



Eurasian Academic Libraries Conference – 2021
“Contemporary Trends in Information Organization in the
Academic Library Environment”

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KEYNOTE SPEECH

Why RDA?

Organizing bibliographic information in the 21st century

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Organizing bibliographic information

Context for our work in the 21st century:

- users interact with bibliographic data in a broad, global context
- bibliographic data is managed inside and outside traditional catalogues
- no library is an island – everyone's data is interconnected
- metadata supports linking to and aggregating with data from other communities
- metadata can be harvested, re-used, and mined

RDA: Resource Description and Access

RDA is a package of:

- data elements
- guidelines and instructions

→ for creating library and cultural heritage resource metadata

→ metadata that can be used in traditional catalogues

→ metadata that is ready for use in linked data applications

2 significant facets of RDA

- RDA as a standard for the 21st century
- RDA as an international standard

RDA as a standard for the 21st century



Creator: ipopba --
Credit: Getty
Images/iStockphoto

A standard for the 21st century

- recording data, not strings  machine processing
- a shared element set  data interoperability
- suitable for wide range of technological environments  flexibility
- optimized for linked data environments  ready for the future

RDA is a package of data elements

- data elements that can be understood by humans and processed by computers
 - current reality = vast amounts of bibliographic data
 - no longer practical to think that the management of bibliographic data will be manually curated
 - reality of reliance on machine processing
 - but machines need good data to produce useful results

RDA is a package of data elements

RDA = a set of precisely defined data elements (and controlled vocabularies)

- each data element contains only one type of data – unambiguous data
- RDA has elements for recording data about 13 entities
- RDA has over 3,000 elements

RDA data designed for interoperability

- clearly defined element set
 - different types of RDA users all share the same element set
 - openly published controlled vocabularies to increase interoperability
 - definition and structure make it easier to map to non-RDA data
- recognizable structure for the data elements
 - explicit and widely accepted structure –
 - based on the internationally accepted bibliographic conceptual model:
IFLA Library Reference Model (IFLA LRM)

Designed for flexibility

Four recording methods

- options according to the technological environment in which one operates:
 - unstructured description
 - structured description
 - identifier
 - IRI – internationalized resource identifier

“The methods are listed in order of increasing utility in general applications of RDA data, from low utility to high utility or *smart* data.”

- IRI → for linked data

One standard -- many ways to use it

an unstructured description

transcribe the name of the author from the title page

or automated data capture of information on a title page

result = a string of characters

a human can decipher and understand

a computer cannot process effectively – only good enough for keyword
searching

One standard -- many ways to use it

IRI – internationalized resource identifier

an Internet standard

a globally unique identifier, *for example*, use it to record the name of a person

result = a machine-readable string

- a human cannot easily decipher and understand
- a computer can process very effectively in a linked data application
- a computer can retrieve a large amount of information using the IRI and may also link to other information connected to that IRI
- expands the potential for exploration

Metadata statement using IRIs

subject, object and predicate all recorded using IRIs

Screen image from the RDA Toolkit (www.rdatoolkit.org) used by permission of the Copyright Holders for RDA (American Library Association, Canadian Federation of Library Associations, and CILIP: Chartered Institute of Library and Information Professionals).

View as Relationship Example

👁 Example

Person

Walcott, Derek *has country associated with person* Saint Lucia (nation)

<http://isni.org/isni/0000000114709596>

<http://rdaregistry.info/Elements/a/P50097>

<http://vocab.getty.edu/page/tgn/7004772>

Metadata standard for the 21st century

- ready for the future
- flexible

create metadata that can be used in traditional catalogues and also for the web and linked data environments

- data that can be used effectively for automated processing
- promotes data interoperability





precise and unambiguous data in well-defined data elements with an articulated structure

RDA as an international standard



Flags globe at
shutterstock (vector)
ID: 111655109 by
Alhovik

An international standard

- aligned with international standards  sound theoretical framework
- accommodating different local traditions  responsive to local needs
- translations are an integral part of the standard  different language versions for use in communities around the globe
- in use in countries around the globe  governance to reflect international participation

RDA aligned with international standards

- RDA is aligned with:

IFLA's International Cataloguing Principles

IFLA's bibliographic conceptual model: IFLA LRM

- also includes a statement of relationship to other international standards

for example, metadata that can be stored in different encoding schemes, such as MARC 21 and RDF

RDA: implementation of IFLA LRM

IFLA LRM = IFLA Library Reference Model

the bibliographic conceptual model that consolidates and supersedes the three previous IFLA models:

FRBR Functional Requirements for Bibliographic Records

FRAD Functional Requirements for Authority Data

FRSAD Functional Requirements for Subject Authority Data

Alignment with IFLA LRM

- RDA based on an internationally accepted understanding of the structure of bibliographic data
- IFLA LRM provides:
 - the basic structure and organization for the content of RDA
 - a recognized theoretical framework that was developed through international cooperation and consensus
 - built-in focus on the needs of the end-user through the user tasks

Not “one size fits all”

RDA is designed so that metadata can be created to meet the interests of local communities within a global framework for interoperability.

– Gordon Dunsire, [*Accommodating local cataloguing traditions in a global context*](#), 2018

- basis for data interoperability → the shared element set
 - data shares the same structure from IFLA LRM
- focus on the common ground we share

Internationalization – a design objective

- data harmonization

“RDA is designed for an international audience with the expectation that cataloguing agents will make application decisions when desirable”

...

“Given the flexibility of the guidance and recording methods, the metadata provided by different agents will **not necessarily be identical**, but as well-formed data it will be understood by any agent when shared. The emphasis is on **data harmonization** rather than strict compatibility.”

RDA > Introduction to RDA > Objectives and principles governing RDA

Accommodation of variations

IFLA LRM provides the basic structure for bibliographic data

→ RDA provides:

option to use any of a large number of precise data elements

choices on how to record the data

options for which instructions to use

options for sources of controlled vocabularies

options on how to punctuate and order elements

→ a cataloguing community makes the choices that suit their needs

Cataloguing community's choice

For example, when using controlled vocabulary (vocabulary encoding scheme) to record data:

Structured description

Instruction to use one of the RDA vocabulary encoding schemes

Followed by instruction to use another suitable vocabulary encoding scheme

Examples in RDA also show use of RDA vocabularies and external vocabularies

Instructions for *broadcast standard*

Recording a structured description

OPTION

Record an appropriate term from the [RDA Broadcast Standard](#) [↗](#) *vocabulary encoding scheme*:

HDTV

NTSC

PAL

SECAM

OPTION

Record a term from another suitable *vocabulary encoding scheme*. For general guidance, see [Guidance: Introduction to RDA. Data elements. Data values](#) [↗](#).

Screen image from the RDA Toolkit (www.rdatoolkit.org) used by permission of the Copyright Holders for RDA (American Library Association, Canadian Federation of Library Associations, and CILIP: Chartered Institute of Library and Information Professionals).

Cataloguing community's decisions

- Places within RDA Toolkit for a community to record and share its decisions:
 - policy statements
 - application profiles and other documents (shared or not)
 - community resources

A multilingual standard

RDA an international standard

8 – full translations integrated into the original RDA Toolkit

14 – language versions integrated in the [RDA Registry](#)

(partial translations = names of elements and controlled vocabularies)

- a standard that places equal value on all its language versions
 - English is treated as one of the language versions
 - English is the version used as starting point for translations, but deliberately called a “version”

A multilingual standard

- seamless integration of all language versions in the one RDA Toolkit and RDA Registry
- visibility of all the different language communities using RDA
- all using the same element set and vocabularies

RDA, a global metadata standard

- designed to be easy to use by metadata creators around the globe



- a standard to be maintained and developed jointly with representatives from all regions of the globe

RDA governance internationalizes decision-making and management

RDA, a framework for interoperability

- cataloguing communities around the globe operate in different contexts
 - different technological environments
 - conventions and practices differ
 - different needs in linguistic, national, and cultural cataloguing communities
- our common interest
 - providing metadata that fulfills the needs of our end-users
 - data that can be processed accurately by computers
 - compatibility of bibliographic data across communities

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SPRINGER NATURE



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THANK YOU FOR LISTENING!

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