

LIBRARY AUTOMATION FOR CHINESE COLLECTIONS IN WESTERN EUROPE; POTENTIALS AND PROBLEMS[†]

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Sinological studies in Western Europe have a long history. So have the Chinese collections in that region. Old library collections are usually rich in historical materials. Chinese collections in Western Europe are no exception. We can find today in those collections unique and rare materials which do not exist anywhere else in the world, not even in China. If, through automation, these materials are made easily accessible, it will be a tremendous boon to sinological researchers and China specialists.

Although not comparable in size to libraries in China, Japan, or the United States, Chinese libraries in Western Europe with a collection of more than 10,000 volumes number over 30. The total number of volumes in some 50 Chinese libraries in Western Europe can be roughly estimated at 2.5 million, not including periodicals, newspapers and microfilms. This estimate does not include many smaller collections, nor does it include Chinese books integrated in general library collections. If Chinese books in all Western European libraries would be counted, it may be said that their total number of volumes is about equal to the total number of volumes of Chinese books in the U.S.A. and Canada during the year 1967.¹

Some leading Chinese libraries in Western Europe are just

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as big as a major Chinese library in the U.S.; however, European Chinese libraries differ from American ones in several ways.

Firstly, (with the exception of only a few Chinese libraries in smaller countries) national languages are used in cataloguing Chinese-language materials. Different romanization systems are used in different countries; and there are different romanization systems even within one country.

Secondly, there is no uniformity in cataloguing systems of Chinese libraries in Western Europe. Many classification schemes are in use. Many libraries have their own classification schemes for Chinese-language materials. And many classification schemes are of their own design and, therefore, totally unknown to outsiders. There is also no definite or general rule for descriptive cataloguing. Almost every library has its own way of doing things.

Thirdly, the size of the staff of Chinese libraries in Western Europe is much smaller than that of Chinese libraries in America. This is, perhaps, mainly due to their simpler way of cataloguing, their slower growth rate and their smaller circulation.

Fourthly, while most Chinese collections in America can be called a general collection for Chinese studies, most Chinese collections in Western Europe are predominantly collections of traditional sinology. Furthermore, many collections are highly specialized and often contain a very large quantity of materials on a very small and specific subject.

Before we discuss what different problems these differences may create in developing an automation program, we may take a quick glance at the major Chinese collections in Western Europe so as to gain a brief impression of their present situation.

In the 14 countries in Western Europe, extensive Chinese collections exist in nine of them. While the United Kingdom, France, the Federal Republic of Germany, The Netherlands, and Sweden have the larger Chinese libraries, small collections are spread all over Europe. The following is a brief description of major Chinese collections in Western Europe:

1. The United Kingdom

There are undoubtedly more Chinese books in the United Kingdom than in any other country in Western Europe. It is difficult to estimate the size of holdings of Chinese collections in the United Kingdom because Chinese books in various numbers can be found in so many libraries. Due to the large size of the Chinese population, large numbers of Chinese books can be found not only in academic libraries, but also in public libraries and private collections.

The leading collections in the United Kingdom are:

1) The British Library. Ever since the Earl of Aberdeen presented his collection of Chinese books to the British Museum in 1846, the British Museum has been the best-known Chinese collection in Europe. (Its book collection has now been separated from the museum and renamed the British Library).

It is known to have held a large number of rare books, oracle bones, Tun-huang manuscripts, and the Morrison Collection. In addition, it is the depository library of the British Commonwealth and, therefore, it receives automatically all the Chinese publications printed in Singapore, Malaysia, Hong Kong, and other BC countries. It has now over 70,000 volumes of Chinese books and over 3,500 periodicals.

2) The Library of the School of Oriental and African Studies of the University of London. With more than 100,000 volumes, it is perhaps the largest Chinese library in the United Kingdom. It received the first collection of Chinese books as early as 1824 when the first Protestant missionary to China, Robert Morrison, sent back from China about 15,500 volumes. This collection includes about one hundred Ming editions as well as many blockprints of the 17th and the 18th centuries. Many British old China hands also gave their collections to this library, including a very large collection from Reginald Johnston, who was once tutor to Emperor P'u Yi. The library also holds more than 90 private archives of old China hands.

The acquisition policy of this library now stresses materials on modern and contemporary China. The library of the Contemporary China Institute has been merged into this library. The open shelves and the modern building of this library make their materials very easily accessible.

3) Cambridge University Library. This is one of the best libraries for the study of traditional sinology. With more than 25,000 bound volumes in about 2 kilometers of shelves, it contains the private collection of the grand old man of the Western sinology, Sir Thomas Wade, which was given to the library in 1886. It has also about 3,500 volumes of *fung-chih* (local gazetteers) and about 150 Chinese genealogical records.

4) Oxford University. The best-known special collection in the Chinese library is the Backhouse Collection, which contains about 650 titles, including about 120 Ming editions. Another collection called Serica Collection has about 2000 titles ranging from the 17th century editions to the early 20th century. Like Cambridge, Oxford also stresses traditional sinology.

Apart from the Chinese collection at the Bodleian Library, there is at Oxford the Oriental Institute Library which has about 10,000 Chinese volumes and is a research library for studying Chinese art.

5) Edinburgh University Library. The Chinese Studies Collection of the Edinburgh University Library is relatively young in comparison to the above-mentioned Chinese collections in the United Kingdom. It started as late as 1966. However, its growth rate is probably the greatest. It now has already about 50,000 volumes. It also is a well-balanced collection with materials on both the humanities and social sciences.

6) The University of Leeds. With emphasis on modern and contemporary literature, the Brotherton Library of the University of Leeds also keeps the collection of the Royal Asiatic Society which contains mainly research materials on the 17th and 18th century China. It also has a collection presented by Professor Owen Lattimore.

In addition to the above-mentioned six major Chinese collections, several other universities and research institutes have Chinese books. For example, the Oriental Section of Durham University Library has about 10,000 Chinese volumes and more than 260 Chinese magazines. And the Percival David Foundation of Chinese Art has a fair collection of publications on Chinese ceramics.

2. France

With the only exception of the Sinological library of Lyon University, all major Chinese collections in France are located in Paris. It is, therefore, rather convenient to coordinate an automation program if all collections cooperate. However, as library automation in general is less advanced in France than it is in some other countries in Europe, there may be more technical problems in developing an automation program for the Chinese collections there.

1) Bibliothèque Nationale. The Oriental Section of the National Library of France received its first large collection of Chinese books in 1908 when Paul Pelliot brought from the Orient more than 8,000 volumes of Chinese books. Pelliot also gave the library the well-known collection of Tunhuang manuscripts. The holdings of this Chinese library include now more than 135,000 volumes of books, more than 700 periodicals, and about 6,000 reels of microfilms, in addition to manuscripts.

2) Institut des Hautes Etudes Chinoises, Collège de France. This is the largest Chinese collection in France, perhaps also in Western Europe, in terms of the number of volumes. With about 2,500 kinds of *ts'ung-shu* (collected works) and 4,211 *fang-chih* (local gazetteers), it contains a total of about 300,000 volumes (*pen*) of books and about 1,100 periodicals. Although it includes works on all subjects, it is predominantly a sinological collection with emphasis on history, literature, social history, religion, philo-

sophy, and historical geography, but not art.

(3) Centre de Recherche et de Documentation sur la Chine Contemporaine. As the Institute of Advanced Chinese Studies mentioned above emphasizes traditional sinological materials, this center concentrates on contemporary China, especially the political and social sciences on China today. It has about 100 current Chinese periodicals and about 6,000 volumes of Chinese books.

4) Bibliothèque de l'Ecole des Langues Orientales. This is the most important school for teaching the Chinese language in France. Its library ranks number three in size in France and contains more than 30,000 volumes.

5) Bibliothèque sinologique de l'Association Universitaire Franco-Chinoise, Université Jean Moulin Lyon III.

The most important materials in this library are the publications of Chinese labor students published during and after the First World War. The library also has more than 4,000 Chinese books in over 10,000 volumes published mainly during the second and the third decades of the 20th century. Due to the close relationship between this university and China, the collection holds some unique materials for the study of Sino-Franco cultural relations.

There are several smaller and specialized Chinese collections in France that are important to subject specialists. For instance, Musée Quimet is well-known for its collection of Chinese art and archaeology. And the Center for the Study of Popular Religions in China has a unique research collection on Taoism, including many audio-visual materials. The Chinese collection of the 7th Paris University is used by many students. Adding all those large and small collections together, Paris has probably the largest concentration of Chinese books in Europe.

3. The Federal Republic of Germany

There are more new Chinese libraries in Western Germany

than in any other country in Western Europe, and the growth rate of Chinese libraries in Western Germany is also the greatest. In sharp contrast with France where Chinese collections are concentrated in Paris, Chinese collections in Western Germany are scattered all over the country. Therefore, an automation program which provides a centralized bibliographical control of Chinese-language materials will be more helpful to sinologists in Western Germany than it will in any other major country in Europe.

1) Staatsbibliothek Preussischer Kulturbesitz. This is the national library of the Federal Republic of Germany. Its East Asian department has over 80,000 volumes of Chinese books and about 2,500 Chinese magazines. Its printed cards reproduced in book form are distributed periodically to many libraries in Europe.

2) Bayerische Staatsbibliothek. The Far Eastern Collection of the Bavarian State Library is the largest Chinese collection in Western Germany. With more than 27,000 titles in about 130,000 volumes, the collection is especially strong in books of the Ch'ing Period. It has more old Chinese books than any other library in Germany.

3) Seminar für Sprache und Kultur Chinas, Universität Hamburg.

This is the largest Chinese collection among all German universities and has about 70,000 volumes. Its strongest feature is the history of the Ming Dynasty.

4) Institut für Asienkunde, Hamburg. The main purpose of this institute is to study the social, political, and economic conditions of contemporary China. Therefore, its library has a rather large number of current periodicals but a relatively small book collection.

5) Universität München.

The Institute of East Asian Studies of Munich University has a Chinese collection of about 30,000 volumes. It has a special collection of Chinese translations of German books which can

be used as source materials for studying German cultural influence on China.

6) Monumenta Serica. Started originally in China, this well-known collection is now located in St. Augustin. The collection has about 60,000 volumes but most of them are pre-1937 publications.

In addition to the abovementioned collections, rather extensive Chinese collections can be found in the Universities of Bochum, Bonn, Cologne, and the Free University of Berlin. Bochum is strong in modern China. Bonn has a well-organized collection of 50,000 volumes. Cologne has a unique collection of Manchu-language and early Ch'ing publications. The Free University of Berlin is strong in social science.

4. The Netherlands

There is only one sinological institute in The Netherlands, i.e., the Sinological Institute of Leiden University. Its library is the only Chinese library in the country. To avoid waste of unnecessary duplication, The Netherlands concentrates its Chinese books in one library and the result is a general collection of over 170,000 volumes of books, over 3,000 periodicals, about 5,000 reels of microfilms, and many audio-visual materials, including satellite photographs. The library provides materials for the study of both traditional sinology and modern China, and both humanities and social sciences. It includes also the collection of the Documentation Centre for Contemporary China which specializes on mainland China. It has a total of 2.6 kilometers of book shelves of Chinese books and periodicals, not counting maps, vertical files, and photographs which are kept in special cabinets. Covering all major subjects and periods, it is the largest all-round general library for Chinese studies in Western Europe.

Among special collections in this library, the best-known is Dr. Robert H. van Gulki's collection of old (thread-bound)

Chinese books which number about 10,000 volumes. The collection contains many valuable books on literature, art, history, classics, ancient music, and, most unique of all, many traditional novels and forbidden books.

The Library of the Sinological Institute at Leiden is also responsible for international exchange of Chinese publications for The Netherlands. It receives currently more than 700 Chinese periodicals, mostly through exchange.

Besides the Sinological Institute, the library of Delft Technical College collects some Chinese scientific and technical journals, the Library of the International Court of Justice has some Chinese-language books on international law, and the Ethnological Museum at Leiden has some art books.

5. Italy

There are no larger collections of Chinese books in Italy. However, the Seminar of Asian Studies of the Oriental University at Naples has a long history. So does the Library of the Vatican. Both the Oriental Institute at Venice and the Chinese Department of the University of Venice have Chinese collections. The Italian Institute of the Middle and Far East in Rome also has Chinese books.

Because of the small number and the size of Chinese collections in Italy, they will be the easiest to be computerized by an automation program.

6. Scandinavian countries

In terms of bibliographical control of Chinese-language materials, Scandinavian countries are ahead of any other region in Europe. A union catalogue of Chinese collections in Scandinavian countries has already been completed and will be published

in microfiche form very shortly. This is the first union catalogue of Chinese-language materials in any country or region in Europe. It can be used as a basis for future automation of Chinese libraries in those countries.

Of the three Scandinavian countries, Sweden has the largest number of Chinese books. And Sweden is trying to merge her four largest Chinese libraries into one. When this project is completed, the new King Gustaf Adolf VI's Library for Far Eastern Research at Stockholm will have more than 1,000 meters of shelves. Only two Chinese collections of significance will remain outside this library: the private collection of the late Bernhard Karlgren at Göteborg University and the Research Policy Institute of Lund University which collects scientific and technical publications from China.

In Denmark, most Chinese books are in the Chinese Division of the Royal Library, the Scandinavian Institute of Asian Studies, and the East Asia Institute of the University of Copenhagen. All these three Chinese collections are housed in the same building.

In Norway, most Chinese books are in the Royal Library at Oslo, although the East Asia Institute of the University of Oslo also has a small collection.

The Scandinavian Institute of Asian Studies published a *Guide to East, Southeast, and Central Asian Library Collections in Scandinavia*, in 1976, which provides all the basic information on each library.²

7. Switzerland

The largest Chinese collection in Switzerland is in the East Asian Seminar of the University of Zürich. It has more than 40,000 volumes of books and about 200 periodicals. Its strongest features are philosophy and religion.

The UN and other international organizations at Geneva

have in their libraries Chinese-language translations of their important documents and publications.

Other universities and research institutes may have Chinese books too.

8. Belgium

The three most important Chinese collections in Belgium are the Belgian Institute for Advanced Chinese Studies, the New Louvain University and Louvain University. The first two are strong on Chinese classics and Buddhism. The last one, which started only two years ago, has an extensive private collection of a former Catholic missionary in China.

Spain and Portugal have no extensive Chinese collections, but have some valuable old Chinese books in small collections.

The National Library of Austria in Vienna also has a good collection from a former Ambassador to China, who was in China during the early part of the 20th century.

There must be many special collections in Western Europe, waiting to be discovered. Due to the long-standing and close cultural relations between China and Western Europe, it is reasonable to assume that some of those collections will contain valuable historical materials.

The above is a very brief survey of the present situation of Chinese collections in Western Europe. How can these collections be automated? Before we can answer this question, we must first look at the present status of library automation in Western Europe.

Time has not allowed me to survey the automation of libraries in Western European countries other than the United Kingdom and The Netherlands. In the United Kingdom, in 1977 the BLAISE was started (British Library Automated Information Service) which has now become one of the largest commercial automation services in the world. The central database of BLAISE

consists of several files. The most important are the four MARC (Machine Readable Cataloguing) files, namely, the current and retrospective UKMARC, and the current and retrospective LCMARC. These four files contain nearly 2 million records of books and some serials catalogued for the British National Bibliography (BNB) since 1950 and for the US Library of Congress since 1968. They are catalogued according to Anglo-American Cataloguing Rules and are searchable on line.

BLAISE operates on IBM 370 computers located at Marlow, Essex. It is accessed by teletype – compatible terminals and the public telephone service. It publishes a regular newsletter which keeps subscribers informed of the most recent developments. It also has a Help Desk which gives advice on individual problems during working hours.

The two major functions of BLAISE are 1) to provide an automated information retrieval service and 2) to facilitate general library housekeeping routines from cataloguing to bibliographic checking. These functions are carried out by a combination of online and offline computer processing.

In The Netherlands, the National library automation system is called PICA (Project for Integrated Cataloguing Automation). Beginning in 1969, it was started as a cooperative project (between the Royal Library and several university libraries) to study the possibilities of an automated online catalogue system and the application of other computerized library procedures in academic libraries. The research period ended in 1975 and then the PICA project was started to perform the limited functions of (1) increasing the cataloguing efficiency by using machine-readable title descriptions from national bibliographies, (2) obtaining machine-readable "own" title descriptions as a basis for further automated library procedures, and (3) constructing a computerized union catalogue for participating libraries by adding book numbers and other local information to the descriptions.

The rapid growth of the automation program strains the capacity of the original system. A new system, the PICA-II,

was introduced in 1979. This new system has more advanced output and searching facilities, and has a capacity of about 60,000 transactions per day. With this new system, PICA decided to develop its own software and run its own computer center. It also decided to install a new operating and database management system, although using the same PDP 11/70 hardware.

The database of PICA holds now about 1.2 million titles. The number of books catalogued via the system is about 450 titles per day. In the middle of 1980, 8 libraries were connected to the system and about 40 terminals were installed. Probably four more libraries will be connected very shortly.³

The experience of BLAISE and PICA, seems to indicate that there is no great difficulty in developing an automation system for Chinese libraries in Western Europe. However, the problems involved are many and some are not easy to solve.

First of all, there is the technical problem. By "the technical problem", I do not mean the hardware. It is the problem of changing technical services in the library in preparation for automation. Cataloguing rules have to be revised. A common format has to be agreed upon. A number of things concerning processing will be affected. Let us take the case of romanization as an example. Some libraries have shifted from Wade-Giles to *pinyin*. Some have not and will not. French libraries use French romanizations. Chinese libraries in some other countries may use their own romanizations. Some conversion programs have to be made if the automation program is going to use romanized entries.

The second problem is personnel. The size of the staff of almost every Chinese library in Western Europe is small, very small by Chinese and American standards. The number of trained Chinese librarians working in those libraries is also very small. It is very difficult and extremely costly to run an automation program for Chinese libraries without trained Chinese personnel. Since European library schools have produced almost no qualified Chinese librarians, the Chinese personnel needed for the automa-

tion program will have to be imported from abroad.

The third problem is financial. The initial cost of equipment may not be too high. But the maintenance of an automation program, especially the personnel, can be too expensive for Chinese libraries which usually have rather small budgets. One possible way of reducing the financial burden is to have the program connected with a larger existing system. However, the feasibility of such a program depends on many factors and conditions. At this moment, there is no system that can serve all the major Chinese libraries in Western Europe. And no major Chinese libraries are ready to be integrated into a large automation system.

To summarize, we have in the Chinese collections in Western Europe a rich treasure of research materials for Chinese studies. To open up this treasure and make its contents easily accessible to researchers will be of tremendous importance not only to sinological scholarship but also to the spreading of Chinese culture in the Western world. Automation of those Chinese collections will make this possible. Automation of library service is quite advanced in Western Europe as we can see from BLAISE in Great Britain and PICA in The Netherlands. The possibility and potential of automation for the Chinese collections in that region are there. The challenge is great. Whether and when the sinologists and librarians are ready to meet this challenge is difficult to say. However, as the problem of automation for Chinese libraries is increasingly receiving international attention as evidenced by this conference, I am hopeful that sooner or later automation will come to Chinese libraries in Western Europe. And, with the help of my fellow Chinese librarians in all parts of the world, especially those in Taiwan, it may come much sooner than expected.

References

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