Basics of Attributes and Relationships

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Terminology

(definitions based on RSC Chair’s papers and comments and Registry information)

- **Domain**: entity that the element belongs to
- **Range**: entity that a relationship element points to
- **Properties**: RDA elements including relationship designators; term used in RDA Registry
- **Class**: an RDA entity; term used in RDA Registry
- **High-level relationship**: a relationship between two entities with no refinement of the nature of the relationship (e.g., related agent of work)
Beta Glossary Definitions

- **Element**: a word, character, or group of words or characters representing a distinct unit of bibliographic information

- **Attribute element**: an element that is expected to be recorded as an unstructured description

- **Relationship element**: an element that relates two entities

*Two of these definitions may need rethinking. We’ll see why later....*
Original vs. Beta Organization

Original:
- Attributes are usually in one or two chapters
  - Work attributes are in ch 6-7
- Relationships are scattered
  - Work relationships are in ch 17, 19, 23, and 25
- Relationship designators in Appendixes
- Link to RDA Registry from Resources Tab

Beta:
- Attributes and relationships are together!
  - All listed in the elements section for the entity
- Relationship designators have become elements
- Registry labels and domain and range in Element Reference
Relationship Designators

Become

Relationship Elements
From Designator to Element: Genesis

• Relationship designators live in a no man’s land in original Toolkit
  • They are not attributes
  • They are not properly relationship elements because they are not contained in chapters 19, 20, etc.
  • They are Appendixes I-M, after instructions on recording B.C. and A.D. dates

• And yet, relationships are a principle that governs RDA and one of the two kinds of elements
From Designator to Element: Exodus

• Creator is a relationship element
• Composer is a type of creator
• Therefore, composer is a relationship element
From *cadenza (work)* to *cadenza work*

- **From original Toolkit:**
  - *cadenza (work):* A musical work consisting of an ornamental passage for a soloist, added to a musical work such as a concerto, either by the same or a different composer.

- **From beta Toolkit:**
  - *cadenza work:* A musical work that is an ornamental passage for a soloist added to a musical work, such as a concerto, by the same or a different composer.
Elements in the Registry have a domain and may have a range
- Exception is meta-elements that are being deprecated
- The range does not appear here because this screenshot is from the Work properties Index
- For this element, the range is “work”
- Entity in domain + range = relationship element
Basics of Attributes and Relationships

Element Reference:
- **Domain:** Work
- **Range:** Work
- **Alternate label:** has cadenza work

Values for domain and range work entities are given in human-readable and URI forms.

- The labels for the class and element are imported via URIs given in the example’s XML.
- If the labels change in the OMR, the example will change.
Relationships

Become

Relationship Elements
From Relationship to Relationship Element

- Relationships are elements in the original Toolkit so this is just a wording change
- In the original Toolkit, relationships are refined by designators
  - Owner is refined by former owner
- Reminder—a relationship element relates two entities, e.g., related item of manifestation, creator of work, etc.
From *creator* to *creator of work*

- **From original Toolkit:**
  - *creator*: A person, family, or corporate body responsible for the creation of a work.

- **From beta Toolkit:**
  - *creator of work*: An agent who is responsible for a work.
• Range is given as “agent” rather than 3 ranges of “person,” “family,” and “corporate body”
  • Range appears here because this is from the object properties
• Entity in domain + range = relationship element
Beta Toolkit: creator of work

- **Element Reference:**
  - **Domain:** Work
  - **Range:** Agent
  - **Alternate labels:** has creator of work
  - **Recording methods:** identifier, IRI, structured description, unstructured description

- **Differences from original Toolkit:**
  - can record using unstructured description
  - domain added to label to make it unique from a new element
  - can use it like a relationship designator if more specificity is not wanted
Attributes Become Attribute Elements or Relationship Elements
From Attribute to Attribute Element

• “Attribute” was never defined in original Toolkit, but we know
  • it is an element
  • it is not a relationship (which is also an element)
• Attribute element
  • defined in beta TK glossary “as an element that is expected to be recorded as an unstructured description”
• Several elements listed as “Attributes” can be recorded using all 4 methods, e.g., language of person
• Better definitions?
  • an element with no range
  • an element that does not connect two entities
From profession or occupation to profession or occupation

• From original Toolkit:
  • profession or occupation: A person's vocation or avocation.

• From beta Toolkit:
  • profession or occupation: A vocation or avocation.
Beta Toolkit: profession or occupation

Example

Economist

Recording method: structured description
VES source: ISCO
Name of agent: Ragnar Frisch

VETERINARIAN (medical ser.)

Recording method: structured description
VES source: Dictionary of occupational titles
Name of agent: Marjorie Orr

Author

Anthropologist

Folklorist

Recording method: unstructured description
Name of agent: Zora Neale Hurston

• Element Reference:
  • Domain: Person
  • no Range for this element
  • Alternate labels: has profession or occupation
  • Recording methods: structured description, unstructured description
    • should include identifier and IRI

• Attribute element or Relationship element?
  • Multiple recording methods
    • does not fit attribute element definition
  • Does not relate two entities
    • does not fit relationship element definition
From Attribute to Relationship Element

- New entities Nomen and Timespan have turned several attributes into relationship elements
  - name of corporate body
  - title of work
  - date of birth
- Further development of Place entity has also turned some attributes into relationship elements
  - location of conference, etc.
  - place of death
- Many elements renamed to include both entities
  - date associated with person = related timespan of person
  - place associated with corporate body = related place of corporate body
From variant title for work to variant title of work

• From original Toolkit:
  • variant title for work: A title or form of title by which a work is known that differs from a title or form of title chosen as a preferred title for the work.

• From beta Toolkit:
  • variant title of work: A title of work that is not selected for preference in a specific application or context.
• **Element Reference:**
  - **Domain:** Work
  - **Range:** Nomen
  - **Alternate labels:** has variant title of work
  - **Recording methods:** unstructured description

• **Attribute element or Relationship element?**
  - **Record using unstructured description only**
    - **Attribute element definition**
  - **Relates two entities**
    - **Relationship element definition**
From *place associated with corporate body* to *related place of corporate body*

- **From current Toolkit:**
  - *place associated with corporate body*: A significant location associated with a corporate body.

- **From beta Toolkit:**
  - *related place of corporate body*: A place that is associated with a corporate body.
Beta Toolkit: related place of corporate body

- **Element Reference:**
  - **Domain:** Corporate Body
  - **Range:** Place
  - **Alternate labels:** has related place of corporate body, place associated with corporate body, other place associated with corporate body
  - **Recording methods:** all

- **Attribute element or Relationship element?**
  - **Multiple recording methods**
    - does not fit attribute element definition
  - **Relates two entities**
    - relationship element definition
Using the Relationship Matrix

- The Relationship Matrix is a look-up tool for relationship elements
- It replaces Appendixes I-M
- The Matrix is located in the RESOURCES picklist
- You won’t find The Oracle there
Relationship Matrix Lists

Entities are listed in alphabetical order a list of high-level relationship elements. There is no hierarchy in the entity listings (e.g., Person and Agent are at the same level).

Agent
Entities related to an agent

To record an association between this entity and a related entity, use a relationship element that is sufficiently specific to meet the needs of the agency creating the data.

Select an appropriate relationship element from the list for the related entity:

- Agent to Agent
- Agent to Collective Agent
- Agent to Corporate Body
- Agent to Expression
- Agent to Family
- Agent to Item
- Agent to Manifestation
- Agent to Nomen
- Agent to Person
- Agent to Place
- Agent to RDA Entity
- Agent to Timespan
- Agent to Work

Person
Entities related to a person

To record an association between this entity and a related entity, use a relationship element that is sufficiently specific to meet the needs of the agency creating the data.

Select an appropriate relationship element from the list for the related entity:

- Person to Agent
- Person to Collective Agent
- Person to Corporate Body
- Person to Expression
- Person to Family
- Person to Item
- Person to Manifestation
- Person to Nomen
- Person to Person
- Person to Place
- Person to RDA Entity
- Person to Timespan
- Person to Work
Relationship Matrix in Action

• Situation: relating the person *Anne Rice* to the work *Interview with the Vampire*

• Relationship: “author of” from the current Toolkit

*I’ll use the Relationship Matrix to get from the relationship designator I know to the element*
Since Anne Rice is a person, I picked Person to Work.

Why isn’t “author of listed” here?

• Because person is not the domain of “author of”
• Since a person is an agent, I picked Agent to Work

• Now I see “author of” because any type of agent can be an author
  • The Matrix just taught me the domain of “author of”
Using the Entity List of Elements

- All the entities have a list of their elements
- The search box is predictive so I don’t have to type in the entire element to find it.

- The technique has two of the same weaknesses the Matrix does:
  - I need the domain
  - I need the beginning of the element name
Using the Search Filters: Keyword

- If I select “Elements” and search “author”, I will get elements with that word.
- Although I have multiple elements to pick from, I don’t need to know the domain.
Using the Search Filters: Former Element Name

- If the former element name is an alternate label, it will show up in the elements search
- I don’t need to know the domain or the range
- This depends on having the former element as an alternate label
Definitions Revisited

- **Element**: a word, character, or group of words or characters representing a distinct unit of bibliographic information

  *Have we gone beyond words and characters?*

- **Attribute element**: an element that is expected to be recorded as an unstructured description

  *Should this definition be changed, or...*

- **Relationship element**: an element that relates two entities

  *Does it still matter what kind of element it is?*