NACSIS-CAT Author Name Authority Record: 
Its Function and Processing

SAKAI Kiyohiko & KYOTO Toru 
Contents Division, Development and Operations Department, 
National Institute of Informatics (NII)

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Introduction

NACSIS-CAT is a system of a national union catalog database of scholarly materials held among libraries. The system maintains bibliography files, holding files and authority files. The bibliographic file and the holding file are distinguished by monographs and serials. The authority files have Author Name Authority and the Uniform Title Authority.

Each records (bibliography, holding, author name authority, and uniform title authority) are related each other. This relationship is called "link." The union catalog database currently maintains the following links:

(1) bibliography -- holding
(2) bibliography -- bibliography
(3) bibliography -- author name authority
(4) bibliography -- uniform title authority
(5) author name authority -- author name authority
(6) uniform title authority -- uniform title authority

These link relationships are established when a cataloger registers a new bibliography record to the Union Catalog Database by creating a link with related records.

In this session, utilization, reference functions and creating method are
described how we utilize the author name authority records.

1 Purpose of the Author Authority Record

On page 49 in the "Catalog Information Standards" which specifies how to create data in the NACSIS-CAT (the latest edition is the Fourth edition published in December 1999), the following three points are listed as the purpose and functions of the author authority records:

1. to unify and to control the form of author heading of bibliography records
2. to assemble works of an author
3. to provide accessibility of search for an author by recording variant and related forms of author headings

The first item is the purpose by which the second and the third, functions, are achieved. Purpose of the author name authority record is to collate / assemble various author names of an author under a single heading, not to register various names as they appear for achieving manageability.

Here is one example. Mr. KODA Rohan, who was a great writer active around 1900s, published his works under three names such as 「幸田露伴」「蝸牛露伴」and 「幸田成行」. The first name 「幸田露伴」maybe well known, but the latter two maybe not well known. For possible searches, it needs to specify headings such as 「蝸牛露伴」「幸田成行」 recorded in bibliography records, and that their uniform heading is 「幸田露伴」. Therefore in bibliography records in which 「蝸牛露伴」「幸田成行」 appear as author, the author name heading is recorded as 「幸田露伴」, and that 「幸田露伴」 becomes a uniformed heading of the author name authority record.

When headings are unified and controlled through the author name authority record, it becomes possible to concentrate works of an author published under various names. It also becomes possible to search by any form of names, the search produces a comprehensive result including works under the uniform heading.

2 Contents of the Author Authority Record

In this section, data contents is reviewed of the author authority record of the NACSIS-CAT. It is possible to search directly to the author name authority record that are linked with bibliography records. They are available through the link from bibliography records.

Here is a search on the author name authority file, and a frame of the author name authority retrieval appears.

1 “KODA” shall be “KÖDA” in the standard Romaized form.
Each box has name such as "AUTH" (author name), "AKEY" (abbreviated form of author name), "PLACE" (place), "DATE" (date), and accepts search words. 「幸田露伴」 is an example of search. 「幸田 露伴」 is entered in the AUTH box, and searched. One record is hit, and the author name authority detailed display frame appears.

There is a record ID in the head of the record enclosed by "<" and ">".

In the box of "HDNG," the uniform heading form appears. Elements are names in Japanese language form delimited by "," (comma, space), and/or, as it required, additions (such as the date of birth and death, profession, specialization, etc.)
and in this case the date of birth and death), and followed by the reading of heading form after the double strokes.

In the box of "TYPE," a type of author name authority is specified from "personal name" (p), "corporate name" (c), or "meeting" (m).

"DATE" records the date of birth and death in the case of personal name, the inclusive years of its existence for corporate body, or the date of meeting.

"PLACE" field, not appearing in this frame, records the birth place or work, place of office, meeting place.

"SF" field is an abbreviated form of "See From," and records the form(s) of See From reference headings. In the example, there are two variant author names together with Romanized forms. There are two possible reading forms, and they are recorded. This provision is made voluntarily by catalogers of the participating libraries for the possible use in the future.

"NOTE" field(s) appears next. Here in this field or, information is recorded for the source materials used in the creation or correction of this authority record. "SRC" indicates as a newly created record, "EDSRC" indicates the corrected record according to a client system. Bibliographic information of source materials is recorded automatically when the process is referring a bibliography record.

"SAF" field, not appearing in this frame, is provided. It is an abbreviated form of "See Also From," and records heading forms of See Also From. Some more detail shall be discussed later through examples.

Data elements, including those embedded automatically, of the author name authority record in the NACSIS-CAT system are listed below.
3  Reference Function of the Author Authority Record

By having reviewed on the data contents of the author name authority record of the NACSIS-CAT, its relationships with bibliography record shall be shown. The start is to click the button of "list of bibliography" on top right in the author name authority detailed display frame.
Then the system responds to create a list of bibliography records linked with this author name authority record. The posting is 334.

Here is the full display of a bibliography record, in this case the first record in the list.

The material is an English translation of 「五重塔」, a representative work of KODA Rohan, and other works. "AL" field in the frame shows the Uniform Heading.
of 「幸田露伴」 in Japanese scripts. Linking mechanism with the author name authority record creates the transcription of "HDNG" field from the Authority record. And the record ID, enclosed by "<" and ">", of the Authority record is attached in the end of the field. The ID is automatically embedded in this field. This ID, or this mechanism, makes it possible to cross-reference between an author name authority record and bibliography records.

In another record retrieved, the author name described following to the title of 「葉末集」 is 「蝋牛露伴」. But as in the preceding example, the information is transcribed into the AL field from the author name authority record of 「幸田露伴」.

Title and responsibility in a bibliography record is being transcribed as they appear in the item. But the mechanism provides controlled information as author name authority in the AL field, and it links this bibliography record with the authority record.

Here is another example of author name authority record. 「栗本 薫」 is to be searched through the author name authority retrieval frame.

Search results are two. 「栗本 薫」 and 「中島 柊」 are displayed. These two names denote one person who distinguishes her works by a pen name of writer for 「栗本薰」, and a name of literature critique for 「中島柊」, the latter is her
real name. For these cases, as special case, the system allows to create multiple author name authority records for one person.

Each authority records maintain the information of the other(s) in the SAF field. The ID recorded in the end of field links authority records each other. Through this provision, it is possible to achieve full retrieval without loss by any one of possible names. Incidentally, the number of bibliography records linked with two authority records are 142 by 「栗本薰」, and 23 by 「中島栄」.

These are the reference function of the author name authority record. Now lets look at it from bibliography record.
In this sample bibliography record, there are two co-authors. Therefore there are two AL fields to link with two author name authority records. Each related author name authority record shall be referred / traced via ID in the end of each AL fields.

A list of bibliography can be displayed to look at other works of the same author. In this way, both authority record and bibliography record, which are related each other, can be searchable from the other end. This mechanism offers very effective search capability for a special subject.

4 **Creation of the Author Authority Record**

Up to this point, we have seen what and how to use the existing author name authority records. Then I would like to show how to create author name authority record.

Creation of the author authority record is not a single isolated process but a part of process in the creation of bibliography record, where a search is made for a bibliography record, and a new bibliography record is going to be made by applying the retrieved result.

Example is 「安藤昌益・現代・中国: 中日安藤昌益学術討論会文集」 which is a material published in China.
This frame is to create a bibliography record of 「安藤昌益・現代・中国：中日安藤昌益学術討論会文集」. It is in a step by applying a record from the CHINA MARC as the derived cataloging. It is completed bibliography processing other than processing the author name authority. From this step, a linking work shall be started with an author name authority record.

There are 「王守華」、「李彩華」, and 「中日安藤昌益学術討論会」 in AL fields. Then by clicking the "Link" button, an automatic search is started for the author name authority file by 「王守華」 as the search key.

If there is related record(s) in the union catalog database, then these related records are displayed. When there is no related record, a search shall be continued to the Reference Files and may produce a result. If there is no hit in the Reference Files,
then the system reports that the hit is "0."

When there is the related record(s) in the union catalog database, the cataloger creates a link between the author name authority record and the bibliography record. When there is no related record, then the cataloger creates a new author name authority record and links with the bibliography record.

In this example, there is no related record in the author name authority file, the cataloger clicks "New" button and gets a form for creating a new record and records data.

Cataloger inputs name of the author, dates and additions together with reading of the name in the "HDNG" field. When data is available, DATE and PLACE fields are entered. If there maybe variant form(s) of the name, they are recorded in the "SF" field for possible search in the future. Then the bibliographic information of the source material of information is recorded in the "NOTE" field with other information for identification of the author.

By clicking the 「リンク確定」 (link confirm) button after entering required
information, then a new author name authority record is registered. At this point, an automatic checking is made with the HDNG field against the existing author name authority records to avoid an identical form of heading. If the same form exists, the new record submission is rejected, and additions shall be entered into the HDNG field for separation.

In this way, the process is to be repeated as many times as necessary for the number of AL fields in the bibliography record. As a result, the established headings by author name authority record are copied in AL field(s) of the bibliography record. By this mechanism, author names become searchable by any form.

5 Support for the Creation of the Author Authority Record

5.1 Import of Reference Files

We have seen the creation process of an author name authority record in the NACSIS-CAT. Reference files are loaded for supporting to create name authority record as is provided for creation of bibliography record.

National libraries offer standard bibliographic and authority information in machine-readable form (MAchine Readable Cataloging) for international exchange and sharing information. National Institute of Informatics (NII) imports these source MARCs and converts into NACSIS-CAT as reference files.

UNIMARC is an international standard format. US MARC produced by the US Library of Congress is the de facto standard. The Japan MARC created by the National Diet Library is based on the UNIMARC format. As it is, there are various MARC formats. The purpose of format conversion carried out at NII is to absorb the differences and maintain an unified operation of the database system. A part of the specification for conversion of the JAPAN/MARC is listed below.

In the JAPAN/MARC author name authority file, parallel data in Sino-Japanese scripts (display form), Kana scripts and Romanized form (reading for sorting and retrieval) are kept in repeated fields that are associated with the control subfield. For example, in the Field 200 for [display form of] Heading, Kana script form is
recorded with "dc" in the control subfield of $7, Romanized data with "ba." Kanji (Sino-Japanese) script is not indicated because it is the default.
Elements of Heading display form is composed of $a, $b, $c, $d, $g from Field 200 and $a of Field 301. $a, $b, $c of Field 200 are family name and given name of a personal name. Additions for personal name is indicated by $d for "Roman Numerals," $g for other additions, and the dates of birth and death is attached from $a of Field 301 by enclosing with round bracket. The dates of birth and death is also recorded in $f, but it is neglected because the AD date is followed by a Japanese script of 「生」, which is different from NACSIS-CAT syntax, and the data from $a of Field 301 is used.

In contrast to this, the reading of heading form is taken and edited from the Field 200 with "dc" in the control subfield $7.

See From reference and See Also From reference are also converted according to the control subfield.

The JAPAN/MARC author name authority file currently covers "Japanese Author Name Authority Record (personal name)," which are created based on the intake of NDL since 1948, and does not cover corporate names nor meetings.

The USMARC Name Authorities covers not only personal name but also corporate name and meeting. Elements of heading display are taken from Fields 100$a (Personal name), $b (Roman numerals), $c (titles and other words associated with a name), $d (dates of birth and death) and $q ( fuller form of name). Additions are created from $b, $c and $d which are delimited by ", ˚ (comma, space)" and $q is added with round bracket.

In case of corporate name, the elements are composed from Field 110 $a (corporate name or jurisdiction name as entry element), $b (subordinate unit), $c (Location of meeting), $d (Date of meeting or treaty signing), and $n (Number of part/section/meeting). Root of Heading display is composed of $a, $b by delimiting with " ˚ (space). Additions are taken from $n, $d and $c, delimited by " ˚ ˚ (space colon space) and in a round bracket.
In case of meeting, the elements of heading display are composed from Field 111 $a(Name of meeting), $c(Location of meeting), $d(Date of meeting), $e(subordinate unit), $q(Name of meeting following jurisdiction name as entry element ), and $n(Number of part/section/meeting). Root of Heading display is composed of $a, $e, $q by delimiting with "˚" (space). Additions are taken from $n, $d and $, delimited by "˚ɿ˚" (space colon space) and in enclosed round bracket.

See From reference and See Also From reference are also created in the same way.

5.2 Support for Linking Processing

In NACSIS-CAT, cataloger should create a new authority record when he/she fails to find a preceding authority record in the union catalog database or reference files during the authority linking processing.

Normally, a bibliography record is created by deriving from the reference file at the step of linking processing, and data recorded in AL fields of the existing bibliography records can be used. However, searches may be repeated and information from AL fields would be lost during the process. For supporting these cases, a provision is made to use AL fields of the existing bibliography record, and the author heading established in the reference files are imported to a new authority record.

This mechanism increases opportunity of various searches by different search words, and decreases search loss during the retrieval of authority record. It also saves labor time in the new authority record creation.

6 Editing of the Author Name Authority Record

Bibliography records and authority records are shared by the participating libraries in the NACSIS-CAT. Therefore cataloger should carry out the confirmation task for maintaining quality. For allowing this, any cataloger can correct / edit the authority record, and rules are set.

Correction work shall follow "Guideline for Correction of Author Name Authority Record (Japanese Name)" specified in Chapter 25 of the "Catalog System Coding Manual."

The Guideline specifies that the cataloger should report its correction to NII in certain cases. By doing so, it is possible to confirm of the vital modification and make it known among the participating libraries that use the authority information. However, negotiation / discussion process, which is established for bibliography record correction, is not applied for authority record correction.

Corresponding authority record ID and the Heading form are copied into fields describing the linking relationship such as AL field in the bibliography record or SAF field in the authority record. Therefore, when a authority record is corrected according to the Guideline, the data shall also be corrected in the related bibliography record and authority record in due course. Otherwise, consistency among records would be lost. For avoiding this possibility, when a source record (authority record) is corrected, then the linked fields are automatically re-written (corrected) in the NACSIS-CAT.
In Concluding

Reference function of the author authority record and record creation method are reviewed of the NACSIS-CAT

As of December 2000, NACSIS-CAT holds 5.6 million bibliography records (title), 50.5 million holding records (copies), and 1.15 million authority records. The database has grown up over the 16 years since December 1984 when we started the operation for national shared cataloging.

Roles and features that the author name authority record of NACSIS-CAT has achieved and developed are summarized as follows:

(1) author name authority control of NACSIS-CAT has saves scattered and dispersed work of authority control of individual libraries.
(2) Awareness has developed among the participating catalogers for significance and importance of authority control as part of the shared cataloging by data input, confirmation and expanding the authority data according to the standard manuals such as "Guidelines."
(3) authority information exists not as an independent file but closely related with the bibliographic database through the mechanism of linking. By materializing this mechanism, it becomes possible to operate the authority control in systematically effective way.
(4) By applying the linking mechanism, it is very easy to maintain the authority records.
(5) By importing standard (source) MARC databases as reference file, workload is saved of creating authority records.

Chinese cataloging data is available for inputting Chinese materials since January 2000, and it is expected to achieve Hangul language environment by 2002. It is planned to develop input environment for non-Western language materials such as Arabic, Thai, etc. in the future. Author name authority is one basic task in this planning, and findings and recommendation shall be reflected in the planning and development.