

# Making RDA Work For You: Leveraging the Semantic Coherency of the RDA Element Set

RSC Outreach Event: Think Globally, Act Locally!

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R | D | A  
Resource Description & Access

# RDA Element Set By The Numbers

Entities: 13

*RDA Entity, Work, Expression, Manifestation, Item, Agent, Person, Collective Agent, Corporate Body, Family, Nomen, Place, Timespan*

Elements: 3024

*Relationships that have a domain and range of one of the RDA entities (2,715 relationship elements)*

**or**

*Attributes that only have a domain of one of the RDA entities (309 attribute elements)*

# RDA Element Set By The Numbers

Recording Methods: 4

*Unstructured*: literal value that is free-text

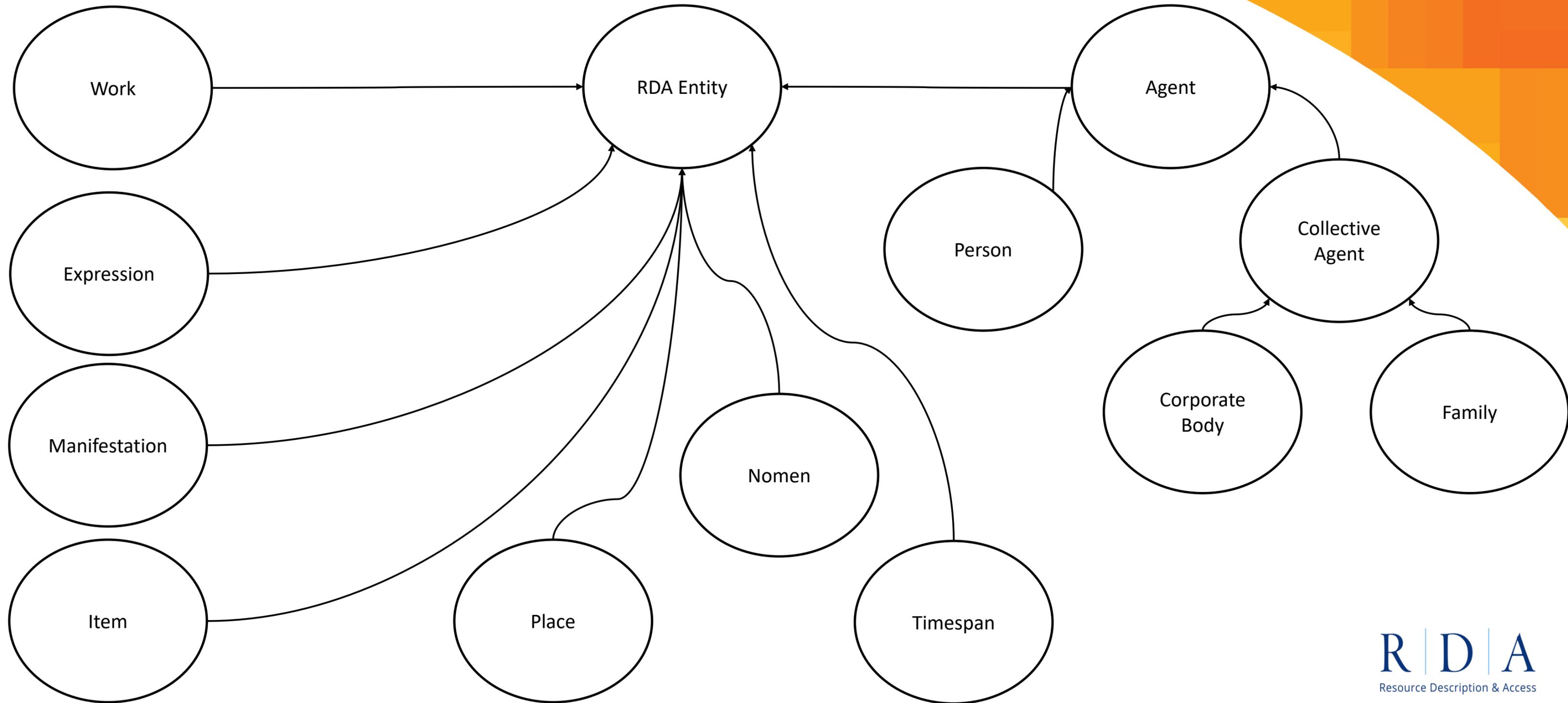
*Structured*: literal value that is formatted according to a string encoding scheme or taken from a vocabulary encoding scheme

Recording Methods +  
Elements = **11,422**  
possible ways to  
record RDA data (!!!)

*Identifier*: literal value that consists of alphanumeric characters that are independent of human language

*IRI*: value that is an RDF identifier

# Semantic Structure: Entities



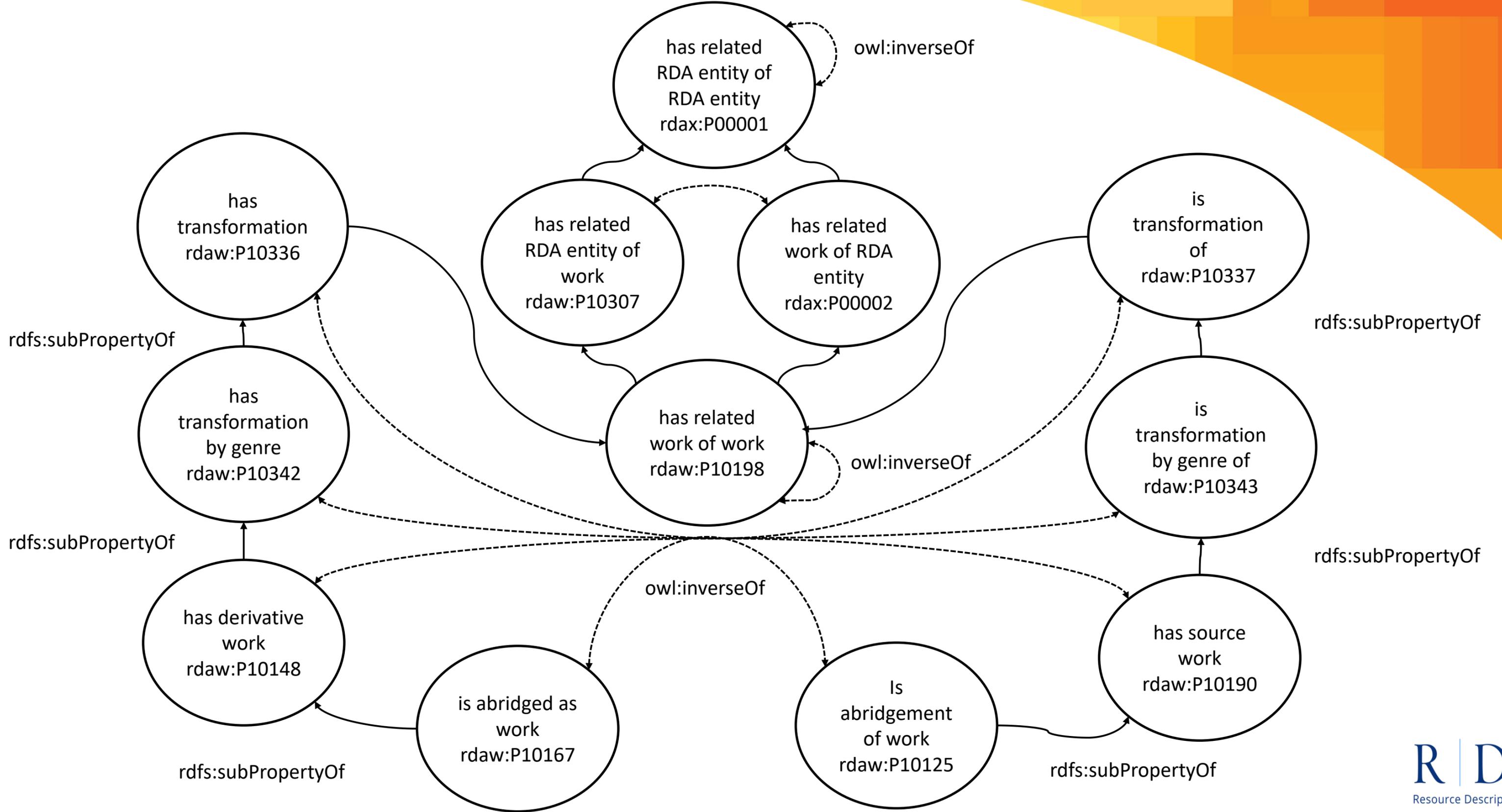
# Semantic Structure: High-Level Matrix

All RDA relationship elements exist in a semantic matrix with one another

Each of the 13 entities are related to one another through ‘high-level’ relationships

- has related [RDA entity] of [RDA entity]
- 169 high-level elements

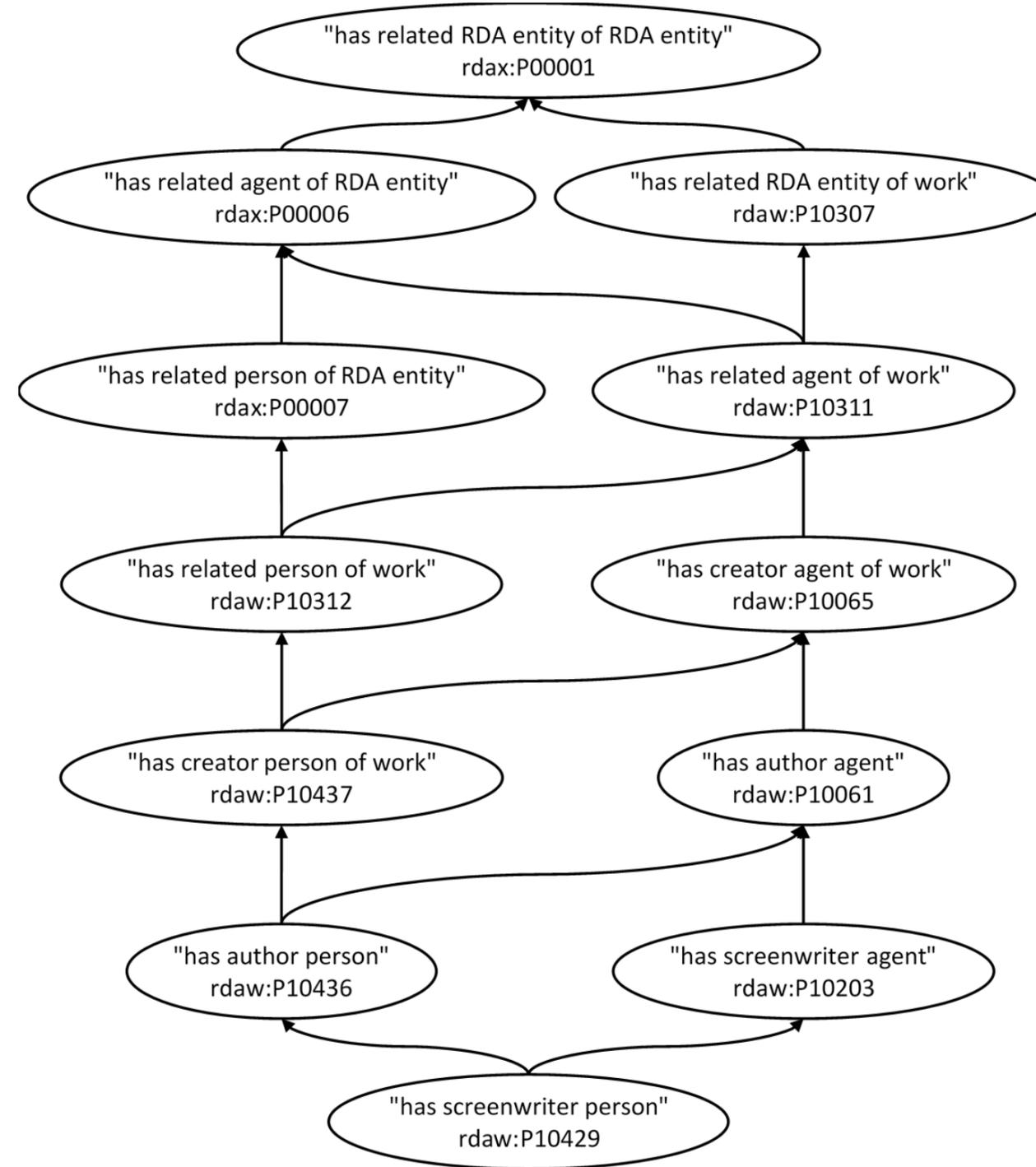
All of the RDA relationship elements are refinements of the high-level relationships.



# Semantic Structure: Agents

- Agent
  - Collective Agent
    - Family
    - Corporate Body
  - Person

Each agent relationship is related to its broader agent, as well as its broader relationship within a specific agent hierarchy



# Using Semantics to Manage Elements

One may choose elements at whatever level of the hierarchy that is appropriate; it may be based on costs, user needs, or any other criteria deemed important

The semantic coherency of RDA ensures that applications that use “verbose” RDA can still be understood by applications that use a “slim” RDA

Important: More granular metadata can always be generalized to something more coarse, but the opposite is not true

# Managing Agent Elements

1,014 elements have a range of Agent or its entity subtypes

179 elements that have a range of Agent also have parallel elements with the other Agent entity subtypes (716)

1,053 elements have a domain of Agent or its entity subtypes

185 elements that have a domain of Agent also have parallel elements with the other Agent entity subtypes (740)

A decision to only use agent elements and none of the element subtypes results in the RDA element set being reduced by 1,456 elements, nearly half of the total number of RDA elements

# Managing Related Agents of Resource Entities

All related agent elements of the WEMI entities are either in a hierarchical structure with related agent of work [etc.] or creator agent of work [etc.]

A decision could be made to only use the above elements

1,014 elements could be reduced to between 8 and 40, depending on decisions reached regarding the use of the agent elements and their subtypes

# Building Your Own Element Set

## **Coherent Description of an Information Resource**

Elements that relate the WEMI resource entities to one another

Minimum: Describe one resource entity and relate it to another resource entity using one of the 'primary' relationships

## **Minimum Description of a Resource Entity**

Only requires the entity to be named using an appellation element

## **Minimum Description of Other Entities (excluding Nomen)**

Only requires the entity to be named using an appellation element

# Building Your Own Element Set

## Effective Description

Elements selected because they may be applicable to most information resources or selected because they are needed for specialized description

Determining which elements will be selected are dependent on a variety of factors

# Application Profiles

Specifies the entities, elements, and vocabulary encoding schemes that are expected in a set of metadata that meets the functions and requirements of an application that uses the metadata

- Entities that must be used, should be used, or must not be used
- Elements that must be used, should be used, or must not be used
- Repeatability
- Recording methods for values of each element that must be used, should be used, or must not be used
- Value source
- String encoding scheme for a value

May be tabular, in prose, or in the form of annotations in RDA Toolkit

# Application Profiles: The More the Merrier

Consider creating application profiles that are tailored to specific workflows

- Legal deposits
- Collections that receive minimal treatment
- Specialized collections
  - Subject-based
  - Content-based
  - Format-based

# Thank You!

RSC Technical Working Group: [techo@rdatoolkit.org](mailto:techo@rdatoolkit.org)

RDA Registry: <http://rdaregistry.info>

*RDA Toolkit*: <http://access.rdatoolkit.org/>