

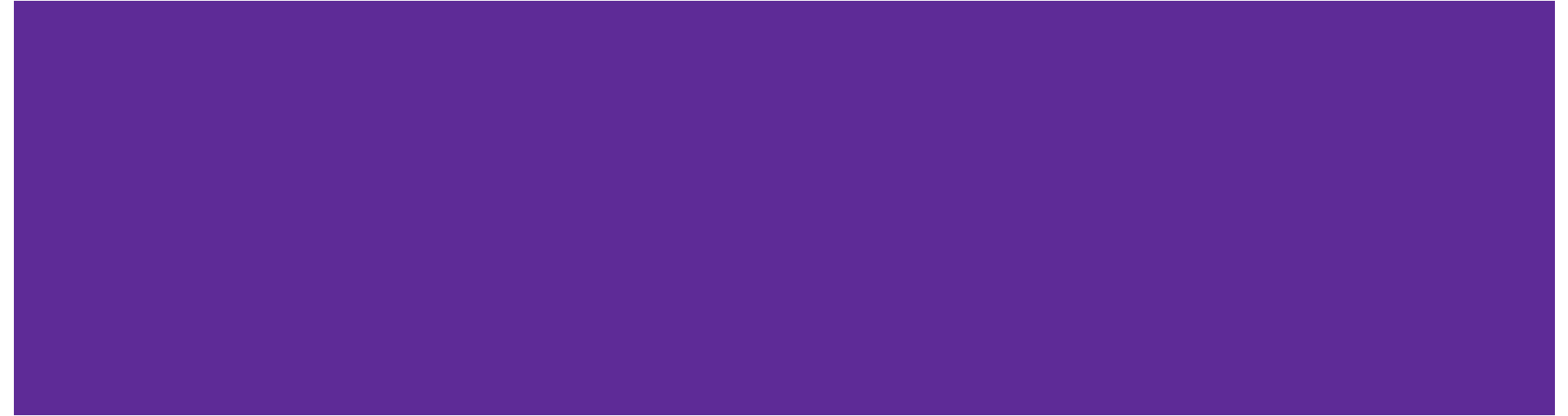
# RDA Changes in Theory and Practice

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# **Changes Arising from IFLA LRM**

## Representative Expressions



# Background: IFLA Library Reference Model (LRM)

- Created to consolidate and resolve conflicts in the earlier IFLA Functional Requirements models (FRBR, FRAD, FRSAD), resulting in a single unified model
- IFLA FRBR Review Group started planning for the revision in 2010
  - Appointed the 3-person Consolidation Editorial Group in 2013
- Draft of *FRBR Library Reference Model* released for worldwide review in 2016
- Modifications made based on feedback, including changing the title to *IFLA Library Reference Model*
- Published in August 2017; amended/corrected edition published in December 2017

# Origin of “Representative Expressions”

- IFLA’s Consolidation Editorial Group’s response to modeling problems in FRBR
  - Attributes that end users consider as being essential to the *work* were modeled at the *expression* level
    - Such as language
  - FRBR offered no way to differentiate an “original” *expression* from others
    - Although *expressions* that contain attributes that differ from the essential values are considered derivative *expressions*
  - Medium of performance modeled for both *work* and *expression*
- How could the new LRM help an end user select an *expression* appropriate to their needs?

# We Already Apply This Concept

- Music catalogers...
  - Identify when a title proper on a *manifestation* should be used to form the preferred title of the *work*
  - Recognize when a recording uses the original instrumentation vs. being an arrangement for a different medium of performance
  - Describe a score as not being in the original key
  - Determine if an opera is sung in its original language or in translation
- We have to know the “original” attributes to make these determinations
  - And to decide if we have a new *expression* of a *work*, or a new *work* altogether

# New Idea: Certain *Expressions* Represent the *Work*

- In the 2016 FRBR LRM draft, a *representative expression* designation applied to all aspects of a particular *expression*
  - A yes/no decision
  - Not repeatable
- Commenters on this draft found the approach to be too limiting
  - Many *expressions* of a particular *work* could all be equally representative
  - Some representative attributes might come from different *expressions*
    - Two from one, three from another, etc.
  - What if the cataloger identifies representative attributes but doesn't want/need to create a description of the *expression*?

# IFLA LRM's Revised Solution

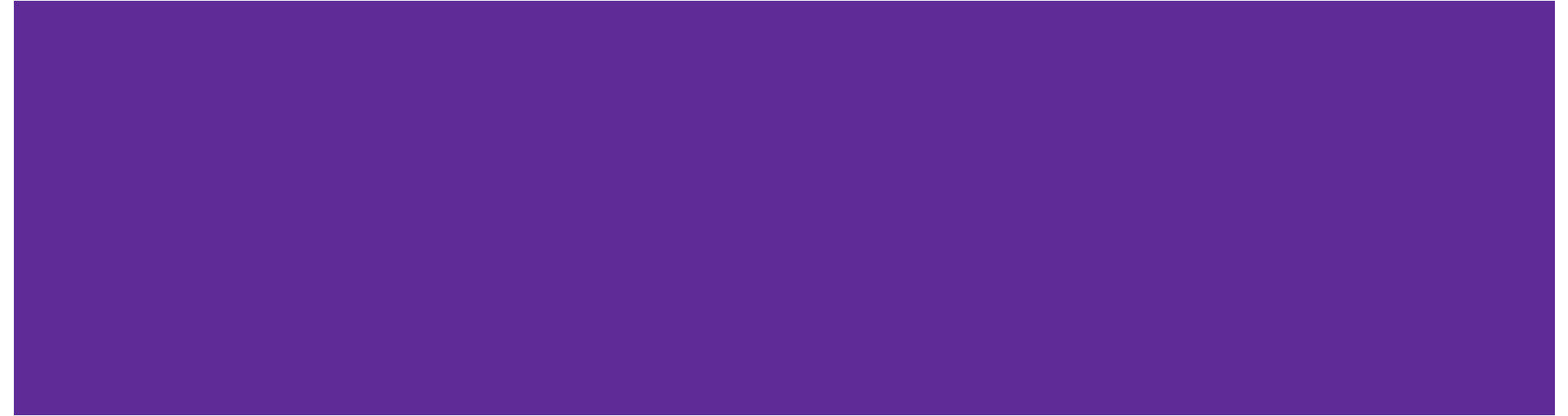
- New attribute of the *work* entity was created: *representative expression attribute* – not tied to any particular *expression*
  - More abstract than in the 2016 FRBR LRM draft
  - More flexible than in the 2016 FRBR LRM draft
  - Addresses those attributes considered to be closest to the original concept of the *work*
  - Inferred from particular *expressions* or from a network of similar *expressions*
    - With no requirement to identify the source of the values, or to record them at all
    - Do not have to come from the first *manifestation* of the *work*
  - Attributes first recorded at the *expression* level
    - If they are *representative expression attributes* they are then also associated with the *work*
- Analysis revealed that more FRBR *work* attributes really belonged at the *expression* level in LRM
  - Including medium of performance, key, and intended audience

# Impact on RDA

- Original RDA is based on the IFLA Functional Requirements (FR) models
  - IFLA LRM updated and replaced those
  - RDA had to adapt – part of the 3R Project (2017-2020)
- LRM is extensible
  - Implementations (like RDA) may define as many appropriate sub-types of the representative expression as needed
- Implemented in the [Official Toolkit](#) only
  - The original Toolkit remains tied to the earlier FR Models



# Implementing Representative Expressions in RDA



# New or Revised Elements

- Representative expression
- Aspect ratio of representative expression
- Colour content of representative expression
- Content type of representative expression
- Date of capture of representative expression
- Date of representative expression
- Duration of representative expression
- Extent of representative expression
- Intended audience of representative expression
- Key of representative expression
- Language of representative expression
- Medium of performance of choreographic content of representative expression
- Medium of performance of musical content of representative expression
- Place of capture of representative expression
- Projection of cartographic content of representative expression
- Scale of representative expression
- Script of representative expression
- Sound content of representative expression

# Other Changes in RDA

Specific expressions may be specified as being representative using the work element ‘representative expression’ to link the work and the RepEx.

Not limited to a single expression

Representative expression elements may be used in constructing access points for works:

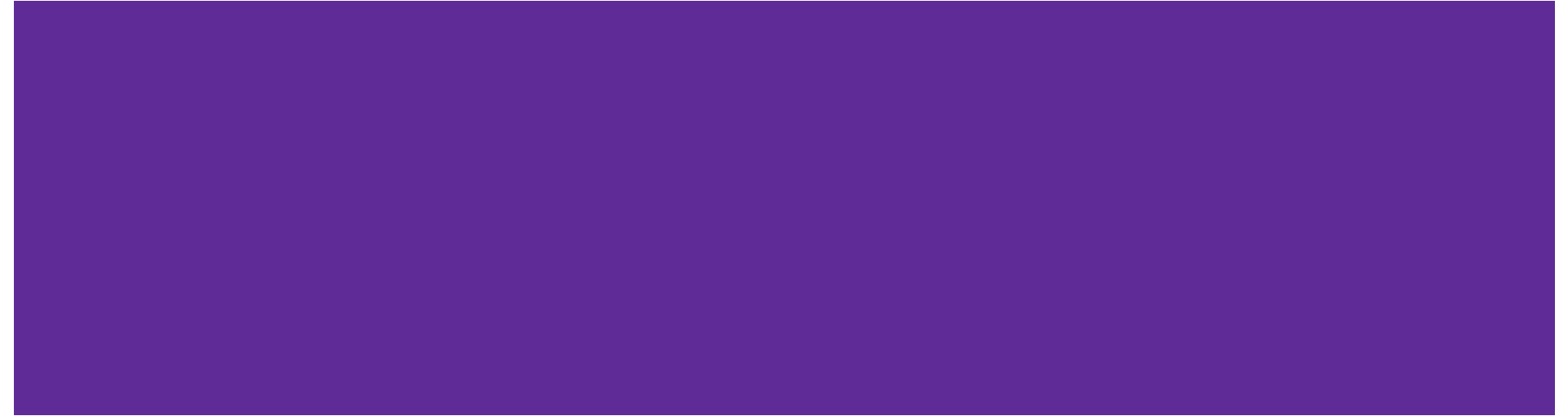
- medium of performance of musical content of RepEx
- key of representative expression

Representative expression elements may be used to describe the content selected by an *aggregating work* for an *aggregate*.

More later!

# **Changes Arising from IFLA LRM**

## Aggregates



# The Evolution of Aggregates

- Original version of FRBR (1998) only briefly describes aggregates
  - With whole/part works, made a distinction between dependent and independent parts
    - Dependent: intended to be used in the context of the larger *work*; generally don't have distinctive titles
    - Independent: do not rely on the context of the larger *work* for their meaning; frequently have distinctive titles
- Two visions presented in the Final Report from the IFLA Working Group on Aggregates (2011):
  - Main text: An aggregate cannot be modeled as whole/part relationships, instead it is “a *manifestation embodying multiple distinct expressions*”
  - Appendix B: “an **aggregate entity** is the ‘whole’ in a ‘whole/part’ relationship with two or more components (parts)”

# What Should RDA Contain?

- With an unsettled vision at the international level, original RDA largely remained silent
  - “Aggregates” used only in explaining the scope of WEMI:
    - “Each of these terms, depending on what is being described, can refer to individual entities, aggregates, or components of these entities (e.g., the term *work* can refer to an individual work, an aggregate work, or a component of a work)”
  - “Compilation” used in instructions about conventional collective titles and other collections of published works
- RSC decided to wait for IFLA to determine which approach better fit the original FRBR model
  - Once agreement was reached, RDA would be updated

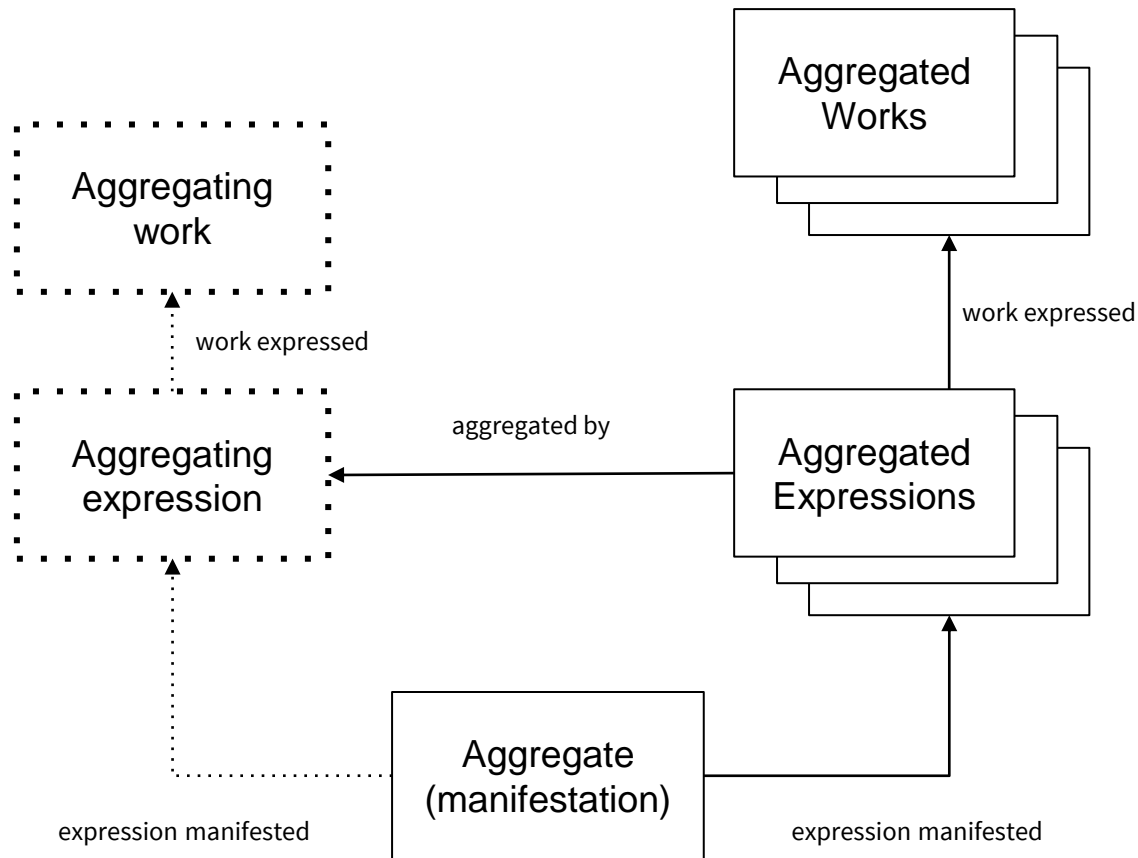
# IFLA LRM to the Rescue!

The Consolidation Editorial Group settled on the recommendation in the main text from the IFLA Working Group on Aggregates.

An *aggregate* is a manifestation that embodies multiple expressions.

*Aggregated expressions* are the content embodied in an *aggregate*.

The *aggregating work* is the plan for selecting and ordering *expressions* embodied in an *aggregate*.



# Pros and Cons of Aggregates Model

- *Pros:*

- Better reflection of reality

- Avoids logical conundrums, such as a *work* being in multiple dependent whole-part relationships

- Recognizes the activity of selecting and ordering as a *work*

- Flexibility

- *Cons:*

- Increase in precision accompanied by an increase in complexity

- Flexibility



# Implementing Aggregates in RDA



# Providing Guidance

New [Guidance Chapter](#) on aggregates explaining the model.

Guidance provided for how to relate manifestations, expressions, and works to one another

Best to  
apply  
in this  
order:

[Describing a manifestation that embodies two or more expressions](#)

[Describing expressions of aggregating works and expressions that are aggregated](#)

[Describing aggregating works and works that are aggregated](#)

# New Elements for Aggregates

Elements related to agents:

**aggregator agent:** relates an *aggregating work* to an agent responsible for selecting and ordering expressions embodied in an *aggregate*.

**contributor agent to aggregate:** relates an *aggregate* to an agent responsible for creating an expression of a work that is embodied in an *aggregate*.

Used for situations where the embodied expressions are not described, but access to the agents responsible for the expressions is desired.

A creator of a work is also considered a creator of expression. See scope note to [creator agent of expression](#): “A creator of a work that is realized by an expression is also a creator of expression.”

Elements related to WEMI:

**aggregates:** relates an *aggregating expression* to an *aggregated expression* embodied in an *aggregate*.

Element is in LRM and is therefore required to be in RDA.

# Representative Expressions Meet Aggregates

An *aggregate* may be described by only describing the *aggregating work*. This might be appropriate when describing each aggregated expression is not desirable.

Problem: how to describe the content embodied in the aggregate?

Solution: the representative expression elements may be used to link the *aggregating work* to attributes associated with the aggregated expressions

This solution works because anytime the plan changes for an *aggregate*, one must have a new *aggregate*. Therefore the attributes of the *aggregated expressions* are “representative” of what was intended by the *aggregating work*.

# Representative Expressions Meet Aggregates

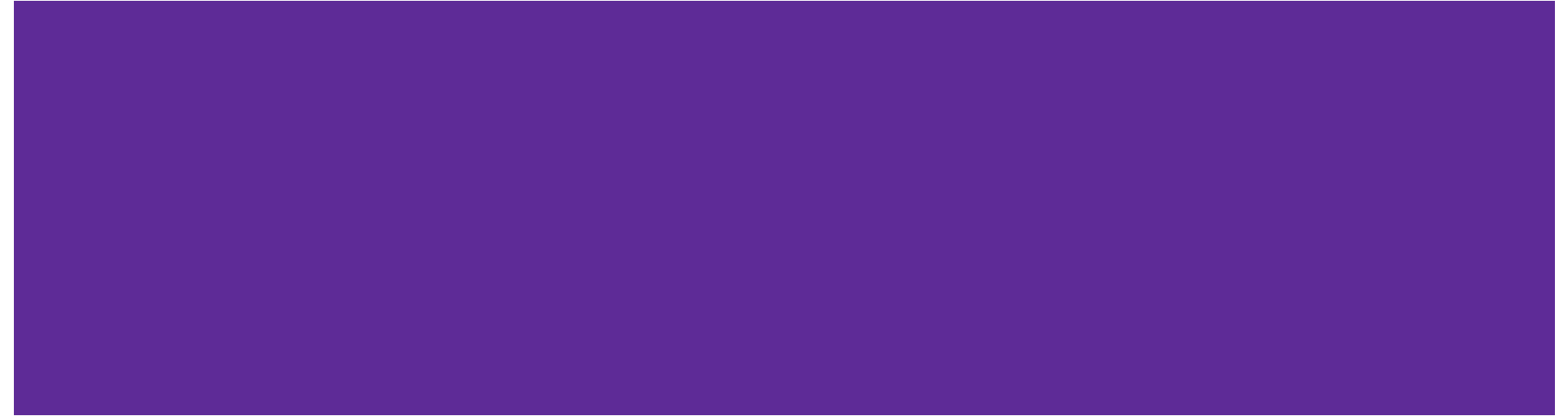
Example: a 20 CD box set of piano music

**content type of representative expression** = performed music

**duration of representative expression** = durations could be cumulative or separated by disc, etc

**date of capture of RepEx** = recorded 1950-1976

# **Nomens, Appellation Elements, and String Encoding Schemes in RDA**



# Nomens

An association between an entity and a designation that refers to it (LRM, p. 31).

The identity of a nomen is determined by its *nomen string* and the instance of an entity associated with it.

Person1 has given name “Damian” – identifies Nomen1

Person2 has given name “Damian” – identifies Nomen2

While the *nomen strings* are identical, they are *nomen strings* associated with different entity instances (Person1 and Person2), and therefore must be separate nomens.

# Nomens Are a Big Change!

A title or name was considered to be an attribute in FRBR, but was recognized as an entity unto itself in FRAD and FRSAD.

LRM harmonized the FR models to model titles/names as Nomens.

Allows for other things to be said about the nomen:

- Script
- Context of use
- Status
- Assigning agent
- Date of assignment



# Nomens are Statements About Statements

Reification: Process through which a relationship is modelled as an entity, so that it can in turn have its own attributes and relationships (LRM, p. 100).

Relationship:

Person1 has given name “Damian” .

Reification:

<Person1 has given name “Damian”> a Nomen ;  
has nomen string “Damian” ;  
assigned by LibraryOfCongress ;  
has script Latin .

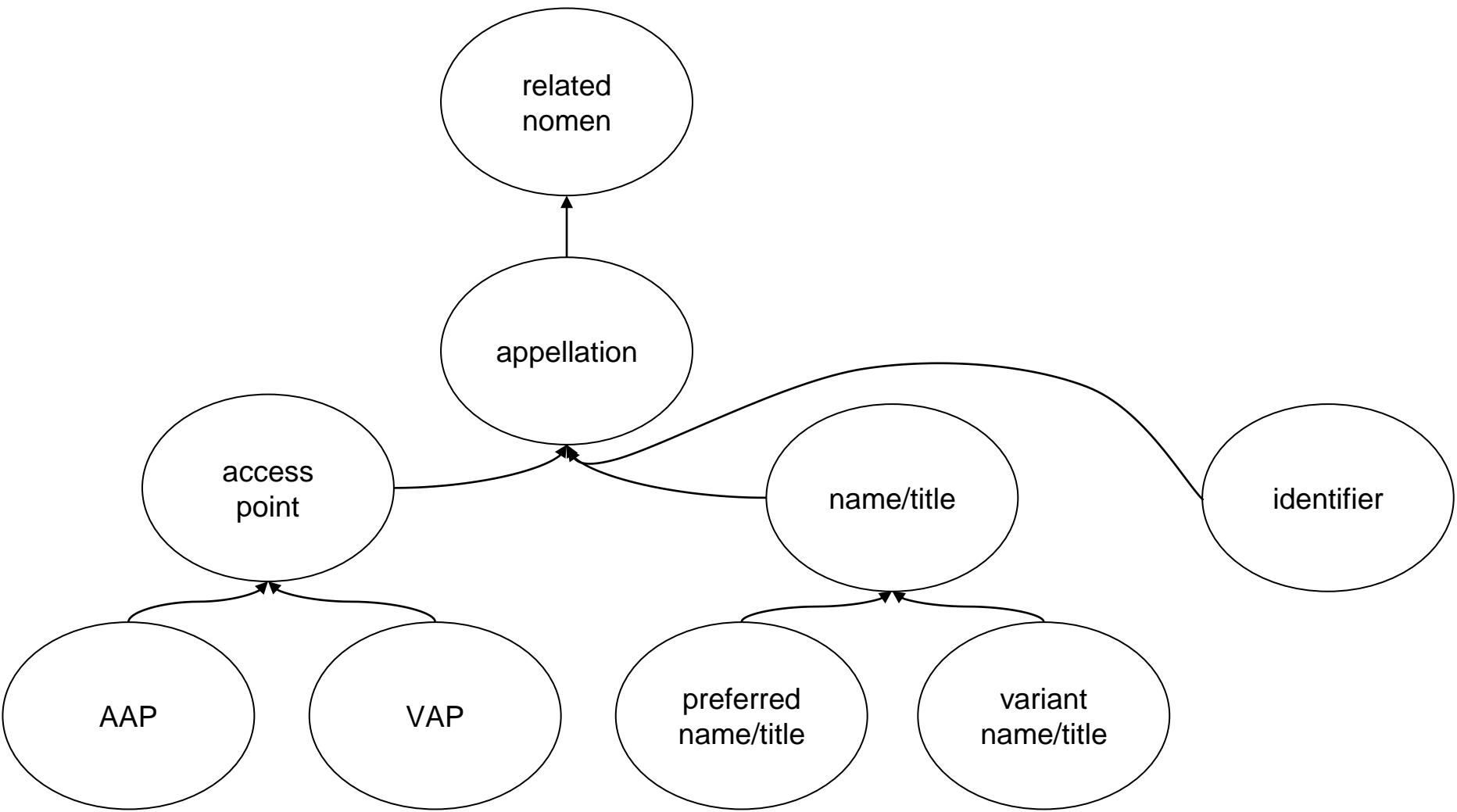
# Appellations in Official RDA

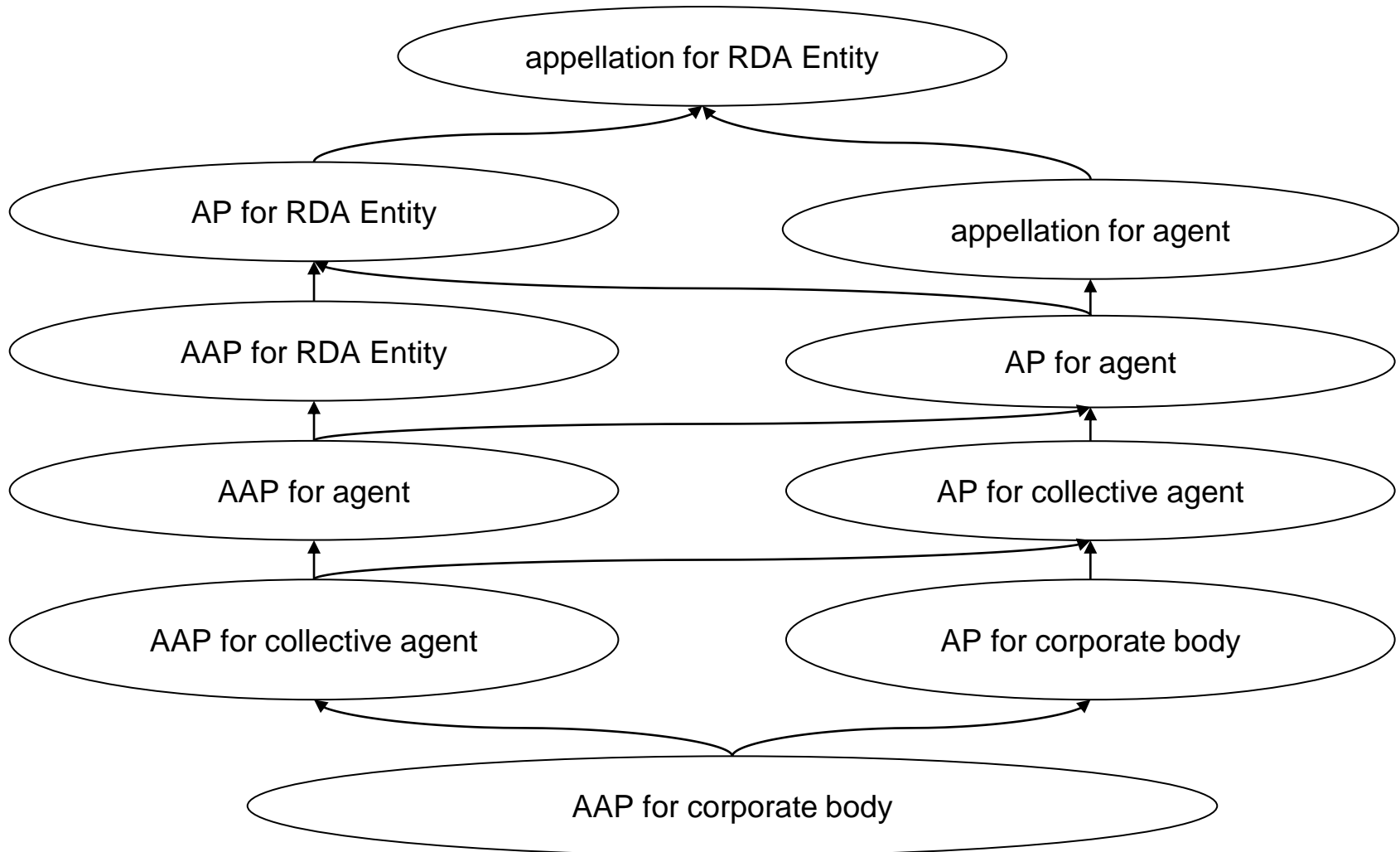
Had to be revised to be a relationship element between an RDA entity and a nomen.

A well-formed appellation element hierarchy had to take into account:

- The hierarchy of the entities

- Recording methods





# Recording Values of Appellations

Record the value of a nomen string as the value of the appellation element:

Work1 has title of work “My work” .

OR

Record the appellation as an instance of a Nomen:

Work 1 has title of work Nomen1 .

Nomen1 has nomen string “My work” .

For most applications, the former method will suffice.

# Recording Methods for Appellations

## Unstructured description

Record the value as found on the resource with no modification.

Used for name/title of [entity] elements.

Preferred and variant name/title elements are the strings that are selected for preference or non-preference in a specific application or context.

“Take exactly what you see”

# Recording Methods for Appellations

## Structured description

A value that is taken from a vocabulary encoding scheme or constructed according to a string encoding scheme.

Used for access point elements.

“Modify what you see for your system requirements”

Authorized and variant access point elements are the strings that are selected for preference or non-preference in a vocabulary encoding scheme.

An authority file is an example of a vocabulary encoding scheme.

# Recording Methods for Appellations

## Identifier

Record the value as found on the resource or as found in a vocabulary encoding scheme.

Used for identifier of [entity] elements.

## IRI

Record an IRI for the appellation as an instance of a Nomen.

Method is available for recording all types of appellations.



# String Encoding Schemes (SES)

A set of string values and an associated set of rules that describe a mapping between that set of strings and a value of an element.

SES include details about:

- Base value

- Format of base value

- Additions to base value

- Punctuation between string values

Access points may be values that are constructed according to a SES.

# SES and RDA

SES are dependent on community formulation and application.

The majority of the appellation instructions in OG RDA are describing SES specific to the Anglo-American community or communities of practice within the Anglo-American cataloging tradition.

Officially maintaining a set of Anglo-American SES is at odds with RDA Internationalization.

3R Project identified and developed SES instructions with general applicability.

SES for specific situations or communities have been shifted to the Community Resources area as legacy practice.

General SES instructions may be given specific applicability instructions via the Policy Statement/Best Practice mechanisms in the Toolkit.

# General SES in RDA

Access point elements provide instructions for the base of an access point, the formatting of the base, and additions to the base.

The base of an access point is a name.

The base of an AAP is a preferred name.

The base of a VAP is a variant name or a preferred name (for situations where the additions are different).

Formatting refers to how the base of an access point is manipulated.

Name inversions

Formatting of acronyms and initialisms

AAP and VAP refer back to the access point instructions for base and formatting decisions and also include instructions for special situations.

# Additions for General SES in RDA

Access point elements provide options for adding values to base of an access point.

Includes:

- Additions that are values of other RDA elements.

- Additions that are specified string values.

- Additions that are string values supplied by the user

AAP and VAP instructions refer back to the access point instructions for available additions and also include instructions for special situations.

# Naming Musical, Legal, Official, and Religious Works and Expressions

Presented as separate elements in OG RDA as refinements of preferred/variant titles, AAPs, and VAPs.

Analysis reveals that these are SES for communities of practice.

Not appropriate for base RDA.

Legacy instructions removed to the Community Resources area and are no longer maintained by the RSC.

Available for use and can be annotated by policy statements and best practices.

Removal also necessary from a technical point of view: for each work or expression category, a reproduction of the appellation structure would be required.

# Summing Up

Nomen as an entity required wholesale restructuring of the appellation elements as relationship elements.

Instructions for choosing and recording names aligned with the RDA recording methods.

Access point instructions generalized so as to provide a general SES structure:

- Select the base

- Format the base

- Add to the base

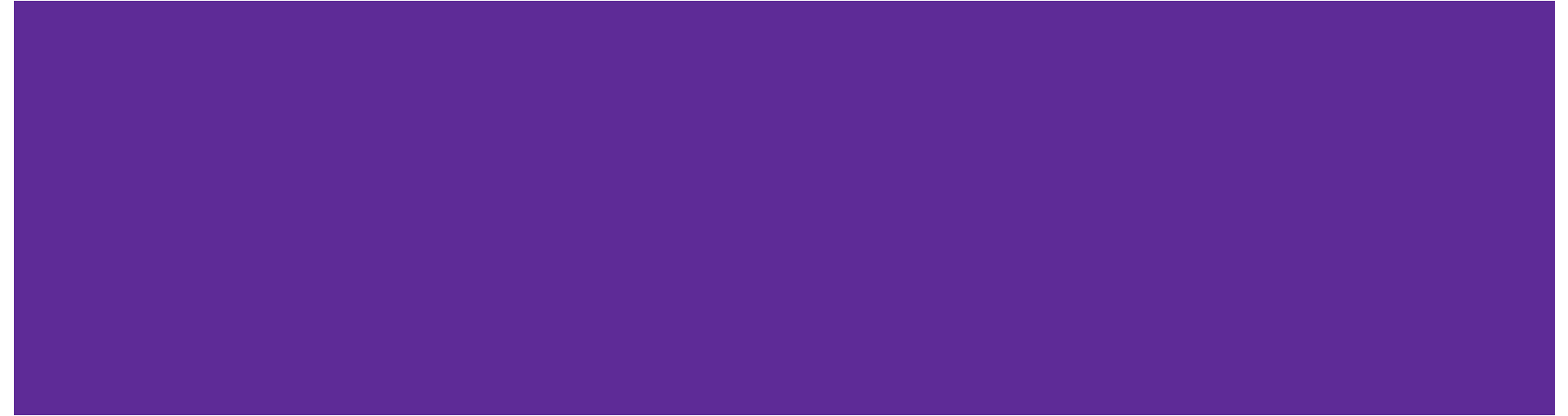
OG RDA “elements” for specific kinds of works and expressions moved to Community Resources.

Community implementations of RDA will determine how entities are named:

- LC-PCC Policy Statements

- MLA Best Practices

# **What You Need to Know (Abridged): An MLA Perspective**



# Representative expressions in MARC

- Field 387 has been defined in both Bibliographic and Authorities format to cover every representative expression element **except**:
  - Key of representative expression: new indicators in field 384
  - Medium of performance of musical content: new indicators in field 382
  - Medium of performance of choreographic content: nobody has any idea what to do with this
- Still awaiting detailed guidance on recording representative expression elements, but tentative MLA guidance is to reserve them for the authorities context only
  - This is an extension of the existing recommendation in Original RDA to record only the medium of performance actually expressed by a resource, not the MoP it was originally written for (if different)



# Field 387 and friends

- 387
  - Guidance pending, but likely for work authority records only:
    - \$h - language of representative expression
- 384
  - Expression: key of expression:
    - First indicator 0: Original key (matching key of representative expression)
    - First indicator 1: Transposed key (not matching key of representative expression)
  - Work: key of representative expression:
    - First indicator 2
- 382
  - Expression: medium of performance of musical content
    - First indicators 0 or 1: full or partial
  - Work: medium of performance of musical content of representative expression
    - First indicators 2 or 3: full or partial

# Navigating the new RDA Toolkit: Toolkit Resources

- The move to a "data dictionary" style model means there is no longer an obvious "start here" location
- Guidance: Resource description
  - The section [Minimum description of a manifestation](#) (53.57.76.31) lists the bare-bones necessary data elements for describing a manifestation. Note this is much more stripped-down than Original RDA's "core" elements.
- Where an exact correspondence exists, the Original RDA instruction numbers are hidden in the background and can be searched
- MARC fields in the Element Reference box for most elements are also searchable
- Most element names are unchanged from Original RDA

# Navigating the new RDA Toolkit: Other Resources

- The MLA RDA Metadata Guidance document includes a list of relevant elements, roughly organized by ISBD descriptive area
  - MARC mapping included
  - LC-PCC Core and MLA "routinely record" elements are in bold
- The MLA draft application profile includes several worksheets
  - One large sheet with generally-applicable elements
  - Smaller sheets with elements specific to different resource types
  - Can filter for those marked "mandatory" or "mandatory if applicable"
- For specific topics, the MLA and LC-PCC narrative guidance documents point to relevant locations
  - <https://cmc.wp.musiclibraryassoc.org/mla-best-practices/>
  - <https://loc.gov/aba/rda/mgd/>

# Noteworthy changes: relationships

- Original RDA's relationship designators have become sets of relationship elements
  - Ex: "composer" has become the following set of elements relating the WEMI entity "work" to various types of agents:
    - Work: composer agent of work
      - Work: composer collective agent of work
        - Work: composer corporate body of work
        - Work: composer family of work
      - Work: composer person of work
- These are, if anything, even *less* user friendly as display names than the relationship designators
- Thus, the PCC relationship label vocabulary:  
<https://www.loc.gov/aba/rda/mgd/relationshipLabels/index.html>

# Relationship labels

- The PCC relationship labels mostly collapse relationship sets into a single term, which is usually more display friendly (or at least no *less* display friendly) than the original RDA relationship designator
  - Ex: The label "composer" covers "composer [person/family/corporate body] of work" equally
  - The reference for "composer person of work" from the Work to Person label document:

## [composer person of work](#)

Definition: A person who is responsible for creating a musical work.

Adaptation of another musical work to form a distinct alteration, paraphrasing a work or creating a work in the general style of another composer, or creating a work that is based on the music of another composer, is included.

PCC relationship label: **composer**

Inverse: [composer person of work of](#)

# Relationship designators and PCC labels: the usual suspects

- composer
  - composer (expression)
  - author
    - lyricist
  - performer
    - conductor
    - instrumentalist
    - narrator
    - singer ...
  - arranger of music
  - editor
  - translator
  - container of (work)
    - what we mean in analytic AAPs
    - legit whole-part relationships
  - container of (expression)
    - what we mean in analytic AAPs
    - legit whole-part relationships
- composer
  - **contributor of music** [manifestation-to-agent]
  - author
    - lyricist
  - performer
    - conductor
    - instrumentalist
    - narrator
    - singer ...
  - arranger of music
  - editor
  - translator
  - [the relationship formerly known as container of work]
    - **expression manifested**
    - **part**
  - [the relationship formerly known as container of expression]
    - **expression manifested**
    - **part**

# Relationship labels: related WEMI entities

- Any designators with "(work)" or "(expression)" have different labels
  - PCC relationship labels generally do not include the name of any WEMI entities (with the exception of "expression manifested")
- There are no Manifestation to WEMI label documents
  - The handful of relevant manifestation relationships are mostly in relevant narrative MGDs, e.g.:
    - "Reproduction of" in the Reproductions-Photocopies document
    - "Expression manifested" in the Aggregates document
- "Based on" relationships
  - "based on (work)" → Work: *based on work* → renamed Work: *source work*
  - "based on (expression)" → Expression: *based on expression* → renamed Expression: *source expression*
  - PCC relationship labels for both are currently listed as "based on"
    - MGDs have not yet caught up with the name changes; may change in the future

# Noteworthy changes: expression access points

- New PCC policy: access points for things-being-manifested should refer to expressions, rather than works
  - LC-PCC
    - The MGD for expression access points notes PCC catalogers may use the work access point to represent any expression in the original language
  - MLA
    - The MLA guidance document recommends using the work AAP as the expression AAP as long as the expression manifested matches a representative expression in terms of:
      - Language
      - Key (for music where an "original or canonical" value for key makes sense)
      - Medium of performance (for music where an "original or canonical" value for medium of performance makes sense")
    - Generally do not consider content type (performed vs. notated music)
  - The relationship "expression manifested" is implicit in any combination of 1xx and 2xx; record explicitly in 7xx.



# Noteworthy changes: "creators" and "contributors"

- The creator-contributor distinction has been weakened
  - The artists formerly known as "creators" are now "creators of works"
  - The artists formerly known as "contributors" are now "creators of expressions"
- For the most part, AAPs (and "main entry" for MARC) still need to refer to creators of works rather than expressions
  - After discussion with the PCC Policy Committee, MLA guidance makes an exception for certain aggregates with a common creator of expression
    - Art music is largely excluded
    - One performer must be specifically highlighted
    - The main point of interest for most users should be at the expression rather than work level
  - See MLA RDA Metadata Guidance under Aggregates > Authorized Access Points for Aggregating Works and Expressions for the full decision tree

# In which I talk more...

- Roundtable on Policy Statements
  - YouTube: <https://www.youtube.com/watch?v=ysNWllXeeB0>
- Using the New RDA Toolkit to Catalog Music
  - Slides on Humanities Commons: <https://hcommons.org/deposits/item/hc:48851/>
  - A slightly updated version will be offered again through ALA eLearning in June 2023
- Aggregates for the Practical Cataloger
  - Slides available in Sched for MOUG 2023 attendees
  - Slides will eventually be posted on the MOUG website for non-attendees (<https://musicocclusers.org/meetings/meeting-presentations/>)

# More Information - IFLA LRM

- IFLA LRM: [ifla-lrm-august-2017\\_rev201712.pdf](#)
- [Explanations of recurring issues from the LRM World-Wide Review](#)
- [Chris Oliver LRM presentation June 2018](#) [video presentation ~29 min.]
- Pat Riva, “[\*The IFLA Library Reference Model : lectio magistralis in library science = Il modello concettuale IFLA Library Reference Model : lectio magistralis in biblioteconomia.\*](#)” Fiesole (Firenze), Italy : Casalini Libri, 2018.  
[download available]
- [Implementation of the LRM in RDA](#) [from the RSC website]