

Entity Boundaries: Fixed or Fluid?

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- What an entity boundary is
- The development and introduction of entity boundaries into the RDA Toolkit
- Types of entity boundaries
- A closer look at specific entity boundaries:
 - Work
 - Expression
 - Manifestation
 - Item

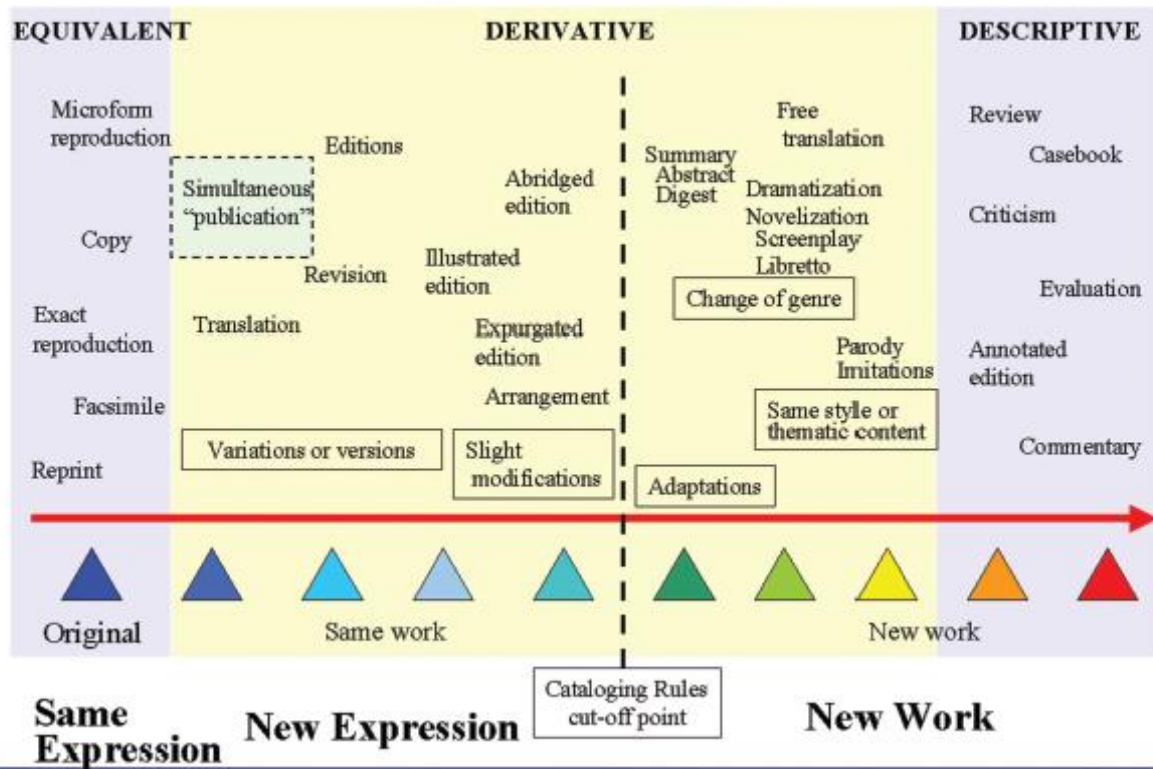
RDA definition of an entity boundary

An RDA entity boundary is the set of criteria that is applied by an agent who creates metadata to determine if a description of a new RDA entity is required.

Have you ever...?

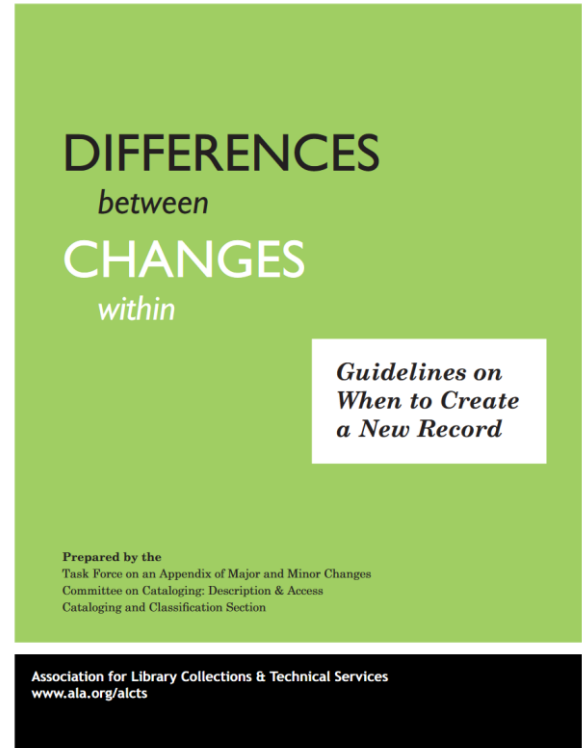
- Narrowed your search for a matching bibliographic record by specifying publisher or publication date?
- Narrowed your search for a matching bibliographic record by specifying a language of content?
- Looked at the works cited in a name authority record to see if the subject content is similar to that of the manifestation you have in hand?

FAMILY OF WORKS



Relationships in the Organization of Knowledge, edited by Carol A. Bean and Rebecca Green, 2001, p. 23, "Bibliographic Relationships" by Barbara B. Tillett, Figure 2, © 2001 Kluwer Academic Publishers Boston, with kind permission of Kluwer Academic Publishers.

- ★ [Differences Between, Changes Within: Guidelines on When to Create a New Record \(ALCTS, 2007\)\(PDF\)](#)



OCLC implementations

- ★ [OCLC Bibliographic Formats and Standards Chapter 4, When to Input a New Record](#)
- ★ OCLC Deduplication Algorithm (DDR)
- ★ [OCLC Member Merge field-by-field comparisons for different Bibliographic Formats](#)

Guidelines for rare books

[DCRM\(B\): Descriptive Cataloging of Rare Materials \(Books\)](#)
[\(Cataloging Distribution Service, Library of Congress, 2011\) \(PDF\)](#)

Appendix E. Variations requiring a new record


- Basic guidelines
- Alternative guidelines that an institution may implement dependent on a variety of factors including:
 - The comprehensiveness of the collection
 - Staffing levels
 - And more


OpenRefine reconciliation

35 rows Schema Issues 10 Preview

The Wikidata schema below specifies how your tabular data will be transformed into Wikidata edits. You can drag and drop the column names below in most input boxes: for each r

_ - rows - _ - RecordNumber 001 original 100 100 2 1 Last name Forename only First name Direct order name 100 2 1 3 100 2 1 4 100 2 2 date of birth date of death



Direct order name 

 remove

Terms
no labels, descriptions or aliases added

[+ add term](#)

Statements



date of birth  date of bi... 

[+ add qualifier](#)

[▶ 0 references](#)

[+ add reference](#)

[+ add value](#)

date of death  date of de... 

[+ add qualifier](#)

[▶ 0 references](#)

[+ add reference](#)

[+ add value](#)

Boundaries in the IFLA LRM

- In the IFLA LRM, boundaries between instances of entities are explicitly referenced in the scope notes of some entities:
 - Work
 - Expression
 - Manifestation
 - Place

Boundaries in the IFLA LRM, cont.

- Other boundaries are implicit for some entities:
 - Nomen
 - One and only one nomen string associated with an instance of Res
 - Work and Expression
 - Representative expression attributes that users compare other expressions against
 - Modelling of Aggregating Works and Aggregating Expressions--the W-E lock
 - Modelling of serials--the W-E-M lock

Boundaries in the initial beta Toolkit release

- The Guidance chapter on Diachronic works introduced the concept of transformation boundary:
 - “A transformation boundary is a stage at which a work is treated as a new work that is separate from the existing work”
- Indications of a work transformation differed for static and diachronic works:
 - Static works:
 - subject focus of the content
 - content type
 - Diachronic works
 - scope or editorial policy
 - genre or literary form
 - target audience
 - style

Further development...

- [Work boundaries](#)
 - Discussion paper prepared by Gordon Dunsire for the October, 2019 RSC meeting; the RSC agreed that additional guidance on work boundaries was desirable ([Minutes of the October 2019 RSC Meeting, agenda item 181](#))
- [RDA entity boundaries](#)
 - Proposal prepared by Gordon Dunsire for the July, 2020 RSC meeting based on the broader conceptualization of entity boundaries that emerged out of ongoing RSC discussions; the RSC approved a new guidance chapter for entity boundaries and instructions on entity boundaries for each of the RDA entities ([Minutes of the July 2020 RSC Asynchronous Meeting, agenda item 230](#)); implemented in the September, 2020 release)

RDA definition of an entity boundary

An RDA entity boundary is the set of criteria that is applied by an agent who creates metadata to determine if a description of a new RDA entity is required.

Types of entity boundaries

- “The set of criteria is specific to an entity. Some criteria are required for conformance with well-formed RDA metadata and are determined by the semantic integrity of the type of entity. Some criteria are specified within an application and are determined according to “bibliographic and cultural conventions ([IFLA library reference model](#)).”” --[Guidance: Entity boundaries](#)
- These concepts are expressed in [RDA Entity](#) as two types, absolute and relative:
 - “The absolute boundary of the entity is determined by characteristics of the entity that reflect the physical world.”
 - “The relative boundary of the entity is determined by bibliographic and cultural conventions.”

Absolute boundaries

- “Absolute boundaries are determined by characteristics of the entity that reflect the physical world.”
- These are the element values that must be the same in all descriptions of the entity (if recorded) because they convey these physical characteristics, for example:
 - Person: date of birth
 - Timespan: beginning

RDA entities with absolute boundaries

RDA entities that reflect the physical world:

- Item*
- Manifestation*
- [Nomen]
- Person*
- Place
- Timespan

* These entities may use additional elements to identify instances when the absolute boundaries are not known

Relative boundaries

- Are determined by bibliographic and cultural conventions
- May be fluid across implementations, but are generally fixed within a specific implementation context
- For any given instance of an entity, there are some element values where a difference may or may not require a new entity description within a given implementation, for example, Manifestation: date of manufacture

Work boundaries

- Work is an abstract concept, and as such, has no absolute boundaries
- Element values for expressions that vary from a preferred representative expression may specify that an expression realizes a new work

Work boundaries, pt. 2

- A new work may be indicated where there is a significant differences in the value(s) of specified elements:
 - Work: subject or an element subtype
 - Work: related agent of work or an element subtype
 - elements of an expression whose content differs from another realization of a work as the result of a change in
 - genre or literary form
 - editorial policy
 - style
 - Work: extension plan
 - Expression: aggregates for the aggregating expression

Work boundaries, pt. 3

For diachronic works:

- There is a significant difference in a value of one or more of the elements:
 - Work: frequency
 - Work: ISSN
- There is a significant difference in a value of Manifestation: carrier type for the manifestation that embodies the work
- There is a significant difference in a value of one or more characteristics of the plan for embodiment of the work over time

Work boundaries, pt. 4

For diachronic works:

- A value of Work: preferred title of work is in a language and script that divides text into words.

There is a difference in a value of Work: preferred title of work that is a change in the first five words following an initial article, if any

- There is a significant difference in a value of Work: preferred title of work that is a change in meaning or an indication of a different subject
- There is a significant difference in a value of Work: preferred title of work that is a change in a value of Corporate Body: name of corporate body

Work boundaries, pt. 5

Hamlet

- Shakespeare's play as in the First Folio
- Kenneth Branagh's film - 4 hour version
- Kenneth Branagh's film - 2 hour version
- Shakespeare's Hamlet - staged on the page by Nicki Greenberg

Expression boundaries

- Expression is an abstract concept, and as such, has no absolute boundaries
- There is a significant difference in a value(s) of:
 - elements of an expression from the values of a representative expression
 - Expression: creator agent of expression or an element subtype
 - Expression: date of expression
 - Expression: aggregates for the aggregating expression

Expression boundaries, pt. 2

There is a significant difference in a value of one or more of the elements:

- Expression: aspect ratio
- Expression: aspect ratio designation
- Expression: capture information or an element subtype
- Expression: colour
- Expression: content type
- Expression: designation of version
- Expression: duration
- Expression: extent of expression
- Expression: form of notation or an element subtype
- Expression: intended audience of expression
- Expression: interactivity mode
- Expression: key of expression
- Expression: language of expression
- Expression: prime meridian
- Expression: relief type
- Expression: scale
- Expression: script

Expression boundaries, pt. 3

- **Beowulf**
 - Original in Old English – verse
 - Translated in modern English by J.R.R. Tolkien 1924 edited Christopher Tolkien and published 2014 - text in prose
 - Translated into modern English by Seamus Heaney published 1999 - text in verse
- **Il gattopardo / Giuseppe Tomasi di Lampedusa**
 - Representative expression 1969, although first published 1958

Manifestation boundaries

- Absolute boundaries:
 - “The absolute boundary of the entity is determined by characteristics of the entity that reflect the physical world.”
 - A new instance of the entity must be recorded when an unaltered item has values of characteristics that differ from those of a manifestation

Manifestation boundaries, pt. 2

- Relative boundaries
 - A manifestation has values of relationship, identifying, or carrier characteristics that differ from another manifestation
 - There is a significant difference in a value of Manifestation: type of binding
 - A significant difference in a value of one or more other elements may indicate a boundary of the entity.

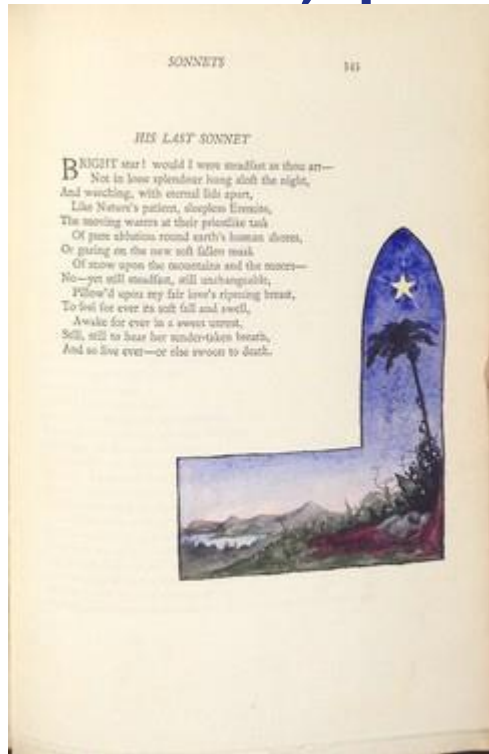
Item boundaries

- Absolute boundaries:
 - “The absolute boundary of the entity is determined by characteristics of the entity that reflect the physical world.”
 - “A new instance description is required when there is a significant difference in a value of one or more of the elements:
 - Item: modification of item
 - Item: accompanied by item or an element subtype”

Item boundaries, pt. 2

- Relative boundaries:
 - “An item has values of relationship, identifying, or other characteristics that reflect the physical world that differ from another item that exemplifies the same manifestation.”
 - “There is a significant difference in a value of one or more of the elements:
 - Item: authorized access point for item within a specific vocabulary encoding scheme
 - Item: identifier for item within a specific vocabulary encoding scheme”

Item, pt. 3



- A copy of The poetical works of John Keats, extra-illustrated with watercolors by Charlotte Perkins Gilman
- Two DVDs with different barcodes
- A bound item

Watercolor by Charlotte Perkins Gilman in the copy of the Poetical works of John Keats (London : Kegan Paul, Trench & Co., 1884) she gave to her first husband, Charles Walter Stetson for Christmas, 1884. <http://id.lib.harvard.edu/alma/990058693370203941/catalog>

Entity boundaries and metadata application profiles

- Metadata application profiles that include entity boundary criteria, especially in linked data contexts, can be used to support resource description:
 - by identifying existing descriptions of entities available for reuse (and additional data elements needed to conform to a local implementation)
 - triggering the creation of a new entity description when adding a value that crosses a defined entity boundary

Thank you!
Questions?