Authority Control at the International Level

Barbara B. Tillett

International efforts to provide authority control include the work of IFLA, the AUTHOR Project funded by the European Commission, and related work conducted under the auspices of the ICA/CDS. IFLA developed the guidelines Form and Structure of Corporate Headings, *documented the formulation of names along the lines of national origin in its publication* Names of Persons, *and published* Guidelines for Authority and Reference Entries. *Attention has shifted from a single authority record for each entity that would be shared internationally through the exchange of records to linking parallel authority records for the same entity. The "access control" of the future will account for difference in cataloging rules, transliteration standards, and cultural differences within the same language as well as for the need for different languages and scripts and will enable users to display the script and form of a heading that they expect. Project AUTHOR is a shared set of resource national authority files that used selections from the authority files of France, the United Kingdom, Spain, Portugal, and Belgium. The prototype tested an adaptation of Z39.50 server software for authority records and displays for user interface. An international standard for authority control records has been developed for corporate bodies, persons, and families. Through joint meetings efforts have been synchronized to develop authority control at the international level.*

After the success of international agreement on the 1961 Paris Principles for cataloging rules, there was what Dorothy Anderson of IFLA called a "welcoming climate of opinion in the 1970s for international work" (Anderson and Myall 1998). Members of IFLA envisioned the potential for further international cooperation and cost savings through sharing bibliographic and authority records worldwide. The concept of Universal Bibliographic Control (UBC) was the focus of several IFLA initiatives during the 1970s and early 1980s, including the programs to set up International Standards for Bibliographic Description (ISBDs), UNIMARC format, and *Guidelines for the National Bibliographic Agency and the National Bibliography*.

Universal Bibliographic Control

UBC is based on these principles:

- each country is responsible for the bibliographic control of publications from its own country; and
- each country is responsible for making its records available to all other countries for cataloging those same publications.

The IFLA UBC principles for authority control are parallel, namely:

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- each country is responsible for the authorized headings for its own personal and corporate authors (it didn't mention uniform titles, series, or subjects), and
- the authority records created by each national bibliographic agency would be available to all other countries needing authority records for those same authors.

Tom Delsey of the National Library of Canada chaired the 1970s IFLA committee that explored the possibility of an infrastructure to support effective international exchange of authority data and to promote national responsibility for the creation and dissemination of authority records. Unfortunately, technology had not yet advanced to make such sharing practical on an international level in the 1970s. In addition, the lack of funding for an international center to manage such a program prevented that visionary concept from becoming reality.

Other IFLA Activity

IFLA did focus attention on authority control of corporate headings and names of persons. For the former, IFLA set up guidelines for the form and structure of corporate headings (*Form and Structure of Corporate Headings,* first published in 1980), building on the work of Verona (*Corporate Headings: Their Use in Library Catalogues and National Bibliographies* issued by IFLA in 1975). This document is currently under review for revision in IFLA, and I currently serve as recorder for the chair, Ton Heijligers from the Netherlands.

A different approach was taken for personal names. Rather than standardizing the cataloging conventions, IFLA instead documented the formulation of naming persons along the lines of national origin in its publication *Names of Persons* (a new edition was recently released). The idea here again was UBC—that each country would establish the name of its own authors and that form would be universally used.

IFLA also established guidelines for bibliographic agencies to use in creating authority references and entries (*Guidelines for Authority and Reference Entries,* 1984, also known as *GARE*), which is also now under review for revision, and I am also serving on that working group, chaired by Isa de Pinedo from Italy.

UBC Principles

The UBC principles, of course, presume that there is a national bibliographic agency creating a national bibliography of the publications of its own authors, and that the form and structure of the authorized heading is accepted worldwide. This concept unfortunately does not apply in the United States, where we do not create a national bibliography of our national authors' works and our national authority file is created cooperatively by many libraries and maintained and distributed by the Library of Congress (LC) for authors and publications worldwide.

The UBC model also originally assumed that the single exchanged authority record for each entity would follow the UNIMARC format and only one record for each entity would be needed. Canada, with its bilingual requirement, quickly realized it needed an English and a French authority record for the same entity, linked.

When the UBCIM Working Group on Minimal Level Authority Records (MLAR) began its work, it was clear that some of the UBC assumptions did not match reality. We felt that perhaps with the current advances in technology, we could take a fresh look and adjust the UBC concepts to facilitate international cooperation. We could shift our attention from a single authorized form that everyone in the world had to accept and could instead share parallel or complementary records through the Internet—moving more into what I've called for years "access control."

We now recognize that there are legitimate and necessary reasons why a single form of name is not necessarily acceptable worldwide. These include national differences in cataloging rules, transliteration standards, the need for different languages and scripts, and even within the same language the need to respect cultural differences in vocabularies of different audiences (see figure 1).

There are national differences in cataloging rules and communication formats used to share bibliographic and authority records. Several countries have begun the work to explore how we might get closer to harmonizing our cataloging rules and our communication formats; as noted in other articles in this issue, these countries include Germany, Russia, Canada, United Kingdom, and the United States. Cataloging rules in different countries have different perspectives on when to consider entities the same or not. There are different answers to the questions of when a name is a variant form and when it becomes a new entity; the

National Differences

- Cataloging rules
  - Boundaries of entities
  - Transliteration standards
- Languages
  - Cultural differences
  - Audience's vocabulary
- Scripts

Figure 1. UBC vs. Reality

boundary for a work becoming a new work; and if the relocation of a corporate body headquarters constitutes a new entity.

Cataloging rules also have differences in their transliteration standards. The United States follows the ALA-LC transliteration tables; other countries follow ISO transliteration standards or variations of the ISO standards.

There are also legitimate differences related to languages; even for the same language cultural differences prefer one name variation to another for the same entity. This is most apparent when we look at authority records for subject heading terminology (e.g., the term "football" is self-evident in the United States, but has several meanings in other countries, often referring to soccer; see figure 2). But this is also true for geographic names or spelling or orthographic differences in countries supposedly using the same language (e.g., Cataloging Program vs. Cataloguing Programme).

We need to consider variations to provide the users of a library catalog with a form they would expect to find: variations that result from the age or scholarly level of the intended users of the catalog (elementary school children versus scientific researchers). The vocabulary of the audience is very important, and we should be able to tailor our authorized headings to the audience. An example of this is the Getty's authority lists for author's names, which provide variant forms and explain in what context the variations are to be used as authoritative forms.

Still another legitimate and important difference besides language is the script in which that language is conveyed (see figure 3). In order to be of most use to each country's library users, the scripts should be the scripts they can read. What a novel idea! Transliteration might serve as a way for some users to be able to decipher records, but the accuracy of using original scripts can't be beat. We should now provide cross-references for variant forms of headings in variant scripts when appropriate. In the United States, MARBI is starting to explore this possibility and more work needs to be done. We should eventually be able to display the script and form of a heading that the user expects and wants.

I'm jumping ahead to the future and access control. But for now we can acknowledge the value of parallel authority records that allow us to set up the syndetic structure of cross-references and authorized forms of headings to be used in catalogs intended for a specific audience and include variants in alternate scripts at least as cross-references.

United States	UK, Australia, Canada
football	American Football, Soccer, Rugby, etc.
United States	UK, Australia, Canada
Cataloging	Cataloguing

Figure 2. Language Variations

UBCIM Working Group on Minimal Level Authority Records

Those of us on the MLAR Working Group recognized that we were at a point in technological advancement that allowed us to move beyond thinking we needed a single authority record for each entity that would be shared internationally through exchange of records. We could instead move on to linking parallel authority records for the same entity.

We no longer need to exchange records, which requires having a local database of the foreign authority file that has to be maintained locally and updated. Instead we can now arrange to use the authority records from other countries and select records for local use as needed to incorporate when appropriate into our own authority files or use as the basis for our own local authority records.

The MLAR Working Group recommended a minimal set of essential data elements that should be in any national authority record to enhance its usefulness as a shared resource—to identify those elements that one could come to expect to find in a "national" authority record. We envisioned linking records for the same entity when that is appropriate rather than requiring everyone to use the same authority record. Once again there are legitimate reasons why we need to keep a cross-reference structure that fits the language and cataloging rules of the catalog into which the authority record will be used.

Rather than exchanging authority records with the overhead of locally maintaining such a file, we would instead create a virtual database on the Internet that allowed simultaneous searching of multiple national authority files. The Europeans decided earlier to test this out with a prototype system and got funding from the European Commission as part of the Computerised Bibliographic Record Actions (CoBRA) Programme activities. This prototype was tested from January 1995 to December 1997.

Each country or library that wished to participate made its authority files available through the Internet. Links were

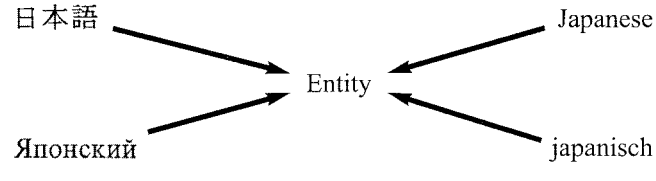

Figure 3. Same Entity/Variant Scripts

made to the related records when there was a match on a cross-reference, or there was an explicit linking field that indicated the form and authority record number and source. In the future, computer systems will be able to use these records for switching the display forms of headings.

Let's say the United States created an authority record for some international committee—the record on the left in figure 4. Then let's say the Bibliothèque Nationale de France created an authority record for the same entity and found the U.S. record on the Internet. It could use some of the notes and source information and add its authorized form that followed its cataloging rules and also possibly add a parallel heading field for the form of authorized heading used in the United States. This field could then act as a link for future displays of these authority records in the virtual international authority file.

Project AUTHOR

This idea of a shared set of resource national authority files was explored in Europe and in 1997 finally was proven in a prototype funded by the European Commission called Project AUTHOR. The project used selections from the authority files of five countries: France, the United Kingdom, Spain, Portugal, and Belgium.

This prototype included a sampling of records from each country with overlap to show the parallel records when they existed. The numbers shown here reflect the total numbers of records from each national authority file that were included in the prototype (see figure 5).

The prototype tested an adaptation of Z39.50 server software for authority records and displays for the user interface: both a UNIMARC tagged display and a labeled display. Although each country in this cooperative test actually keeps its own authority records in its own communication format, it used a conversion software package called USEMARCON to translate them all into UNIMARC. Bourdon and Zillhardt reported their results at the Bibliothèque Nationale de France (Zillhardt and Bourdon 1998).

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International Committee

Figure 4. MLAR Model

Archival Efforts

Beyond libraries and national bibliographic agencies, international authority control has also been an issue recently for the archival community. The International Council of Archives (ICA) and IFLA held joint meetings and continue the liaison between the MLAR Working Group and the ICA Committee on Descriptive Standards (ICA/CDS) to synchronize efforts.

ICA/CDS developed an international standard for archival authority records, the ISAAR (CPF) for corporate bodies, persons, and families. It also wished to establish an international standard number for each entity, which is what the MLAR Working Group also considered early on, as had been recommended by the earlier IFLA committee. For each entity, a number could be used that was language- and script-neutral and recognized by computer systems to display whatever form was desired. The MLAR Working Group decided to table the idea of an ISADN (International Standard Authority Data Number) since technological advances seem to preclude the need for such a number, and we could possibly avoid the overhead of setting up and maintaining an international infrastructure to manage such numbers. We instead prefer just to provide links between authority records (a neutral number still can be present, but it represents the record not the entity) and matching and switching can work on the text string. IFLA continues to explore this issue in the Functional Requirements and Numbering of Authority Records (FRANAR) Working Group.

Next Steps

What are the next steps toward international authority control? At the 1998 ALA conference, MARBI meetings were held to review discussion papers on including references in non-Roman character sets in USMARC authority records. Considerable work remains to be done, but the introduction of Unicode and its international standard usage will enable us to make great progress in providing non-Roman access.

At the 1998 IFLA meeting in Amsterdam, the next version of the report of the MLAR Working Group was

FIVE NATIONAL LIBRARIES
UK, France, Portugal, Spain, Belgium

- British Library—41,764 records
- Bibliotèque Nationale de France—41,370 records
- Biblioteca Nacional (Portugal)—11,024 records
- Biblioteca Nacional (Spain)—22,244 records
- Bibliotèque Royale Albert Ier (Belgique)—7,196 records

Figure 5. Project AUTHOR

discussed. The essential data elements were agreed upon. IFLA plans to identify those bibliographic agencies that are willing to share their authority records as an international resource and will establish use agreements to enable international access to these records. As with Project AUTHOR, we will need to establish Internet protocols, starting with Z39.50 and later exploring whatever future protocols emerge for searching and displaying the shared resource authority records.

As our computer systems continue to mature, we will have the ability to display a user's preferred form of heading anywhere in the world in whatever script and language the user wants or whatever default form was selected for the catalog. The heading will still be controlled for consistent access to the same entity—to gain all the advantages of authority control that maximize precision and recall in online searching and to provide cross references from variant forms and related headings that fit the structure of the catalog.

It's not such a distant future anymore; the Internet and Web capabilities make it closer than ever before. The Project AUTHOR prototype has shown it can be done with current technologies, and we need to continue to develop those capabilities for the benefit of our future users and for the economic benefits to libraries everywhere.

Works Cited

Anderson, Dorothy, and Carolynne Myall. 1998. Dorothy Anderson: A welcoming climate for international work. *Cataloging & Classification Quarterly* 25, no. 2/3: 14.

Delsey, Tom. 1989. Authority control in an International context. In *Authority control in the online environment: Considerations and practices*. Ed. Barbara B. Tillett. New York: Haworth. (Also published as *Cataloging & Classification Quarterly* 9, no. 3 (1989): 13–28.)

IFLA UBCIM Working Group on Minimal Level Authority Records and ISADN. 1998. Mandatory data elements for internationally shared resource authority records: Report of the IFLA UBCIM Working Group on Minimal Level Authority Records and ISADN. www.ifla.org/VI/3/p1996-2/mlar.htm.

Tillett, Barbara B. 1990. Access control: A model for descriptive, holding, and control records. In *Convergence: Proceedings of the Second National Conference of the Library and Information Technology Association*. Ed. Michael Gorman. Chicago: ALA, p. 8–56.

———. 1995. 21st century authority control: What is it and how do we get there? In *The future is now: Reconciling change and continuity in authority control*. Dublin, Ohio: OCLC.

Zillhardt, Sonia, and Françoise Bourdon. 1998. Project final report: Report for publication. Version 1. Paris: Bibliothèque Nationale de France.