

To: Mary Larsgaard, Chair, CC:DA
From: Ann Caldwell, Chair, Task Force on Rule 21.0D
Re: Final Report of Task Force

Introduction

The charge of the Task Force on Rule 21.0D is to:

Undertake an examination of AACR/LCRI 21.0D, an optional rule on designations of functions in headings. The Task Force will reconsider the need for an indication of the nature of relationships in headings rather than relying on the description for such information in light of recent discussions on *Functional Requirements for Bibliographic Records (FRBR)* and relevant metadata standards. If appropriate, prepare revisions to the rules and/or a recommendation that the Library of Congress modify its rule interpretation; provide rationales for such actions.

The group met once at the ALA annual meeting in Toronto. All other work has been conducted via e-mail. An interim report (CC:DA/TF/Rule2 21.0D/3) was submitted to CC:DA prior to the Toronto meeting.

Historical Practices Relating to Designations of Function in Headings

Designating the function of a particular person or corporate body in relation to a work is an old practice, dating back in the Anglo-American tradition to at least the 19th century. Provisions for designating the editor function appear as early as the first edition of edition of Cutter's *Rules for a Dictionary Catalogue* (1876). In the second edition, published in 1889, a list of abbreviations for a variety of functions appears in Appendix V, Abbreviations for Headings. The following functions (in addition to other additions to names) are identified: abridger, afterwards [sic.], annotator, collector, commentator, compiler, continuer, editor, and publisher. Additional functions were identified in the 1908 *Catalog Rules: Author and Title Entries*, including: engraver, illustrator, joint author, joint editor, librettist, praeses, and respondent. These functions were identified both in the rules, e.g., Rule 3 for praeses and respondents, and in the list of abbreviations in appendix 1, e.g., engraver and illustrator.

However, in none of cataloging codes, up to and including *AACR2*, was the consistent designation of function explicitly required. Rules frequently existed for making an entry under editors, illustrators, joint authors, etc., but they seldom required the addition of a function designator (for an example of such a rule, see the required Cutter's second ed. (1889), rule 137, which required the cataloger to add "ed." when providing an entry for an editor). In some codes prior to *AACR2*, examples under rules for entry showed these entries with the function

abbreviation, implying that the designation of function was also required. In other codes, the requirements were inconsistent, for example, in the 1949 *A.L.A. Cataloging Rules for Author and Title Entry*, catalogers were explicitly told to add the “designation JOINT AUTHOR”, but were not told explicitly to do so for editors, translators, etc.

In *AACR* (1967), function designators appeared in Appendix III, Abbreviations, with a single asterisk; the associated footnote states “Asterisks denote terms that may be abbreviated in headings,” but no rule addresses the addition of a designation of function to a name. In *AACR2*, through its various revisions, rule 21.0D, *Designations of Function*, has appeared as an optional addition, specifying only four functions: compiler, editor, illustrator, and translator. Statements of function for publishers are also optionally provided for, when the function of a publisher, distributor, etc., is not clear (rule 1.4E). Currently, *Library of Congress Rule Interpretations* limit designation of function for person or corporate body headings to illustrator, and statements of function for publishers in a limited number of situations.

Current Uses for Relator Information

Several library OPACs are already taking advantage of the possibilities of designations of function in order to collocate search results. Below is a description of three of those as well as another non-OPAC use of relator information to facilitate retrieval of film director information within a videorecording collection. All of these examples demonstrate the usefulness of designations of functions.

a) Collocation in Library OPACs

The Harold B. Lee Library at Brigham Young University (<http://www.lib.byu.edu/>) uses relator terms in its catalog indexing in two ways.

When a heading containing a relator term appears in the browsable “author” index, the relator term both appears in the index and affects the indexing. Thus a search on “Moser, Barry” produces the following:

MOSER BARRY	13
MOSER BARRY BOOK DESIGNER	5
MOSER BARRY ENGRAVER	2
MOSER BARRY ILL	53
MOSER BARRY KURT	1
MOSER BARRY SIGNER	1
MOSER BARRY WOOD-ENGRAVER	26
MOSER BENJAMIN	1
MOSER BERTHOLD	1
MOSER BRIAN 1935-	2
MOSER C	1
MOSER C A CLAUS ADOLF SIR	2

The entries separate out the different roles Moser has had in relation to the items recorded. The first entry (with no relator term) indicates that he is the author of the texts; the second indicates that he is the book designer of the items indexed; the third, the engraver, and so forth.

The Lee Library has also created a relator index, by which the library user can search on an individual relator term and receive an alphabetical listing of persons or bodies who have performed that function in relation to the records indexed. For example, if this indexed is searched using the relator term “printer”, the index entries begin as follows:

PRINTER A B C PRESS	1
PRINTER A COLISH FIRM	103
PRINTER A G TANNATT CO	1
PRINTER ABBATOIR EDITIONS	3
PRINTER ABBEY PRESS EDINBURGH SCOTLAND	1
PRINTER ABBEY PRESS OAKLAND CALIF	3
PRINTER ABEL PHIL	2
PRINTER ACADEMIA ITALIANA DI COLONIA	1
PRINTER ACCADEMIA VENEZIANA	8
PRINTER ACCARISIO ALBERTO 16TH CENT	1
PRINTER ACCOLTI GIULIO D 1572	1

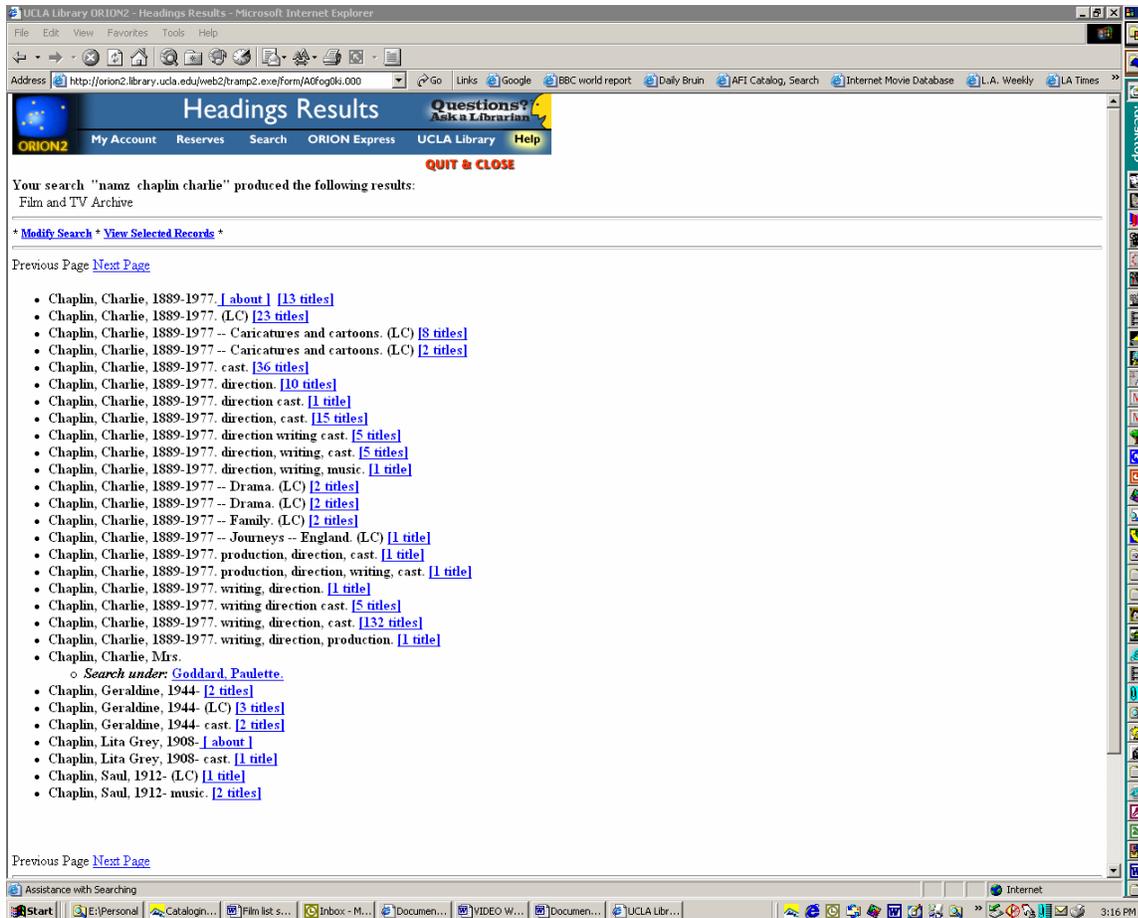
As another example, the search “signer” produces:

SIGNER ABBOTT EDWIN ABBOTT 1838-1926	1
SIGNER ABDUL-JABBAR KAREEM 1947-	1
SIGNER ABELES SIGMUND 1934-	1
SIGNER ACOSTA Y LARA EDUARDO F	1
SIGNER ADAMS JOHN 1735-1826	1
SIGNER ADAMS JOHN QUINCY 1767-1848	1
SIGNER ADAMS WILLIAM 1814-1848	2
SIGNER ADE GEORGE 1866-1944	1
SIGNER ADEY ANTHONY	1
SIGNER ADEY EMMA	1
SIGNER ADLER ELMER 1884-1962	1
SIGNER ADLER JEREMY D	1

The relator index has successfully replaced “special” manual indexes that libraries (especially special collections) have traditionally kept for printers represented in the collection, or autographs. In addition, the index groups together particular types of illustrators, such as wood-engravers, or lithographers.

As can be seen below, the left-to-right matching (“browse”) name authority search in UCLA’s Web-based OPAC (<http://orion2.library.ucla.edu>) treats every change in a \$e subfield as a change in heading and creates a new line and separate postings for it. This is a configuration

decision, by the way; once you decide to index the \$e subfield, it displays in this fashion. If you decide not to index it, it does not display at all.



The University of California, San Diego uses the |4 relator codes *prf* (performer) and *cmd* (conductor) in records for music materials. In its Innovative-based online catalog (<http://roger.ucsd.edu/>), the author index includes the |4. When a user searches on a name such as *copland aaron*, the index browse display treats each heading/relator code combination as a separate heading, and displays each (including the heading with no relator code) on a separate line. Each word in a heading in this display is capitalized, and the code itself displays:

- 1 Copland Aaron 1900
- 2 Copland Aaron 1900 Cnd
- 3 Copland Aaron 1900 Prf

When the user clicks on one of those lines, the record browse display lists each record for the selected role, with the heading appearing on the top:

Copland Aaron 1900 Prf

- 1 50 Years. / Volume 5, Great Collaborations [Sound Recording] CD AUDIO p1996
- 2 Instrumental Music. / Selections [Sound Recording] RECORDS/TAPES 2737
- 3 Isaac Stern. / Vol. 28 [Sound Recording] CD AUDIO c1996
- 4 Modern American Vocal Works / [Sound Recording] CD AUDIO p1999
- 5 Orchestra Music. / Selections CD AUDIO p1998
- 6 Poems Of Emily Dickinson. / Sound Recording RECORDS/TAPES 0018
- 7 Poems Of Emily Dickinson. / Sound Recording RECORDS/TAPES 5106
- 8 Selections RECORDS/TAPES p1962
- 9 Selections CD AUDIO p1991
- 10 Selections CD AUDIO p1997
- 11 Sonatas, / piano. Sound Recording RECORDS/TAPES 277.
- 12 Sonatas, / violin, Piano, C

When the user clicks on a specific title, the record display shows the heading with the full form of the relator, capitalized:

Copland, Aaron, 1900- Performer.

b) Other uses related to FRBR

The University of Rochester successfully uses MARC relator codes in \$4 to create a customized website that facilitates access to the UR River Campus Libraries' circulating collection of videorecordings. The site allows users to browse the list of film directors represented in the collection (<http://www.library.rochester.edu/index.cfm?label=videos>). This particular functionality was much requested by users of the collection. Another website that will allow similar browsing of the River Campus Libraries' collection of music CDs by performers and composers is now being developed (a prototype can be viewed at <http://www.library.rochester.edu/index.cfm?page=cds> - the CD collection still needs some maintenance in order for this site to be fully usable)

Both websites use perl scripts to output MARC data from the library's Voyager system. Following this, Cold Fusion scripts populate SQL tables, and then generate the web pages dynamically using Cold Fusion forms that pull data from the SQL tables. The presence of the \$4, which clearly identifies to the system the relationship between the name in a heading to the work/expression on the video or sound recording, triggers the placement of the heading in dropdown lists that allows users to browse the headings alphabetically and easily select the heading that they want.

The sites provide an additional type of access to these collections that is not available through the libraries' OPAC. While the OPAC requires a user to actively enter some kind of search term, the websites allow users to passively browse complete lists of what the libraries own in each format by each director, performer, etc., without entering any search key at all.

Other Metadata Standards

As libraries begin adding digitized materials (images, texts, sounds, etc.) to their collections, providing access to them via descriptive metadata other than MARC becomes increasingly important. A number of metadata schemas provide for the addition of some sort of designation of function to headings. Although the following summary does not attempt to be exhaustive, it is a brief overview of eight metadata schemas and their respective uses (or non-uses) of designations.

Visual Resources Association Core Categories (3rd version) provides for a Creator element. That element may be further qualified as Creator.Role or Creator.Attribution. A controlled list for these two qualifiers is in development.

Although the 15 **Dublin Core** elements may be qualified to make the meaning of the elements narrower or more specific, neither <dc:creator> nor <dc:contributor> may be qualified at this point.

MODS (Metadata Object Description Schema), a bibliographic element set, is a subset of MARC fields and therefore has striking similarities to MARC. The <name> element has a subelement of <role>

The **Content Standard for Digital Geospatial Metadata** (CSDGM) provides for an <originator> element in the “citation information” (this refers to the person who developed the dataset). If this is used to designate the editor or provider it must be followed by “(ed.)” or “(comp.)”.

The **Data Documentation Initiative** also provides an attribute for its AuthEntry (Authoring Entity) element (defined as the person, corporate body or agency responsible for the data/documentation’s substantive and intellectual content). This is defined as a “description of the individual’s ‘job title’ in regards to study, e.g., data collection staff, research initiator, etc.’.”

There are several elements associated with personal names in the **Encoded Archival Description**, but the most commonly used one is <persname>. There is a lengthy list of attributes associated with it, including “role.”

The **Text Encoding Initiative** uses separate tags (e.g., <editor>, <author>, <docAuthor>) to designate different functions.

Authorship is specified in the <contributor> tag in **ONIX**. A specific tag, <b035><ContributorRole> may qualify this.

Problems with Coding

a) Analytics

In the majority of bibliographic cases, there is a one-to-one correspondence in the relationship between FRBR Group 2 and Group 1 entities. An author usually writes an entire novel; a composer usually composes an entire symphony; an editor (or editors as a group) usually edits an entire book; an orchestra usually performs an entire CD. Once identified and appropriately "tagged," such relationships should be fairly clear to the catalog user. In many cases, however, a person or corporate body may be related to only a portion (or portions) of a "collective" work, expression, manifestation, or item. For example, when two piano soloists perform on different tracks of the same sound recording, the "tagging" of each of their relationships to specific analytics in the bibliographic record is currently impossible. If, for instance, a catalog user were to search for a performance of Daniel Barenboim playing a Beethoven piano sonata, he/she might find Barenboim playing piano, but in a Tchaikovsky trio on the same recording as another pianist who is playing the desired Beethoven sonata.

This failure, however, of systems to link analytic entries to their related headings and coded fields is not a new problem. In recent years, suggestions have been made to resolve this issue through encoded links within the MARC record; but so far without success. Another potential solution would be to employ "in-analytic" records for such collective items, as described in AACR2 rule 6.1G4, although most libraries have rejected this option as being too labor intensive and expensive.

b) Multiple Functions

A single person may also have multiple relationships of different types to one or more of the Group 1 entities (levels) or sub-entities (analytics), performing different functions, either simultaneously or subsequently. For example, Gunther Schuller might make an arrangement for orchestra of a Scott Joplin piano rag, and then later conduct a performance of it for a video recording. In addition, the video might include an interview with Schuller about Joplin's oeuvre. The "tagging" of these three types of relationships could become quite complicated. Besides the problem with relating name headings to specific analytic entries (described above), it is also difficult to "tag" the types of relationships that a single person might have to multiple FRBR entity levels. Would one assign multiple "relators" to a single name heading or assign unique "relators" to each of multiple, yet identical, name headings -- each of which in turn would need to be linked to the appropriate analytic or Group 1 entity level? Unfortunately, the answer to this question might depend upon how each local system has been programmed to sort and display such complex relational information. In such a case, might not the standardized application of relator terms or codes to "complex" Group 1 and 2 entities be merely a pipe dream -- or a very big mess?

Conclusion

In examining Rule 21.0D, the Functional Requirements for Bibliographic Records, and some of the preliminary uses systems are making of relator information, the task force recommends that the current rule be revised and that its rule interpretation be rescinded. The attached appendix contains the proposed revision.

APPENDIX

Proposed Revision of Rule 21.0D1

Proposed change:

21.0D. *Optional addition. Designations of function*

~~21.0D1. In the cases noted below, add an abbreviated designation of function to an added entry heading for a person. In some catalogues, it may be desirable for purposes of identification, collocation, or file arrangement to show explicitly the relationship between a person or corporate body named in a heading to the resource being catalogued. When desirable, add to a heading for a person or a corporate body a term or other designation of function to show the relationship clearly. Use standard lists appropriate to the material being cataloged as the source for such designations.~~

FUNCTION PERFORMED	DESIGNATION
Compiler	<i>comp.</i>
Editor	<i>ed.</i>
Illustrator	<i>ill.</i>
Translator	<i>tr.</i>

Add other designations to headings as instructed in particular rules.

~~In specialist or archival cataloguing, when desirable for identification or file arrangement, add designations from standard lists appropriate to the material being catalogued.~~

Clean copy of revised rule:

21.0D. *Optional addition. Designations of function*

21.0D1. In some catalogues, it may be desirable for purposes of identification, collocation, or file arrangement to show explicitly the relationship between a person or corporate body named in a heading to the resource being catalogued. When desirable, add to a heading for a person or a corporate body a term or other designation of function to show the relationship clearly. Use standard lists appropriate to the material being cataloged as the source for such designations. Add other designations to headings as instructed in particular rules.

Rationale:

Research studies by O'Neill¹ and by Hegna and Murtomaa² demonstrate the importance of explicitly identifying the role of the contributor within a heading to allow for more structured search results within a catalogue and to facilitate the collocation of results according to the FRBR Group 1 entities.

The proposed rule revision extends and generalizes the rule by eliminating the current rule's limitations of scope in the following areas:

1. Allows the designations to be used in headings for corporate bodies (e.g. performing groups) as well as in headings for persons
2. Allows the designations to be used in main entry headings, in addition to added entries (e.g. performer as main entry)
3. Expands the designations from the four listed in the original rule to any from any standard list.
4. Allows designations from standard lists to be used for all materials in a given catalogue as appropriate, not just those materials catalogued according to specialist or archival cataloging practices.

The proposed revision adds wording that describes the usefulness of the designations of function for purposes of collocation, as well as for identification and file arrangement. The wording of the revision makes clear that the usefulness of designations of functions for collocation is that they explicitly identify the relationship between the entity named in the heading and the resource being catalogued *in a predictable place within the catalogue record*.

Recommended Change to Library of Congress Rule Interpretation for 21.0D

If a revision to Rule 21.0D similar in intent to our proposal is approved by the JSC, the Task Force recommends that the Library of Congress reconsider, and ultimately rescind, its current Option Decision for Rule 21.0D that directs catalogers not to apply the option to use designations of function. Such an action by LC will encourage libraries to reconsider the potential value of designations of function for purposes of collocation within a catalogue.

¹Edward T. O'Neill. "FRBR: Functional Requirements for Bibliographic Records: Application of the Entity-Relationship Model to Humphry Clinker." *Library Resources & Technical Services* 46 no. 4 (October 2002): 150-59.

²Knut Hegna and Eeva Murtomaa. *Data mining MARC to find: FRBR?* March 13, 2002 <http://folk.uio.no/knuthe/dok/frbr/datamining.pdf>. Viewed November 26, 2003.