Relationships in General

• Connect two things
  ▪ Kate has employer LC

• Are inherently reciprocal
  ▪ LC has employee Kate

• Help identify one thing by defining its relationship to another
  ▪ Kate that has employer LC not Kate that has employer NBC
Expressing Relationships

• Graph

  Kate

  \[\text{has employer}\]

  LC

• RDF triple
  - Subject: Kate
  - Predicate: \textit{has employer}
  - Object: LC

• RDA relationship element
  - Kate \textit{employer} LC
Terminology

(definitions based on new RDA)

• **Entity:** an abstract class of a physical or conceptual thing in the universe of human discourse

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

• **Domain:** entity that is described by an element

• **Range:** entity that is the value of a relationship element
Characteristics of Relationship Elements

• Have a domain and a range entity

• Value recorded represents the range entity

• Sometimes multiple recording methods are available to record the value

• Have a corresponding inverse relationship element
### Domain and Range Examples

<table>
<thead>
<tr>
<th>Reference</th>
<th>In Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related agent of work</strong></td>
<td><strong>Related agent of work</strong></td>
</tr>
<tr>
<td>- Domain: Work</td>
<td>- Domain: Great expectations</td>
</tr>
<tr>
<td>- Range: Agent</td>
<td>- Range: Charles Dickens</td>
</tr>
<tr>
<td><strong>Related work of agent</strong></td>
<td><strong>Related work of agent</strong></td>
</tr>
<tr>
<td>- Domain: Agent</td>
<td>- Domain: Charles Dickens</td>
</tr>
<tr>
<td>- Range: Work</td>
<td>- Range: Great expectations</td>
</tr>
<tr>
<td><strong>Place of birth</strong></td>
<td><strong>Place of birth</strong></td>
</tr>
<tr>
<td>- Domain: Person</td>
<td>- Domain: Charles Dickens</td>
</tr>
<tr>
<td>- Range: Place</td>
<td>- Range: Portsmouth, England</td>
</tr>
</tbody>
</table>
Determining Domain and Range

- Consult the Element Reference box
- Range entity appears first in RDA Glossary definition but ...
- In Registry definition, the pattern is “relates a [domain entity] to a [glossary definition]”
  - and the Glossary definition contains range entity
- Use the verbalized labels
Element Reference Box

- date of publication

Element Reference

IRI

http://rdaregistry.info/Elements/m/P30011

Domain

Manifestation

Range

Timespan

Alternate labels

has date of publication
In this definition the range entity is provided...

**director**
An agent who is responsible for the general management and supervision of a filmed performance, a radio or television program, etc.
*Inverse:* director of

In this definition the “range” is given as the broader element so you must refer back to the broader element definition to determine the range entity ...

**film director**
A director who is responsible for the general management and supervision of a filmed performance.
*Inverse:* film director of
RDA Registry Definition

- **Domain**
  - rdap:P50029 "has founder"
    - "Relates a corporate body to a person who founded a body."
  - rdap:P50030 "has member"
    - "Relates a corporate body to a person who is a member of a corporate body."
  - rdap:P50031 "has place associated with corporate body"
    - "Relates a corporate body to a significant location associated with a corporate body."
  - rdap:P50032 "has name of corporate body"
    - "Relates a corporate body to a word, character, or group of words and/or characters by which a corporate body is known."

- **Toolkit definition**
  - Range given in definition

- **Range given in definition**

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Relationship Elements

January 28, 2019
Using the Verbalized Labels

• Available in Element Reference Box
• Available in the RDA Registry
• You might be able to make an understandable sentence!
  ▪ Work has preferred title of work Nomen
    ○ Work has preferred title of work Hamlet
  ▪ Person has date of birth Timespan
    ○ Amy Tan has date of birth 1952

At least “understandable” to catalogers...
Alternate Labels
Elements have Alternate Labels

• Verbalized labels from Registry are available
  - **Element**: adaptation of work
    - **Verbalized Label**: is adaptation of work
  - **Element**: adapted as work
    - **Verbalized Label**: is adapted as work

• Former labels are often available
  - **Element**: related place of corporate body
    - **Former Label**: place associated with corporate body

• Former labels are not automatically added—done if there is a significant change
WEMI to Agent Entity Relationship Elements Breakout
What???

• Agent has 4 entity sub-types
  ▪ Person
  ▪ Family
  ▪ Corporate Body
  ▪ Collective Agent

• Relationship elements applicable to each sub-type were defined at Agent level
  ▪ Example: creator of work had range Agent

• Relationship elements applicable to each sub-type now defined for each sub-type
  ▪ Example: creator person of work has range Person
Why???: Find the Element

- **Last week:** I want to relate Anne Rice to Interview with the Vampire
  - I know Anne Rice is a Person
  - I looked in the Person relationship elements list
  - ... but *author of* was in the Agent list!

- **Now:** I want to relate Anne Rice to Interview with the Vampire
  - I know Anne Rice is a Person
  - I look in the Person relationship elements list
  - ... *author person of* is in the list!
Why???: Technical Issues

- Difficult to create a script that instantiates the specific Collective Agent, etc. relationships for RIMMF4 input forms
  - Example: Without such a script Person input form does not contain *author of* element

- Need to resolve long-standing issue of translating relationship elements into languages that require male and female terms for Persons

- Supports future application profiles
Yeah, but, ...

- Number of elements seems overwhelming!
  - *You don’t have to use them all*

- Once policy statement becomes five
  - *Yes, but there are technical solutions to help*

- Where does it end???
  - *Hierarchy with agent sub-types is not the same as hierarchy with specific role*
Relationship Designators

Become

Relationship Elements
Designators in the Original TK

• In the original Toolkit, relationship designators seem to be a “refinement” of a relationship element, e.g., composer is a type of creator

• And yet, the relationship element chapters (chapters 19, 20, etc.) do not discuss them

• So what are they?
“Designators” in the RDA Registry

- Creator is a relationship element
- Composer is a type of creator
- Therefore, composer is a relationship element

<table>
<thead>
<tr>
<th>CURIE</th>
<th>Label</th>
<th>Definition</th>
<th>SubpropertyOf</th>
</tr>
</thead>
<tbody>
<tr>
<td>rdaw:P10053</td>
<td>&quot;has composer&quot;</td>
<td>&quot;Relates a work to an agent responsible for creating a musical work.&quot;</td>
<td>rdaw:P10065 &quot;has creator&quot;</td>
</tr>
</tbody>
</table>

Lexical Alias: http://rdaregistry.info/Elements/w/composer.en
Domain: rdac.C10001 "work"
Former “Designator” Elements in the New TK

• Equal status with any other element

• May be easier to find because not banished to an Appendix
  ▪ Listed on entity page
  ▪ Each has its own page
  ▪ Each is in the Glossary
Some Attributes Become Relationship Elements
From Attribute to Relationship Element

- New entities Nomen and Timespan turned several attributes into relationship elements
  - title of work
  - date of birth
- Further development of Place entity turned some attributes into relationship elements
  - 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
I hope you’ve found this presentation relatable!