Preparing for the new RDA Toolkit: special topics

Gordon Dunsire, Deborah Fritz, Damian Iseminger Presented at the RSC outreach seminar National Library of Spain, Madrid, 23 Oct 2017 (amended)



Overview

- Topic 1: Serials, aggregates, and changes over time
- Topic 2: Types of description
- Topic 3: Developing attributes as relationships

Slides 18 and 19 have been amended following discussion on meta-works vs work clusters by the RDA Steering Committee. Other slides have minor amendments.



1.1: Changes over time

- Static and diachronic works
- ROF extension attributes
- Extension expectation vocabulary





A **static work** is realized and embodied at the same time*.

A **diachronic work** is realized and embodied in a duration of time**.

* The content is issued in a single act

** The content is issued in a sequence of single acts that effectively change the content

***Time? Time-span entity?





The essence of a diachronic work is the plan for the change of content:

- Replacement? = Integration
- Accumulation? = Succession

The future may not conform with the plan ...

The last episode of a TV serial is not made 😣

... so we cannot describe a diachronic work (or expression or manifestation) until it is complete

But we can describe the plan, and the distinct "issue" WEMs 😳



ROF Extension attributes

RDA/ONIX Framework for Resource Categorization

Extension requirement:

- Not applicable
- Essential
- Inessential

Static work

"Monographic" work

Continuing work

Qualified by *Extension mode* (integration, succession) and *Extension termination* (determinate, indeterminate) to form "Extension expectation" categories



"Extension expectation" terms

Static work	A work intended to be realized in one or more distinct expressions that are embodied simultaneously.
Integrating monographic work	A work intended to be realized in one distinct expression embodied during a fixed time-span.
Sequential monographic work	A work intended to be realized in multiple distinct expressions embodied during a fixed time-span.
Integrating continuing work	A work intended to be realized in one distinct expression embodied during a time-span with no ending.
Serial work	A work intended to be realized in multiple distinct expressions embodied during a time-span with no ending.





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1.2: Serial works

- Serial works and LRM relationships
- Change in work plan; WEM lock
- Boundary of serial work; ISSN and ISSN-L (clarified)





Serial work

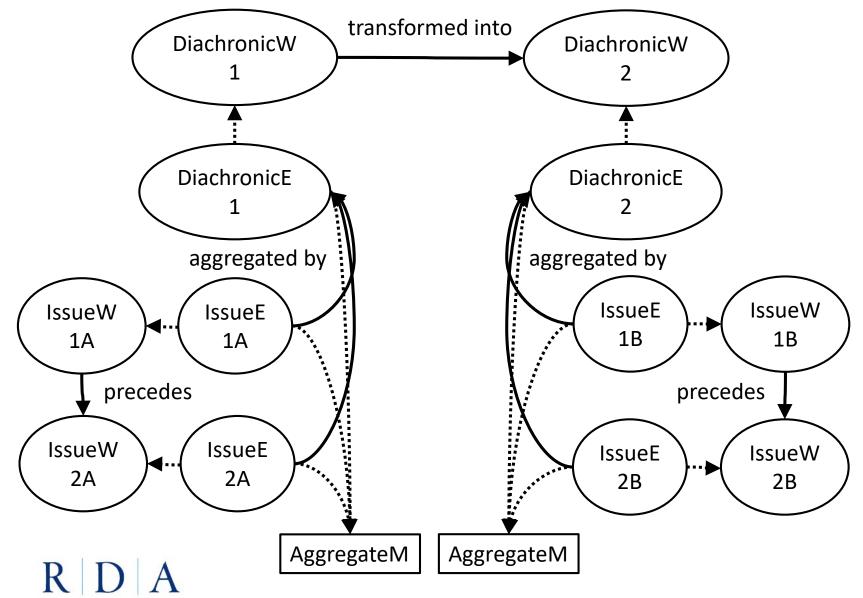
A work intended to be realized in multiple distinct expressions embodied during a time-span with no ending.

Work-Work relationships

- LRM-R19 precedes [logical, not chronological]
- LRM-R22 was transformed into [by policy, etc.] Expression-Expression relationship:
- LRM-R25 was aggregated by







Resource Description & Access

Changes in Serial work plans

LRM: The plan of a serial work includes the editorial concepts that guide the production of the issues that comprise an aggregate manifestation.

Any changes to the plan may result in a new serial work.

The national edition of *El País* is a different serial work than the Valencia edition of *El País*. The plan for the content has changed, resulting in a new serial work.





WEM lock (1)

Because a serial work is also a plan for how a serial will be expressed and manifested, it may only have one expression and one manifestation.

Just because something is true now, does not necessarily mean that it will be true in the future.





WEM lock (2)

Translated editions should be treated as different expressions of different serial works.

It is impossible to predict that a single serial work will always be published in both Spanish and Valencian. At some point, publication may cease for one of the language editions, but not the other.





WEM lock (3)

Similarly, a serial released in an online version and a print version should be considered instances of 2 different serial works

It is impossible to predict that a single serial work will always be published in both a print and online version.

It is also impossible to predict that the online and print versions will always share the same content.





Boundary of serial works

A new serial work is generated when the plan for an already existing serial work changes.

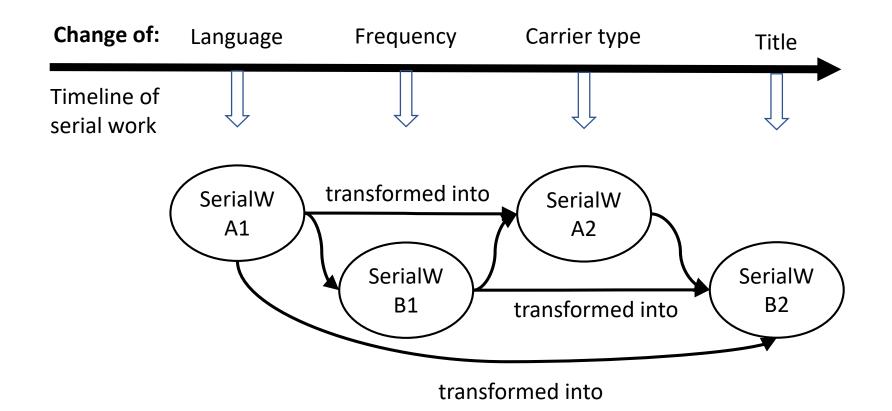
RDA will provide instructions for recording changes to elements associated with the plan for a serial work.

But RDA can provide only general guidance on determining when a change of plan results in a new work.





Significance





Judging boundaries

It will be up to local policy and cataloguer's judgment to:

- Select the elements for describing the plan
- Select the elements for recording changes in their value
- Select the elements and values that justify the description of a new work
- Select the issue or iteration that provides the values used in a serial work

This will prevent unnecessary proliferation of serial works.





ISSN and **ISSN-L**

Because of the WEM lock, an ISSN should be understood as an identifier for a serial work, as opposed to an identifier for a manifestation.

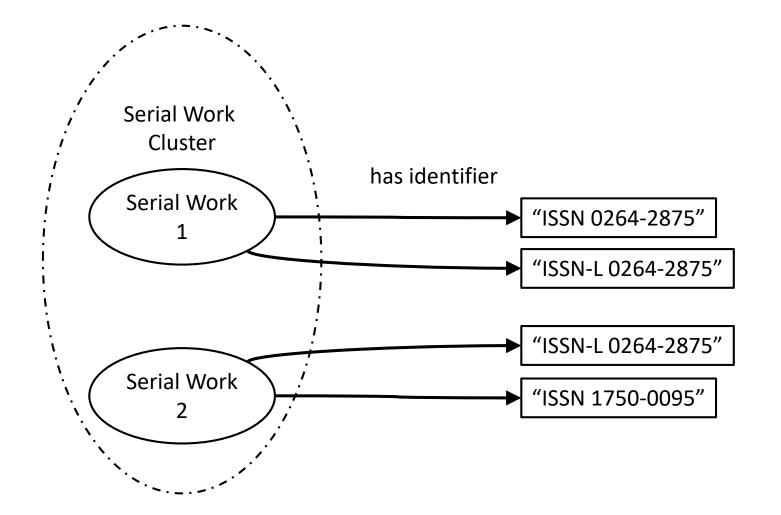
An ISSN-L should be understood as an identifier for a group of closely related serial works, i.e. a "work cluster". In this case it, is the same "work" in different "mediums."

In RDA, the relationship between the ISSN-L work cluster and the ISSN serial work can be indicated by recording the ISSN-L for each serial work.





Serial work cluster





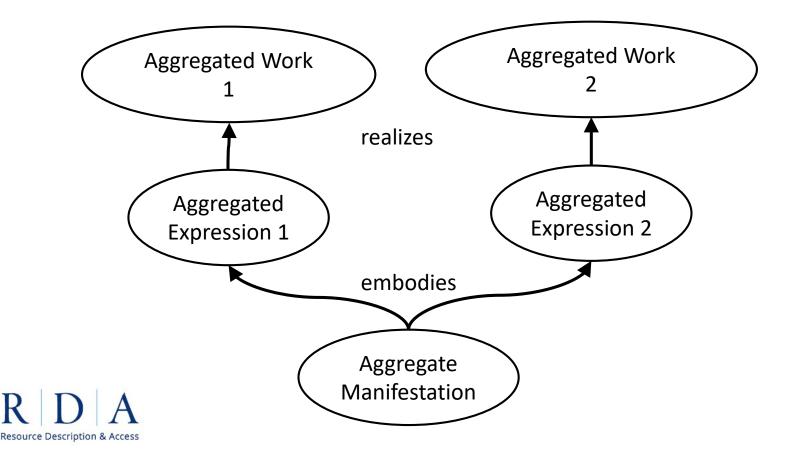
1.3: Aggregates

- Types of aggregate
- Whole/part; Combination works
- Short-cuts through aggregating expressions



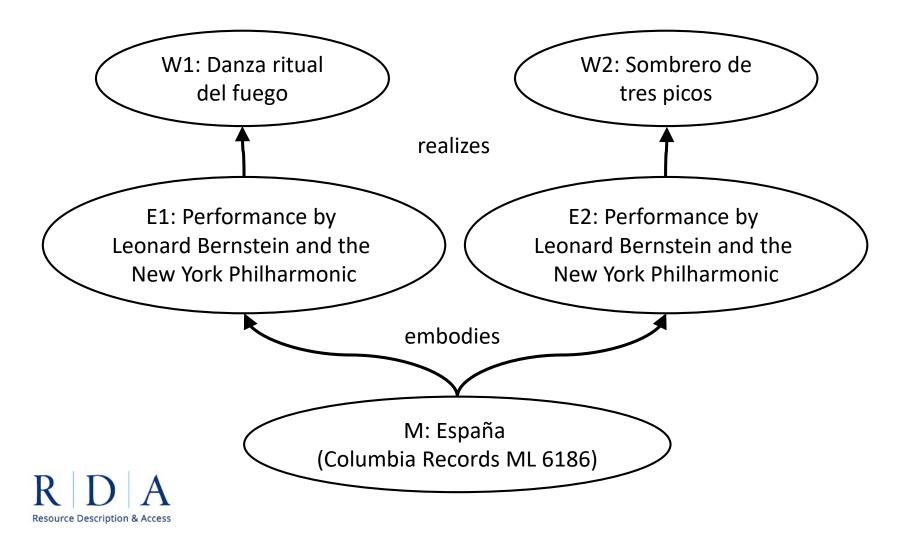
Types of aggregates

An **aggregate** is a manifestation embodying multiple distinct expressions



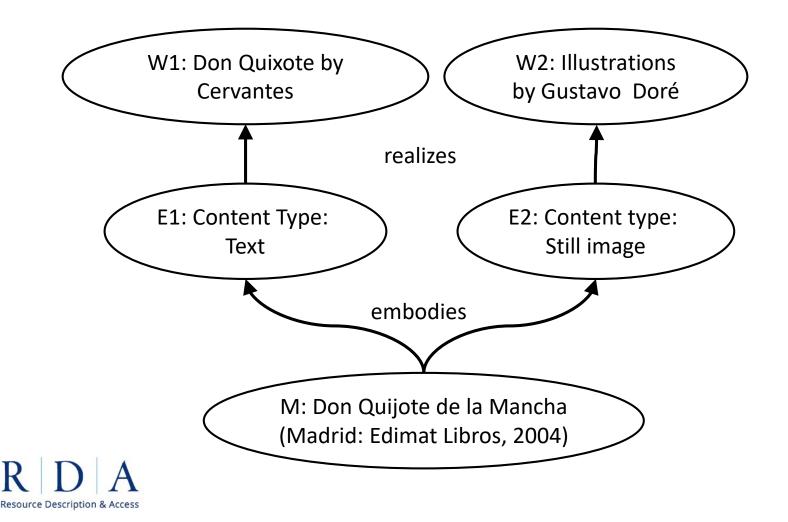
Types of aggregates: 1

Aggregate collections of expressions



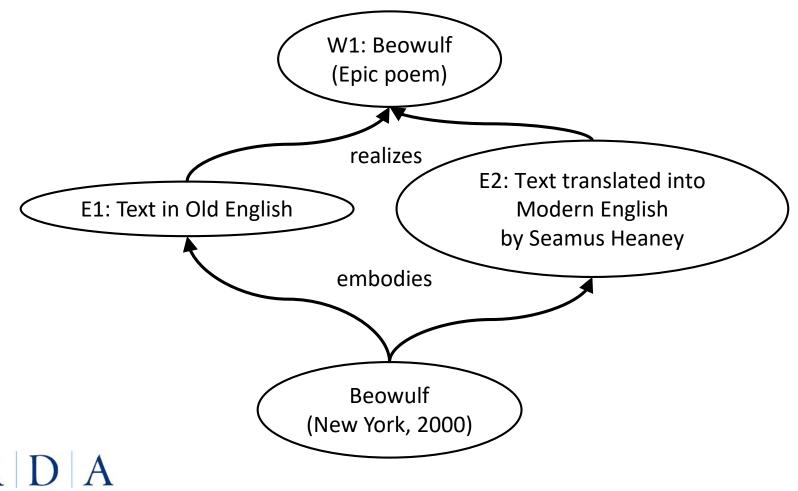
Types of aggregates: 2

Aggregates resulting from augmentation



Types of aggregates: 3

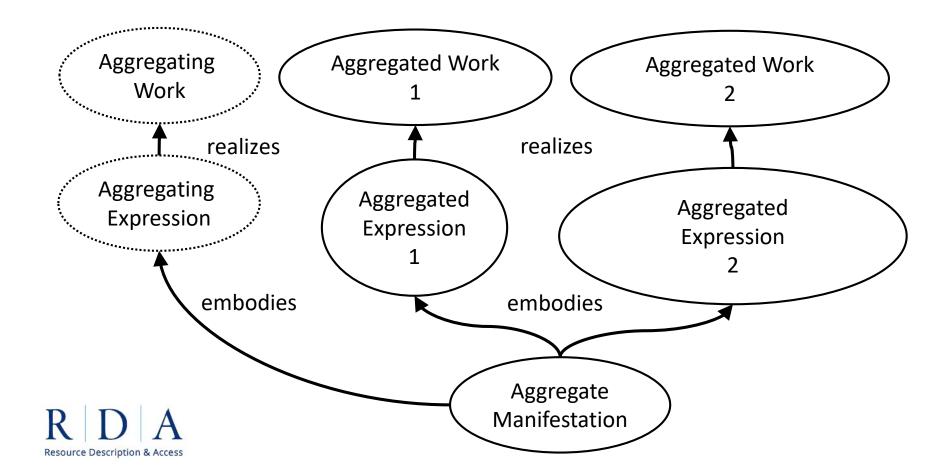
Aggregates of parallel expressions



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Plans for aggregates (1)

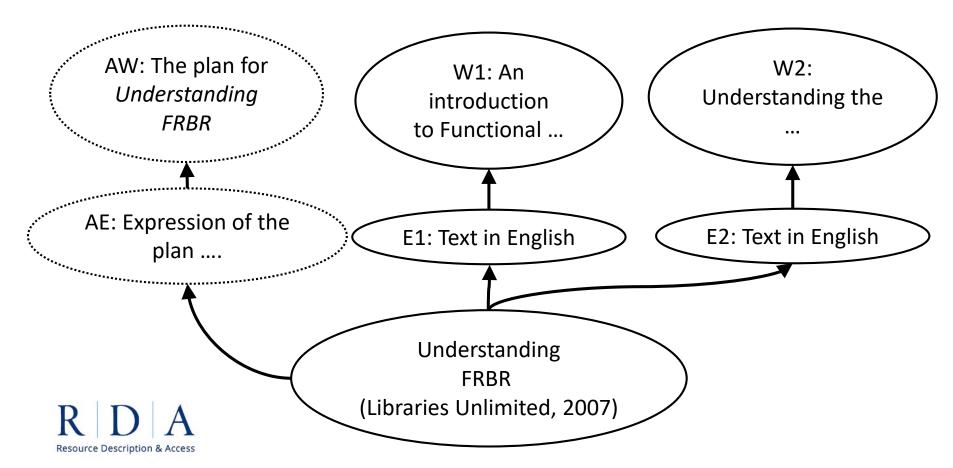
Aggregate manifestations also embody an **aggregating expression** which realizes an **aggregating work**





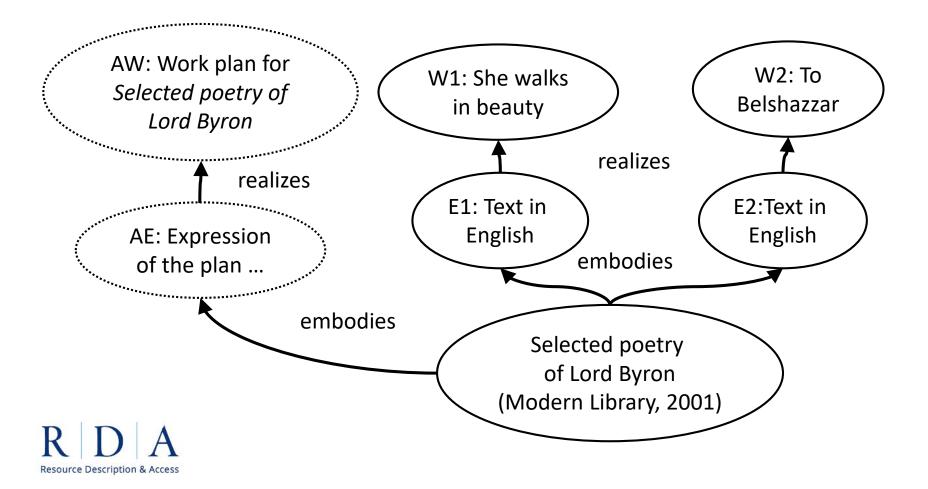
Plans for aggregates (2)

The **aggregating work** is the plan, realized in the **aggregating expression**, for the selection and arrangement of the **distinct expressions** in the **aggregate manifestation**.



Plans for aggregates (3)

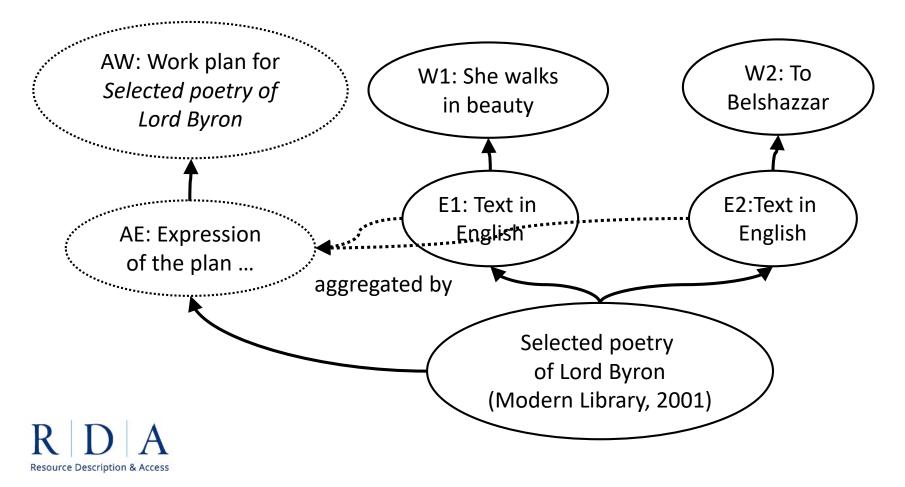
The aggregating work **does not** contain the distinct works. There is no whole-part relationship...



Plans for aggregates (4)

What happens if the plan changes?

But there is a relationship, LRM-R25, between the aggregating expression and the expressions it selects

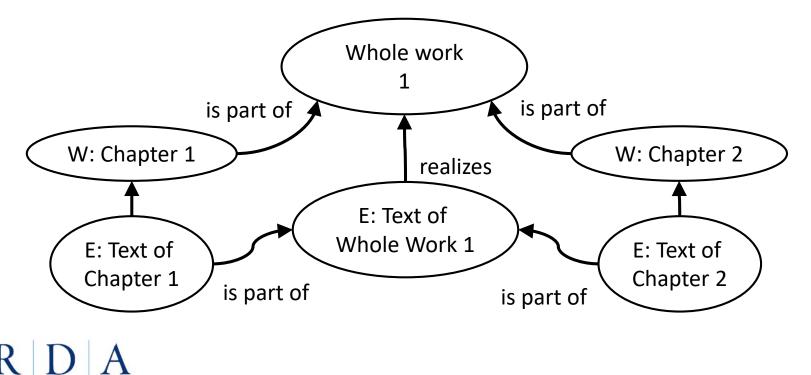


Whole/part works and expressions

Whole/part works are distinct from aggregating works. The parts are always intended to belong to the whole.

Each part of a whole/part work is realized by a corresponding **part expression**.

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Combination works

Works that are conceived as whole, with contributions by one or more agents intended to be integral to the whole. They are neither whole-part nor aggregating works.

Examples of combination works include:

- Silent films (moving image + text)
- Films with soundtracks (moving image + ...)
- Songs (music + text)
- Graphic novels (still image + text)



Types of combination work

Amalgamated content: Content of a single type that is associated with two or more different creator roles. The content cannot be separated from the combination work to derive a new work. Example: acting and lighting design in a motion picture

Composite content: Content of two or more types that is associated with one or more creator roles. The content can be separated from the combination work to derive a new work. Example: music and libretto in an opera

Performed expressions?



2.1: Description in context

- Description as (RDF) statements
- Semantic web applications
 - Open World Assumption
- Attributes and relationships
 - 4-fold path; distinct "records"





Resource Description Framework

- RDF (Resource Description Framework): the format of the Semantic Web
- Data are recorded as triples: each triple is a single statement in *subject-predicate-object* order
- A description ("record") is one or more triples with the same *subject*:
- This Work [has] title of work "My title"
- This Work [has] creator That Agent





Open world description

Semantic Web **Open World Assumption**:

No data does not imply "not applicable".

All description is open-ended; there is always something more that can be said about a *subject* entity.

Work1[has] title of work"My title"[has] creatorAgent2[has] expression of workExpression3[Etc ...][is] remade as (work)Work4[Etc ... ⇒ the future]





Related descriptions

A related entity (triple *object*) can be recorded as a "string" label or as an IRI. An object IRI can be the *subject* of another triple statement; a related entity may have its own description.

Work1 [has] creatorAgent2[Etc ...]

Agent2 [has] name of agent"Jane Doe"[Etc ...][is] creator ofWork1





Recording descriptions

A description can contain statements that mix "string" values with entity (or concept) IRIs. The same *predicate* element is used in statements with different kinds of *object* values.

Work1 [has] creator [has] creator [has] creator [has] creator Agent2 "Jane Doe" "Doe, Jane, 1999-" "DoeJ99"

Agent2 [has] name of agent [is] creator of "Jane Doe" Work1



2.2: Relating WEM

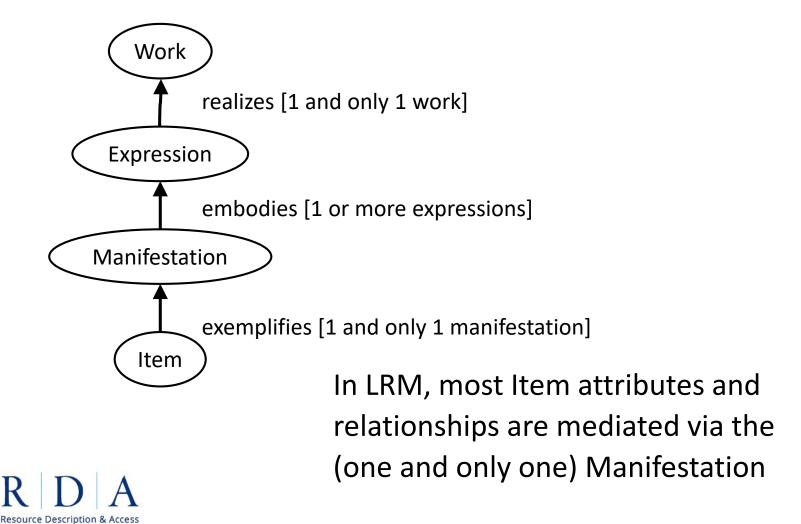
- Primary WEMI stack (locks)
 - Item mediated thru Manifestation
- "Component" relationship types
 - Whole-part
 - Aggregates
 - "Complementary" combination components
- Mode of issuance of manifestation
 - Single and multi-unit





Primary WEMI relationships

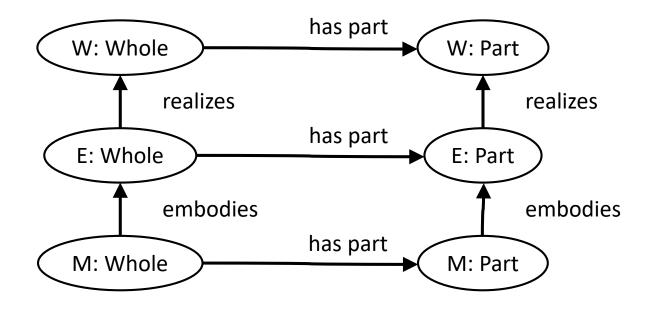
WEMI "stack" (primary FRBR relationships)





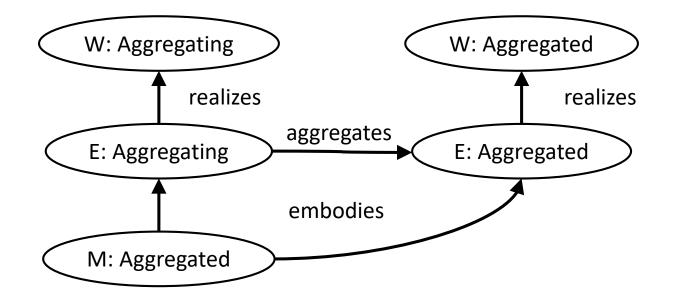
Whole-part WEM relationships

Whole "stack" has part "stacks"





Aggregate WEM relationships



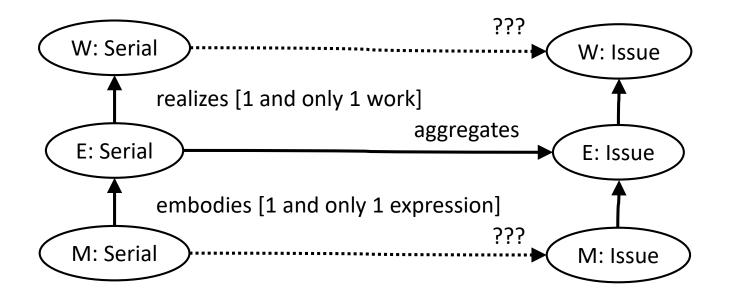


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Serial WEM relationships

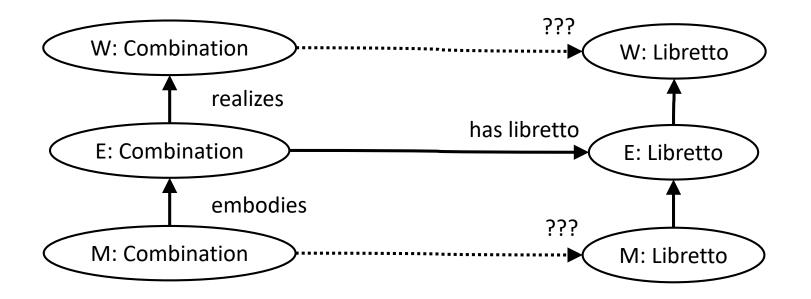
Manifestation embodies one and only one expression





Combination WEM relationships

Component WEM is only described if it is separately embodied





Mode of issuance of a manifestation

A manifestation can be issued as either:

- a single unit, consisting of a single physical or logical unit.
- a multiple unit, consisting of two or more physical or logical units.

A single unit can be a component of a multiple unit manifestation

Manif1 [has] part [has] part [has] part Manif2 [is] part of [is] part of

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Manif2 "Name of {Manif2}" "Includes 20 discs" Manif1 "A 20 disc set"



2.3: Issues

- Focus of description now entity-based
- "Analytical description" is a set of statements describing a component of a larger entity, and one of those statements might have an IRI or a string label for the larger entity as its object
- "Comprehensive description" is a set of statements describing a larger entity, and one of those statements might have an IRI or a string label for the component entity as its object
- Relationship with "coreness"



3.1: Attribute/relationship duality

- LRM
- RDA 4-fold path
- High-level relationship matrix





Attribute vs Relationship

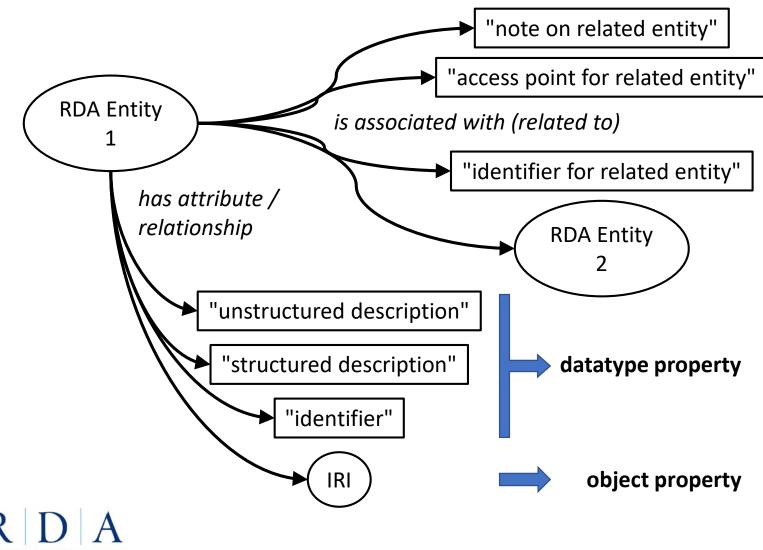
Distinction is blurred in LRM LRM optimized for Semantic Web applications Distinction determined by data

Web Ontology Language (OWL):
Data value is a string (literal)
⇒ OWL datatype ⇒ attribute element
Data value is a thing (IRI): entity or concept/term
⇒ OWL object ⇒ relationship element

⇒ RDA Recording methods (4-fold path)



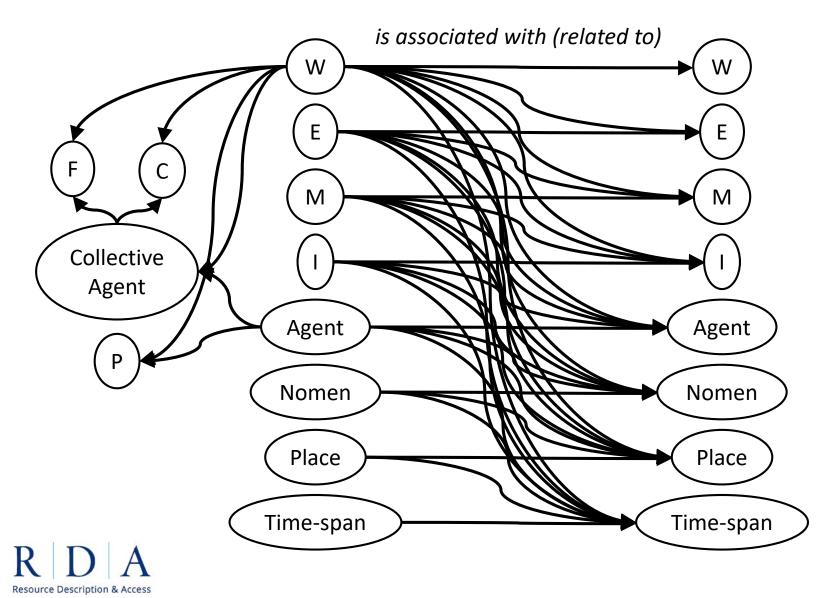
Recording methods for related data



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High-level relationship matrix

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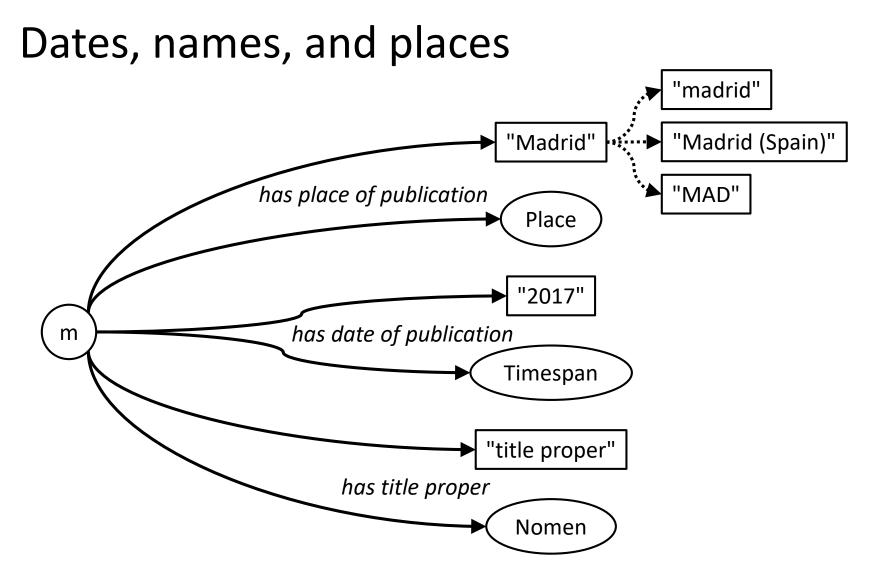


3.2: Impact on RDA elements

- New LRM entities
- Cross-over attribute elements
- Hierarchies and inverses



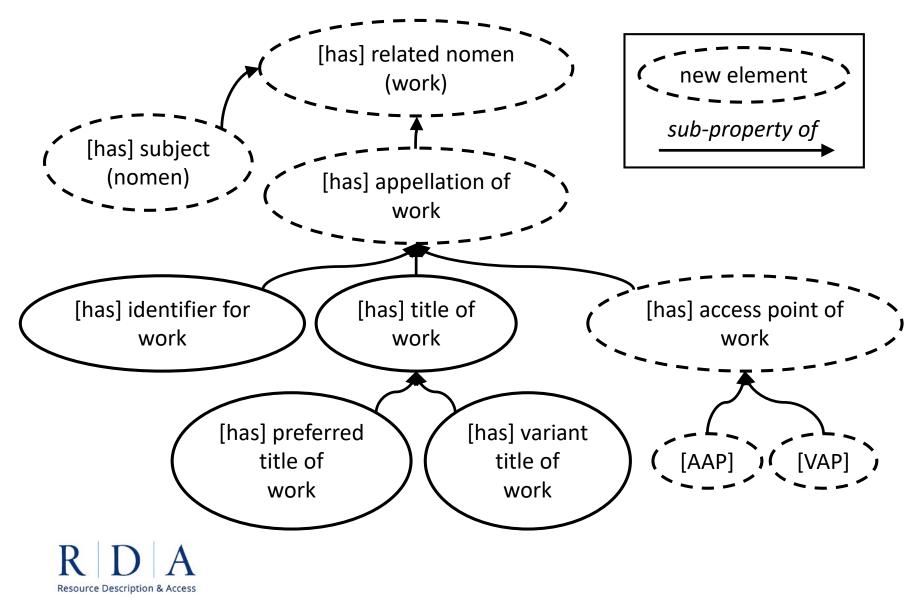








Work to Nomen relationship hierarchy



Place relationship hierarchy

High-level relationship matrix

Inverse of current attribute ⇒ relationship element



- related entity (place)
 - \circ related agent (place)
 - related collective agent (place)
 - related corporate body (place)
 - place associated with corporate body of
 - <u>Location of conference, etc. of</u>
 - <u>Ø Other place associated with corporate body of</u>
 - related family (place)
 - place associated with family of
 - related person (place)

 - <u>ØPlace of birth of</u>
 - <u>ØPlace of death of</u>
 - <u>
 <u>
 Place of residence, etc. of</u>

 </u>

Taken from CMS "chunk"

3.3: Impact on RDA Toolkit

- Relationships as context and navigation
- Related entities and 4-fold path
- Micro and macro views of relationship elements/designators



Hierarchy in context

Taken from CMS "chunk"

Appellation of place

Recording

□→[`)

For sub-types of this element, see:

- <u>Place: Access point of place</u>
- <u>Place: Identifier for place</u>
- <u>Place: Name of place</u>

ERecording an unstructured description

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For instructions on recording an unstructured description, see

 Place: Name of place

Context of Recording methods

Hierarchy

navigation

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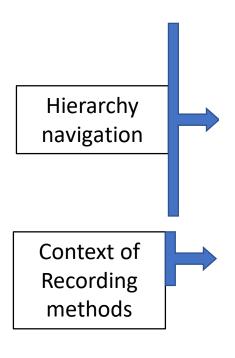
Hierarchy in context

Name of place

For sub-types of this element, see:

■ Recording

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Place: Preferred name of place *Place:* Variant name of place

For super-types of this element, see: *Place:* Appellation of place

This element is used for *Place:* Recording an unstructured description.
Recording an unstructured description

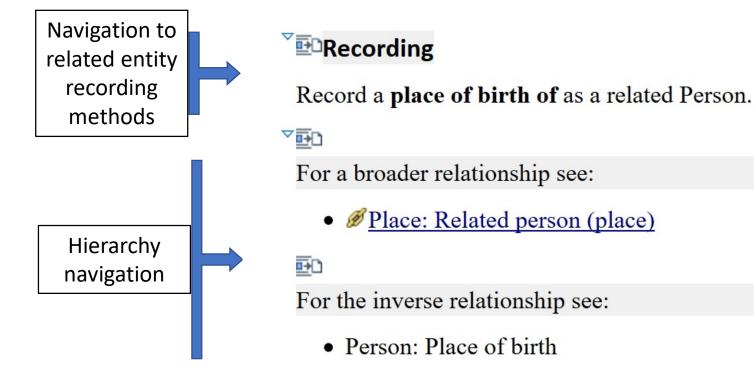
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If the source of information is a manifestation being described

Hierarchy in relationship

Taken from CMS "chunk"

Place of birth of



Resource Description & Access

Recording an entity

Taken from CMS "chunk"

Person entity

Definition and Scope

Data OmrURI rdaregistry.info-Eleme

[™] Recording

Recording an unstructured description

<u>-</u>

For instructions on recording an unstructured description, see

Person: Name of person

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For general guidance and instructions on recording an unstructured description, see

• <u>Recording RDA Data Values: Recording an unstructured description</u>

ERecording a structured description





Many more "designators"

High-level relationship matrix (12 x 12 entities)



Cross-over attribute/relationship elements



New relationship elements (appellation hierarchy; aggregate/serial works; etc.



New relationship elements for consistent and complete hierarchies





The exploding designator appendix

Current Toolkit approach assumes primary (WEMI) and secondary (PFC) entities, and cannot scale

Toolkit data workflow allows flexible outputs:

Designators in context of element

Designators in context of entity

All designators in one giant "appendix"



Thank you!

• Discussion!

