

NACSIS (NATIONAL CENTRE FOR SCIENCE INFORMATION SYSTEMS) AND
UNIVERSITY LIBRARIES IN JAPAN

Magdalen Lee
East Asian Collection Librarian
University of Sydney Library

The September 1991 to March 1992 Japan Foundation Japanese Language Study Program for Professional Librarians in Tokyo was attended by two participants from Australia: Sit-Ling Tull (Asian Studies Librarian, Murdoch University) and myself, together with six other librarians (one each from Canada, China, Malaysia, Mexico, Singapore and Thailand). The Program was joined in January 1992 by another eight librarians for three months from China, Myanmar, Mongolia and Russia.

The Program was a combination of language course and library studies, balanced with lessons on Japanese culture and activities such as the tea ceremony, Japanese calligraphy and flower arrangement.

Since Ms Tull is contributing an article on the Professional Study Program, I am writing briefly on the library network in the university libraries in Japan, based on my observations during library visits there. However, my observations are only superficial as I was constrained by lack of language skills.

Our official library visits included the National Diet Library, NACSIS (National Center for Science Information Systems), the Japan Library Association, Keio University Library, Urawa Municipal Library and the Japan Foundation Library. I also managed to visit a few more libraries with my friends. (Visitors to university libraries in Japan are only allowed when accompanied by library members or letters of introduction.) I had the opportunity to visit the Hosei University Library, Sophia University Library, Waseda University Library, Tokyo Metropolitan Central Library, the Institute of Developing Economics Library, and the Tokyo Kogyo University Library.

NACSIS

The online library network between university libraries in Japan and the National Diet Library is administered by NACSIS, which was founded in April 1966 as a centre for joint use by universities in accordance with the National School Establishment Law. It is a central organ for promoting the service of functions similar to those of the Australian Bibliography Network (ABN) Office, offering

cataloguing information services for monographs and serials as well as training courses. In addition, NACSIS carries out the following work:

1. Planning and constructing a Science Information Network
2. Supplying secondary information, such as bibliographies, serials and abstracts
3. Constructing databases
4. Maintaining an electronic mail and bulletin board service.

NACSIS-CAT

NACSIS-CAT is a nation-wide bibliographic network composed of union catalogues for monographs and serials. For efficient input work, standard bibliographical databases such as JAPAN/MARC and LC/MARC are referred to and a shared cataloguing system has been adopted to prevent duplicate cataloguing work in libraries.

The main databases in the NACSIS-CAT are:

JAPAN/MARC (Monographs)	1969-
TRC/MARC	1985-
LC MARC (Books)	1968-
UK MARC	1950-
LC MARC (Serials)	1973-
GPO MARC	1976-
JAPAN/MARC (Serials)	1988-
LC MARC (Non-book)	1972-

(JAPAN/MARC is also available for purchase in a CD-ROM version in two parts: 1969-83 and 1984+.)

The online NACSIS-CAT is divided into four separate files:

Japanese monographs
 Foreign monographs
 Japanese serials
 Foreign serials

Users have to select which file they wish to consult.

The online cataloguing system has a screen-oriented user interface. For example, in cataloguing a Japanese monograph, cataloguers first search the 'Japanese monographs' file by keying in title keywords in Katakana. If the bibliographic data is found in the database, Screen 1 appears:

Screen 1: Search of bibliographic record for Japanese monographs

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和図書館誌検索・簡略表示          NC          1-      4/      4
>:
TITLE =ブンカ カガク ギジュツ
AUTH =          ISBN:          NBN:          NDLCN:
AKEY :          YEAR:
PUB =          CNTRY:        LANG:
PLACE =
SH =
WORDS =
ID :          PID:
FILE :
1.<BN0496891X>日本の心の技術：量かな入魂の技術 優れた直観の科学 謙虚な文化の
  吸収と創造 / 加藤隆平著. -- 科学同人研究,..., 1989.
2.<BN05592547>文化としての科学技術を考える / 猪瀬博著. -- 三田出版会, 1990. -
  - (ステアリング シリーズ ; . 科学技術を先導する30人カガク ギジュツ オ センドウスル 30ニン ; 1

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The full bibliographic record of Japanese monographs is displayed on Screen 2.

Screen 2: Display of bibliographic record of Japanese monograph

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和図書館誌詳細表示          NC          2/      4
>: REGISTER
<BN05592547> CRTDT: 19901211 RNWDT: 19910207
GMD: SMD: YEAR: 1990 CNTRY: ja TLL: jpn TXTL: jpn ORGL:
VOL:          ISBN: 489583073X PRICE: 1000円
OTHN: JLA: 90029380
TR: 文化としての科学技術を考える / 猪瀬博著 | ブンカト シテ ノ カガク ギジュツ オ カンガエル
PUB: 東京：三田出版会，1990.10
PHYS: 99p；19cm
NOTE: Interview: 佐和隆光
PTBL: ステアリングシリーズ | ステアリング シリーズ <BN04826143> . 科学技術を先導する30人 | カガク
  ギジュツ オ センドウスル 30ニン ; 1//ab
AL: 猪瀬, 博 (1927-) | イノセ, ヒロシ <DA00171014>
CLS: NDC8: 504
SH: BSH: 科学技術//L

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After the details of the book in hand have been confirmed on Screen 2, the REGISTER command is issued. Then the necessary holdings data are input, as shown in Screen 3.

Screen 3: Register of holding for Japanese monograph

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和図書館所蔵新規入力          <BN05592547>          0
>: SAVE
<BN05592547>文化としての科学技術を考える / 猪瀬博著. -- 三田出版会, 1990. -- (ス
  テアリングシリーズ ; 科学技術を先導する30人 | カガク ギジュツ オ センドウスル 30ニン ; 1).
<FA012943>学情セ
<CD0036606002>
LOC: 資料室
VOL:          CLN: 504          RGTN: S900124          CPYR:
LDF:
LTR:

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The SAVE command is entered to end the cataloguing process.

Library-Network connection

NACSIS has developed and operated two types of network communication protocol for the online library network. One protocol (N-1) was based on the Inter-University Computer Network and is used to connect libraries with main frame computers. The transferable N-1 character set was extended to include Kanji (Sino-Japanese) characters and Western alphabet with diacritical marks (EXC: Extended Character Set). The other network protocol is the VTSS (Virtual Screen Transfer on TSS Link) which is designed to connect small computers. In each case, the User interface Program resides in each local computer to provide a full screen interface with the host computer for online users.

By the beginning of 1992, 184 universities, including national, municipal and private universities, and inter-university research institutes, had joined NACSIS-CAT. However, none of the public libraries have yet joined. I believe that plans are now being made to cover the library holdings of public libraries in Japan.

NACSIS-IR

More than 24 million records have been accumulated on NACSIS-IR, covering a wide range of information on the humanities, social sciences and natural sciences. There were 36 databases on NACSIS-IR as of April 1991, and they will be further enriched to meet the needs of scientific research and researchers.

In general, there are three categories of databases on NACSIS-IR:

1. The database compiled by the National Diet Library - JAPAN/MARC (the national bibliography of books published in Japan)
2. Twelve databases purchased from foreign data producers, including -

LC MARC (Books)	1968-	
LC MARC (Serials)	1973-	(compiled by the Library of Congress)
Harvard Business Review	1927-	(compiled by John Wile & Sons, USA)
SciSearch	1987-	(compiled by the Institute for Scientific Information, USA)
3. Twenty three databases planned and formed by NACSIS itself, including -

Grants in Aid Scientific Research	1985-
Dissertation Index	1984-
(Index to doctoral theses submitted)	

to Universities in Japan)
 Academic Conferenc Papers. Series 1-8
 (Citations with abstracts of papers
 presented to conferences and meetings of the
 academic societies in engineering, chemistry,
 architecture, biology, physics, medical
 sciences, humanities, and social sciences)

The services of NACSIS-IR are offered to academic staff, library personnel, graduate students of universities, junior colleges, colleges of technology, inter-university research institutions and institutions within the jurisdiction of the Ministry of Education, Science and Culture. The purpose of the services is for scientific research in general, and for reference work in libraries. Charges include connect charges of approximately Y50 per minute, plus charges for the number of retrieved records at approximately Y13 per record.

Access to NACSIS-IR is available over a network or by direct telephone line connection.

International Operations of NACSIS services

The Science Information Network is also accessible overseas. Package nodes are installed at academic institutions in the USA and UK, providing access to NACSIS-IR for foreign researchers, and allowing exchange of research information by electronic mail between researchers in Japan and other countries.

In the UK, a pilot project involving the use of the NACSIS-CAT system by the British Library and other research libraries was started in March 1991. The aims of the pilot project are to evaluate the feasibility of overseas access to NACSIS-CAT and to develop experimentally a union catalogue of Japanese material in the UK. The five research libraries participating in the pilot project are:

Cambridge University Library
 Bodlean Library, Oxford University
 School of East Asian Studies Library, University of
 Sheffield
 Scottish Centre for Japanese Studies, University of
 Stirling
 School or Oriental and African Studies, University of
 London.

Another project is a feasibility study aimed at the exchange of scholarly databases in East Asian scripts started in 1989. Experts from China and Korean have visited Japan, and NACSIS staff members have been sent to China and Korea. The outcome of these negotiations will be most interesting.

Japanese university libraries

Besides joining NACSIS-CAT, most of the university libraries that I visited have automated part of their collection on in-house computers. For example, Sophia University Library has devised its own system, SAINT (Sophia Academic Information Network System). Waseda University Library, which was moved to a new library building two years ago, uses a system called WINE (Waseda University Information Network System).

CD-ROMs are widely used in university libraries that I visited. In Tokyo Kogyo University Library, a separate printer is attached to each CD-ROM machine, and the print-outs are free. Printers are also attached to the OPACs in this library.

In summary, the Japan Foundation Language Study Program for Professional Librarians provided the participants with an invaluable opportunity to learn the language, experience the culture and visit the libraries. Guest speakers were invited to give talks in Japanese on Japanese libraries. I have cassette tapes of the talks on the National Diet Library, given by Mr Masaki Nasu (Library Co-operation Department, National Diet Library), and by Ms Kim (NACSIS) on NACSIS. Anyone interested can contact me on +61 02 692-2884.

However, the participants felt that short-term work experience in a Japanese library would have been more useful than brief formal visits to many libraries. We did suggest this to our teachers-in-charge at the end of the program; maybe this could be considered for implementation in the future.

