

Authority Files in the National Library of Korea

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Introduction

With the growth of bibliographic databases, library users demand to find the right information within a short time more and more. It is thought that a best way to meet such demand is to provide bibliographic data under authority control from the perspective of librarians. The integration of different databases and the virtual storage technology on the web will open a new path for the share of authority file.

It is very significant to discuss about sharing authority data among three countries in East Asia that have similar cultural backgrounds to reflect today's tendency.

1. Current Situation

For over a half century since its opening in 1945, the National Library of Korea has served the public consistently as the national information center. The Library has responsibility for legal deposit for domestic publications and houses the most comprehensive collections in Korea. In the legal deposit provisions of the Library and Reading Promotion Act, all materials published in Korea should be submitted to the Library: books, periodicals, audio and video materials and electronic materials in a certain container. The Act does not yet include online publications.

1.1 Functions

NLK operates under the provisions of the Library and Reading Promotion Act. NLK is responsible for acquisition, processing analysis, accumulation, and preservation of books, other types of documents, visual and audio materials as well as making them accessible by the public. Furthermore, as a central clearing house, NLK is in charge of national information system.

- o Acquisition, processing, analysis, preservation and storage of materials from Korea and abroad as well as the task of making these materials available to the public
- o Management of deposit of domestic materials
- o Resource sharing with other libraries
- o Preparation and standardization of bibliographies and management of the ISBN and ISSN systems
- o Control of the national information system and library cooperation network through computerization
- o Cooperation with overseas libraries and international exchange of materials

- o Guidance and support for library services, cultural activities and continuing education programs for public libraries
- o Formulation and implementation of programs to encourage reading
- o Surveys and research on library management
- o In-service training of librarians
- o All other activities required of a national library

1.2 Library Collections

The Library acquires materials from domestic publishers through the legal deposit system. Materials are also collected by means of purchase, donations, and exchanges with overseas libraries. The Library's most important function is not only to undertake comprehensive acquisition of national materials, but also to ensure their preservation. The Library houses over 4.1 million materials. Library collections include about 3,100 rare books published before the 17th century. Some of those materials have been also designated as National Treasures.

1.3 Construction of Database

The Library has created a database of its collection through KOLIS within the Library. These databases service is available on the Web. In addition, the "KORMARC on Disc" is made and distributed on CD-ROM. The library computerization project has integrated the databases of public libraries in the country into a national bibliographic database "KOLIS-NET", so that regional library collections can now be retrieved from anywhere in the country. And, if necessary, these bibliographic records can be downloaded to shape or constitute the databases of their own libraries.

< Table 1. Contents of National Library's Database as of Dec. 2001 >

Bibliographic Records of NLK	1,781,123
Holding Records of Union DB	
- Bibliographic Records	2,400,000
- Holding Records	7,340,000
TOC (Tables of Contents)	780,000
Full Image Database	58,489,000 pages

1.4 Organization and Personnel

The Library is under the jurisdiction of the Ministry of Culture and Tourism and is organized into two departments, seven divisions, and one branch library. Under the Director General, there are two departments: Library Management Department & Library Service Department. Library Management Department includes General Affairs Division, Support & Cooperation Division, Librarian Training Division, and Information Technology Division. Library Service Department includes Public Service Division, Deposits Division, and Acquisition & Technical Service Division. The Branch Library is also called as the Dissertations Library. There are 219 employees including the Director General as Table 2.

< Table 2. Personnel >

Total	Librarian	Administration	General or Privileged Government Positions	Technical Staff	Privileged Government Positions	Functional Staff
219	117	29	10	5	6	52

1.5 Major Activities in Information Technology

Major activities related to Information Projects during last 5 years are:

- 1997 - Developed Testbed for Digital Library and Launched Internet Services
- 1998 - Began National Digital Library Project Linking with 7 Major Libraries
Constructed Databases for the Digital Library by the 1st Year Nation's Information Employment Project
- 1999 - Offered Internet Services Linked with National Digital Library Construction Plan on the Web,
Promoted the 2nd Nation's Information Employment Project,
Developed Integrated Within-The-Library Automation System (KOLIS)
- 2000 - Distributed Library Automation System for Public Libraries (KOLAS II),
Developed National Union Cataloging System (KOLIS-NET),
Promoted the 3rd Nation's Information Employment Project
- 2001 – Updated National Union Cataloging System (KOLIS-NET),
Executed Preliminary Investigation of New Building Project “The Digital Library of Korea (tentative name),” by Korea Development Institute
Developing The e-CIP System and The Acquisition System of Online Publications
(continued)

With the tremendous progress in information technology, NLK opens "National Digital Library" site (www.dlibrary.go.kr) which can search major digital libraries in the nation at the same time. These include 6 libraries: the National Library of Korea, the National Assembly Library, the Supreme Court Library, Korea Institute of Science and Technology Information (KISTI), KAIST Science Library, and Korea Education and Research Information Service (KERIS).

National Digital Library Construction Project on the Web is aimed at enhancing the nation's ability to utilize information and balancing development between regions through the connection of major digital libraries nationwide. Moreover, the Project also plans to make a foundation for information that will build national resources flow system by connecting domestic libraries. And it has been launched as a three-year project since 1996, based on national superhighway information network construction plan. The Project is also introduced as a general model of digital libraries.

In the year 2001, NLK started to develop e-CIP system and online publications acquisition system. e-CIP system will be connected to the National Union Cataloging System in operation. Therefore, users can access more fresh and active information than ever before. These series of projects make NLK to have fundamental functions and leadership for a network time.

2. Authority Files

2.1 Authority Records in Korea

NLK developed KOLIS in 1999 which made a foundation for authority files and began to build authority data in 2000. The total of authority records for personal and corporate names are approximately 60,000 records on December 2001.

Compared with the number of authority records in libraries in Korea, authority records of NLK amount to 5 percent of all authority records. It means that building authority files on the national scale is in an initial stage. NLK will collect authority records built by other libraries for intensifying the quality of authority database and construct national authority files of Korea based on those records. NLK has decided upon a positive plan to share authority database all together with other libraries.

< Table 3. The Authority Records >
(the number of records/ the number of libraries)

Libraries	Personal·Corporate Names	Meeting Names	Uniform Titles	Topical Terms	Total
NLK	59,271 / 1	-	-	-	59,271
Public	131,626 / 6	-	-	15,000 / 1	146,626
University	945,222 / 32	7,680 / 4	163,628 / 13	38,424 / 10	1,154,954
Special	18 / 1	-	-	7,000 / 1	7,018
Total	1,076,866 / 40	7,680 / 4	163,628 / 13	60,424 / 16	1,308,598

※ Source : Statistics of Libraries in Korea 2001(Korean Library Association, 2001)

2.2 Traditional Understanding about Authority Heading

It is a bit late to construct authority records in Korea including NLK compared to those in western countries. There are many reasons of being late in constructing the authority records, of which the major one probably stems from the understanding of cataloging which has been influenced by traditional customs of cataloging.

"Traditional cataloging system in Korea is single entry system by classification order. Whereas western cataloging is to arrange materials by author name's alphabetical order within the same classification scheme, Korean cataloging is to sort items by title's alphabetical order under each publication year. There were no author or title index and even no author catalogues and title catalogues. Only title retrieval by subject headings has been searchable in Korean cataloging until the beginning of 20 century."(KIM Tae-soo, Understanding cataloging)

As a result it took time to adopt authority files to keep author name under control and put them in practice.

2.3 Rules for Authority Headings & KORMARC format

2.3.1 Korean Cataloging Rules(KCR)

Rules for cataloging apply 'Descriptive Rules for KORMARC' and rules for headings are based on internal regulations of KCR, 2nd edition. KLA is opening a public hearing on its homepage about KCR, 4th edition which will be published in this year, 2002. The edition proposes only basic rules for headings. KCR4 will be inserted into KORMARC descriptive rules. Librarians of NLK have been participated in this project and made efforts to integrate the rules with KORMARC formats.

2.3.2 KORMARC Format for Authority Data

NLK has established KORMARC bibliographic formats for standardization of resources processing patterns in 1993 and thus authority formats in 1999. These formats are enacted as KS(Korean Standard) and 98 percent of libraries in Korea follows KORMARC formats.

KORMARC format for authority data is based on "USMARC Format for Authority Data Including Guidelines for Content Designation." In a KORMARC authority record, a name heading is the content of 100, 400, or 500 field and a corporate name heading in 110, 410, or 510 field. Each field contains basic elements in a subfield code \$a. Authority headings keep them unique by supplementing additional information even if they have the same values in basic elements.

To distinguish homonyms which can be easily found in Korean names, established or unestablished headings contain a subfield \$h for a personal name in Chinese. If the Chinese name are the same, it can add \$d for dates associated with a name. Besides those codes, \$f(Successive dynasties, 歷朝), \$g(Genealogy, 世系), or other information related with a title(\$t, \$n, \$p, \$l) can be added.

In authority headings for corporate names, basic information is inputted in \$a of 110, 410, or 510 field. Additional information can be transcribed in subfield codes: \$b(subordinate unit), \$c(location of meeting), or \$d(date of meeting or treaty signing).

2.3.3 Personal Name Authority Records

1) Korean Names

Individuals have their own name when born, but Korean ancestors might have different names for a child or for an adult. In archaic writings, literary names were used a lot. In Cho-sun Dynasty, it was considered as a more polite way to use literary or pen names than to use real names when scholars exchanged opinions or letters. In those writings, most authority records are for reference entries for other variants.

The characteristics of Korean personal names in modern society are many homonyms. Most Korean names have both Hangul names and Chinese characters for their names. Publications have author names both in Hangul and in Chinese. Headings for author names are described in Hangul even if author names are written in Chinese on the material. There are 57 surnames whose Chinese characters are pronounced the same way but have different meanings. In case of surnames, Kim, Lee, and Park, have large population, thus there are many homonyms of which persons have those surnames. When transcribing as a heading a name in a Chinese character with many homophones, headings for homonyms are getting larger and larger.

Koreans' names put forenames after surnames with no distinction. Koreans' names do not use 'comma(,)' between forenames and surnames. And Korean language has the 'initial law' which pronounces differently from its original pronunciation in the case of starting personal names(forenames or surnames) with 'ㄴ' or 'ㄷ'. When starting with 'ㄴ' or 'ㄷ', mostly 'ㄷ' is recorded by 'ㅇ', or 'ㄴ' by 'ㅇ'.

< Example of Korean personal name authority record >

```
001 KAC200100020
005 20010310161634
008 010102 n aznnnabbn          a a a      a
040   ▼ a011001▼ c011001▼ d011001
100 1   ▼ a이광수=▼ h李光洙,▼ d1892-1950
400 0   ▼ a춘원=▼ h春園,▼ d1892-1950
400 0   ▼ a장백산인=▼ h長白山人,▼ d1892-1950
400 1   ▼ a향산광랑=▼ h香山光郎,▼ d1892-1950
400 1   ▼ a가야마 미쓰로,▼ d1892-1950
400 1   ▼ aKayama, Mitsuro,▼ d1892-1950
670   ▼ a세계인명대사전(고려출판사, 1999)
678   ▼ a소설가, 6.26때 납북
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2) Japanese names

Headings for Japanese names are recorded in Hangul by Japanese pronunciation, based on regulations of Japanese names, 'Foreign Language Transcription Rule.' There is one blank between forenames and surnames with no comma. When Chinese scripts of Japanese names in reference entry are transcribed by Korean pronunciation, forenames and surnames put together with no distinction. 'Initial Law' will not be applied when transcribing by Japanese pronunciation of Chinese scripts.

<Example of Japanese personal name authority record >

```
001 KAC199631100
005 20001228101355
008 960908 n aznnnabbn          a a a      a
040   ▼ a011001 c011001
100 1   ▼ a아쿠타가와 류노스케, ▼ d1892-1927
400 1   ▼ a개천용지개=▼ h芥川龍之介, ▼ d1892-1927
400 1   ▼ aAkutagawa, Ryunosuke, ▼ d1892-1927
670   ▼ a國立國會圖書館著者名典據錄 (國立國會圖書館, 1991)
678   ▼ a일본작가
```

3) Chinese names

Headings for Chinese names are transcribed into two patterns according to the times. The past people's names who had lived since 1911 will be transcribed in Korean pronunciation of Chinese names. After 1911, author names are transcribed in Hangul by pronouncing it in its own language pronunciation based on 'Foreign Language Transcription Rule.' Forenames and surnames put together with no distinction. 'Initial Law' will not be applied when transcribing by Chinese pronunciation like Japanese names.

<Example of Chinese personal name authority record>

```
001 KAC199631269
005 20001005100955
008 960911 n aznnnabbn          a a a      a
040   ▼ a011001▼ c011001
100 1   ▼ a노신=▼ h魯迅,▼ d1881-1936
400 1   ▼ a루신,▼ d1881-1936
400 1   ▼ a루신,▼ d1881-1936
400 1   ▼ a주수인=▼ h周樹人,▼ d1881-1936
400 1   ▼ a저우수런,▼ d1881-1936
678   ▼ a중국 문학가, 사상가
```

4) Headings for Western Names

For unification of authority records for western names, headings will be romanized and created reference entries for other variants. It is very difficult to transcribe foreign names even if it is followed and described by 'Foreign Language Transcription Rule.' It is very possible to cause errors in transcribing in Hangul exactly by pronouncing its won language for whoever has complete knowledge of the language.

It happens much more in publications. In the worst case, an author's name is described in over 10 different ways. It depends on translators or publishers. Authority control for western names consists mainly of reference entries not to other variant of the names, but to other description of the process of transcribing in Hangul.

< Example of Western personal name authority record>

```
001 KAC200000024
005 20010302101553
008 000103 n acnnnaaaa          a a a      n
040   ▼ a011001▼ c011001
1001 ▼ aShakespeare, William,▼ d1564-1616
4001 ▼ aShakespeare, W.,▼ d1564-1616
4001 ▼ a세익스피어, 윌리엄,▼ d1564-1616
4001 ▼ a세익스피어, W.,▼ d1564-1616
4001 ▼ a섹스피어, 윌리엄,▼ d1564-1616
4001 ▼ a세익스피어,▼ d1564-1616
4001 ▼ a세익스피어, 윌리엄,▼ d1564-1616
4001 ▼ a세익스피어, 윌리엄,▼ d1564-1616
4001 ▼ a섹스피어, 윌리엄,▼ d1564-1616
4001 ▼ aシェクスピア,▼ d1564-1616
670   ▼ a로미오와 줄리엣 (전예원, 1989)
678   ▼ a영국 시인 ; 극작가
```

2.4 Authority Control System

In the latter half of 1999, authority records have been made through KOLIS(KOrean Library Information System) developed in 1999. KOLIS is within-the-library system of NLK. Authority records are created in the process of cataloging. When establishing a heading in a bibliographic record, if a heading exists in its authority record, the established heading is chosen as the heading on the bibliographic record. In a bibliographic record, author name of

“1XX field(established heading)” is moved to the heading of the bibliographic record. At this time, the control number of an authority record is connected to a heading of a bibliographic record. Bibliographic records and authority records are separated.

2.5 Cataloging Department

NLK does not draw a distinct line between cataloging and classification. For domestic books, cataloging and classification are divided into two parts. Catalogers process materials focusing on headings. A new authority record can be created or modified when cataloging librarians are creating or retrieving authority data for making a heading. The heading for a material is first searched in authority file and if there is an established heading, it is connected to a bibliographic record and inserted as a heading of the record. If not, a new authority record is created. Authority file is managed through these series of process.

In cataloging, Deposits Division makes a descriptive part for materials and Acquisition & Technical Service Division makes a heading part. There are 22 professional librarians.

2.6 Future Development

Deep concern with authority files has been raised for improving the quality of databases. The share of authority files will be the real problem owing to union cataloging.

In Korea, a nation-level authority files are required for solving differences in cataloging rules, principles of probable association, and formats of headings. NLK has to play a more important role in solving these problems than before. Therefore, NLK will start to build authority files for bibliographic records established before 2000. Retroactive authority files will be constructed by means of reference to existing authority records of their libraries, or drawing out authority data from heading parts of bibliographic files. Both ways will be huge-scale projects. NLK will make a concrete plan to build authority files. The files are also required for both e-CIP and online resources acquisition system in completion. Retroactive files will be built as complete-level records of national authority databases.

Conclusion

Through 1st & 2nd Meetings of CJK Name Authority Control, authority headings have similarities among three countries. Most fields in authority records have closeness: Chinese name, dates with a name, variants, and source data. They have their own languages, but have something in common with understanding other countries' languages in Chinese. Based on these similarities, there are diverse ways to share authority formats like mapping or crosswalk to each other related data elements.

Authority files for Japanese names are more precise than those built in Korea, and authority records for Chinese names, too. It is the most economic and precise way for each country to build authority records of its own author names and to share each other's records through cooperative relationship. To do this, NLK suggests putting efforts together as follows:

- 1) Development of union descriptive rules for heading parts;
- 2) Development of exchange formats of mandatory fields suggested by IFLA;
- 3) Conclusion of cooperation for mutual data exchange.

Reference

KIM Tae-soo, Understanding cataloging. Seoul : Korean Library Association, 1999.
Statistics of libraries in Korea 2001. Seoul : Korean Library Association, 2001