

Cataloging in Japanese Libraries

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Japan is considered one of world's major financial centers and industrialized countries. Its technological and economic development have a direct impact on the countries of Asia. Moreover, Japan has contributed greatly to establishment of national and international standards in various areas including Library and Information Science. In particular, a number of organizations play important role in producing a variety of guidelines and standards for cataloging activities in Japanese libraries.

STANDARDIZATION

This section reflects three points: cataloging rules, subject authorities, and classification systems.

Cataloging Rules

In regard to the first point, cataloging rules, it is necessary to highlight the fact that all Japanese libraries use Nippon Cataloging Rules (NCR) compiled by the National Diet Library in 1977. It is basically for publications in the Japanese and Chinese languages and is based on a description unit card system (DUCS) and does not conform to the principle of main entry.

In a catalogue constructed according to this system, multiple entries are created for an item by reproducing the unit card made for it. Unlike Anglo American Cataloging Rules (AACR), NCR has no main entry headings and as many heading as are needed are recorded in the tracing. The descriptive part of the record is created independently of the headings (Takawashi, 1989).

* บรรณารักษ์สำนักหอสมุด มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี

Four revisions were carried out in the 1980s. The NCR was also revised in 1987 and published by Japan Library Association (JLA) to conform internationally with the AACR2. However, the NCR1987 is still based on the no main-entry principle and incorporates a concept of Bibliographic Level, which is also a basic structure of a national union catalog database maintained at the National Center for Science Information System (NACSIS). NACSIS is the sole bibliographic utility in Japan (Masuda, 1998). The concept of bibliographic level is also utilized by UNIMARC developed by International Federation of Library Associations and Institutes, or by Common Communication Format (CCF) developed by UNESCO GIP/UNISIST. Therefore, the NCR1987 and NACSIS database are of international conformity to IFLA and UNESCO standards with a minor modification. A most notable feature of NCR is in its treatment of bibliographic hierarchy. This feature has been incorporated in preparation for online catalogs (Takawashi, 1989)

In April 1994, the JLA published the sixth edition of NCR called NCR1987R. Although NCR1987R is the result of ongoing revisions, it maintains the same principles and guidelines as NCR1987. The major differences relate to the rules of some types of materials, notably manuscripts, graphic materials, and computer files. In comparison to AACR2, NCR1987R had the following splendid features:

1. Index: NCR1987R contains the rules not only for filing but also for subject cataloging under Subject Headings and Class Number as Headings.

2. Description: NCR1987R was designed separately for Materials for the Visually Handicapped in the rules for description. In general, NCR1987R has the same principles and objectives as AACR2R; each chapter starts with the definition and scope of the material specific to that chapter and followed by its own particular rules, and instructions refer to the related general rules in the first chapter.

3. Headings: Unlike AACR2R, NCR1987R has adopted the principle based on the no-main entry system. Thus, all entries are equal access points. On the other hand, the main feature for cataloging is called to be in proposing title unit entry. The title unit entry provides only the description of books, which starts with the title without author entry headings. Therefore, a

NRC1987R catalog record begins with the title while an author statement is recorded in the bibliographic description, and necessary headings are indicated in tracing (Figure 1).

All jangle and riot : a barrister's history of the bar / by R.G. Hamilton.
(BA00698403)

Abingdon, Oxon : Professional Books, 1988

325 p., [8] p. of plates ; 23 cm

ISBN: 0862050839

AL: Hamilton, R. G.

SH: Great Britain. Barristers, history

Figure 1: NRC1987R catalog record

However, one of the current problems in library works in Japan is a problem of romanization schemes. It means that a romanized headings for CJK materials have to be assigned (Naito, 1987).

Subject Authorities

NDL (National Diet Library) and JLA have created their Subject Headings, but they are not widely used in Japanese libraries. Actually, subject access is the weak point of Japanese libraries (Masuda, 1990).

From visiting some libraries's OPACs in Japan, I found that those libraries use Library of Congress Subject Headings (LCSH) (Figure 2).

Algebraic groups and class fields / Jean-Pierre Serre. (BA01328170)

New York ; Tokyo : Springer-Verlag, c1988

ix, 207 p. ; 25 cm. (Graduate texts in mathematics ; 117) : U.S

NOTE: Translation of: Groupes algebriques et corps de classes ;

“Translation of the French edition” T.p. verso ; Bibliography:

p. [198]-205 ; Includes index

ISBN: 038796648X(: U.S) ; 354096648X (: Germany)

VT: Groupes algebriques et corps de classes
 AL: Serre, Jean Pierre
 CLS: LCC : QA171 ; DC19 : 512/.2 ; NDC7 : 410.78 ; NDC7 : 411.7
 ; NDC8 : 411.6
 SH: Linear algebraic groups ; Class field theory

Figure 2 : Catalog record uses Library of Congress Subject Heading

Classification Systems

The most widely used classification systems in Japanese libraries are the Library of Congress Classification (LC), the Dewey Decimal Classification (DC), and the Nippon Decimal Classification (NDC). For instance, the National Diet Library and academic libraries employ the LC, DC, and NDC systems (Figure 3). The Nippon Decimal Classification was first proposed by Kiyoshi Mori in 1928 and published in the following year. NDC was influenced by Dewey's Decimal principles, which are comprised of major classification categories. In 1969, the National Diet Library (NDL) developed its own NDL Classification with Library of Congress Classification (LC Classification) by using one or two letters, and followed by numbers 1 through 999 to cover subjects.

Brownian motion and stochastic calculus / Ioannis Karatzas, Steven E. Shreve. (BA01316218)

New York ; Tokyo : Springer-Verlag, c1988

xxiii, 470 p. ; 25 cm. (Graduate texts in mathematics ; 113) : U.S.

NOTE: Bibliography: p. [447]-458 ; Includes index

ISBN: 0387965351(: U.S.) ; 3540965351(: Germany)

AL: Karatzas, Ioannis ; Shreve, Steven E.

CLS: LCC : QA274.75 ; DC19 : 531/.163 ; NDC8 : 410.8 ; NDC8 : 423.1

SH: Brownian motion processes ; Stochastic analysis

Figure 3: Catalog record employs LC, DC, and NDC systems

LIBRARIES' OPACs

A list of libraries that have their OPACs available via the Internet and World Wide Web is shown in Appendix 1. Although 310 libraries have developed their web sites, only a few are available in English. These web sites can be broken down into 9 groups: Online libraries (4), Polytechnic's libraries (38), University libraries (207), Hokkaido and Tohoku area (5), Kanto area (2), Chubu area (13), Kinki area (12), Chugoku and Shikoku area (5), and Kyushu and Okinawa area (6). After visiting some OPACs of Japanese libraries, the connection is very slow and may not even be available when the library is closed. From considering web-accessible library catalogs and plain OPACs of some libraries in Japan, I found that they use various library automation systems. For instance, the National Center for Science Information Systems (NACSIS) provides WWW interfaces for its OPAC products with NACSIS webcat; the University of Electro-Communications Library uses the library search system LIMEDIO; the University of Tsukuba has been fully automated using Tulips, and so forth (Figure 4).

Book catalog information

To Menu

Bibliography

[*] Title

Library automation : experience, methodology, and
technology of the library as an information system

[*] Authors

(by) Edward M. Heiliger (and) Paul B. Henderson, Jr

[*] Publication items

New York : McGraw-Hill, 1971

[*] Physical description

xii, 333 p : illus ; 23 cm

[*] Series name

McGraw-Hill series in library education

[*] Notes

Bibliography: p. (255)-316

[*] Author information

Heiliger, Edward M., 1909- ; Henderson, Paul B.

[*] Subjects

Libraries Automation

[*] NDC Classification

014.8

[*] ISBN

0070278881

[*] NCID

BA11135038

Holdings

Location Call number Material ID Status (Due date)

1□B3+2M□(B 014.8||H51 2207746946)

Figure 4 A corresponding record on LIMEDIO

BIBLIOGRAPHIC UTILITIES

Bibliographic utilities are large databases of shared cataloging information created by the effort of large libraries. The most popular bibliographic utility in Japan is NACSIS-CAT, composed of university libraries in this country. As of December 31, 1996, the number of university libraries connected online to NACSIS-CAT was around 485 libraries, and the total number of holdings had reached 28.4 million (Books: 25.3 million and Serials: 3.1 million) (NACSIS, 1997). NACSIS-CAT is a product of the National Center for Science Information Systems (NACSIS) in 1984. The members of this shared cataloging system contribute their acquisition and cataloging records in Japan MARC, USMARC, TRC MARC, or GPO MARC and use a special terminal software named User Interface Program (UIP) for connecting to the system. In this system, library members can use Japanese and European languages.

NACSIS webcat is the system for searching the union catalog databases of books and serials held in the university libraries in Japan on World Wide Web. The database, which are established by using NACSIS-CAT the shared cataloging system, may be searched by title, author, publisher, publication date, ISBN or ISSN, and keyword. This webcat display contains two different formats the Brief Record (Figure 5) and the Full Record (Figure 6)

NACSIS webcat: **brief record(s)**

112770 record(s) hit.

1. A Survey of cell biology ; v. 103 - v. 113. --Academic Press, 1986.
-- (International review of cytology / editor-in-chief, G.H. Bourne ; editors, K.W. Jeon, M. Friedlander ; v. 103-106, 108-111)
2. A catalogue of the Tibetan manuscripts collected by Sir Aurel Stein / edited by the Seminar on Tibet ; pt. 9. --Toyo Bunko, 1977
3. A comprehensive guide to AI and expert systems using Turbo Pascal / Robert I. Levine, Diane E. Drang, Barry Edelson. -- McGraw-Hill, 1988
4. Advances in accounting : a research annual / editor, Bill N. Schwartz; associate editors, Philip M.J. Reckers, James W. Deitrick, James H. Scheiner ; v. 1: 1984 - supplement 1, 1989. -- JAI Press, 1984
5. Algebraic groups and class fields / Jean-Pierre Serre ; : U.S. Springer--Verlag, 1988. --(Graduate texts in mathematics ; 117)
6. All jangle and riot : a barrister's history of the bar / by R.G. Hamilton. --Professional Books, 1988

[Manual] || [Return]

Figure 5 NACSIS webcat brief record

NACSIS webcat: full record

[Manual] || [Return]

A Survey of cell biology. --(BA01128772)

Orlando ; Tokyo : Academic Press, 1986-

v. ; 24 cm. (International review of cytology / editor-in-chief, G.H.

Bourne ; editors, K.W. Jeon, M. Friedlander ; v. 103-106, 108-111)

v. 103 - v. 113

NOTE: @@@91000***,920310 ==>BA00294696 ; Includes

bibliographies and index

ISBN: (v. 103) ; (v. 104) ; (v. 105) ; (v. 106) ; (v. 108) ; (v. 109) ;

(v. 110) ; (v. 111) ; (v. 112) ; (v. 113)

Figure 6 NACSIS webcat full record

The benefits of NACSIS-CAT are:

1. To achieve labor savings for cataloging works.
2. To provide means for construction of efficient union catalogs.
3. To maintain the high quality data.
4. To provide and maintain holding data for participating libraries.
5. To provide an individual library version of CD-ROM service.

STANDARDS FOR MACHINE-READABLE CATALOGING (MARC)

In Japan, Japanese MARC was developed by the National Diet Library in April 1981 and recorded information in Chinese characters for the first time in the world. Since April 1988, Japan MARC has also been distributed on CD-ROM (J-BISC) (National Diet Library, 1996-1997). Besides this, TRC MARC format has been developed by TRC Library Service Co., Ltd. At present, 70% of public libraries an 2,261 libraries have adopted this MARC format (Toshokan Ryutsu Center, 1995-1997).

COOPERATION AND NETWORKS

In addition to NACSIS-CAT, there is a National Union Catalog Network Project of the National Diet Library (NDL). This is a public library network supported by the Information-technology Promotion Agency (IPA). The main objectives of this project are to compile national union catalogs from NDL and 26 main public libraries in Japan, convert library bibliographic holding data into the unified format based on Japan MARC, and provide ILL services among their members (National Diet Library, 1996-1997)

CONCLUSION

Although the rules were applied from Western countries, standardization for cataloging in Japan is unique. For example, NCR1987R is applied from AACR2R. In my point of view, Japan libraries have an attempt to develop the appropriate method of cataloging Japanese materials. Therefore, a variety of standards such as NCR1987R, NDC, NDL classification, and NACSIS-CAT bibliographic utility, were established.



REFERENCES

- Encyclopedia of Library and Information Science.** Volume 13.
New York: Dekker.
- Masuda, Hajime, Librarian of Agricultural Library, the University of Tokyo. 1998. Interviewed by author. 9 April 1998, Boston, Massachusetts.
- Naito, Eisuko. Standardization Activities in the field of Documentation in Japan: Review and Propects. In **Proceedings of the Asian Forum for Standardization of Information technology, Tokyo, Japan, September 14, 1987.** Tokyo : AFSIT, 1987.
- NACSIS-Electronic Library Service.** [Home page of the National Center for Science Information Systems], [Online]. Available: <http://els.nii.ac.jp/nacsis-els-j.php3?top>
- National Diet Library. (Copyright 1996-2002). **National Diet Library** [Homepage of The National Diet Library], [Online]. Available: <http://www.ndl.go.jp/e/index.html>
- Takawashi, Tadayoshi and Yasuo Iwashita. "The concept of a Bibliographic Unit Introduced into the Newly Revised Edition of Nippon Cataloging Rules, 1987 Edition and the Resultant Cataloguing Object." **Cataloging & Classification Quarterly** 23, 2 (1996): 17-39.
- Takawashi, Tadayoshi, Tsutome Shihata, and Zensei Oshiro. "The No-Main-Entry Principal: the Historical Background of the Nippon Cataloging Rules." **Cataloging & Classification Quarterly** 9, 4 (1989): 67-77.
- TRC Library Service Co., Ltd.** [Homepage of the Toshokan Ryutsu Center], [Online]. Available: <http://www.trc.co.jp/trc-eng/pr/company.htm>

Appendix 1

Japanese Libraries' OPACs list*

Lib. Name	Chiba University
URL	telnet://culis.ll.chiba-u.ac.jp gopher://gopher.ll.chiba-u.ac.jp http://www.ll.chiba-u.ac.jp
IP Address	133.82.217.1
Connect	login: culis
Lib Name	Kouchi University
URL	telnet://ken01.lib.kochi-u.ac.jp
IP Address	133.97.81.11
Connect	login: opac password: (send cr)
Lib Name	Miyazaki University
URL	telnet://msptcp.cc.miyazaki-u.ac.jp
IP Address	133.54.254.1
Connect	PLEASE KEY IN "TERMINAL TYPE" (send cr, and choice your TERMINAL TYPE) PLEASE KEY IN "APPLICATION NAME" (send cr, and choice "OPAC")
Lib Name	Nagaoka University of Technology
URL	http://nalib.lib.nagaokaut.ac.jp/ telnet://nalib.lib.nagaokaut.ac.jp
IP Address	133.44.10.121
Connect	login: opac
Lib. Name	National Laboratory for High Energy Physics
URL	http://keklib.kek.jp/
IP Address	130.87.18.1
Lib. Name	Tokyo Institute of Technology
URL	telnet://topics.libra.titech.ac.jp gopher://gopher.libra.titech.ac.jp
IP Address	131.112.212.11
Connect	ENTER USERID- OPAC

Lib. Name The University of Electro-Communications
URL telnet://baloo.cc.uec.ac.jp
IP Address 130.153.46.3
Connect ENTER USERID- limepub

Lib. Name The University of Tokyo
URL telnet://library.lib.u-tokyo.ac.jp
telnet://liliput.lib.u-tokyo.ac.jp
telnet://opac.cc.u-tokyo.ac.jp
IP Address 130.69.96.3
130.69.96.9
130.69.240.42
Connect ENTER USERID - LIBRARY

Lib. Name University of Tsukuba
URL telnet://anzu.cc.tsukuba.ac.jp
IP Address 130.158.64.40
Connect Select menu, "tulips"

Lib. Name Waseda University
URL telnet://wine.wul.waseda.ac.jp
IP Address 133.9.8.10
Connect select- 1 (WINE)

Source: Agriculture, Forestry and Fisheries Research Information Center. **Jump to Library! (In Japan)** [Homepage of the AFF Research Information Center], [Online]. Available: <http://ss.cc.affrc.go.jp/ric/opac/opacE.html> [2002, August 22].

Japan OPACs List (Ver 1.3E 1994.9.8), [Online]. Available: <gopher://libnext1.Libra.titech.ac.jp:7070/JAPANOPAC?ELIST>