#### RDA DEVELOPMENTS OF NOTE

PRESENTED TO CC:DA

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#### ESTABLISHING NARDAC

NORTH AMERICAN RDA COMMITTEE

#### **C**ALENDAR

#### Working backwards...

- NARDAC must be fully in place by 2019
- Need near-final structure no later than mid-2018
  - Will not happen before April 2018 RDA Toolkit Update
  - Allows for test and adjust period before full NARDAC implementation
- Basic outline of structure, membership, working principles, etc. need to be developed (and generally agreed upon) in 2017

#### REQUIREMENTS FROM RDA BOARD

- Represent countries/organizations in the region who have implemented RDA
  - NARDAC doesn't have to be legal entity but needs terms of reference or a constitution
- Serve as conduit between regional RDA users and RSC regarding RDA development
- Identify RSC representative and backup
  - Must serve for a minimum of 2 years
- Develop and provide feedback on proposals
- Foster development of supporting structures
- Support RSC working groups suggest members

#### **CURRENT ASSUMPTIONS**

- Members will represent the three current organizations: ALA, CCC, LC
  - Each organization will identify their own representatives, determine term limits, etc.
- Decision-making
  - Will need to accommodate split recommendations unanimity not required
- NARDAC members will
  - Select their own RSC Representative
  - Be responsive to their communities, keep lines of communication open, etc.
- Working principles need to be developed

#### Issues Under Discussion

- Representation / membership
  - Possibility of having 2 representatives each from ALA, CCC, and LC
  - Possible slots for 1 or 2 co-opted members to address areas where particular expertise is needed
- How closely should the North American structure model others?
  - Review European model, while recognizing that their needs and structures are different from ours
  - Monitor the structure developing for Oceania (ORDAC)

## NARDAC-RELATED OPPORTUNITIES FOR CC:DA

- As part of the 3R Project
  - Form an unofficial North American working group to take on a 3R Project assignment?
    - A follow-up joint project based on the success of the ALA/CCC partnership last year
    - Along with the task could also test: Communication procedures, tools, liaison work, protocols, etc.
- Related to RSC meeting this spring
  - Day-long RSC sponsored event to discuss NARDAC, IFLA LRM, 3R Project, etc.
  - To be held in Chicago on May 16

# SYNCHRONIZING THE OPEN METADATA REGISTRY AND THE RDA TOOLKIT

#### OPEN METADATA REGISTRY & RDA

#### For RDA, the OMR contains

- RDA Reference data stored in RDF
  - Labels, definitions, and scope notes of:
    - RDA entities
    - RDA relationship elements and designators
    - RDA attribute elements
    - RDA meta (provenance) elements
    - RDA vocabulary encoding schemes
    - RDA terms used in guidance and instructions
  - Used in several RDA services, not just the Toolkit
  - Has open CC0 license

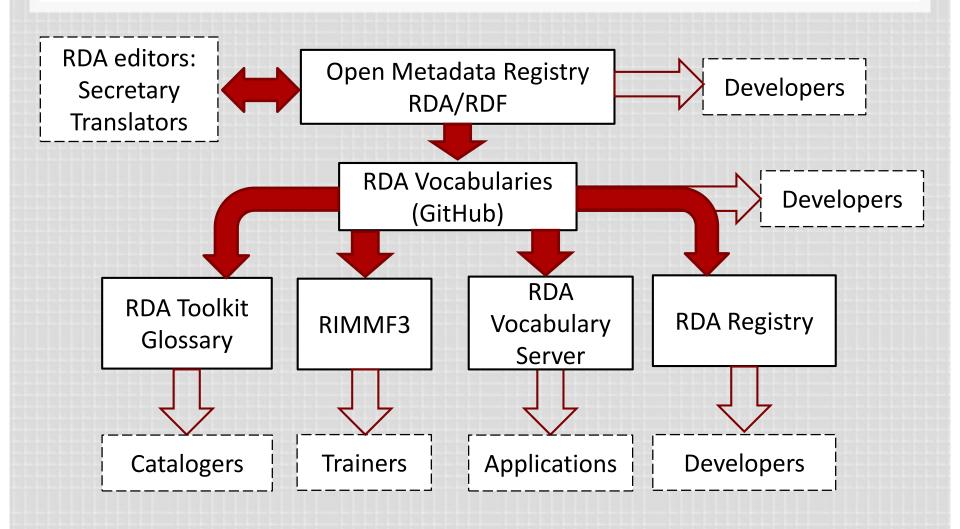
#### OMR HAS...

- Translations of RDA Reference in a wide variety of languages
  - Arabic, Catalan, Chinese, Danish, Dutch, English, Finnish,
     French, German, Greek, Hebrew, Italian, Norwegian, Polish,
     Portuguese, Slovak, Spanish, Swedish, Ukrainian, Vietnamese
  - Some RDA translations are limited to the OMR
- Many other non-RDA vocabularies/element sets
  - Dublin Core, ISBD, PBCore, RDA/ONIX Framework, UNIMARC, etc.
  - Offers potential for mapping between these and RDA

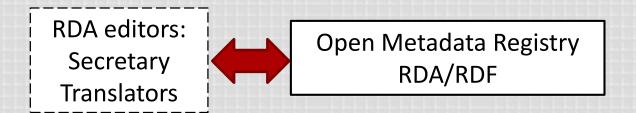
### HOW DOES THE OMR RELATE TO THE TOOLKIT CONTENT?

- Until summer 2016
  - Both maintained separately; kept in synch manually
- Starting in August 2016
  - Most changes made in OMR only visible before they are rolled out to the Toolkit
  - Critical to have this structure in place before implementing IFLA LRM in RDA

#### RDA REFERENCE DATA WORKFLOW



#### WHY OMR?



- Semantic vocabulary management system
- Content managed via export/import spreadsheets
- Import data authorized by RDA editors

#### OMR EXAMPLE

#### **Element Sets: Show Elements for RDA Manifestation properties**

Detail   Elements   History   Maintainers   Export   Import				
Label (a)	Туре	Canonical URI 🕢		
has carrier type	property	/Elements/m/P30001		
has media type	property	/Elements/m/P30002		
has mode of issuance	property	/Elements/m/P30003		
has identifier for manifestation	property	/Elements/m/P30004		
has preferred citation	property	/Elements/m/P30005		
has regional encoding	property	/Elements/m/P30006		
has copyright date	property	/Elements/m/P30007		
has date of distribution	property	/Elements/m/P30008		
has date of production	property	/Elements/m/P30009		
has date of manufacture	property	/Elements/m/P30010		
has date of publication	property	/Elements/m/P30011		
has parallel designation of named revision of edition	property	/Elements/m/P30012		
has parallel designation of edition	property	/Elements/m/P30013		
has numbering within series	property	/Elements/m/P30014		
has numbering within subseries	property	/Elements/m/P30015		
has electronic reproduction (manifestation)	property	/Elements/m/P30016		
has parallel distributor's name	property	/Elements/m/P30017		

#### **OMR EXAMPLE**

Element Sets: RDA Manifestation properties Elements: has date of publication

Detail

Statements

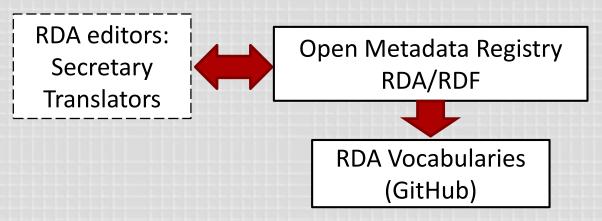
History

Profile property	Language	Object
name	English	dateOfPublication
label	English	has date of publication
description	English	Relates a manifestation to a date associated with the publication, release, or issuing of a manifestation.
type		property
domain		http://rdaregistry.info/Elements/c/C10007
uri		http://rdaregistry.info/Elements/m/P30011
status		Published
lexicalAlias	English	http://rdaregistry.info/Elements/m/dateOfPublication.en
hasUnconstrained		http://rdaregistry.info/Elements/u/P60073
instructionNumber		2.8.6
ToolkitLabel	English	date of publication
ToolkitDefinition	English	A date associated with the publication, release, or issuing of a manifestation.
label	French	a pour date de publication
description	French	Met une manifestation en relation avec une date associée à la publication, la mise à disposition ou l'édition d'une ressource.
ToolkitLabel	French	date de publication
ToolkitDefinition	French	Date associée à la publication, la mise à disposition ou l'édition d'une ressource.
ToolkitLabel	Spanish	fecha de publicación
ToolkitDefinition	Spanish	Una fecha asociada con la publicación, entrega o emisión de un recurso.
label	Swedish	har utgivningstid
ToolkitLabel	Swedish	utgivningstid

#### SPREADSHEET DATA EXAMPLE

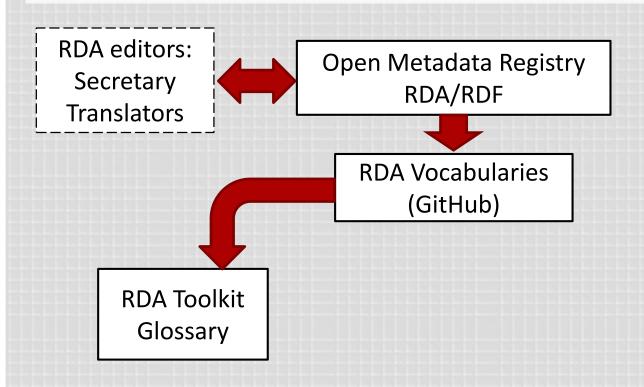
A	В	С	D	E	F	G	Н
reg_id	*preferred label[0]_en	ToolkitLabel_en	definition[0]_en	ToolkitDefinition_en	scope note[0]_en	*uri	*status
1028	Labanotation	Labanotation	A form of notated movement using abstract symbols on a vertical three-line staff to represent movement of the body and limbs as seen from the back., developed in the United States and the United Kingdom in the middle of the 20th century.	A form of notated movement using abstract symbols on a vertical three-line staff to represent movement of the body and limbs as seen from the back., developed in the United States and the United Kingdom in the middle of the 20th century.		noteMove:1002	Published
5924	Kinetography Laban	Kinetography Laban	A form of notated movement using abstract symbols on a vertical three-line staff to represent movement of the body and limbs as seen from the back., developed in Europe in the middle of the 20th century.		Kineography Laban is now harmonized with, while remaining distinct from, Labanotation.	noteMove:1010	Published

#### OMR EXPORT TO RDA VOCABULARIES



- Project on GitHub: open infrastructure for developers
  - Version management allows applications to update and synchronize
  - Publish RDA Reference data in multiple RDF serializations
  - Published as discrete, integrated releases

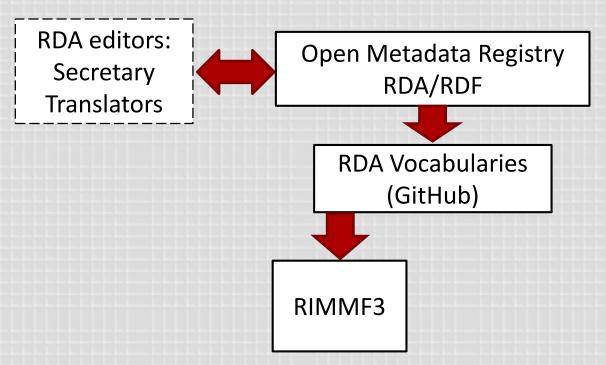
#### RDA TOOLKIT GLOSSARY



#### RDA TOOLKIT GLOSSARY

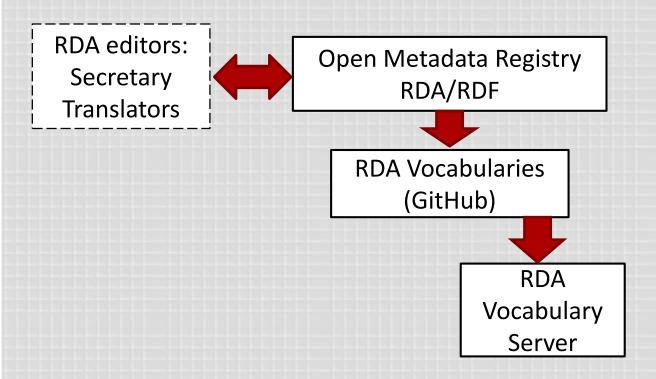
- Based entirely on RDA Reference
  - Includes relationship designators and their inverses
- Greatly expanded in the August 2016 release of the Toolkit
- Extracted from RDF/XML files
- Internal Toolkit identifiers based on RDA URIs
- Content re-used in Toolkit guidance and instructions
  - Element scope sections
  - Relationship designator appendices
  - Vocabulary encoding scheme term lists

#### RIMMF3



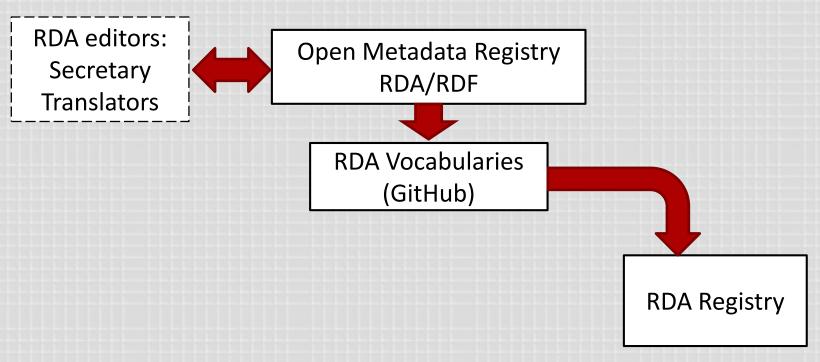
 Data for entities, elements, vocabulary terms, and translations for user-controlled language display extracted automatically from current release

#### RDA VOCABULARY SERVER



 Provides download management and linked data de-referencing services for machine applications

#### RDA REGISTRY



 Provides download management and linked data de-referencing services for application developers (humans)

#### ACCESS TO "RDA"

- Variety of audiences
  - Catalogers
  - Trainers
  - Developers
  - Machine applications
- Open access except for RDA Toolkit
  - Toolkit contains RDA Reference + guidance/instructions
  - Open CC0 license allows commercial re-use of RDA Reference

#### GLOSSARY CHANGES AUG. & OCT. 2016

#### RELATIONSHIP DESIGNATORS

- Deconstructed definitions into
  - General definition
  - · Scope note
    - Includes examples, inclusions/exclusions, restrictions
    - See references removed
- Identified which definitions include instructions
  - Will address as part of 3R Project
- Replaced secondary definitions, e.g.
  - "… a halogen (chlorine, bromine, iodine, or fluorine)…"
    → "… chlorine, bromine, iodine, or fluorine…"
- Limited punctuation to period, comma, semi-colon
   & colon

#### RDA CHANGES Feb. & Apr. 2017

BEYOND PROPOSALS APPROVED IN FRANKFURT

#### REPLACING "RESOURCE"

- Where possible in RDA element definitions, labels and Toolkit instructions, the term "resource" will be replaced with the specific entity term
  - Addresses current ambiguities
    - Sometimes just one of the WEMI entities is meant, other times it's more
  - An early step in accommodating LRM
    - LRM implies that greater precision is required
  - The term "entity" will be used to refer to any RDA entity (not just WEMI)
  - Changes mostly limited to the use of "resource" alone; review of additional terms will be part of 3R Project

#### Introducing / Clarifying "Agent"

- Replacing "person, family, or corporate body" with "agent"
- Replacing "person, family, and corporate body" with "agents"
- Changing "agency or agent" to "agency"
  - Used in some instructions for legal works
- Introduction of "collective agent" will come during 3R Project

#### Use of Definite/Indefinite Articles

- Current practices
  - Use indefinite article in new RDA elements and relationship designators
  - Omit articles from the preferred label of new RDA elements and relationship designators
- Will remove articles from RDA element labels
  - Will serve as basic design for 3R Project
- Within instructions, will normally use the indefinite article
  - But use definite article to distinguish between the element in focus from another instance of that element

## REMOVING "IN THIS ORDER" FROM AAP INSTRUCTIONS

- In Frankfurt, RSC agreed to remove "in this order" from several AAP instructions while keeping the a), b), etc. labels
  - Still an implied order
    - Construct the authorized access point representing the work by combining—(in this order):
    - a) the authorized access point for an agent responsible for the work (see 6.27.1.2-6.27.1.8), if appropriate
    - b) the preferred title for the work (see 6.2.2).
- Later agreed to extend this to all AAP instructions
  - Considered a powerful signal to non-Anglo American communities – offers flexibility
  - No change in North American practice expected
- Will be reviewed again as part of the 3R Project and the impact of implementing Nomen

#### OTHER EDITORIAL CHANGES

- · Working on replacing "and/or" with just "or"
  - language and/or script → language or script
  - identification and/or function → identification or function
- Replacing Table 3.1 (Media Type) and Table 6.1 (Carrier Type) with a list of terms
  - Needed consistent approach with vocabulary terms; definitions will reside in Glossary
  - Interim decision; end-user experience may change as result of 3R Project
- Note: The group reviewing all of these proposed changes is now "RSC+" – includes WG chairs

## RDA TOOLKIT RESTRUCTURE AND REDESIGN (3R) PROJECT

TO BE COMPLETED BY APRIL 2018

#### 3R Project - Why Now?

- Growing dissatisfaction with RDA Toolkit
  - Design is about 10 years old
  - Inflexible displays
  - Difficult to find information about changes made
  - Placeholder instructions instead of actual deletions
- Need structure in place to accommodate changes arising from IFLA LRM
- Growing number of translations
  - Need to find better ways to keep them current

#### 3R Project – What is it?

- Data restructure
  - Create entity-based structure
  - Identify patterns that can be generalized, along with redundant content to be deleted
  - Develop relationship designator matrix
- Website redesign
  - Improve work processes
  - Enhance user experience
    - Advisory group collecting user stories
- Improve translation tools and processes
  - Allow for easier exchange of RDA information
  - Expand international involvement and input

#### 3R Project –LRM Entities

- Add
  - Collective agent
  - Nomen
  - Place
  - Time-span
- Refine
  - Work
  - Expression
  - Manifestation
  - Person
  - etc.

#### 3R Project – Content Changes Beyond LRM

- Address long-standing problems
  - Completely remove guidance that says: "This instruction has been deleted as a revision to RDA."
  - Implement the 4-fold path throughout RDA: four ways to capture data
    - Unstructured description
    - Structured description (includes authorized access points)
    - Identifiers
    - URIs
  - Clarify the "transcribe" vs. "record" instructions
  - Further develop guidelines for recording pagination and foliation

# 3R Project – Content Changes Beyond LRM

- Rethink presentation of instructions, etc.
  - Generalize where possible
  - Restructure layout
    - Create general guidance chapters followed by entity-based chapters
- Develop a new approach to relationship designators
  - Provide multiple labels for encoding, identification, and display
  - Possibly incorporate new terms at the same time
- Complete vocabulary substitution projects (resource, agent, etc.)

# 3R Project – Content Changes Beyond LRM

- Implement solutions to problems identified through Jane-athons, online forums, and deferred JSC/RSC proposals
- Build a concordance of current instruction numbers which will map to their new locations
- The result will NOT be RDA 2.0
  - Rather, a new Expression of RDA

# 3R Project – Freezing RDA Content

- No changes to English RDA Toolkit text between April 2017 and April 2018
  - Need a stable text as the transformation takes place
    - Helps the various translations become current with the base text
  - No formal proposals considered in 2017
    - One last chance for fast track changes in April Update
    - Identified problems and possible solutions can be documented for submission in 2018
  - Some opportunities for community participation and feedback
    - Will turn to RSC working groups and other experts for help
    - Feedback loop will be initiated by RSC, rather than by RDA users

# 3R Project - Steps

- Scoping study of current text in progress by RSC Chair & RSC Secretaries
  - Identify patterns to improve flexibility for Toolkit displays
    - See where instructions can be generalized
  - Standardize ways to refer to specific elements/entities
  - Identify tasks for working groups in next phase
- 2) Open up participation to RSC+
  - Develop content, build new structure
  - Make tentative decisions
- 3) May RSC meeting
  - Review progress and set tasks
- 4) Fall RSC meeting
  - Make final decisions

# THE 4-FOLD PATH

# 4-FOLD PATH

- Options for recording relationships between entities
  - Unstructured description
    - A string, such as a free text note
  - Structured description
    - String values from other elements put in a particular order
      - Access point
  - Identifier
    - (Alpha-)numeric string designed for human consumption
      - Does not include the label/source: [ISBN] 978-0-8389-1328-4
  - URI
    - Identifies a specific instance of a thing; machine-actionable
    - Not an identifier for the thing

## 4-FOLD PATH: IMPLEMENTATION

- Will make available to every RDA element by default
  - Provide general guidance and instructions
    - Clarify when an element can only use a subset of the paths
      - Transcribed elements: unstructured; only applicable to manifestations
      - Identifier elements: only can have identifiers
- Different paths for different applications
  - More flexibility in instructions
  - URI only works with linked data
- Examples will expand to illustrate all paths
  - Will become obvious that examples aren't prescriptive

# Transcription vs. Recording

- Transcribed data only accommodated by unstructured description
  - Unmediated transcription
    - Captured by machine processes
    - Human transcription without further manipulation
  - Mediated transcription
    - Default for legacy data
    - Includes normalizing spaces, capitalizations
- All paths accommodate recording data

# IFLA LIBRARY REFERENCE MODEL

FORMERLY KNOWN AS FRBR LRM

## **STATUS**

- Worldwide review complete
  - Some changes made based on comments received
  - But no change to conceptualization of fictitious entities
- Final version
  - Three documents: LRM; Transition mapping overview; Explanations of recurring issues
  - Awaiting approval by IFLA Committee on Standards
    - No additional content changes anticipated
    - Approval expected sometime in 2017
  - Shared with RSC to support work on 3R Project
    - Anyone on CC:DA roster may have a copy upon request
- RDA will be an instantiation of LRM
  - Assume equal treatment of each entity

## MODELING ATTRIBUTES & RELATIONSHIPS

- Greater emphasis on relationships
  - Declared at the highest superclass possible
  - Recast Place of... and Date of... attributes as relationships
    - Refinements of the LRM Place and Time-span entities
  - Appellation relationship links a specific subclass of Nomen to any other entity
    - Title of work, Name of person, etc.
  - Subject of work is a relationship and thus replaces
    - FRAD's attribute subject of the work
    - FRBR's attribute coordinates (cartographic work)
  - Affiliation of the person modeled using membership relationship

## MODELING ATTRIBUTES & RELATIONSHIPS

- Only the most essential attributes declared in LRM
  - RDA can define and add additional attributes as needed
- An attribute defined for the superclass is automatically applied to the subclass
  - Anything declared for Agent also applies to Collective agent and Person
    - Contact information, Language, Field of activity

# LRM-E1: RES

- Super-entity of any entity (internal or external to LRM)
- Its attributes apply to all entities in the model
  - Category
    - Structured description [controlled term], identifier, or URI
  - Note
    - Structured or unstructured description
- RDA will refine Res by creating element sub-types and relationship designators
  - No need to model Res specifically in RDA it's inherent

# LRM E-10: PLACE

- Includes
  - Extraterrestrial places (planets, etc.)
  - Contemporary and historic places
- Distinct from any governing bodies that exercise jurisdiction over the area
- Excludes imaginary and fictional places
  - Recognition that such places are important to users but instances of Res, not Place
    - May be subject of works
    - Often have a Nomen
  - RDA will need to deal with these in a similar fashion to fictitious persons
    - Will be able to transcribe a fictitious place of publication as part of a manifestation statement

## LRM E-11: TIME-SPAN

- Has attributes for beginning and ending
  - But not mandatory
- Can be precise or general but can't be fictitious
  - 2017-01-21
  - 17<sup>th</sup> century
  - Bronze Age
- RDA will need to provide guidance about what "year", "month", etc. means
- Provides the linked data path for dates and events
  - Birth & death dates associated with a person
  - The range of dates associated with an event

# LRM E-9: Nomen

- An appellation used to refer to an entity
- Mandatory attribute: Nomen string
  - Any label of symbols and signs
  - Each string is the attribute of a separate Nomen
- 8 other Nomen attributes
- Distinction between the entity itself and the Nomen string
  - The name ≠ The thing
- Identical Nomen strings can refer to different entities
  - Corpus Christi [musical group]
  - Corpus Christi [Texas]
  - Corpus Christi [monastery]

# LRM E-9: Nomen

- A single entity can have multiple Nomen strings
  - Mark Twain
  - Samuel Longhorn Clemens
  - Quintus Curtius Snodgrass
  - Louis de Conte
  - 0000 0001 2132 4854 [ISNI]
- May consist of components or parts, which can be governed by rules
  - Name/title AAPs for works
  - Personal name AAPs with dates
  - Subdivisions in a subject heading

# LRM E-9: NOMEN

- Provides the linked data path for access points, identifiers, etc.
  - RDA will continue to provide instructions for creating AAPs (Nomen strings)
- Enables identification of
  - Preferred names (and when this form was preferred)
  - Agency that created the Nomen string
  - What standard determined the format of the string (RDA, ISBD, etc.)

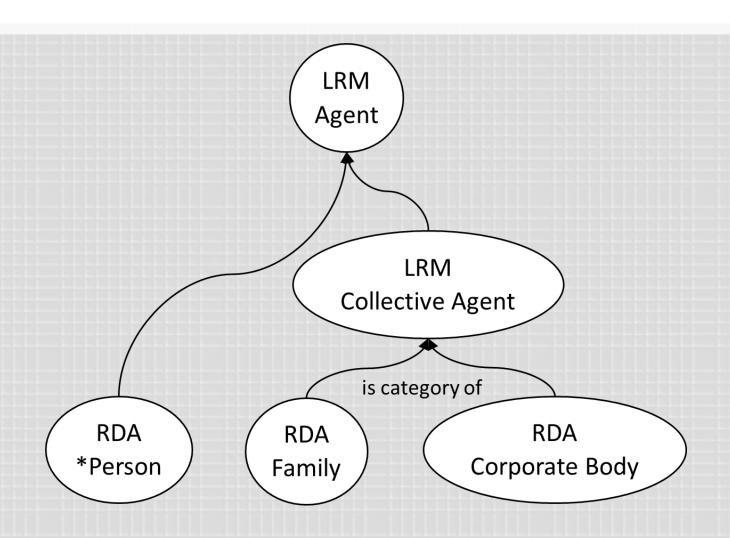
## LRM-E8: COLLECTIVE AGENT

- Must have a name and be capable of acting like a unit
  - Cannot just be a group of people, like Railfans, Southerners, Expats
  - Includes conferences, expeditions, exhibitions, etc.
  - Includes joint or collective pseudonyms
    - Even if the pseudonym looks like a personal name
- No declared attributes
  - Use attributes for Agent
- RDA can still retain Family and Corporate Body as sub-classes

# LRM-E7: Person

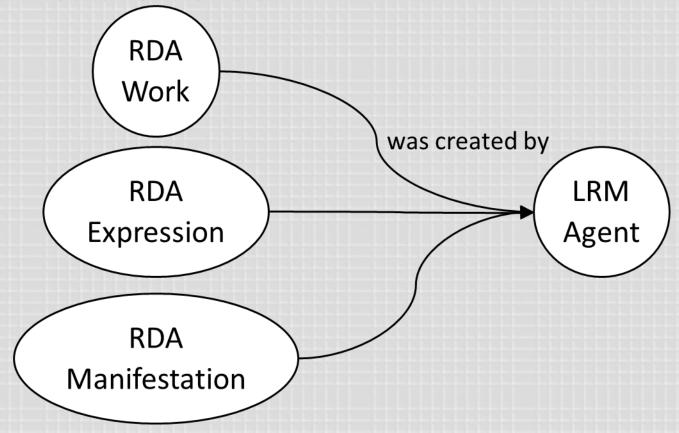
- Restricted to real persons who have lived or are assumed to have lived
  - Excludes fictional characters, personas, spirits
- Fictitious entities are not instances of this entity, but are instances of Res
  - Model recognizes the need to distinguish between
    - Fictional character used as subject
    - Each use of a "known" fictional character as a pseudonym
  - In RDA, plan is to relate the Nomen directly to the WEMI entity that it is associated with
- Gender attribute not declared in LRM
  - Not seen as essential for most applications

# AGENT SUPERCLASS



# **AGENTS & CREATION**

 Creative responsibilities at Work, Expression & Manifestation levels



# LRM-E2: WORK

- Representative expression attribute New
  - Any attribute deemed essential in characterizing the Work
    - Language
    - Cartographic scale
  - Values taken from a representative or canonical Expression of the Work
    - Notionally "transferred" to the Work
  - Do not have to identify the particular expression which served as the source for the values
  - One of only two attributes declared for Work
    - The other is Category
      - Includes Form of work, Intended termination

# LRM-E3: EXPRESSION

- Some attributes moved from Work to Expression
  - Medium of performance
  - Key
  - Intended audience [also a Manifestation attribute]
- Boundaries still flexible
  - Minor changes (corrections, etc.) may be considered as variations within the same expression – or not
    - Depends on nature of the Work and anticipated needs of users
- Category attribute includes
  - FRBR's Form of expression, Extensibility of expression, Revisability of expression

# LRM-E4: MANIFESTATION

- Manifestation statement attribute New
  - A statement normally transcribed from a manifestation
  - Replaces many of the FRBR attributes for manifestations
  - Transcribed; helps users understand how the resource represents itself
    - Statement of responsibility
  - Can be aggregated from other elements
    - Publication statement
- Category of carrier incorporates the FRBR
  - Form of carrier, Physical medium, Capture mode
- Extent now includes dimensions

# LRM-E4: MANIFESTATION

- Joining multiple Items from different Manifestations (a bound with) results in a new Manifestation
- Downloaded files are instances of the same Manifestation as the "source" online file

## **AGGREGATES**

- With LRM finalized, RDA can incorporate specific guidelines for aggregates
- But there are questions to resolve:
  - What is a work?
    - A title page??
  - What is a collaborative work vs. an aggregate work?
    - Where do motion pictures fit?
  - How do aggregate works differ from whole/part works?
    - How can we define the difference?
  - How can RDA accommodate different communities' approaches to describing the same resource?
    - Cataloging for rare/special collections vs. general collections

# RDA CHANGES - SUMMARY

# RECENT & UPCOMING RDA CHANGES

#### Driven by...

- International adoption of RDA
  - Better support for translations
  - More flexibility in instructions
- Linked data
  - Relying on OMR as source of RDA data
- IFLA LRM
  - Accommodating new and revised entities
- Implementation of the 4-fold path
- Making the Toolkit more user-friendly
- Refocusing order of instructions
  - Generalizing where possible

# QUESTIONS??