From the Cloud to the Ground:

Cataloguing, Linked Data, and RDA Search Strategies

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September 26, 2013
What is a Catalogue?

"a complete list of items, typically one in alphabetical or other systematic order, in particular: a list of all the books or resources in a library . . ."


3 parts:

Data (AACR2/RDA)

Record (entry, card, MARC)

Search interface (list, card catalog, OPAC)
# History of Data and the Record

<table>
<thead>
<tr>
<th>Year</th>
<th>Data</th>
<th>Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>1908</td>
<td>L. M. Montgomery</td>
<td>Not recorded</td>
</tr>
<tr>
<td>1918</td>
<td>Montgomery, L. M.</td>
<td>List on paper</td>
</tr>
<tr>
<td>1925</td>
<td>Montgomery, L. M.</td>
<td>List on paper arranged by author</td>
</tr>
<tr>
<td>1930</td>
<td>Montgomery, L. M.</td>
<td>Index card in a card catalogue</td>
</tr>
<tr>
<td>1967 (AACR introduced)</td>
<td>Montgomery, L. M. (Lucy Maud), 1874-1942</td>
<td>Index card in a card catalogue</td>
</tr>
<tr>
<td>1973 (MARC becomes international standard)</td>
<td>Montgomery, L. M. (Lucy Maud), 1874-1942</td>
<td>AACR MARC 100 field</td>
</tr>
<tr>
<td>1980’s (MARC develops authority format)</td>
<td>Montgomery, L. M. (Lucy Maud), 1874-1942</td>
<td>AACR Authority Record</td>
</tr>
<tr>
<td>2013</td>
<td>Montgomery, L. M. (Lucy Maud), 1874-1942</td>
<td>RDA Authority Record</td>
</tr>
<tr>
<td>2013</td>
<td>Montgomery, L. M. (Lucy Maud) 1874-1942, author</td>
<td>RDA MARC 100 field</td>
</tr>
</tbody>
</table>
The new way to think

Functional Requirements for Bibliographic Records

How is the item in front of you related to everything else?

WEMI

Work
Expression
Manifestation
Item

“Anne”

Copy 1
Copy 2
### What's the difference? Theoretically...

<table>
<thead>
<tr>
<th>Anglo-American Cataloging Rules</th>
<th>Resource Description and Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules</td>
<td>Instructions and Guidelines</td>
</tr>
<tr>
<td>Started as a North American effort</td>
<td>Started as an international effort</td>
</tr>
<tr>
<td>Intended for use by libraries</td>
<td>Intended for use by everyone</td>
</tr>
<tr>
<td>Monograph based</td>
<td>“WEMI” based</td>
</tr>
<tr>
<td>Description, description, description</td>
<td>Description AND access</td>
</tr>
<tr>
<td>Describes a single resource</td>
<td>Describes a resource and its relationships to creators and other works</td>
</tr>
<tr>
<td>Relies on humans to infer relationships</td>
<td>Describes relationships</td>
</tr>
<tr>
<td>Goal: Human understanding</td>
<td>Goal: Machine understanding (?)</td>
</tr>
</tbody>
</table>
Is it actually different?

700 $aDerivative work:$aBoz.$d1812-1870.$tSketches by Boz.
700 $aContains (work):$aBirth, Renn.$tMerchant's world.
700 $aAbridgement of (work):$aMonsun, Craig.$cCraig A.$d1949-.$tDisembodied voices.
700 $aAugmentation of (work):$aAnderson, Philip.$d1952-$tMariner's role in collecting evidence - in light of ISM.

Is RDA a step toward Linked Data?
<table>
<thead>
<tr>
<th>MARC</th>
<th>AACR2</th>
<th>RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader 18</td>
<td>a</td>
<td>i</td>
</tr>
<tr>
<td>040##</td>
<td>--</td>
<td>erda</td>
</tr>
<tr>
<td>100 1#</td>
<td>Montgomery, L. M.</td>
<td>q(Lucy Maud),</td>
</tr>
<tr>
<td>240##</td>
<td>Anne of Windy Poplars.</td>
<td>Anne of Windy Poplars.</td>
</tr>
<tr>
<td>245 10</td>
<td>Anne of Windy Poplars /</td>
<td>cL.M. Montgomery.</td>
</tr>
<tr>
<td>250##</td>
<td>Special Collector's ed.</td>
<td>Special Collector's Edition</td>
</tr>
<tr>
<td>264#1</td>
<td>[Place of publication not identified] :</td>
<td>b Seal Books,</td>
</tr>
<tr>
<td>264#2</td>
<td>[Toronto?] :</td>
<td>bSeal Books,</td>
</tr>
<tr>
<td>264#4</td>
<td></td>
<td>c©1996.</td>
</tr>
<tr>
<td>300##</td>
<td>264 p. :</td>
<td>bmap ;</td>
</tr>
<tr>
<td>336##</td>
<td>text</td>
<td>btxt</td>
</tr>
<tr>
<td>337##</td>
<td>unmediated</td>
<td>bn</td>
</tr>
<tr>
<td>338##</td>
<td>volume</td>
<td>bnc</td>
</tr>
<tr>
<td>490 1#</td>
<td>Anne of Green Gables novels ;</td>
<td>vno. 4</td>
</tr>
<tr>
<td>500</td>
<td>Seal Books Edition May 1996 [2.5.2.3]</td>
<td></td>
</tr>
<tr>
<td>650#0</td>
<td>Shirley, Anne (Fictitious character)</td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>Shirley, Anne,</td>
<td>d1874-</td>
</tr>
<tr>
<td>830##</td>
<td>Anne of Green Gables novels ;</td>
<td>vno. 4</td>
</tr>
</tbody>
</table>
Is RDA a step toward Linked Data?
Next Steps for the Record

What humans see...

100 1 Montgomery, L. M.$q(Lucy Maud),$d1874-1942
245 10 Anne of Green Gables

What computers see...

100 1 textstring$qtextstring$dtextstring
245 10 textstring
What humans see...

100 1 Montgomery, L. M. $q$ (Lucy Maud), $d$ 1874-1942
245 10 Anne of Green Gables

What computers see...

100 1 textstring$qtextstring$dtextstring
245 10 textstring

What if computers saw this instead?

100 1 Montgomery, L. M. $q$ (Lucy Maud), $d$ 1874-1942.
   $0http://id.loc.gov/Authorities/names/n81018346
245 10 Anne of Green Gables
   $0http://id.loc.gov/Authorities/names/no2010143485
Linked Data

Four Rules:
1. Use URIs as names for things.
2. Use HTTP URIs so that people can look up those names.
3. When someone looks up a URI, provide useful information.
4. Include links to other URIs, so that they can discover more things.

The MISSING LINK into bibliographic records...
The Record or the System?

AACR2 --> RDA

MARC21 --> ???

ILS --> ???
Library Linked Data Sources

Anne of Green Gables \( \xrightarrow{\text{has author}} \) L. M. Montgomery

http://viaf.org/viaf/181245094 \( \xrightarrow{\text{http://rdvocab.info/roles/authorWork}} \) http://viaf.org/viaf/27203212

LC Linked Data Services

VIAF
Welcome to The Registry!
This is the home page for the Open Metadata Registry (formerly the NSDL Registry).

The Metadata Registry provides services to developers and consumers of controlled vocabularies and is one of the first production deployments of the RDF-based Semantic Web Community's Simple Knowledge Organization System (SKOS).

How to begin
Step-by-step illustrated instructions...

Play in the Metadata Registry Sandbox
If you just want to experiment and play around a bit, go on over to the Metadata Registry Sandbox. The code is exactly the same, but it's using a non-production database. (Please be careful not to kick any sand out of the box) NOTE: The sandbox has its own domain now. If you had bookmarked the beta site thinking that it was the sandbox (and we did say that), it will shortly be a real beta site again complete with broken code, wacky ideas, and disappearing data. Please change your sandbox bookmarks to point to the Metadata Registry Sandbox. Any of the sandcastles that you had built in the beta, back when you thought it was the sandbox, are still there.
**Element Sets:** RDA Roles  
**Elements:** Author (Work)

| Metadata + |
|---|---|
| **Detail** | |
| Label: | Author (Work) |
| Name: | authorWork |
| URI: | http://rdvocab.info/roles/authorWork (RDF) |
| Description: | A person, family, or corporate body responsible for creating a work that is primarily textual in content, regardless of media type (e.g., printed text, spoken word, electronic text, tactile text) or genre (e.g., poems, novels, screenplays, blogs). Use also for persons, etc., creating a new work by paraphrasing, rewriting, or adapting works by another creator such that the modification has substantially changed the nature and content of the original or changed the medium of expression. |
| Comment: | |
| Type: | subproperty |
| Parent: | Creator |
| Domain: | http://rdvocab.info/uri/schema/FRBRentitiesRDAWork |
| Range: | |
| Status: | New-Proposed |
| Language: | English |
| Note: | |

List | Get RDF
Future of the catalogue?

What can next-gen catalogues and LSPs offer us?

Do we want vendors creating our LOD systems?

BIBFRAME? eXtensible Catalog? RIMMF?

Post-MARC environment?

What are other options?

Do we want corporations creating our LOD system?
RIMMF?

RDA In Many Metadata Formats

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Heading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>Taylor, Arlene G., 1941-. Organization of information</td>
</tr>
<tr>
<td>Expression of work</td>
<td>Taylor, Arlene G., 1941-. Organization of information. text. 2004</td>
</tr>
<tr>
<td>Expression of work</td>
<td>Taylor, Arlene G., 1941-. Organization of information. text. 1999</td>
</tr>
<tr>
<td>Manifestation of expression</td>
<td>The organization of information. Libraries Unlimited, 1999. volume</td>
</tr>
<tr>
<td>Expression of work</td>
<td>Taylor, Arlene G., 1941-. Organization of information. text. 2009</td>
</tr>
<tr>
<td>???</td>
<td>Joudrey, Daniel N.</td>
</tr>
<tr>
<td>Author</td>
<td>Taylor, Arlene G., 1941-</td>
</tr>
<tr>
<td>In series (work)</td>
<td>Library and information science text series</td>
</tr>
<tr>
<td>Continues (work)</td>
<td>Library science text series</td>
</tr>
</tbody>
</table>
Future of the catalogue?

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What are other options?

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Future catalogue experience?
Lucy Maud Montgomery - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Lucy_Maud_Montgomery
Lucy Maud Montgomery OBE (November 30, 1874 – April 24, 1942), called "Maud" by family and friends and publicly known as L. M. Montgomery, was a...

Early life - Writing career, romantic ... - Works - Notes

L.M. Montgomery Institute
www.lmmontgomery.ca/
Welcome to the online home of the L.M. Montgomery Institute of UPEI. We hope that you find your visit to our pages both interesting and educational. We have ...

Her Life | L.M. Montgomery Institute
www.lmmontgomery.ca/aboutlmm/herlife
L.M. Montgomery was born in Clifton (now New London), Prince Edward Island, on November 30, 1874, to Hugh John Montgomery and Clara Woolner MacNeill.

Lucy Maud Montgomery - Uxbridge
www.uxbridge.com/people/maud.html
A short biography and links to several of her works available online.

Lucy Maud Montgomery Society of Ontario
lucymaudmontgomery.ca/
Welcome to the Official Website of the Lucy Maud Montgomery Society of Ontario. LUCY MAUD MONTGOMERY wrote 11 of her 22 novels at home in rural ...

Anne of Green Gables® - Government of Prince Edward Island
www.gov.pe.ca/lmm/index.php3
HOME / Anne of Green Gables, Bantam Paperback Cover L.M. MONTGOMERY, WRITER OF THE universally beloved Anne of Green Gables, was born on the ...

L. M. Montgomery Biography - Department of Education and Early ...
www.edu.pe.ca/lmmontgomery/lmbiography/lmbiob.htm
L. M. Montgomery. We would like to take this opportunity to welcome you to our L. M. Montgomery page. Our school, L. M. Montgomery Elementary, ...

Lucy Maud Montgomery - IMDb
www.imdb.com/name/nm0000844/

Lucy Maud Montgomery
Author
Lucy Maud Montgomery OBE, called "Maud" by family and friends and publicly known as L. M. Montgomery, was a Canadian author best known for a series of novels beginning with Anne of Green Gables, published in 1908. Wikipedia

Born: November 30, 1874, New London, Prince Edward Island
Died: April 24, 1942, Toronto
Spouse: Ewen Macdonald (m. 1911–1942)
Children: Stuart Macdonald, Chester Macdonald, Hugh Macdonald
Movies: Anne of Green Gables, Anne of Avonlea, Lantern Hill

Books
Anne of Green Gables
Anne of the Island
Anne of Avonlea
Anne's House of Dreams
Anne of Windy Poplars
The Da Vinci Code


This book describes the attempts of Robert Langdon, Professor of Religious Symbology at Harvard University, to solve the murder of renowned curator Jacques Saunière of the Louvre Museum in Paris. A baffling cipher is found near his body. Saunière's granddaughter, Sophie Neveu and Langdon attempt to sort out the bizarre riddles and are stunned to discover a trail of clues hidden in the works of Leonardo Da Vinci.

The unraveling of the mystery requires solutions to a series of brain-teasers, including anagrams and number puzzles.

The conclusion of The Da Vinci Code shocked people with its interpretations about one of our deeply held cultural beliefs. What about The Lost Symbol? Do you think the ideas expressed—such as noetics and other New Age concepts—which look ahead instead of backward, will have a similar impact?

— Arne De Keijzer and Daniel Burstein, Secrets of The Lost Symbol
The conclusion of **The Da Vinci Code** shocked people with its interpretations about one of our deeply held cultural beliefs. What about The Lost Symbol? Do you think the ideas expressed—such as noetics and other New Age concepts—which look ahead instead of backward, will have a similar impact?

— Arne De Keijzer and Daniel Burstein, *Secrets of The Lost Symbol*
What can we do now?


Talk. With colleagues. With administrators. With vendors.

Play. eXtensible Catalog. Local Linked Data projects. RIMMF.

Share what you know. Find out what others know.

Be a rebel. Add URIs to MARC $0

Find ways to convert MARC records to Linked Open Data.
"Although a daunting challenge, this conversion of our bibliographic records from MARC to Linked Open Data will become one of the most powerful drivers in the transformation to the Semantic Web. Placing our data and resources where people are actually looking for it, and tying them intelligently to the wealth of the Web."

Philip E. Schreur, Program for Cooperative Cataloging
"Linked Data for Libraries: Why should we care? Where should we start?" April 2012 (youtube)
Communicating RDA changes for non-Metadata staff

- Developing a training strategy
- Common changes
- Examples

What is "To the Ground?"

Bringing metadata changes to a level that is
Common Changes

- Examples

**What is "To the Ground?"

- Bringing metadata changes to a level that is useful to the end-user
- Preventing RDA information overload
  "Information overload is not simply the problem of too much information. It is the problem of too much irrelevant information." (1)


**Is that really necessary?**
• Preventing RDA information overload
  "Information overload is not simply the problem of too much information. It is the problem of too much irrelevant information" (1)


---

Is that really necessary?

• Important changes for cataloguers may not be relevant to reference staff
• If the information in the record is changing, it becomes important
To the Ground

Explaining RDA

- Gone is the fear of the unknown
- Importance of developing context
- Context example:

Why are we implementing RDA?
Service Spectrum AACR2

Cataloguing Resources ↔ AACR2 ↔ Users

Service Spectrum RDA

Cataloguing Resources ↔ RDA ↔ Users
To the Ground

The Hybrid Environment

Why a Hybrid environment?

Book scroll

Codex

library.rit.edu

library.arizona.edu

How to identify RDA Records
The Hybrid Environment

Why a Hybrid environment?

Book scroll

Codex

library.rit.edu

library.arizona.edu

How to identify RDA Records
Mrs Tabby G: based on the true story of an Australian farm cat / written and illustrated by Richendra Goldfinch

Bib ID: 6303027
Format: Book [text, still image, volume]
Author: Goldfinch, Richenda, author, illustrator
Description: Ravensthorpe, Western Australia : Richenda Goldfinch, 2013
31 pages : chiefly colour illustrations, 1 map ; 21 x 30 cm
ISBN: 9780987207210
Notes: For children
Subjects: Australian

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Details | Collect From
--- | ---
Npef 2013-117 | Main Reading Room (Australian Monograph Collection)
Copy: N pbk

...MARC View
...Change Display
Mrs Tabby G: based on the true story of an Australian farm cat / written and illustrated by Richenda Goldfinch

Bib ID: 6303027
Format: Book [text, still image, volume]
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31 pages : chiefly colour illustrations, 1 map ; 21 x 30 cm
ISBN: 9780987207210
Notes: For children
Subjects: Australian
relevant to reference staff

- If the information in the record is changing, it becomes important

**To the Ground**

**Impact on Search and Browse**

---

**Abbreviations**

- AACR2
- RDA
- Arr.
- Arranged
- Unaccomp.
- Unaccompanied
- Dept.
- Department

**Headings for The Bible**

- RDA

**Changes to Search and Browse**

- Search both terms.
- Browse should not change for terms that fail
### Headings for The Bible

<table>
<thead>
<tr>
<th>AACR2</th>
<th>RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bible. Apocrypha.</td>
</tr>
</tbody>
</table>

### Changes to Search and Browse

Search with and without the testament abbreviation.
Browse with and without testament abbreviation.
Abbreviations

AACR2
Arr.
Unaccomp.
Dept.

RDA
Arranged
Unaccompanied
Department

Changes to Search and Browse
Search both terms.
Browse should not change for terms that fall close to one another in alphanumeremic array.
Changes in Terminology

AACR2  RDA
Violinello  Cello

Changes to Search and Browse
Search both terms.
Browse both terms.
Impact on Record Interpretation

- Emphasis on transcription
  Information recorded as it appears in the item
  Including articles, order, capitalization, language, errors, punctuation
- Inaccuracies transcribed as they occur; notes added to indicate the corrections
  Yale Latin!
• Emphasis on transcription
  Information recorded as it appears in the item
  Including articles, order, capitalization, language, errors, punctuation
• Inaccuracies transcribed as they occur; notes added to indicate the corrections
• Vale, Latin!
  Et. al; sic.; S.l.; S.d.; I.e.; Fl.
• Abbreviations, be gone!
  Mostly in carrier description (physical description):
    p. pages
    ill. illustrations
    + p. incomplete
  No more abbreviations for numbering
• 260 replaced by 264.
  When a 264 is used, can distinguish between functions (publication, distribution, publication, manufacture)
• First place of publication, order it appears on the resource
• Dates in roman numerals no longer converted to Arabic numerals
In-record Terminology Changes

- Mostly format specific; may not be relevant in general instruction

**Music**
- v. of music/p. of music
- miniature score
- score
- study score
- Mostly format specific; may not be relevant in general instruction

**Music**
- v. of music/p. of music
- miniature score
- score
- study score

**Video**
- video reel
- videotape reel

**Art**
- art print
- art original
- print
- collage
- drawing
- icon
- painting
Illustrating FRBR

UNIVERSITY OF CALGARY

gone with the wind

Search Advanced Search

Search Results: Your search for gone with the wind returned 1,055,939 results

Relevance

Gone with the wind
by Mitchell, Margaret
1964, p. 733
FRBR group 2

expression

FRBR group 2

Gone with the wind
by Mitchell, Margaret
1964, p. 733
After the Civil War sweeps away the genteel life to which she has been accustomed, Scarlett O'Hara sets about to salvage her Georgia plantation home. History
Book: Taylor - General Collection, University of Calgary, PS3525 .I972 G6 1964

FRBR group 3

FRBR group 3

Gone with the wind
by Mitchell, Margaret
1939, Motion Picture edition, p. 391
Book: Taylor - General Collection, University of Calgary PS3525 .I972 G66 1939

FRBR group 3

Gone with the wind
by Susan Swan
Brick, ISSN 0382-8565, 07/2013, Issue 91, p. 119
Literary criticism, Writers, Preferences, Historical fiction
Journal Article: Full Text Online

FRBR group 3

Gone with the wind
by Susan Swan
Brick, ISSN 0382-8565, 07/2013, Issue 91, p. 119
Literary criticism, Writers, Preferences, Historical fiction
Journal Article: Full Text Online
To the Ground

More RDA Training Resources

RDA Canada Knowledge Exchange
rdacake.wikispaces.com
RDA Canada Knowledge Exchange
rdacake.wikispaces.com
Welcome to the RDA CAnadian Knowledge Exchange

This wiki is a place for Canadians to collaborate on RDA projects, share ideas and plans for implementation, and to temporarily store and share training materials and workflow documentation. After implementation the materials will be moved to a permanent location, most likely on the CLA website. Regardless of the final address, the materials will be accessible to all.

Given the geography and population distribution in Canada, making training materials available on the web is an important part of Canada's implementation of RDA.

You are welcome to use the information and documents for non-commercial purposes, as per the Creative Commons license parameters.

The sections within this site are listed on the right navigation pane.

Vous pourriez être intéressé par le site francophone du RDA.
Library of Congress RDA Training Materials
http://www.loc.gov/catworkshop/RDA%20training%20materials/

Library of Congress (LC) RDA Training Materials

Library of Congress RDA Training Plans:
- Classroom Training Plan (September 2012) [Word : 117 KB]
- Online Training Plan (November 2012) [Word : 158 KB]

The tables listed below contain the Library of Congress Resource Description & Access (RDA) training materials used for internal training beginning in June 2012. As RDA changes, the materials will be updated.
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#### Related Resources

- Program for Cooperative Cataloging (PCC)
- Cataloging & Acquisitions
- Librarians, Archivists
- Online Catalog
- Webcasts

#### Slides, Manuals, Exercises

<table>
<thead>
<tr>
<th>Title</th>
<th>Slides, Manuals, Exercises</th>
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<tbody>
<tr>
<td></td>
<td>Slides (Sept. 2012) [PPT: 1.34 MB]</td>
</tr>
<tr>
<td></td>
<td>Trainees Manual (Sept. 2012) [PDF: 771 KB]</td>
</tr>
<tr>
<td></td>
<td>Test yourself: FRBR Terminology Quiz</td>
</tr>
<tr>
<td></td>
<td>Test yourself: Attributes of FRBR Group One Entities Quiz</td>
</tr>
<tr>
<td></td>
<td>Test yourself: Relationships of FRBR Entities Quiz</td>
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<td></td>
<td>IFLA FRBR Report</td>
</tr>
</tbody>
</table>
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Heather Pretty, Memorial University of Newfoundland
@hjpretty

Catelynne Sahadath, University of Calgary
@metacatie

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