1748–1750	Oliver Peabody
1751	Perez Marsh
1751–1753	Stephen Badger
1753–1755	John Rand
1755–1757	Mather Byles
1757–1758	Elizur Holyoke
1758–1760	Edward Brooks
1760–1762	Samuel Deane
1762–1763	Stephen Sewall
1763–1767	Andrew Eliot
1767–1768	Jonathan Moore
1768	Nathaniel Ward
1768–1769	Caleb Prentice
1769–1772	William Mayhew
1772–1787	James Winthrop
1787–1791	Isaac Smith
1791–1793	Thaddeus Mason Harris
1793–1800	Samuel Shapleigh
1800–1805	Sidney Willard
1805–1808	Peter Nourse
1808–1811	Samuel Cooper Thacher
1811–1813	John Lovejoy Abbot
1813–1821	Andrews Norton
1821–1823	Joseph Green Cogswell
1823–1826	Charles Folsom
1826–1831	Benjamin Peirce

1831–1856	Thaddeus William Harris	1936–1937	Walter Benjamin Briggs (acting)
1856–1877	John Langdon Sibley	1937–1955	Keyes DeWitt Metcalf
1877–1897	Justin Winsor	1955–1964	Paul Herman Buck
1898–1928	William Coolidge Lane	1964–1972	(*see* University Librarian)
1928–1936	Alfred Claghorn Potter	1972	Louis Edward Martin

VIII. Undergraduate Collections

It should be emphasized that undergraduates do not depend on undergraduate collections alone. They use other Harvard libraries heavily, including the Widener stacks. Lamont, Hilles, the Science Center, and the house libraries attempt, however, to meet their everyday needs for assigned and recommended reading and to provide some supplementary material. Graduate students, of course, use the undergraduate collections, particularly since many courses are open to both graduate and undergraduate students.

For the Lamont and Hilles *buildings*, see Section IV above.

LAMONT

Lamont Library is a unit of the college library. Holdings: 172,805 vols. The original collection was assembled while the building was under construction (1948), and representatives of each department of the Faculty of Arts and Sciences participated in its selection. A catalog, published in 1953, was useful for some years thereafter to other institutions engaged in building up undergraduate collections. A guide to Lamont (frequently revised) is No. 7 in the series of *Guides to the Harvard Libraries.*

The Farnsworth Room for recreational reading, established in 1916 as a memorial to Henry Weston Farnsworth, is located in Lamont, as is the Woodberry Poetry Room. (For the latter see the account of special research collections in Section X below.)

HILLES (THE SUSAN MORSE AND FREDERICK WHILEY HILLES LIBRARY)

Radcliffe's library did not become an administrative unit of the Harvard College Library until 1971 and did not acquire its present home and name until 1966, but it was founded in 1881 as the library of the Society for the Collegiate Instruction of Women, which became Radcliffe College twelve years later. The collection, now consisting of 155,620 volumes, is that of a good college library; it was assembled over a long period to serve what was for many years a distinct undergraduate community, though all instruction at Radcliffe has always been provided by the Harvard faculty (*17*).

A special collection in Hilles, the Susan Alice Ensign Morse Music Library, contains some 8,000 records and 4,500 scores.

THE SCIENCE CENTER

A central undergraduate science library will be opened in the new Science Center during 1973. The nucleus of this collection has been acquired during recent years, and relevant materials will be transferred from Lamont; this library will also absorb the Jefferson Physics Library, an undergraduate collection of approximately 7,000 volumes. (In addition to this undergraduate library, the Science Center will house both departmental and research collections for mathematics and statistics.)

THE HOUSE LIBRARIES *(18)*

There are ten house libraries, reporting a total of 118,952 volumes. Dunster and Lowell were opened in 1930; Adams, Eliot, Kirkland, Leverett, and Winthrop in 1931; Dudley (for commuters) in 1954; Quincy in 1959; and Mather in 1969. Some supervision and assistance in selection of books is provided by the staff of Lamont, but there has never been an attempt to standardize the content or arrangement of the house collections. While these libraries have had an important function in supplying material for tutorial work, they have been regarded as "a part of the facilities provided for undergraduate living" rather than as "a part of the apparatus of instruction."

IX. Working Collections

Any classification of Harvard libraries must be arbitrary and inexact to some extent. Many of the "working collections" are highly useful for research, and their content is not entirely duplicated in the university's research collections. The following libraries, however, can be described as useful primarily to members of the institution, faculty department, or office to which they are attached, and their holdings are so largely duplicated elsewhere at Harvard that it seems unnecessary to describe them even briefly.

As used in this and following sections, "vols." stands for volumes and pamphlets. Statistics are for June 30, 1971.

Afro-American Studies (292 vols., in Lamont)

George R. *Agassiz Station*, Harvard College Observatory (779 vols., at Harvard, Massachusetts)

Atkins Garden and Research Laboratory (3,300 vols., near Cienfuegos, Cuba; now inactive)

Biochemical Sciences Tutorial (1,072 vols., a departmental library in Prince House)

George David *Birkhoff Mathematical Library* (6,471 vols., a departmental library to move to Science Center in 1973)

Busch-Reisinger Museum of Germanic Culture (869 vols.)

Cambridge Electron Accelerator (13,250 vols.)

Career Reference Library, Office for Graduate and Career Plans (2,134 vols.)

Center for Community Health and Medical Care (1,100 vols., at 641 Huntington Avenue, Boston)

Center for International Affairs (9,601 vols.)

Center for Middle Eastern Studies Reading Room (2,127 vols.)

Center for Population Studies (9,025 vols. at 665 Huntington Avenue, Boston)

Child Memorial Library and English Tutorial (13,167 vols., a departmental library in Widener)

Classics Examination Texts Collection (3,387 vols., a departmental library in Sever Hall)

Commission on Extension Courses (2,964 vols.)

Committee on Experimental Geology and Geophysics (404 vols., at the Hoffman Laboratory)

East Asian Research Center (797 vols.)

East Asian Studies Reading Room (883 vols.)

Economic Development Library (an offshoot of Center for International Affairs)

Fiscal Policy Seminar (2,499 vols., at Littauer Center, John Fitzgerald Kennedy School of Government)

Gibb Islamic Seminar of the Center for Middle Eastern Studies (5,251 vols., in Widener)

Government Department Data Center (punched cards and tapes, at Littauer Center)

Harvard Economic Research Project (16,300 vols.)

Harvard Radio Astronomy Station of the Harvard College Observatory (843 vols., at Fort Davis, Texas)

History Departmental Library (6,405 vols., to move from Widener to Robinson Hall)

Linguistics (2,073 vols., a departmental library in Widener)

John Peabody *Monks Library* of the Harvard University Health Services (2,510 vols.)

Near Eastern Languages and Literatures (1,828 vols., a departmental library in Widener)

Nieman Collection of Contemporary Journalism (2,150 vols.)

Palaeography (692 vols., a library of the Classics Department in Widener)

Personnel Office (743 vols.)

Psychology (5,958 vols., a departmental library in William James Hall)

Robbins Library of Philosophy (6,875 vols., a departmental library in Emerson Hall)

Fred N. *Robinson Celtic Seminar* (1,196 vols., a departmental library in Widener)

Russian Research Center (8,734 vols.)

Sanskrit (2,582 vols., a departmental library in Widener)

Science and Public Policy Program (5,208 vols., at Littauer Center, John Fitzgerald Kennedy School of Government)

Herbert Weir *Smyth Classical Library* (8,043 vols., a departmental library in Widener)

Social Relations (11,097 vols., a departmental library in William James Hall)

Statistics (1,558 vols., a departmental library, to move to the Science Center in 1973)

Ticknor Library of Modern Languages (7,258 vols., a departmental library in Boylston Hall)

Charles *Warren Center for Studies in American History* (308 vols.)

West European Studies (1,657 vols.)

X. Special Research Collections of the College Library

The collections described in this section are housed in the central buildings—they are in Widener, Houghton, or Lamont at present, and some of them will move into the fourth central building, the Pusey Library, when it has been constructed. They are physically separate from the general stack collections and most of them have their own staffs and reading areas.

ARCHIVES: THE HARVARD UNIVERSITY ARCHIVES (*19*)

The essential records of the university, as preserved in the archives, run without a break from 1643 to the present; little, fortunately, was lost in the fire of 1764. Present regulations governing official papers, adopted by the corporation in 1939, provide that "The archives of the official activities of University officers and offices are the property of the University" and are "not to be destroyed without the approval of a committee of three consisting of the Secretary to the Corporation, the Director of the University Library, and the officer in charge of the department where the papers accumulate. . . . All archive material, when no longer wanted in the office to which it pertains, shall be sent to the University Archives in the College Library." The present organization of the archives is almost entirely the result of work done under the administration of Dr. Clifford K. Shipton, their curator from 1938 to 1969.

In all, there are some 120,000 volumes, boxes, and pamphlets in the collection. Official records form only a fraction of the whole, which includes theses and prize papers, club and class archives, Harvard publications and books about the university, manuscripts of public lectures and of Commencement and Class Day speeches, examination papers, a special collection on the Harvard curriculum, photographs and portraits, ephemeral biographical material on Harvard men, and personal papers of Harvard officers.

The reading room for the archives, now on the top floor of Widener, will move to a room in the Pusey Library that is to be provided by gifts in memory of the late Alexander M. White.

Several editions of a guide to the archives have been published as No. 4 in the series of *Guides to the Harvard Libraries*.

DOCUMENTS AND MICROTEXTS

The college library's Documents and Microtext Division was organized along its present lines in 1964. Its document holdings include legislative debates and papers, census compilations, statistical publications, and general annuals of most nations of the world as well as of major international organizations. (Many other documents, classified by subject, are in the Widener stacks or in other Harvard libraries.)

The microtext collection includes 50,508 reels of microfilm, 7,411 microcards, 58,581 microfiche, and 411,648 other microforms. Microfilms of newspaper files are a major item. The collection—both documents and microtexts—is noncirculating, but photo-duplication services, including reader-printers, are provided.

INCUNABULA

Most of the college library's incunabula are shelved in the wall cases of the Houghton Library exhibition room. The university library as a whole possesses more than 3,700 volumes printed before 1501, including a copy of the Gutenberg Bible in the Widener Collection.

KEATS

Combining gifts from Amy Lowell and Arthur A. Houghton, Jr., the Keats Room of Houghton Library contains an unequalled collection of manuscripts of poems and letters, books from the poet's own library, editions of his work, and related materials. A catalog is being prepared for publication.

MANUSCRIPTS

The largest of many Harvard collections of manuscripts is in the Manuscript Department of Houghton Library. It includes material useful for research in many subjects, but the greatest strength is in American literature and history and English literature. A few of the individuals represented by particularly noteworthy manuscript holdings will be mentioned in Section XI in summaries of resources for major subjects; many more are enumerated in Philip M. Hamer's *Guide to Archives and Manuscripts in the United States* (1961), and it should be noted that there have been important acquisitions since this work was compiled.

MAPS

The Winsor Memorial Map Collection contains atlases, sheet maps, wall maps, and reference books, including gazetteers. The Ebeling Collection, acquired in 1818, increased Harvard's holdings by nearly 10,000 maps, and the historical geography of America has always been emphasized. Much of the collection has recently been cataloged and reorganized, and it is anticipated that construction of the Pusey Library will make it possible to combine the Winsor collection with the rare maps now kept in Houghton Library.

POETRY *(20)*

The Woodberry Poetry Room in Lamont Library is an endowed collection, originally established by Harry Harkness Flagler in memory of Professor George Edward Woodberry in 1931. When Lamont was built, a room and furnishings designed for the collection by Alvar Aalto were provided. The emphasis in collecting is on contemporary poetry in English, and older publications are transferred to the literature collections in Widener. Holdings include many recordings of poets reading their own work, and listening facilities are part of the room's equipment.

PRINTING AND GRAPHIC ARTS *(21)*

The Printing and Graphic Arts Department in Houghton Library is very largely the creation of Philip Hofer, who was its curator from its founding in 1938 until his retirement in 1968 and whose gifts constitute a great portion of the collection. It is the first department of its kind to be based in a university library, and covers the whole history of the illustrated book from early manuscripts to the present.

The first part of the Department's *Catalogue of Books and Manuscripts,* entitled *French Sixteenth Century Books,* compiled by Ruth Mortimer, was published in two volumes in 1964. The department is a prolific publisher; in 1972 its publications in print included twenty-three monographs and five exhibition catalogs in addition to numerous color reproductions and postcards.

THEATRE *(22)*

The Theatre Collection was established in 1915 when Robert Gould Shaw presented to the university the great collection of playbills, programs, posters, prints, photographs, pamphlets, broadsides, sheet music, letters, documents, and clippings that he had been assembling for more than 50 years. Mr. Shaw served as curator of the collection until his death in 1931. Professor George Pierce Baker is credited with having made the arrangements that brought this gift to Harvard; he had also been instrumental 14 years earlier in the acquisition of the library's first significant collection of theatrical material, a collection of portraits of David Garrick.

In 1917 the Theatre Collection was almost doubled in size by the bequest of Evert Wendell; his collection contained some 2,000,000 items, and added particular strength in materials from the Continent. Major subsequent benefactions have included the collection, particularly noteworthy for its manuscript letters, given by Henry M. Rogers, a great ballet collection presented by George Chaffee, and materials on the modern stage given in memory of Edward Sheldon. An anonymous gift of $1,000,000 will provide space in the Pusey Library for an area to be named The Robert Jordan Library of Theatre History.

While it is valuable above all for its source-materials on the history of the English-speaking stage, the Theatre Collection is worldwide in scope, and includes important resources for research on the dance, circus, opera, magic, American ministrelsy and showboats, pantomime and puppetry, English fairs and pleasure gardens, freaks, and amateur theatricals.

Four volumes of its *Catalogue of Dramatic Portraits* have been published (1930–1934).

THEODORE ROOSEVELT

In 1943 the Roosevelt Memorial Association (subsequently renamed the Theodore Roosevelt Association) presented to Harvard the collection that it had been assembling on the twenty-sixth president of the United States, who was a Harvard graduate of 1880. The association has continued to assist the library in building up this collection, which now contains more than 10,000 printed works as well as many manuscripts, 10,000 photographs, 3,000 political cartoon clippings, and hundreds of postcards and pieces of sheet music. Funds have been raised to establish in the Pusey Library a Theodore Roosevelt Memorial with facilities for changing displays from this collection.

A catalog (5 vols.) published by the library in 1970 reproduces in book form more than 52,000 cards, including many analytics, but does not separately index all the cartoons, photographs, and other ephemeral items. A guide to the collection (1971) is No. 11 in the series of *Guides to the Harvard Library.*

THE WIDENER COLLECTION

The books bequeathed to Harvard by Harry Elkins Widener are kept in the Widener Memorial Rooms, together with a copy of the Gutenberg Bible that Harry Widener's grandfather had intended to give to him; this was presented to the library in 1944 by George D. Widener and Mrs. Widener Dixon, Harry Widener's brother and sister.

The collection, numbering 3,300 volumes, is strong in English literature, association books and authors' manuscripts, extra-illustrated books, and color prints and illustrations. Highlights include a copy of Caxton's *Royal Book,* the 1526 Pynson edition of Chaucer, the four Shakespeare folios, a fine Robert Louis Stevenson collection, Dickens and Thackeray manuscripts, Cruikshank drawings, and costume books. A two-volume catalog of the Widener Collection was privately printed in 1918.

XI. Other Research Collections in the Central Buildings

The count of volumes and pamphlets reported for June 30, 1971 was 2,640,249 in Widener, 222,327 in Houghton, and 335,175 Harvard books in the New England Deposit Library; many of these volumes will be shelved in the Pusey Library when it has been built. Holdings of the special research collections described in Section X above, except for the Archives and the Poetry Room, are included in these totals. The central buildings do not house Harvard's research collections for materials in Far Eastern languages, for the sciences, for fine arts and music, or (with exceptions that will be noted, particularly in the subjects of education and theology) in fields covered by the professional-school libraries—business administration, design, education, industrial relations, law, medicine, public administration, and theology.

Resources for specific subjects are supplemented by strong general collections, some of which have been listed in volumes of the *Widener Library Shelflist*—35,000 volumes in No. 7 (*Bibliography*), 12,000 in No. 33 (*Reference Collections*), 207,000 in No. 15 (*Periodical Classes*), 47,000 in No. 32 (*General European and World History*, which includes publications on the World Wars and 1,454 volumes on the Crusades), and 6,591 in No. 18 (*Literature: General and Comparative*). There are also substantial holdings in subjects that fall outside the usual fields of academic research, including chess, tobacco, and angling; the latter includes 11,500 volumes given in 1915 by Daniel Butler Fearing, who subsequently presented a large collection of bookplates.

The paragraphs that follow deal only with subjects that seem to call for comment because Harvard's collections for them are particularly strong in whole or in part, or because they have been listed in a published shelflist or catalog or described in a significant bibliographical study.

AFRICA

The published shelflist volume (No. 34) for the *Afr* class (which does not include ancient North Africa or Semitic, Hamitic, and Afrikaans literatures) lists 22,001 volumes. Africa north of the Sahara falls within the scope of Harvard's strong Middle Eastern collection. There is strength in Afrikaans, and a noteworthy Congo languages collection was acquired in 1929; in general, however, the collection is strong in European publications on Africa but not in vernacular-language materials.

AMERICAN HISTORY *(23)*

The shelflist volumes for *US* (Nos. 9–13) list 125,591 volumes and the account of the Theodore Roosevelt Collection in Section X above has mentioned its published catalog. Acquisition of the Ebeling Collection in 1818 has been described as a landmark in the library's history. Particularly noteworthy additions were the collections formed by David B. Warden (1823) and Obadiah Rich (1830), the Francis Parkman bequest of 1894 (early exploration), three major Lincoln collections, the E. H. Peirce library (Mormonism), and the Matt Bushnell Jones collection on the colonial period (1941). The only relatively weak subdivision is genealogy, in which Harvard does not attempt to duplicate the outstanding collection of the New England Historic Genealogical Society in Boston.

American historians represented by important manuscript collections include Brooks and Henry Adams, John L. Motley, Francis Parkman, Jared Sparks, and Frederick Jackson Turner. *Afro-American Studies*, published as No. 10 in the series of *Guides to the Harvard Libraries*, lists numerous manuscript sources, including the papers of Thomas Wentworth Higginson, Charles Sumner, and Booker T. Washington.

During the past decade, funds allotted to the library from the bequest of Charles Warren have enabled it to establish the post of Charles Warren Bibliographer in American History and to continue to build up the American history collection, with particular emphasis at present on the acquisition of microfilm copies of newspaper files.

AMERICAN LITERATURE

The shelflist volumes for American Literature classes (Nos. 26–27) list 62,217 volumes. American authors represented by exhaustive collections of printed works are too many to list; those for whom the Library has significant manuscript materials include Aiken, the Alcotts, Aldrich, Barlow, Bellamy, Cable, John Jay Chapman, E. E. Cummings, Emily Dickinson (a great collection given by Gilbert H. Montague), Emerson (including 15,000 items from the Ralph Waldo Emerson Memorial Association), Hawthorne, Hearn, Holmes, Howells, Henry James, Sarah Orne Jewett, Longfellow, Amy Lowell, James Russell Lowell, Melville, Poe, Ezra Pound, Edwin Arlington Robinson, Thoreau, Mark Twain, Whittier, Thomas Wolfe (a remarkable collection given by William B. Wisdom), and Woollcott. Two of the special collections described above in Section X, the Poetry Room and the Theatre Collection, further contribute to resources in American Literature.

ASIA

Shelflist volume No. 19 (*Southern Asia*) lists 14,440 volumes; No. 14 lists 10,435 on China and 5,108 on Japan, but the major research collection for the Far East is in the Harvard-Yenching Library (Section XII below). The Sanskrit collection is good, and there is a substantial collection of manuscripts in Prakrit and Pali as well as in Sanskrit; holdings in Urdu have been built up during recent years. For modern India there is strength in western-language materials, including many volumes on Gandhi given by the Rev. John Haynes Holmes. Purchases on Thailand have been supported by the income of a fund given in 1908 in memory of Edward Henry Strobel.

BRITISH HISTORY

There is great strength in every subdivision of this collection, including local, military, and naval history. Resources for the Civil War and Commonwealth period include the Frederick L. Gay collection of more than 27,000 pamphlets, thousands of broadsides, and more than 1,200 newspapers. Other noteworthy special features are a collection on defense against the Armada, Napoleonic invasion broadsides, and manuscripts of Canning, Nelson, and Walpole.

CANADA

The shelflist volume (No. 20) lists 13,790 volumes; there is good representation of literature, both French and English, as well as history. Holdings include Francis Parkman's bequest of 1894, Acadian material bequeathed by Frederick L. Gay in 1916, and Bliss Carman manuscripts. The Rev. William Inglis Morse, a major benefactor during the 1940s, edited six numbers of a bulletin published by the library, *The Canadian Collection at Harvard University* (1944–1949), and Mrs. Morse left a generous endowment (1952) for support of the collection.

CELTIC LANGUAGES AND LITERATURES (*24*)

The shelflist volume (No. 25) lists 7,615 volumes. Some 60% of these are Welsh, but Irish holdings are also strong, and were enriched by a project for filming Irish manuscripts, undertaken in 1941 under the auspices of the National Library of Ireland. Celtic publications of North and South America have not been neglected.

CHURCH HISTORY—RELIGION (*25*)

The Harvard Library began with John Harvard's bequest of a collection chiefly theological in content, and it has always collected church history, religion, and theology. The Andover-Harvard Library of the Harvard Divinity School (Section XII below, under "Theology") has outstanding research collections, and the division of responsibilities between Andover-Harvard and the college library is not easy to define. Widener has the major resources for non-Christian religions (including Hebraica and Judaica, which are treated below), for Roman Catholicism, liturgical materials, and local church history. College library holdings include more than 1,900 editions of the *Imitatio Christi* of Thomas à Kempis, particularly strong collections for Mormonism, Quakerism, and Swedenborgianism, and great philological resources.

The American Board of Commissioners for Foreign Missions has deposited its manuscript archives in Houghton Library. The historical value of this large collection is remarkable; letters and reports by missionaries in all parts of the world (including the American West) are among the first written accounts of many peoples and regions (*26*).

CLASSICAL LITERATURE AND ANCIENT HISTORY

The strong collections are particularly distinguished for their holdings on Aristophanes, Horace, and Persius. It should be noted that the college library (not the Peabody Museum) maintains the university's research collection for classical archaeology, which includes the John Harvey Treat collection on Christian antiquities of Italy.

DUTCH HISTORY AND LITERATURE

Gifts in memory of John Lothrop Motley have helped to build up a good Dutch history collection, to which 2,000 seventeenth-century historical tracts were added by a single purchase in 1925. Dutch literature was a Farmington Plan responsibility of Harvard until 1971. A remarkable Frisian literature collection was given in 1930 by Henry Harmon Stevens.

ECONOMICS (27)

The shelflist volumes (Nos. 23–24) for *Econ* list 96,440 volumes; extensive collections in this subject are also to be found in Baker Library at the Graduate School of Business Administration, the Industrial Relations Library, and the Law School (for these libraries see Section XII below). The college library emphasizes governmental and social action, while the focus of collecting at Baker is on the individual business unit. Baker Library, in its Kress collection, has Harvard's major rare-book holdings for economics.

EDUCATION

Some 43,000 volumes classified in *Educ* are listed in the shelflist volumes (Nos. 16–17), but these are already out of date as regards location of material, since a great portion of the college library collection in the subject was transferred in 1972 to the new Gutman Library-Research Center of the Graduate School of Education (Section XII below). Widener retained works on higher education and many of the foreign-language publications on education.

ENGLISH LITERATURE

The shelflist volumes (Nos. 35–38) list 133,256 volumes in English Literature, and Houghton Library has many thousands of rare books and manuscripts that are not included in this total. The special Keats Collection was noted in Section X above. Major authors represented by outstanding collections of printed works include Bacon, Chaucer, Dryden, Milton, Sir Thomas More (with an extensive collection of Utopian literature), and Shakespeare. In addition to strong holdings of books, the library has important manuscripts of Barrie, Beerbohm, the Brontës, the Brownings, Burns, Byron, Carlyle (who gave Harvard 500 volumes from his own library), Lewis Carroll, Coleridge, Wilkie Collins, De Quincey, Dickens, Donne, T. S. Eliot, Etherege, Evelyn, John Gay, Goldsmith, Herbert, Housman, Joyce, Kingsley, Kipling, Lamb, T. E. Lawrence, Edward Lear, Masefield, Pepys, Pope, Sir William Rothenstein, Ruskin, Shelley, Shaw, Southey, Stevenson, Swinburne, Tennyson, Thackeray, Thomson, Dylan Thomas, Gilbert White, Wordsworth, and Yeats. The collection of ballads, originally built up by Professor Francis James Child, is also noteworthy.

FINNISH AND BALTIC HISTORY AND LITERATURES

The shelflist volume (No. 40) lists 13,475 volumes. Resources in Finnish literature were substantially increased in 1961 by the purchase of 8,000 items from the library of Eino J. Ellilä.

FOLKLORE

Professors Child and Kittredge were largely responsible for development of the folklore collection. German, French, Slavic, and Scandinavian materials are included as well as English; there are strong holdings in medieval romances, chapbooks, alchemy (particularly French works), and witchcraft. Proverbs, emblems, and works on the Dance of Death were major features of a remarkable collection given in 1893 by John Bartlett.

FRENCH HISTORY AND LITERATURE

The excellent history collection has a strong medieval section which includes a remarkable number of cartularies. Jeanne d'Arc is the subject of a special collection bequeathed in 1911 by Francis Cabot Lowell, and the library of Count Alfred Boulay de la Meurthe, purchased in 1927, contained 10,000 volumes, 30,000 pamphlets, and numerous broadsides and newspapers, all relating to the Revolution. The Dreyfus collection is outstanding. Microcopies of the archive of André Marty were acquired in 1960. Local history is a strong point.

In literature, Montaigne, Molière and his contemporaries, Bossuet, and Rousseau are represented by exceptional collections, and there are significant manuscript materials for the Goncourts, Hugo, Mistral, Romain Rolland, Rousseau, Verlaine, and Zola. Provençal literature has not been neglected.

GERMAN HISTORY AND LITERATURE

All periods and all regions are admirably covered by the fine history collection. Three special acquisitions were the Pfister library (Bavarian local history, purchased in 1906), the Rodolphe Reuss collection on the Thirty Years War (purchased in 1928), and the Stolberg library (1933), which consists of some 2,700 volumes from the working library of a reigning prince of the Holy Roman Empire.

Equally comprehensive holdings in literature include thirty-nine volumes which Goethe presented to Harvard in 1819. There are noteworthy manuscript holdings for Beer-Hofmann, Brecht, Heine, and Zweig, among others; but the two great manuscript collections are those of Hugo von Hofmannsthal and Rilke. The Hofmannsthal manuscripts were given by the poet's family in 1946; 3 years later, Gilbert H. Montague presented the collection of printed works that had been formed by Karl Jacoby, Hofmannsthal's bibliographer. The Rilke materials were collected by Professor Richard von Mises; a catalog was published by Insel-Verlag in 1966.

GOVERNMENT

The shelflist volume (No. 22) lists 10,941 volumes, but this represents a small fraction of all Harvard Library holdings that might be classified as government if one took into account documents and the holdings of the John F. Kennedy School of Government (Littauer Library), the Law School, and other collections.

GREECE—MODERN GREEK HISTORY AND LITERATURE (*28*)

The library's outstanding Modern Greek collection had its beginnings at the time of the Greek War of Independence; Edward Everett was one of the Harvard philhellenes who visited Greece, and Dr. Samuel Gridley Howe, whose journals and other papers are in the library, was surgeon-in-chief of the Greek armed forces. Subsequent benefactors have included Professor C. C. Felton, whose heirs gave his personal collection to the library; Professor E. A. Sophocles, who left an endowment fund as well as many books; and Dr. Harry K. Messenger. In folklore the collection is even stronger, if possible, than in history and literature. Papers and tracts deposited by the American Board of Commissioners for Foreign Missions are of great value, especially for the period from 1820 to 1869. The Poetry and Theatre Collections of the college library and the oral literature library (below) also contain significant modern Greek materials.

HEBRAICA, JUDAICA, AND YIDDISH (*29*)

Total resources in Hebraica, Judaica, and Yiddish exceed 100,000 volumes; it is believed that no other university library is equally strong in these fields.

The library's *Catalogue of Hebrew Books* (6 vols.) was published in 1968, with a supplement (3 vols.) in 1972. Hebrew has always been taught at Harvard, and the library has a Hebrew Bible owned and used by Henry Dunster, Harvard's first president; but the great growth of the Hebrew collection did not begin until the 1920s, with major gifts from Leon Nathan Alberts, Julius Rosenwald, and Lucius N. Littauer. In 1929 Mr. Littauer purchased for Harvard the Ephraim Deinard collection of some 12,000 volumes. Professor Harry A. Wolfson has had a leading role in building the collection.

The Judaica volume in the shelflist series (No. 39) lists 11,800 volumes, but this does not include the Hebrew and Yiddish books, to say nothing of at least 40,000 volumes relating to the Jews that are classified with other historical works on various countries. The great benefactor for Judaica was Lee M. Friedman. In 1951 he headed the committee that raised funds to purchase for the library a collection assembled by Felix Friedmann, and he later bequeathed to Harvard his own great collection of more than 10,000 volumes on the Jews in Western

Europe and the United States, together with an endowment that helps to support the college library's Hebrew Division, of which the Lee M. Friedman Bibliographer in Judaica is the administrative head. A remarkable Dreyfus collection has been mentioned above in the paragraph on French history. The Ladino and North African holdings are strong, and Harvard has been receiving current Israeli publications under the Public Law 480 program. Charles Berlin's *Index to Festschriften in Jewish Studies*, based on Harvard holdings, was published in 1971. During the same year the Friends of the Harvard Judaica Collection formally organized.

The Yiddish collection numbers approximately 10,000 volumes. It was began about 1898 by Professor Leo Wiener, and owes much of its growth during more recent years to Abraham A. Roback.

ITALIAN HISTORY AND LITERATURE

The excellent Italian history collection is particularly strong in materials on Florence, Sicily, and Venice; its outstanding feature is the H. Nelson Gay collection on the Risorgimento, which was purchased in 1932. This contained some 40,000 items, of which 5,000 were broadsides.

In literature, the Dante collection given in 1884 by Professor Charles Eliot Norton has been augmented by Professor George Ticknor's Dante collection (1896), by gifts from the Dante Society, and by purchases with income from the fund for Italian literature given in 1925 by Mrs. Mary P. C. Nash. The Tasso and Petrarch collections are noteworthy, as are holdings in eighteenth- and nineteenth-century drama, which include manuscripts of 1,500 operas, sacred dramas, and cantatas given in 1890 by the Massachusetts Historical Society.

LATIN AMERICAN HISTORY AND LITERATURE

The shelflist volumes for Latin American history (Nos. 5–6) list 29,556 volumes; the shelflist for literature (No. 21) lists 17,851. Important private libraries acquired during the administration of Archbald Cary Coolidge as director of the library include those of Donato Lanza y Lanza (Bolivia), Luis Montt (Chile), José Augusto Escoto (Cuba), Blas Garay (Paraguay), and Manuel Segundo Sánchez (Venezuela).

LINGUISTICS

This strong collection is supplemented, for American Indian languages, by the Library of the Peabody Museum of Archaeology and Ethnology (Section XII below, under "Anthropology").

THE MIDDLE EAST *(30)*

The library's *Catalogue of Arabic, Persian, and Ottoman Turkish Books* (5 vols.) was published in 1968; it lists approximately 30,000 Arabic, 5,500 Persian, and

4,000 Ottoman Turkish volumes. The Middle Eastern collections include many thousand additional volumes in other languages; they are well balanced and well organized, ranking among the best in the United States. Much of the development dates from the last 20 years, since the Library had only twenty Arabic books in 1830 and fewer than 2,000 by 1949. The Middle Eastern Division of the College Library was established in 1962, and Harvard has been receiving publications of the United Arab Republic under the Public Law 480 program since that date. The most noteworthy acquisition of earlier years was in 1900, when Count Paul Riant's library on the Ottoman Empire was purchased; there is a printed catalog of this library (Paris, 1899).

ORAL LITERATURE: THE MILMAN PARRY AND JAMES A. NOTOPOULOS COLLECTIONS

Administratively, this is a research-institution library, but it is housed on the top floor of the Widener building. Though the volume count is only 573, it contains the finest collection in existence of recordings and transcriptions of oral epic songs and texts of Yugoslavia, Albania, and Bulgaria. The original collection was a bequest of Professor Milman Parry, who died in 1935. Similar materials, recorded in Rumania, Central America, Turkey, Iran, and Africa, have been added, and the James A. Notopoulos bequest of 1968 was a collection of recordings and manuscripts of modern Greek oral epic and lyric song, which Professor Notopoulos had gathered throughout Greece in 1953 and 1954.

PHILOSOPHY

The collection is good, including particularly strong holdings for Kant, Hegel manuscripts, and important private libraries assembled by Professors George Herbert Palmer, Hugo Munsterberg, Josiah Royce, and William James (with an extensive collection of William James manuscripts). There are also Santayana manuscripts, and the papers of Franz Brentano were given by his son in 1968.

PORTUGUESE HISTORY AND LITERATURE

The most noteworthy single Portuguese acquisition has been the library of Fernando Palha, containing 6,700 volumes and pamphlets, which was presented by John B. Stetson, Jr., in 1922. The Camoẽs collection is particularly strong. The Palha library included several hundred manuscripts of João III, his queen, and members of his court. There is also an extensive collection of *autos*.

SCANDINAVIAN HISTORY AND LITERATURES

Harvard's first significant Scandinavian acquisitions date from 1835, when Professor Henry Wadsworth Longfellow was commissioned to buy books during his travels (*31*). Another landmark was the purchase of the Konrad von Maurer library in 1904, and the Icelandic collection has been outstanding since 1930, when the library of Kristján Kristjánsson, consisting of some 10,000 items, was presented by Mrs. William Henry Schofield. There are remarkable holdings of Sagas and Eddas, and an excellent Strindberg collection was given by Henry Harmon Stevens.

SLAVIC HISTORY AND LITERATURES (*32*)

The shelflist volumes for Slavic (Nos. 28–31) list 147,334 volumes, but it is estimated that the university library as a whole has 500,000 volumes in the Slavic languages or dealing with the history or literature of Slavic countries. Archibald Cary Coolidge was the first great builder of this pre-eminent collection.

For early printing and for manuscripts and first editions of Russian literature, Bayard L. Kilgour, Jr., has been the major benefactor; a catalog of *The Kilgour Collection of Russian Literature* (which includes the only known copy of Fedorov's *Primer* of 1574) was published by the library in 1959; there have been many additions since that date.

Materials on the Revolution include the Spiridovich library (with his scrapbooks), the Smolensk Archive (photoreproductions of documents of the Communist Party in the Smolensk District, 1917–1941), the Aleksinskii Archive, and—above all—the Trotsky Archive. Arrangements for the sale of his 1917–1936 Archive to Harvard were made by Leon Trotsky himself shortly before his assassination in 1940; archives of the later years, with related papers, were acquired subsequently. In all, there are more than 150 manuscript boxes. Papers for 1928–1940 are to remain closed until 1980.

The non-Russian holdings are also very strong. Ukrainian materials include the Ceglinsky library, which was purchased in 1959. The Polish and Czech collections are remarkable; perhaps even greater resources are available for Slovak (*33*), in which a strong foundation was provided by the library of Alexander Lombardini, purchased for Harvard by Archibald Cary Coolidge in 1901. Bulgarian has not been neglected, and the library has been receiving Yugloslavian materials under the Public Law 480 program. The modern Macedonian collection is very nearly exhaustive. The strong Slavic folklore collection is supplemented by the special oral literature collection (above), and the Theatre Collection contains a noteworthy assemblage of Russian theatre ephemera bequeathed in 1950 by H. W. L. Dana.

SPANISH HISTORY AND LITERATURE

The shelflist volume (No. 41) lists 33,080 volumes of Spanish history and literature. The history collection, generally good, includes books and manuscripts on Ferdinand and Isabella bequeathed by Prescott, and a special effort was made to acquire publications on the Civil War of 1936–1939. Holdings in literature include more than 10,000 broadside Spanish and Catalan poems, *gozos* and *goigs*, purchased in 1933. The most remarkable author collection—for Cervantes—came as the gift of Carl T. Keller.

XII. Other Harvard Research Libraries and Their Collections

ANTHROPOLOGY AND PREHISTORIC ARCHAEOLOGY: THE TOZZER LIBRARY OF THE PEABODY MUSEUM (*34*)

An anonymous gift announced in 1969 will make possible construction of the Tozzer Library to house the library of the Peabody Museum of Archaeology and Ethnology; this will adjoin the museum building in which the library is now located. The name commemorates Alfred Marston Tozzer (1877–1954), who was for many years professor of anthropology and librarian of the museum.

Though its greatest strength is in American materials, this is believed to be the strongest library collection in the United States for prehistoric archaeology generally, anthropology, and ethnology; it does not collect classical archaeology. Holdings (1971) are 102,402 volumes and pamphlets.

The *Catalogue* (54 vols.) was published in 1963, and a supplement (12 vols.) appeared in 1970. Since the catalog analyzes the contents of serial publications by subject and author, it constitutes an important index to the literature of its field.

The Peabody Museum, founded by George Peabody in 1866, is the oldest anthropological museum in the world; it did not become an integral part of Harvard University until 1899. It scope was originally limited to the American continents.

(At Dumbarton Oaks, in Washington, D.C., a library of 3,500 volumes serves research in the Robert Woods Bliss Collection of Pre-Columbian Art.)

ASTRONOMY: THE JOHN G. WOLBACH LIBRARY OF THE HARVARD COLLEGE OBSERVATORY (*35*)

The Library of the Harvard College Observatory was named for John G. Wolbach in 1972 when it moved into the new Perkin building at the observatory. It is the university's research collection for astronomy, with 20,616 volumes. Strong holdings in serials have been built up by exchange of publications over a long period; the observatory was established in 1843.

BIOLOGICAL SCIENCES: SEVEN LIBRARIES

An account of Harvard's resources for research in the biological sciences must take into account the holdings of seven libraries: Arnold Arboretum (79,741 vols.), the Biological Laboratories Library (19,017 vols.), the Economic Botany Library of Oakes Ames in the Botanical Museum (22,398 vols.), the Farlow Reference Library (53,277 vols.), the Gray Herbarium (55,325 vols.), the Museum of Comparative Zoology Library (244,726 vols.), and the Oakes Ames Orchid Library

(4,327 vols.). In addition, there are two libraries attached to Harvard forests; these are not located in Cambridge (see below, under "Forestry").

Collectively, these libraries provide extremely strong resources. The Orchid Library (presented to Harvard in 1938) and the Economic Botany Library were developed and for many years largely supported by Professor Oakes Ames; both are relatively small but highly specialized. The Biological Laboratories Library is primarily a working collection for the building in which it is located, but it supplements the other libraries to some extent and is technically the library of the Biology Department rather than of a research institution.

The Farlow Reference Library and Herbarium of Cryptogamic Botany, as its name indicates, specializes in the lower forms of plant life. It was bequeathed to the university in 1919 by Professor W. G. Farlow, who had been collecting on the subject throughout his 40 years as a member of the faculty. Pre-Linnean works on fungi are an outstanding feature, and some of the periodical files are not duplicated elsewhere in the United States. The library of a Russian mycologist, Professor Bucholtz, supplied Slavic items supplementing Professor Farlow's holdings, and there are extensive manuscript files.

The Gray Herbarium Library, formed by Professor Asa Gray, was presented to Harvard in 1864. Historical collections on the higher plants are very rich, and the greatest strength is in classification, gross morphology, and geographic distribution of the flowering plants, ferns, and fern-allies. The *Gray Herbarium Index* (10 vols.), which was published in 1968, reproduces some 265,000 cards giving names and literature citations of newly described or established vascular plants of the Western Hemisphere.

The Arnold Arboretum Library and Gray share a single staff; both are located in the University Herbaria Building. The arboretum was founded in 1872; its field is dendrology and arboriculture. Periodical holdings are noteworthy, as is the collection of works of Linnaeus. Professor Charles Sprague Sargent was a major benefactor of the Arnold Arboretum Library from 1874 to 1927.

The Museum of Comparative Zoology Library (*36*) began as the creation of Professor Louis Agassiz; the museum, founded in 1859, became a part of Harvard in 1876. The collection's greatest strength is in serial publications, reports of voyages and expeditions, and entomological publications. During the 1940s, when major portions of the libraries of the Boston Society of Natural History and the American Academy of Arts and Sciences were sold to newer institutions in the West, Harvard acquired those volumes in their collections that did not duplicate its holdings, and many of these came to the Museum of Comparative Zoology. The *Catalogue* (8 vols.) of the library was published in 1967.

BUSINESS ADMINISTRATION: BAKER LIBRARY (*37*)

Baker Library is centrally located on the Business School campus in Boston, immediately across the Charles River from the section of Cambridge in which most Harvard buildings are concentrated. The building (80,000 sq. ft.) was opened in

1926; it contains a few classrooms in addition to the library. The architects were McKim, Mead, and White; the donor was George Fisher Baker.

The collection (including the Kress Library of Business and Economics) contains 460,770 volumes as well as extensive manuscript holdings. Baker Library's general catalog (32 vols.) was published in 1971. Several special collections and departments are also noteworthy—

The Core Collection, housed in the main reading room, enables the reader to browse on shelves containing 3,500 volumes that represent a cross-section of the library's resources; new books are added regularly and older titles are withdrawn. *Core Collection: An Author and Subject Guide* is now an annual publication.

The Corporation Records Division, which houses reports on 18,000 companies, attempts to collect all material available on 500 major corporations, as well as annual reports, S.E.C. 10K statements, and listing statements for all companies on the New York and American stock exchanges.

The Kress Library of Business and Economics (*38*) is one of the world's three greatest collections in its field—business and economics before 1850. Its foundation was a collection assembled by Herbert S. Foxwell, which was purchased for Harvard by Claude W. Kress. Arrangements for this acquisition were made in 1929, but the bulk of the material was not received until after Mr. Foxwell's death in 1936. An exhaustive collection of editions of Adam Smith is one feature of this 32,000-volume department of Baker Library. Four volumes of the Kress Library *Catalogue* have been published (1940–1967); a series of monographic *Publications* (21 numbers since 1939) and printed *Annual Reports* are also issued by the Kress Library.

The Manuscript and Archives Division (*39*) collects unpublished historical records of business firms, and possesses materials such as letters and account books of a branch of the Medici family (1400–1600), business papers of John and Thomas Hancock (1728–1854), Dun and Bradstreet credit ledgers (1840–1890), and papers of Thomas W. Lamont and Winthrop W. Aldrich. A third edition of the *List of Business Manuscripts in Baker Library* was published in 1969.

Several publications should be noted in addition to those mentioned above. *New Books on Business and Economics: Recent Additions to Baker Library* (monthly) is an important current bibliography. *Current Periodical Publications in Baker Library* is an annual. A series of *Reference Lists*, which began publication in 1947, has reached No. 27, and a revised edition of the library's classification system (*A Classification of Business Literature*) was issued in 1960 (Shoe String Press). *A Guide to Baker Library* is also available.

The Harvard Graduate School of Business Administration was established in 1908, but its library—housed successively in Gore Hall, Lawrence Hall, and the Widener Library—was relatively small until 1927, when the school moved to a new campus provided by the munificence of George Fisher Baker. At the same time, the Florence T. Baker Fund for the purchase of books was established by friends of Mr. Baker in memory of his late wife.

BYZANTINE STUDIES: DUMBARTON OAKS *(40)*

The Dumbarton Oaks Research Library and Collection in Washington, D.C., was given to Harvard in 1940 by Mr. and Mrs. Robert Woods Bliss. A staff had already been at work since 1936 on organization of the Research Library. This now contains 77,671 volumes, in addition to some 38,000 photographs, 7,500 slides, and many microcopies of manuscripts; it has a copy of the Princeton Index of Christian Art, and maintains the Dumbarton Oaks Census of Early Christian and Byzantine Art in America. All aspects of Byzantine culture are covered as well as its antecedents and relationships with contemporary cultures; consequently numerous Russian, Turkish, and Yugoslav publications are included.

Two relatively small libraries in other fields are also maintained at Dumbarton Oaks. The Bliss Pre-Columbian Collection has a working library of 3,500 volumes. The Garden Library (7,532 vols.) includes significant research materials in its field, and will call for notice below in the paragraphs on Design.

THE CHEMISTRY LIBRARY

The library maintained in the Converse Memorial Laboratory by the Chemistry Department of the Faculty of Arts and Sciences is Harvard's research collection in its field. Holdings number 45,051 volumes; the scope includes related materials on chemical physics, biochemistry, and biophysics, but little is collected on applied chemistry.

DESIGN: THE FRANCES L. LOEB LIBRARY

The Frances L. Loeb Library of the Graduate School of Design occupies two floors (35,000 sq. ft.) in Gund Hall, which was opened in 1972; the architect was John H. Andrews.

The Faculty of Design is responsible for instruction in architecture, landscape architecture, city and regional planning, and urban design. Its library now contains 150,193 volumes and pamphlets, plus large collections of slides, photographs, blueprints, and manufacturers' catalogs. For architecture, its resources are believed to be second only to Columbia University's; for landscape architecture it may be unequalled. The *Catalogue* (44 vols.) was published in 1968, with a supplement (2 vols.) in 1970. The 620,000 cards reproduced in this work include analytics for periodical articles and ephemeral materials.

In its new quarters the library will establish a Le Corbusier research collection, in which it will attempt to assemble all printed publications relating to Le Corbusier, together with slides, films, and models.

The Library of the School of Design did not take its present name until 1972, when it moved into Gund Hall, and was not constituted on its present basis until 1958, when it was formed by the union of the Architecture Library with the Landscape Architecture and Regional Planning Library.

Harvard's Architecture Library (*41*) began about 1893, serving early undergraduate courses in the subject. In 1901 a new building, Robinson Hall, provided space for it, and Nelson Robinson contributed an endowment fund. Noteworthy acquisitions included the purchase of the Francis Bond collection on mediaeval architecture in 1916, a bequest from Pierce Anderson in 1925, and the Henry Hobson Richardson collection of architectural drawings (housed in Houghton Library).

The other ancestor of the present Frances L. Loeb Library was the library of the Departments of Landscape Architecture and Regional Planning (*42*), which was established in 1911. It developed rapidly. Its classifications for city planning (published in 1913) and landscape architecture (published in 1920) were adopted by other libraries, and it was the source of significant bibliographies in its fields during the 1920s and 1930s. Major acquisitions included the libraries of two pioneers, the Charles Mulford Robinson collection on city planning (*43*) and the Charles Eliot collection on landscape architecture; a fine collection on expositions was presented by Warren H. Manning, and George A. Parker gave extensive files of park commission reports.

DESIGN: THE GARDEN LIBRARY

The Garden Library at Dumbarton Oaks in Washington, D.C., includes 7,532 volumes and numerous manuscripts, many of which are unpublished. The history of garden design and landscape architecture is its field, and some 2,400 rare books form part of its collection (*44*).

EDUCATION: THE GUTMAN LIBRARY-RESEARCH CENTER

The Gutman Library-Research Center (100,000 sq. ft., of which 82,000 are assigned for library purposes) was opened in 1972 (see Figure 4). In planning the new home for the library of Harvard's Graduate School of Education, particular attention was given to provision of facilities for audiovisual materials. The architects were Benjamin Thompson and Associates, and the building is named for Monroe C. Gutman, a major donor.

The Education Library reported holdings of 70,280 volumes and pamphlets in 1971; but it has since moved into its fine new quarters and begun the work of incorporating into its collection many thousand volumes from Widener, the New England Deposit Library, and storage areas. As has been indicated in the paragraph on education in Section XI above, Widener retains works on higher education and extensive foreign-language collections on education. The Gutman Library has strong resources for research in the history of American education, including a text-

FIGURE 4. *Monroe C. Gutman Library-Research Center, Harvard Graduate School of Education. (Photograph by George Dow.)*

book collection of 35,000 volumes. A separate programmed instruction collection is maintained, and manipulative materials, audiovisual materials, and tests are collected. A *Guide* to the library is available.

ENGINEERING: THE GORDON McKAY LIBRARY (*45*)

The Division of Engineering and Applied Physics of the Faculty of Arts and Sciences maintains the Gordon McKay Library (112,633 vols.). Its subject fields are mechanical and civil engineering, soil mechanics, electronics, applied mechanics, metallurgy, sanitary engineering, electrical engineering, nuclear engineering, applied mathematics, applied physics, and computer science; it also houses much of the meteorological and oceanographical collection originally assembled (1885–1959) at the Blue Hill Observatory. (A portion of the Blue Hill Library was transferred to the American Meteorological Society in 1959.) There is a special technical reports collection. While this is Harvard's research collection in the subjects enumerated, these are subjects in which the Massachusetts Institute of Technology Library has greater resources, for the most part, than Harvard. A guide to the Gordon McKay Library is No. 8 in the series of *Guides to the Harvard Library*. The library has always been housed in Pierce Hall, where it was established in 1919; previous Harvard engineering collections had been dispersed a few years before.

THE FAR EAST: THE HARVARD-YENCHING LIBRARY (*46*)

With 474,349 volumes and pamphlets, the Harvard-Yenching Library is third in size among units of the Harvard University Library; only Widener and the Law School have larger holdings. It is unlike Harvard's other departmental and research-institution libraries because language rather than subject determines its content; while it is primarily a research collection for Far Eastern studies, particularly for history and literature of China, Japan, and Korea, it is also Harvard's collection for books in Chinese, Japanese, Korean, Manchu, Mongolian, and Tibetan, regardless of their subject.

The greatest strength of this outstanding Far Eastern collection, the largest in any American university, is in classical and historical Chinese materials, including local histories. Its Japanese collection is particularly noteworthy for resources on Buddhism. Development of the Korean holdings dates only from 1945. Among the numerous rare books is Harvard's earliest printed book, a Buddhist text printed in A.D. 975.

The printed catalog of Chinese books is now long out of date and out of print, but two volumes of a Korean catalog have been published since 1962, and a *Harvard-Yenching Bibliographical Series* was inaugurated in 1971 with an index to articles on Chinese history in learned journals.

Harvard first offered instruction in Chinese and first acquired a few Chinese books in 1879, and Japanese acquisitions began in 1914; but rapid growth of the collection dates from 1928, when the Harvard-Yenching Institute was incorporated with the purpose of creating a center of Chinese studies at Harvard as well as helping universities in China. During the administration of Dr. Alfred Kaiming Chiu as librarian (1927–1965), more than 400,000 volumes were added. The Harvard-Yenching classification scheme, published in 1943, has been adopted by many other libraries. From 1938 to 1949 a grant from the Rockefeller Foundation enabled the library to print and distribute catalog cards for thousands of Chinese and Japanese books.

THE FINE ARTS LIBRARY AND THE RUBEL ASIATIC RESEARCH BUREAU LIBRARY

Administratively the Fine Arts Library is a unit of the Harvard College Library, but it is housed in the William Hayes Fogg Art Museum. Prior to 1963 the museum (founded in 1895) maintained a working library, but the research collection for fine arts was in Widener. Construction of a bookstack addition to the Fogg made it possible to consolidate Harvard's library collections for the subject.

The Fine Arts Library now contains 131,088 volumes and pamphlets, plus 150,000 slides, 300,000 photographs, and manuscript collections. There is a special collection of auction catalogs; copies of all the photographs assembled at the Harvard Center for Italian Renaissance Studies at Villa I Tatti, and two sets of the Decimal Index to Art of the Low Countries are available, as well as a pamphlet file containing exhibition folders and announcements.

Fogg was the first center in the country for training museum administrators and conservators, and the Fine Arts Library has built up an outstanding collection on conservation and restoration. Photography is a relatively new field of interest, but the collection is now substantial.

The *Catalogue* (15 vols.) was published in 1971, with a supplementary volume for the *Catalogue of Auction Sales Catalogues*. The third edition of the library's *Fine Arts: A Selected List of Reference Materials* appeared in 1972, and a guide is No. 2 in the series of *Guides to the Harvard Libraries*.

The Rubel Asiatic Research Bureau Library (*47*) is a separate collection (8,062 vols.) serving the Oriental Department of the Fogg Museum; its field is arts of East Asia, including the Far East, Southeast Asia, and the Indian subcontinent.

FINE ARTS: THE BERENSON LIBRARY

The Biblioteca Berenson (65,118 vols.) at Villa I Tatti (*48*), near Florence, Italy, is the subject of a separate article (see Vol. 3, pp. 335–343). This remarkable collection on Italian Renaissance art became a part of the Harvard University Library in 1960.

FORESTRY

The Harvard Forest Library (9,708 vols.) at Petersham, Massachusetts, and the Harvard Black Rock Forest Library (6,011 vols.) at Cornwall, New York, are primarily working collections, but they supplement to some extent the biological sciences collections in Cambridge. The Harvard Forest was established in 1908, and the Black Rock Forest was acquired in 1950 as a bequest from Dr. E. G. Stillman.

GEOLOGY

The Geological Sciences Library (20,455 vols., plus 15,000 geological maps) is a departmental library of the Faculty of Arts and Sciences, located in the university museum building. It was created in 1962 by merging the Mining Geology and Mineralogical Libraries, and it absorbed the Kirk Bryan Geomorphology Library in 1966. The Museum of Comparative Zoology Library originally contained Harvard's research collection for geology, and it retains the major resources on regional and sedimentary geology and on paleontology, as well as an extensive collection of geological survey publications. Subject fields of the Geological Sciences Library include mineralogy, petrology, geochemistry, crystallography, and structural, economic, and mining geology; there is some material on geomorphology, geophysics, stratigraphic geology, and gemology.

HELLENIC STUDIES *(49)*

The Center for Hellenic Studies, a residential research center in Washington, D.C., was given to Harvard in 1961 by Mrs. Marie Beale in memory of Walker Blaine Beale, and was endowed by a grant from the Old Dominion Foundation. The library (32,205 vols.) serves research on Greek civilization to A.D. 200, and the major event in its development was the acquisition in 1962 of the personal collection formed by Professor Werner Jaeger.

HISTORY OF SCIENCE

Research in the history of science draws upon Harvard's specialized science libraries, some of which will transfer increasing quantities of retrospective materials to the new Science Center Library. Widener holdings of academy and other learned society publications are particularly noteworthy, and the Widener building houses the library of the History of Science Department of the Faculty of Arts and Sciences (23,466 vols.), which began with the collection presented to Harvard in 1949 by Professor George Sarton and the Carnegie Institution of Washington. A pioneer in scientific study of the history of science, Professor Sarton began his collecting in 1912; by 1949 he had assembled 4,000 books, 15,000 pamphlets, 100,000 cards, and large collections of portraits, prints, and archives *(50)*. Noteworthy among Houghton Library holdings are books and manuscripts of Robert Boyle, Sir William Herschel, and Count Rumford. Harvard's old and large research-institution libraries for the biological sciences also have important manuscript holdings. An endowment fund left by Peter Paul Francis Degrand for the purchase of French works on science has been a factor in development of the science collections.

INDUSTRIAL RELATIONS

The Industrial Relations Library (117,073 vols.) began in 1941 as a collection for Professor Sumner Slichter's Collective Bargaining Seminar. It is housed in the Littauer Center of the John Fitzgerald Kennedy School of Government. Its strength is in trade-union publications and government documents on labor; there is a special collection of labor agreements. Personnel administration, however, is a Baker Library field, and Baker collections are stronger in publications representing the management point of view.

LAW *(51)*

The Harvard Law School Library occupies 80,000 sq. ft. of Langdell Hall, 16,000 sq. ft. in the International Legal Studies wing, and 8,000 sq. ft. of storage space in adjacent buildings. Langdell Hall was opened in 1907, and there was a major addition in 1929; the International Legal Studies wing was opened in

1959. The architects were Shepley, Bulfinch, Richardson, and Abbott (and, for Langdell Hall, its predecessor firms).

This unequalled legal collection (1,184,939 vols.), virtually complete for Anglo-American law, includes an assemblage of early English law books that is particularly remarkable. In the Treasure Room (*52*) there are also more than 500 incunabula, and exceptional holdings of legal Americana, including nearly complete collections of colonial and territorial laws. Strength in foreign and international law is almost equally impressive (*53*). An unusual special collection is made up of hundreds of prints and painted portraits of lawyers and judges.

Particularly noteworthy acquisitions have included the libraries of Brinton Coxe (presented by his son in 1903), Francis Rawle (1911), the Marquis de Olivart (international law, in 1912), George Dunn (English law, in 1913), Paul Viollet (French legal history, in 1920), Heinrich Lammasch (particularly rich in international arbitration, in 1921), J. E. de Becker (Japanese law, in 1927), and Alexander Loeffler (1931). Some 25,000 French edicts (1550–1794) were acquired from the library of Cardinal E. C. de Loménie de Brienne in 1927, and legal materials from the Stolberg library were received in 1933.

The monthly *Current Legal Bibliography* and the *Annual Legal Bibliography,* which began publication in 1961, are major reference works, as are the library's 20-volume *Catalog of International Law and Relations* (1965–1967), two Soviet law bibliographies (1965 and 1966), and a *Preliminary Union List of Materials on Chinese Law* (1967). Recent publications also include an *Index to Multilateral Treaties* (1965) and *Index to Proceedings and Documents of the International Institute for the Unification of Private Law* (1967).

While the collections merit almost unqualified praise, it should be noted that their use is hampered to some extent by the necessity for storing thousands of volumes in the basements of neighboring buildings and by the fact that substantial portions of them have not been fully classified and, having no call-numbers, cause difficulties in circulation and shelving.

The library began when the Harvard Law School was established in 1817, and was housed successively in the Second College House (1817–1832), Dane Hall (1832–1883), and Austin Hall (1883–1908); Langdell Hall received it in 1908. A landmark in the early history of the collection was the gift of Samuel Livermore's library in 1834, but it was not until Dean Langdell's time and the long administration (1872–1913) of John Himes Arnold as librarian that a genuinely great library was created.

MATHEMATICS

The research collection for mathematics (some 20,000 vols.) has been shelved in Widener, but will be transferred to the new Science Center in 1973; the Birkhoff Mathematical Library of the Mathematics Department will also go there. The mathematics collection is regarded as good, but not nationally outstanding.

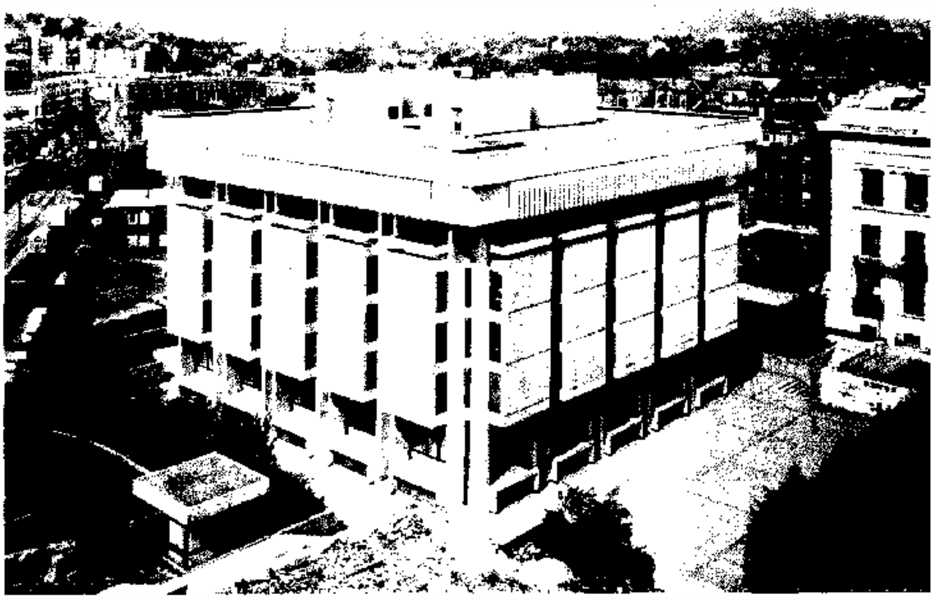

FIGURE 5. *The Francis A. Countway Library of Medicine. (Photograph by Leonard R. Johnson.)*

MEDICINE AND PUBLIC HEALTH: THE FRANCIS A. COUNTWAY LIBRARY

The Francis A. Countway Library of Medicine (160,000 sq. ft.) was opened in 1965 (see Figure 5); it is located, with other buildings of the Harvard Medical School, in Boston, approximately 3 miles from the Harvard Square section of Cambridge. Construction of the building was made possible by a gift from Miss Sanda Countway in memory of her brother; the architects were Hugh Stubbins and Associates (*54*).

The collection (436,931 vols.) unites holdings of the Boston Medical Library with those of Harvard's Faculty of Medicine (which includes the School of Dental Medicine) and Faculty of Public Health. In resources for medical research, the Countway Library is believed to be surpassed in the United States only by the National Library of Medicine. Early works are very well represented; there are more than 800 incunabula, and fields of particular strength include English books printed before 1700, American books before 1820, medical Hebraica and Judaica, and New England imprints (*55*). In 1928 the bequest of Dr. John Warren brought to the library a collection assembled by five generations (1782–1928) of Boston physicians. The George Burgess Magrath legal medicine collection is noteworthy, as is a special collection on the history of radiology. The archives constitute a remarkable assemblage of records of the Boston medical community. The papers of Dr. Oliver Wendell Holmes, a founder of the Boston Medical Library, are included. Pasteur, Bernard, Virchow, the Curies, and Avicenna (in Persian and

Spanish translations) are represented in the manuscript collection; there are also noteworthy portraits.

The New England Regional Medical Library Service (NERMLS) at Countway is supported by the National Library of Medicine (*56*). The library is a regional search center of the Medical Literature Analysis and Retrieval System (MEDLARS), and is connected by remote computer terminal to the State University of New York Biomedical Communication Network. A monthly *Newsletter and List of Recent Acquisitions* is published, as well as *NERMLS News* (quarterly). A guide to the Countway Library is No. 9 in the series of *Guides to the Harvard Libraries*.

The Harvard Medical School is the third oldest medical school in the United States; when the Harvard Corporation voted in 1782 to establish medical professorships, it also voted to develop a library "collection more perfect than any in America, as soon as circumstances will permit." The school did not have a library of its own, however, until 1819 (9 years after it had moved from Cambridge to Boston), when five members of the faculty offered to convey to Harvard the library that they had collected from their own resources in the building known as the Massachusetts Medical College (*57*). A Dental School Library, established in 1897, became part of the Harvard Medical Library in 1944.

There was a Boston Medical Library, formed by a private medical society in 1805, but its books were kept with Harvard's until 1826, when they were transferred to the Boston Athenaeum. In 1875 a new Boston Medical Library was established, largely on the initiative of Dr. James R. Chadwick, and this became the leading medical collection in the area. Although suggestions for union with Harvard were made from time to time, it was not until January 1960 that an agreement was ratified; Miss Countway's gift of $3,500,000 in 1958 had assured the construction of a new building for the Harvard Medical Library, and it was evident that, if there was to be a union, it ought to be agreed to in time to provide for it in building planning. The Boston Medical Library retains its corporate identity, but its collection has been administratively and physically united with Harvard's.

MEDICINE: THE LUCIEN HOWE LIBRARY OF OPHTHALMOLOGY

The Lucien Howe Library of Ophthalmology (9,913 vols.) is located in the Massachusetts Eye and Ear Infirmary in Boston. It was founded in 1928 by the Harvard Medical School and the infirmary, and contains an excellent collection in its fields of ophthalmology and otolaryngology (*58*).

MUSIC: THE EDA KUHN LOEB MUSIC LIBRARY AND THE ISHAM MEMORIAL LIBRARY (*59*)

The Eda Kuhn Loeb Music Library was opened in 1956; the architect was Stanley B. Parker, and construction had been made possible by gifts from the estates of Eda Kuhn Loeb and Fanny P. Mason. An addition larger than the original building was completed in 1972. Music is the only department of the

Faculty of Arts and Sciences with a library housed in a building constructed for it.

The collection (70,490 vols.) includes research materials on the subject that had been shelved in Widener prior to 1956. It is good; there are also numerous sound recordings with facilities for listening. A distinguished personal library formed by Richard Aldrich was given by his family at the time the building opened, and gifts of Gilbert H. Montague have established the Amy Angell Collier Montague Collection of Phonograph Records.

The Isham Memorial Library (642 vols., plus 6,300 reels of microfilm and 300 microfiche) was moved from Memorial Church to the Loeb building in 1971. It began in 1932 when Ralph Isham established a fund for the purchase of early organ music, but its holdings (chiefly microreproductions) now include important research material on early vocal as well as early instrumental music.

PHYSICS *(60)*

The Physics Research Library (11,715 vols.) can trace its antecedents to 1886/87, when Justin Winsor's *Annual Report* noted the "beginning of a collection in the Physical Laboratory, consisting at present of only 7 volumes." This was the Jefferson Physical Laboratory, in which an undergraduate collection remained after 1931, when a separate Physics Research Library was established in the new Lyman Laboratory. In 1967 the research library moved to new quarters in the Jefferson Laboratory. In physics (as in engineering) Harvard's library resources are less extensive than those of the Massachusetts Institute of Technology.

PUBLIC ADMINISTRATION: THE LITTAUER LIBRARY OF THE JOHN FITZGERALD KENNEDY SCHOOL OF GOVERNMENT *(61)*

The Littauer Library of the John Fitzgerald Kennedy School of Government (formerly the Graduate School of Public Administration) is now housed in the Littauer Center building, which was opened in 1939, but there are plans for moving the library, the school, and the Kennedy Institute of Politics to a complex of buildings that will also house the Kennedy Memorial Library, a Presidential library administered by the National Archives. Construction has been delayed because the site, on the Charles River between Harvard Square and the Harvard Business School, had to be vacated by the Massachusetts Bay Transit Authority. The architects will be I. M. Pei and Partners.

The collection (271,757 vols.) is Harvard's research collection for public administration, and its American state document holdings are not for the most part duplicated elsewhere at Harvard, though they are less comprehensive than those of the Massachusetts State Library in Boston. The Littauer Library also provides a working collection for the Departments of Economics and Government of the Faculty of Arts and Sciences. Books are shelved alphabetically by author in broad groups, and circulation and shelving difficulties result from the absence of call numbers.

The library was established in 1939, when more than 50,000 volumes were transferred from Widener to the Graduate School of Public Administration (renamed in honor of President Kennedy in 1966), which is the newest of Harvard's graduate professional schools.

THEOLOGY: THE ANDOVER-HARVARD THEOLOGICAL LIBRARY OF THE HARVARD DIVINITY SCHOOL (*25*)

The Andover-Harvard Library (36,000 sq. ft.) retains the bookstack that formed part of its quarters in Andover Hall, but two-thirds of its space is in new construction that was completed in 1961. The architects were Shepley, Bulfinch, Richardson, and Abbott.

The collection (313,471 vols.) is particularly strong in Biblical studies, Unitarianism and the liberal movement in theology in America, and in European Protestantism, especially German and Dutch controversial theology of the sixteenth through the eighteenth century. It is supplemented by collections in the college library that have been described above (Section XI, under "Church History").

The Harvard Divinity School is one of seven Boston-area institutions that formed the Boston Theological Institute in 1967. The B.T.I. is developing an ambitious program of library cooperation and specialization in collecting; there are more than 1,500,000 theological books in research libraries of the Boston area, and the Andover-Harvard Library, as the largest of the theological collections, is taking a leading part in the movement toward coordination (*62*).

Religious & Theological Resources is a monthly publication of the Boston Theological Institute. Publications of the Andover-Harvard Library include its *Theological Currents*, a monthly guide to the contents of selected periodicals and festschriften.

The Andover-Harvard Library was created in 1908 by the union of two collections. One, the Library of the Andover Theological Seminary, dates from 1808, when the seminary was established by conservatives who were alarmed by Harvard's appointment, in 1805, of Henry Ware, Jr., a Unitarian, as Hollis Professor of Divinity. The other, the Harvard Divinity School Library, began in 1811, when graduate instruction for the ministry was organized at Harvard and a collection of duplicate theological books was segregated from the college library for use of the students. In 1826 the books were installed in Divinity Hall.

In 1908 the seminary at Andover and the school at Harvard entered into affiliation, and in 1910 they adopted an agreement for union of their libraries. Andover Hall (at the northeastern corner of the Harvard campus in Cambridge) was erected by the Andover Trustees in 1910–1911, and it included a reading room and stack for the united library. In 1922 a plan was adopted for forming a single theological school, but this was challenged on legal grounds and in 1926 the affiliation was dissolved; the Andover Seminary later joined with the Newton Theological Institution to form the Andover Newton Theological School. The libraries, however, remained united; Andover retains title to its books, but a new agreement concluded in 1970 reaffirmed the arrangement and, unless both parties concur in a change, the Andover materials will remain in the Library at least until A.D. 2000.

WOMEN: THE ARTHUR AND ELIZABETH SCHLESINGER LIBRARY ON THE HISTORY OF WOMEN IN AMERICA, AT RADCLIFFE COLLEGE (*63*)

Unlike Radcliffe's undergraduate Hilles Library, the Schlesinger Library has not been attached administratively to Harvard; Radcliffe College remains a separate corporation, and the Schlesinger Library is its property, but it functions as a research collection for the Harvard community.

Manuscript collections are a major element in its holdings; they include the papers of figures such as Susan B. Anthony, Dr. Mary Putnam Jacobi, Leonora O'Reilly, Lucy Stone, and Harriet Beecher Stowe, as well as the archives of a number of women's organizations, including the League of Women Voters of Massachusetts. The emphasis in collecting is on women's part in the American concern for social justice; papers of distinguished women in the arts normally are not collected, but a special effort has been made to document woman's life at home and in her volunteer services. Book collections include etiquette books and cookbooks, as well as files of numerous periodicals identified with the woman's rights movement and of popular women's magazines.

The Schlesinger Library began in 1943 as the Radcliffe Women's Archives when Maud Wood Park presented her woman's rights collection to Radcliffe. In 1965 it was renamed in honor of the Schlesingers in recognition of their interest and their contributions to scholarship in its field. Since 1967 it has been housed in the building on James Street that was occupied by the Radcliffe College Library prior to the construction of the Hilles Library.

XIII. Sources of Further Information

Some 300 articles and books describing Harvard Library collections are listed in Robert B. Downs's *American Library Resources* (1951), and another 100 are to be found in his *Supplement* for 1950–1961. References have been cited only very selectively in this article.

Publications mentioned in Section VI above should not be overlooked, particularly the *Annual Report* of the Harvard University Library from 1877/78 to date and Alfred C. Potter's fourth edition (1934) of *The Library of Harvard University: Descriptive and Historical Notes.*

The *Harvard Library Bulletin* (1947–1960, 1967–) is the major single source for accounts of the library's history and collections. It also provides a current bibliography in the form of two or three supplements per annum to "A Harvard

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EDWIN E. WILLIAMS

HASSE, ADELAIDE ROSALIA

Adelaide R. Hasse, born September 13, 1868, at Milwaukee, Wisconsin, was one of the daughters of Dr. Hermann E. and Adelaide (Trentlage) Hasse. About 1885 the father, who was a physician and lichenologist, removed with his family to the vicinity of Los Angeles on account of his health. Adelaide R. Hasse, who had been tutored privately, began her career at the Los Angeles Public Library under Tessa L. Kelso in 1889, and was encouraged to organize the very considerable collection of United States government publications there, and to start preparing a checklist of them. Word of the first section relating to the U.S. Department of Agriculture reached Washington and appeared presently as *Library Bulletin 9*, U.S. Department of Agriculture (*List of Publications of the U.S. Department of Agriculture, 1841–1895*).

Under the Printing Act of January 12, 1895, the Office of the Superintendent of Documents was created at the United States Government Printing Office, which in addition to having centralized control over the distribution and sale of government publications was required to prepare, print, and publish three important bibliographical series: (1) Comprehensive index (*Document Catalog*, at the end of each Congress); (2) Consolidated index (*Document Index*, at the end of each regular session of Congress); and (3) *Monthly Catalog*. On the basis of her competence as mentioned above, Miss Hasse became the first librarian of the new office in May 1895. As Miss Hasse has related in *The Compensations of Librarianship* (*1*).

> My duties as librarian were to care for the current documents after they had been recorded by the cataloguers and to collect all other documents. The Richardson Bill [Printing Act of 1895] gave to the Superintendent of Documents the authority to remove to his custody from all the departments all the accumulations of documents not in use for the business of the departments. The removal of these accumulations fell to me. I dare say never had any collector been given such an opportunity to revel in a very orgy of collecting.

To meet the needs of the situation, Miss Hasse devised the classification scheme by agency as expanded in the *Checklist of United States Public Documents, 1789–1909* (*2*), and as used currently in the *Monthly Catalog of United States Government Publications*, "with the idea of providing a notation for any collection of United States documents which was to be kept intact as a unit." The Library of the Superintendent of Documents, originally organized by Adelaide R. Hasse, seems to have become the outstanding instance among all the countries of the world of a practical and archival approach for the increasingly voluminous and intricate output of national government publications. On account of space considerations it was transferred in 1972 to the National Archives. When Dr. John Shaw Billings, then director of the New York Public Library, examined Miss Hasse's achievement in 1897, he was so impressed that she "received an offer from him to come to the New York Public Library, there to build up what Dr. Billings wished to be a great document collection." To the Washington period belongs her *Reports of Explorations Printed in the Documents of the United States* (*3*).

Under the stimulus of Dr. John Shaw Billings, Miss Hasse's service at the New York Public Library was not only most fruitful in building up the collection of government publications from a rather modest basis of about 10,000 volumes. Cooperation with and participation in the activities of the American Library Association Committee on Public Documents resulted in articles contributed to the

Bulletin of the New York Public Library as well as to *Library Journal* and *Public Libraries*. This was a stimulating period on which to work on government publications in New York City. The lead had been taken by R. R. Bowker of the *Library Journal* and *the Publishers' Weekly* on the basis of his experience with lists of state publications in the *American Catalog* for 1884–1890 and 1890–1895 by bringing together (with cooperation from a variety of sources, mainly in the several states from 1899 to 1908) the then epoch-making *State Publications, A Provisional List of the Official Publications of the Several States of the United States from their Organization*, in 4 parts. Miss Hasse was then in contact with Mr. Bowker from 1897 as a member of the American Library Association Committee on Public Documents, of which he was then chairman, and with a lapse of several years succeeded him as chairman herself in 1905 and served actively thus through 1908. Her works, first of *United States Government Publications, A Handbook for the Cataloger* (*4*), next *Some Materials for a Bibliography of the Official Publications of the General Assembly of the Colony of New York, 1693–1775* (*5*), and further the *Materials for a Bibliography of the Public Archives of the Thirteen Original States* (*6*), were but proving grounds for the great work to come under the auspices of the Carnegie Institution of Washington as its *Publication 85*. As Dr. William S. Jenkins has said in his report on 25 years of collecting public record material (*7*), Miss Hasse had become "versed in the tradition of the classical bibliography of distinguished American figures such as Henry Stevens, Sabin and Wilberforce Eames."

On the basis of the collections of the New York Public Library, Miss Hasse, under the sponsorship and encouragement of Dr. John Shaw Billings and of John L. Cadwalader, a trustee of the New York Public Library and prominent lawyer in New York City, both being trustees of the Carnegie Institution, was authorized by the Department of Economics and Sociology of the Carnegie Institution of Washington to prepare the monumental *Index of Economic Material in Documents of the States of the United States*. This work was intended initially to open up through the year 1904 this vast resource for all students engaged in the preparation of the economic history of the United States. The stately series, beginning with Maine (1907), and continuing through New Hampshire, Vermont, New York, Rhode Island, Massachusetts, California, Illinois, Kentucky, Delaware, Ohio, New Jersey and Pennsylvania (1919–1922), covers economic material in the broad sense. Exceptions are (1) laws, constitutions, and court decisions; and (2) bureaus of labor, to which there was already an adequate index. It contains, wherever necessary, references to material outside the New York Public Library so far as Miss Hasse was able to locate it through trips or correspondence as well as precise lists of the legislative journals and of the collected documents prefixed to the *Index* for each state. Increasingly, state by state, many lacunae in the holdings were noted, and examination of legislative journals for orders to print brought to light a number of unlocated references. For Kentucky, Delaware and a few other states, it was not possible to collate a continuous file of the legislative journals and of the collected documents. Owing to the discontinuance of the Department of

Economics and Sociology beginning with 1917 by the Carnegie Institution of Washington as reported in its *Yearbook* for 1916, in the continuing trend to concentrate on the natural sciences, the series of its *Publication 85* was suspended with the three volumes for Pennsylvania, although work had been started on South Carolina. As Mr. Bowker has stated in his discerning sketch of Miss Hasse in the *Library Journal* of August, 1920, p. 639–40, the series "in itself was a life work for any less industrious and persistent person," and indeed "Miss Adelaide R. Hasse has made herself one of the first authorities on public documents not only of this country and of its states but of other countries."

In addition to the great series, the Carnegie Institution of Washington published from 1914 to 1921 in three volumes as its *Publication 185,* Miss Hasse's *Index to United States Documents Relating to Foreign Affairs, 1828–1861.* Mr. John L. Cadwalader, who had served in Washington, D.C., as assistant secretary of state under Hamilton Fish, 1874–1877, had had great difficulty from time to time finding documentation for earlier foreign negotiations. This was the case because of the absence of any key, especially for that period as he explained briefly in his introduction to the *Index.* He had collected a great and almost complete collection chronologically of the documents, especially for the period, while it was still possible for a persistent and devoted individual to do so, and deposited the series with the New York Public Library, of which he was a trustee. There, also, the lack of any detailed key for the period 1828, when the foreign affairs section of the folio *American State Papers* concludes, to 1861, when the annual volumes of *Diplomatic Correspondence* had begun, "diminished its practical value." Miss Hasse immediately understood and acted to begin preparing the *Index.* Mr. Cadwalader, said, "The index assumes, within the period named, to afford to the student reference to the entire published record of documents, papers, correspondence, and to a considerable extent, legislation and decisions upon international or diplomatic questions." Mr. Cadwalader himself died in 1914, and the three volumes of the *Index* represent a memorial to his great understanding for the practical as well as scholarly needs for the period.

With the death of Dr. John Shaw Billings on March 11, 1913, the coming of a new director, and other changes such as the merger of Public Documents with the Economics Division, a situation was created in which Miss Hasse, with boundless energy and specialized experience, did not adjust. The invitation late in 1918 by the U.S. Department of State to come to Washington to concentrate for the time being on the preparation of certain material for the American Peace Commission in Paris, marked her return to Washington, where for the ensuing 30 years or so Miss Hasse engaged mainly on bibliographical assignments for various agencies of the U.S. Government. This was interrupted by several years at the Brookings Institution. She also taught courses on government publications, first at George Washington University and later at the Catholic University of America.

In September 1948, coming from retirement as a final contribution to her great work, Miss Hasse served for a year and a half as bibliographer and analyst at the Library of Congress, assisting Dr. William S. Jenkins of the University of

North Carolina in the final editing for microfilm publication of records of the states of the United States, which he had been collecting as an itinerant microphotographer.

Thus, as expressed so well at the beginning of her little-known *The Compensations of Librarianship* (*1*), Adelaide R. Hasse continued in the discerning spirit of collecting and service almost to the very end of her life, which came in a suburb of Washington, D.C., on July 28, 1953, at the age of 84.

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JAMES BENNETT CHILDS

HAWAII LIBRARY ASSOCIATION

The librarians of the Hawaiian Islands held their first meeting in November 1921, in Honolulu, at the invitation of Edna Allyn, a children's librarian of the Public Library of Hawaii. This preliminary gathering paved the way for a formal meeting in January 1922 when twenty participants from the four major islands officially established the Hawaii Library Association (HLA) and adopted a constitution. Clara Hemenway, librarian of the University of Hawaii, served as the first president. The following year the new association sent delegates to the annual conference of the American Library Association, and in March 1924 the association officially became a chapter of ALA.

Membership increased gradually for the next 2 decades; by 1944 there were over 130 members, and by the end of 1964, 5 years after statehood, membership had increased to more than 250. Membership in 1971 was approximately 450. The organization was the offspring of a relatively small and dedicated group in the early years. Today it is larger and more diverse, with six special-interest or type-of-library sections and a variety of functions. Throughout its history it has been involved in basic professional considerations: The training, compensation, working conditions, and professional development of library personnel; the nature of library organization in the territory and state; the creation of local reference and bibliographic resources; and the general welfare and improvement of Hawaii's libraries. As stated in its constitution, the association's object is "To promote library service and librarianship in Hawaii, and to cooperate in the promotion of general and joint related enterprises with the American Library Association and other groups."

The association has long manifested a concern for school libraries. This was the subject of a meeting in the first year of its existence. In 1931 the qualifications of secondary school library personnel were considered. Some years later the association asked that graduating teachers have at least six units of library work. A teacher-librarian coordinator for each island was first advocated in 1936, and by 1944 the recommendation to the Department of Public Instruction was for a territory-wide school library supervisor. A similar recommendation emerged from the association's survey of Hawaii school libraries in 1954. When the new state government was organized following statehood in 1959, response to long advocacy came with the creation of a State Supervisor of School Libraries. With the release of the Odell survey in 1958, HLA joined other groups in campaigning for more support for school libraries.

Participation of school librarians in HLA resulted in the formation of a Junior and Senior High School Section in 1951. Although the Elementary and Secondary School Librarians' Sections were still in existence in 1960, in that year the Hawaii School Librarians Association was organized, and the separate schools sections of HLA disbanded shortly thereafter. In 1962 the school library group adopted its present name, the Hawaii Association of School Librarians. HASL is affiliated with the American Association of School Librarians. One of the first activities of the new organization was its cosponsorship, with HLA and the State Department of Public Instruction, of a Pilot Program for the Implementation of the 1960 School Library Standards. Close cooperation has continued between the two separate organizations, for the most part. Many of the 190 current members of HASL also maintain membership in HLA, and a number of HLA members, although not school librarians, hold membership in HASL.

Just as the interest in school libraries resulted in the formation of school library groups within the parent organization, other interests also led to the establishment of special groups. The Children's Section and the Hawaiian Document Checklist Section began in 1939; in 1944 the latter became the Hawaiiana Section, and the Reference and Special Libraries Section began, followed in 1946 by a relatively short-lived Cataloging Section. Members of the Children's, Hawaiiana, and Special and Reference Sections continue to join together on the basis of common interests that transcend type-of-library boundaries. For a long time this was the dominant kind of affiliation within the association. Type-of-library grouping also developed, however, in addition to the early schools sections: the Armed Forces Section started in 1954 (and was re-established in 1963), the College and University Section began in 1970, followed by the Public Libraries Section in 1971.

While section activities constitute a major part of HLA's operations, the work of permanent committees is also important. Since the early 1930s there have been committees concerned with professional standards and with legislative matters, and their members have been called upon to testify before the State Legislature and to work with other agencies of government and community groups. The Legislative Committee Chairman became the first Federal Relations Coordinator after the committee's work for federal support for libraries in 1963. Today the coordinator is a separate appointee. Following a local censorship case in 1961, an Intellectual Freedom Committee was established. While its role has been primarily educational, it has been called upon occasionally to support the right of libraries to circulate controversial materials, notably in 1963 when the public library refused to withdraw *Tropic of Cancer* from circulation.

The executive board is the governing body of the association, and is composed entirely of elected officials: president, vice-president–president-elect, secretary, treasurer, and four directors (who serve for overlapping 2-year terms), the section chairmen, and the representative to the ALA Council.

HLA has taken an active part in a range of activities important to the development of librarianship in the fiftieth state. The organization has at various times worked successfully for improved position classification plans and salaries for professional and subprofessional personnel, and for increased book budgets. It has seen its recommendations adopted for the organization of the state library system, beginning with the endorsement of Robert Leigh's survey recommendations in 1960. It has participated both in developing the position description for state librarian and in recruiting all three of the persons who have occupied that position. In the early 1960s the membership considered a plan for HLA to upgrade and improve the status of Island librarians by becoming the official certifying body for the profession locally. The membership finally voted against certification by the organization, however, in part because of the highly centralized state control of position classification for all types of librarians in the state.

The association has also been active in the area of library education and training. In the mid-1950s its surveys revealed interest in summer courses at the University of Hawaii. In 1959 the Personnel Standards Committee suggested exploring the need for a graduate library school in the state. Following the release of the Gitler Report for the East-West Center in 1962, recommending the establishment of a graduate library school, HLA undertook an advisory role. Today the president of HLA serves as a member of the Advisory Board of the Graduate School of Library Studies of the University of Hawaii. A special HLA committee has been organized recently to develop continuing education opportunities for Hawaii librarians.

In cooperation with the Hawaii Association of School Librarians, the association administers the Nene Award. This award (named for the Nene, the official state bird) is intended to encourage the children of the fiftieth state to become acquainted with the best in contemporary children's fiction. Through their school and public libraries, Island children select the book of their choice each year. The Nene Award has gained national recognition since its inception in 1964.

In its role as publisher, the association has documented professional activities and library development in Hawaii, and has in addition produced a number of unique reference and bibliographic resources. It first periodical publication, the *News Bulletin,* appeared in 1943. The *HLA Journal* began the following year as a quarterly news bulletin. It was soon carrying articles of permanent interest as well, and in 1958 a separate publication, the *HLA Newsletter*, was created to handle the more transitory material. Both are still being published. The *Journal* became semi-annual in 1951. *Current Hawaiiana* was conceived by Janet Bell of the University of Hawaii and was launched by the Hawaiiana Section in 1944. Under her guidance it has developed into a periodical bibliography on Hawaiiana with a world-wide mailing list. It is now issued by the University of Hawaii Library. Other special resources published by the association include *Index to Thrum's Annual* (1925); *List of Hawaiian Statute Laws in Hawaiian and English, 1839–1939* (1951); *Union List of Serials in Libraries of Honolulu* (1950) (3rd ed., 1965); *Names and Insignia of Hawaii* (1958); *List of Hawaiian Children's Books* (1959); *Official Publications of the Territory of Hawaii, 1900–1959* (1962); *Directory of Special Libraries in Honolulu* (1958), (rev. ed., 1960, 2nd rev. ed., 1968); *Directory of One Hundred and One Hawaiian Libraries* (1968) (Vol. 25, No. 1 of the *HLA Journal*); and *A Directory of Libraries and Information Sources in Hawaii and the Pacific Islands* (1970) (Vol. 27, No. 2 of the *HLA Journal*).

In addition to annual Fall and Spring Conferences, the various sections schedule meetings with programs of interest throughout the year. Fall conferences are held on the neighbor islands in alternate years. The Spring conferences of 1968 and 1970 were joint conferences sponsored by HLA, The Hawaii Association of School Librarians, and the Hawaii Audio-Visual Association (now renamed the Pacific Association for Communication and Technology). HLA has been the co-operating host association for four Mid-Pacific Summer Library Conferences: In 1958 with the American Library Association, in 1961 with the Special Libraries Association, in 1962 with the American Association of Law Librarians, and in 1967 again with ALA. The association maintains good working relations with the Friends of the Library of Hawaii, a thriving organization whose services are often of direct benefit to the library community.

Nineteen seventy-two marks the fiftieth anniversary of the association. At least two areas of special concern that have preoccupied the organization in its past will carry over into its future. One is the geographical isolation that this island state imposes, and attempts will continue to assure neighbor island librarians full opportunity to participate in the association's affairs. The other area of concern is the relationship among different types of librarians in Hawaii, and particularly the relations of school and public librarians to one another, to their mutual employer, and to the public they serve. Because people from all types of libraries comprise its ranks, the Hawaii Library Association will continue to face special challenges in working for all librarians in Hawaii.

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IRA W. HARRIS

HAWAII. UNIVERSITY OF HAWAII GRADUATE SCHOOL OF LIBRARY STUDIES

Introduction

Lying at 21°18′ N and 157°51′ W, the Graduate School of Library Studies of the University of Hawaii is located closer to Tokyo, Taipei, Manila, and Shanghai than to New York, Washington, or London. This has much to do with the character of the school, its program, and its student body. The school is in an ideal location to serve as a bridge between East and West. About 20% of its students are from Asian countries and are committed to return home to assist in library development on completion of their studies. The Graduate School of Library Studies offers a unique sequence of courses in Asian librarianship and cooperates closely with Asian library schools and associations in programs of mutual interest and benefit.

History

Undergraduate education for librarianship at the University of Hawaii started in 1928 when the Territorial Normal School, later called the College of Education and integrated with the university, offered a course called Library 150, Library Techniques. A second course on School Library Materials was given in the 1929 Summer Session. Additional courses were gradually added and an undergraduate major in library education tailored to meet the needs of the State Department of Education for school librarians made available. A distinctive feature of this program was a 14 credit hour practicum. The program of undergraduate instruction was not well supported. The teaching load was carried by the university's elementary and high school librarians both of whom had full-time library responsibilities and it was not until 1959 that the first full-time instructor was appointed. The success of the program which received the 1961 Grolier Americana Award for undergraduate library education is a tribute to the dedication of Caroline Crawford, Cynthia Geiser, Priscilla Lantz, and Chow Loy Tom, who served as instructors in the program in the 1950s and 1960s.

The question of a graduate program in librarianship at the university had been discussed for some years by members of the Hawaii Library Association. The question revolved around the number of positions open in the state for professional librarians, there being continuing difficulty in recruiting professional librarians to work in Hawaii, and at the same time a recognition that the number of vacancies open each year were probably not enough to warrant the expense of establishing and maintaining a graduate school of librarianship. This was the conclusion of the Hawaii Library Associations's Special Committee on Library Personnel Standards *Report* of March 1960 (*1*). Robert D. Leigh's *Governor's Study of Public and School Libraries in the State of Hawaii* published later in 1960 urging an improvement in librarians including increased numbers of personnel led to changes in the estimates of demand for professional librarians (*2*). The establishment at the University of Hawaii of the East-West Center, officially called the Center for Cultural Interchange between East and West, provided impetus for new programs at the University of Hawaii for educating Asians as well as Americans. These new inputs resulted in a change in the thinking of the committee, which in February 1961, under the chairmanship of Eleanor H. Davis made *Recommendations for Expanded Library Science Training in Hawaii* (*3*). The 1961 recommendations directed to the East-West Center suggested the need for in-service training programs for Asian library personnel and for graduate level instruction for both Asians and Americans. The committee strongly recommended that East-West Center employ a qualified consultant to assess Asian and local needs and make recommendations. In April 1961, the House of Representatives of the First Legislature of the State of Hawaii passed a resolution instructing the University of Hawaii to study the feasibility of offering a degree in library science and to report its findings at the start of the 1962 session (*4*).

Robert L. Gitler, then associated with the Japan Library School at Keio-Gijuki University in Tokyo and before that, Executive Director of the Library Education Division of the American Library Association, was asked to serve as consultant to the East-West Center and the University. Dr. Raynard Swank served as co-consultant during the early period of the study. Gitler observed that there were sixty-seven vacancies in libraries in Hawaii and that approval of pending budget requests would increase the vacancies by twenty more positions (*5*). He correctly anticipated a growth and improvement of libraries in the state. There were in 1961 more than 100 Asians studying in United States library schools and Gitler observed that because of its location, its affinities with Asia, and curricula offerings in Asian Studies and cognate subjects the University of Hawaii offered a location hospitable to Asian students. He concluded also that these factors offered the opportunity for training United States students for specialized work in Asian collections in the United States. The major recommendation of the Gitler report was that a graduate library school designed to meet the standards of the American Library Association be established at the University of Hawaii. It was recommended that the curriculum of the school be constituted to provide a graduate progrm leading to a Master's degree preparing students for all types of professional library service; to offer a program specifically to prepare school librarians to meet the certificate requirements of the State Department of Education; and to offer vestibule courses at the undergraduate level as preparation for graduate study, to train library aides, and as a means for building individual orientation programs for Asian students of library science. Undergraduate courses were not, however, incorporated into the school's curriculum. Instead, a 2-year program for training para-professionals was instituted at Leeward Community College, a part of the University of Hawaii system, in 1968, and a 6-month program combining lecturers and in-service training initiated by the East-West Center's Institute for Technical Interchange in 1965. The latter has trained people for both Asia and the Pacific Islands.

In 1964, Dr. Ralph R. Shaw came to Hawaii from his position at the Rutgers Graduate School of Library Study to become Dean of Library Activities, with responsibilities for expanding and improving the University's library system and for establishing a new Graduate School of Library Studies. The year 1964/1965 was spent in recruiting faculty and designing the curriculum. Instruction began in June 1965 and the first class of twelve graduated in June 1965. The school's program of Master's level education was accredited by the American Library Association in June 1967. The School has awarded 350 Master of Library Science degrees since June 1965 and currently graduates about 100 students each year.

Objectives and Curriculum

The objectives of the Graduate School of Library Studies are to prepare beginning professional librarians for the essential task of selecting, organizing, and dispensing recorded knowledge in many different settings and with varying groups of people; to provide opportunities for practicing librarians to update their skills; and to add to the sum total of knowledge in the field of librarianship.

A core curriculum of six required courses is designed to provide the basic professional knowledge essential to all types of library work. This core curriculum includes courses in cataloging, reference, reader services, book selection, administration, and the history and current nature of the library profession. The remaining six courses in a normal student program are elective courses providing the student with an opportunity to explore one area of specialization such as school or special libraries in some depth. Programs of study are tailored to fit the needs of the individual and students are encouraged to take some of their elective courses in other departments of the University when this is appropriate to their career plans. Most of the courses in librarianship reflect the Asian-Pacific context in which the school operates. A number of specialized advanced courses are devoted to such topics as traditional literature and oral narration in the Asia-Pacific area, the special problems of administering Asian libraries, Asian reference sources, technical services for collections of East-Asian materials, and the publishing and bookselling activities of Asian-Pacific countries.

Federally-funded institutes have served as a basic means of providing continuing education opportunities for practicing librarians. Institutes have been devoted to such topics as: materials about Asia for college libraries, media materials for school libraries, Asian-Pacific folk literature, libraries in a pluralistic society, and the use of computers in library cataloging.

Asia Oriented Programs

From its inception the Graduate School of Library Studies has worked in close cooperation with the East-West Center in programs designed to train both Asians and Americans and to identify problems of Asian librarianship needing solutions. A basic program of grants for Asian students provides round-trip air fare from the student's home, housing in East-West Center residence halls, tuition and books, medical insurance, and a modest stipend for food and incidental expenses. The center assists in initial screening of candidates in the field, provides a mechanism for administering the Test of English as a Foreign Language and supports an English Language Institute where students are re-tested and given any required remedial work in English after arrival in Hawaii and prior to enrollment in Graduate School of Library Studies classes. Admission of candidates and graduate training are the responsibility of the school. On completion of Master of Library Science course work, grantees spend up to sixty days touring libraries in their area of special interest on the U.S. mainland. In some instances, East-West Center services and facilities are used in support of Asian students whose basic scholarship come from foundation or other sources. In 1966, 1967, and 1968 the East-West Center funded a Summer Asian Librarianship Program which made it possible for librarians employed in specialized Asian collections in United States libraries to come to Hawaii for 6 weeks of specialized training. In 1966 the East-West Center sponsored jointly with the Graduate School of Library Studies a conference on Library Education and Training in Developing Countries. Participation of Asian library educators in this conference was supported by a grant from the Rockefeller Foundation. An East-West Center supported program for in-service training of Asian library school faculty was initiated in 1969. Under this program two faculty members from Asian library schools spend a semester in residence and have opportunity to observe teaching methods, develop new course materials, or plan curricula for their schools.

The Graduate School of Library Studies has developed a special relationship with the Department of Library Studies at the University of Indonesia. In spring 1970 the Dean of GSLS served as consultant to the Government of Indonesia for several weeks. He returned to Djakarta in the following year to teach during the spring semester and a second member of the faculty went to teach at the University of Indonesia in 1972. In the meantime, the Director of the Department of Library Studies at the University of Indonesia has spent a semester in residence at Hawaii and a group of three students are doing a part of their course work for the degree at Indonesia in Hawaii along with getting some on-the-job experience in the University library system.

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ROBERT D. STEVENS

HAWAII. UNIVERSITY OF HAWAII LIBRARIES

The University of Hawaii is the only public institution of higher education in the state. It is composed of the University of Hawaii's largest campus, Manoa, in Honolulu, the University of Hawaii at Hilo, on the island of Hawaii, and six 2-year community colleges—four on the island of Oahu (Honolulu, 1965; Kapiolani, 1965; Leeward, 1968; and Windward, 1971), and one each on the other major islands of Hawaii (1965), Maui (1965), and Kauai (1965). Several of the community colleges existed as technical schools prior to their being made part of the consolidated university in 1965.

The fact that 80% of the state's population and virtually all of the financial and industrial activity is located in the city and county of Honolulu is responsible for the large number of campuses located on the island of Oahu. In fact, another community college and another 4-year institution are in the planning stages for this island (1972).

The university operates teaching and research facilities at more than fifty locations throughout the Hawaiian Islands and participates in international service and research activities in the Pacific Basin and Asian countries. It offers course work leading to the bachelor's degree in sixty-six fields. The Graduate Division offers work leading toward the master's degree in sixty-four fields and the doctorate in thirty-three. The fall of 1971 saw almost 40,000 students enrolled in the University of Hawaii for daytime classes, with an additional 8,500 enrolled for evening courses. The community colleges with their varied vocational programs, as well as liberal arts transfer programs, are presently experiencing the most dramatic growth.

The university is governed by a Board of Regents, a president with vice presidents for the university system, chancellors for the universities in Manoa and Hilo, and provosts for the community colleges. There is a Library Council composed of the librarian and a faculty member from each campus, and presided over by the university-wide vice president for academic affairs, which serves as the vehicle for achieving coordination of system-wide library activities.

The growth of the university and hence of the library can be divided into two periods: between 1907 when it was founded and 1959 when Hawaii achieved statehood. The College of Agriculture and Mechanical Arts of the Territory of Hawaii, a land-grant college, was established in 1907. Miss Caroline Green was appointed as the first librarian in September 1908.

In 1911 the new institution's name was changed to Hawaii College, and in 1912 it moved to its present site in Manoa Valley. The library was located in the first floor of Hawaii Hall, containing at that time 9,000 bound volumes and 9,000 pamphlets. As a land-grant institution supported largely with restricted federal funds, the college and library had a strong science orientation.

In 1920 a federal commission surveying education in Hawaii recommended an enlarged library and library staff and a new library building. As part of the general activity the name was changed to the University of Hawaii. The first separate library building, known now as George Hall, was completed in 1925, and the staff of six and the collection of 36,000 volumes and 91,000 pamphlets moved again.

The Gregg M. Sinclair Library, named in honor of a former president of the university, was completed in 1956 (see Figure 1). By this time the staff had grown to thirty-four and the collection had reached 264,747 bound volumes and 651,000 unbound periodicals and pamphlets.

In 1968 the Thomas Hale Hamilton Library, also named for a former university president, was completed (see Figure 2). The main book and periodical collection of the University of Hawaii is now housed in Hamilton Library, which has four floors containing 106,000 square feet of space and accommodates 1,000 reader stations with space for 800,000 books.

Sinclair Library was renovated in 1969 to better accommodate the undergraduate students. As of 1972 these two major library buildings serve the needs of the main Manoa campus. The Sinclair Library on the western side of the campus houses the undergraduate collection, the Asian, Hawaiian, and Pacific collections, and Government Documents, totalling some 500,000 volumes. Audio-Visual Services, which circulates films to the entire university system and operates a Listening Center, is also a part of the undergraduate library services housed in

FIGURE 1. *Gregg M. Sinclair Library, University of Hawaii.*

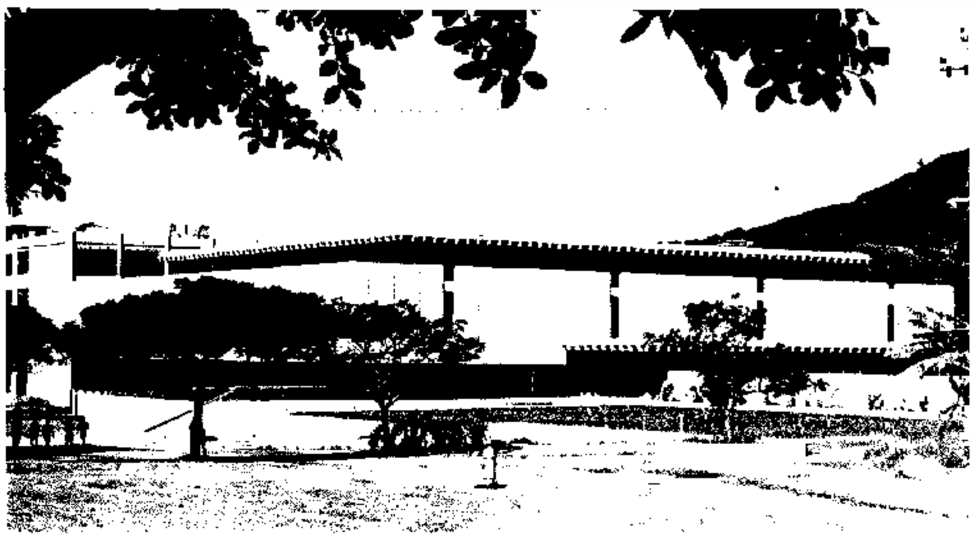

FIGURE 2. *Thomas Hale Hamilton Library, University of Hawaii.*

Sinclair. Hamilton Library on the eastern side of the campus contains not only the bulk of the general collections, approximately 700,000 volumes, but the administrative services and technical processing activities for both libraries.

Plans are well underway for construction of Phase II of Hamilton Library. This addition will more than double the present amount of space in Hamilton and will allow the research collections now at Sinclair to be housed in Hamilton Library to form one major research unit.

As the largest research collection in the state, the University Library serves as a bibliographic resource center to the entire state. It is linked by teletype to the centrally-administered public library system, the Hawaii State Library, as well as to the regional public libraries on each of the major islands. Through a cooperative arrangement with the public libraries, the community colleges on Maui, Kauai, and Hawaii, and the University of Hawaii at Hilo utilize the teletype network for rapid communication of interlibrary loan requests. A microfilm copy on indexed cartridges of the union catalog located in Hamilton Library is located in the community colleges of Maui and Kauai and in the Hilo College Library. In a geographically isolated state, sharing of resources through interlibrary loan and cooperative efforts assumes major importance. This concept is realized not only in the relationship of libraries within the university system, but also among all of the libraries of the state as they seek to provide the information resources needed by a rapidly growing citizenry.

The decade since statehood marked the period of greatest growth in enrollment at the university as well as a greatly accelerated growth in library staff, collections, and building space on the Manoa campus.* The university's full time enrollment has grown by more than 200%; it was 7,680 in 1958. The library's annual rate of book acquisitions and periodical subscriptions approximately quadrupled, resulting in a 150% increase in total holdings; the collection was converted from the Dewey Decimal to the Library of Congress classification; operational reorganization and efficiencies resulted in reducing cost of acquiring and cataloging books; and the staff grew from 39.5 to 147. (See Table 1 for current statistical data for the entire system.)

The establishment of the federally supported East-West Center on the campus in 1961 not only stimulated interest in Asian studies but provided financial support for a strong library program by the center. When augmented by the university's already strong Oriental collection, the result was a major collection of Asian materials administered by the center until the combined collection was returned to the university in 1970. By this time the collection had been expanded to include substantial holdings from South and Southeast Asia as well. The Asia Collection constitutes the largest of the special collections of the University Library, with holdings of over

*Since the community colleges are a rather recent development, eliminating the possibility of a long-term statistical comparison, the subsequent data deals with Manoa campus libraries.

TABLE 1

University of Hawaii Library Data, 1970/1971

	Full-time student enrollment, fall 1970	Bound volumes: Added during year	Bound volumes: Held at end of year	Library staff
University of Hawaii, Manoa	18,839	97,194	1,118,396	161.5
Hawaii Community College	540[a]	1,449	2,755	1
Hilo College	1,098	5,335	48,640	5
Honolulu Community College	1,663	1,699	21,463	9
Kapiolani Community College	1,850	1,378	14,873	3
Kauai Community College	458	1,223	11,859	2.5
Leeward Community College	3,651	10,334	27,314	12
Maui Community College	882	1,994	23,818	4.5
TOTAL	28,981	120,606	1,269,118	

[a] Estimated

300,000 volumes, and provides strong support for the institution-wide interest in Asia. A monthly list, *Asia Collection: Selected List of Recent Acquisitions*, is published.

The Hawaiian Collection of 52,000 volumes is the library's oldest and most comprehensive collection. Staff members produce a quarterly bibliography, *Current Hawaiiana*, which is circulated internationally, as well as an annual *Selected Reading List of Hawaiian Books*.

A rapidly growing Pacific Islands Studies program and the natural interest in the Pacfic Basin in interdisciplinary studies is supported by a 22,000 volume Pacific Collection. The University Library has joined with the Mitchell Library, Sydney; National Library of Australia; the State Library of Victoria; the Australian National University; and the National Library of New Zealand, Wellington, to form the Pacific Manuscript Bureau which is actively seeking rare archival materials from islands in the Pacific and making available microfilm copies to all cooperating libraries. An annual bibliography of Oceania, focused on humanities and social sciences, is compiled in the Pacific Collection and published in the *Journal de la Societé des Océanistes, Paris*.

Perhaps the most unusual characteristic of the Hamilton Library is that it contains virtually all of the scientific literature in the university. There are no departmental libraries of any significance on the campus. Even the bulk of the medical collection is located in Hamilton Library, with a small reference branch at an off-campus medical center.

As the library of a land grant and now a university with a sea-grant program, it continues to be heavily oriented toward the sciences. Paralleling this orientation and heavily influencing its direction, however, is the previously described strong interest in Asia and the Pacific Basin.

Reference service for the general collection is organized along the divisional lines of humanities and general reference, social science, and science and technology. These units produce bibliographies, assist with collection building, and provide instruction and seminars for their specializations.

There are four categories of employment at the University of Hawaii Library. Board of Regents librarian appointments are professional librarian positions with full faculty status. Librarians are well represented in the Faculty Senate and assume an active role in faculty affairs. Board of Regents administrative, professional, and technical appointments are nonacademic appointments which serve in areas such as fiscal affairs and reprography. Civil service appointments are nonprofessional positions in the library assistants, library technicians, and clerical series and are made through the State Department of Personnel Services. Student assistant appointments provide students with part-time jobs as well as help for the staff in every area of the library.

The following librarians have served to advance the development of the University of Hawaii Library during its relatively brief history:

1908	Caroline Green
1912	Elizabeth Bryan
1919	Clara Hemenway
1922	Mary Pringle
1943	Carl Stroven
1964	Ralph Shaw
1968	Stanley West

STANLEY WEST

HENRY E. HUNTINGTON LIBRARY AND ART GALLERY

Three years ago the Huntington Library celebrated the fiftieth anniversary of its foundation, but it was in the first decade of this century that Henry Edwards Huntington began his collecting which was to develop so dramatically after his retirement in 1910. In the ensuing years he certainly became the greatest figure in the history of American book-collecting, and when he died in 1927 he had brought together about 175,000 rare books and hundreds of thousands of manuscripts and documents.

Huntington, born in Oneonta, New York, in 1850, early showed qualities of initiative and leadership, and his interests were practical rather than scholarly (see Figure 1). Following successes in small undertakings, he joined his uncle, Collis P. Huntington the railroad builder, and in 1892 came to the west coast to represent the family's interests in California. On the way to San Francisco he stopped at Los Angeles and visited the Shorb ranch, known as San Marino. Ten years later, when

FIGURE 1. *Henry Edwards Huntington, 1850–1927.*

he withdrew from the Southern Pacific, he purchased this ranch which became the site not only of most of the city of San Marino but also of his own library, art gallery, and botanical gardens. Foreseeing the great possibilities of development in Southern California, he set to work to build an interurban electric railroad, and in 10 years he had created a system surpassing anything of its kind hitherto known. This, and other projects in the area he was instrumental in opening up, made him one of the outstanding figures in Southern California, and when he decided to retire from business in 1910, his home had been built on his estate and he was free to devote his energies to the collecting of books and paintings, in which he had already made a start in New York, and to the development of his San Marino property and the creation of botanical gardens.

He was a born collector with an instinctive appreciation of fine things, and of his two main interests, book collecting was the earlier to develop. He bought editions of his favorite authors and added more expensive volumes as he could afford them, but neither these nor the first paintings are now in the Huntington collections. With experience he adopted higher standards, and the earliest acquisitions in the library today are those that were made after 1900. He became attracted to the arts of the book: fine printing, illustrations, and bindings, and he bought a complete set of the Kelmscott Press editions and representative productions of other private presses.

In these early days Huntington adopted and developed his favorite method of buying, which was to acquire private collections or large lots of books in single transactions. This is not to say that he would not buy single volumes if they attracted him, or if they were needed to fill gaps, but by the en bloc purchase method he was able to build his library speedily. No other procedure could have brought together such a rich collection in less than 20 years. When considering en bloc purchases, scope, quality, condition, and the amount of duplication involved were the decisive factors, and it may be mentioned here that Huntington did not amass duplicates and thus deprive other collectors and libraries of books they needed; some were disposed of privately, but most of them were sold in a series of fifteen sales by auction, beginning in 1916.

Huntington's first major plunge in the auction room was at the sale of the library of Henry W. Poor in New York in 1908–1909. He purchased more than 1,600 lots, or approximately one-quarter of the sale, and an examination of his acquisitions confirms his fondness of beautifully printed and handsomely bound books, illuminated manuscripts, and incunabula. But it was his next purchases which determined the direction in which his library would grow. His interest in English literature and Americana rapidly became a concentration upon the history and literature of the English-speaking peoples in manuscripts, and first, early, and rare editions. In April 1911 Huntington acquired the E. Dwight Church Library of 2,133 volumes for a figure in the neighborhood of a million dollars. It included 1,500 Americana, including Franklin's *Autobiography* and a very fine set of De Bry's Voyages, but there were also first editions of Spenser and Milton, twelve Shakespeare folios, thirty-seven quartos, and first editions of *Lucrece, Love's Martyr,* and the *Sonnets.* Subsequent additions have made the library's Shakespearean collection one of the richest in the world. It is the only library with both the 1603 and 1604 editions of *Hamlet.* George Watson Cole, who compiled the great illustrated catalog of the Church Library, became Huntington's first librarian in October 1915.

In the meantime the sales of Robert Hoe's books were taking place in New York (1911–1912); this collection was rich in English and American history and literature, and Huntington bought 5,500 lots, including the Gutenberg Bible on vellum (see Figure 2). Before the Hoe sale was over, Huntington had acquired another private collection as a whole: this was the small but choice Beverly Chew

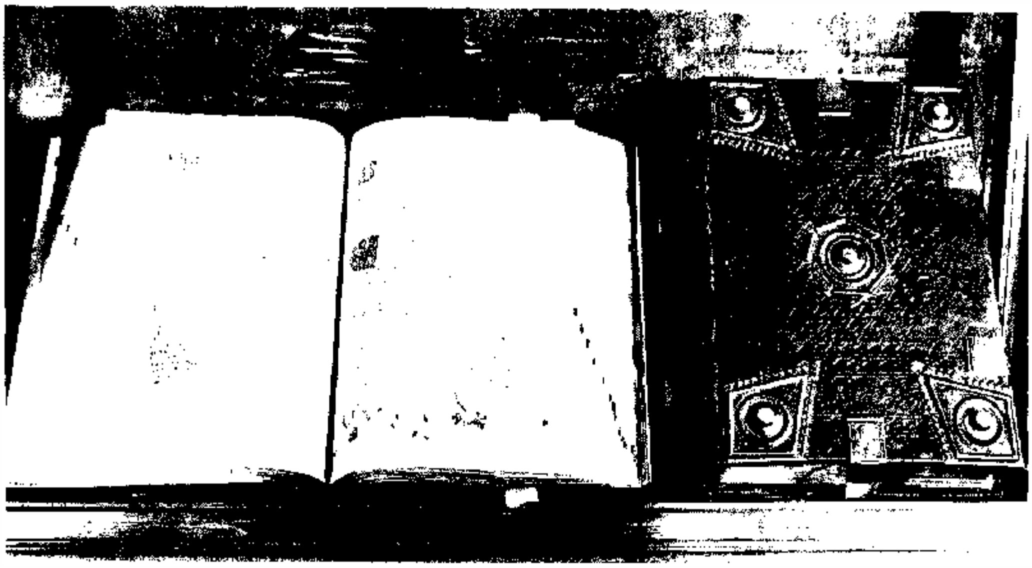

FIGURE 2. *The Gutenberg Bible. One of only twelve known copies printed on vellum.*

library of some 1,600 volumes of English poetry, including some valuable seventeenth century editions.

While being a consistent bidder at the Huth sales in London (1911–1920), Huntington continued to make his en bloc purchases; some of these related to the American Revolutionary War, George Washington, the Civil War, and Lincoln, but his greatest coup at this time secured not only a precious group of English incunabula, but the vast collection of plays which puts the library in the forefront for students of English dramatic literature. From the Duke of Devonshire came twenty-five books printed by Caxton, and the so-called Kemble-Devonshire plays. Before his retirement from the stage in 1817 John Philip Kemble, the celebrated actor, made a collection of about 4,000 plays and 40 volumes of playbills, which he sold to the Duke of Devonshire in 1820. The Duke added to the collection, and when Huntington bought it in 1914 it contained over 7,500 plays and 111 volumes of playbills. Among original manuscripts by Bale, Marston, and Percy is the earliest known manuscript of the Chester mystery plays.

By purchasing the F. R. Halsey library of about 20,000 volumes in December 1915 Huntington obtained not only valuable editions of almost every significant English writer down to the time of Stevenson, making this acquisition one of the first importance as far as the library's resources in modern English literature are concerned, but also notable early rarities by American authors of the nineteenth century such as Poe's *Tamerlane* (1827) and works by Longfellow and Melville. Two months later Huntington made his largest single purchase of incunabula, a precious collection of 136 titles including the Mainz *Catholicon* of 1460 and forty-eight first editions. Two months after that he acquired his first single collection of Californiana, the A. S. Macdonald library of 1,500 volumes, and so was begun another of the special fields for which the library has become famous.

In this same year the sales at Sotheby's of the Britwell Court books, owned by S. R. Christie-Miller, was begun. This fine library, rich in early English literature, history, and travel was dispersed in twenty-one sales. After a sensational beginning on August 15, 1916, when Huntington stepped in and bought the whole offering of the first sale in one transaction, the sales continued until 1927, and many acquisitions were made for the library over the years.

In retrospect, the year 1917 appears as most significant because by the purchase of the Bridgewater House library in that year, in one of his most outstanding en bloc acquisitions, Huntington began paving the way for the development of his library for research purposes. Sir Thomas Egerton (later Baron Ellesmere) founded the Bridgewater collection in the reign of Queen Elizabeth I, and it was augmented by succeeding generations down to the nineteenth century. Its wealth lies in a group of extraordinary medieval manuscripts (including the world-famous Ellesmere Chaucer) (see Figure 3); in many dedication and presentation copies of sixteenth and seventeenth century literary works; manuscripts of poems, plays, dialogs, and other compositions of the Tudor and Stuart periods; and the Larpent collection of about 2,500 manuscripts and printed proofs of plays of the period 1778–1824.

The purchase of the Bridgewater House library of about 4,400 printed books and some 12,000 manuscripts broadened any narrow concept of literature and history which Huntington may have had, for this great family library contained works on theology, science, and commerce as well as volumes covering numerous subjects of popular interest such as gardening, cookery, courtesy, and the like. Hitherto Huntington had been buying great books and great rarities, but now the background of literature was being filled in and light was being thrown on social and scientific changes that have affected civilization. The scholar's interests were now being served, and in subsequent purchases of manuscript documents and archives the way was being opened to research. Among these purchases may be mentioned the Brock collection of Virginiana (1922); the Loudoun papers of the eightheenth century (1923); the Battle Abbey papers (1923); the Blathwayt documents (1924); the Stowe manuscripts (1925), consisting of thousands of muniments and personal papers of the Temple, Grenville, and Brydges families which were united by marriages during the seventeenth and eighteenth centuries; and the Hastings papers, numbering about 40,000 documents of the Earls of Huntingdon, rich in records of the medieval and renaissance periods.

It was in August 1919 that Huntington signed the deed of trust whereby his collections would be given to the people of California and a self-perpetuating board of trustees was formed. In the same year ground was broken for the library building to which his books and manuscripts were finally brought from New York in 1920 (see Figure 4). The development of a library of thousands of "collector's items," first editions, manuscripts, and archives into a research institution for the study of the history of civilization in Britain and America was fully approved by

FIGURE 3. *Chaucer's* Canterbury Tales. *The Ellesmere Manuscript, dating from about 1410.*

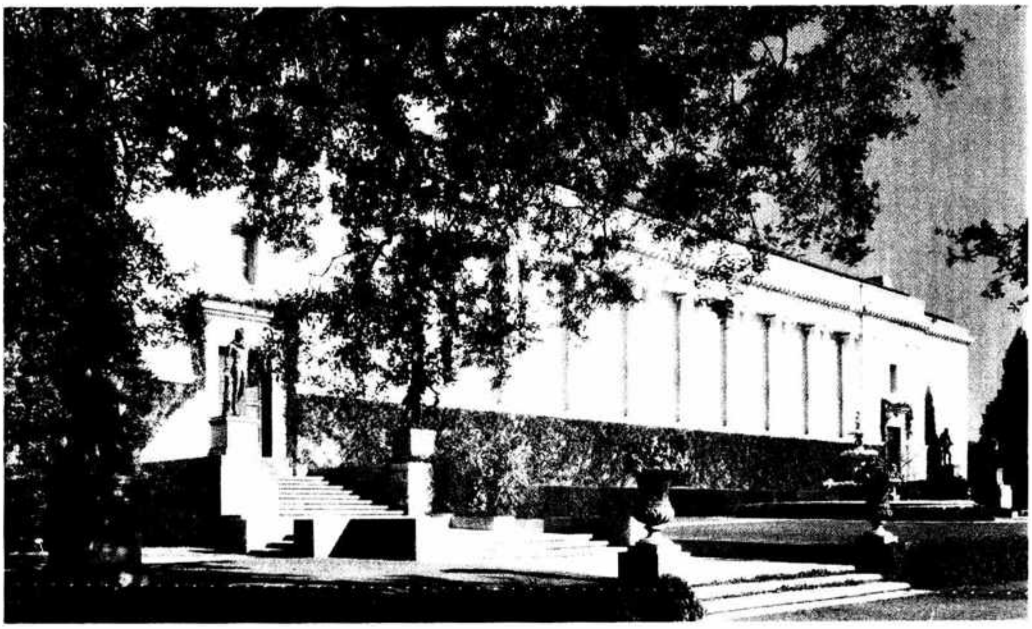

FIGURE 4. *The Library, set, with the Art Gallery, in 200 acres of Botanical Gardens.*

the donor, and shortly before his death in 1927 Dr. Max Farrand was appointed director of research. This involved not only the organization of the collections and the making of them available to scholars at the institution itself, but also the provision of a bibliographical and reference library to cover all the interests represented. There are now research associates on the permanent staff, assistance is granted to visiting research scholars, and a publications program is maintained. Over 1,200 readers use the library's facilities each year, and visitors to the public exhibition rooms and gardens (see Figures 5), for which there is no charge for admission, number about half a million annually.

The foregoing describes the genesis of the library and its development during Huntington's lifetime. Bearing in mind the founder's purpose, successive librarians have made thousands of additions in the established fields and have continued to build in depth. Huntington's acquisition of incunabula, especially in his later years, could only be described as additions to British and American history and literature in so far as the Caxtons and Columbus letters are concerned, but they are examples of printing and book production in its infancy and reflected Huntington's interest in the arts of the book. But he no doubt felt that these early printed books were the means whereby the culture of Western Europe was spread throughout the countries on the Atlantic and Mediterranean seaboard, and eventually through various channels found its way to the New World. Among the 5,300 incunabula are many first editions of the Greek and Latin classics, the Church Fathers, medieval literature, and contemporary creative writings. With these incunabula already here as a starting-point, the Continental literature of the Renaissance, the Reforma-

FIGURE 5. *The Art Gallery, formerly H. E. Huntington's residence, housing the famous collection of English eighteenth century paintings, drawings, and British and French decorative arts.*

tion, and the seventeenth century has been actively collected by the undersigned librarian, for what was being written, published, and disseminated on the continent of Europe was of profound interest and significance to English writers of the period; the circulation of continental books in England has been proven many times by the existence of copies in contemporary English bindings or with contemporary English ownership entries and notes.

The acquisition of numerous Greek and Latin editions and translations of the classics by the continental humanists drew attention to the fact that the library's reference material on and standard modern editions of the classic were inadequate, and these lacunae of books fundamental to all literary studies have been filled.

For the use of future generations of readers, and to bring the library's literary collections up to date, the first editions of significant British and American creative writers of the twentieth century have been acquired in recent years; the adjective British has been used advisedly because in the past English had received a narrow interpretation to the exclusion of Scottish and Irish authors.

Thus the library has grown along the guidelines laid down by its founder, interpreted and expanded in a legitimate way to meet the demands of enlightened scholars who come to work in one of the greatest research libraries in the world for British and American history and literature.

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ROBERT O. DOUGAN

HERBERT HOOVER PRESIDENTIAL LIBRARY

Two blocks from Interstate 80 at Iowa exit 63 is the Herbert Hoover National Historic Site. This includes President Hoover's birthplace, his grave beside that of his wife, a blacksmith shop, Quaker meeting house, and the Presidential Library and Museum, likened to a jewel box in a beautifully landscaped setting.

Herbert Hoover chose to have the library at West Branch, the town of his birth. He wanted it built on the south bank of the Wapsinonoc Creek across from his birthplace. Builders soon learned that a worse spot could hardy have been chosen. In prehistoric times it had been a river bed, and the residue presented serious building problems. It was consequently suggested that the building be constructed 100 feet south of the first proposed site, on ground that was higher and firmer. However, Mr. Hoover insisted that the library had to be built where he had chosen, as "nothing in my lifetime is to be higher than my birthplace." Cement-filled steel pilings, 18 to 50 feet in length, were driven to support the structure. Since Mr. Hoover wanted stone from Iowa, an extremely hard native limestone was specially cut at Stone City. To the uninformed, spots that look like deterioration are actually exposed geodes. Mr. Hoover was confident that builders could overcome their problems and that Iowa stone would be "right" to hold his papers, memorabilia, and books that he offered to the United States as a gift December 15, 1960. On the same date the Herbert Hoover Foundation, which had been incorporated to raise the funds and supervise the construction, offered the buildings, equipment, and grounds to the federal government as a gift.

It was at the dedication by the Herbert Hoover Foundation on Mr. Hoover's 88th birthday, August 10, 1962, that he said.

> When the members of Congress created these presidential libraries, they did a great public service. They made available for research the records of vital periods in American history . . . Within them are thrilling records of supreme action by the American people, their devotion and sacrifice to their ideals. Santayanna rightly said, "Those who cannot remember the past are condemned to relive it." These institutions are the repositories of such experience—hot off the griddle.

Following its dedication, the Hoover Museum was immediately opened to the public, but time was needed by the archivists to screen and process the papers that had been received from Mr. Hoover's offices and the Hoover Institute at Stanford University. The library was formally accepted by the government and dedicated on August 10, 1964, and is administered by the Archivist of the United States under the General Services Administration.

Not until February 14, 1966, when the librarian arrived, was cataloging of the 8,000 books and other nonarchival materials started in preparation for the projected March 19 opening of the research room. Many problems have had to be worked out: nonprofessional, short-term summer and work study help had to be trained, inadequate finances utilized to best advantage, and vague guidelines clarified as needs of scholars and staff were recognized.

A book collection is required in an archival institution to aid the scholars as well as the staff. Researchers need to compare their chosen subject with other scholars' works, and to check published work against information they find in the archival papers. The Herbert Hoover Presidential Library is unusual among the presidential libraries in that it was established many years after Mr. Hoover retired from public life. Papers of his associates are scattered and many books of this period are out of print and difficult to find.

Sorting the contents of more than one hundred boxes of nonarchival material which Mr. Hoover had saved for this library was an interesting experience. "West Branch" was scribbled across each piece. In most cases, time has shown the material to be of distinct value. Excluded from Mr. Hoover's offer to the Presidential Library are the "war and peace" documents gathered since World War I and housed at the Hoover Institute.

At this writing, 10 years after the dedication, papers of many of Mr. Hoover's associates have been acquired and processed, so that combined with his own the total number is 5 million. The staff has assisted 475 scholars in their research for theses, dissertations, research papers, articles, or books. More than a dozen each month come to stay at least for a day and up to several weeks. The 20,000 books, 6,000 reprints, 10 file drawers of subject and annual reports, 1,100 microfilms, 9,500 photos, 577 sound records, and 115 transcripts of oral history also aid the scholars.

An increasing number of historians have shown interest in delving into the many and varied facets of Mr. Hoover's life. These include his career as a mining engineer of worldwide experience and his participation in the Boxer rebellion in China; his organization of food shipments as head of the American Relief Committee, Committee for Relief in Belgium and American Relief Administration.

that saved many in Europe from starvation during World War I; and his service as President Truman's emissary in 1946 to study food supplies and make recommendation for averting a post-World War II famine. Much attention has been given to his many innovations as secretary of commerce involving radio, TV, waste elimination, standardization, better homes, child care, fisheries, foreign and domestic commerce, aviation, and his relief of Mississippi River flood victims without resort to government funds.

His presidential years brought many accomplishments. Noteworthy among these were federal court criminal procedure reforms, bankruptcy laws, laying of the foundations of the Federal Bureau of Investigation, creation of the Federal Power Commission, new banking laws, regulation of stock speculation and securities promotion, the improvement of waterways, and the conservation of oil and other natural resources. The Reconstruction Finances Corporation was created, as were home loan banks and a new agricultural credit system. Mr. Hoover was influential in the convening of a world economic conference to reduce trade barriers and stabilize world currency.

Other activities of the former President included heading two commissions—1947 and 1953—to study and make recommendations for improving the organization of the executive branch of the government. A savings of millions of dollars to the American taxpayers resulted from the changes made as a result of these recommendations. He authored or co-authored more than thirty books, many articles, interested himself in the Boys Clubs of America, and relaxed with family and friends by camping and fishing.

For the assistance of scholars the staff has prepared archival finding aids, a chronological index of sound recordings, biographical notes of associates of Mr. Hoover, a bibliography of more than 2,500 books by and mentioning Mr. Hoover, published works drawing upon the Herbert Hoover Presidential Library, lists of dissertations owned, and Hoover entries from the *New York Times Index* from 1932 to the present (to complement one prepared earlier by the Hoover Institute). A 120-drawer card catalog describes the books, microfilms, reprints, and oral histories.

The Herbert Hoover Presidential Library is located close to the Truman and Eisenhower presidential libraries and near to many midwest colleges, an added convenience to scholars. Researchers have also come from distant states and from France, Russia, and England. The library encourages future historians and youngsters interested in history by mailing them "Kiddie Packets" upon request, answering their letters, and conducting school tours.

The museum was remodelled in 1971 with new exhibits better depicting Mr. Hoover's life and works, using many of the 2,700 museum items. Nearly 750,000 persons visited the museum in the first 10 years after its opening. From the 72,274 feet of motion picture film the museum possesses, movies are shown twice daily in its 180 seat auditorium during the summer months.

RUTH DENNIS

HEURISTICS

Heuristics and *algorithms* are the two approaches generally used to aid problem-solving activities. An *algorithm* is any method or procedure which is guaranteed to generate an exhaustive list of all possible solutions, including the optimal one, for the problem under study. The existence of an algorithm does not guarantee that there is a practical solution to the problem, however. For example, the algorithm for generating an exhaustive list of combinations to a three position safe can be easily described; but trying each of the possible solutions generated by the algorithm would take several years.

Heuristic, on the other hand, is a method which limits the number of possible problem solutions investigated to a very small subset of the total set of possible solutions to the problem. This is usually accomplished by using nonrigorous approaches such as intuition or rules of thumb to generate only those possible solutions that appear to have a very significant chance of solving the problem. This could, of course, result in the nongeneration of either optimal or acceptable solutions. Heuristic is useful not because it is guaranteed to generate good solutions (there is no such guarantee) but because, most of the time, it produces acceptable solutions which are much less costly and/or more workable than the optimal solutions produced by algorithms. A heuristic approach to the combination safe problem might first search for locations where the combination might have been hidden or might try combinations of digits that were relevant to the person who set the combination and which he might have used in setting the safe's combination, such as his date of birth, social security number, telephone number, or house address. There is no guarantee, of course, that he hid the combination or used familiar digits in setting the combination. It is simply that enough people use such methods that there is a good chance that such a search method might well be successful.

Heuristics play an important part in the library and information science areas. Library use, other than access to known materials, involves heuristic searches of a catalog and/or library shelves. The user will employ various heuristic methods to restrict the number of books and materials he investigates and will use the knowledge he gains from his investigation to direct his subsequent direction toward problem solution.

In the area of automatic classification, the traditional algorithmic process of using existing catalog descriptors to categorize materials can be replaced by a heuristic process whereby descriptors are defined for each set of materials. Under this process the catalog descriptors are not defined independent of the materials, but are rather a direct consequence of the materials' descriptors and new descriptors are therefore created not as the result of some library decision to add a new descriptor, but rather as a result of new material which contains a descriptor not previously defined for that library.

Most information retrieval systems are currently based on an algorithmic methodology of predefining all keywords and phrases that could possibly be of interest, using an algorithm and the computer to find all documents in the data base that match these predefined keywords and finally using a human to search through a multitude of documents to find those of interest. It now appears that improved effectiveness might result through the use of a time-shared computer which would allow the human to interact with the computer in a continuous process of defining and refining the keywords for most effective information retrieval. Rather than requiring the human to receive and investigate all documents that fit into the "all possible solutions" criteria, this heuristic method will enable the user to continually improve his selectivity until a small enough set of materials to be searched is obtained and the user can terminate his search. Of course, there is always the chance that the necessary documents will be eliminated before the search is terminated, and this will simply require a replication of the search with alternate descriptors.

In the area of mechanical translation of natural language text, algorithms for computer processing, even when supplemented by detailed syntactic rules and a word and phrase dictionary, are not sufficient to produce accurate translations. Heuristic methods, either provided by humans who understand the problem of translation in the context of the two languages in question or provided by computer programmed with similar abilities, will eventually result in a significant improvement in the volume and quality of natural language translation.

The effectiveness of selectively disseminating new materials to subscribers has been restricted as a result of the inability of most such systems to adapt users' profiles in line with their specific interests. Information from subscribers as to the appropriateness of materials received under a selective dissemination system can be fed to heuristic computer programs which can continually reconstruct each user's profile in line with such information. The subscriber can even be notified of materials in allied areas where he has not indicated an interest or lack thereof.

Finally, using computers to perform some of the heuristic operations that are presently performed by librarians, such as tabulating holdings by classification to determine areas of collection weakness, will allow the librarians to concentrate on finding materials to strengthen such areas. Similarly, with sufficient circulation records, heuristic methods could be used to determine the demand patterns to aid librarians in planning future acquisitions.

MICHAEL GOLD

HISPANIC-AMERICAN PRINTING

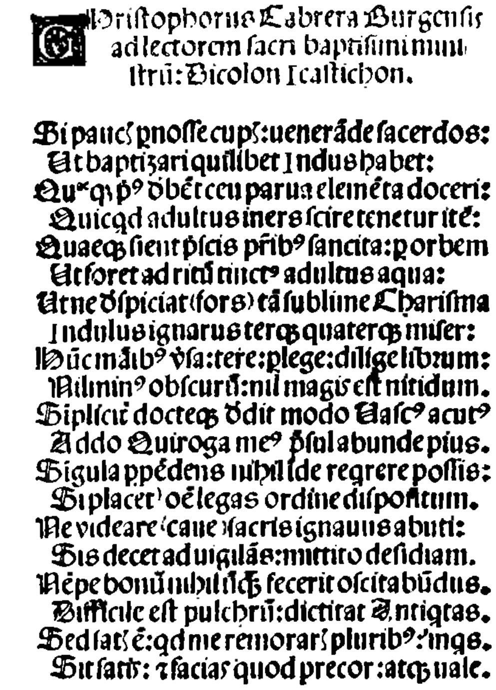
Mexico: The Sixteenth Century

The origins of printing in Mexico are shrouded in mystery and obscured by controversy. In March 1953 the distinguished Spanish bibliographer Francisco Vindel published a little book entitled *El primer libro impreso en América fué para El Rezo del Santo Rosario (Mexico, 1532–34)*. It contained a facsimile of the work he discovered and his arguments that it was printed from type from the shop of Juan Varela of Seville on a small press for printing playing cards sent over to Mexico with Juan's son, Pedro, in 1531. Three eminent members of the Academia Mexicana de Historia, Juan B. Iguíniz, Alberto María Carreño, and Francisco Gómez de Orozco, made a highly critical examination of Vindel's claims, and their conclusions were printed in the first number of the Academy's *Memorias* for 1954. Their only agreement with Vindel was that the little work was "indudablemente de la primera mitad del siglo XVI." Vindel denied the position of the Mexican bibliographers indignantly. No further conclusive evidence has been offered to identify the place, printer, and date of the little book discovered by Vindel.

The greatest of all Spanish-American bibliographers, José Toribio Medina, believed that one Esteban Martín was the first printer in Mexico, and that he was at work from 1535 to 1538. The supporters of the Martín thesis allege that he printed the *Escala spiritual* of San Juan Climaco, but there is no extant copy of this work or anything else printed by Martín. A key document supporting the claims for Martín is a memorial from Archbishop Juan de Zumárraga to the emperor, dated May 6, 1538: 'Poco se puede adelantar en lo de la imprenta por la carestía del papel, que esto dificulta las muchas obras que acá estan aparejadas y otras que habrán de nuevo darse a la estampa, pues que se carece de las más necesarias, y de allá son pocas las que vienen." Thus a printer may have been in Mexico in 1538. In the *Actas de Cabildo* of the municipal archives of Mexico City for September 5, 1539 it is noted one Esteban Martín was admitted to citizenship.

The first Mexican printer whom we can identify with absolute certainty and whose work survives is Juan Pablos, or Giovanni Paoli, a native of Brescia. He left Spain in June 1539 after negotiations by Zumárraga and Viceroy Don Antonio de Mendoza with a leading Seville printer, Juan Cromberger. Eager to provide religious instruction for native Mexicans, Zumárraga had arranged with Cromberger to print a catechism in Nahuatl, but Cromberger decided that the job could be done more easily by a printer located in Mexico. Accordingly, on June 12, 1539 Cromberger entered into a contract with Pablos which was to run for 10 years. Cromberger would pay transportation for Pablos, his wife, his pressman (Gil Barbero), and a Negro slave, and for freight charges on the press and printing supplies.

Pablos went to work immediately in the service of Archbishop Zumárraga and his pious objectives. In the *Cartas de Indias* (1877) there is a description of a *Breve y mas compendiosa doctrina christiana en lengua mexicana y castellana*. In spite of the most diligent searches by Medina, García Icazbalceta, and other Mexican bibliographers, no trace of this precious little quarto of twelve leaves has been found. On December 13, 1540, Pablos issued a *Manual de Adultos* (see Figure 1). Three surviving pages are now in the Biblioteca Nacional in Madrid. The third known production of Pablos is the *Relación del espantable terremoto que*



Christophorus Cabrera Burgensis
ad lectorem sacri baptismi ministrum: Dicolon Icastichon.

Si paucis nosse cupis: ueneráde sacerdos:
Ut baptizari quilibet Indus habet:
Qu^x q; p^9 dbét ceu parua eleméta doceri:
Quicqd adultus iners scire tenetur ité:
Quaeq; sient pscis prib^9 sancita: p orbem
Ut foret ad ritú tinct^9 adultus aqua:
Ut ne dspiciat (fors) tá sublime Charisma
Indulus ignarus terq; quaterq; miser:
Húc maib^9 vsa: tere: plege: dilige librum:
Nil nin^9 obscurú: nil magis est nitidum.
Siplicit docteq; dedit modo Uasc^9 acut^9
Addo Quiroga me^9 psul abunde pius.
Sigula ppédens nihil inde regrere possis:
Si placet^) oé legas ordine dispositum.
Ne videare (caue) sacris ignauus abuti:
Sis decet aduigilás: mittito desidiam.
Népe bonú nihil nlq; fecerit oscitabúdus.
Difficile est pulchrú: dictitat Antiqtas.
Sed sat^s é: qd me remorar^s pluribus: inqs.
Sit satis: r facias quod precor: atq; uale.

FIGURE 1. *Recto of first leaf of* Manual de Adultos, *issued by Juan Pablos on December 13, 1540, the first surviving Mexican imprint. The top three lines are printed in red in the original.*

agora nueuamente ha acontecido en la cibdad de Guatimala (1541), referring to the Guatemalan earthquake of September 10–11, 1541. The fourth book printed by Pablos is his first large work, the *Doctrina breve muy provechosa de las cosas que pertenecen a la fé cathólica y a nuestra cristianidad* (1543) (see Figure 2).

Pablos became the sole proprietor of the press in 1547, and his total production until his death in 1560 consisted of thirty-seven known titles, most of them religious works. In 1544 he printed an edition of Johannes Gerson's *Tripartito,* the first book printed in the Americas to be illustrated with a full-page wood engraving (see Figure 3). The *Ordenanças y copilación de leyes* (1548) is the first collection of laws printed in the New World. In 1556 Pablos issued the first American arithmetic and algebra, the *Sumario compendioso de las quentas de plata y oro que en los reynos del Piru son necesarias a los mercaderes,* by Fray Juan Díez; in the next year he brought out a monument in the history of science, Fray Alonso de la Vera Cruz' *Phisica speculatio.* Francisco Bravo's *Opera medicinelia* (Pedro Ocharte, Mexico, 1570), Alonso Lopez de Hinojoso's *Svmma, y recopilación de chirvgia* (Antonio Ricardo, Mexico, 1578) and Fray Agustín Farfán's *Tractado breve de anothomia y chirvgia* (Antonio Ricardo, Mexico, 1579) are other noteworthy Mexican scientific imprints of the sixteenth century.

In 1550 Pablos sent an agent, Juan López, to Spain to handle some business for him, and one item was to secure the services of a typefounder. On September 24, 1550, López made a contract on behalf of Pablos with Antonio de Espinosa,

FIGURE 2. *Title page of* Doctrina breve muy provechosa de las cosas que pertenecen a la fé cathólica y a nuestra cristianidad, *the first major work printed by Juan Pablos (1543).*

FIGURE 3. *The first full-page engraving in an American book, in Juan Pablos' edition of Gerson's* Tripartito *(1544).*

"fundidor de letra," to come to Mexico and bring with him Diego de Montoya and to work as "fundidor y cortador" for Pablos for 3 years. Espinosa was not only a punchcutter but also a skilled bookmaker in general, and by 1554 the "gran cibdad de Tenochtitlan-Mexico" was beginning to acquire some fine printed books worthy of its sonorous name. Espinosa was a typographical reformer of first order. The three Pablos imprints of 1554, Fray Alonso de la Vera Cruz' *Recognitio svmmularum* (see Figure 4), Fray Alonso's *Dialectica resolutio* by Aristotle), and Francisco Cervantes de Salazar's *Dialogos*, contain the first Roman and italic types used in the New World, a tradition which was firmly established in short order. There are some unusually attractive wood engravings, in striking contrast to Pablos' pedestrian ornamentation.

In 1559 Pablos' monopoly on printing in the Americas was broken. Espinosa returned to Spain and made a plea at the royal court for permission to set up a press in competition with Pablos. During his active career as an independent printer (from 1559 until his death in 1576), Espinosa did some truly distinguished work. He used a large variety of types, much of which was undoubtedly cut and

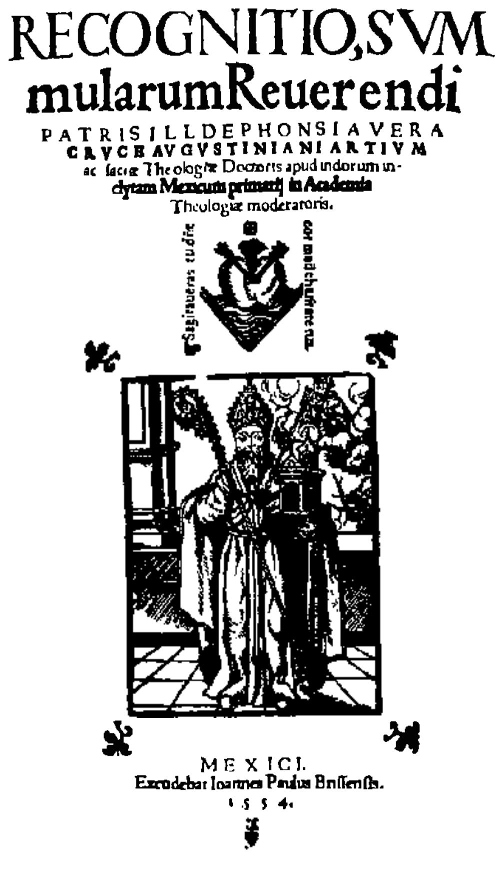

RECOGNITIO,SVM
mularumReuerendi
PATRIS ILLDEPHONSI A VERA
CRVCE AVGVSTINIANI ARTIVM
ac sacræ Theologiæ Doctoris apud indorum in-
clytam Mexicum primarij in Academia
Theologiæ moderatoris.
MEXICI.
Excudebat Ioannes Paulus Brissensis.
1554.

FIGURE 4. *Title page of Pablos' edition of Fray Alonso de la Vera Cruz'* Recognitio svmmularum *(1554), probably the first Roman type used in the New World.*

cast by himself. The most famous work printed by Espinosa was the magnificent *Missale Romanum* of 1561.

In addition to Pablos and Espinosa, there were six other printers (including one woman) in sixteenth-century Mexico who were responsible for 204 different works in the sixteenth century. Upon Pablos' death (probably in 1560) his press passed to Pedro Ocharte (or possibly Ochart or Charte), born in Rouen about 1532. He probably arrived in Mexico about 1549. In 1561 or 1562 he married María de Figueroa, daughter of Juan Pablos, and the first imprint that bears his name is dated 1563. In 1570 he took a second wife, María de Sansoric, daughter of Pedro de Sansoric. This is a significant detail, since María de Sansoric, not María de Figueroa, as some bibliographers have argued, took over Ocharte's press when he ran afoul of the Holy Office in 1572. The imprint "Apud Viduam Petri Ocharte" on Alvarez' *De institutione grammatica* refers to María de Sansoric, not to the daughter of Juan Pablos. Between 1572 and 1574, when Ocharte was actually incarcerated, his wife valiantly supervised the printing of "cartillas y los sumarios de Nuestra Señora del Rosario," and in 1576 he collaborated with Espinosa in producing a *Graduale dominicale*. Ocharte resumed independent printing in 1578 with the publication of an *Arte en lengua zapoteca* of Fray Juan de Córdoba and the *Doctrina christiana, en lengua mexicana* by Fray Alonso de Molina. His last publication was Agustín Farfán's *Tractado brebe de medicina* (1592).

Pedro Balli, Mexico's fourth printer, came from Salamanca, although he was of French descent. He came to Mexico in 1569 as a bookseller, and he first appears as a printer in 1574 with Fray Juan Baptista de Lagunas' *Arte y dictionario: con otras obras, en lengua Michuacana*. His last imprint is Dionisio Ribera Flores' *Relacíon historiada* (1600). Balli produced more than sixty imprints, including books in indigenous languages and academic publications of the University of Mexico. One of the latter was the *Oratio in lavdem ivrisprudentiae* (1596) by the printer's son, Juan Bautista Balli, an attorney of some distinction.

The fifth Mexican printer, of whom we will hear more, was Antonio Ricardo, born in Turin. A royal *cédula* of 1569 refers to permission granted to Ricardo to go to Mexico. It is not unlikely that he worked for Espinosa or Ocharte, probably the latter, since the names of Ocharte and Ricardo both appear on the imprint of Fray Juan de Córdoba's *Vocabvlario en lengva zapoteca* (1578). The Jesuits arrived in Mexico in 1572, and during his short career as an independent printer in Mexico (1577 to 1579) Ricardo worked for them and even maintained his office in their Colegio de San Pedro y San Pablo.

The sixth printer in New Spain was Enrico Martínez. He printed from 1599 to 1611, although only one sixteenth century imprint may be assigned to his press, Fray Elias de San Juan Bautista's *Compendio de las excelencias, de la bvlla de la Sancta Cruzada, en lengua mexicana* (1599). Martínez died in Cuauhtitlán on Christmas Eve 1632.

The seventh and last sixteenth century Mexican printer was Melchior Ocharte, probably the son of Pedro by his second marriage, born prior to 1574. His first imprint was a *Confessionario en lengua mexicana y castellana* (1599). He maintained his shop in the Franciscan college of Tlatelolco, and one of his employees was his half-brother, Luis Ocharte de Figueroa, son of Pedro Ocharte and María de Figueroa.

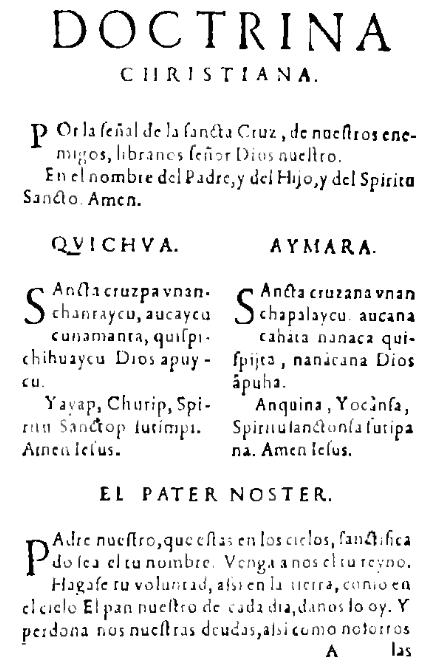
Peru

During Antonio Ricardo's active career as an independent printer in Mexico City, he produced ten books. Then he decided to move on to Peru. The new viceroyalty had thrived, and by 1551 it acquired the Universidad de San Marcos in Lima, but still there was no printing press. Ricardo may have been attracted either by the wealth of Peru or by the potential authors in the university, which was long to remain the intellectual capital of South America. It is also possible that his patrons, the Jesuits, needed him in Lima. The first three Jesuits reached the viceroyalty of Peru in 1568, and others followed quickly. They may well have sent the word to the Colegio de San Pedro y San Pablo in Mexico that a press in Lima would be of substantial help in realizing their aspirations to spiritual and temporal power.

Ricardo arrived in late 1580 or early 1581, but the first printed work from Lima that has survived is dated 1584. As early as September 24, 1572 the Viceroy Francisco de Toledo wrote to the king urging that a catechism be translated into a composite Indian language and that it be printed in Spain or in New Spain. Ten years later, on September 30, 1583, the Real Audiencia of Lima wrote a letter to the king restating the need for a catechism in Quechua and Aymará, pointing out that "a well-equipped printer from Mexico is in our city," and urging His Majesty to issue this printer a license at once. Before the king could act, the Audiencia took matters into its own hands on February 13, 1584 and granted Ricardo the exclusive privilege to print certain books under the supervision of the Jesuits. Ricardo was in business, and his license to print was confirmed by a royal *cédula* issued from the Escorial later in the year.

Ricardo's first and most urgent task was to get a catechism in print. The catechism was still not ready when the summer mail from the metropolis arrived. It contained, inter alia, a directive from the Crown concerning the decision of Gregory XIII to reform the calendar. It was necessary to give widespread notification of this change, and Ricardo halted work on his catechism to print a *Pragmática sobre los diez días del año,* signed by the Audiencia on July 14, 1584, the first product of the printing press in South America. Work on the catechism must have been nearly finished, for less than a month later, on August 12, 1584, the *auto* (certification) of the Audiencia was affixed to the *Doctrina christiana y catecismo para instrucción de los indios*. This book of ninety-two leaves contains the Spanish text in a single column followed by the Quechua and Aymará texts in parallel columns (see Figure 5).

Ricardo printed two more books in 1585 for missionary purposes, a *Con-*



DOCTRINA

CHRISTIANA.

POr la ſeñal de la ſancta Cruz, de nueſtros enemigos, libranos ſeñor Dios nueſtro.
En el nombre del Padre, y del Hijo, y del Spiritu Sancto. Amen.

QVICHVA.	AYMARA.
SAncta cruzpa vnanchanraycu, aucaycucunamanta, quiſpichihuaycu Dios apuycu.	SAncta cruzana vnanchapalaycu, aucana cahata nanaca quiſpijta, nanácana Dios âpuha.
Yayap, Churip, Spiritu Sanctop ſutimpi. Amen Ieſus.	Anquina, Yocânſa, Spiritu ſanctonſa ſutipana. Amen Ieſus.

EL PATER NOSTER.

PAdre nueſtro, que eſtas en los cielos, ſanctificado ſea el tu nombre. Venga a nos el tu reyno. Hagaſe tu voluntad, aſsi en la tierra, como en el cielo. El pan nueſtro de cada dia, danos lo oy. Y perdona nos nueſtras deudas, aſsi como noſotros

A las

FIGURE 5. *A page from Antonio Ricardo's* Doctrina christiana y catecismo para instrucción de los indios *of 1584 showing the arrangement of Quechua, Aymará, and Spanish texts.*

fesionario para los cvras de Indios (possibly by Father Diego de Alcobaza) and a *Tercero catecismo*, both in the same three languages as the *Doctrina christiana*. In 1586 came an *Arte, y vocabulario en la lengva general del Perv, llamada Quichua, y en la lengua Española*, attributed by Brunet and Medina to Father Domingo de Santo Tomás. We have no record of further activity by Ricardo until 1592 when he printed an *arancel real*. In 1594 Ricardo printed a fifteen-leaf pamphlet by Pedro Balaguer de Salcedo on the piracies of Sir Richard Hawkins, and the first vestige of a newspaper in the New World, a translation of a letter by "Ricardo Havqvines" to his father on his capture and the loss of his ship, the *Dainty*. Medina records twelve sixteenth-century imprints bearing Ricardo's name; and he describes twenty more in the next 5 years, ending with a *Sermón* by Fray Pedro Gutierrez Flores. Ricardo died in 1606.

In 1605 appeared the first Lima imprint by Francisco del Canto Lozano, Feliciano de Vega's *Relictio legis*, a pamphlet in Latin in fifteen leaves. Canto, son of a printer in Medina del Campo, came to Lima in 1586, but we first learn of him as a printer in 1604 when the viceroy, Don Luís de Velasco, granted him a license to print. Canto introduced the refinement of two-color printing to Lima in 1608 with the *Directorio espiritual* of Father Arriaga, and he was also a bookseller and probably the author of an *Arte, y vocabulario en la lengva general del Perv, llamada Quichua, y en la lengua Española*, issued by his press in 1614. Canto was imprisoned briefly for debt in 1617, and the next year he issued his last book, Antonio Rodriguez de León Pinelo's *Relación de las fiestas qve a la*

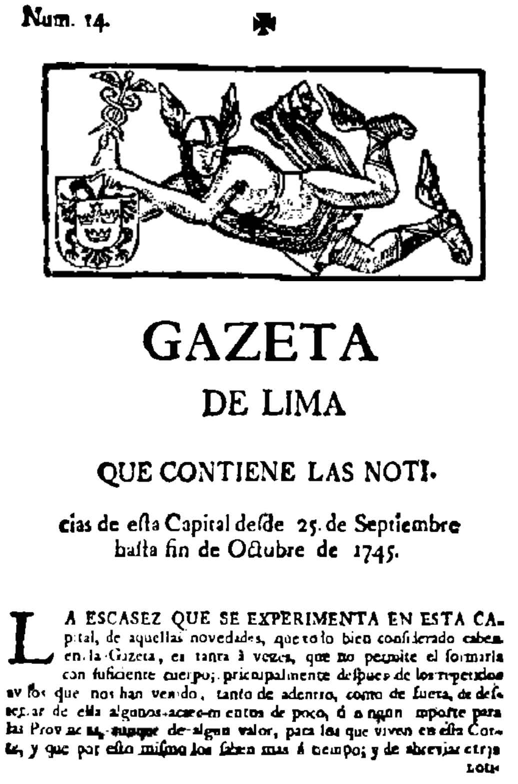
Immaculada Concepción de la Virgen N. Señora se hizieron en la Real Ciudad de Lima.

There is one still unsolved problem about Canto's work. In 1612 four books by Father Ludovico Bertonio appeared with imprints such as the following: "Impressa en la Casa de la Compañía de Iesvs del pueblo de Iulí, que esta en la Provincia de Chucuyto, en la emprenta de Francisco del Canto, Año M. DC.XII." The four titles include a *Vocabulario de la Lengua Aymará*, an *Arte de la Lengua Aymará*, a *Vida de Christo*, and a *Confessionario* in Aymará and Spanish. One thing only is certain: the Jesuits established a mission station to facilitate the study of native languages at Julí on Lake Titicaca. Between 1610 and 1612 a press, probably quite a different apparatus from the one producing books for Canto in Lima at the same time, was in operation in Julí. The Jesuits may have worked out an agreement with Canto to use his name, since he was a licensed printer, as a subterfuge to evade the zeal of the Audiencia in detecting unauthorized presses.

In 1613 the name of Pedro de Merchán Calderón appeared in the imprint of a book printed in Lima, but 7 years passed before another book appeared over his name, and then only in three books printed in 1620. Merchán Calderón may have been associated with Canto's firm in some unknown capacity.

In 1621 we have the first Lima imprint over the name of Jerónimo de Contreras, progenitor of a famous Latin American printing family. He opened a printing shop in Seville in 1618 and began to print some works of the learned Franciscan friar Alonso de Herrera who had just arrived from Lima. The latter may have persuaded Contreras to emigrate to Peru, and there he had a productive and fruitful career until 1639. A slight but significant early publication by Contreras was a four-page newssheet captioned *Nuevas de Castilla* (1621). From then on such newssheets containing résumés of the news brought by ship from Panama appeared fairly frequently, although the first American newspaper to be published periodically south of Mexico City was the *Gazeta de Lima* (see Figure 6), beginning in January 1744. Contreras prospered, and in 1641 his son, José de Contreras, took over the business and managed it for 47 years. Next came a grandson of the founder, José de Contreras y Alvarado, Lima's only printer from 1686 to 1712. José's brother, Jerónimo de Contreras y Alvarado, who had been printing since 1677, took over in 1712; and the last book to bear the Contreras imprint appeared in 1720. Even after 1720, however, the daughters of the family maintained an interest in the press, and it was actually operated by persons associated with the Contreras family until 1779.

For the whole colonial period Medina records 3,948 titles (including a few duplications) for Peru and 12,412 for Mexico during the same period. This proportion is characteristic of the relative importance and wealth of the two viceroyalties. The content of Peruvian printing parallels that of Mexico and other Spanish colonies, with strong emphasis on religious texts (and particularly those destined for mission purposes), law, some history, and a little science.



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GAZETA

DE LIMA

QUE CONTIENE LAS NOTI-

cias de eſta Capital deſde 25. de Septiembre haſta fin de Octubre de 1745.

LA ESCASEZ QUE SE EXPERIMENTA EN ESTA CA-pital, de aquellas novedades, que todo bien conſiderado caben en la Gazeta, es tanta à vezes, que no permite el formarla con ſuficiente cuerpo; principalmente deſpues de los repetidos avisos que nos han venido, tanto de adentro, como de fuera, de deſcartar de ella algunos acaecimientos de poco, ó ningun importe para las Provincias, aunque de algun valor, para los que viven en eſta Corte, y que por eſto miſmo los ſaben mas á tiempo; y de abreviar otros

FIGURE 6. *The* Gazeta de Lima *was the first American newspaper to be published regularly south of Mexico.*

The Reducciones of Old Paraguay

In the sixteenth and seventeenth centuries Paraguay was not only the country between the Paraguay and Paraná Rivers but also parts of Brazil, Uruguay, and of the Argentine provinces of Buenos Aires, Entre Rios, Corrientes, Misiones, and Sante Fé. Indeed, the actual site of the beginning of printing in old Paraguay was in the present Argentine territory of Misiones. In 1620 Paraguay proper and Río de la Plata (or Buenos Aires) were made separate jurisdictions, but both were dependent on Lima until 1776 when the viceroyalty of Buenos Aires was created with Paraguay as one of its dependencies. In the first decade of the seventeenth century the Jesuit *imperium in imperio* of the *reducciones* (settlements of converted Indians) of Paraguay became a reality. Until their expulsion in 1767 the Jesuits worked with the Guaraníes intensively, and the results are remarkable, not least of all for the history of printing in the southern half of South America.

Elsewhere in Spanish America Indians were regarded as *repartimientos* or, later, *encomiendas;* but the Jesuits set up a sort of communistic-theocratic state in old Paraguay in which they, as spiritual and temporal rulers, isolated their Indian wards from the corrupting influences of the Spanish colonial power. The Jesuit fathers taught them trades and crafts, and the *reducciones* were almost self-supporting. When printing finally came to old Paraguay, only the paper had to be imported from the old world.

Printing was an early desideratum for the *reducciones guaraníticas*. In 1633 an emissary of the Paraguayan fathers urged the Jesuit general, Mutio Vitelleschi, to send to Paraguay some brother from France, Flanders, or Germany who knew the art of printing. Despite repeated requests, no printer is known to have entered the Río de la Plata area at this time. Nevertheless, the fathers taught the Guaraníes to copy European books with such meticulous care that Father Francisco Xarque remarked in his *Insignes misioneros* (Pamplona, 1687) that it was difficult to differentiate between a missal printed in Antwerp and the same book after it had been copied by the Indian scribes. Even more interesting is the work which was done by the Guaraní xylographers. There is strong evidence on which to base a presumption that the Jesuits of old Paraguay had xylographic broadsides, pamphlets, or even books printed in the seventeenth century. A block found in Paraguay and presently owned by the Biblioteca Enrique Peña in Argentina is illustrated by a facsimile in Furlong. It is of the type that may have been cut by the Guaraníes, although it may date from a period subsequent to the expulsion of the Jesuits.

Actual letterpress printing did not come to the La Plata region before the eighteenth century; and the founders of the mission press were Father Juan Baptista Neumann of Vienna and Father José Serrano of Andalucia. Neumann arrived at the Río de la Plata in 1690 at the age of thirty-two, and he died in Asunción in 1705 after winning honor for himself as an explorer and, above all, as a co-founder of the press in Paraguay. Serrano was born in 1634 and came to the Río de la Plata in 1658. He was head of the *reducciones* in the capacity of *superior* for a few months in 1695 and died in 1713.

The beginning of letterpress printing in old Paraguay is recorded by Father Antonio Sepp in his *Continuatio laborum apostolicorum . . . in Paraquaria* (Ingolstadt, 1710) with a prologue dated December 8, 1701. No copy of this first book, most likely printed in Loreto, has survived, nor has a copy of the 1709 edition, the fourth book printed in Paraguay; but we know of their existence from subsequent inventories of Jesuit libraries. We cannot be absolutely sure that the two *Martirológios* were in Guaraní, but it is likely that they were, or at least that they were bilingual.

A letter of January 6, 1696 from Tirso González, the Jesuit General in Rome, to Lauro Núñez, the *provincial* of Paraguay, refers to translations into Guaraní of Pedro de Rivadeneira's *Flos Sanctorum*, and of Juan Eusebio Nieremberg's *Diferencia entre lo temporal y eterno*, being undertaken by Father Serrano. González also expressed the desire for a press so that these books could be made accessible to literate Indians. Serrano completed the translation of the *Flos sanctorum* in 1699, and on September 18, 1700 both this volume and the translation of the *Diferencia* received ecclesiastical approval. No copy of the printed edition of the *Flos sanctorum* has survived, but we have a record of its existence in Jesuit inventories.

The two surviving copies of the *Diferencia* bear an unequivocal imprint, "Impresa en las Doctrinas, Año de M.D.CC.V." and are illustrated with wood engravings.

All the valid evidence points to Father Neumann as the creator of the press and types used in Paraguay. The *Martirológio* was probably a rather crude production since it had to be revised in 1709, but Father Serrano seems to have joined with the Austrian to perfect the press and the types in order to produce the *Diferencia.* Certainly both of them were in Loreto not later than the end of 1701, and it is most likely that the two cooperated in developing the new press. Contrary to various speculations that the types used at Loreto were cast from pure lead, brass, or bronze, Furlong cites evidence strongly suggesting the type metal was a conventional alloy of lead and tin. In any event it seems most likely that the type was cast in Paraguay.

The most fascinating possible relic of the press of old Paraguay is a fragment of what Medina and others allege to be the remains of the first press in Loreto. The fragment is now in the Museo del Cabildo in Buenos Aires, where it has been fully reconstructed. The press does undoubtedly date from a period prior to the nineteenth century, but there is no real evidence that this press was used by the early printers of Paraguay.

Excluding spurious and doubtful titles, Furlong describes twenty-three Paraguay imprints issued during the period 1700–1727. Nine titles survive, and of the other fourteen, nine are known only from Sepp's *Geschichte von Paraguai* (1712; Staatsarchiv, Hs. 275, Munich). The imprints on the surviving titles indicate that printing was done in Loreto, Santa María la Mayor, San Javier, and possibly a fourth locality, which Furlong suggests might be Candelaria.

After 1727 we hear no more of the press of the Jesuit missions, and not until 38 years later was there any printing anywhere in the La Plata basin.

The La Plata Region

Printing did not come to the rich lands at the mouth of the Río de la Plata until the latter part of the eighteenth century. The population of Buenos Aires was relatively small (in 1770 there were slightly more than 20,000, of whom half were negroes or civil and military officials), and the cultural interests of the capital of the southernmost viceroyalty were relatively slight. Thus it was not in Buenos Aires but in Córdoba de Tucumán where the first printing was done in Argentina. In that interior city the seventh university of colonial Spanish America, the Jesuit Colegio Máximo de Córdoba, became the Universidad de San Ignacio in 1622.

It was not until 1750, at the twenty-fourth Congregación Provincial, that the need for a press was expressed. Father Pedro de Arroyo and Father Carlos Gervasoni were elected to represent that congregation at the courts of Rome and Madrid and to procure the necessary printing equipment. But the star of the Jesuits was setting. Arroyo died in Madrid in 1753, and Gervasoni was expelled from Spain because of the vigor with which he defended the interests of the

Indians in the matter of the Treaty of Limits. Nevertheless, Gervasoni was able to secure a press, types, and other equipment in Italy and ship the whole to Córdoba in 1758 or soon thereafter.

A German Jesuit, Pablo Karrer, a printer by profession, was engaged to operate the press, but he did not reach the Río de la Plata until 1764. Furlong records six publications from this press in 1766 and 1767, the year of the expulsion of the Jesuits from all the Spanish dominions and the confiscation of their property. The first and perhaps most important Cordoban imprint was a collection of five panegyrics on the university's greatest benefactor, Dr. Ignacio Duarte y Quirós, by Father José Peramás (see Figure 7). The other works are religious manuals and publications relating to the university. The end came quickly in 1767. The Franciscans occupied the Convictorio. The press and the equipment were finally sent to Buenos Aires in 1780. Thus ended the first Argentine press of which we have a clear and unequivocal history. José Torre Revello suggested that there may have been one or more small presses in Buenos Aires prior to the removal of the Jesuit press from Córdoba, but there is no evidence to identify the printer or the shop. Until we can learn more about these presses, we must assume that there was no printing in Buenos Aires prior to 1780.

Three men, Viceroy Juan José de Vértiz y Salcedo, a Portuguese bookseller, José Silva y Aguiar, and Manuel Ignacio Fernández, governor of the city, were largely responsible for the introduction of printing to Buenos Aires. As early as 1778 Vértiz wrote to the Franciscans in Córdoba inquiring about the press. In 1779

CLARISSIMI VIRI
D.D. IGNATII
DUARTII ET
QUIROSII,
COLLEGII MONSSERRA-
TENSIS CORDUBÆ IN
AMERICA CONDITORIS,
LAUDATIONES
QUINQUE,
QUAS
EIDEM COLLEGIO REGIO
BARNABAS ECHANIQUIUS O. D.

Cordubæ Tucumanorum Anno. MDCCLXVI.
Typis Collegii R. Monsserratensis.

FIGURE 7. *Title page of* Laudationes *(1766) in honor of Dr. Ignacio Duarte y Quirós, the first surviving imprint of Córdoba de Tucumán.*

Fernandez asked the royal minister, Jose Galvez, for a press for the community for official purposes. Galvez approved Fernández' request, but before Madrid could act the energetic Vértiz had followed up his letter of 1778 to Cordoba, and early in 1780 the old Jesuit press with its equipment was in Buenos Aires.

Among Vértiz' other contributions to the social betterment of Buenos Aires was the establishment of the Casa de Niños Expósitos. The press was immediately put to work even without the customary royal approval. The crown gave formal approval in 1782—after some 150 separate items had come off the press.

Silva y Aguiar's enthusiasm was not matched by technical skill as a printer, and he would hardly have wanted to give up his bookselling business for printing. He ascertained that a dragoon corporal stationed in Montevideo, Agustín Garrigós of Alicante, was an experienced printer. Through Vértiz, Silva arranged for Garrigós' reassignment in Buenos Aires. Garrigós was on the job in August 1780.

The press of the Niños Expósitos was a busy office from the beginning. Furlong records fifteen separate imprints for 1780, sixty-one for 1781, and ninety-five for 1782. The vast majority were official documents in the form of broadsides, and indeed these were the exclusive products of the press in 1780. We have a broadside captioned "Letrilla, que llevaba por registro en su Breviario la Seráfica Madre Santa Teresa de Jesús" as the first Buenos Aires imprint. The first work recorded for 1781 is an almanac, of which no copy is now known. Other products of the press in 1781 were a pastoral letter of the bishop of Córdoba de Tucumán, a catechism, a couple of newssheets, several *novenas*, and other religious works.

In spite of Silva y Aguiar's services in behalf of printing in Buenos Aires, his efforts did not meet with full favor in the eyes of the authorities. He was accused of mismanagement, and in 1783 Captain Alfonso Sánchez Sotoca replaced the Portuguese bookseller as director. He operated the press for 6 years, during all of which Silva made every effort to regain control. The latter finally succeeded in July 1789 and continued for 5 years. The press subsequently had various other administrators, including Garrigós (1799–1804), and in 1825 the "Imprenta de los Expósitos" finally became the "Imprenta del Estado."

Montevideo had no press in the eighteenth century, and as late as 1807 it was only an overgrown provincial capital of 4,300. However, the English invasion of the regions of the Río de Plata in 1806 and 1807 had a salubrious effect on Uruguay in at least one respect. General Samuel Auchmuty must have thought he came to found a new empire, for the well equipped invasion fleet even included a printing press. Soon after Auchmuty assumed control of Montevideo in February 1807, a weekly, *The Southern Star—La Estrella del Sur*, began to appear, but it lasted only until July 11, 1807.

Mexico and Central America in the Seventeenth and Eighteenth Centuries

The third place in which printing was established in Latin America, and, indeed, the fourth in the Americas (after Mexico, Lima, and Cambridge) was Puebla. Founded in 1532, Puebla has always been recognized as the second city of Mexico in cultural importance. The origins of printing in Puebla are obscure and controversial, and Medina has presented available evidence in his *La imprenta en la Puebla de los Ángeles* (*1640–1821*) (1908).

The legend that a book was printed in Puebla in 1634 dies hard. The first Puebla imprint of which we have positive knowledge is Father Mateo Salcedo's *Arco triunfal: emblemas, geroglíficos y poesías con que la ciudad de la Puebla recibio al Virrey de Nueva España, Marqués de Villena* with the simple imprint, "Impreso en la Puebla de los Ángeles, 1640." We know of no printing in Puebla in 1641 or 1642, but five titles appeared in 1643, viz., three rather slight religious tracts without designation of printer, and Bishop Juan de Palafox y Mendoza's *Historia real sagrada* (Francisco Robledo, Impressor del Secreto del Santo Officio, Ciudad de Los Ángeles, 1643), and Bartolemé Venavides y de la Cerda's *Sermón* (Diego Gutiérrez, Puebla de los Ángeles, 1643).

Robledo's name is the first to appear on a Puebla imprint, but was he responsible for the *Arco triunfal?* He started printing in Mexico City in 1640 and continued until 1647, when he probably died. He came into contact with the bibliophilic Bishop Palafox in 1642, and in the same year he became printer to the Holy Office. It seems likely that Palafox persuaded Robledo to send part of his equipment to Puebla to print the *Historia real sagrada* and probably also a *Carta pastoral* (one of the three 1643 Puebla imprints without a printer's name). Robledo was settled in Mexico before books appeared over his imprint in Puebla, and it is unlikely that he printed the *Arco triunfal*.

Medina suggests another possibility for Puebla's first printer. Juan Blanco de Alcázar printed some of the most typographically distinguished works in Mexico between 1617 and 1627. He disappeared completely for almost two decades and suddenly, in 1646, his name reappears on a Puebla imprint. He was the printer of four rather slight works between 1646 and 1650. Blanco de Alcázar cannot be eliminated as Puebla's first printer. Medina finds no reason to attribute the *Arco triunfal* to Diego Gutiérrez, whom we know to have been active as a printer in Mexico City from 1628 to 1634. Gutiérrez again appears in Mexico City in 1643 but he moved in that year to Puebla, printed the Venavides *Sermón*, and then disappeared from history.

The most important of all Puebla printers was Diego Fernández de León, who practiced his craft from 1683 to 1709. In 1688 he received a large shipment of Dutch type, and from then on he called his shop the "Plantiniana." His work was typographically attractive and textually significant. It is of some interest to note that the firm of Calderón, which dominated publishing in Mexico City in the whole latter half of the seventeenth century, also boasted of its Dutch type with the designations of "Plantin Press" and "Antwerp Press." Printing did not come to Guadalajara, Puebla's rival for the rank of Mexico's second city, until 1793. In the next year Veracruz acquired a press. A press was installed in Oaxaca in 1811, although almost one full century earlier there had been another press there. In 1720

Doña Francisca Flores issued Fray Sebastian de Santander's *Sermón funebre* on Mother Iacinta Maria Anna of the Convent of St. Catherine of Siena, a pamphlet of twelve leaves. There is no other extant piece of printing from this press. Doña Francisca died in 1725, and we know only that she made the Convent of St. Catherine her sole beneficiary.

The third early center of printing in Spanish North America and the fifth in the western hemisphere was Guatemala, and again here there has been some uncertainty concerning the first imprint. (It must be remembered that prior to 1779 Guatemala in an imprint refers to what we now know as Antigua, or Santiago de los Cabelleros la Nueva, destroyed by the earthquake of 1773). Medina, in *La Imprenta en Guatemala (1660–1821)* (1910), proves that there was no printing in Guatemala before 1660. It was Father Payo Enriquez de Ribera who was responsible for bringing printing to Guatemala. Fray Payo was appointed bishop of Guatemala in 1657 and took possession of his diocese in 1659. In 1668 he became archbishop of Mexico, and from 1674 to 1681 he was viceroy.

Fray Payo sent a Franciscan friar, Francisco de Borja, to Mexico City in 1659 to procure a press and a printer. Early in 1660, perhaps in March, he was back in Guatemala with a printer, José de Pineda Ibarra, his family, a press, and a good assortment of type. In 1660 he produced three rather slight pieces. Medina accords the honor of number one in his list to Fray Francisco de Quiñones y Escobedo's *Sermón* preached on October 4, 1660. For 1661 we have no recorded Guatemalan imprint, but for 1663 we have two small pieces and Fray Payo de Ribera's monumental *Explicatio apologetica nonnullarum propositionum a theologo quodam non dextere notatarum*, a work of 710 pages.

The *Explicatio* and the Dominican Fr. Diego Sáenz Ovecuri's *Thomasiada* (1667), an epic poem of genuine merit, are Pineda Ibarra's two most significant imprints. He continued to print until 1679. After Pineda Ibarra's death in 1680 his son, Antonio de Pineda Ibarra, took over the press and operated it from 1681 and 1721. He was the only printer in Guatemala until 1714.

Among other early eighteenth century presses in Guatemala we might note those of the Franciscans (1714–1771), Antonio de Velasco (1715–1726), Sebastian de Arevalo (1727–1772), and above all, Cristóbal de Hincapié Meléndez (1739–1748), a native Guatemalan. Medina lists and describes the work of fourteen Guatemalan printers of the seventeenth and eighteenth centuries.

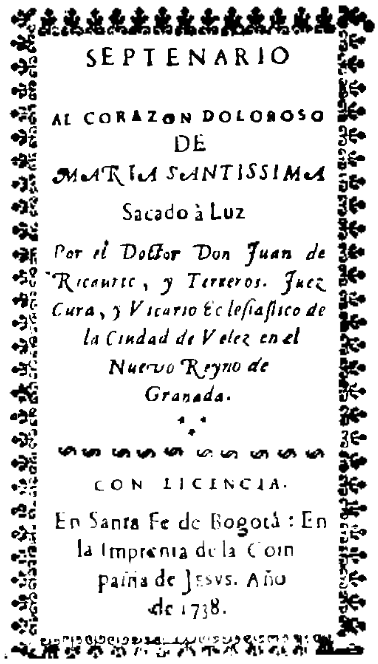
New Granada

In the eighteenth century the viceroyalty of Nueva Granada included the presidency of Quito, the Audiencia of Santa Fé (de Bogotá), and the captaincy general and presidency of Caracas. Again in this jurisdiction there are uncertainties and obscure references which may conceivably lead to concrete discoveries in the future. There is some evidence that the Franciscans or their friends were printing there before the end of the sixteenth century. There is a document in the Archivo de

Indias which indicates that the Franciscan friar Pedro de Aguado sought permission to go to Nueva Granada to supervise the printing of his *Historia del Nuevo Reino de Granada*. On February 5, 1582 permission was granted, but the story ends here.

The first printing of which we have definite evidence in Bogotá is dated exactly two centuries after the foundation of the city. The Jesuits were responsible for the founding of the press, and the first known Bogotá imprint is Father Juan Ricaurte y Terreros, *Septenario al corazón doloroso de María Santissima,* dated 1738 (see Figure 8). In his *Bibliografía bogotana* (1917) Eduardo Posada identifies ten imprints (one not located but known to have been printed) from this press between 1738 and 1742. The press served religious purposes exclusively. There is no record of the fate of the press after 1742, and it probably remained idle for a quarter of a century in the Jesuit house of San Bartolemé until all Jesuit property was secularized coincident with the expulsion.

The next notice of a printer in New Granada occurs in 1776, when we hear of a printer in Cartagena de Indias, although there is no known Cartagena imprint before 1809. In 1777 he was asked to come to Bogotá, and in this year he produced an almanac. He was undoubtedly Antonio Espinosa de los Monteros, although he did not place his name on any of the books he printed until 1782, when he already had fourteen titles to his credit. In this year he acquired a new press and new type from Cadiz and took the name of "Imprenta real." Printing thrived in Bogotá. In 1785 the first newssheets appeared, and in 1791 a *Papel periódico* was founded. In



SEPTENARIO

AL CORAZON DOLOROSO
DE
MARIA SANTISSIMA

Sacado à Luz

Por el Doctor Don Juan de Ricaurte, y Terreros. Juez Cura, y Vicario Ecleſiaſtico de la Ciudad de Velez en el Nuevo Reyno de Granada.

CON LICENCIA.

En Santa Fe de Bogotá : En la Imprenta de la Compañia de JESVS. Año de 1738.

FIGURE 8. *Title page of* Septenario al corazón doloroso de María Santissima, *printed by the Jesuits in Bogotá in 1738, the first surviving book printed in New Granada.*

1793 Antonio Nariño set up a short-lived printing shop, "La Patriótica," under Diego Espinosa, son of Antonio, but this enterprise failed after Nariño was persecuted for his inflammatory *Derechos del hombre* (1793). The Imprenta real continued under Antonio Espinosa until 1804, when his son Bruno took it over. Once again, in 1810, "La Patriótica" appears as the name of a printing shop under Nicolás Calvo. Both the presses served political objectives of the revolutionaries.

Alexander A. M. Stols, *Historia de la imprenta en el Ecuador de 1755 a 1830* (1953), gathers virtually all known information about early Ecuadorean printing in one place. Printing in Ecuador is another chapter in the triumphs and tragedies of the Society of Jesus in Latin America. As early as 1736–1740 the Jesuits tried unsuccessfully to get a license to print from the Real Audiencia in Quito. In 1740 two prominent Ecuadorean Jesuits, José Mariá Maugeri and Tomás Nieto Polo del Aguila, a native of Popayán, were sent to Europe, mainly to buy a press for the private use of their community. With them was one Alejandro Coronado, a poor copyist of Quito who worked for the Jesuits. The two priests probably arranged for Coronado to secure a royal *cédula* from the Consejo de Indias, permitting him to operate a public printing office in Quito. Coronado, a poor man, could; and their equipment, with Coronado's license, could permit the establishment of a public press. Unfortunately Coronado died in Spain, and his mother in Quito inherited the rights granted by the *cédula*. The Jesuits then arranged for her to sign over the *cédula* to one Raimundo de Salazar. In the meanwhile, however, the press did not reach Ecuador, and Salazar could do nothing. Sra. Coronado revoked the earlier contract and turned over the *cédula* to the *procurador* of the Colegio Máximo of the Jesuits.

When the press finally arrived, it was set up in the new Jesuit college in Ambato, some 75 miles south of Quito. We may guess it was set up here at the instigation of Father Maugeri, who was probably the moving spirit behind the importation of the press and who had founded the college at personal sacrifice. The first printer was Father Juan Adán Schwartz, probably a native of Hamburg, who arrived in Quito in 1754. Schwartz' first production came in 1755, St. Bonaventure's *Piisima erga Dei genetricem devotio* (see Figure 9), a substantial publication of ninety-two pages. In the next 4 years, until 1759, eleven other books and pamphlets appeared in Ambato.

In 1759 Father Maugeri was transferred to Quito, and Schwartz and the press were also moved to Quito. The first Quito imprint was again the work of a Jesuit, Juan Bautista Aguirre's *Divino religionis propugnaculo polari fidelium syderi* (1759). Subsequently fifteen other publications, nearly all religious in content, appeared from Schwartz' press. In 1767 the Jesuits were expelled from South America, and Schwartz died in the hold of a Panama-bound ship. His successor, Raimundo de Salazar, printed in Quito from 1767 to 1793, after the government took over Jesuit property. After Salazar stopped printing in 1794, Mauricio de los Reyes succeeded him as Quito's printer, but his work was distinctly inferior to that of his two predecessors. He was succeeded by José Mauricio de los Reyes, who printed from 1797 to 1799 and from 1801 to 1810.

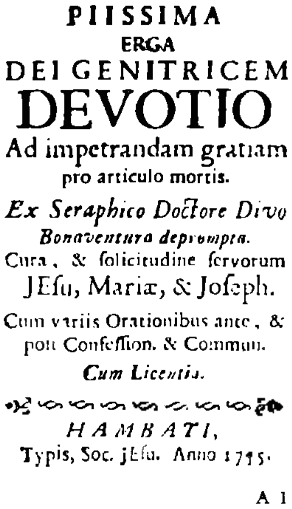

PIISSIMA
ERGA
DEI GENITRICEM
DEVOTIO
Ad impetrandam gratiam
pro articulo mortis.
Ex Seraphico Doctore Divo
Bonaventura deprompta.
Cura, & ſolicitudine ſervorum
JEſu, Mariæ, & Joſeph.
Cum variis Orationibus ante, &
poſt Confeſſion. & Commun.
Cum Licentia.
HAMBATI,
Typis, Soc. JEſu. Anno 1755.
A 1

FIGURE 9. *Title page of St. Bonaventure's* Piisima erga Dei genetricem devotio *(Ambato, 1755), the first known Ecuadorean imprint.*

The first Caracas imprint was the *Gaceta de Caracas* for October 24, 1808. The printers were Mateo Gallagher and Jaime Lamb, both North Americans, and their press had originally been brought to Venezuelan shores by the expeditionary fleet of Francisco Miranda when he attacked Coro. Evidently Miranda could not use it but left it in Trinidad, where Gallagher and Lamb acquired it. Printing had been introduced to Port-of-Spain on August 11, 1786 by Juan Cassan, who printed an *Ordenanza.* Trinidad was lost to Spain in 1802.

In 1810 Gallagher and Lamb published the first nonserial Caracas imprint, the *Calendario manual, y guía universal de forasteros.* Printing came to Cumaná in 1811; to Nueva Valencia, as already noted, in 1812; to Angostura (Ciudad Bolívar) in 1819; and to Maracaibo and Puerto Cabello in 1822.

Chile

The origin of printing in Chile was long clouded in mystery, and even Medina was unaware of the real facts when he compiled *La Imprenta en Santiago* (1891). Today it is generally accepted that the first press was brought to Chile by a German Jesuit, Carlos Haimhausen. Father Haimhausen had been sent to Spain as the *procurador* for the provincial congregation of Chile. When Haimhausen arrived in Buenos Aires in November 1747, the customs agents in Buenos Aires found "cinco cajones para imprenta de libros" among Haimhausen's 386 boxes and bundles, and we also know that royal officials in Santiago checked in these five boxes on May 6, 1748.

The press and the type were sent to the Universidad de San Felipe. We do not know whether it was used for printing prior to Haimhausen's death in May 1767 and the Jesuit expulsion 4 months later. The first surviving Chilean imprint that has come down to us is the *Modo de ganar el jubileo santo* (1776); a slender pamphlet of nine pages, extremely poorly printed, the *unicum* is now in the Biblioteca Nacional in Santiago. We know nothing about the printer or the conditions of printing, but there is no evidence that there was any press in Chile in 1776 other than the one imported by Father Haimhausen.

Medina records twenty-one pieces, mainly broadsides of an official character, printed in Santiago between 1780 and 1811. It seems most likely that the Santiago imprints he recorded were printed on Haimhausen's press, but only fragmentary information is available about the printers and the circumstances of printing. We know that there was a press (probably Haimhausen's) in the university. José Camilo Gallardo, warden of the university, learned printing and produced some of the invitations and official announcements recorded in Medina's list of 1780–1811 imprints. However, neither Gallardo nor anyone else who may have operated the Haimhausen press printed any work necessitating a sustained effort.

As late as 1803 it was necessary to have a *Reglamento del hospicio de pobres de la ciudad de Santiago* printed in Buenos Aires. When the struggle for Chilean independence formally began on September 18, 1810, it was clear that the absence of an effective printing shop could no longer be tolerated. A native of Gothenburg, whose name is recorded in Chilean history as Mateo Arnaldo Hoevel (Havel), deserves a large measure of credit for bringing a regular press to Chile. With the cooperation of John R. Livingston of New York, Hoevel brought a press and three North American printers (Samuel Burr Johnston, William H. Burbidge, and Simon Garrison). On February 13, 1812 the Yankee printers produced the first issue of the weekly *Aurora de Chile*. The last issue of the *Aurora* appeared on April 1, 1813. A new newspaper *El Monitor Araucano,* began publication on April 6, 1813 "En la Imprenta de Gobierno P. D. J. C. Gallardo." Three months later, June 29, Gallardo rented the press from the government and continued to hold it through the Spanish occupation (1814–1817). The *Monitor* ceased publication on October 1, 1814.

The Spanish Antilles

The first Cuban printer of whom we may speak with any certainty was Carlos Habré, a foreigner, probably a Frenchman, of whom we know almost nothing. His first known imprint is a *Tarifa general de precios de medicina* (Havana, 1723). The only other two books from Habré's press that we know are the *Méritos que ha justificado y probado el Ldo. D. Antonio de Sossa* (1724) and the *Rúbricas generales generales del breviario romano* (1727). Until further proof is presented, we cannot accept any other Cuban imprints rumored to have existed before 1736.

We know little more about the life and work of Cuba's second printer, Francisco José de Paula. On June 4, 1735 the Cabildo in Havana approved a license to de Paula to print, possibly a recognition of the need of the new University of Havana (founded 1734) for a printer. The next product of de Paula's press was a university thesis by Juan Bautista Sollozo y Urrea, *Coelestis astrea* (1736). Only two other publications of de Paula are known, another thesis and an *Ordo recitandi officium divinum,* both dated 1741. We know that de Paula received an appointment as printer to the Tribunal de Cruzada in 1741, and Antonio Bachiller y Morales says that de Paula sold his shop to Manuel Azpeitia, from whom it later passed to Esteban José Boloña. The third printer in Havana was Blas de los Olivos, whose first imprint was a broadside entitled *Receta facil y provechosa contra dolores y llagas provenidas de humor galico* (1757), formerly in the British Museum but destroyed by enemy action in World War II. Blas de los Olivos' last imprint is dated 1777, and there are no more than a dozen publications definitely attributed to his press.

The printing house of the Cómputo eclesiástico began to serve the cathedral and the various religious orders in 1762. From 1776 until the end of the century it used the more descriptive title of "Imprenta de la Curia Episcopal y Colegio Seminario de San Carlos." In 1781 the "Imprenta de la Capitanía General" began to function with the publication of a *Guía de forasteros* and was the main printing house of Havana for the next three decades. In 1782 this shop began to issue the *Gazeta de la Habana,* first under Diego de la Barrera and later under Francisco Seguí, who was associated in some way with the family of Blas de los Olivos.

In 1787 Esteban José de Boloña initiated an important printing tradition in Havana when he began to print Ignacio José de Urrutia Montoya's *Teatro histórico jurídico, político militar de la Isla Fernandina de Cuba.* This promising work ceased after the appearance of the first fascicle, but Urrutia's notes were undoubtedly used for his important *Compendio de memorias* published by the Imprenta de la Capitanía General. Despite his initial fragmentary effort, Boloña (whose relation to the alleged purchaser of de Paula's press is not known) prospered, and he and his descendants were prominent printers in Havana until the middle of the nineteenth century.

The last Havana printer pertinent here is Pedro Palma (or Pedro Palmé or Pedro Nolasco Palmer), a sergeant invalided out of the army after two decades of service. He was given permission to open his shop in 1791.

In 1790 the Imprenta de la Capitanía General began to issue the noteworthy *Papel periódico de la Habana,* the first bonafide magazine in Cuba. It was a major force in the intellectual life of the Habaneros for two decades, and it was later known as *El aviso* and *Diario de la Habana.*

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LAWRENCE S. THOMPSON

HISTORICAL LIBRARIES AND COLLECTIONS

See *Social Science Libraries*

HISTORICAL LITERATURE

A comprehensive discussion of historical literature is clearly outside the scope of this article; indeed, such an examination would consume this Encyclopedia for the literature of history is as voluminous and diverse as mankind itself. Inclusiveness being impossible, the article will essentially take the form of a bibliographic essay providing references for further information and stressing relationships between librarians and historians. Attention will focus on four areas as they apply to practices in the western world: (1) the history of history, (2) introductions to the study of history, (3) historiography in the twentieth century and recent practices in historical research, and (4) the implications of current trends for libraries.

The History of History or Historiography

Historians have long sought the historical roots of their subject and have, now, provided a relatively clear idea of the discipline's evolution to approximately the form recognized today. But the reader will readily acknowledge, as other historical topics are considered, that the subject is not without contention; when a writer describes the origns of history, he simultaneously makes philosophical statements concerning its role within society, its purpose, and its ultimate meaning. Peter Gay reflected these problems when he wrote that history is "easier to write than define" and that "historians continue to disagree not merely on *how* to do what they are doing, but on *what* it is they are doing in the first place" (*1*). Consequently, both the most philosophically advanced historical systems and the most general outlines, such as that which follows, occasion challenge. With this in mind, the present writer offers a distillation of recent research as suggestive but not conclusive.

Babylonian lists of kings, Assyrian royal annals, and Hebrew chronologies all have recognizable historical elements and values, but despite arguments to the contrary grounded in considerable amounts of documentation, Herodotus still must be acknowledged as the first historian. Yet of this "father of history" little is known. Evidence from his *History of the Greek and Persian Wars* (*2*) shows that although he passionately favored the Athenian cause he did not let partiality interfere with his attempt to understand what had happened, why it had happened, and why the prevailing Greek myths were insufficient to produce understanding. A second Greek historian, Thucydides, introduced in *The History of the Peloponesian War* (*3*) the first truly critical thinking about his sources. Although unlike in the subjects that interested them, the techniques that they employed, and the periods that attracted them, the combination of their efforts formed a foundation upon which future historical efforts could be based.

From these beginnings the accretion of historical methodology and writings was steady—Roman histories, medieval chronicles, and perceptive Enlightenment analyses—but this essay must skip to the development of the nineteenth century school of German historiography and focus a substantial portion of attention there. Two ancient Greeks wrote the first histories, but it remained for scholars in the nineteenth century to expand, clarify, and codify principles which they initiated, begin the publication of critical source series upon which sound research could be based, and establish history as an academic discipline. These principles evolved over many years from the works of numerous scholars, but a few names remain prominent. Leopold von Ranke, a distinguished Prussian historian, and his followers espoused objective history (although subtly avoiding it at judicious times) and stated that a description of events as they actually happened was the goal toward which all historians must aspire. Karl Marx and Friedrich Engels evolved a dialectical materialistic concept of history which had a profound impact on subsequent thought and writing. Jules Michelet sought in his *History of France* (*4*) to include within his sweep of coverage factors such as religion, law, geography, literature, and art. But overwhelmingly histories dealt only with a small range of human activity—political, diplomatic, institutional—those aspects are easily documented by sources such as the German *Monumenta Germaniae Historica* (*5*) or the English *Rolls Series* (*6*). American scholars enthusiastically embraced these techniques, established in turn their own seminars on Germanic models, to which were joined seminar libraries lined with shelves weighted with "Monumenta," national series of documents such as the *American State Papers* (*7*), and university monographic series, e.g., "Harvard Historical Monographs" (*8*), which served as vehicles for publishing the seminars' results. It remained for a few scholars in the twentieth century to question Ranke's definition of what history was intended to achieve; this development is taken up below.

Introductions to the Study of History

A number of excellent and accessible introductions to historical research describe historians and their basic problem—the search for reliable source materials. Among the most entertaining for the beginner is a volume of selections from historical research which editor Robin W. Winks admits he compiled "just for fun." *The Historian as Detective* (*9*) compares the use of evidence in historical research to its use by detectives in unraveling a crime. The detective has live witnesses whom he may question; the historian rarely has such good fortune and must turn to written resources, becoming in Winks' terms, "the most bookish of men," to whom

> no printed statement is without its interest. For him the destruction of old cook-books, gazetteers, road maps, Sears Roebuck Catalogs, children's books, railway timetables, or drafts of printed manuscripts, is the loss of potential evidence . . . . Back files of *St. Nichols* or *Boy's Own* or even *Superman* will be relevant" (*9*, p. xvii).

Under the rubric of fanciful chapter titles, e.g., "Who Killed John Doe," historians consider sober questions of the validity of historical source materials which are the profession's foundation and, by implication, a librarian's chef concern. What multi-volumed, but fabricated work, on the history of Western Pennsylvania still graces many library shelves; "The Case of the Men Who Weren't There" will solve the mystery.

Allan Nevins' *The Gateway to History* (*10*) is a more serious but still gracefully written and perceptive introduction to the field by a former newspaperman who became a professor of history at Columbia University and a leading scholar of the American Civil War and of business history. Like Winks, he considers the problem of "cheating" documents but also writes gracefully of the nature of history and its relation to the actions of men and nations. He deals with varieties of history—feuds and controversies that defile the purity of Clio, the historical muse. Among his examples one finds the British historian, Thomas Carlyle, declaring that his countryman, John Babington Macauley, writes history lacking sense only to have the American, William H. Prescott, call Carlyle's *French Revolution* (*11*) "perfectly contemptible" (*10*, p. 41). J. H. Hexter in *Doing History* (*12*) fascinates through his unique view of the philosophy of history, using, for example, the analogy of a baseball game to make a point about historical research. In a frank chapter he discusses the relationship between the historian and the society he serves and suggests some of the unwritten "rules" which govern admission to the profession, including the "incentive system," the fate of an historian who writes "potboilers," and the "contamination of historical cargo with ideological seawater." Although there is much with which one can disagree in Hexter, he is unflaggingly readable. *The Historian's Craft* (*13*), by the eminent French historian Marc Bloch, is an important and widely read introduction to the field which disagrees with many of Hexter's assumptions. He writes with the belief that exchanges with scholars working in other fields are mandatory "for the only true history, which can advance only through mutual aid, is universal history" (*13*, p. 47). He urges historians to take account of every aspect of man's activities and thereby reveal human life in its infinite variety—food and nourishment, money, agricultural, customs—and not confine their interests to such topics as diplomatic history which he describes as merely the record of the dealings of two clerks.

Controversy, as noted, is not foreign to historical research. Two other works, one by a philosopher and the second by an historian, further illustrate the point. The first, polemics within a confined area, is Ved Mehta's *Fly and Fly-Bottle; Encounters with British Intellectuals* (*14*).Although dealing essentially with British philosophy, he interviews British historians holding antithetical views—particularly on the origins of World War II—and with partly skeptical, somewhat bemused mien juxtaposes their viewpoints, adding frank commentary on personalities and idiosyncracies. The prolific English historian, J. H. Plumb, asks the scholarly community to acknowledge *The Death of the Past* (*15*). Plumb ranges from thoughts on worldly historians of ancient China to history as the "two-headed Siamese twin" in Communist countries today. Writing primarily for the historically sophisticated, Plumb prods and provokes, but continually fascinates:

> For many centuries now history has burrowed like a death-watch beetle in this great fabric of the past, honeycombing the timbers and making the structure ruinous. Now that it has fallen, can the historian reconstruct a more viable past for mankind (*15*, p. 103)?

Several available handbooks and guides to historical research have a more practical goal. First, and perhaps best known, is *The Modern Researcher* by Jacques Barzun and Henry F. Graff (*16*). In precise, occasionally eloquent, language, the authors survey the basic principles and methodology of historical research—including use of a research library—inclinations, patterns of research, and sister disciplines of history, and the techniques of presenting results effectively through clarity in style and form. They complement their text with a very brief concluding list of suggested readings. Also widely read is *Historian's Handbook* by Wood Gray and others (*17*). It covers essentially the same ground as Barzun and Graff but is more bibliographically oriented. Although slight and becoming dated, Gray had advice from numerous skilled collaborators; as a result many references are to relatively obscure but particularly valuable entries. Another work with the same title compiled by Helen J. Poulton and Marguerite S. Howland (*18*) is intended almost entirely for library reserach. Arranged by country, Poulton and Howland's *Historian's Handbook* focuses on guides considered by the compilers most important for the beginning or intermediate student. Left to last but not least is the American Historical Association's *Guide to Historical Literature* (*19*) which remains useful for research in some areas and a basic source for the advanced student. Because compilation of materials in each section was left to the discretion of individual editors, variation in content between sections is considerable. Similar guides are available, e.g., the *Harvard Guide to American History* (*20*) for almost every country or for specific topics but lack of space prohibits listing. Bibliographies included in the guides listed above will identify most of those available.

Another useful type of guide surveys and describes the current state of the art in a specific field and identifies major research trends. John Higham, Leonard Krieger, and Felix Gilbert collaborated on such a survey as part of the Ford Humanities Project at Princeton University. *History* (*21*) examines the development of the historical profession in the United States and its viewpoints in the early 1960s; a second major section deals with "European History in America"; while a third is concerned with European historiography. In *Contemporary History in Europe; Problems and Perspectives* (*22*), Donald C. Watt has assembled a collection of essays by experts who discuss prominent European historians, research in progress, and research institutions. Sections on historical trends discuss such influences as the impact of ideology and usually include a substantial bibliography, frequently with critical annotations. Numerous works of this type are available for American history. One of the most serious recent attempts defines problems and prospects of American history in a collection of essays, *The State of American History* (*23*), edited by Herbert J. Bass. Stressing bibliographical references, the authors, each an expert in his phase of American history, consider the state of familiar topics such as diplomatic history, but also include less familiar and virtually unexplored subjects such as environmental history or welfare history.

From reading about historians to reading the works of historians seems a natural development; compilers of several anthologies have eased this transition by selecting judiciously from the corpus of prominent historians those works or parts of works which express their views of history. The two volume *Historians at Work* (*1*) edited by Peter Gay, Gerald J. Cavanough, and Victor B. Wexler describes the unsettled state of the historical profession today, and elaborates on why this should be true now and why it has frequently been true in the past. Starting with Herodotus and concluding with Gibbon, the compilers provide for each historian a brief introduction to his life and works, an example typifying his writing, and a brief but carefully selected bibliography of secondary works. Fritz Stern, a noted intellectual historian, has compiled another anthology, *The Varieties of History* (*24*), which selects pertinent works of historians from Voltaire in the eighteenth century to Jacques Barzun writing in the 1950s. Although similar, there is one significant difference: Gay and his companions have chosen historians writing history, Stern has historians writing about history, "personal reflections on an ancient but ever varying discipline." Stern draws attention to debates and controversies still attracting contemporary historians. A third collection juxtaposes contradictory viewpoints of the same historical event. Shephard B Clough and his collaborators in *The European*

Past (25) illuminate the extent of historical controversy: to one scholar World War I was caused by the unfortunate cumulative effect of relatively minor events, to a second it was imperialist designs of the German War Office; to Albert Guerard, Napoleon III was the people's friend and leader, to Lewis Namier—the people's oppressor; to J. L. Hammond the industrial revolution made the working man miserable, for J. H. Clapham there was a rise in the workingman's standard of living from 1760 to about 1830. These debates are in one sense the life's blood of historical research, for it is through these controversies that scholars are encouraged to probe more deeply into the fabric of a past society.

Twentieth-Century Historiography

Some historians regard items described in the previous section as having as little relation to contemporary historiographic developments as Egyptian mythology had to the first critical histories. These scholars view the historical profession during the 1920s and 1930s as being in the midst of crisis; diligent work in archives of national governments and the resultant proliferation of research on diplomatic, administrative, and constitutional topics had virtually exhausted itself; close textual study could no longer yield fruitful results in fields already pursued to logical conclusions by outstanding nineteenth-century historians. As a consequence of this "crisis," many younger scholars directed their attentions to new fields of historical research and new techniques which they hoped would amplify knowledge and perspectives of the past.

One of the most successful schools of historical thought which has probably had the greatest impact on post-World War II scholarship is the "Annales" school, after the journal which began publication in 1929. Scholars who helped found *Annales* (26), particularly Lucien Febvre and Marc Bloch, sought to study contemporary history as a means of understanding the past, to expand the subject matter of history to include all the varied activities of mankind, and to enlarge the number of methodological tools available to conduct such research through incorporating social science techniques. *Anales* became and remains a publishing outlet for substantive as well as theoretical articles. Publication of two collections of English translations of articles from the periodical should gain the wider audience among non-French scholars *Annales* merits. *Social Historians in Contemporary France: Essays from 'Annales'* edited and translated by the staff (27), shows *Annales*' range of subject matter—from ancient Athens to sixteenth-century Peru—and its willingness to open its pages to varying approaches. The collection of articles edited by Peter Burke, *Economy and Society in Early Modern Europe: Essays from Annales* (28) is more limited in its scope. It focuses on a period in which, according to some scholars, the most imaginative historical work is being conducted today. The volumes dovetail; they do not duplicate. Burke has included an article ("History and the Social Sciences") by Fernand Braudel, described as the most outstanding historian of the *Annales* school, primarily for his multivolume study of the Mediterranean in the era of Philip II (now being published in English); essays viewing the sixteenth century "price revolution" from comparative standpoints; and other topics such as European expansion. Burke concedes that historians of the Annales school are far from uniform but stresses that they share important characteristics: (1) interest in creating a new framework for scoial history; (2) concern with structural factors or constants in history; (3) emphasis on patterns of change, particularly long term changes; and (4) if not Marxists, they at least share Marx's concern with the relationship between economics, societies, and civilizations.

Although there is no exact parallel to the Annales school elsewhere, certain publications and historians are similar. In England there is the periodical *Past and Present* (29) and historians such as Eric Hobsbawn with his research on banditry as a form of social protest and Edward Thompson's magisterial work on origins of the English workingclasses; in the United States there are the periodicals *Comparative Studies in Society and History* (30), *The Journal of Interdisciplinary History* (31), *The Journal of Social History* (32), and *Historical Methods Newsletter* (33) (exclusively devoted to technical research procedures) and historical research such as Charles Tilly's concern with quantification and French society, Lawrence Stones' work on prosopography or collective biography in his *Social Change and Revolution in England, 1540–1640* (34), and Bernard Barlyn's *The New England Merchant in the Seventeenth Century* (35) and the school of New England urban history has formed around him. Elsewhere there is the *International Review of Social History* (36) with its emphasis on social movements and publication of archival sources; or the *Scandinavian Economic History Review* (37) and the Swedish *Society and History* which make available in English the efforts to quantify Scandinavian data.

These works suggest three common factors which can be isolated and merit further consideration since they have a direct bearing on relationships between libraries and the historians they serve: (1) revitalization of the use of local history publications and local archives; (2) use of quantifiable or serial data in large quantities which usually require a team approach, use of sophisticated data processing equipment, and application of techniques borrowed from other social sciences; and (3) research on new or nontraditional subjects such as psychohistory, the history of social groups and movements, and the "new" economic history.

The use of local historical sources and archives is not new; the nineteenth century witnessed the establishment of countless local historical societies whose chief goals were to foster regional studies and publish historical sources. What is new is that these societies, formerly the domain of antiquarianism and foundering for lack of funds in the 1930s, have attracted professional social and economic historians. In England a group of historians led by H. P. R. Finburg and others at the University of Leicester has concentrated on rural preindustrial societies with notable results. French local studies, perhaps most distinguished among them Emmanuel LeRoy Ladurie's work on the Languedoc peasantry, have been substantial and, aided by a central archival administration favoring production of guides to departmental and local archives to make sources more easily available, seem likely to continue at high intensity. The renewal of American regional and local study has not yet equalled its European counterparts. Scholars are confronted by understaffed and consequently insufficiently organized archives while conducting their research and encounter further difficulty publishing results of that research when finally completed. Yet there have been distinctive studies—Merle Curti on Trempealeau County, Wisconsin *(38)* or Sumner Chilton Powell's study of Sudbury, Massachusetts *(39)*. The potential for application of social scientific techniques to local sources should increase their use as well as heighten the respectability of such works among the historical profession as a whole.

The issue of quantitative history or reliance on quantitative methodology derived substantially from the social sciences is one of the liveliest topics in historical circles. To supporters, the only means of verifying historical generalizations; to detractors, a "whoring after false gods"; the issue divides the profession. But accepted or rejected, it is fashionable, and as is true for other aspects of historical research, not easily defined. Presently quantitative history can include primitive calculations completed by an individual or large data sets requiring complex manipulations, research teams, and large capacity computers. Whatever the technology, simplistic or sophisticated, a practitioner of quantitative history is making a positive statement of his conception of history: he believes that his methodology provides more accurate answers to historical questions than the impressionistic history of his contemporaries. A middle ground may emerge when the historian accepts the insights quantitative history provides and incorporates them with the best historical ideas of the past.

Until very recently guides to methodology and practice of quantitative history were few; now publications ranging from practical handbooks to comprehensive texts are available. D. K. Rowney and J. Q. Graham performed a useful task for the uninitiated by collecting in *Quantitative History* *(40)* articles representing various techniques, topics, and time periods as diverse as demography in colonial Bristol, Rhode Island, and nobility in preindustrial Japanese cities. A useful textbook, it identifies scholars active in the field, suggests possibilities for research, and provides a bibliography of methodological, theoretical, or substantive contributions to quantitative history. Aware of the need to stimulate interest among historians of the United States as well as to provide a basic text, Robert P. Swierenga compiled *Quantification in American History* *(41)* which includes articles published from 1960 to 1970 in professional journals. Swierenga concentrates on substantive articles rather than methodological explanations. Convinced that familiarity with computational techniques is a skill historians lack, Edward Shorter produced a practical and elementary guide, *The Historian and the Computer* *(42)*. Starting with the premise that historians had neither background in other social sciences which would have familiarized them with basic techniques nor knowledge of computer programming or mathematics, Shorter takes the historian step by step through procedures to utilize the computer in analyzing historical data. From these beginnings has emerged a major work compiled by Val R. Lorwin and Jacob M. Price which is likely to serve as a definitive guide for much research. *The Dimensions of the Past; Materials, Problems, and Opportunities for Quantitative History* *(43)* confronts four major issues: kinds of quantitative data available for problems, periods, and areas under discussion; uses of these data; important problems remaining; and promising directions for future quantitative historical research in areas of the world *other than* the United States. Finally it provides a unique, critical bibliographic guide to sources of quantitative data. Based on these works it is possible to concur with numerous historians who claim that "some of the most interesting work now being done involves the systematic use of quantitative data."

Whether due to the impact of quantitative research or not, there has been a significant change in topics that attract scholars and editors. Although articles following patterns established in the nineteenth century are still widely published, other subjects and techniques are finding an audience. The staid *American Historical Review* (*44*) features an article on treatment of the poor in sixteenth-century Geneva; the *Journal of Contemporary History* (*45*) relates group psychology to contemporary historical events; and other standard journals include articles on literacy among members of the working classes, a review of Philippe Ariès bold *Centuries of Childhood* (*46*), and a quantitatively-based study of the elite in seventeenth-century England. As more young scholars are attracted to what one historian termed "history with the politics left out," we can anticipate that their research will find an even more substantial audience.

Another entrée to current historiography is through the first two numbers in the hundredth volume of the eminent American journal *Dædalus* (*47*). "Historical Studies Today" contains articles which demonstrate trends of current historical thought, which suggest further readings, and which are in themselves models of recent historiography. As British historian Eric Hobsbawn suggests, social history, previously on the fringes of respectable historical investigations, has now become a center of attention and this focus will require a respect for data which would have been ignored by previous generations of historians. In his section on social movements—one of six examples he cites as major divisions within social history—he notes that when we attempt to deal with the common people, we are dealing with an "individually inarticulate, undocumented, and obscure" group. Historians concerned with such groups must of necessity deal from the outset with partial and scattered data which forces them to construct models in order to evolve coherent systems. If it were not for bursts of revolutionary activity with "mountains of pamphlets, letters, articles, and speeches, not to mention the mass of police reports, court depositions, and court inquiries" they produce, how much less we could know of life of the working classes (*47*, p. 39). To analyze these masses of material, cooperative teamwork with scholars representing various disciplines and the use of modern computational equipment are needed. For François Furet, "quantitative history presupposes the existence and elaboration of long series of homogeneous and comparable data" (*47*, p. 154). Since data are produced to meet immediate socio-political and not historical needs, and since they are stored in archives developed during the nineteenth century, they are difficult to use for much recent research. New archives utilizing different systems of classification are required. This idea could be most easily applied to fiscal, economic, and demographic research, but once principles and new criteria for evaluating and storing documents in computers are established, coverage could expand to other fields. Thus scholars would be establishing standards, constituting subject matter, and storing sources for today's methodology just as pioneering historians had set patterns for their school of history in the early nineteenth century. Robert Darnton, a French scholar primarily interested in historical sociology of books and reading, opens a provocative article by noting that intellectual historians have taken relatively few works as representative of an age and based their research on them. Using quantitative methods, Robert Escarpit and David Pottinger had been able to examine a much larger universe and derive from their analyses striking generalizations concerning writers and their works. Darnton then goes on to investigate the economics of the publishing trade and concludes with a discussion of the scurrilous *libelles* about the monarchy which proliferated in eighteenth-century France and did such damage to the prestige fo the crown. He thus shows through an examination on several different levels what is known about the general intellectual climate of Enlightenment France, but more importantly, what is yet to be learned.

Implications for Libraries

One factor affecting the ability of libraries and librarians to anticipate trends of historical research is lack of investigation of research patterns of historians themselves. A basic volume in the field containing a survey of historians' attitudes toward bibliography is *Bibliography and the Historian (48)* edited by Dagmar Horna Perman. Perman sent a questionnaire to a representative sample of members of the American Historical Association in an effort to determine how they discover their sources and "dredge up from [the] ever-deepening ocean of information the treasures and fragments they need in their research." Since only 50 of 300 questionnaires were returned, her results cannot be termed conclusive but they are suggestive of the historian's basic attitudes. Emerging from her survey is a profile of the typical historian as his own bibliographer, generally dissatisfied with many bibliographic services, and occasionally critical of libraries. Other papers in the volume suggest that technological advances in information retrieval offer potential solutions for historians in their search for sources and that, often, it will be librarians who will be charged with the responsibility for being aware of advances of value to historians. An extensive survey conducted by Walter Rundell, Jr. and having serious implications for librarians is *In Pursuit of American History; Research and Training in the United States* (*49*). Since Rundell included librarians within the scope of the survey and contrasts their comments with those of professional historians, results are intriguing. He discusses at length topics relevant to both professions such as cataloging microfilms, collecting original sources, and research–custodian relations. It is one of the most important guides to historical practice and libraries now available.

There are three possible relationships between historians and libraries. One is that historical research will continue with little deviation from paths established by historical schools of the nineteenth century and, correspondingly, libraries will continue as they have to supply research materials in the form of sets of Monumenta, memoirs of diplomats and politicians, and other traditional source materials. A second is that new technologies and ideas will impinge on traditional historical research but will have only a relatively minor impact on the mainstream of historical teaching, research, and publication—approximately the situation as it exists today—and consequently the impact on libraries will be equally slight. Finally there is the possibility that scholars advocating new methodologies and subjects will become substantial segments of the historical community, and libraries traditionally responsible for supporting historical research will have to accommodate themselves to demands for new services.

If this third alternative obtains, as now seems likely, libraries will have to alter patterns of collecting and storing resources and assisting readers in their use. From comments made by social historians it follows that as large a book stock as possible will be needed, including traditional works and also such sources as statistical publications on every conceivable topic from book production to venereal disease rates, biographic sources on minor figures from every imaginable sphere of human activity, and minor or unusual works from the scatological to the beatific. In addition there will have to be facilities for storage and manipulation of historical data in machine-readable form. At this moment substantial historical data sets are available on topics as varied as fifteenth century Florence, African slave trade, and a Wisconsin county; their number is growing at an exponential rate. Finally, computer facilities and trained personnel to assist historians retrieve their data must be provided. The library must also retain flexibility to absorb efforts of yet other generations of historians producing even newer styles of historical literature.

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HISTORICAL SOCIETY LIBRARIES IN THE UNITED STATES

Historical societies in the United States have served two very useful purposes since the establishment of Massachusetts Historical Society, the first, in Boston in 1791: (1) publication of irreplaceable source documents and (2) establishment of libraries as depositories for books, pamphlets, manuscripts, and archives. Proceedings, journals, newsletters, and collection guides were advanced early as desiderata of historical society work. With professionalization after 1875, a state of cooperation existed, in certain praiseworthy instances, between university history faculty and historical societies such as the merging of professional and amateur efforts in Georgia in 1920 which resulted in the happy appointment in the same year of Professor E. Merton Coulter as editor of *The Georgia Historical Quarterly* (*1*). The aims and purposes of historical societies have often been quite broad as to include natural history, geology, inventions, art galleries, home furnishings, costumes, state and local archives, and historical highway markers, but high on the list in most historical societies, beginning with the Massachusetts club, has been the library; a place to collect, organize, and make use of the source materials of history. For more than a hundred years the chief depositories for rare Americana were historical societies and not universities, which later assumed this responsibility, especially for the more modern periods of American history. The historical society publications and collections covering the colonial period and extending through the War of 1812 are priceless, but one of the chief criticisms of professional historians is that historical societies have tended to remain antiquarian and have interested themselves too little in social, economic, and cultural areas such as women's rights, labor and recent literature. When, however, a full realization is assumed as to the limited financial resources of historical societies and the strengths, largely colonial, which exist, the wisdom of such a policy may be less disputed. The earliest American imprints and pamphlets extant reside in the libraries of historical societies, while scholars have found the long runs of eighteenth and nineteenth century newspapers invaluable. As for the papers of major Americans. historical societies have been discovered to be major sources by the editors of such projects. Examples of the importance of historical society libraries to the publication of papers are those of such prominent figures in American history as John Adams, James Madison, Thomas Jefferson, and Benjamin Franklin, without which such published collections would have been much the poorer (*2*).

The Massachusetts Historical Society was organized during the first term of George Washington, more than 40 years away from the seating of Jared Sparks at Harvard (1838) in what may be considered to be the first chair for the teaching of history in the United States (*3*). Much uncertainty surrounds the reasons for the organization of this first historical society. One important reason for its formation was, undoubtedly, pride born of a free people whose government was now reorganized under the presidency of the great hero of the American Revolution. Another origin often given with good historical basis is a model established by eighteenth century English and French societies organized by antiquarians and historians desirous of learning more about the past. The American Philosophical Society, founded in 1743 and copied after similar organizations across the Atlantic, took history as one of its aims with direct links to such European societies as the French Academy of Inscriptions, the Spanish Royal Academy of History, the Royal Danish Society, and the London-based Society of Antiquarians (*4*). But perhaps a more important and certainly a more pressing reason for the establishment of American historical societies has been the desire of a few educated bibliophiles to form clubs for the purpose of assembling libraries and publishing to increase the number of copies of valuable documents to avoid irrevocable losses. The founder of the Massachusetts Historical Society, Jeremy Belknap, was a clergyman and already the author of the first volume of his *History of New Hampshire*. Belknap, encouraged by Ebenezer Hazard, a New York bookseller, and John Pintard, a wealthy New York book collector, called an organizational meeting in 1790 of five Bostonians, and in the following year the society was inaugurated with a charter membership of ten (*5*). Among its aims were:

> The preservation of books, pamphlets, manuscripts and records, containing historical facts, biographical anecdotes, temporary projects, and beneficial speculations, conduces to mark the genius, delineate the manners, and trace the progress of society in the United States, and must always have a useful tendency to rescue the true history of this country from the ravages of time and the effects of ignorance and neglect (*6*).

Today, there are probably more historical societies in the United States than in any other country in the world (*7*), conservatively estimated at 2,400 (*8*). The growth and development of historical societies, however, did not follow a steady course from its earliest years. Only two new historical societies, New York and the American Antiquarian, were organized prior to 1820, both along lines similar to that of the Massachusetts society (*9*). The New York Historical Society had been planned earlier, but it was not until 1804 that the dreams of its founder John Pintard, were brought to fruition. In December of that year its ten charter members drew up a constitution influenced in its aims by the Massachusetts experience, placing heavy emphasis on the development of a library to contain priceless documents which otherwise might be lost and unavailable in the future to historians. A want list soon went out soliciting a wide range of source materials covering "the whole continent," as its founders envisaged a depository going beyond the confines of the state of New York. The third society organized in the first three decades of federal history was the American Antiquarian Society of Worcester, Massachusetts, which was called into existence in 1812 by Isaiah Thomas, the most successful book publisher at that time in the United States. Collections of historical materials received, naturally, high priority. Even more ambitious in scope than that of the New York Historical Society was the plan of the Worcester group to collect, along with newspapers, natural and man-made objects, manuscripts, and books "of every description including pamphlets and magazines" of early print in both North and South America (*10*).

Sixty-two more historical societies came into existence between 1812 and 1861, of which thirty-two have survived (*11*). The decade of the 1820s brought the first period of real growth. In that decade, eight historical groups were formed in Maine, New Hampshire, Connecticut, Rhode Island, Pennsylvania, Tennessee, Illinois, and Michigan (*12*). These were the ripening years of American nationalism; first, political, as symbolized by the Monroe Doctrine, the second, democratic, beginning with the election of Andrew Jackson to his first term as President of the United States (*13*). Of these, the Historical Society of Pennsylvania may lay claim to special attention. With the establishment of the American Philosophical Society (1743), Benjamin Franklin made Philadelphia the intellectual center of the seaboard. Since one of the Society's interests was history, no concentrated efforts were made to form a Pennsylvania historical group until 1824. The sixth American society was organized in December at the home of Thomas I. Warton, and it received its state charter in June of the following year. The library of the Historical Society of Pennsylvania developed at a slow rate. It was not until after the Civil War that the library became an important depository, first in 1868 with the inheritance of the George Fahnestock pamphlet collection and in 1873 with the acquisition of a large number of Penn papers. Other societies originating in the 1820s developing important libraries are the societies of New Hampshire, Connecticut, and Illinois with large and significant book and manuscript collections (*14*). The next 30 years witnessed the birth of other societies which made significant contributions to the collection of historical materials, although none of these has measured up fully at any time in their existence to the big four: Massachusetts Historical Society, New York Historical Society, American Antiquarian Society, and the Historical Society of Pennsylvania. The most important of these antebellum society libraries are: Ohio (1831) (not the present one), Virginia (1831), Maryland (1844), Wisconsin (1849), and Minnesota (1849) (9). All have substantial book, pamphlet, and microfilm collections, but more importantly, the manuscript holdings are large and valuable (*15*).

The Minnesota and Wisconsin societies were the earliest of the western groups, several of which, unlike their progenitors east of the Mississippi, pioneered in public fund support and direct collection methods by professional staff members. As Boyd has written about the development of such institutions, "one of the most astonishing phases of the first half-century of historical societies in the United States is the manner in which those with notebooks and the collecting instinct followed so closely upon the heels of the frontiersman" (*16*). In the fall of 1849, less than 8 months following the establishment of the Minnesota territory, the legislature chartered the Minnesota Historical Society. Its early history at this time was so current that a speaker at the first meeting in 1850 referred to scalp dances performed not far distant and Minnesota soil reddened with Objibwa and Dakota blood (*17*). The Wisconsin Historical Society, though founded in 1849, did not have its real beginning until Lyman Draper was elected its secretary in 1854. Draper remained with Wisconsin for 33 years. During those years, he laid the foundations of a new kind of collecting—interviews with historical figures and the assemblage, at little or no cost, of historical materials, upon which experience many subsequent historical and university libraries were built. It was Draper's remarkable success which demonstrated that a dedicated, enterprising professional collector with limited capital outlay may build up a collection in a lifetime equal to or superior to those purchased by a huge private or public fund outlay. Other state depositories established with public backing are Kansas, Iowa, Nebraska, and Missouri (*18*). These public societies, largely dependent on legislatures for funds, but relatively free of political interference, have managed to survive and maintain their independence because of the important services they provide, including research facilities, and because of the tradition in the West of supporting universities, historical societies, and other cultural institutions out of state appropriations (*19*).

Historical societies with precedents of establishing libraries and publishing documents continued to expand in number after the mid-nineteenth century, but the newer organizations were less restrictive in membership and somewhat less scholarly and more local and regional in outlook (*4b*). Between 1850 and 1876 some twenty new societies came into existence, but it was in the latter years, during the centenary celebrations of the independence of the United States, that societies were seen to increase much more rapidly. Another reason for the increased growth may be seen in the establishment of chairs of history in American colleges and universities and the development of a profession of European-trained historians more concerned with national history (9). These professionals became critical of the amateur societies described by John Franklin Jameson before the 1897 annual meeting of the American Historical Association as being often excessively localized in interest and overweighted in early American history and genealogy (*20*). Though the newer historical groups never completely lost sight of scholarly foundations calling for substantial libraries, it soon became recognized, with Wisconsin and Reuben Gold Thwaites leading the way, that a "progressive" approach must be grafted on to the scholarly underpinnings if historical societies were to gain the necessary financial support. While in office, Thwaites increased the size of the Wisconsin Historical Library from 118,000 to 352,000 volumes and edited ten volumes of *Collections* and twenty-six volumes of *Proceedings*, but he also made the society over as an education institution by deriving great public support for his museum and historic sites and markers programs as well as by obtaining wide attention through centennials, pageants, and public school programs (*21*). The American Historical Association, around the turn of the present century, through its annual Conference of Historical Societies, attempted to coordinate the nation's historical societies, but after 1914 the professional historians tended to go their own way; although exceptions are found in a score or so societies where professional and amateur historians have mingled in the twentieth century on more or less equal terms (*22*).

After 1875 historical societies tended to alter their form. History became a profession, and scholarly work tended to shift to universities and colleges where post-War-of-1812 source materials have been gathered in on a wide basis. When the historical society lost its monopoly over historical scholarship, under the wise leadership of Thwaites, without abandoning its libraries or publications policy, it became, in its highest form, a new type educational and cultural institution. With the pioneer period largely mined, many society libraries, particularly those created after 1850, became largely genealogical in orientation, which has been markedly accelerated as U.S. Census, tax records, wills, marriages, deeds, and cemetery and Bible records have become easily accessible in microfilm and in pamphlet form. Two genealogical societies have developed outstanding libraries and special collections, the New England Historic Genealogical Society in Boston and the Genealogical Society of Salt Lake City, Utah. The former, founded in 1845, now has a library of over 200,000 volumes. The Mormon society, incorporated in 1894, has developed a huge collection of microfilms to accompany its respectable book and pamphlet collection, especially since 1938 when the library began to copy genealogical records on film. By 1960 the library had on hand 246,838 rolls of microfilm of public and private records of sixteen major foreign countries and of the United States (*23*).

Samuel Eliot Morison has characterized the period after the Civil War as a "joiner" type society. As the country became more closely drawn together through faster means of transportation and communication, there developed among Americans a "desire for distinction" which secret and fraternal orders, patriotic societies, and racial groups provided. Naturally, historical societies were developed for the purpose of enriching the heritage and the uniqueness of these associations (*24*). Sometimes these associations were local, but more often they were national and based on common ancestral origins, either in the American colonies or in the countries of origins. The earliest of these groups may be characterized as closed and motivated more by pride than by desire to search out sources which would result in scholarly research, later corrected to some degree as their members became more sophisticated.

According to the seventh edition of the *National Organizations of the United*

States, over 200 "veterans, hereditary, and patriotic organizations" were in existence in 1972. Among those known to have historical libraries, most of which are quite small, are the National Society of the Daughters of the American Revolution, the Sons of the American Revolution, the Pennsylvania German Society, the Society of Cincinnati, and the General Society of Colonial Wars (*25*). The most substantial of these is the D.A.R. Library located in Washington, D.C., with a specialized book collection and a sizable collection of microfilms and typescripts (*26*). National groups organized to preserve the history of nineteenth century immigrants are represented by such groups as the Norwegian-American Historical Society, the American Irish Historical Society, the Scotch Irish Society of the United States of America, and the Pennsylvania German Society, all of whose collections are welcome, but small (*27*). It would seem from the recent survey of such organizations by this author that library collection building within such groups has not been particularly successful.

More fortunate in the establishment of libraries has been another type of society which flourished after the Civil War. Community pride generates the development of local historical societies in every state of the nation, which appear and disappear in the state and local history's biennial directory. These societies have made important contributions to historical knowledge, but as Jameson indicated around the turn of the century, local historians tend to fail to see the whole for its parts (*28*). By establishing libraries, they have made important contributions to research; although before the easy access of microfilming, important records were often hid from the view of the trained historian. Certainly, many local historical societies have been, on the whole, little aware of the outside world and are often uncooperative or covert with those of larger perspective and more thorough schooling in historical research (*29*). Exceptions would be the following local historical societies and their libraries whose outreach extends considerably beyond their towns and cities: Essex, Western Reserve, Chicago, Missouri, Buffalo and Erie County, Cincinnati, Filson, Dallas, and Columbia historical societies. The Essex Institute, organized in 1831, consists of a rich library of some 300,000 books including manuscripts, so large as to be difficult to handle for its small, overburdened staff. Western Reserve, Chicago, and Missouri Historical Society are composed of substantial collections serviced by competent and nearly adequate staffs. The libraries of the Buffalo and Erie County, Cincinnati, Filson, Dallas, and Columbia historical societies house important book and manuscript collections, though smaller in size and cared for by fewer librarians and assistants (*30*).

The final historical society library type to be considered has made vital contributions to American society. Few general societies or even universities and colleges have made reputations for themselves as significant religious repositories; although there is an encouraging recent trend for seminaries and denominational schools of higher learning to develop sectarian religious historical libraries and collections. The two largest of these libraries belong to the American Baptist Society of Rochester, New York, and the Presbyterian Historical Foundation of Montreat, North Carolina, at 50,000 volumes each, with large collections of manuscript materials. Others fairly consistent in interest and growth, but much smaller in size, are the libraries of the Universalist, Huguenot, Moravian, American Jewish, Disciples of Christ, the Church (Episcopal), Evangelical United Brethren, and American Catholic societies (*31*). Several states or church districts have their own organizations with attempts to collect materials as the Kentucky Baptist Association and the California-Nevada Conference (Methodist). Within the last two decades, religious historical societies have been active in the Society of the American Archivists and have formed a committee within the historical organization to further their collection designs.

All those who have done research into historical societies and their activities have found, as Lord writes, that the history of such groups is most difficult to trace (*32*). Historical libraries tend to expand or contract, appear or disappear, reflecting the interest or quality of management. One cannot help suspect that amateurism and shortage of funds lie at the heart of the matter, and as long as the latter situation exists, consistent efforts, even under excellent administration, will fall short of the ideal. There is no question, however, of the overall importance of such organizations to build libraries and to collect source historical materials in the absence of a centralized national effort under a single government bureau as is found in England and on the continent of Europe. Lack of direction from the top has resulted in a nationwide voluntary effort which has met with amazing success and must defy the European skeptic who from the beginning has not been absolutely certain that the democratic system is practical for political units larger than city-states. As will be seen below in a listing of major historical library depositories, the United States would have been much the poorer in newspaper, pamphlet, manuscript, and interview sources without the sustained and intelligent efforts over the years of the Jeremy Belknaps, the Lyman Drapers, and the Clarence Binghams.

Major United States Historical Society Libraries and Their Holdings as of 1970

PRIVATE STATE SOCIETIES

American Antiquarian Society, Worcester, Massachusetts. Founded, 1812. Library holdings: 750,000 books (including pamphlets); manuscripts; newspapers. Special significance: Priceless collection of American newspapers and American imprints before 1820.

Connecticut Historical Society, Hartford, Connecticut. Founded, 1825. Library holdings: 70,000 books; 1,250,000 manuscripts; newspapers. Special significance: Outstanding seventeenth and eighteenth century Connecticut manuscript and newspaper collection.

Historical Society of Pennsylvania, Philadelphia, Pennsylvania. Founded, 1824. Library holdings: 400,000 books (including bound periodicals); 4,000,000 manuscripts (including bound periodicals); 5,377 newspaper volumes. Special significance: Benjamin Franklin books and pamphlets; 25,000 Penn manuscripts and numerous other important manuscripts as 400 letters of George Washington; at least one Philadelphia newspaper for each year from 1720 to the present; eighteenth century imprints.

Maryland Historical Society, Baltimore, Maryland. Founded, 1844. Library holdings: 70,000 books (including bound periodicals); 1,500,000 manuscripts; 20,000 pamphlets; newspapers. Special significance: 1,300 papers of the Lords Baltimore; papers of Charles Carroll, Benjamin Latrobe, and other leading Americans; Baltimore newspapers after 1773.

Massachusetts Historical Society, Boston, Massachusetts. Founded, 1791. Library holdings: 500,000 books (including bound periodicals); manuscripts; pamphlets; newspapers. Special significance: Adams papers; early Massachusetts imprints.

New Hampshire Historical Society, Concord, New Hampshire. Founded, 1823. Library holdings: 80,000 books (including bound periodicals); manuscripts; pamphlets; newspapers. Special significance: Early New Hampshire newspapers; Papers of General John Sullivan, Daniel Webster, and Franklin Pierce.

New York Historical Society, New York, New York. Founded, 1804. Library holdings: 500,000 books (including bound periodicals); 750,000 manuscripts; 18,000 broadsides; pamphlets; maps; prints; photographs. Special significance: Manuscripts, including those of the American Fur Company, Horatio Gates, Rufus King, and Livingston families; strong in all departments with emphasis on New York State history.

Virginia Historical Society, Richmond, Virginia. Founded, 1831. Library holdings: 175,000 books (including bound periodicals); 2,250,000 manuscripts; broadsides; maps; newspapers. Special significance: Papers of colonial leaders, Revolution period and early Federal, such as those of Byrd, Dinwiddie, Spotswood, Jefferson, Madison, and Monroe; the *Virginia Gazette;* early Virginia and Confederate imprints and maps.

PUBLIC STATE SOCIETIES

Illinois State Historical Society, Springfield, Illinois. Founded, 1889. Library holdings: 114,560 books (including bound periodicals); 1,000,000 manuscripts; 10,000 bound newspapers. Special significance: More than 1,200 Lincoln manuscripts and 6,000 related books and pamphlets; Mormon-Nauvoo manuscripts; nineteenth century Illinois newspapers.

Kansas State Historical Society, Topeka, Kansas. Founded, 1875. Library holdings: 300,000 books (including bound periodicals); manuscripts; maps; photographs. Special significance: American Indians; Kansas history.

Minnesota Historical Society, St. Paul, Minnesota. Founded, 1849. Library holdings: 250,000 books (including bound periodicals); 4,000,000 manuscripts; pamphlets; 25,000 bound newspapers. Special significance: Scandinavian immigration; fur trade; Old Northwest.

Nebraska State Historical Society, Lincoln, Nebraska. Founded, 1878. Library holdings: 54,910 books (including bound periodicals); manuscripts; maps; pictures; newspapers. Special significance: United States plains region; Nebraska history.

Ohio Historical Society, Columbus, Ohio. Founded, 1885. Library holdings: 91,100 books (including bound periodicals); 1,000,000 manuscripts; broadsides; maps; newspapers. Special significance: Rutherford B. Hayes manuscripts (located at Fremont); large Ohio historical collection; Ohio newspapers.

State Historical Society of Iowa, Iowa City, Iowa. Founded, 1857. Library holdings: 93,000 books (including bound periodicals), 30,000 pamphlets, 12,000 bound newspapers. Special significance: Iowa history.

State Historical Society of Missouri, Columbia, Missouri. Founded, 1898. Library holdings: 375,000 books; 230,000 manuscripts; pamphlets; 24,140 bound newspaper volumes. Special significance: Old and New West; Missouri historical collection; Missouri newspapers.

State Historical Society of Wisconsin, Madison, Wisconsin. Founded, 1849. Library holdings: 354,454 books (including bound periodicals); 2,000,000 manuscripts; 357,520 pamphlets; maps; newspapers. Special significance: Draper manuscripts; McCormick papers; agriculture; labor; communication; state archives.

LOCAL HISTORICAL SOCIETIES

Chicago Historical Society, Chicago, Illinois. Founded, 1856. Library holdings: 136,125 books (including bound periodicals); manuscripts; broadsides; maps; newspapers. Special significance: Manuscripts and newspapers of Old Northwest, Illinois, and Chicago; Illinois politics; fur trading; Mormons; Haymarket Riot.

Essex Institute, Salem, Massachusetts. Founded, 1821. Library holdings: 300,000 books (including bound periodicals); manuscripts; pamphlets; broadsides; newspapers. Special significance: Papers of John G. Whittier and Nathaniel Hawthorne; county historical collection.

Missouri Historical Society, St. Louis, Missouri. Founded, 1866. Library holdings: 100,000 books; 1,500,000 manuscripts; pamphlets; 2,000 bound newspapers. Special significance: Manuscripts and newspapers on Missouri, Women's Suffrage; fur trade; important personages as Thomas Jefferson, Lewis and Clark, George Rogers Clark, and Aaron Burr.

Western Reserve Historical Society, Cleveland, Ohio. Founded, 1867. Library holdings: 300,000 books (including bound periodicals); 1,000,000 manuscripts, 25,000 bound newspapers. Special significance: Confederate newspapers; Shakers, Civil War; slavery; abolition; business; politicians.

GENEALOGICAL SOCIETIES

Genealogical Society of the Church of Jesus Christ of Latter-day Saints, Salt Lake City, Utah. Founded, 1894. Library holdings: 95,000 books (including bound periodicals), 668,000 microfilm rolls. Special significance: European and U. S. genealogical archives and manuscripts on microfilm.

New England Historic Genealogical Society, Boston, Massachusetts. Library holdings: 220,000 books (and bound manuscripts). Special significance: New England and, especially, Massachusetts genealogical books and records.

CHURCH HISTORICAL SOCIETIES

American Baptist Historical Society, Rochester, New York. Founded, 1853. Library holdings: 50,000 books (including bound periodicals); manuscripts. Special significance: Collections on Freewill and English Baptists.

Historical Foundation of the Presbyterian and Reformed Churches, Montreat, North Carolina. Founded, 1927. Library holdings: 50,000 books (including bound periodicals); pamphlets; manuscripts. Special significance: Books and records of Presbyterians and Reformed Churches, worldwide; Southern U.S. Presbyterian church records.

PATRIOTIC SOCIETIES

National Society, Daughters of the American Revolution, Washington, D. C. Founded, 1890. Library holdings: 54,600 books (including bound periodicals); genealogical manuscripts; 3,500 microfilm rolls. Special significance: Genealogy of soldiers of the American Revolution.

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CHARLES F. HINDS

HOLLERITH, HERMAN

Herman Hollerith was born in Buffalo, New York on February 29, 1860. He was the youngest of seven born to Franceska and Johann Hollerith, a German language professor who was caught in the German revolution of 1840–1849, was disenchanted with the Prussian take-over, and decided to migrate to the United States in 1848 where he lived a quiet life, deriving his income from managing a large farm.

After Johann's death in 1869, Herman Hollerith moved with the rest of the family to New York City where he attended the public school. He loved his studies but hated spelling and got in the habit of leaving the room when the spelling class started. When the teacher locked the door before the spelling class began, Hollerith jumped out of the second floor window and out of the New York City public school system also (*1*). His grade and high school education, however, was accomplished through private tutoring by a Lutheran minister.

When he reached 16 years of age in 1876, he was admitted to Columbia College in New York City to study mines engineering. One of his instructors, Prof. William Trowbridge, noticed his intelligence and ambitions and upon graduation in 1879 appointed Hollerith as his assistant in the U.S. Bureau of Census, where Prof. Trowbridge was a chief Special Agent in the Department of Power and Machinery Used in Manufacture (*2*). There, Hollerith knew about Dr. John Shaw Billings, an army medical doctor who was an acknowledged and self-educated statistician, and who was appointed, at the time, director of the vital statistics for the 1880 census.

Because of his new job, Hollerith had to move to Washington, D.C., where he rented a room in the Georgetown section and was successful in getting into the Washington elite circle and social life. He organized parties and became a member of a boat club and was, as a young educated eligible bachelor, a welcome guest at many Sunday evening suppers (*3*). In one of the social parties he was attending, Hollerith met one of Dr. Billings' daughters and she invited him to have supper with her family at their home. There he met Dr. Billings for the first time and had a chance to converse with him at the supper table where they embarked on a business discussion in which Dr. Billings suggested that "there should be a machine or device to lighten the repetitive and dull clerical work of the census (*4*).

Hollerith became interested in Billings' suggestion and later, after studying the problem thoroughly, told Billings that he could work out a solution. He asked him also if he would join him in this venture, but Billings declined because "his only wish was to see the problem solved (*5*).

Hollerith's idea was to use cards with the description of the individual shown by notches punched in the edge of the card in such a way that the several enumerations required could be made by electrical counting or by machinery, thus insuring accuracy as well as speed. During the period 1880–1889, Hollerith worked hard to develop the punch card system through designing, building, testing, documenting, and financing the system, which he patented in 1884.

Rumors regarding a Billings-to-Hollerith transfer of the idea varies from a "suggested need for" to the suggestion of the detailed system in full. Whatever the facts, there is no doubt that Dr. Billings, through various speeches (*6*) and writings, made people aware of the development of Hollerith's system and gave much needed professional endorsement for it when it was first presented for acceptance by the Census Office (*7*).

In 1882 General Francis Walker, President of Massachusetts Institute of Technology, heard about Hollerith and asked him to come to Boston as an instructor. Hollerith accepted the position and took a leave of absence from government service,. He did not, however, go to M.I.T. because he was interested in teaching, but because he needed the academic freedom to do more experiments on his tabulating equipment. This did not last more than one year as he did not "like the idea of teaching older students and repeating the same material year after year (*8*).

During the year he spent at M.I.T., he developed the basic procedure and equipment for punching and reading cards, and it was through this development that he was able to assemble the proper components for the final system.

Eventually, Hollerith returned to Washington, but in 1884 he left again and went to St. Louis to work on a railway brake improvement he had in mind. He was soon able to invent and patent the first electrical brake for freight trains. But in an experiment with other competitors, including George Westinghouse, his electrical brake was rejected on the basis that lightning and thunderstorms would seriously affect it. The brake was never adopted and the patent was neglected until it expired (*9*).

During his stay in St. Louis, Hollerith also continued work on his census machine, and that same year he was ready to manufacture it. He needed financial help and secured some from his brother-in-law. The latter, however, discontinued his help because he felt that the idea was not profitable. Nevertheless, Hollerith was able to finance his project on his own.

Hollerith tried his system in tabulating the mortality statistics in Baltimore and New Jersey in 1887. He made holes in cards with a railways conductor's punch, each hole representing a death. Later, he revised his system by using separate cards, each representing an individual or a subject, and secured a patent for the revision in 1887. This patent gave Hollerith a commanding position, as other equipment manufacturers had to negotiate and obtain a license from him before attempting to use their own machines for processing punch cards (*10*).

Though he achieved considerable recognition, Hollerith knew that the real challenge was in getting the contract for the 11th census of 1890. In a competition with William Hunt's slip system and Charles Pidgin's chip system, Hollerith proved that his equipment and method were superior and won the contract to tally and tabulate the 1890 census (*11*).

In the 1890 census the data which described the characteristics of the person or item were transcribed from the census taker's report sheets to manila cards (6⅝ × 3¼ inch). Holes punched in the cards represented these characteristics, with each hole assigned to a specific characteristic. One corner of the cards was cut off diagnoally to insure their proper arrangement when cards were stacked for counting or sorting. According to Blodgett:

> The tabulating function was the most remarkable part of the system. Hollerith built a press device which consisted of a hard-rubber bed-plate provided with suitable stops and guides against which the cards were successively placed. The bed-plate was formed with a number of holes or cups, with as many cups as there are holes in the card. Each cup was partially filled with mercury and connected with a binding post on the back of that frame. Above the hard-rubber plate was a box provided with a group of projecting spring-actuated contact points which met the mercury cups. A card was placed in the press. Where a hole appeared in the card, the spring actuated contact point met the pool of mercury and thus closed an electrical circuit. The electrical energy was transmitted to a counter. The counter was a dial capable of registering to 10,000 and was moved one space at a time by an electromagnet as it received its signal whenever the electrical circuit was closed. The counters were read periodically with their totals entered manually on appropriate accounting paper (*12*).

This system was applied successfully to the 1890 census and in one month the total count of the population was announced; a matter that would have taken several months to accomplish if the old manual procedures had been applied.

In September 1890 Hollerith was married to Lucia Talcott of Washington, D.C., and decided to combine his honeymoon with a business trip to Europe. On this trip he was able to sell his machine to the Austrian government for use in the central Bureau of Statistics (*13*).

In the same year, Columbia College conferred on him a Doctor of Philosophy degree under a special ruling of the School of Mines, which provided that candidates, in special cases, might be permitted to present work done away from the school as a dissertation (*14*). Hollerith, accordingly, made use of his article on "An Electric Tabulating System," which was published in the *School of Mines Quarterly*. The work was accepted as a dissertation and he was awarded the Doctorate degree in 1890 (*15*). In the same year he was also awarded the gold Elliott Cresson Medal by the Franklin Institute in Philadelphia, which made him and his invention known to the country's finest scientists.

Though Hollerith's system was primarily known as a "Census Machine (*16*) his article in the *School of Mines Quarterly* indicated that he was thinking about the concept for broader use, even though he did apply it specifically to census work.

With his equipment completed, tested, and properly patented, Hollerith was ready to bring his machine to the international market. As a result, he made two trips to Europe in 1894 and was successful in selling his ideas in Italy, England, and Russia. In 1896 he incorporated the Tabulating Machine Company in the State of New York to manufacture machines and sell cards to the users of the machines. Hollerith controlled the majority of the stocks and was the company's general manager (17). In 1901 he purchased the Taft Pierce Company of Woonsocket, Rhode Island, a machinery company, to manufacture his equipment independently.

Being a perfectionist, Hollerith was able to see some weak spots in his system. Accordingly, he improved the quality of the paper used in the card, which used to clog the machines, and changed its size to $3\frac{1}{4} \times 7\frac{3}{8}$ (the size of the 1890 U.S. dollar bill). Shortly after that, he decided to manufacture the cards himself. He also developed the idea of renting rather than selling his machines to the users, and instigated the idea of removing the malfunctioning machine to his workshop for repair while putting a new one in its place. This led to making service of the machines a part of the system (18).

In 1905, Mr. S. N. North was appointed as a new director of the Census Bureau. He started his tenure by surveying the whole system and discovered that nobody in the bureau knew either the principles of the census machines, or how they worked, or how they could best be adapted to census work. He became concerned also about the costs of the Hollerith system. The effect of all these concerns was not favorable in the negotiation for the 1910 census, and Hollerith was notified that he would not have the contract for the new census because the Bureau was going to make its own equipment (19). Shortly after this notification, North set up a census machine shop in the Bureau of Standards and appointed three of Hollerith's former employees to work in it. He also appointed a patent examiner to work with them to make sure that no infringement on previous patents would occur. North also asked James Powers, who worked with Hollerith in previous censuses, to develop a new system, and by 1908 Powers was able to patent his own punching machine. Thus the first significant competition faced Hollerith (20). This, however, did not affect Hollerith's success, as his system's admirers were top men in the industry and his name was highly respected in professional and statistical circles.

Hollerith, however, was watching the Census Bureau's shop operation, and in 1910 became disturbed about certain modifications that were made on some sorting machines that he had sold to the bureau. He met with Edward Durand, who replaced North as Director of the Census, to protest the modifications, but got no relief. His lawyer, therefore, advised him to sue Durand for damages (21). To his disappointment, the case was later dismissed on the basis that the government, not Director Durand, made the modifications and that these modifications were made on specific machines which were sold to the Census Bureau on a date prior to the dates of their patents.

During this period of time, Charles Flint, a successful business man, established the Computer-Tabulating-Recording Company (CTR) and proposed a merger between his new company and Hollerith's Tabulating Machine Company. Hollerith agreed to the proposal and the formal merger was announced in July 1911 (22). In return, Hollerith received 2 million dollars and, to insure that he would not start a competitive company, CTR hired him as a $25,000 per year consultant for 10 years.

Despite Flint's leadership, CTR did not make any substantial profits, and by 1914

Flint appointed Thomas Watson as manager. Watson became the president and general manager of the company in 1915. in his early years as president of CTR, Watson had to face many problems, and two of them were the Tabulating Machine Company and Hollerith himself. This was due mainly to deep personality differences between the two (*23*). The relationhip, unfortunately, did not improve with time and in 1921 the 10-year contract as a consutlant to CTR was not renewed; thus Hollerith's relationship with the company was severed. He did not, however, invest in CTR (which in 1924 became IBM Company), and 'it seems that he sold out to get away from the competitive world in which he had fought for many years." (*24*).

Hollerith, whose health was declining at the time, retired to his large farm in Tidewater, Virginia, on Mobjack Bay where he had three big houses. There he spent much of the time of his later years operating the farm, raising cattle, and enjoying the frequent visits of his family and friends.

In 1929 he became ill with a cold. Later his condition got worse and he died on November 17, 1929 from a heart attack.

If we examine Hollerith's ideas, we recognize that he pioneered, according to Blodgett and Schultz, in several areas of interest:

1. His was not simply a calculating machine, it performed selective sorting, an operation basic to all information retrieval. Thus, when asked to compile special reports on the relation of crop yields to types of farm management for the census of 1900 he was able to quickly produce 20 custom machines for the purpose.
2. He developed methods for translating English words and census-takers' check-marks into machine-readable language.
3. His use of the punched card "fields" as arrays (or matrices) to produce what we might currently call "binary decks" is still of functional importance in many kinds of scientific data processing including information storage and retrieval.
4. His ideas for file organization included both item-on-term and term-on-item arrangements—still the most-used arrangement of data to be processed.
5. Hollerith innovations for error-checking are still of importance, for example, the corner-cut on the tabulating card, use of identification numbers on every card to insure a deck against unwanted cards or missequencing, card designs allowing for visual checking, and the like. All of these design features attest to Hollerith's strong concept of technique for data handling—the information scientist's stock-in-trade (*25*).

The author believes also that John Blodgett's analysis of Herman Hollerith gives a true picture of him as a man and as a national and interational figure. He wrote:

> The biographer's standard statement that his subject was "born before his time" cannot be applied to Herman Hollerith. A world of disorderly information was waiting for someone to come along and straighten it out. Up until 1890 that world was ill-equipped to count itself. The accumlation of voluminous data and its organization into useful form were difficult tasks. When Herman Hollerith faced up to these tasks and solved the problem, he made an impact that touched on

every facet of every day living (*26*). . . . [He] was not born before his time, but he died before his time. Had he lived into the early years of computer development, the significance of his invention might well have enjoyed a renaissance and the man Hollerith might well have received the publicity he richly deserved (*27*).

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WILLIAM Z. NASRI

HOLOGRAPHY

Holography and Information Sciences

Holography belongs to the field of optics. Holography is a recording process not unlike photography, yet differing significantly in the outcomes. Holography as a technology is particularly important to the information sciences (e.g., communication science, computer science, library science and informatology) for the following reasons:

1. Holography provides new possibilities for increasing the versatility of information systems by providing new ways for recording and transfer of data.
2. Because of its capacity to record a large volume of data and its manipulation, holography is useful in data storage and retrieval systems.
3. The underlying principles that govern the physics of holography can suggest new hypotheses and theories concerning man's abilities to process data and subsequently to transform such data into information.

In a paper that is now a classic, Nobel Prize winner Gabor (*1*), in his attempt to improve the resolution quality of microscopes, described ways for recording and then regenerating the wave pattern of an electromagnetic disturbance. Later, the work of Leith and Upatniecks (*2*) in the development of a coherent light source (laser: *l*ight *a*mplification by *s*timulated *e*mission of *r*adiation) extended the original contribution by Gabor and made possible the three-dimensional presentation and storage of data of direct interest to the information sciences. Three-dimensional presentation and storage of data are presently possible because of holography. Gabor used the term hologram (after Kock) for recorded data (equivalent to the photograph). Stroke proposed the term holography for the science of making holograms (*3*).

Holography as in photography is the result of scientists' interest in the action of light and its effect on recording surfaces. Lenses are not required in holography. What is required is a coherent light source. This coherent light source is provided by laser. The experience gained from holography can be explained through an understanding of light and its actions under certain conditions. Photographic emulsions record the intensity of light falling on their surface. Since intensity of light is the square of the amplitude of the wave, a large value of intensity implies large wave amplitude. When two waves interfere constructively, their amplitudes are added up and brightness results (see Figure 1a), but when they interfere destructively (see Figure 1b) the difference in their amplitude results in darkness.

In Figure 1 it is assumed that two waves have the same frequency and are either completely in phase or out of phase (step), which is an idealized situation. In ordinary light sources this is rarely the case. White light consists of millions of waves differing in phase and frequency. In ordinary photography the information about the

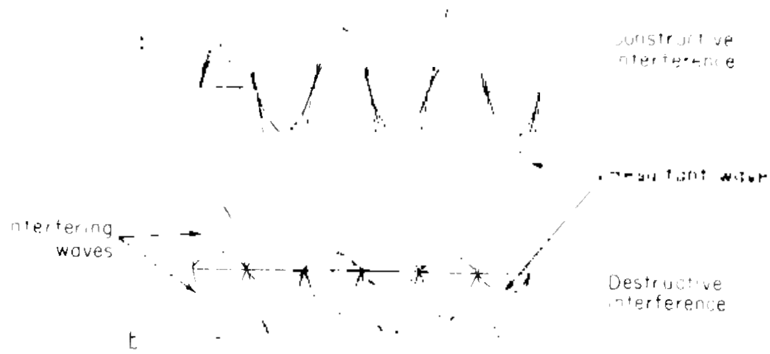

FIGURE 1. *The difference in amplitude of the resultant wave in the cases of constructive and destructive intereference. Both Waves 1 and 2 have same frequency, different amplitude, and are in phase in (a) and out of phase by 180° in (b). Thus the amplitudes in (a) are added up and the result is a larger amplitude (hence brightness) while in (b) the result is a lesser amplitude (hence darkness).*

amplitude and frequency of the wave is recorded as the intensity pattern but all information about the phase (the information about the time lag of different waves) is lost and hence it is not possible to reconstruct the original wave pattern from the photograph. This results in the loss of dimensionality in image.

In the case of holography this information about the phase is preserved by making use of light which is spatially coherent (i.e., starts from the same point) as well as light waves which are in phase (i.e., starts at the same time, and hence in step). A laser provides such a source. Now if light from such a source can somehow be split into two separate waves and some phase difference can be introduced in one part so that when they recombine they will interfere with each other, there will result an interference pattern which will be a function of phase alone (since the frequency of both waves is the same in this case). This interference pattern results in dark and bright spots (dark where destructive interference occurs and bright where constructive interference occurs). As pointed out earlier, intensity is a function of amplitude, and since intensity has been affected by changing the phase in this case, we can say that it is possible to control the amplitude of the resultant wave by controlling the phase between the two interfering waves. This method of control of intensity also has the advantage in that the time sequence is somewhat preserved by preserving the information about phase, and when an image is reconstructed out of this interference pattern using the original laser beam of the same frequency, the original wave pattern can be generated. This, in essence, is the principle of holography. We do not need a lens in this method. And the image that is formed is three-dimensional in space. The change of phase in one part of the incident laser beam is brought about by reflecting that beam by an object to be holographed.

Holography, therefore, is the recording of these fringes on some photographic medium (emulsion) and the actual record thus produced is a *hologram*. The hologram looks like a photograph, but it appears like a blank photograph although it is possible that the fringes appear like gratings. These fringes reconstruct the image in 3-D when exposed to coherent light of the original frequency.

To clarify and review the concepts, let us follow the steps required to produce the hologram. This is illustrated in Figure 2a. Let us say that the object to be holographed is a manikin (subject or object). The manikin is lighted by a laser beam (coherent light) and the reflections are imparted on a photosensitive medium. Meanwhile, another beam from the laser source is imported on a mirror which serves as the reference beam. This reference beam consists of a set of plane waves emanating from the same laser beam which is used to light the object. The interference pattern between the reference and reflected beam is recorded on the photographic medium and gives rise to the hologram. When the viewer sees the hologram illuminated by a laser beam as in Figure 2b, the viewer sees the three-dimensional *virtual image* of the manikin. When, however, the hologram is illuminated away from the observer, he sees the three-dimensional *real image* of the manikin. For greater detail on the physics of holography, see Kock (*5*).

It should be mentioned that there are different kinds of holograms. *Volume holograms* use different layers of recording medium to record different holographic images one after another. Each image can be retrieved by changing the angle of incidence of the laser beam that is used to regenerate the scene. *Color holograms* reproduce the scene in natural colors. Holography is not limited to light sources. Sound also provides a base for the construction of holographs. Acoustical holography was first conceived in 1964 (*5*). In *acoustical holography* a coherent and intense source of light is not needed; rather, acoustical transmitters of acoustical waves in varying frequencies are used. [For a description of an acoustical hologram, see Brenden (*7*).]

Applications

INFORMATION TRANSFER

The most direct impact of holography on the information sciences is in the area of communications. The possiblility of facilitating all forms of data recording and data transmission through laser technology is far reaching. First, holography provides a new dimension to electronic display (media) of data. For application of holography to visual displays, see Sherr (*8*) and Jacobson (*9*). Electronic and mechanical displays (often referred to as "information" displays, e.g., TV and CRT) are the means for the transfer of data from sites remote to the individual. One of man's quests has been to reduce the loss of reality due to the increase in distance between the object and the perceiver. (Visual and auditory recording devices are often hindrances because of the registration required between the viewer, the optical device, and the real object. The effect of poor registration may lead to further loss of data transfer because of the blur and misalignment of object and space that

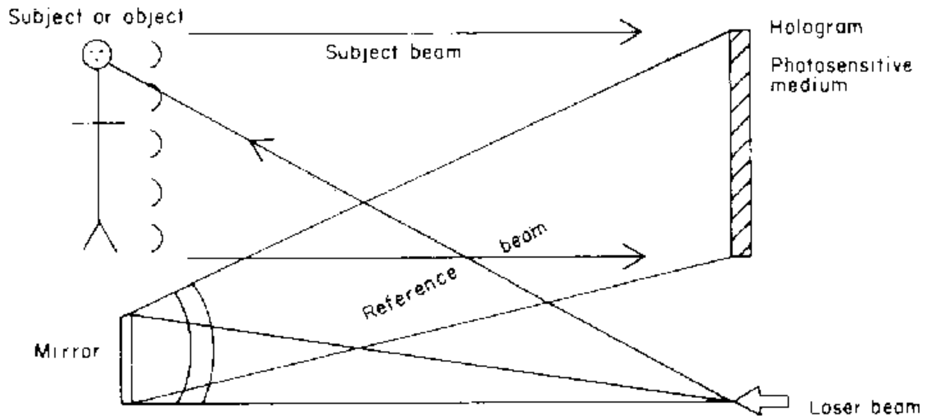

FIGURE 2a. *The relationships necessary for the formation of a hologram (4, p. 15).*

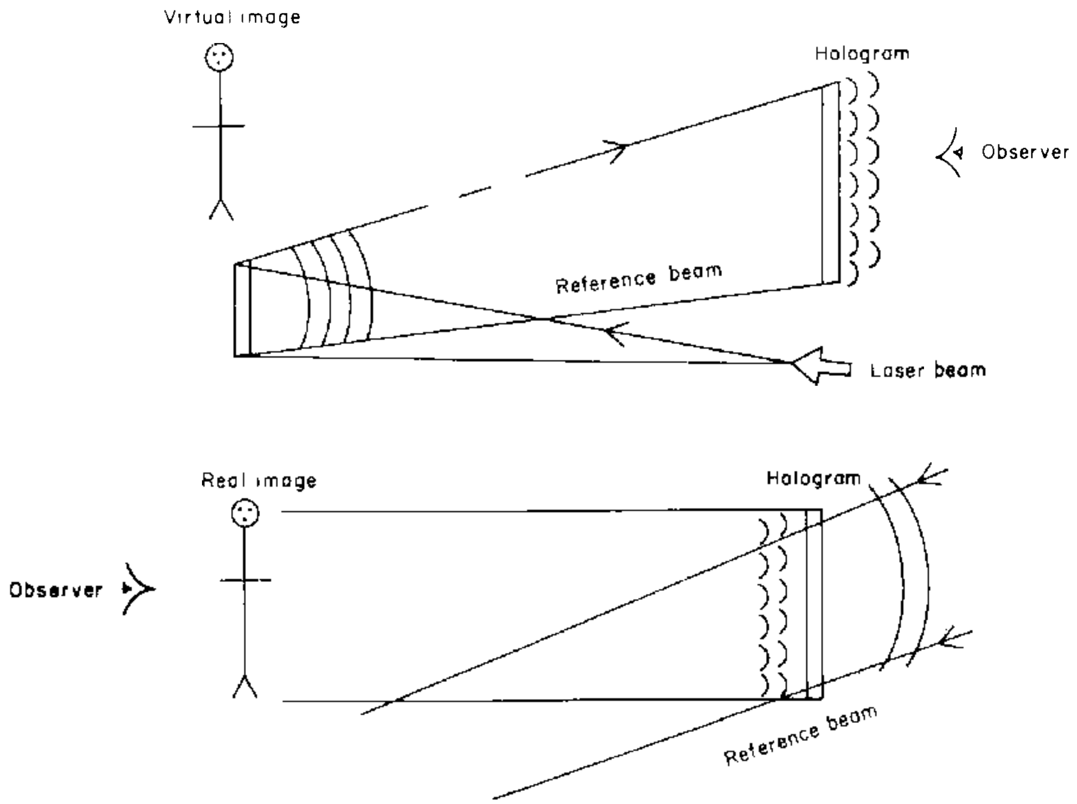

FIGURE 2b. *The generation of a virtual image using the original reference beam to illuminate the hologram (4, p. 17).*

occurs). Electronic means make possible the conquest of remoteness through the transmission of signals (data) through space and their subsequent presentation on displays. Yet, much of the dimensionality of nature is lost when man resorts to mechanical means to capture reality. Despite the fact that nature has provided man with an inherent capability to see objects dimensionalized through his visual systems, this capability is lost and must be restored when mechanical means are applied. It is desirable for man to achieve this dimensionality on displays because the recording of objects on two-dimensional surfaces reduces the realism and quality of data. To retain this dimensionality in the media, however, requires capabilities beyond what conventional optics can provide. Holography provides this possibility. Holography used in conjunction with media can provide the examination of a large area in space without the time constraints usually faced. In addition, holography provides the possibility of the study of a number of events which occur quickly (*6*, p. 406).

Three-dimensional presentation is not required or even desirable in all conditions where transfer is involved. Man's requirement for three-dimensional information is unknown, despite his claim to the contrary. There is insufficient experimental evidence to support a general claim for or against three-dimensional presentation. Yet, the application of three-dimensional or stereoscopic technology through holography on information displays can be supported for specific tasks. For example, three-dimensional displays have been warranted for space operations where metrics for the physical aspects of the environment are ambiguous and unknown. Of some interest is the application of holography in medical practice and research. Holograms can be ingeniously applied to detect tumors, cancers, and other malignancies.

The uses of holography in "information displays" for military purposes are numerous (*10*). The use of holography displays for detecting enemy positions, for indicating map gradients of terrain differing in contour complexity, for the use of air traffic control procedures, and for subterranean operations has been amply demonstrated (*11*).

Second, holography provides new means for the transmission of news. Photographs from long distances containing printed photographs in depth are possible.

Third, motion pictures, television, and other recreational media (books, newspapers, etc.) can be considered as mechanisms for the transfer of information,* and it is expected that recording them in 3-D, will improve the amount of data transfer and perhaps facilitate its transformation into information in the individual's mind. They are communicational as well as recreational devices. Holography directly influences these mechanisms by providing numerous styles of presentation. Advances in the application of holography to this area will be much slower because of technical problems. Some of the technical problems involved concern the quality of the light source that is available, the resolving power of the photographic film, and the vibrations of the object. There are more overriding problems, however,

*See Jacobson (*9*) For a further discussion of technical problems related to the application of holography to motion pictures, see Leith, Brumm, and Stephen (*12*).

when electronic displays are considered which deal with transmission and other electronic properties that may mitigate against advances. Most certainly, the size of the subject is a formidable obstacle. Despite these obstacles holography can be expected to expand the formats of the media now used for recreational and informational purposes.

It has not been possible to produce a very wide laser beam to record a large scene. So far, at most, a dozen people have been holographed together. Attempts to produce large laser beams that will cover a whole building or a whole room have not been very successful and require tremendous cost and technological breakthroughs.

Holograms have a great advantage over the photograph in that an entire scene can be generated by using only a tiny part of the hologram. This is because each part of the hologram gets the input from the entire scene as opposed to a photograph. This means that if a part of the hologram is destroyed, it is still possible to recreate the original scene although the clarity of the scene is reduced.

In addition to the above application, holographc techniques are being widely used in microscopy, particle sizing, portrait holography, vibration analysis, and stress analysis.

DATA PROCESSING

Events are recorded on paper, photographic emulsion, and electronic devices. The processing and retrieving of the event at a later time is important to library operations, command-control, management functions, communications, etc. Holography as a technology provides new avenues for the processing of data in a number of contexts.

Storage

A hologram can be used as a medium for locating data in a store. Holography provides new ways of associating particular needs with codes used to store the data in memory. This is because the hologram is an interference pattern of two beams differing in phase alone, and whenever the hologram is illuminated by the exact replica of one of the original beams, the other interfering beam is automatically generated which in turn creates the scene associated with this second beam. Thus one beam can be regarded as a reference beam by which the other scene can be recalled. Because the hologram can be used as a filter through which new coded techniques can be applied, the conventional means of locating data through an address on a register of a computer is avoided.

Holography provides for considerable versatility in storage inasmuch as holograms can store a tremendous amount of data in three-dimensional form; the data may be color or coded, graphic or alphanumeric, in a single surface or in volume. The record can be permanent.

A holographic memory consisting of a number of separate planes of different patterns can in effect hold very large amounts of data. This capability is further extended through the use of potassium bromide crystals that can hold a million bits per half inch square (*13*).There is a further advantage with crystals inasmuch as they are eraseable by applying heat (170°C). This provides for using the crystals as temporary storage of data. In brief, therefore, when compared to other forms of storage media, holography provides a distinct advantage both in terms of capacity, access time, and cost. Table 1, provided by Johnson and Briggs (*13*), compares the various forms of computer memories in these respects.

Recording

Because no lenses are involved in the holographic process, the resolution of photographic material is a problem. The interference phenomena involved in holography permits a tremendous increase in recording capabilities. It has been said that the Library of Congress can be recorded holographically on a single slab of recording media. Moreover, holography reduces the danger of a loss of record because of the deletion of a part due to physical conditions. Holography allows for the uniform distribution of the record and as such the loss of one part will not necessarily mean the loss of the whole.

Processing and Recording

When combined with the computer, holography provides a useful source for the processing of images and pattern recognition. The capabilities are projected in the practical tasks of fingerprint and signature identifications. Holograms produced by computers permit digital optical information processing. Further, if a desired object can be described mathematically, then the computer can reconstruct the object from

TABLE 1

Comparison of Computer Memories (*13*)

	Capacity	*Average access time*	*Comparative cost bit ($)*
Magnetic tape	No limit over 50 million bits	Slow; 20 seconds sequential	0.002
Disk	5–10 million bits	20 milliseconds sequential	0.008
Drum	1 million bits	8.5 milliseconds sequential	0.04
Magnetic core	200,000 bits	10 microseconds random access	2.00
Holography	100 million, 10 billion bits	Microseconds random access	Anticipated similar to magnetic tape

a computer generated hologram. Fourier transform holography can provide the means of optical filtering of some of the dimensions of the pattern, and as such function as a spatial filter and an image synthesizer. Problems in theory and technology, however, are formidable, and progress in this area of application of holography will be slow.

Nevertheless, there has been considerable interest and effort applied to optical processing systems during the last 20 years, particularly in the area of physiology and clinical medicine. Holography provides the means for filtering out details of complex structural patterns such as are found in cell structures. The use of correlational filters allows for the enhancement of certain features of an image by bringing into context essential characteristics that may be hidden in depth. Deblurring techniques applied to images are now possible which heretofore represented countless, and often impossible, efforts by using techniques available through digital electronic computers.

DATA AND INFORMATION TRANSFORMATION

The principles and laws that govern the transformation of raw inputs from the physical world (data, signals) into information are largely unknown. Studies that relate to this problem have been of interest to behavioral as well as to physical scientists. The experiments that have been conducted attempt to postulate and describe the course of events as a train of inputs occurring in the brain. The sense mechanisms acquire the energy that impinges on them and subsequently transform such energy into images which are stored and later recalled. This descrption however belies the complexity of the underlying process and the difficulty in arriving at conclusive evidence in support of a theory of information processing.

Holography offers promise in the attempts to understand the process underlying information in two ways: First, it provides the technical hardware arrangements which make possible the study of the functioning of underlying mechanisms. Second, the physics of holography provides a conceptual model of neural and cognitive functioning which can be tested. In these two ways, holography may provide the means of resolving several physiological and psychological paradoxes that exist in information processing.

At present the application of holography to information processing has been largely directed toward the understanding of brain functioning. Studies in this area have concentrated on the nature and role of memory, and pattern recognition. In the latter case, holography seems to suggest the manner in which the brain operates in sorting out one configuration of sensory impulses from the other.

The notion that some neural processes operate in a similar way to the processes by which holograms are formed has been explored by a number of scientists. Through the application of the holographic process to the realm of neural circuitry, a model can be postulated which hopefully can offer an explanation for many physiological and psychological processes and some testable predictions.

A mathematical model for memory based on a holographic type process has been proposed by Baron (*14*). The reason for postulating a holographic process is the distributed nature of memories in the brain. The holographic process is seen as offering the maximum interaction among all areas of a mass. The human brain is a contralateral system where one half of the brain influences the other. Consequently the holographic process, explained as a Fourier transformational process, can be postulated as representing a concept relating to the functioning of the brain. It would explain the contralateral transfer (effect of one part on the other) in the neural systems.

The concept of brain functioning and its understanding through holography can be extended specifically to human memory. Human memory has been discussed in terms of a store of sensory impressions which may be recalled at a later time. Distinction between short term memory and long term memory has been described in the literature (*15*). Holography is concerned with memory inasmuch as it provides a thesis concerning the functioning of mechanisms in the brain which contribute to memory. A foundation for the conceptual developments in this area can be attributed to the law of mass action proposed by Lashley (*16*). The law of mass action states that the greater the damage to the brain, the more it affects the organisms. If in a hologram the final effect is caused by the alteration of complex diffuse patterns of energy, then the analogy can be postulated that the brain works in the same way—suggesting a continuing, diffuse pattern of activity throughout the brain area. This thinking is extended to suggest how associative memories may work; that is, how one part of memory that is associated with another may influence the action by exciting a stimulus from one of the pairs. For example, Stroke (*3*) has illustrated the process of generating an image in the case where two holograms are stored on one negative. Collier (*4*) has applied holography for the study of redintegrative memory, that is, when an entire memory is evoked by a small component of itself. Collier showed that a recorded holographic image can be used to reconstruct the entire recorded image just like one sub-aspect of a stimulus can lead to a response to the total stimulus.

In the area of pattern recognition, the attempt has been made to show that correlational processes pertain. Physically, pattern recognition can be achieved through a holographic process wherein a true cross correlational comparison of all areas of the visual field is accomplished simultaneously. Basically, the process involves combining the hologram of the text to be searched with the hologram of the character to be found. Kabrinsky (*17*) postulates these correlational processes in the brain which permit pattern recognition. He suggests that the brain acts as an optical system inasmuch as the impulses reaching the brain are transformed and that these transformations can be described as Fourier transforms. His colleagues have applied similar models to pattern recognition of handwritten letters.

In brief, despite the fact that not much is known quantitatively about the processes underlying the experience of information, holography provides new vistas in the study of the phenomena. One should heed, however, the caution extended by Lindsay and Norman (*18*) who advise that the analogy of holography to human information processing may be too simple and that application to a more representative sample of problems is necessary before definitive conclusions can be defended.

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ANTHONY DEBONS

HOMEBOUND HANDICAPPED, LIBRARY SERVICES FOR

Both public and private libraries that meet the special needs and wants of special groups in the population are not new. Yet one kind of special library service, that of catering to the needs of handicapped individuals confined to their homes, is relatively new compared with the more traditional type of general and special services. And although comparatively young and few in number, public library services for the homebound handicapped are being gradually but steadily increased in most sections of the country.

Rationale for Special Libraries for the Handicapped

Location and accessibility of library facilities are perhaps the most crucial factors in determining whether the handicapped can utilize them in the same manner as do the nonhandicapped. Blind persons and the elderly may, for example, be able-bodied, but a visit to the library or bookmobile station may be too difficult a task for them to carry out, for physical, economic, or other reasons.

Blind individuals, particularly those who have lost their sight late in life, according to Irwin, are

> pretty likely to be homebound or at least dependent upon the kindness or generosity of relatives and friends for making even the shortest journey away from home. The inability to go forth alone at will without accommodating oneself to the convenience of one's associates is perhaps the greatest affliction resulting from blindness. . . . The advent of the automobile has greatly added to the blind man's difficulties . . . (*1*).

Physically getting in and out of library buildings is a problem for many, especially the disabled confined to wheelchairs. Older library buildings often lack ramps; and braille labels identifying entrances, exits, elevators, and the like for the blind are often missing.

Extent of Limited Mobility

Many Americans have limited mobility to some degree. According to the National Health Survey conducted from July 1965 to June 1966, about 3.2% of the total noninstitutionalized population falls into this category (*2*). Approximately 1.77 million persons need special help, either a special aid or the help of another person, in getting around; 1.4 million persons are confined to their homes; and 400,000 are confined to their beds most of the time. The home confinement period can be brief, for a few days, or for years and the reasons for confinement are many and varied. Some may have disabling musculoskeletal impairments resulting from disease or accident; some have heart disease, severe arthritis, cerebral palsy, muscular dystrophy, congenital defects, amputations, spinal injuries and diseases, or quadriplegia (*2*).

Sponsorship of Library Services for Handicapped

So great are the limitations of traditionally delivered library services for the handicapped that supplementary services must be brought to readers whose handicaps and related problems restrict them to their homes or nearby. Only in this way can reasonably or fully effective services be provided to meet their needs related to recreation, schooling, or work.

The public library is the agency which usually takes this responsibility for those living within the geographical area it serves. For those who cannot read ordinary printed material because of physical limitations special materials, braille and recorded, are provided through fifty-one regional libraries for the blind and physically handicapped of the Division for the Blind and Physically Handicapped, Library of Congress. A growing but selected number of local public libraries serve as subregional libraries for each state, and are cooperating with regional libraries to serve this special clientele.

In terms of the total number of libraries in this country, proportionally few programs exist for the homebound handicapped, especially for those who do not qualify for services of the regional libraries for the blind and physically handicapped. The existing ones are to be found in public libraries, and many of these divide the administrative responsibility for service between extension or outreach unit, main library, and branch personnel. For the best development of a homebound handicapped program, it should be ideally centered in one person or agency rather than scattered through many circulation outlets. Such a centering of responsibility and function has been found to provide continuity for the reader, a focus for referrals, and a main rather than an added duty for those assigned to the work.

Not considered or included here are the library needs and resources of the handicapped who are confined to large state or federal institutions. Most of these maintain their own libraries to serve patients or residents, as for example, the U.S. Public Health Service Hospital for victims of Hansen's Disease in Carville, Louisiana.

Relevant Characteristics of the Homebound Handicapped

A number of characteristics of the handicapped who are confined to their homes have relevance for the kind and amount of library services they require.

Disability has long been recognized as a handicapping condition that in many cases leads to poverty. A limitation in the ability to work or to continue in the same kind of work may radically curtail the income of the individual; severe disability may deprive him of earnings altogether. The median income of disabled persons aged 18–64 was $3,923 as reported in 1965 (*3*). Wide differences in income were reported for the severely disabled: the median income for this group in 1965 was $2,124. About one-half of the severely disabled had incomes below the poverty level. Earnings were a major income source for most disabled in 1965, accounting for about 84% of the median income (*4*). Earnings declined sharply at age 55 for occupationally disabled men, while disabled women had earnings about half or less than half of men's earnings at all ages of all levels of disability (*5*).

Disease and impairment when taken together with other social, economic, or demographic factors such as advancing age, minority group membership, low level of education, absence of skills, or being a woman household head, may make coping with the work environment difficult if not impossible. In 1965 the severely disabled, in particular, were older than the general population and had a higher proportion of persons from minority groups, nonmarried women, and those with a low educational level.

As for level of education attained, more than twice as many severely disabled as partially disabled men had only an elementary education, and only half as many had completed high school.

Very little current research is available on the use of the public library by different economic groups. But Berelson in 1948 (*6*) indicated that libraries were used preponderantly by the higher economic groups. He attributed this to the differential education of higher and lower economic groups. The majority of users comes from the middle class; neither the wealthy nor the very poor use the library extensively. Some scattered, recent observations indicate that the racial minorities in the lower income brackets, with fewer educational opportunities, use the library in fewer numbers than do majority group members.

The age of the individual is a factor affecting library usage. The older a person grows, the less likely he is to use the library. This appears to be a function of his physical capabilities, distance from the library, and special interests.

Distance from the library has been shown to be a significant factor affecting its usage. The farther one is from library services, the less use he is likely to make of those services.

Living arrangements of the handicapped, especially of the elderly, likewise have relevance for their utilization of library services. Living alone or in a household separate from children or close relatives seems to be a preferred arrangement for the population aged 65 or over. In 1968, fourth-fifths of the elderly married couples and half of elderly nonmarried persons lived alone. Thus, the elderly disabled may be unable to easily obtain the necessary equipment to carry on a reading program: for example, eyeglasses. The small amount of help sometimes needed may not be available, as when the disabled elderly need to have books or talking book containers brought from the mailbox or post office and opened, or catalogs read (for those who cannot see), or books taken or returned by mail to the library. All such tasks become even more difficult if their execution is resented by members of the household who are depended upon to perform them.

Value of Demographic Surveys

Surveying the characteristics of the homebound handicapped population, where feasible, has distinct advantages for the library in the formulation of its budget and its program. Such data lend great support to requests for operating funds. A reasonable estimate as to the potential number of townspeople that the library can expect to serve may bring the support needed to sustain an extension of the library's program to the homebound handicapped. Without a survey, the taxpayers or those who pay to maintain the library may believe that any further extension is another frill; the staff of the library, further, may often feel that an added burden has been handed to them; and failure of any such new venture may be the unfortunate result.

Yet there are deterrents to such surveys. It is often difficult and expensive to survey the city to determine how many disabled persons there are who cannot get to the library and, instead, require service in their homes. Handicapped persons are scattered throughout the community, and not generally located in a single geographic area. The handicapped themselves, moreover, may be uncooperative, preferring not to be identified or singled out as handicapped or blind. Door-to-door surveys, perhaps the most accurate way to determine the number who are eligible for service, are also the most difficult and expensive. The assistance of graduate students and volunteers sometimes has made community surveys possible. One city, Elyria, Ohio, provides an example of a successful house-to-house canvass. In its Project Aurora, calls were made at homes of all families in a targret area by library field workers; library services were provided to those found by the field workers who wished them. Both homebound and handicapped persons were discovered in the target area.

Not all handicapped persons, of course, will take advantage of library service, even a free one. Some librarians in the field feel that reaching one-half of those eligible is doing extremely well.

Reading Preferences

A knowledge of the demographic patterns of the community may also be helpful in determining the reading preferences of those expected to take advantage of the services for the homebound handicapped. Most community surveys would probably mirror the present national composite; that is, the homebound handicapped and the severely disabled are generally older than the rest of the population, and over half of the legally blind in the country are over the age of 60. Selection of materials, therefore, could and probably would tend to emphasize what is known of the tastes and preferences of those groups. Buswell (7) observes the preference of the aged for turn-of-the-century writers, mystery stories, and westerns. However, since not all librarians in the field agree, this would seem to indicate the need for much more demographic data.

Library Service for Homebound Handicapped in Historical Perspective

As institutions in the United States, library programs for the homebound handicapped, excluding the blind, are not very old. The oldest of them are rarely more than 40 years old. Services for the blind were made available at the Library of Congress—and gradually at libraries in some of the larger cities—as early as the turn of the century. But the national library program of the Library of Congress did not begin until 1931, when it was authorized by the Pratt-Smoot Act; services for the physically handicapped were added in 1966, following passage of enabling legislation by the Congress. At present the Library of Congress Division for the Blind and Physically Handicapped serves upwards of 350,000 readers across the country, some of whom are homebound.

The oldest of the public library services to those confined in their homes, often referred to as shut-ins, is in Cleveland, Ohio. Begun in the 1930s as a WPA project, the Cleveland library for the homebound handicapped was reorganized in 1941 as the Judd Fund Division of the Cleveland Public Library, taking its name from the source of its funding grants, the Frederick W. and Henryett Slocum Judd Fund of the Cleveland Foundation. Since 1955 the service for the homebound has been incorporated into the Library's Hospital and Institutions Department as the Judd Fund Service to Shut-ins.

Another of the older services is the home mail delivery library program in Montclair, New Jersey, which dates from May 1933.

Profile of Cleveland Program

Cleveland's library program deserves special mention from two standpoints: continuity and comprehensiveness. As sections of the Outreach Services, the Braille and Talking Book Department and the Hospital and Institutions Department, which includes the Judd Fund Division, provide a framework for a well-integrated program of work with health personnel, with the blind, and the physically, mentally, and socially disadvantaged of Cleveland. The program also enables all agencies to use a pooled collection of special materials; for example, the Talking Book Department has access to large print books.

Initial contact with the homebound reader is made by a librarian who visits the home, investigates the nature of the handicap, and provides reading guidance. Future visits are made by the librarian at regular intervals to deliver books and continue giving reading guidance. For purposes of the shut-in service, the city is divided into thirty-five neighborhoods or visiting areas, one to be visited in the morning, another in the afternoon in a 4-week cycle. During the fourth week, the afternoons are used for film and book programs in nursing homes and homes for the aged. By 1971, under contract arrangements, users in two suburbs of Cleveland, Lakewood and Euclid, also were being included in the service.

A newly referred reader is assigned a visiting time and is given a calendar showing the dates of forthcoming visits and the name of his or her librarian. Each reader receives as large a supply of books, magazines, and other library materials as he wishes to have, enough to last for 4 weeks.

Each librarian involved in the service uses her judgment about the frequency and length of visits to each individual. A librarian is accompanied by a driver on all trips; while the librarian sees as many readers as possible during the time available, the driver delivers books to others signed up for the service. On the following trip, the librarian visits the readers seen by the driver on the preceding month. Each librarian makes from four to five half day trips a week and spends the balance of her time in selecting books and preparing readers' collections for the next visit.

There is no slack season in the service. In the year 1971, the thirtieth anniversary of the Judd Fund, 1,336 homebound readers were served, including 214 children, with a total of 66,280 books. Staff for the shut-in service during 1971 consisted of two professional librarians, one and one-half pre-professional, one clerical aide, one truck driver who doubled as delivery man and projectionist, and one part-time student page.

The Cleveland service is also notable in being one of the few local programs of its kind to provide special equipment on loan for users who need it for nonprint material. Among the kinds of equipment made available are ceiling projectors for filmed books, magnifiers, and page turners. The equipment is made available to individuals in hospitals, institutions, and in their own homes. Cleveland's program has about 1,000 books on microfilm for loan.

Home Delivery Library Programs

Public libraries in at least three major cities, Milwaukee, Detroit, and Los Angeles, have in recent years followed the example of Cleveland and have instituted home delivery service for shut-ins. In Detroit, the Hoyt Henshaw Memorial Library Service has extended mail service to homes of shut-in children and, since 1948, has served patient shut-ins in institutions.

In the Milwaukee Public Library program, known as the Over 60 Service, the beneficiaries are elderly people who find it impossible to visit the library. The program was originally funded under the Older Americans Act, through the Wisconsin State Division on Aging, and those eligible homebound were located through door-to-door canvassing. Now, when a prospective homebound user applies for the service, one of four community aides visits the individual to determine if he is eligible. All of the aides are elderly adults who have been especially trained for this work. A librarian selects books for each of the homebound readers, which are delivered on a regular basis, usually from twelve to fifteen books a month per reader. A bookmobile makes regular stops at day centers, nursing homes, and housing projects where elderly people live. Agencies in the community are encouraged to make referrals to the Over 60 Service and the service is publicized in newspapers and by radio so that readers can make contact with the service themselves. The Over 60 Service is a continuing part of the library's budget.

The Los Angeles Public Library service to shut-ins began in March 1966 with a staff of two and nine patrons; within 9 months, patrons or readers numbered 104. By 1970, 341 individuals were receiving home delivery of library materials and 69 others were participating in mail delivery service; the staff had by then increased to seven. The service was initially financed by a grant of $54,112 a year for 2 years under Title I of the Library Services and Construction Act. Later, an extension for an additional 6 months was granted since the program did not begin on the date originally set. A second grant to cover the 2-year period ending June 30, 1970 amounted to $120,900. This program continued to offer home delivery and mail service until the end of June 1971.

The following guidelines were established for eligibility for the Los Angeles service: (1) obvious illness or incapacity, (2) statement from a doctor or social worker, or (3) temporary confinement of 3 months or longer. In addition, the regulations established required that readers must live within the boundaries prescribed for home delivery service, and they must register for a library card. Delivery is by a small van obtained on a lease arrangement with the City Bureau of Transportation which is responsible for its maintenance. Canvas bags with address labels are used to carry books to readers. Mail service was found best suited for readers who wanted only occasional service and, also, for readers who live beyond the delivery service area. Readers register for mail delivery service, then receive a padded paper bag containing one or two books with return label and postage. As soon as a shipment has been returned, additional books are sent to a reader.

No accurate cost analysis has been made of the service, but a recent 3-week study revealed that, exclusive of telephone and correspondence, the cost amounted to about $1 per book or $1.90 per reader, with staff salaries accounting for approximately 94% of this figure. All aspects of the service were considered for implementation as part of the regular library program. The staffing pattern seemed to be the most costly of all factors. As a result of the study it was decided to reorganize so that service could be planned on a city wide basis, corresponding to the library's regional organization, and involve all library service units. For the present, employed staff in branches were to be responsible for service in their immediate neighborhoods. To augment staff, a recruitment program is now being directed at finding volunteers who will make deliveries in the neighborhood served by the branch. The work is coordinated by a senior librarian as part of the library's Mobile Services unit.

In the late 1960s, the Cincinnati Public Library extended service to homebound children who have been confined to their homes for at least 3 months and who are being taught at home. Referrals to the library are made by the schools. The library's initial contact is made by telephone, when possible, to determine the child's reading level, interests, and reading habits. A librarian or library assistant next selects appropriate books which are taken to the child monthly. This service also includes the mailing of talking books supplied by the Regional Library for the Blind and Physically Handicapped, whose offices are located within the Cincinnati Public Library. It also provides electrically operated page turners for children who cannot hold a book or turn pages. About forty children were served in 1971. Services to adult homebound patrons in Cincinnati and Hamilton County were begun July 1969 and are more extensive than those given to children. At present about 878 adults are being served in their homes or in institutions, with an average monthly circulation of about 6,000. Approximately one-fourth of these patrons use books in large print.

Until recently a professional visiting librarian carried the primary load of the library service for the homebound handicapped provided by the Central Michigan Library System with headquarters in Mason in Ingham County. This cooperative library arrangement served several counties. The visiting librarian was first given the task of locating prospective readers and devising appropriate service methods. Those eligible for library services to the blind and physically handicapped were served by the regional library in Lansing, and were therefore excluded from the Central Michigan program. The program for the homebound that evolved called for a visit by the librarian to each user every 3 weeks. By May 1968, 111 homebound handicapped readers had been enrolled in the service, but this program, funded by a grant from the Library Services and Construction Act, was discontinued at the end of the LSCA grant year.

Mail-Order Library Service

Handicapped homebound individuals may be the beneficiaries of a mail-order service designed specifically for them, or else intended for all those living in a geographic area, whether disabled or not.

The federal program of the Library of Congress Division for the Blind and Physically Handicapped has historically been a service conducted by mail; special free mailing privileges are authorized by law for materials for those who cannot read conventional print because of their physical limitations (*8*). For many years, the materials—brailled books, talking books, cassette books, and selected equipment to use the material—made available through the Library of Congress actually have reached readers through a network of regional libraries that serve the nation as a whole. By 1973 the number of regional libraries had increased to fifty-one.

A recent trend is the development or establishment of subregional libraries. A subregional library is a public library (city, county, or multi-county) working in cooperation with the state's regional library for the blind and physically handicapped. The subregional facility may provide all of the services of the regional library, with the exception of magazine and cassette book circulation; generally, the scope of service is limited to current talking books. Because of the limited number of copies available and the record-keeping involved, magazines are more effectively circulated from a central point in each state.

A typical subregional library might serve as many as 200 blind and physically handicapped readers; total circulation might average 600 titles each month.

Among the advantages to readers of such decentralized service are the following: the bringing of blind and physically handicapped readers into the local library community; acceleration in the receipt of materials; and reduction in the number of barriers to reading that are inherent in dealing with an agency far removed from the reader's home. From the reader's subjective view, perhaps for the first time he or she can really feel that the local library is truly his own, providing the materials he can use and the individualized service he or she needs.

For the subregional library, it means assuming the role of serving the total community for which it is responsible. It also means that circulation will increase since the blind and physically handicapped read more books and magazines than their sighted counterparts. Regional libraries, meanwhile, freed from the major portion of routine talking book circulation, have time available to strengthen collections, develop an active corps of volunteers, and inform the public at large about the service.

Public Library Services by Mail

Mail-order programs by public libraries vary greatly in size and in methodology. Problems arise in conducting them that are unlike those encountered in delivering traditional services at a stationary location, or even in home delivery library programs. Some problems are common to all programs; others, to only a few. So integral are the problem areas to the service itself that they will be considered along with the program.

A relatively new mail-order program by the public library in San Antonio, Texas, is noteworthy in its objectives and certain characteristics. Open to all, the program from its inception has been designed to update library service, to better serve shut-ins, and to reach those who were not regular library users. Begun in 1966, the books-by-mail program was originally financed by a grant of $22,500 from the Council on Library Resources.

In the initial trial period of 18 months, 24,000 books were mailed, representing 1% of the San Antonio Public Library's total circulation, at a unit cost of 16¢ per circulation. During this period, the operation needed less than 90 square feet of floor space, and required no special stock or staff; books were returned on time and with fewer losses than through normal circulation procedures. Postage to the borrower is paid by the library; the borrower pays for the return postage.

Books can be ordered by mail only from the main library. Most orders are received by telephone; requests for material by letter or card have been negligible. Telephone requests are routed by the switchboard directly to the subject department where the material is deposited. Orders are filled between periods of peak activity by staff members assigned to the public service desks. From the various departments, books ordered are taken to a special shipping center, recorded using microfilm charging, packed in padded bags, labeled, stamped, then loaded into open mail sacks, and taken to the main post office during the afternoon of the same day. Under normal conditions books are delivered not only in San Antonio but in the whole county of Bexar in which San Antonio is located.

As a subregional library, the San Antonio Public Library also has a small collection of braille and talking books, both of which go postage free to and from the reader. This material, moreover, unlike other material in the library, can be requested by telephone 24 hours a day.

Problems in the San Antonio program seem to be largely the ones common to so many other similar programs: some readers complain of slow service or receipt of the wrong books; some readers are concerned over mail thefts. Talking books in their fiberboard containers, very like film containers, are often bulky and heavy, and postmen on their routes inside the city will not always pick up packages weighing more than a pound or two. As in other instances, postmasters usually are sympathetic to individuals presenting this problem, and often make satisfactory special arrangements.

The South San Francisco Public Library, for the benefit of those unable to visit their local library conveniently, developed a procedure in which participants buy four reserve postals for 25¢ each from the library, which they fill out and send in one by one as they learn of books they would like to read. The library reserves the book requested when available, and mails it in a padded bag, in which it can also be returned. Charges cover the cost of one-way postage and the mailing bag. Similar in many respects to the South San Francisco program is the recently organized Pioneer Library System of the Rochester (New York) Public Library for shut-ins and other readers.

Reaching readers walled off by expressways from the "old-town" location of the public library is the aim of the dial-a-book project of the Huntington Beach, California, Public Library. Featured in this telephone-order program are reusable book mailing cartons, and the Bowker bookseller catalogs which were produced originally for use in bookstores. Colorfully illustrated and annotated, the catalogs include books on a variety of subjects such as cooking, travel, and gifts. The service costs 25¢ per mailing.

Utilization of catalogs or lists of books available appears to be a requisite for successful books-by-mail programs. Libraries have devised a variety of catalogs to meet reader needs. The state of Washington's North Central Regional Library, with headquarters in Wenatchee, offers a books-by-mail program over a wide geographic area to handicapped and nonhandicapped alike. An attractive, twenty-four-page, illustrated book catalog, tabloid size on newsprint stock, goes to every rural boxholder and every registered reader, complete with a post card for ordering the books and materials wanted. A similar catalog is employed by the Vermont Bookfetch (postage free) program of the Department of Libraries in Montpelier.

Kansas' South Central Library System, headquartered in Hutchinson, also issues an illustrated book catalog with post cards for ordering. The production of the catalog is unique: a quarter carload of paper was ordered just for this purpose;

catalogs are printed on the Hutchinson Public Library's own press; and all copies are identical except for the last page, which is reserved so that each county can advertise its own local libraries and their services. The mail-order library uses only paperback books and the staff, practically speaking, consists of one full time assistant with occasional relief help during peak periods. Two thousand catalogs were mailed into two of the most sparsely settled counties in the system; and within two weeks, 500 cards had been returned requesting 1,700 titles. Since the program was initiated 26,000 catalogs have been mailed in ten counties.

Important as they are, especially in rural areas where readers do not have as ready access to other sources of information about new and old books, catalogs themselves present problems. Considerable staff time is required to compile, print, and mail them. There is a time lag between the acquisition of a book and the publicizing of it in a catalog. Catalogs, moreover, tend to create peaks in demands for service: requests are at their highest immediately following the mailing of a catalog, and fall off rapidly, reaching the lowest point by the time the next catalog is sent to the borrowers. Some readers, especially the visually handicapped, have difficulty using catalogs in normal-size type, or even those that are printed. Each bimonthly issue of *Talking Book Topics,* published by the Division for the Blind and Physically Handicapped of the Library of Congress, includes a flexible disc recording which is essentially a catalog of the titles listed in the print and the concurrently published braille edition.

One of the older programs in the country, that in Montclair, New Jersey, has several novel features. Users purchase post cards for 25 cents each, which they mail to the library as their needs for books arise. Other users establish a deposit account of 2 or $3 to permit mail or telephone requests for home mail delivery. Some of the program's services are reminiscent of the department store personal shopper: sending books on approval, sending out notices of new books according to individual interests, and renewing books by telephone. Another mail program, that of the Fair Lawn, New Jersey, Public Library, is quite popular, reaching a circulation of 60,000 to 80,000 in eleven towns. Its 10¢ charge for mailing is among the lowest reported for this type of service.

Library Radio Service

A library program recently begun by the Minnesota State Services for the Blind deserves mention as a noteworthy innovation in reaching the visually and physically handicapped with reading material. It is a daily radio service called the Radio Talking Book, which makes available readings from books and magazines and a varied selection of current information of interest to its selected audience. The first of its kind known to have been developed in the nation, the service broadcasts for 17 hours a day, 365 days a year, and utilizes a special subchannel that is audible only on specially designed receivers. By late 1971, about 1,000 receivers were on loan covering an area 100 by 200 miles from the transmitters located near St. Paul and St. Cloud. Cables carry the programs beyond this range. Similar services have been developed in at least two other states.

Special Materials Designed for the Deaf

A relatively recent development affecting library materials for a special group of handicapped, the deaf, brought into being the Media Services and Captioned Films program of the U.S. Office of Education. Begun in 1960, under terms of the Elementary and Secondary Education Act, P.L. 90–247, the program makes available, through a central library and various depository libraries, a number of captioned films and other visual aids on loan to groups of deaf persons. By fiscal year 1971 the appropriation for this program had risen to $7 million annually; and the number of films was more than 500.

Groups of three or more deaf persons, clubs, classes, schools, and other organizations are eligible to borrow films, with the traditional guarantees that copyright will not be violated or infringed, that films will not be shown for profit, and that they will be shown only to the deaf.

Home Reading Aids and Their Availability

Various mechanical or other aids are available in the marketplace for assisting the homebound handicapped to read print and nonprint material. A list of these, *Reading Aids for the Handicapped*, has been compiled since 1961 by the American Library Association, and an attempt is made to keep the list up to date (9).

Yet these aids are not always available to the reader, usually through lack of his own funds or lack of sufficient library resources. The cost of eyeglasses, for example, is sometimes prohibitive for the visually handicapped, especially those who are elderly and poor. Whereas the Library of Congress Division for the Blind and Physically Handicapped can supply, within a reasonable time, talking book machines for playing recordings to all those eligible readers who need them, it can make a far smaller number of players for cassette tape recordings available at present; so priorities have had to be established for their distribution.

The handicapped do not always have someone present to advance film (for filmed books) or to change a recording, and some aids, when available, allow the handicapped to accomplish these tasks for themselves. There is no lack of innovative attempts to develop more and better aids for this purpose. But many experimental models and prototypes are quite expensive and, therefore, often inaccessible to the handicapped. Years often elapse, moreover, between the introduction of prototypes and the mass production of reading aids.

Local libraries almost always find that for the purchase, distribution, and maintenance of various reading aids they need subsidies from state and federal funds available for this purpose. The U.S. Office of Education Media Services and

Captioned Films program can provide such funds. Vocational rehabilitation programs are sources of special equipment for reading, such as tape recorders, if the handicapped individual is enrolled in an approved vocational training course of study.

Utilization of Volunteers

Public libraries, when the lack of sufficient professional staff has prevented them from extending services to the homebound handicapped, have sometimes turned to volunteers to assist in starting and in continuing such services. Urban blight, especially in larger cities, makes it difficult to find volunteers, and often volunteers are reluctant to visit homebound handicapped in many neighborhoods. Whether to use volunteers or professional librarians to work directly with the homebound handicapped is the subject of much discussion among those who administer such library programs. Some libraries have reported volunteers to be undependable, and believe that only professional librarians can select the books needed by individual readers and can use the full resources of the library to assist readers in other ways.

There is no doubt that dependability is important when dealing with shut-in readers. Those in their homes and in institutions look forward to "library day" when the person with books, be he or she a professional librarian, volunteer, clerical or nonprofessional worker, or perhaps a bookmobile driver is scheduled for a visit. The aged and the handicapped are often lonely, and they treat the library representative as a friend with whom they will talk about a great many things touching on their personal lives and thoughts.

In the volunteer or librarian, health, energy, flexibility, and empathy are important. According to Romani (*10*),

> a pleasant appearance and a cheerful manner help, as does good, clear diction which carries through dimmed hearing. A sensitive and empathetic person instinctively knows when a book is too heavy, the print too fine, the sex content too blatant, a description of illness and death too depressing. . . . He can recognize an accent and be quick to suggest the right foreign language book that will bring joyful gratitude from the foreign born. . . .

The Detroit Public Library has found volunteers to be reliable, when carefully screened by the Central Volunteer Bureau, a Community Fund agency, and handled with care by the library. So have other libraries that have taken the time to orient the volunteer. An important objective of orientation is to instill in the volunteer a sense of the importance of the task. It further seems important to allow volunteers to exercise their own judgment in some matters and, also, a degree of flexibility in carrying out assignments.

Library schools at present have no courses of study leading to a library degree for work with handicapped readers, although a few, notably Wayne State University, have programs for those who are to work with the aging. The University of Minnesota includes this type of library service in its courses on medical librarianship. Case-Western Reserve University offers a course on hospital libraries and work with the handicapped. Generally, work with handicapped library service depends to a large extent on on-the-job preparation.

Role of Official Agencies and Voluntary Organizations

Official state and local agencies, as well as voluntary organizations, often play important roles in library services to the homebound handicapped. Their function is best defined as supplemental and facilitative.

A most useful service performed by official agency and voluntary organizations alike is the referral of eligible individuals to the library service. Referrals in Cleveland, for example, have been obtained from housing managers, branch and hospital librarians, operators of nursing homes, and case workers for welfare agencies; from talks to community groups, service and retirement clubs, and church organizations. Constant contact is often necessary, as in Cleveland, due to changes in personnel in cooperating agencies and organizations, and the loss of one-third of the library's users each year because of advanced illness or death.

Visiting nurses and social workers often can supplement the services of the librarian in contacting the homebound handicapped, or in selecting library books and obtaining talking book machines.

Worth mention is the experience of the San Antonio Public Library in publicizing its mail-order service via the monthly billing by the city's public service board. Response from this endeavor was unexpectedly good and high.

Voluntary and civic organizations continue their historical and traditional role of helping the blind and handicapped in obtaining aids, including reading aids. Eyeglasses, record players, and tape recorders are examples of the aids often purchased for the handicapped by such groups as the Lions, Kiwanis, and Rotary clubs; veterans organizations; and religious and educational associations.

Summary and Conclusions

Library services for the homebound handicapped have increased substantially in the nation during the last 30 years, and the trend is toward even greater increase. As has been demonstrated by the specific programs described here in greater or lesser detail, the services exhibit variation in structure, type, and extent.

Some problems are common to all such services; others, to only a few. A persisting problem is that of finding ways to make the service well known. Continuing publicity seems to be required to assure that those eligible know about the service's existence. Funds to operate the special library service vary in source; more federal funds have been made available in recent years.

The more successful programs utilize all available contacts within the community: volunteers; allied organizations in the health, civic, and social fields; and appropriate government agencies. No overall guidelines or standards have been developed for a model library service to the homebound handicapped. If a model state statute existed for library services to the handicapped, it would probably serve a useful purpose in assuring such services as stable institutions in local communities; or, at the very least, in assuring increases in funds for this purpose in some states.

Eligibility for such services varies from program to program, and determining eligibility can be time-consuming. Proposals made to establish a national computerized registry of blind and handicapped persons would be helpful to libraries, but the idea so far has met with little success.

Blind and other handicapped persons—those eligible for library services for shut-ins—have been characterized as generally having a lower income than their fellow citizens, being more elderly, and less well educated.

Innovation in the field of reading aids for the handicapped yields occasional prototypes that may or may not eventuate in aids that can be widely used. The cost of early-developing models is frequently prohibitive for the handicapped.

Technological and other developments in the mass media, meanwhile, may revolutionize present concepts of delivering library service to the homebound handicapped. National availability of radio or television talking books, as has been proposed, would probably obviate the need to provide many present services to shut-ins.

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HONG KONG, LIBRARIES IN

When the British prime minister, Lord Palmerston, described Hong Kong in 1841 as a "barren island with hardly a house upon it" for which he could see no future, it was no doubt political caution which prompted him to add "though it is possible I may be mistaken." These words are often quoted as a contrast to the thriving city-state into which Hong Kong has grown. Yet those who speak of modern Hong Kong as a cultural desert are rarely as cautious as Palmerston, though this description is equally at variance with reality. Even though newer states may point to a more rapid development in the provision of libraries, the diversity and quality of library facilities in Hong Kong today compare favorably with those of most Asian countries, while the long span of its library history may surprise many aware of its development in other respects.

Hong Kong is a British Crown Colony on the southeast coast of China, and on the eastern side of the Pearl River estuary, on which stands the important city of Canton, some 90 miles to the northwest. Forty miles away to the west, and across the estuary, is the Portuguese Province of Macau, having a much longer history as a western foothold on the China coast, dating from the sixteenth century.

The island of Hong Kong, with an area of some 29 square miles, is only one part of the colony, which altogether covers 398½ square miles and includes more than

230 islands as well as the New Territories, leased from China for 99 years in 1898. Sprawling for some 7 miles on the northern side of Hong Kong island is the city of Victoria, but it is never more than a mile deep from the shore, and in most parts only half that depth owing to the steep mountainous spine of the island. On the other side of the harbor is Kowloon, the second main urban center of the colony, though satellite towns of up to 1 million inhabitants each are planned for or under development at Tsuen Wan, Castle Peak, and Sha Tin in the New Territories.

In 1971 the population passed the 4 million mark, of which over 98% was Chinese, and some 80% lived in the urban areas. However, probably only about a quarter of this is literate, and perhaps only 150,000 inhabitants are literate in both Chinese and English. The non-Chinese population is mainly from other commonwealth countries (over 30,000) and America (5,000), and thus mostly English speaking.

Although Hong Kong lies within the tropics, its climate is unusual for tropical countries in that it has four distinct seasons. Lying between the vast land mass of Asia and the Pacific Ocean, it is influenced by the north to northeast monsoons from September to March or later. The summer monsoon from the south or southwest is not so persistent. Temperatures range from a mean daily average of 15°C in February to 28°C in July, with an average for the year of about 22°C, and an average annual rainfall of over 85 inches. The relative humidity exceeds 80% for the greater part of the year, but is lower from September to January, and may be very low in November. Typhoons bring gales and heavy rainfall to Hong Kong usually at least once a year, mostly between July and September, but storms sufficient to cause damage or loss of life are less frequent. With climatic conditions of such variety, design of library buildings becomes a matter of considerable importance.

Economically, Hong Kong has developed from the principal *entrepôt* for southern China to one of the main exporters of its own manufactured goods in the world. Yet it possesses practically nothing in the way of natural resources, and relies for its success upon the industry and ingenuity of its population. Clothing comprises over a third of its total exports, while textiles and miscellaneous manufactured goods together comprise another third.

To trace the beginnings of the library history of Hong Kong as a British colony, one must go back beyond the occupation, and farther afield; for the oldest collection of books, that of the Morrison Library, was started at the English Factory in Canton in 1806. While no contemporary documentation of its foundation has been traced, a catalog of the collection published in 1832 contained an extensive quotation from the document inviting initial contributions, which is in turn quoted in the *Chinese Repository* for June 1835, and in the interesting account of the Morrison Library by Dorothea Scott.

When the East India Company lost its charter in 1834, the collection of books in its factory at Canton was broken up; but many found their way into the library of a new institution, the Morrison Education Society, so named in memory of Dr. Robert Morrison, the first protestant missionary to China, who died at Canton in 1834. When the library of this society was opened in Canton in 1838, it contained some 2,000 volumes, compared with 4,000 in the 1832 catalog of its predecessor. In 1841 the society moved to Macao, and a year later to the newly established colony of Hong Kong. Here a site was provided for a permanent headquarters on Morrison Hill, now to be identified only by a road of that name, though early illustrations of the building on its eminence have survived. A large room was provided for the library, then containing nearly 3,500 volumes, though a report of this period refers to losses by the failure of borrowers to return volumes on leaving the colony, and to the large number of volumes requiring repair or rebinding.

The first of several financial crises affected the Morrison Education Society in 1849. Its premises had to be closed temporarily, but the library was made available again in a room in the court house in 1855. Before recording the next stage of its history, however, it is necessary to go back a few years to the founding of two other libraries in Hong Kong, which were both eventually to be combined with that of the Morrison Education Society to form the old City Hall Library.

"A meeting of the Medical Gentlemen in Hongkong was held on Tuesday evening May 13th [1845] . . . for the purpose of forming a Medical Society." Thus opens the newspaper report of the founding of the first institution originating within the colony to have its own library; for one of the objects of this, the China Medico–Chirurgical Society, was "the formation of a library, where all the best periodicals and the most valuable standard medical works of the day can be had." Just how far this object was achieved it is difficult to say, for the only surviving list of the contents of the library is unsystematic. In any event, the medical society was first to be incorporated into the Philosophical Society of China, founded on January 5, 1847, which changed its name later in the same month to the Asiatic Society of China. It eventually became the China Branch of the Royal Asiatic Society, under the presidency of Sir John Davis, Governor of Hong Kong and a founding member of the parent body, in the same year. The origins of this library, the earliest of any significance to be founded in colonial Hong Kong, may therefore be traced back to 1845.

Last of the three major libraries of this era was the Victoria Library and Reading Room, founded in 1848 as a subscription library. Judging from the annual reports and notices appearing in the local press, it was more active and better used in its early years than the two forementioned, though it too was eventually to suffer financial difficulties, the reason for the proposed amalgamation of the three collections.

This proposal for amalgamation was apparently first put forward in a circular issued by the Morrison Education Society in 1863, offering its own books and those of the Royal Asiatic Society's China Branch, which it had accepted on trust when the branch became defunct in 1859, as the nucleus of a reference library to be located in a city hall. There was, however, a snag to this apparently generous offer, since some 3,000 of the 3,800 volumes involved were in need of rebinding, and the Morrison Education Society had no money available for the purpose. The same proposal for amalgamating the three collections was repeated in an editorial in the *China Mail* of May 8, 1867. Two years later when Hong Kong's first city hall was nearing completion the proposed reference library came into existence, though it was not until a year or two later that the collection of the Victoria Library was added to it.

In 1871 the City Hall Library contained 8,000 volumes, 3,000 of which had been presented unconditionally by the trustees of the Victoria Library. Another 3,000 had come from the Morrison Education Society, though this gift was "on condition that in consideration of . . . the great services of Dr. Morrison to both European and Chinese, the books be kept distinct from all other collections in the City Hall, and designated 'the Morrison Library' in perpetuation of the great missionary's memory." It should be noted that this first city hall, unlike its present day counterpart, was a private enterprise and not an official one, though the Hong Kong Government had provided the building site free of charge and made a grant in aid of the foundation.

Some government departments and institutions had, however, started libraries from quite early days. First of these was that of the Supreme Court, which originated in a gift of his own books by Chief Justice J. W. Hulme in 1847. The inadequacy of this collection became a standing cause of complaint with a later chief justice, Sir John Smale, of whom it was said that he "seldom delivered a judgment in which he did not make the time-honoured complaint as to the state of the library." He may have had an ulterior motive in this, as in 1881 the government bought part of his collection to add to the library of the Supreme Court. The history of this library is included in that of the laws and courts of Hong Kong, compiled by J. W. Norton-Kyshe, registrar of the Supreme Court, who in 1896 managed to persuade the government that an annual grant should be made for the purchase of books.

Another important collection, in the nineteenth century as well as today, is that of the Royal Observatory, founded in 1883. Records of the early development of its library are, however, lacking, and the present collection is postwar in origin, the earlier library having been a victim of the Japanese occupation in 1941. The same applies to another early collection of scientific literature under government auspices, that of the Botanical and Afforestation Department, established in 1881. Its first superintendent was Charles Ford, who since 1871 had held the title of Superintendent of Government Gardens. As well as founding the department's library, he was also responsible for starting the Colonial Herbarium, and the records of additions to the library in his annual reports, starting from 1880, indicate his personal interest in building up the collection, mostly by gifts and exchanges with similar institutions in other parts of the world.

Apart from the Morrison Education Society, school libraries are conspicuous by their absence in the reports of educational progress during the nineteenth century. The reason would appear to be that the normal form of instruction consisted almost entirely of learning by rote, which gave rise to little need for wider reading. In the centenary history of the earliest established government secondary school, for example, there is only one mention earlier than 1931 of any library provision at all. The Central School opened in 1862, and when it moved to new premises in 1889 its name was changed to Victoria College; but since there were at least five other educational institutions in the colony with similar names it eventually became Queen's College in 1894, under which name it still flourishes. However, the only early reference to its library is the statement that "in 1886 a Boys' Self Supporting Lending Library was started."

The only other libraries dating back to the last century are those of the various social and residential clubs. Foremost and earliest was the Hongkong Club, established in 1845, and originally occupying premises at the bottom of Wyndham Street, but moving into its new building, which it still occupies, on what was then the waterfront in 1897. Another early establishment, the Concordia which later became the Club Germania, was founded in 1859, and first occupied premises in Queen's Road East, after a succession of moves finishing up in Kennedy Road in 1902. At this stage it was said to possess an extensive and well-stocked library. The Club Lusitano dates from 1865 and had its own premises in Shelley Street. By its fiftieth anniversary the Bibliotheca Lusitana contained some 10,000 volumes, mainly Portuguese.

At the turn of the century the library scene as depicted in a contemporary account may be summarized as follows. The nearest approach to a public library was that at the city hall, which contained the former libraries of the Morrison Educational Society, incorporating that of the China Branch of the Royal Asiatic Society and the Victoria Library. Its total book stock amounted to 12,839 volumes, of which 3,332 were in the Morrison Collection. There were about 500 registered borrowers, and the monthly average of persons using the reading room, which carried newspapers and magazines from England and the United States as well as local publications, was 1,412 non-Chinese and 628 Chinese.

Most important of the government departmental libraries were those of the Supreme Court, the Royal Observatory, and the Botanical and Afforestation Department. School libraries were hardly known. The Hongkong Club, Club Germania, and Club Lusitano were among the best libraries provided for limited memberships, the first far exceeding in size that of the city hall, having over 18,000 volumes.

The next event of significance in the history of library development in the colony was the founding of the University of Hong Kong in 1911. This was formed by the amalgamation of the Hong Kong College of Medicine, which originated in 1887, and the Technical Institute, a government institution providing evening classes in various subjects including engineering. To the two resultant Faculties of Medicine and Engineering was initially added a third, of Arts.

A detailed history of the library of the university has yet to be written, but some salient points may be mentioned here. Between the time that the university first opened its doors to students (there were fifty-four) in October 1912 and the first appointment of a full-time librarian in September 1921, there was a succession of honorary, temporary, part-time, and acting librarians, and the library history of this period is hardly recorded. A change came with the appointment as librarian of Mrs. M. Ring in 1921, from which date minutes of library committee meetings and annual reports have been preserved. The total bookstock at this time was 14,880 volumes, some already classified by Dewey; the book fund was $1,000, there was a staff of one clerk and one coolie; and there appear to have been no library regulations (these were introduced in 1923). The number of students at this date had risen to 225, and for the first time included women.

Meanwhile, the university had negotiated the first large acquisition to its library when the Committee of the City Hall agreed to hand over the Morrision Collection to the university in June 1914. At first the committee reserved the right to reclaim the collection, but in 1925 this was revoked and the books became the property of the university. However, the conditions imposed on the city hall in 1869, that "the books be kept distinct from all other collections . . . and designated 'the Morrison Library' in perpetuation of the great missionary's memory," are still observed.

Financial problems continued to beset the university right up to the Japanese occupation in 1941. The vice-chancellor, Sir William Hornell, commented in the annual report for 1926, "The University has not got anything which it has the right to call a Library. . . . The amounts annually available for the purchase of books are ludicrously inadequate." Yet by 1932 the stock had nearly doubled the 1921 figure, exceeding 29,000, and the budget had risen to $10,000. This also was the year in which the Fung Ping Shan Library was opened by the governor, Sir William Peel. The building and an endowment of $50,000 for the purchase of Chinese books was given by Fung Ping Shan, a local philanthropist, who unfortunately died before he could see the results of his generosity. This, together with gifts of other Chinese books, added 40,000 volumes to the university's collection.

In the following year the university purchased the Hankow Collection, which comprised the China class of 2,952 volumes from the Hankow Club. This gave the library the nucleus of a very good collection of materials, mostly in English, relating to China. This was largely at the instigation of Hornell, who when he retired from the vice-chancellorship in 1937, made a gift of over 1,300 of his own books to the library.

Addressing the University Court in March 1940, the treasurer painted a gloomy picture in which he expressed doubts as to whether the university could continue its existence. "Our expenditure on the University libraries and laboratories is almost ludicrously insufficient," he said. "Laboratories, libraries and administrative buildings alike are completely inadequate." Indeed, first mention of a new and separate building for the library had been minuted in 1929, more than 30 years before it was to be implemented. World events, however, were shortly to overtake the purely local problems troubling the university, which ceased to function shortly after the surrender of the colony to the Japanese occupation forces in December 1941. The main building, which included the library, was used as an emergency hospital during the hostilities, and when this was damaged by shellfire the hospital was dispersed to other university buildings, including the Fung Ping Shan Library. After the surrender the science laboratories, despite the paucity of their equipment, were systematically looted by the Japanese, a process continued during the occupation by the much diminished local population, which removed doors, windows, fittings, and even floors in search of any means of obtaining fuel.

It is therefore surprising to learn that losses from and damage to the library were relatively light. Indeed, the Fung Ping Shan Library gave temporary shelter to three other collections, including books from the National University of Peking, and was able to restore them to their owners after the war. This was largely due to the devotion of a few of the clerical staff, who did their best to preserve the collections during the occupation. In the last pre-occupation report, for the year ending August 31, 1941, the number of volumes in the general library stood just short of 49,000, with almost as many in the Fung Ping Shan Library, and the book fund amounted to $11,500. It appears that some 7,000 volumes were removed to Japan, but many of these were returned in 1948. With the rest of the university, the library reopened in 1946, Mrs. M. Ring having returned to the post of librarian, but the next year or more was spent in sorting out the accumulation of 5 years' desolation.

Before the end of the war, the secretary of state for the colonies set up an advisory committee in London under the chairmanship of Mr. (afterwards Sir) Christopher Cox in December 1945 to consider the future of the University of Hong Kong. This committee agreed that the university had amply justified its existence in peace and war, and its report in July 1946 recommended rehabilitation and reopening of the university. In October 1948 a sum of $80,000 was made available for reestablishment of the library, while the book fund was increased to $53,000, more than four and a half times its prewar figure. Many large and valuable donations of books and periodicals from Britain, the United States, and elsewhere helped in the restocking of the library. The first postwar statistics are those for 1949–1950, when the main library held over 50,000 volumes and the Fung Ping Shan Library nearly 55,000. Additions to the two libraries exceeded 9,000 volumes. The main library had accommodation for 118 readers.

Mrs. Ring retired in 1950 after more than a quarter of a century of devoted service as the first full time librarian of the university. The Fung Ping Shan Library, which had hitherto come under the aegis of the Department of Chinese, became part of the University Library. An important collection of 15,790 volumes of Chinese books, the property of Dr. Wong Mo Hon, was purchased in 1952. In the following year a small bindery was established. The annual reports for this decade record steady growth of the book stock and increases in the annual book fund, but also contain recurrent themes of shortage of space and of library staff. The Chinese collection passed the 100,000 volume mark in 1956, and so did the main library some 2 years later. Two generous grants were received in 1957, one of US$10,000 from the China Medical Board for the purchase of back numbers of medical periodicals, the other US$16,000 from the Carnegie Corporation for the purchase of American publications. In the same year a special exhibition to commemorate the 150th anniversary of the first arrival of Robert Morrison in China was held in the Fung Ping Shan Library.

The university celebrated its Golden Jubilee in 1961. The student population exceeded 1,500 in Faculties of Arts, Science, Medicine, and Engineering and Architecture. There was a thriving Extra-Mural Department and an Institute of Oriental Studies. A Ph.D. program had recently been established. Table 1 gives statistics from the annual report for the library.

Meanwhile, the pleas for a new library building had at last been heard, and the move from hopelessly crowded quarters into an imposing new building of five floors took place in September 1961 for the general library, and in the following February for the Fung Ping Shan Library. Readers' places increased from 182 in the two old libraries to 274 in the new, but even this was inadequate. The next expansion was accomplished in December 1965 when a Medical Branch Library was opened adjacent to the new Li Shu Fan Preclinical Building, close to the teaching hospital and some 2 miles from the main university campus. This provided places for a further 119 readers, and on opening held some 16,000 volumes. By mid-1966 the space in the main library relinquished by the medical collection had been utilized to increase readers' places to 460.

Dr. J. H. P. Pafford, Goldsmiths' Librarian of the University of London and library adviser to the Inter-University Council for Higher Education Overseas, was invited to visit the university in May 1965 to advise on library development. At about the same time a substantial increase in the library budget was approved, and the book fund for 1965–1966 was $429,250. There was a total staff of seventy, of which fifteen were professional. In the following year a new Faculty of Social Sciences was instituted, and an earmarked grant of $50,000 was provided for setting up its library requirements.

In September 1969 a law library was opened in temporary premises, in conjunction with a new Department of Law. A building-up grant of $600,000 was provided, to be spent within 3 years (later extended to 4), which ensured rapid growth to a useful working collection. The law library opened with about 1,500 volumes and places for twenty-eight readers, and 2 years later had over 9,000 volumes and places for sixty readers. This brought the total resources of the Univer-

TABLE 1

Statistics of the University of Hong Kong Libraries

	General Library	Fung Ping Shan Library
Accessions, 1960–1961	4,460	2,678
Total stock	119,500	121,586
Number of borrowers	2,492	492
Total loans	61,182	6,505
Books consulted in library	33,074	

sity Library in August 1971 to over 400,000 volumes, with places for 830 readers for a student enrollment of about 3,200. Loans in the previous year totalled just over 193,000, and the book fund expenditure amounted to $1,200.000.

Returning now to the public library scene, the original City Hall Library, the early history of which has already been recounted, was dispersed in 1932 when the government decided to resume possession of the land, and the building was demolished. Although the City Hall Library gradually deteriorated after the removal of the Morrison Collection to the University Library in 1914, it nevertheless contained the nucleus of an excellent local collection, and it is much to be regretted that this was not preserved. It was stated at that time that government policy included the intention to provide for amenities such as had previously been available at the city hall, but it was nearly 30 years before this intention was honored. However, a preparatory committee for a new City Hall Library was set up in May 1952, on which the university librarian was asked to serve, and being the only librarian with long experience in the colony at that time, her advice was sought at successive stages by the various government departments concerned in the city hall project.

The first librarian of the new city hall, Mrs. M. C. David, formerly deputy librarian of the University of Hong Kong, was appointed on October 1, 1959, but resigned the followed January, at about the time that building operations started. She had, however, been able to do useful planning on the layout of the library and had initiated book ordering. Her successor, Mr. John Harley, was appointed in September 1961. Planning was no easy matter, since the provision for the library extended over five floors (each of 4,300 square foot area) in the twelve story High Block, allocated as follows: 2nd floor, Children's Library; 3rd, Lending Library; 4th Periodicals; 5th, Reference Library; 6th, stack, work room, and offices. Part of the 7th floor was allocated for the Music Library. When the City Hall Library opened for service on March 5, 1962 (3 days after the official opening), the effective bookstock was some 18,750 volumes in English and Chinese. Initial demand was heavy, and by the end of the first month 10,000 borrowers had been enrolled. Loans during the first year averaged over 15,000 a month, and the stock increased to 106,000 volumes, including about 83,000 in Chinese. There were then four professionally qualified library staff.

In August 1965 the first branch library was opened in Kowloon. Here the rate of loans was even higher, averaging over 20,000 a month in the first half year, and the annual report records that this did nothing to alleviate the overcrowding in the City Hall Library, where loans continued to increase. The combined service became officially known as the Urban Council Public Libraries. From the beginning of 1965, the rights of deposit under the Books Registration Ordinance were transferred from the Secretariat for Chinese Affairs to the city hall, and a greatly improved version of the quarterly record of books deposited has been published, under the professional guidance of the library staff, in the government *Gazette* since 1966. A second branch library was opened in December 1970, located at the Wah Fu low cost housing estate between Aberdeen and Pokfulam, in the southwest corner of Hong Kong Island, and serving a population of some 134,000 people, most of whom would not easily be able to visit the city hall. A third branch started to operate in Yaumatei, a highly populated area of Kowloon, in November 1971, and a fourth at Ping Shek, a resettlement area of Kowloon, in 1972. The next proposed branch is to be at Tsuen Wan, and will thus extend the activities of the Urban Council Public Libraries for the first time into the New Territories. The most recent annual report gives the total book stock on March 31, 1973 as 487,559 volumes, 65% of which are in Chinese. Loans in the previous year from the adult libraries exceeded 1,469,000, while the junior libraries lent 654,700 volumes. The total number of borrowers registered since the City Hall Library opened in 1962 was over 363,360. Activities included book exhibitions, visits by school groups, story hours in the junior libraries, talks to youth groups, and the issue of annotated book lists.

These Urban Council Public Libraries are, however, not the only public library facilities operated by the Hong Kong Government (of which the Urban Council and Urban Services is a department). Next in importance is the Social Welfare Department, which has provided libraries in the resettlement areas of Kowloon and Hong Kong since 1960, and has also operated a mobile library service for the New Territories since 1950. In 1960–1961 this latter visited twenty-four areas and eighteen schools on a regular schedule, and attracted some 400 readers a day. In September 1968 UNICEF donated two further vehicles, and the three mobile libraries reached nearly half the villages and schools in the New Territories. Another organization contributing to this type of work is the Boys' and Girls' Club Association, while financial support for similar purposes has been continuously forthcoming from the Hong Kong Junior Chamber of Commerce. All these organizations suffer from a complete lack of professional guidance in their operations, though the Hong Kong Library Association has embarked upon a voluntary advisory service to remedy this situation. However, what they lack in professionalism they make up for in enthusiasm, and their efforts have clearly filled a gap in library provision which the Urban Services Department has yet to overcome.

The other government agency providing public library facilities is the Education Department, which includes small libraries in its adult education and recreation centers. The first of these was opened in 1955, and the number has grown to twelve. No statistics are available on their size or use. There is apparently no coordinating body for the three government departments which are involved in library provision.

As a result of the recommendations of the Fulton Commission in 1963, a federal Chinese University of Hong Kong was formed later in the same year, comprising Chung Chi College at Ma Liu Shui in the New Territories, New Asia College in Kowloon, and the United College in Hong Kong. These were three of the seven postsecondary colleges which had been set up in Hong Kong as refugee organizations from mainland China in the wake of the changes of regime there. The main object of establishing this second university was to provide tertiary education for those whose previous school had been mainly in the Chinese lan-

TABLE 2

Staff and Students of the Chinese University of Hong Kong, 1963, by Colleges

	Staff	Students
Chung Chi	40	531
New Asia	41	432
United	18	110

guage. Each of the constituent colleges had its own distinctive background which it has retained, though the central influence of the university has gradually strengthened. The oldest established was New Asia (1949), with a strong tradition of classical Chinese scholarship supported by various overseas organizations including the Yale-in-China Association, Harvard-Yenching Institute, and the Asia Foundation. Two years later Chung Chi College was set up by various Protestant churches in Hong Kong, obtaining support from the United Board for Christian Education in Asia and other similar bodies. The United College started in 1956 with the amalgamation of five refugee colleges.

Table 2 gives the actual staff and student numbers of each college at the time of the Fulton Commission.

Consideration of library facilities for the proposed university had preceded the appointment of the Fulton Commission. Early in 1962 Mr. J. D. Pearson, librarian of the School of Oriental and African Studies, University of London, visited Hong Kong to advise the three colleges on the development of their libraries as components of a library system for the proposed university. His report, dated April 12, 1962 gives a very detailed picture of the admittedly inadequate library facilities of the three colleges. The bookstocks at the time of his report are shown in Table 3. The three colleges were only subscribing to some 500 titles of periodicals between them (with some duplication), and these included "magazines and newspapers which might more properly be kept in common rooms." The Pearson report looked forward to a time when the three colleges would be together on one campus (a development which will be completed in 1973), and recommended one joint library for New Asia and United College, with Chung Chi retaining its separate facilities. The idea of a central reference and research library for the univer-

TABLE 3

Bookstocks of the Chinese University of Hong Kong, 1962, by Colleges

	Chinese	English	Total
Chung Chi	43,665	14,191	57,856
New Asia	80,308	11,401	91,709
United	21,661	7,899	29,560

sity, with each college retaining its own undergraduate facilities, was rejected on the grounds of expense and the difficulty of distinguishing between teaching and research materials.

These proposals, however, met with strong opposition from the two colleges which wished to retain their identities in regard to libraries as well as other facilities, and in March 1964 a further report by Dr. R. C. Swank, dean of the School of Librarianship, University of California at Berkeley, and Mr. Eugene Wu, curator of the East Asian Collection, Hoover Institution, reached a different conclusion. They recommended that each college should continue to develop its own library but that there should also be a central university library, since "the triplication of specialized, costly and often little used research materials patently cannot be afforded in the colleges." However, they conceived of the four libraries as forming a carefully coordinated system.

This, then, was the policy to be followed in the development of libraries within the Chinese University. The central library was established in April 1965 and the first university librarian, Dr. Alfred Kai-Ming Chiu, formerly librarian of the Harvard-Yenching Institute, was appointed in September 1966. The University Library occupied successive temporary accommodation in Kowloon and in part of the Benjamin Franklin Centre on the new campus, but moved into its fine new building in 1972. Coordination is achieved by the operation of a Central Library Committee, which in cooperation with the boards of studies in the various subject fields carefully allocates the book fund, and is supported at the administrative level by Library Administrative Committee consisting of the university librarian and the three college librarians. The University Library has established a central union card catalog incorporating the holdings of all four libraries, and has published a *Union Catalogue of Serials* (May 1969; supplement December 1970). A centralized cataloging unit was established in October 1969, utilizing the Library of Congress classification in place of the various schemes previously used for different parts of the library system. The Swank-Wu report recommended a library budget of 5 to 6% of university expenditure (excluding capital outlay), and figures given in the reports of the University Grants Committee, set up in October 1965, indicate that this has been consistently achieved since the academic year 1967–1968. From this source, in 1971–1972, the library resources of the Chinese University are shown as 445,604 volumes, there were 931 readers' places for a student population of 2,756, and the book fund expenditure amounted to $912,556.

The impressive results of the first attempt at a comprehensive survey of library facilities in the colony were published by the Hong Kong Library Association in *Libraries in Hong Kong: A Directory*, compiled by Miss Kan Lai-bing, 1963. (A new edition is projected for 1973.) This listed 215 libraries in the following categories: those open to the public, 35; government departments and British Armed Forces libraries, 32; schools, colleges, and universities, 120; children's libraries, 18; special libraries, 14; institutes, clubs, and societies, 12; also 1 mobile library and 1 private library (some are listed in more than one category). A detailed analysis of these, and particularly of the school libraries, was carried out by T. A. Chow, later senior librarian of the Urban Council Public Libraries, in an essay presented for the diploma course in librarianship, University of New South Wales, 1966. This pointed out that although the total number of libraries was quite large, few were available to the public, many were very small and had inadequate financial support, and very few were administered by professional librarians.

Of the government department libraries, mention has already been made of the three oldest, those of the Supreme Court, the Royal Observatory, and the Botanical and Afforestation (now Agriculture and Fisheries) Department, which in 1962 contained 5,000, 5,000 and 1,500 volumes, respectively. The largest departmental library was that of the Education Department, then containing just over 10,000 volumes, which in 1967 was transferred to the City Hall Library. Other large collections were those of the Legal Department (10,000 volumes), the Colonial Secretariat (8,625 volumes), and Stanley Prison (over 6,000 volumes). Large collections of illustrations were included in the libraries of the Commerce and Industry Department (3,000 photographs) and the Information Services (2,500 photographs and 450 films), while the reference library of Radio Hong Kong included phonograph records and tape recordings. All these were administered by clerical staff without any professional supervision, and although the government set up a committee in March 1962 "to make recommendations for the coordinated development of library services" which reported a year later, no notable improvements resulted. Both the Colonial Secretariat Library and that of the Secretariat for Chinese Affairs (now the Secretariat for Home Affairs) contain materials useful for the study of Hong Kong history, while the Supreme Court Library was the principal depository for English language newspapers published in Hong Kong, though these are now available on microfilm in the City Hall Library.

The educational system of Hong Kong of necessity has two main streams, in one of which the main language of instruction is Chinese, and the other English. Apart from six government and one private primary school, most primary education (6–12 years) is in Chinese, with English taught as a second language. While most primary schools have libraries of a sort, none are of any size, few have adequate financial support, and the teachers in charge may not have any particular interest or qualifications for this chore, additional to their normal duties. At the secondary level, there are four types of school, generally identified as Anglo-Chinese (grammar schools), Chinese middle schools, technical, and secondary modern. In the first, English is the main language of instruction with Chinese (or occasionally French) as the second language, and a 5-year course leads to the English school leaving certificate. Some of these a 2-year sixth form course leading to the matriculation standard of the University of Hong Kong. In the Chinese schools the course leading to Chinese school leaving certificate is also of 5 years, but the sixth form course leading to the Chinese University matriculation is 1 year only, since the degree course is a year longer. Chow's survey of the school libraries in 1963 directory revealed that only twenty-six (out of 115 which responded) reported having a regular book budget, and these included "the best schools in Hong Kong." Excluding one primary school with a collection of 1,164 volumes, the remaining twenty-five varied in size from 3,000 to 24,000 volumes, in the majority of which the preponderance were in Chinese. Only twelve had more than twenty volumes per student, and twenty-three had less than three. The comments on staffing of primary school libraries apply to the majority of secondary schools also, but with several honorable exceptions, among which may be mentioned the Diocesan Girls' School (7,000 volumes), King's College (17,000), and Queen's College (10,000).

At the postsecondary level, apart from the two universities, the most important institution is the Hong Kong Baptist College, which started in 1956. In 1961 its collection was over 13,000 volumes, and 10 years later had grown to 30,000. Associated with the Baptist Theological Seminary is the Rankin Memorial Library, mainly of religion and philosophy. Another important postsecondary institution, the Hong Kong Polytechnic, is still in the development stage, growing out of the former Hong Kong Technical College with a site at Hunghom in Kowloon. The first librarian, Mr. Barry Burton, was appointed in April 1973, and faced the formidable task of building up adequate library facilities for 4,000 full-time and 12,000 part-time students in 2 years. A substantial grant has been provided by the British Government toward this end. Two other special collections should be mentioned: first, that of the Union Research Institute, which specializes in materials relating to Communist China; and second, the Dr. Sun Yat-sen Library (formerly the Mencius Union Library) of over 90,000 volumes, the greater part of Chinese, which is devoted to the dissemination of Chinese culture. The first is primarily for the research staff of the institute, but the latter is open to the public.

Little mention has been made of Chinese libraries as opposed to those which combined Chinese and Western language materials. Although their history should in the nature of things be the longer, little appears to have been recorded of such collections in Hong Kong. There is mention of a library founded by T'ang Fu-hsieh at Kam T'in in the New Territories about A.D. 1000, but no details are known. Coming to the present century, apart from the Fung Ping Shan Library of the University of Hong Kong, the next most important collection is the Hok Hoi Library of some 32,500 volumes, transferred to the City Hall Library in July 1962, and forming the nucleus of the latter's reference collection of classical Chinese works. The Hok Hoi Library was founded in 1923 by three scholars, and monthly lectures are still given to the public in continuation of the original scheme.

It is evident that considerable advances in librarianship have been made in the colony, mainly during the past 20 years, and it was inevitable that at some stage the growth of the profession would lead to the establishment of a library association. A preliminary meeting for the formation of a Hong Kong Library Association was held on April 3, 1958, and at the first annual general meeting in December of the following year the total membership was forty-one. This has since grown to over 100, though the active membership is about half that number. As the association is the subject of a separate article in this *Encyclopedia*, it suffices here to say that the HKLA has been particularly active in the fields of library training, in publications mainly of the newsletter type to keep librarians in the colony aware of local developments, and in holding seminars and symposia on various topics within the field of librarianship.

Credit for initiating the first training courses in librarianship in Hong Kong must be given to the Extra-Mural Department of the University of Hong Kong, which remains the most effective training body in the colony. In 1960 the first course entitled "Library Techniques I" was given by Mrs. Betty Gleave, who followed it up with "Library Techniques II" in 1961. In that year courses in Cantonese were also instituted. In the following 2 years a total of nine courses, some of them duplicated, were run, until the Joint Certificate course offered by the department in conjunction with the HKLA was initiated in 1964. This has been given annually, and the number of students has in many years required duplicate courses. The experiment of conducting one course in Cantonese in 1967 has not been repeated, mainly because of examining difficulties, but also because the Extra-Mural Department of the Chinese University of Hong Kong has offered courses in librarianship since 1967. Although these latter are not yet recognized by the HKLA, attempts to establish a similar joint sponsorship are expected to be shortly concluded.

The syllabus of the Joint Certificate course, revised in 1967, was originally drawn up in consultation with the Library Association, London and with certain local employers of library staff, and was aimed at giving a basic training at the subprofessional level. The course comprises 84 hours of lectures plus practical work and instructional visits to various types of libraries, at the end of which there is an examination requiring three papers, each to be written in 2 hours. In the 7 years in which the course has been offered, 225 candidates have taken the examination and 123 passed.

In 1967 the Extra-Mural Department of the University of Hong Kong initiated a further course to prepare students wishing to sit for the Part I Professional Examination of the Library Association, London. This comprises 180 hours of lectures and practical work. Although many of the students taking this course intend only to improve their knowledge without sitting for the examination, a good proportion of those who have taken the examination have been successful.

The question of whether Hong Kong should support a full-time professional library school has often been debated, but the consensus of opinion so far has been that the time is not yet ripe. It could become a viable proposition only if it were able to attract students from overseas, and there are various reasons, including language difficulties and political barriers, which make this unlikely. Thus the majority of local candidates go overseas to the United States and Canada, Great Britain, Australia, or elsewhere for professional education in librarianship. Some pay for themselves, others obtain scholarships from the British Council and other bodies, and a few are sponsored by their employers. In 1960 there were only seven professional librarians employed in Hong Kong; six in the university, plus the city hall librarian. Today there are at least thirty, and the number continues to grow.

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HONG KONG LIBRARY ASSOCIATION

Early History

On April 3, 1958 a meeting was convened by the then librarian of the University of Hong Kong Library, Mrs. Dorothea Scott, to consider the proposal to form a Hong Kong Library Association. Those attending the meeting were asked, in particular, to

> authorize the interim Chairman and Secretary, with such help as they consider necessary, to draft a proposed Constitution to be circulated for comment and approval to all those who signify . . . that they wish to join the Association; to empower the Secretary to receive nominations for Committee members . . . and to circulate ballot papers for election . . . the ballot papers to be counted at the [proposed] Inaugural meeting;

and "to approve that English and Chinese shall be used for conducting the business of the Association."

The meeting—which was attended by some forty persons representing cultural organizations, publishing houses, booksellers, and various categories of libraries, in addition to other individuals with an interest in the project—unanimously agreed to the formation of the proposed association and to the proposals put to it. At the Inaugural General Meeting duly held on September 11, 1958 the constitution of the association, which was originally modeled on that of the Malayan Library Association but which has since been rewritten, was unanimously adopted; a chairman and committee were elected; and the Hong Kong Library Association was born. Thus, characteristically, the association was brought into existence by the efforts and far-sighted vision of a few individuals; and at a time when significant library developments still lay in the future.

The Role of the Association in the Development of Library Services

This is not to say that the association as a body, as distinct from the individual members who compose it, has been instrumental in securing the developments of the last decade. Hong Kong's closely-knit society—which inevitably is reflected in the composition of the association's membership—while affording advantages in some directions, has made it difficult for the views of the association to be completely disassociated from those of its more influential members who have invariably figured prominently in its offices and committees. Since the views of any professional body must inevitably, from time to time, come into conflict with those who are statutorily responsible for the services provided, there has long been a tacit agreement that the second objective of the association, which is "to encourage the establishment and development of libraries in Hong Kong," would be best achieved by leaving the fight for development programs to the appropriate libraries and their staff: the association as a body only taking a hand when officially requested to do so. These self-imposed limitations have meant that the HKLA has not been associated with the library developments that have taken place.

However, there can be no denying the fact that the association, through its activities in the fields of formal and informal education, has been largely responsible for the raising of qualitative standards of library service, particularly in the numerous small libraries which do not have professional library staffs. In 1971 this was taken a step further by the formation of a new subcommittee—the Advisory Committee to Small Libraries—for the provision of professional advice and help to all nongovernmental libraries who feel that they would benefit from such assistance. The initial response to this modest scheme indicates that there is a genuine need for such a service, and it may well be that this will in time become one of the most important functions of the association.

Membership

In its membership, which presently includes five categories—personal, student, corresponding, institutional and honorary—the association has from its inception represented all types of libraries, thus successfully achieving its first objective, which is "to unite all persons engaged in library work or interested in libraries in Hong Kong." From the outset, however, the words "interested in" have been construed as interest of a non-financial nature. For this reason the association, preferring to keep itself an entirely professional body, has never entertained applications for membership from those in the publishing, printing or book-selling industries, despite attempts from time to time on the part of some of its members to induce it to do so. It has never, however, partly out of necessity and partly out of choice in pursuance of its objective, been limited solely to professional librarians, and in the light of the present state of library development in Hong Kong it is hardly surprising that the bulk of its membership continues to be nonprofessional. Although all personal (professional and nonprofessional alike) and institutional members enjoy the same rights and privileges of voting at elections, and of standing for election to office or to the committee, its officers and committee members have invariably, and to an increasing extent in recent years, been professional librarians of considerable standing and experience.

Committees

The governing and executive body of the association is its committee, which consists of a chairman, vice-chairman, honorary secretary, honorary treasurer, honorary librarian, and five other members, all elected annually. However, much of the business of the association is transacted through subcommittees, all of whose members are not necessarily members of the main committee. The number and terms of reference of the subcommittees have varied from time to time depending upon the nature and quantity of business to be transacted, and at present there are subcommittees for education, publications, cataloging, the proposed formation of a Commonwealth Library Association, and for the provision of professional advice and help to nongovernmental libraries.

The original proposal that the business of the association should be conducted bilingually in English and Chinese was never officially adopted in the association's constitution, and official meetings, as opposed to conferences, lectures, and informal gatherings, have from the outset been in English. While this has considerably simplified the transaction of official business, there remains a suspicion that it has contributed towards the conspicuous lack of involvement on the part of those members drawn from purely or predominantly Chinese libraries in the official affairs of the association, and in the general reluctance of such members to stand for election or to assume office. Fortunately, this has not been true of participation in general, and a number of highly successful lectures in Chinese have taken place over the years.

Activities

Although professional education and training for librarianship—the third objective of the association—has always been a topic close to the heart of the association, it was not until 1964 that the first course of formal education under its auspices was offered. Not surprisingly the initiative for this course, which has since been offered annually in conjunction with the Department of Extra-Mural Studies of the University of Hong Kong, came largely from members of the association who were on the staff of the University Library. The enthusiastic response given to these courses, which are aimed at the level of nonprofessional library assistants, has on numerous occasions prompted the suggestion that the association should venture into the field of professional education, in conjunction with either or both universities. Although sympathetic to these suggestions, the association has rightly taken the view that such a step would be premature in the light of the present state of library development in Hong Kong, and that the need for professional librarians in the immediate years ahead would more efficiently and economically be met by individual libraries sending members of their staff overseas for such education.

Most of the other activities of the association have centered around fulfilling its fourth and last objective, which is "to organize meetings, conferences, co-operation with other library associations and such other activities as are appropriate to the attainment of the . . . objects [of the Association]." In its lecture program the association has been fortunate in securing the services of a number of distinguished overseas librarians. This has not only added variety to the program but has also served to widen the outlook of members and minimize the dangers inherent in too much inbreeding. However, by far the most ambitious and successful of the association's activities in this direction have been the various symposia and seminars on topics relevant to the needs of Hong Kong, which have been organized either in conjunction with other bodies, or with speakers drawn from outside the profession. The first of these, in 1964, was on the theme of "Introducing the reader to the library," and was a cooperative effort with the Extra-Mural Department of the University of Hong Kong. In the following year the HKLA had the assistance of the Education Department of the Hong Kong Government in organizing a seminar on "Libraries in secondary schools." To mark the tenth anniversary of the association in 1968, a symposium was held on "Library provision for science and technology in Hong Kong." Although this was not jointly sponsored, speakers included experts from government departments and industry. More recently, in 1970, the association took advantage of a visit by Dr. George Chandler to organize a seminar on "Some international aspects of librarianship."

The association has from the outset been very conscious of the wider world of librarianship and of the importance of library cooperation at the local, regional and international level, as evidenced by its early membership in the International Federation of Library Associations, which it joined in 1960; its attempts to form a regional group of library associations under IFLA; and more recently, its interest in The International Association of Orientalist Librarians and in the proposed Commonwealth Library Association. In 1971 the association's delegate presented a paper entitled "Report on Cataloging of Chinese Names," which was prepared by the association's subcommittee on cataloging, to the Cataloging Committee session of the 37th General Council of IFLA at Liverpool. At the local level the association has been instrumental in implementing the interlibrary lending scheme which now exists in Hong Kong, but its project for a union catalog of periodicals has so far failed to reach fruition, due solely to the lack of the necessary funds.

Publications and Library

The first substantial publication of the association was Kan Lai-bing's *Libraries in Hong Kong: A Directory* which was published in 1963, and a second edition of which is now in preparation. Between April 1963 and November 1965 the association published, at irregular intervals, five issues of a *Bulletin* in mimeographed form, with contributions in English and Chinese. This was superceded by a *Newsletter* similarly bilingual and irregular in publication, and both these publications, which were and are intended solely for domestic consumption, are valuable chiefly as a record of the association's activities. The association's long felt desire for an official journal in printed form carrying substantial articles relevant to the needs and interests of Hong Kong was not fulfilled until 1969 when the first volume of its *Journal* appeared. Although the then chairman expressed the hope that the journal would appear annually this has for the moment been found impracticable, and the intention is now to issue a volume every second year. Volume 2 of the *Journal* appeared in 1971. Both volumes carry contributions in Chinese as well as English.

During the course of its history the association has built up a small collection of books on bibliography, librarianship, and allied subjects, and in recent years has instituted exchange agreements with its journal with a number of libraries and library associations overseas.

Sources

This article is based largely on the minutes and annual reports of the committee and subcommittees of the association; on issues of the *Bulletin and Newsletter;* and on first hand personal knowledge. See also the two volumes of the *Journal of the Hong Kong Library Association,* particularly Vol. 1 which carries the association's constitution; the proceedings of the symposia on "Library Provision for Science and Technology in Hong Kong" and "Libraries in Secondary Schools" as well as an article by Dr. Kan Lai-bing on "Training in Librarianship in Hong Kong."

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