

**CHINESE-JAPANESE-KOREAN AUTOMATION NEWS**

---

**Vernacular script survey**

A survey of Australian libraries' needs for automated scripts was reported in the last Newsletter. The survey was conducted by the National Library of Australia to gather information for planning the redeveloped ABN/OZLINE system.

Results are now available. Seventy eight libraries out of 180 respondents replied that they collected non-Roman script materials. This group included the National Library, the State Libraries, two networks (Technilib and the South Australian Local Government Services Bureau), 29 academic libraries, 36 public libraries, and two TAFE libraries.

From the responses, it was evident that titles in Chinese, Japanese or Korean far outnumbered those in any other script. Cyrillic and Greek formed a second group, each with more than 100,000 reported titles. For Arabic and Thai 27,000 and 26,000 titles, respectively, were reported, most Thai titles being held by the National Library of Australia and the Australian National University Library. Fifteen thousand titles over seven collections were reported for Devanagari; collections in Hebrew (10 responses with a total of 3000 titles), Burmese (2 with 5,000) and Gurmukhi (2 with 1,000) were also reported.

The libraries holding the bulk of the titles answered "Yes" to placing a medium to high value on the provision of a vernacular script capability on the proposed new ABN/OZLINE system. Some libraries were already using some non-Roman scripts online, others were investigating the possibilities.

Libraries placed greatest emphasis on being able to search on various scripts, displaying these scripts, and on being able to purchase vernacular script cataloguing data. Less emphasis was placed on the ability to input or edit the data themselves, or on a multi-script interface to the system.

*ABN News* No. 62, March-April 1992: 10-11

**Library System for Chinese, Japanese and Korean Languages**

Four libraries - the National Library of Australia, the Australian National University, and the Universities of Sydney and Melbourne - have formed a consortium to investigate what is available to provide a nationally available, shareable library system for Chinese, Japanese and Korean languages. An interim solution is being sought until the various scripts are automated at some future time

by the Australian Bibliographic Network (ABN), which is the Australian libraries' major cataloguing and information network.

Resources on Asia are increasingly important for Australia, with government emphasis at both a national and state level on the teaching of Asian languages. Important information sources for research and development are held in these libraries and the aim is to make these better available.

The Department of Education, Employment and Training (DEET) has provided A\$20,000 in funding, and each library is also making a financial and staffing contribution to the project.

The company RMG/CAVAL of Melbourne and the United States has been hired as consultants to provide a report to the four libraries on what is available. Geoff Payne will run the Australian side of the project. The report is due in June this year. It will be used as the basis for a funding proposal to DEET by late July for the calendar year 1993. The Request For Information (RFI) was issued in mid-April and closes in mid-May.

The aims of the project are to reduce cataloguing costs by moving away from manual systems; to increase the possibility of resource-sharing; and, to increase access to existing collections for both libraries and users.

Further details are available from Marie Sexton, Principal Librarian, Asian Collections, National Library of Australia, Canberra, ACT. Tel +61 6 2621 519 or fax +61 6 257 1703.

#### **Joint Griffith University - University of Queensland CJK Library System Project Developments**

Many readers will be aware that the joint GU-UQ CJK project has received a sizeable Australian Research Council (ARC) Mechanism "C" grant to develop a PC-based CJK Library System.

Last year the two universities and the two companies involved (Jiejing and Softlink) successfully concluded a feasibility study on the incorporation of the Jiejing functionalities within the OASIS (Softlink's library system) software. An impressive demonstration of input, retrieval, screen display and printing of CJK library records was made to an appreciative audience of librarians, systems people and faculty staff teaching the three Asian languages involved.

The universities have now finalised their functional specifications and presented them to the companies.

The system to be developed will support Chinese, Japanese and Korean scripts, featuring a stroke-order input and indexing system and character storage in 16-bit bytes. It will also support romanised parallel titles (for Chinese romanisation, there will be the capacity for both Pinyin and Wade-Giles romanisations), authors and other bibliographical information.

The aim is to have a system that will allow interrogation of the library database in the vernacular (using the Jiejing ten script characters stroke elements, entered in sequence in accordance with rules for writing CJK characters), but also to be able to interrogate the holdings of the East Asian collections of both universities.

Considerable interest has been shown in the system by other Australian libraries, and developments are being followed closely. This system could herald the beginning of an Australian CJK bibliographic network, searchable over the Australian Academic Research Network (AARNet).

By the end of May, a detailed project development plan will have been agreed upon which is expected to result in a full prototype functional by October-November.

The following list specifies the functions required by the universities:

1. The CJK bibliographic database and software shall be so constructed as to store all the record elements required to display and export full CJK MARC records.
2. Within each East Asian language, fields shall be repeatable relating to authors, titles, names, imprints, subjects and other elements, so that separate but linked romanised and vernacular script forms of those bibliographical elements can be stored, displayed and exported.

For example;

In Chinese: both the traditional and simplified vernacular script forms and the romansed Wade-Giles and Pinyin forms are all to be supported.

In Japanese: the vernacular Kanji, Katakana and Hiragana characters are to be supported and the Hepburn romanised form.

In Korean: the vernacular hancha and hangul characters are to be supported and the McClune-Reichauer romanised form.

3. The East Asian script characters supported by the system should include variant and rare forms of given characters (as found in the printed books held in the libraries).

These variant forms of characters should be linked. Newly created characters should only be established after authority control processes have verified and approved their validity.

4. Data entry must support the Jiejing stroke-order retrieval system and also the creation of the prescribed romanised version of the vernacular script element.
5. Creation of the romanised version by programmatic means, as now being developed in full by Jiejing, shall be a highly desirable option.
6. OPAC enquiry may be performed either by searching via the vernacular script or the romanisation of that script.
7. OPAC display shall consist of at least two degrees (brief and full) of completeness of the record, one of which at least, should show the location of the item with call numbers and the number of copies held. The barcode (item) number should be searchable for and should be able to be used as an access point to retrieve a bibliographic record.
8. The usual library functionalities that the OASIS system supports shall be an integral part of the CJK system, such as Acquisitions, Serials, Cataloguing, Authority Control, Union Catalogue, OPAC, other Enquiry and Circulation, etc.)

These functions shall be able to be performed concurrently on different terminals of the system.

9. It shall be possible for a data entry operator to create new vernacular script characters as necessary for the completion of a record.

However, there shall be further processes to enable the subsequent verification and the authorised establishment of proposed new characters.

10. On the UQ and GU systems, both the local and the other database shall be searchable: the default database being the local one.
11. The two university libraries would prefer there to be one database held in common, which would indicate which

library held what items, operating in real time for update and enquiry. However, responsiveness, connectivity, and reliability would need to be proven for such a system.

Alternatively, but less preferred, each library could create and maintain its own database; but the other library's database should also be stored and be regularly updated, perhaps by floppy disks received from the other library.

12. Password control shall protect the modification and creation of new or modified records.
13. The precise MARC formats for the import and export of CJK records need to be decided upon. The need for such communication with the Australian National Bibliographic Database (NBD), and the CJK databases held by RLIN and OCLC in North America should be noted as of great importance.
14. The system should be able to accommodate at least 100,000 CJK records, plus 2,000 acquisitions and serials records, and support concurrent 5,000 loans.
15. The CJK System developed under the Agreement shall be capable of interrogating any other such CJK System across AARNet; and it would be highly desirable if records could be downloaded between such systems.
16. Romanised fields of CJK Bibliographic Records shall be able to be exported into the Geac and PALS systems of Griffith University and the University of Queensland respectively.

For further information, contact Bruce Edwards, Griffith University, Brisbane, (07) 875 7134.

Bruce Edwards, Griffith University, and  
Griffith University Library Reference Services Newsletter  
April 1992