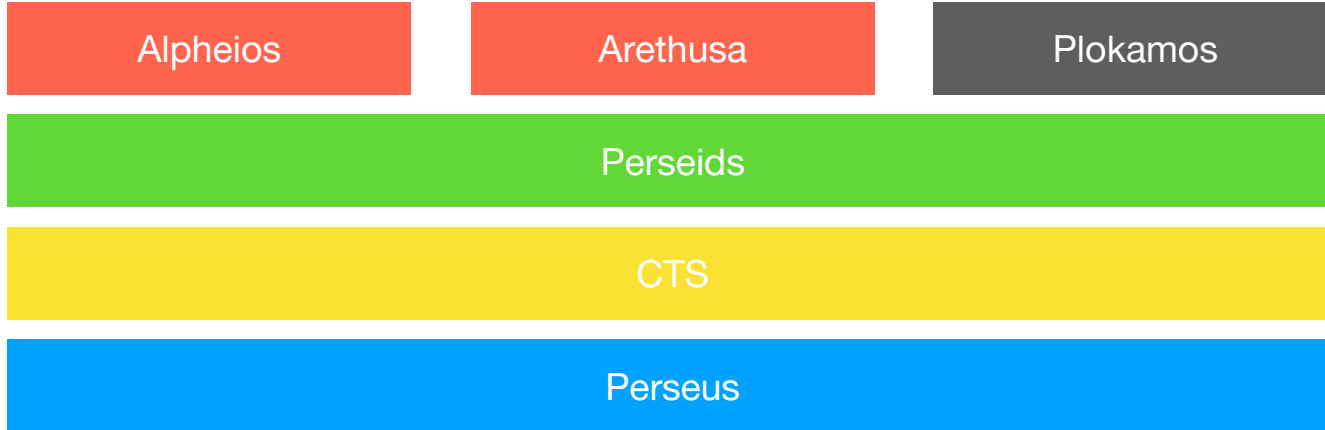


Plokamos: Building a universe of annotations

Leipzig, July 11th 2017

Frederik Baumgardt @ Perseids, Tufts University

What's Plokamos?



- Annotation Tool, Database & Data Architecture
- Web Framework
- Linked Data
- Using W3C Web Annotation Spec

Plokamos interface

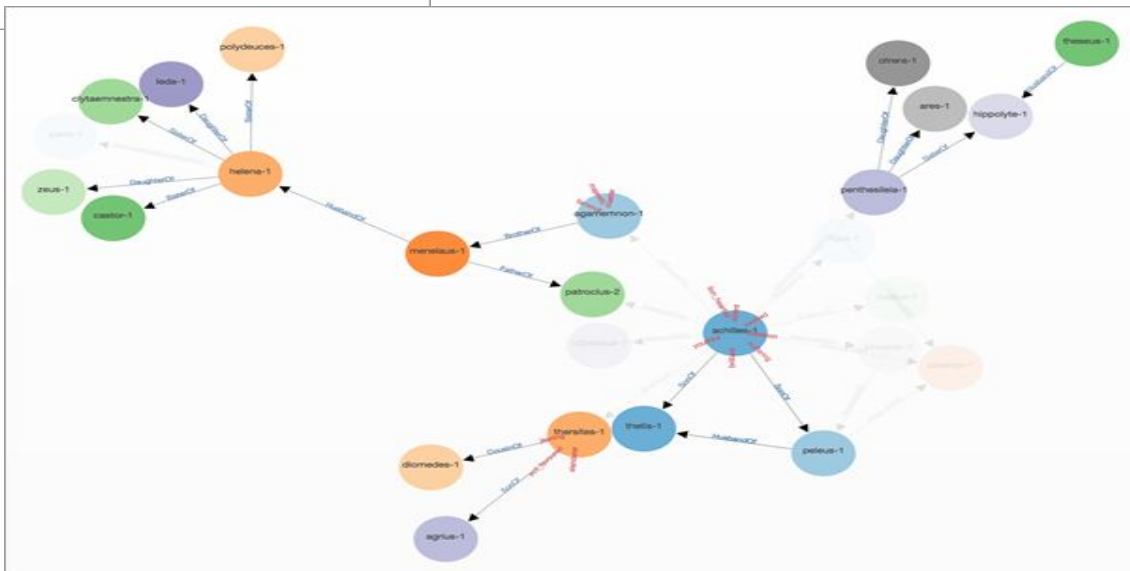
Smith, William

Oceanus

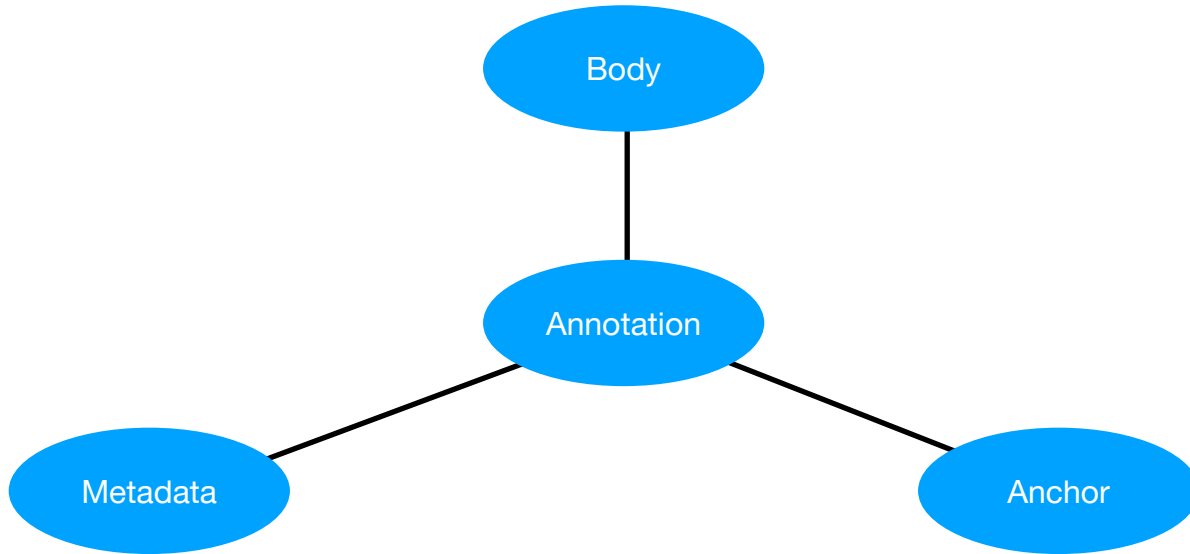
smith:oceanus-1 Is Father Of smith:adme

1. A daughter of Oceanus and Thetys (Hesiod. Theog. 349), whom Hyginus in the preface to his fables calls Admiletto and a daughter of Pontus and Thalassa.

- Embedded in reading environment at
- <http://cts.perseids.org/>
- Network visualization at different CTS levels

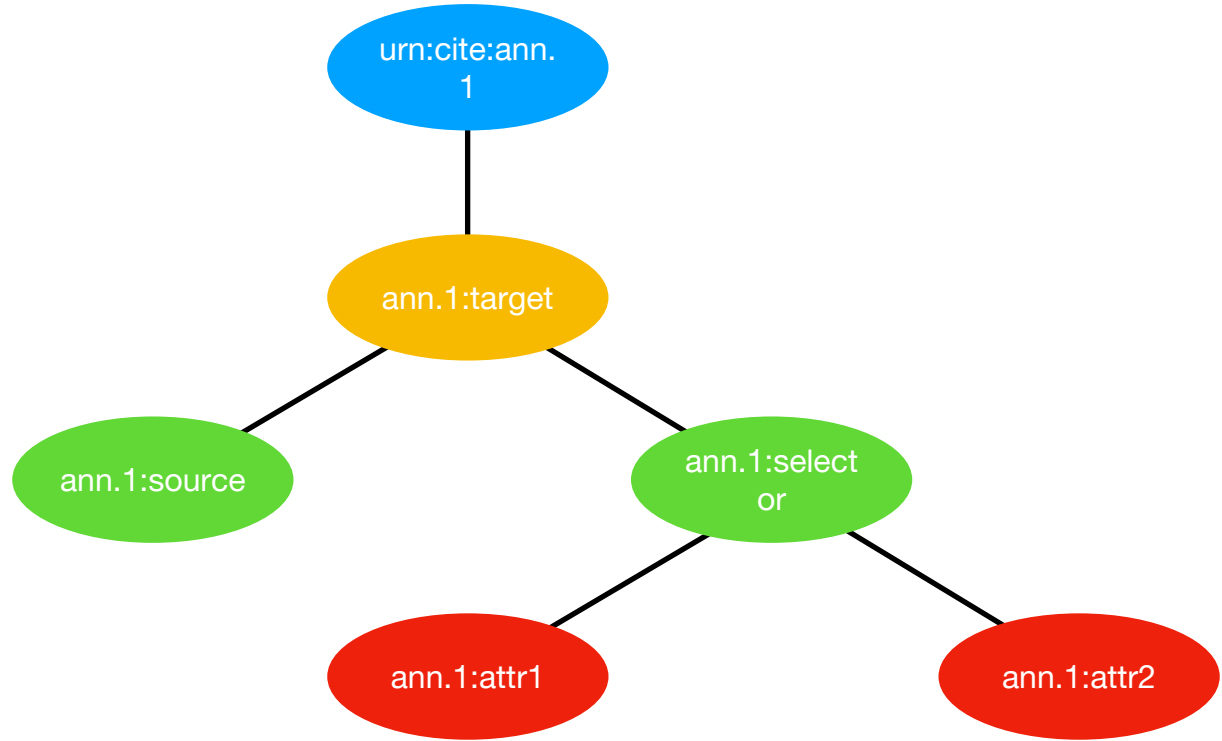


What's an annotation?



- Annotation: an ID
- Metadata: Provenance, Categories, etc.
- Body: actual Annotation Data
- Anchor: Locator for referenced Source Data

What's an anchor?



- Source: Document
- Selector: Subdocument

What's a selector?

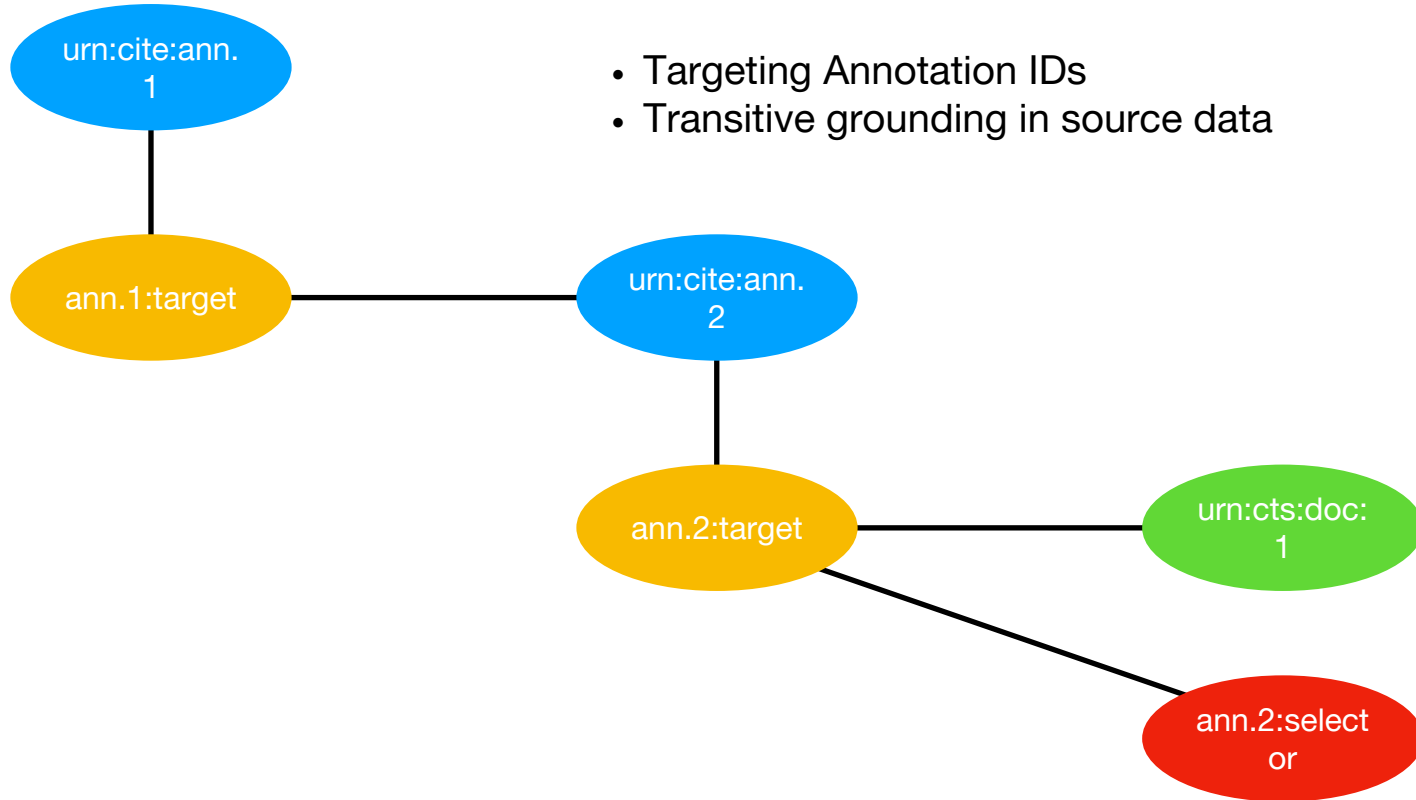
1. Fragment: e.g. HTML fragment ids
 2. CSS: CSS selectors
 3. XPath: XPath selectors
 4. SVG: SVG selectors
-
5. Text Quote: prefix - text - suffix
-
6. Text Position: character level
 7. Data Position: bitstream level
-
1. Range: FROM <selector> TO <selector>
 2. Refinement: <selector> AND <selector>

But why?

1. Higher-order annotations and data analysis
2. Annotations on multiple data elements
3. Annotations on mutable data




Stacking I

- Targeting Annotation IDs
- Transitive grounding in source data



Stacking II

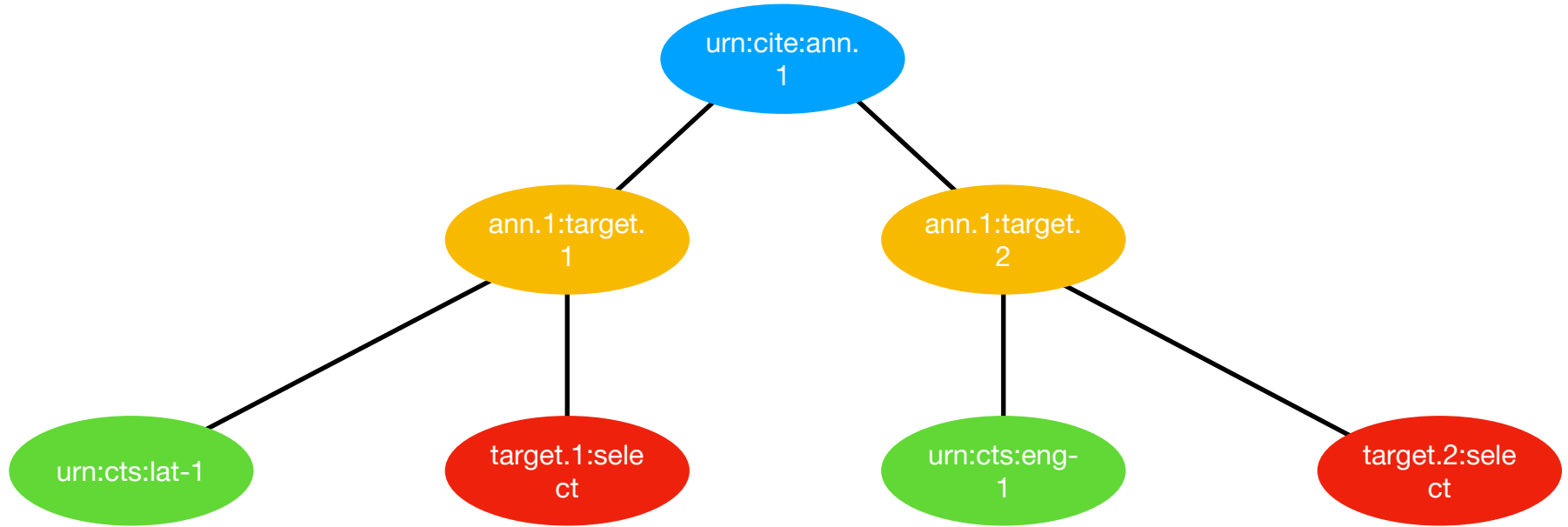
Data

```
GRAPH <http://data.perseus.org/graphs/persons> {  
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.1>   
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.1#target-1>  
    <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://www.w3.org/ns/oa#SpecificResource> ;  
    <http://www.w3.org/ns/oa#hasSource> <http://data.perseus.org/collections/urn:cite:perseus:pdljann.2> .  
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.2>   
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.2#target-1>  
    <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://www.w3.org/ns/oa#SpecificResource> ;  
    <http://www.w3.org/ns/oa#hasSource> <http://data.perseus.org/collections/urn:cite:perseus:pdljann.3> .  
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.3>   
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.3#target-1>  
    <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://www.w3.org/ns/oa#SpecificResource> ;  
    <http://www.w3.org/ns/oa#hasSelector> <http://data.perseus.org/collections/urn:cite:perseus:pdljann.3#target-1-sel-1> ;  
    <http://www.w3.org/ns/oa#hasSource> <urn:cts:pdlrefwk:viaf88890045.003.perseus-eng1:E.endymion-1> ;  
    <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://www.w3.org/ns/oa#TextQuoteSelector> .  
  
  <http://data.perseus.org/collections/urn:cite:perseus:pdljann.3#target-1-sel-1>  
    <http://www.w3.org/ns/oa#exact> "Aetolus" ;  
    <http://www.w3.org/ns/oa#prefix> "rippe, Neis, or Iphianassa; and" ;  
    <http://www.w3.org/ns/oa#suffix> ", Paeon, Epeius. Eurydice, and N" .  
  
}
```

Query

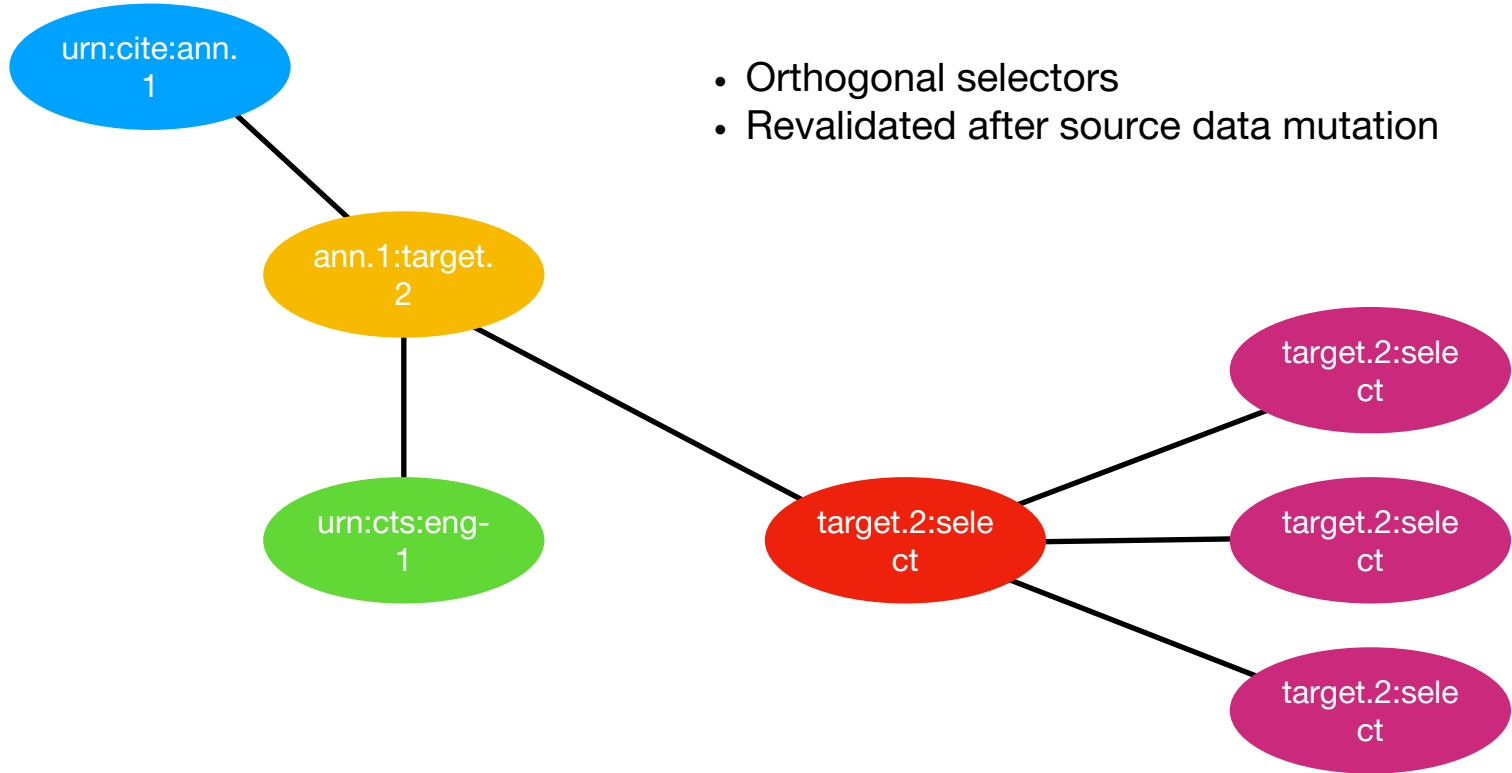
```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>  
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>  
PREFIX oa: <http://www.w3.org/ns/oa#>  
SELECT DISTINCT ?annotation ?target ?selector WHERE {  
  VALUES ?source {<urn:cts:pdlrefwk:viaf88890045.003.perseus-eng1:E.endymion-1>}  
  ?annotation (oa:hasTarget/oa:hasSource)+ ?target .  
  ?annotation (oa:hasTarget/oa:hasSource)*/oa:hasTarget/oa:hasSelector ?selector  
}
```

Fragmentation



- Multiple anchors, connecting source data

Redundancy / Portability I



- Orthogonal selectors
- Revalidated after source data mutation

Redundancy / Portability II

Praesentium pariatur quaerat esse.

Nemo

Nemo

excepturi quo vitae autem magni modi natus rerum.

35 char.



Nemo

Nemo



49 char.

Demo

Please clap

- Different types of Annotations
- Annotating different kinds of Data
- Using Annotation