BULLETIN OF THE EUROPEAN ASSOCIATION OF SINOLOGICAL LIBRARIANS

NUMBER 3   JANUARY 1988

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SIXTH & SEVENTH EASL CONFERENCES

summary of proceedings, by David Helliwell (Bodleian Library, Oxford).

The sixth EASL conference was held at the Istituto di Fisica Matematica Università di Torino on 30th August, 1986; the seventh conference was held in the British Library, London, from 27th to 29th August 1987, and the first day of the conference consisted of a visit to Oxford, including the Bodleian Library, the Ashmolean Museum, and the Oriental Institute Library.

The production of a revised European union list of Chinese periodicals is one of EASL's principal aims, and was the main theme of both conferences. The unavoidable absence from Turin of J-M Streffer, who is instrumental in the project, had prevented substantial progress at the sixth conference, but at the seventh conference some most significant decisions were taken, and the course of the project's future was defined. These developments are summarised separately below.

At both conferences there was some discussion of matters relating to automation, a subject in which members have become keenly interested, and particularly of the RLIN and OCLC CJK systems which members had seen demonstrated at the British Library Chinese Studies Colloquium which had preceeded the seventh conference. Aside from the experimental use of RLIN at the British Library and of OCLC at the Staatsbibliothek in Berlin, no European library had plans to install any CJK automation. Both RLIN and CJK were considered to be insufficiently developed at present for any practical application in Europe. It was decided that the bulletin would be a useful medium for announcing further developments in this field.

There had been a delay in the production of the third issue of the bulletin, largely owing to a shortage of material, but members were firmly of the opinion that the bulletin should be kept alive. It would continue to be edited by David Helliwell in Oxford and printed and circulated from Berlin by J-M Streffer. Members were reminded of a previous understanding that contributions may be made in any European language that is written in the Roman alphabet. As the address list of European institutions with holdings of Chinese books had become out of date since it was published in the first issue of the bulletin, the editor would produce a revised version for publication in the next issue.

It was noted that the German "Blauer Leiverkehr" system for arranging interlibrary loans operated more efficiently in the case of Chinese materials than other systems currently in use elsewhere. J-M Streffer would write a description of this system for publication in the bulletin. The Sinologisch Instituut in Leiden was invited to consider participating in the system as a lending member.

It was decided that David Helliwell should continue to hold the office of chairman for the time being.

Members noted with satisfaction the close connexion that had been established with EACS, and expressed the hope that librarians would continue to be represented on the EACS board, which would be kept fully informed of EASL's activities. However, it was felt that future EASL conferences would not necessarily be held in the same place as those of the EACS. The chairman was asked to seek affiliation with LIBER (Ligue des Bibliothèques Européennes de Recherche).

It was decided that the eighth EASL conference would be held in Krakow, immediately before the EACS conference in Weimar. Should it prove impossible to make the necessary arrangements, the chairman and J-M Streffer would try to arrange for the conference to be held in East Berlin.

EASL SERIALS PROJECT

current status as defined in the minutes of the seventh conference, by
David Helliwell (Oxford).

1   This endeavour would henceforth be known as the "EASL Serials
    Project".

2   On behalf of EASL, the chairman would formally request the director
    of the Staatsbibliothek in Berlin and Dr Hartmut Walravens, the
    director of ZDB, to act as hosts and editors of the project, add
    non-German locations to ZDB, and provide all participating
    libraries with output.

3   Subject to the reservations outlined in 4 below, members agreed
    unanimously to participate, and pledged their enthusiastic support
    for a project that held promise of very great advantages in the near
    future.

4   Reservations were expressed on the following points:

    4.1   The decision had not yet been taken by RAK to change the
          official German standard for the romanisation of Chinese
          from Wade-Giles to Pinyin. Whilst it was confidently
          expected that the decision would be favourable, an adverse
          decision would make it impossible for EASL to participate,
          as members were overwhelmingly of the opinion that the use
          of Wade-Giles was now out of the question for a project of
          this kind.

          [It appears that towards the end of 1987, RAK agreed to change
          the standard, but only for the cataloguing of periodicals - a
          decision which is therefore most favourable to the EASL Serials
          Project. More information on this subject will follow. Ed.]

    4.2   On examination of some samples of printed output, it was
          noted that syllables were separated by hyphens, which were
          ignored for filing purposes, the filing being by letter
          rather than by syllable. John Cayley stressed the
          importance of keeping each syllable distinctly defined in
          the computer file, even if the output was filed by letter.
          Some members felt that the system of filing by letter was a
          serious disadvantage, and sought assurance that output filed
          by syllable would be available. J-M Streffer agreed to seek
          clarification of these matters.

(continued on next page)

5

5 The timetable for the development of the project was outlined as follows:

> 1987 October-November: RAK decision on Pinyin.
>
> 1988 January: input of Staatsbibliothek holdings to begin; conversion of existing Wade-Giles records to Pinyin to take place concurrently.
>
> 1988 August: sample output to be examined by EASL; EASL members to be briefed on input method.
>
> 1988 December: input of Staatsbibliothek holdings of current titles (approximately 4,000-5,000) to be complete; first output on microfiche.
>
> 1989 January: input of (British) China Library Group union list to begin; input of other non-German locations to begin; input of dead titles (including entire 1972 union list) to begin.

6 In the first instance, input of material in non-German locations would be made from lists supplied from each participating library. Members were therefore urged to keep any lists currently in progress fully up to date. The project would depend entirely on the submission of material by each participating library: there could be no question of hiring a travelling librarian to gather material. Members without serials lists were therefore urged to compile them. Following the initial incorporation of such lists into the database, notification of additions and changes would probably be made by means of simple printed forms. The exchange of information by machine was considered rather too advanced a proposition for members to contemplate at this stage.

ANNOUNCEMENTS

The GEST ORIENTAL LIBRARY AND EAST ASIAN COLLECTIONS of PRINCETON
UNIVERSITY has recently completed a two year project to microfilm rare
Chinese books (pre-1644) through the support of a U.S. Department of
Education Title II-C grant. Some 202 titles in 13,144 volumes have been
filmed on silver halide film, all of which may be purchased from the
Princeton University Photoduplication Services Department. Among the
titles filmed are the *Chi sha ta tsang ching*, the *Ta ming shih lu* and
other unique or very rare works on religion, history and literature. A
brief list of the works filmed can be obtained from:

> Gest Oriental Library and East Asian Collections,
> 317 Palmer Hall,
> Princeton University,
> Princeton,
> NJ 08544,
> U.S.A.

EASL offers its congratulations to the GEST ORIENTAL LIBRARY on the
publication of the first three issues of *The Gest Library Journal*, which
can be obtained from:

> The Friends of the Gest Library,
> East Asian Studies,
> 211 Jones Hall,
> Princeton,
> NJ 08544,
> U.S.A.

The annual institutional subscription, including both issues, is
US$25.00, and should be paid either by international money order or
through a U.S. clearing house bank.

THE EAST ASIAN COLLECTIONS at the Royal University Library and the East
Asian Institute of Oslo University were merged on 1st June 1987, and
placed in the Faculty of Arts Library, where they are located in the
basement of the main reading room, called the Sophus Bugges Lesesal.
There will be altogether 800 metres of books, and the strengths of the
collection lie in it holdings of modern Chinese literature, and in the
Tibetan Canon. In the former, the emphasis is on the literature and
periodicals of the Republican period, and in addition, a collection of
cartoons and cheap illustrated books is gradually being built up. The
Tibetan collection comprises 1,377 leaves of Bon literature, plus a
complete edition of the Kanjur and Tanjur. We also attempt to cover the
Dunhuang field. The librarians in charge of these collections are

Elisabeth Eide (Chinese), Per Riis (Tibetan and Japanese), and Ellen Røer Ellefsen (Assistant), and the address of the library appears in the appendix to this issue of the EASL Bulletin.

THE BRITISH LIBRARY will hold a COLLOQUIUM ON RESOURCES FOR JAPANESE STUDIES at the School of Oriental and African Studies in London from 14th to 16th September 1988, immediately preceding the conference of the European Association of Japanese Studies, which is being held at Durham from 19th to 22nd September. The event will follow the model of last year's Chinese studies colloquium, and papers will be read on the following subjects: resources for Japanese studies in Britain and abroad; printing, publishing, and the art of the Japanese book; and current developments in automation and in co-operative ventures. Further details can be obtained from Yu-Ying Brown, who is secretary to the colloquium and head of the Japanese section at the British Library.

The STAATSBIBLIOTHEK PREUSSISCHER KULTURBESITZ in BERLIN will have the trial use of OCLC CJK for a period of 6 months commencing in January 1988.

LIBRARIANS

Just over a year ago, the editor received the following letter from Mr John Lundquist, chief of the Oriental Division of New York Public Library, concerning our founder JOHN MA. Owing to the late appearance of issue no.3 of the bulletin, the news is a little stale; but as information travels so slowly among us, the letter is here reproduced in full:

"I am pleased to inform you that Mr. John T. Ma has been appointed the Chinese librarian at the Oriental Division of the New York Public Library this month [October 1986].

As a veteran Oriental librarian, Mr. Ma will bring into this Division many years of experience in four leading academic libraries in the United States and Europe --- Columbia, Cornell, Stanford, and Leiden.

The Chinese collection of the New York Public Library is almost as old as the Library itself which celebrates its 75th anniversary this year. In keeping with the rising academic and public interest in China, the New York Public Library has in recent years been making great efforts to strengthen its Chinese collection. Mr. Ma will be responsible for the development of this collection.

In carrying out this responsibility, Mr. Ma will need all the help and support from his fellow librarians and from all related institutions in the United States and abroad. Your support will be deeply appreciated not only by me, Mr. Ma, and all other staff members of the Oriental Division, but also by the large number of readers of the New York Public Library. We look forward to your kind cooperation."

Mrs LIANG LIEN-CHU has been appointed librarian at the Needham Research Institute, Cambridge, following the resignation of Carmen Li, who has gone to the United States. Mrs Liang is a scientist by training, having originally taken a degree in mathematics at London University. In recent years she has been collaborating with the *Science and Civilisation in China* project, and will continue to do this work concurrently with her library duties. At present she is doing research on the history of Chinese hospitals as part of the section on medicine in volume 6 of *Science and Civilisation in China*.

Note: Would members please keep the editor informed of any appointments, resignations, or other changes relating to library staff.

A BRIEF HISTORY OF THE CHINESE COLLECTION IN THE BAYERISCHE STAATS-BIBLIOTHEK, MUNICH

by Renate Stephan.

The Chinese collection in the Bayerische Staatsbibliothek has a long history. The first mention of Chinese books in the Library seems to go back to a handlist dated 1610. The acquisitions of that time were sporadic and anything but systematic, and were of course closely connected with the Jesuit mission to China. Through the Jesuits, quite a few Chinese books came into the possession of the Bavarian rulers as well as the monasteries, and as their property passed into the hands of the state during the secularisation which took place at the beginning of the 19th century, the Library was correspondingly enriched.

The first methodical acquisition took place early in the last century, and was entirely due to the unorthodox and enthusiastic initiative of a single person, the accomplished polyglot Karl Friedrich Neumann (1793-1870). After his teaching career in various Bavarian *Gymnasien*, he went San Lazzaro in Venice to study Armenian with the Mechitarists, and spent what little free time he had buying books for the Library. As an indefatigable friend of the Königliche Hof- und Staatsbibliothek ("Royal Court and State Library") in Munich, he travelled widely in search of books for an institution which showed little gratitude for his devotion. In 1828 he went to Paris to study with the famous Abel Rémusat and became a member of the Société Asiatique, enjoying the company of scholars, writers, artists and high society. In April 1829 he left Paris for London with a letter of introduction from Rémusat to Sir George Staunton, who introduced him into the Royal Asiatic Society. Shortly afterwards, he began to write for the Oriental Translation Fund. Then quite unexpectedly the chance of lifetime presented itself: a certain Captain Ward expressed his willingness to take Neumann with him on his voyage via India to China. After settling the details, Neumann hurried back to Munich with the aim of raising funds for the acquisition of a well selected collection of Chinese books for the Staatsbibliothek. Unfortunately, the Bavarian State did not share his opinion of the importance of Chinese books, and was unwilling to spend any money on the venture. Undeterred, he compiled a small catalogue of the known Chinese books in the Library for 50 Gulden, and then tried his luck in Berlin. There he encountered a more broad-minded response, and was able to raise enough money to complete his arduous task.

He arrived in Macao in September 1830, where he was received by Dr Morrison. In October he moved to Canton, where the book market seemed to be more promising. He returned to Europe in 1831 with a collection of around 6,000 volumes, covering a broad area of Chinese literature. Among them, for example, are such works as the *Ta Ming i t'ung chih, Huang Ch'ing ching chieh, Chih pu tsu chai ts'ung shu, Han Wei ts'ung shu, Yüan chien lei han, Pen ts'ao kang mu*, and the *K'ang-hsi tzu tien*. He had to hand over around 2,000 volumes to Berlin for the advanced money, and tried in vain to sell the rest to the Staatsbibliothek. Only with the intervention of King Ludwig I was the collection incorporated into the Library, and Neumann was appointed Professor of Chinese at the university in exchange. With this acquisition, the Library's Chinese collection suddenly became one of the best in Europe. In order to make it complete again, Neumann tried to persuade the Bavarian State to buy back the part which had been sold to Berlin, but although Berlin was willing, his words fell on deaf ears in Munich. The eventual outcome of this unfortunate episode was that when the Chinese books in Berlin were moved to the East during the turmoil of the Second World War, Neumann's collection went with them, and part of it is now said to be in Cracow.

The next step in our history leads us to the Italian merchant adventurer Onorato Martucci (1774-1846), whose business led him as far as Canton. King Ludwig I of Bavaria, who had heard of him during his Italian journey, bought his whole collection of Far Eastern art objects and books in 1842. The art objects are now housed in the Völkerkundemuseum München, and the books, some 250 titles in 2,700 volumes, came into the Staatsbibliothek in 1851. They include *ts'ung shu*, encyclopaedias, materia medica, and novels.

Only a few years later, the Chinese collections were again substantially enriched: in 1858 the Library was able to purchase the excellent collection of the distinguished French orientalist Étienne Quatremère (1728-1857). To do so, it had to sell off some duplicates, including some precious incunabula and a Gutenberg Bible, which caused a considerable scandal at the time. However, it resulted in the addition of another 2,000 volumes of Chinese, Manchu and Mongolian books to the already remarkable Far Eastern collections. In accordance with contemporary fashion, they were all bound in European half-leather bindings.

In the years following this burst of activity, the Chinese collection was in danger of falling into oblivion when another outstanding figure appeared: Dr Georg Reismüller (1882-1936), who was director of the Staatsbibliothek from 1929 to 1936, having joined the staff of the Library as early as 1907. He taught himself the rudiments of Chinese, and later received instruction form Richard Wilhelm. In order to continue the Library's tradition of Chinese book collecting he decided to travel to the Far East, and was supported financially by the Notgemeinschaft der deutschen Wissenschaft (the forerunner of the Deutsche Forschungsgemeinschaft). He set out in 1928, and travelled to China,

Korea, Japan, Taiwan, Hawaii,and the United States. In China he was a guest of honour at the first national conference of librarians at Nanking, where he was the only foreigner present. As a result of his profound knowledge and thorough preparation, he succeeded in securing and expanding the already sound structure of the Chinese collection. He returned with a collection of around 1,000 titles in 18,000 volumes, including all the provincial gazetteers except that of Kansu, about 60 *ts'ung shu*, encyclopaedias, bibliographies, novels, and contemporary historical documents. As he was appointed director of the Library immediately following his return, he did not even have time to unpack his cases of Chinese books, and the situation was not improved by the rise of the Third Reich. The unpacking had to wait until after the war, of which Reismüller himself became one of the lesser known victims: his health ruined by political persecution, he died a premature death in a nursing home.

Miraculously, the Chinese collection survived the War not only undamaged but also complete. Credit for beginning the process of regular cataloguing is due to Dr Franz Josef Meier, who after the War was appointed head of the Far Eastern collections. In those financially hard pressed times, he initiated an extensive exchange system, through which he made contacts with libraries and booksellers all over the world. As a result of his efforts, the Library is now in possession of all the *Ssu pu ts'ung k'an* series (the first one was bought by Reismüller), the *Tao tsang* and the Buddhist Tripitaka, as well as the microfilms of the outstanding Peiping Rare Book Collection. Another of his remarkable acquisitions was Professor Hentze's library, which is strong in archaeology and epigraphy.

In 1970 Meier was succeeded by Dr Alfons Dufey, and later Jane Hwang joined him to assist with the Chinese collection. Through their combined efforts the tradition of enriching our antiquarian holdings is thoroughly upheld, assisted by the generous and broad-minded policy of the Library itself. In addition, we aim to acquire comprehensively the numerous reprints now available of old editions, and also to purchase all important modern publications in Chinese. To this end we have obtained *Chung-kuo fang chih ts'ung shu*, *Chin tai Chung-kuo shih liao ts'ung k'an*, *Tun-huang pao tsang* and so on, and also we are among the very few libraries in Europe which have acquired the *Wen yüan ko ssu k'u ch'üan shu*. From 1973 to 1982, generous funding by the Deutsche Forschungsgemeinschaft enabled us to complete a special project to catalogue and publish the most important part of our older Chinese books.

Presently, the Chinese collection comprises around 28,000 titles in 136,000 volumes, and therefore ranks among the largest in Europe. Besides covering areas such as classical Chinese literature, philosophy, religion, history, art and archaeology, the collection is particularly strong in *ts'ung shu*, encyclopaedias and gazetteers. Also worthy of mention is our unique collection of old Cantonese ballads and opera libretti dating back to the late 18th and early 19th centuries. In

addition to the printed books, there are also 128 Chinese manuscripts, including 3 authentic manuscripts from Tun-huang, which are all housed separately in the Library's manuscript department.

Visitors are welcome throughout the year, our opening hours being 9 to 5 from Monday to Friday, and 9 to 1 during the month of August. If special items are required, advance notice is advisable but not essential.

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DIE SINICA-SAMMLUNG DER ÖSTERREICHISCHEN NATIONALBIBLIOTHEK

von Basilia Fang.

Bestand Herbst 1987

2,000 Werke (ca 25,000 Hefte, 6,000 geb. Bände)
ca 270 *ts'ung shu* (Serien)
45 alte Zeitschriften
5 alte Zeitungen

Autoren- und Titelkataloge (Wade-Giles und Pinyin)
Systematischer Katalog (Wade-Giles)

Die Sammlung besteht hauptsächlich aus Geschichtswerken, Klassikern, Schriften zur Phonologie, Ming- und Ch'ing-Novellen sowie Werken der Jesuiten aus der Shun-chih und K'ang-hsi Periode.

Geschichte

1837: Der erste Sinica-Katalog der K.u.K. Hofbibliothek (nach dem 1. Weltkrieg: Nationalbibliothek, nach dem 2. Weltkrieg: Österreichische Nationalbibliothek) wurde 1837 von Stephan Ladislaus Endlicher (1804-1849) herausgegeben. Er enthält schon die *Erh shih ssu shih*, die berühmten Geschichtsschreibungen bis zum Ende der Ming Dynastie. Der Sinologe August Pfizmaier (1808-1887) übersetzte viele Werke aus den Sinica-Beständen der Hofbibliothek und veröffentlichte die Übersetzungen um 1850 in den *Sitzungsberichten der Akademie der Wissenschaften in Wien, Phil.-hist. Klasse.*

1891: Joseph Haas, K.K. Vizekonsul in Shanghai, übergab der Hofbibliothek ca 200 chinesische Werke.

Um 1945: Arthur von Rosthorn (1862-1945), Student von James Legge, Sinologe und Diplomat, verkaufte seine chinesischen Werke der Österreichischen Nationalbibliothek. Diese geschlossene Sammlung wurde nach 1946 den schon vorhandenen Sinica-Beständen einverleibt und in den

Katalog eingearbeitet. Ein unvollständiger Maschingeschriebener systematischer Katalog in Bandform aus der Zeit um 1946 ist von dieser Sammlung vorhanden. Er umfasst 2,137 Werke in 11,212 Heften, 359 Bänden. Es handelt sich hier hauptsächlich um Serienwerke.

Um 1975: Geschenk aus Taiwan (zeitgenössische Literatur), ca 60 Werke.

Mai 1987: Geschenk der Volksrepublik China. Übergabe durch den Botschafter der Volksrepublik China in Österreich (klassische und zeitgenössische Literatur), 158 Werke.

Nur in chinesischer Sprache edierte Werke, die sogenannten Sinica, haben eine eigene Signatur (z.B. *Sin.900*). Sie werden grundsätzlich nicht durch Kauf erworben. Publikationen ab 1930 werden ausser im Sinica-Katalog auch im Hauptnominalkatalog (in Wade-Giles Transliteration) der Österreichischen Nationalbibliothek eingeordnet. Vor 1930 erschienene Sinica sind nur im Sinica-Katalog verzeichnet. Ein Sinica-Katalog in Buchform soll in Kürze erscheinen.

REPORT ON THE VISIT OF LI ZHIZHONG, 5TH-22ND SEPTEMBER 1986

by Frances Wood (British Library).

We invited Li Zhizhong, who is the director of the *shanben* and special collections section at the National Library of China, Peking, to come to the United Kingdom with the intention of gaining help and advice from him on a long-term project of compiling a union list of *shanben* in British, and perhaps eventually in European libraries.

It turned out that his major interest, perhaps not unsurprisingly, was in the Dunhuang material in the British Library and the British Museum. As his recent articles in *Wenxian* and *Wenwu* suggest, he is at the moment very interested in the history of book format and binding, and we had some very interesting discussions on the number of small "booklets" and other formats that occur in later Dunhuang manuscripts and which depart form the paper roll. Although these booklets were known to Mr Li, and the have recently been brought to the notice of us all by the articles of Jean-Pierre Drège on the subject, he was very interested in seeing them for himself. If there was one area in which the British Library was able to furnish totally new evidence, it was perhaps in our Dunhuang paper *pothi*-type manuscripts, clearly derived from the Buddhist palm-leaf books.

Mr Li has already drafted an article on his impressions of the history of the book format gained through his visit which I am struggling to translate into English. He kindly suggests that it is a joint article but this is excessively modest on his part. However, the article will probably appear in *Wenxian*, with the English version in the *British Library Journal*.

Li Zhizhong expressed some guilt at having neglected our *shanben*, but suggested that it was best for us to proceed with our project and to send all queries to him, and he promised to answer them.

In the Bodleian Library, Oxford, Mr Li looked at some of the *shanben* in the Backhouse Collection, and confirmed the authenticity of the various *neifu* editions. In London he also looked at the items that Professor Roderick Whitfield was preparing for his small exhibition "Chinese Rare Books in the Percival David Foundation", which was held between November 1986 and March 1987.

Mr Li's trip was made possible by the generosity of the British Council and the Universities' China Committee. Future visits over the next three years will be organised under the British Council's "Academic Links" scheme, under which the British Library and the National Library of China can exchange members of staff and carry out joint projects. It is not the intention of the Chinese section to keep such visitors to ourselves. At the Colloquium in London last summer, our British and European colleagues were able to meet two more experts from Peking and

establish their own contacts: Mrs Ji Shuying, who is directing the compilation the the Chinese national union list of rare books, and Zhou Shenheng, a computer expert.

CHINESE CHARACTER AUTOMATION IN THE PEOPLES REPUBLIC: SOME IMPRESSIONS BASED ON A VISIT TO PEKING IN JUNE 1987

by John Cayley (British Library).

In May 1987, the British Library was good enough to send me to China for the first time in my career. For the last two weeks of this trip I was in Peking with a brief to visit a number of selected libraries and research institutions, particularly those with an interest in developing systems to handle Chinese characters and establishing databases with vernacular script records. My investigations were far from systematic or exhaustive, but I hope that this brief outline of my activities may help to give some idea of what is going on in this field in the PRC at the moment.

Before I was in Peking I had been staying at the University of Heilongjiang in Harbin. It was here that I first visited a Chinese computing unit and had my initial taste of Chinese microcomputing. The unit had a mini-computer with 16 terminals for teaching programming (no script capabilities) and then a separate lab with 16 little-used Apple II micros, plus 3 over-used IBM PC's (2 XT and 1 AT). The IBM ran under a "sinified" operating system which seems to be the most popular such software on the mainland. This is CCDOS, as developed by the 6th Research Institute of the Ministry of the Electronics Industry. It will run sinified versions of many common microcomputer applications such as WordStar and dBase II, and also programs written specifically to run under it. Character input via CCDOS is from a standard keyboard normally using a simplified form of pinyin, though other input methods are available. Homophone ambiguities are resolved by selecting characters from a display of alternatives on the bottom line of the screen. The method is fast and adequate if unsophisticated. The characters available are those in the Chinese National Standard Basic Set, amounting to some 7,000 characters.

I was in Peking for almost two weeks during the final portion of my time in China. I arranged what visits I could from my hotel room in my rather strange capacity as "unit-less" visitor. Thankfully, most of the institutions I tried to contact were helpful and open. I have included a selected address list at the end of this article and will now briefly run through the places I visited and my gleanings.

Firstly however I should mention two organisations which, despite many attempts, I was not able to visit for reasons which are more or less obscure to me. One is the unit responsible for publishing the Chinese National Standards for computer character sets, the Chinese Standardisation Research Institute for Electronic Technology. The reason/excuse I was given for not being able to visit was that they were moving to new accommodation, however I suspect there may also be some embarrasment over the slow progress in publishing new extensions to the existing standards. I would also have liked to visit the Peking

Document Service, a body about which little seems to be known though I have seen a number of published papers concerning its extensive involvement in automation projects. It was difficult to get the address of this organisation and I did not have time to try to visit it. It was also suggested to me that I might not be all that welcome, the most likely reason for this being that such places deal with a great deal of pirated material which is not for foreign eyes. Databases might also make it much easier to gauge the extent of these activities on the fringes of document supply. These circumstances will be a continuing complicating factor in certain types of exchange activities.

Just as they are in the West, computer shops are sprouting up like mushrooms after spring rain all over China but especially in crucial areas of the major cities, such as the Haidian area near the main colleges and universities of Peking. Inevitably I found myself spending some of my spare time in a number of these stores. For the most part they were stocked with IBM PCs or compatibles and, for the right money, it was easy to obtain a working microcomputer system which would have the capacity to wordprocess the basic set of Chinese characters. The largest "computer shop" I visited was the China Computer Technical Services Corporation, actually an extensive organisation with many branches in major cities providing sales and support for computer users. Again it tends to promote the IBM-compatible market associated with sinified software, but some more interesting projects are undertaken, for instance in software development, where a co-operative project is underway with the Nationalities Printing House to produce software which will typeset Uighur, Kazakh and other minority scripts. Another visit I made, not directly concerned with bibliographic automation, was to the computing department of the Chinese National Publications Import and Export Corporation. Bibliography is here very much subordinate to stock and financial management, but the commitment to automation is impressive and this does mean Chinese automation. They are fully prepared, once China has the requisite telecommunications system, to set up an automated network of their major outlets.

To turn to the unit by unit outline:

State Language Commission. This is a new advisory body which has arisen out of the Committee for the Reform of the Chinese Script. I visited the commission because it is involved in advising on the establishment of national standards for Chinese and national minority character sets. The commission works closely with the National Bureau of Standards (the body which controls the Standardisation Research Institute of the Electronics Industry which I was unable to visit) and I was most interested to hear their views on developments and progress with these standards. They are not directly involved with the implementation of any of the planned or existing Chinese script bibliographic databases. My contacts confirmed the contents of a news release from the standardisation body announcing that the 2nd and 4th supplementary sets of the Chinese National Standard should be published later this year (it was announced early in 1987 that they were "worked out"). These are both sets of simplified characters. The basic set is numbered 0 and the

sets of simplified characters will have even numbers and will complemented by sets 1, 3 and above which will contain corresponding traditional characters. Sets 1 and 3 are due to appear in 1988. The commission has also been involved in setting standards for minority languages, though only Korean and Mongolian sets have actually been cited as under development.

The situation is interesting because the lack of traditional character codes in the published national standards makes a great deal of automated work, particularly bibliographic work, difficult or impossible. Moreover, many other more or less authoritative standards exist originating in Taiwan (CCCII) and the USA. Libraries and other institutions are faced with the dilemma of either waiting until the national standards are extended or buying an alternative, probably foreign system. The most pointed case of a library taking the second option is that of the National Library itself. It is importing CLSI software driving the Transtech-developed RLG/CJK Sinoterm terminals for an automated circulation system (see below). The latter employs the Research Library Group's three-byte RLIN East Asian Character Codes (REACC, now known as EACC, administered by the Library of Congress, and soon to become an American National Standard). EACC and the two-byte Chinese national standard are quite incompatible and one would need hefty look-up tables to translate from one to the other. However, when I asked about these problems my contacts said that they were aware of them and that such tables are being made. They said that the conversion problems would be faced and sorted out.

<u>Computing Division, Academia Sinica Library Documentation and Information Centre.</u> This is the department responsible for co-odinating, planning and implementing bibliographic automation projects of the Academia Sinica. There are other similar branches in Shanghai, Wuhan, Chengdu and Nanzhou. I was particularly interested to visit the division because we had heard that they had acquired a CJK terminal cluster from the Research Library Group, Stanford. They intended to use this equipment in a restricted local mode, but found that there were technical and practical problems with using the cluster. My visit confirmed that the equipment was lying idle in one of the division's processing rooms. However, my initial contact, Yan Lizhong, Deputy Director of the Library of Academia Sinica was visiting RLG while I was in China, negotiating some significant new developments in shared resources with China. There is talk of establishing an RLIN installation in Peking with the co-operation of the libraries of the Academia Sinica, Peking University and Qinghua University. The Peking node would be linked to that at Stanford and queries which could not be handled locally could be referred to Stanford. Such developments would be unprecedented, and would usher in a new era in information management and exchange in China and abroad. Both sides acknowledge that there is a long way to go and many obstacles, some of which may prove insurmountable.

Apart from this great plan for the future I was told of four other automation projects for the library which involve the department:

(1) the so called APT union catalogue of western serials, with Peking and Qinghua (Tsinghua) Universities; (2) an acquisitions and circulation system for their own library; (3) Chinese Physics Abstracts, a new project of their own; and (4) a conference papers index.

I was told that the front-end of the acquisition and circulation system and the database of Chinese Physics Abstracts would be provided by IBM PC's. The former project is still in the planning stages. A record structure for the latter has been designed and records are being prepared for input using an IBM PC/XT running under CCDOS with a sinified version of CDS-ISIS serving as the database. The latter is a microcomputer version of MINISIS available to members of UNESCO through the International Development Research Centre (IDRC) of Canada. I also saw it used at ISTIC in Peking (who participated in its "sinification" with the Computer Division of the Institute of Scientific and Technical Information of the Ministry of Machine Building). It was this system which was demonstrated to me during my visit. CDS-ISIS provided a perfectly adequate database for the simple record structure plus abstracts which was required. In the early and prepatory stages the data can be manipulated by micro. Later it could be downloaded to a mini-based system.

Generally speaking, facilities were meagre and progress on these projects was slow, uncertain, and dependent on fluctuating staff involvement. Nonetheless the Library of the Academia Sinica clearly wishes to be involved in significant co-operative projects in the Peking area, and it will be interesting to monitor the development of their relationship with RLG.

National Library of China. On my first visit I met Zhou Shengheng (who later took advantage of the academic link for a month beginning mid-August 1987 and spoke at the British Library/SOAS/China Libary Group Colloquium on Resources for Chinese Studies) and Sun Peixin, who guided me through the library's continuing and planned automation projects. I was particularly interested in the recently announced contract with CLSI systems which was advertised as using Transtech's CJK terminals (as supported and developed by RLG) for Chinese script handling. When I asked about the conflict of the American coding system with China's national standard, Zhou Shengheng replied that they were aware of the problems. He said that the system was for circulation only, designed to deal with 300,000 titles in the library's lending collection. He implied that the system was self-contained and did not need to engage national standards. He also complained about the RLG coding system since, being a three-byte rather than a two-byte code, it uses more storage space. He gave me to understand that the Library intends to use national standards whenever possible in the future when they will be able to cope with the range of characters required for serious bibliographic work (estimated at over 20,000). The National Library has access to and makes some use of draft sets of rare and complex characters not yet published as national standards.

Four projects currently engage the Automation Development Department: (1) planning for an acquisition, cataloguing, and information retrieval system (implementation is still being planned and will be on Hitachi, Fujitsu or IBM equipment using 2-byte codes for Chinese character handling; (2) the circulation system mentioned above: CLSI software on a PDP 11/73 with six Transtech terminals and associated software for character handling; (3) planning, and early next year, implementation of an automated system for the National Bibliography using Chinese MARC (presently the library has an M150H Hitachi machine, which apart from general accounting functions is used to read MARC tapes and to process Chinese characters, including the production of proto-type Chinese MARC); and (4) research on the possibility of an optical disk-based rare book storage and retrieval system.

I was shown the processing rooms for the M150H Hitachi machine and the new circulation system, spending most of the time available in the latter. When I visited they were training staff in the use of the equipment, particularly character input which takes a good deal of training (as we know from our own experience with a similar set-up at the BL). It was interesting to see that the library had a newer version of the Transtech terminal and character generation software, namely Sinoterm III, which incorporated some improvements in the input system: character component "spellings" need not be unique and some of the system's more bizarre spellings had been rationalised. Input on terminals attached to the Hitachi machine, and used for Chinese character processing so as to produce proto-type Chinese MARC tapes for entry to the National Bibliography, still employed a large electronic tablet and pen, complete with a huge table of characters (similar in concept to a Chinese typewriter).

Central Institute of Nationalities. I had not orignally intended to visit the Minorities' Institute as part of my computing survey, however on a book-buying foray I chanced upon a Professor Xu who is working on the automation of minority scripts and who invited me back for demonstrations of some of the work in progress. Professor Xu explained that he had been working at the institute since 1985. They were now developing software to handle Tibetan, Korean, Mongolian, Uighur and Yi scripts on the IBM PCs and Japanese "Mugen" compatibilities which are available to them. We talked in the computing lab of the institute, where there were 20 of the Japanese terminals. Professor Xu said that in his view the institute provided the best context in China for the development of this sort of software since the requisite linguistic expertise was immediately to hand. At Peking University (his previous employers), in the Department of Eastern Languages, they were also working on script handling systems, but there was little co-operation between their two institutions. Taking their Uighur system as an example, Professor Xu said that other units, for example the Xinjiang Institute of Industrial Engineering, had produced script handling systems, but these had limited facilities. In some cases the Institute of Nationalities was taking existing software and upgrading it, while at the same time contributing to work on the standardisation of character sets in co-operation with the National Standards Bureau. The professor

and one of his programmers demonstrated the Uighur system to me during a session in which language specialists were assessing its practical use. The special features of the package (which can also be used for Kazakh and Kirgiz are: (1) automatic selection of appropriate arabic script forms for their position in a word; (2) automatic translation from Arabic to the Roman script used for Uighur in the PRC before 1984, and to Cyrillic; (3) automatic indication of pronunciation (this sub-system to be added); and (4) complete compatibility with Chinese and Roman operating systems (i.e. text in any of the scripts can be mixed together in a document). My use of the system did, however, reveal some bugs concerning the last named feature.

Prof Xu agreed to write a short paper describing the department's work in this area, which I hope to translate and publish in the SESAME Bulletin (devoted to non-Roman script automation) edited by John Clews (BL) and Paul Bibire (Cambridge University). Professor Xu will be a great help in keeping in touch with Chinese developments in the automation of the minority scripts of China.

Peking University Libary. Peking University Library is just coming to the end of a long and careful study of its Chinese-script automation options, involving four members of staff in six month's work, plus two months on assessing equipment and software for Chinese character handling. When I visited they were on the point of making a final decision, and, although they were unwilling to give me any details, they said that when the decision was final they would let us know and pass on copies of their reports. They were, however, able to tell me that they had rejected RLIN/CJK and would probably also dismiss the OCLC option. Their reasons were concerned with what they saw as certain shortcomings in the front-end hardware of these systems, but more importantly, because of the question of coding standards for the characters. This question they saw as crucial and they believed that it was necessary for them to follow the Chinese National two-byte standard and to wait for the character set to be extended with the more rare and complex characters. Their understanding was that existing standards would (as the State Language Commission had also indicated) be published on disk before the end of the year. They expected to have equipment and to be experimenting with data entry within the same time scale.

Institute of Scientific and Technical Information of China (ISTIC). ISTIC is, perhaps, the most go-ahead organisation in the automation and networking field in China, with its Shanghai branch showing special dynamism. My visit to the central Peking branch, subsequent to other visits of BL staff in 1986, whose reports I had read, led me to believe that it had made great strides in difficult circumstances, being just about to move to new premises near the new National Library in the academic quarter of Peking, and still, when I visited, in unsatisfactory accommodation rented from the University of Chemical Engineering.

The computer service of Peking ISTIC was involved in six projects when I visited. I saw work on inputting, and had demonstrations of the first four while I was there. The projects are as follows: (1) Union

catalogue of Chinese language periodicals. Entry is initially using the MICRO CDS-ISIS system (see Academia Sinica above) under CCDOS, using IBM PC AT and XTs. Two machines were being used for this at the time I visited. I was told that the records will later be processed by a system running on ISTIC's recently acquired DEC VAX 11/73. (2) Chinese Conferences Index. Records for this database are presently being input on IBM micros running a sinified DBase III under CCDOS. (3) Chinese Technical Dictionary. Tagged entries for this dictionary are being typed in Chinese using the usual IBM equipment and sinified Wordstar. The files so produced will then be passed to pagemaking software developed by the Institute of Printing Technology to generate files which will drive a Monotype typesetting machine. This is one example of the high technology publishing techniques common in the West being applied to text in Chinese script. (4) Development of systems for ISTIC's newly acquired VAX machine which has Chinese script terminals running a Chinese operating system developed by Digital for VAX machines, called CVMS. This has a first-corner last-corner character input system which takes some time to use effectively. (5) Developing systems for indexing of Western language databases on an IBM 43/81 (not dealt with on my visit). (6) Developing the use of Linotype typesetting equipment which will, apparently, be used with the DEC machine.

In the computing lab I visited where data entry for the first three projects was being undertaken, 20 IBM machinese were being used at full stretch. Of all the other places I visited on my trip, only the Chinese National Publishing Import and Export Corporation computing division came close to this level of activity. There was a real impression of quantitative as well as qualitative progress being made at ISTIC, albeit at a low level (by western standards), and in poor working conditions.

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RLIN/CJK IN THE FAR EASTERN SECTIONS OF THE BRITISH LIBRARY

by John Cayley.

In April 1986 the Far Eastern sections of the British Library took delivery of an elaborate conglomeration of computer equipment billed as a "CJK terminal cluster". This equipment had been kindly offered to us on loan for a year by the Research Libraries Group (RLG) of Stanford, California. The BL was then, and still is co-operating with RLG on a major union cataloguing project, the Eighteenth-century Short Title Catalogue (ESTC). This project had demanded an expensive dedicated trans-Atlantic communications link whose existence solicited use. The link, along with RLG's encouragement and generosity, gave us an unexpected opportunity to assess the Chinese-Japanese-Korean enhancement to the Research Libraries Information Network (RLIN), an opportunity which would otherwise have been far beyond our means.

It is a measure of how fast things are changing in the field of the automated processing of East Asian scripts that in describing some of our experiences in using RLG CJK equipment I will be describing the use of equipment which is all but obsolete, a fact which RLG is almost prepared to acknowledge. What I have to say may therefore be somewhat unfair. The new, cheaper CJK front-end, which RLG has tentatively promised for December 1987, will answer most of the problems which we encountered in using the local system, and the group is also proposing changes to its operating software which will have similarly radical effects on the system as a whole. We are now at the stage where there will be increasing flexibility over the terminal equipment, including equipment able to process Chinese characters, which can be hooked up to the databases to which we subscribe. It has therefore become even more important to assess the particular database first and the user's front-end second, a point I will come back to in relation to RLIN and its rivals.

So what was included with our terminal cluster? We received an extremely powerful table-top mini-computer which was to be attached to a modem for communications, two "dumb" terminals with special keyboards for character composition from components, and a dot-matrix printer capable of sufficient resolution to output the CJK character set. All the intelligence of the cluster was held on the hard-disk of the table-top mini. This held the character dictionary and the programs for generating characters and communicating with RLIN. To us, it was a "black box". One was supposed to be able to attach a "console" to the mini and so get it to do other things but this was outside our interest and competence. The cluster was set up only to talk to the database in California. It gave virtually no other local facilities. We received an excellent short course on using the cluster provided by RLG. The Japanese section of the BL was in on this and initially took part in the assessment. After a time however, both terminals migrated into the domain of the Chinese section, and we began to use the equipment

extensively for derived cataloguing from our backlog. Despite new clerical work generated owing to the fact that the printer could not print fileable cards directly, the high hit rate we found for backlog books allowed us to make reasonable use of the system during the year. When the time for clerical processes necessary for manual file maitenance are taken into account, however, we could not claim an overall saving from deriving in this way. Apart from this, the system was used to demonstrate to interested European sinological librarians passing through London, and to help answer readers' queries. On the latter score we very much appreciated the ability to generate partial but stimulating brief bibliographies of CJK material on RLIN almost instantly.

In the last analysis, it must be said that if a CJK cluster was offered to us in the configuration we assessed over the past year, at its full price and given substantial recurrent costs including a hefty portion of the Library's trans-Atlantic communication charges, we would be foolish to take it. It would not save us money or time, nor would it give us fringe benefits in terms of alternative uses for the local hardware. This is partly because of a lamentable contradiction between the original philosophy of the RLIN database and the realities of catalogue maintenance in many Far Eastern collections such as ours. RLIN espouses an online-only philosophy as its ideal. Participating libraries would blissfully discard their paper records. This aim was to be shared by subscribers to the East Asian enhancement, and five years ago, at the time when the East Asian Project was being set up, the libraries concerned agreed to it in principle. Today only one East Asian Library, that of the University of Toronto, is in a position to abandon cards, and this is for the simple reason that in one form or another all its records are on RLIN (records made before the implementation of the CJK enhancement have been loaded in romanised form). The rest of us must compromise, and libraries in North America are now asking RLG for East Asian script card-making services, previously thought to be unnecessary. There is also a problem in the way East Asian collections in the West are staffed: numbers are too small to allow the specialisation of skills which would be required to make effective use of the RLG/CJK equipment as it stands. The newer, more flexible equipment, easier for busy curator/librarians to use on an occasional basis, will better suit the specialist all-rounders who serve our collections.

Our view of the "for and against" arguments for RLIN in the configuration we assessed might be outlined as follows:

For

(1) Link to CJK collections of North America. While physical distance makes information about the holdings of North American research libraries of little more than academic interest, even that is not to be sniffed at since there are perceptible benefits to be gained from keeping in touch through a shared catalogue, seeing what they are buying and letting them know what we are. Moreover, our vernacular catalogues are not published in any form. RLIN would provide us with a unique way

of making our holdings known outside the Library itself. There are further future possibilities for co-operation clustering around RLIN because of its ability to hold union catalogues of special classes of material. A co-operative Chinese rare books project is in its initial stages along with a microfilming initiative, both eminently worthy of support from European libraries.

(2) Access to one of the most extensive databases of CJK bibliographic records available in the West. RLIN presently contains over a quarter of a million CJK library records which point to over a hundred thousand distinct items. All these CJK records have been input since September 1983. More than half the original records have been input by the Library of Congress. LC records will, by the way, also be loaded on to OCLC. (See below for some tentative remarks on the comparative scope of the two American databases with CJK capabilities.)

(3) Generally high quality of records. We found that the standard of record was good with LC setting the tone, with a number of university collections also contributing greatly to record quality.

(4) Abiblity to derive CJK records with high hit-rate. This needs some qualification. For books in our backlog, eg. acquired 1985 onwards, we experienced a hit-rate of over fifty percent. However, for recently acquired material, the rate dropped substantially, as we caught up to LC's own backlogs. (For more detailed information, see the recent report on searching RLIN by the Australian National Library.)

(5) Excellent scope and extent of CJK character set. One of the best aspects of the RLIN/CJK system is its character set and accompanying coding standard. It is now possible to buy cheap Chinese word processing systems which make a large character set available to their users, but for a bibliographic system where a huge number of records will be stored and indexed you need more than a large character set: you need a large set with well maintained coding standards, which determine the form in which the data is stored and indexed. Unfortunately, coding standards for Chinese characters are not internationally determined. The Japanese, Koreans, Republican and Mainland Chinese have all published standards, or are in the process of doing so, and none of these (including the Japanese) are maintained in the strict, regularised fashion which is necessary to preserve the consistency of a large database. RLIN felt obliged by this situation to derive its own standard from the existing Taiwanese Chinese Character Code for Information Interchange (CCCII). It produced a character set, now administered and published by the Library of Congress, which makes 14,063 Chinese, 174 Japanese *kana*, and 1996 Korean *hangul* characters available to the users. This is adequate for most bibliographic work. RLIN also provide an online character Thesaurus – a separate database giving, for each character in the set, corresponding codes in the national standards and attributes associated with the character such as pronunciation, font-design, etc. This is a major and unique resource. The question of coding standards is absolutely vital and has to be carefully monitored by all potential users of these systems. On the

mainland, momentum is building up for developing the presently limited official Chinese standard, only around 7,000 **simplified** characters, in parallel with important library automation developments centering on the National Libray. But until these efforts have borne fruit, the RLIN-developed REACC coding standard will be the most reliable and extensive standard for the exchange of bibliographic information.

(6) Improved bibliographic services to readers. The ability to produce, quickly and flexibly, brief bibliographies in response to readers' or inquirers' requests we found of great benefit, even though some of the useful material found was not held by us.

(7) Further enhancements to other non-roman scripts. The Oriental Collections of the British Library are, of course, interested in RLIN's plans to produce Arabic, Hebrew and Cyrillic enhancements.

Against

NB: Many of the arguments against the system are based on our assessment of the equipment as supplied and our view of a CJK link will be very different if the new generation equipment does all it promises.

(1) Cost in relation to volume of use. This has three aspects: capital costs, communication costs and recurrent costs. Capital costs at approximately £25,000 for the two-terminal cluster were far too high for the use we derived from the system. Communications costs were only acceptable because of the Library's other co-operative projects with RLIN. RLIN will soon be operating under a new system which, amongst other things, will allow it to be accessed through International Packet Switched Stream. This will reduce communication costs considerably. Other recurrent costs were estimated at about £10,000 per annum.

(2) Hours of availability. Because of the time difference and the fact that RLIN is not running 24 hours a day, we could only access the database in the afternoon, severely restricting our possible working patterns. The new operating system is intended to solve this problem also.

(3) Conflicting romanisation for Chinese. At the BL we use the pinyin system of romanisation for our filed headings. Rather than input non-standard records, as we were maintaining card records while assessing the system we simply displayed records and removed the Wade-Giles headings, substituting our own locally on paper. We stongly feel the RLG should provide a routine subordinate to their terminal program which can translate back and forth from Wade-Giles to Pinyin. This would not be a major undertaking and would generally improve the flexibility of the system as pinyin gains ground internationallly.

(4) Difficult input system for Chinese characters. The component method of input with its non-standard keyboard is acceptable for trained, specialist staff. For the general user, especially western-trained sinologists, it is unwieldly, time-consuming, unflexible and ultimately

impractical. We are apprehensive that the new PC-based terminal will still support it, but are pleased to hear that alternatives will be avialable. All the indications, in China as well as in the West, are that pronunciation based input systems of various degrees of sophistication will drive out the quirkier graphic method, at least until the advent of speech recognition.

(5) Poor local output facilities. The present font of the system is adequate but unattractive. The equipment we assessed was very inflexible in the form of output it allowed. We wanted to make cards from output locally and had to make extensive changes to what was printed including reducing it to fit on a card. This compares very unfavourably with the local card-set-printing facilities provided by the OCLC/CJK system, though when (if?) cards go so does the problem. Staff responsible for Japanese and Korean were unhappy with the primitive, print-before-letter handling of diacriticals. Hopefully these problems will be addressed by the new equipment and software.

(6) General inflexibility of local hardware. As already mentioned above it was of some concern to us that a powerful and expensive micro/mini computer was doing so little for us when not connected to RLIN. The new system will, of course, directly address this problem, giving us a general-use IBM PCAT when not being used as an RLIN terminal, one moreover which should have good Chinese word-processing facilities. Another shortcoming of the system was its inability to download records locally in any form. This should be addressed by the new system.

Concluding remarks

As mentioned earlier in these notes, we found that there were serious problems with the RLIN/CJK cluster in the configuration we assessed, so that we would be unable to justify its continued use in the section if nothing new were on the way. However, it is clear that most of our problems will be addressed and answered by the new generation of local hardware and software, or by the new operating system under which the database will run in the future. The former developments will give us local systems with the flexibiblty that is a required standard in the world of roman script computing. They will also bring us to a point where the precise nature of the teminal input device properly becomes much less important in determining the capabilities of the entire system. This is an important consideration. In CJK computing we have been too much taken up with the problems of script-handling: how to get vernacular information in and out of the machine. This problem now has a number of more or less elegant solutions. It is not a problem for librarians and we must now go on to deal with issues that are far more relevant to our work, such as, for instance, the scope and nature of the service provided by machine readable bibliographic databases. In the somewhat circumscribed CJK world, this is where RLIN comes into its own, and where comparisons with what OCLC has to offer become interesting and important. At present, it is true that OCLC can offer a more flexible and convenient front-end for the CJK records in their database, but RLIN has the support of most of the significant large-scale research collections of CJK material in North America. Furthermore, as it is

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governed by these collections, its future interests are more likely to correspond with those of its members and other such collections. As evidence of its future intentions, we can see the work being co-ordinated by RLG's East Asian Programme Steering Committee; for example, such important co-operative projects as those on Chinese microfilming and the cataloguing of rare Chinese books.

RLIN's new operating system may also lead to significant new developments, apart from the near 24 hour operation. It is said that it will make the system portable. In other words, if an institution were willing and able to purchase or licence the system, its facilities, including CJK, could be made available in places where communications would otherwise be prohibitively expensive or technically unworkable. This may, in the future, open up interesting possibilities for direct exchange with, for example, the People's Republic, and any such developments would greatly enhance the attraction and usefulness of RLIN's CJK component.

Speaking for the Oriental collections of the British Library, our assessment boils down to this: if RLIN delivers on its promises for the new local equipment, and, given its continuing co-operative efforts on other projects, if the British Library were willing to fund and support a CJK link, we would look forward to the many opportunities which a continuing involvment in RLIN's East Asian Programme would involve. With the new generation of CJK terminal, we should be able to reap real benefits from shared cataloguing and also contribute not only to catalogue maintenance but to the important co-operative projects which the RLIN database makes possible and which have the potential to provide unprecedented new services to research in Chinese, Japanese and Korean studies.

APPENDIX:

EUROPEAN INSTITUTIONS WITH HOLDINGS OF CHINESE BOOKS

AUSTRIA: WIEN

    Österreichische Nationalbibliothek,
    Josefsplatz 1,
    A-1015 Wien   Tel: (0222) 53-410/432

    Librarian: Basilia Fang

AUSTRIA: WIEN

    Bibliothek des Instituts für Sinologie,
    Universität Wien,
    Rathausstrasse 19,
    A-1010 Wien   Tel: (0222) 4300/2799

    Librarian: Professor Otto Ladstätter

BELGIUM: BRUXELLES

    Bibliothèque de l'Institut Belge des Hautes Études Chinoises,
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