

# The SNAP Data Model

Faith Lawrence  
King's College London  
faith.lawrence@kcl.ac.uk

Hugh Cayless  
Duke University DC3  
hugh.cayless@duke.edu  
@hcayless

This presentation: <http://goo.gl/IYVszl>

# Why?

Corpus Parisinum VI (Digby)

Ἐκλογὴ ἀποφθεγμάτων κατὰ ἀλφάβητον Δημοκρίτου, Ἐπικτήτου, Ἰσοκράτους καὶ ἐτέρων φιλοσόφων. (a) (n)

<A>λέξανδρος ὁ βασιλεὺς πληρώσας ποτὲ ὀστέων πίνακα ἔπεμψε διαγένην τῶ κυνικῶ φιλοσόφῳ· ὁ δὲ λαβὼν εἶπε· "κυνικὸν μὲν τὸ βρώμα, οὐ βασιλικὸν δὲ τὸ δῶρον." (a)

<O> αὐτὸς ἐξίεν ἐπὶ τὸν πόλεμον περιμένον τὸ τέλειον τῆς ἡλικίας σώματος <καὶ τότε πολέμει· ὁ δὲ φοβοῦμαι μὴ περιμένων τὸ τέλειον τῆς νεότητος τόλιον ἀπολέσω." (a)

<O> αὐτὸς ἰδὼν Δαρτεῖον ἐπὶ πατρὶ τὸ σῶμα γυμνωθέντα ἄρας τὴν ἐπιπέθηκεν αὐτῷ· ἐρωτῶμενος δὲ εἶπε· "τοῦτο ἔποιε εἶπεν·" ἄνδρες φίλοι καλύπτω, ἀλλὰ τὴν τύχην περιστάσει· (a)

<O> αὐτὸς εἰς Ἰλλυριοὺς παραγὰς Διὸς βωμῶν κατιδὼν γυναῖκα κάλλει διαφέρουσαν ἐκπλαγεῖς αὐτῆς τὴν εὐμορφίαν πολλὸν χρόνον ἐθεάτο· τοῦ δὲ ἠφαιστῆνος εἰπόντος εἰκότως εἰ παραλάβοι τὴν προειρημένην ἔφη· "καὶ πῶς οὐ δεινὸν <εἶ> οἱ ἄλλων ἀκρασίας κολάζειν βουλόμενοι δουλεύοντες ἀκρασίας ὑπὸ τῶν ἐκτὸς ἀνθρώπων φωραθῶμεν;" (a) (n)

<O> αὐτὸς τοῦ κατασκόπου λέγοντος αὐτῷ πλείους

ταπεινοῖ· (a) Φή μοι <sup>15</sup>ἀνὴρ εἰς γλώσση φίλος, ἀλλὰ καὶ ἔργω· (a) (n) Φή μοι σὺ πεί <sup>16</sup>θειν δῶρα, καὶ θεοὺς λόγους· + (a) (n) Οὐκ ἔστιν οὐδὲν κρείσσον, <sup>17</sup>ἢ φίλου οἰκείου· (a) Πονηρὸν μὲν γυνὴ κἂν εὐμορφος <sup>18</sup>ῆ· ἐὰν δὲ ἄμορφος ἢ <sup>19</sup>διπλοῦν τὸ <sup>20</sup>κακόν· (a) <sup>19</sup>Ἀλέξανδρος ὁ βασιλεὺς, πληρώσας ποτὲ ὀστέων πίνα <sup>20</sup>κα, ἔπεμψε διαγένην τῶ κυνικῶ φιλοσόφῳ· ὁ δὲ, <sup>21</sup>λαβὼν εἶπε· κυνικὸν μὲν τὸ βρώμα· οὐ βασιλεῖ <sup>22</sup>κὸν δὲ τὸ δῶρον· (a) <sup>23</sup>Ο αὐτὸς θεασάμενος γέροντα τὰς

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τῶν ἀνθρώπων· (a) ἔφη· "ὁμοίως ἐγκαλοῦμενος· οὐτε πονηροὶ ἀνθρώποι οὐκ ἔστιν οὐδὲν κρείσσον, ἢ φίλου οἰκείου· (a) Πονηρὸν μὲν γυνὴ κἂν εὐμορφος <sup>18</sup>ῆ· ἐὰν δὲ ἄμορφος ἢ <sup>19</sup>διπλοῦν τὸ <sup>20</sup>κακόν· (a) <sup>19</sup>Ἀλέξανδρος ὁ βασιλεὺς, πληρώσας ποτὲ ὀστέων πίνα <sup>20</sup>κα, ἔπεμψε διαγένην τῶ κυνικῶ φιλοσόφῳ· ὁ δὲ, <sup>21</sup>λαβὼν εἶπε· κυνικὸν μὲν τὸ βρώμα· οὐ βασιλεῖ <sup>22</sup>κὸν δὲ τὸ δῶρον· (a) <sup>23</sup>Ο αὐτὸς θεασάμενος γέροντα τὰς

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# Getting Together

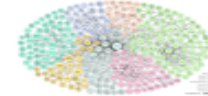
Mark-up Person: "I want to specify this text/image/... refers to a given person"

Prosopography Owner: "I want people to reference my prosopography"

# Why Linked Data?

★★★★★ link your data to other data to provide context

★★★★★ use URIs to denote things, so that people can point at your stuff



http://data...



★★★ use non-proprietary formats (e.g., CSV instead of Excel)



★★ make it available as structured data (e.g., Excel instead of image scan of a table)



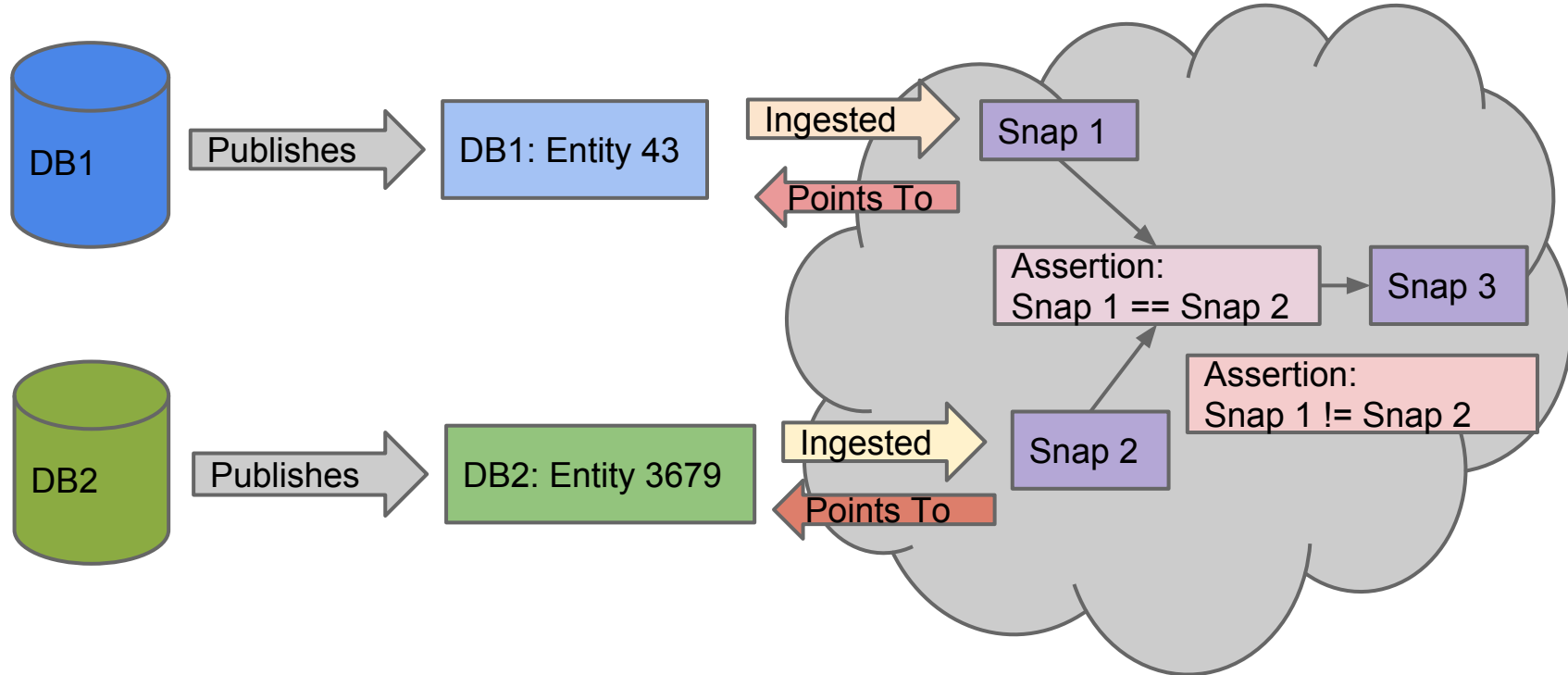
★ make your stuff available on the Web (whatever format) under an open license



# It's all RDF to me...

1. Need a (open) standard for publishing the data
2. Need a (open), (shared) data model

# Bringing Everyone Together



# SNAP Core

Person

Name

Attestation

(also Relationships)

# Person

has:

a publisher

may have:

zero or more Names

zero or more Attestations

date, place associations, etc.



# Person example

```
@prefix lawd: <http://lawd.info/ontology/> .
```

```
@prefix dc: <http://purl.org/dc/terms/> .
```

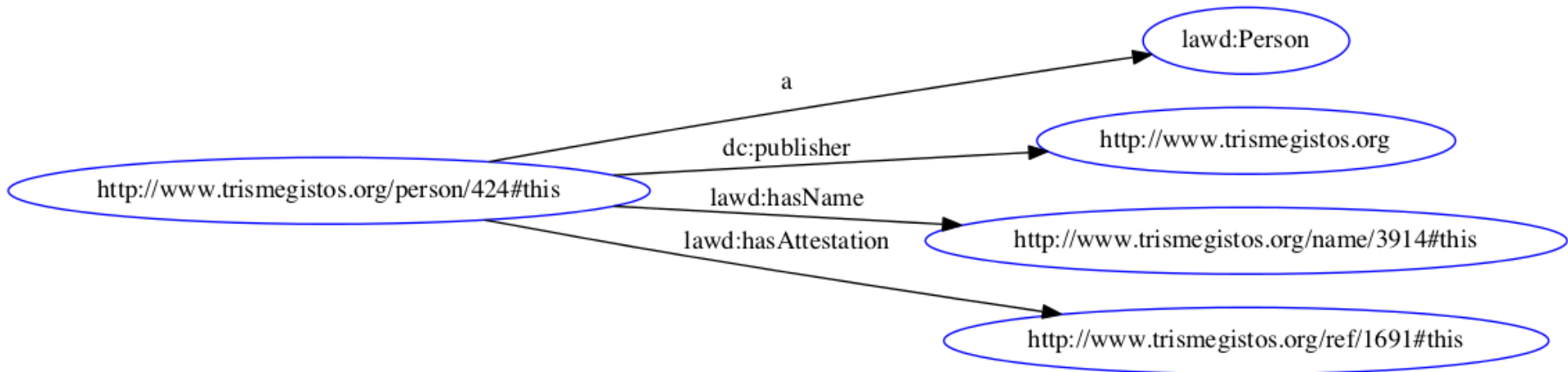
```
<http://www.trismegistos.org/person/424#this>
```

```
  a lawd:Person ;
```

```
  dc:publisher <http://www.trismegistos.org> ;
```

```
  lawd:hasName <http://www.trismegistos.org/name/3914#this> ;
```

```
  lawd:hasAttestation <http://www.trismegistos.org/ref/1691#this> .
```



Namespaces:  
lawd: <http://lawd.info/ontology/>  
dc: <http://purl.org/dc/terms/>  
cito: <http://purl.org/spar/cito/>  
cnt: <http://www.w3.org/2011/content#>

# Name

has:

- a publisher

- a primary form

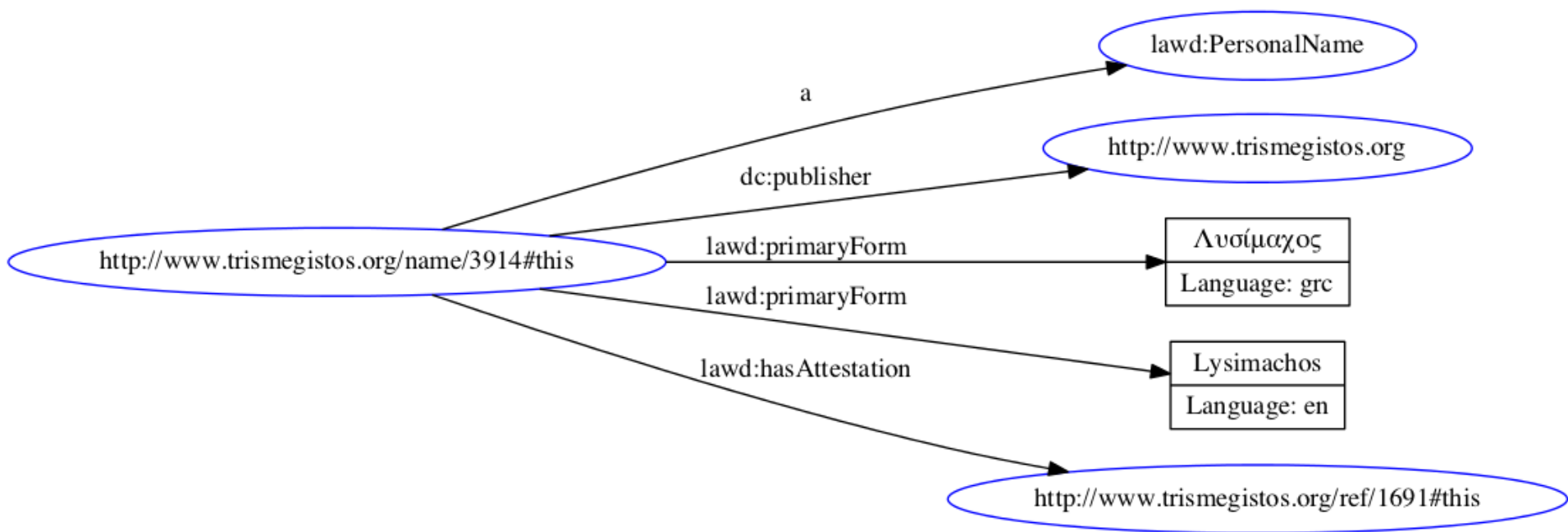
may have:

- zero or more Attestations

- zero or more variant forms

# Name example

```
<http://www.trismegistos.org/name/3914#this>  
  a lawd:PersonalName ;  
  dc:publisher <http://www.trismegistos.org> ;  
  lawd:primaryForm "Λυσίμαχος"@grc;  
  lawd:primaryForm "Lysimachos"@en ;  
  lawd:hasAttestation <http://www.trismegistos.org/ref/1691#this> .
```



Namespaces:  
 lawd: <http://lawd.info/ontology/>  
 dc: <http://purl.org/dc/terms/>  
 cito: <http://purl.org/spar/cito/>  
 cnt: <http://www.w3.org/2011/content#>

# Attestation

has:

- a publisher

- a citation

may have:

- a quoted string

- an online text it cites

# Attestation example

```
@prefix cito: <http://purl.org/spar/cito/> .
```

```
@prefix cnt: <http://www.w3.org/2011/content#> .
```

```
<http://www.trismegistos.org/ref/1691#this>
```

```
  a lawd:Attestation, cnt:ContentAsText ;
```

```
  lawd:conjunctOf <http://www.trismegistos.org/ref/1691#person> ;
```

```
  dc:publisher <http://www.trismegistos.org> ;
```

```
  cito:citesAsEvidence <http://www.trismegistos.org/text/424#this> ;
```

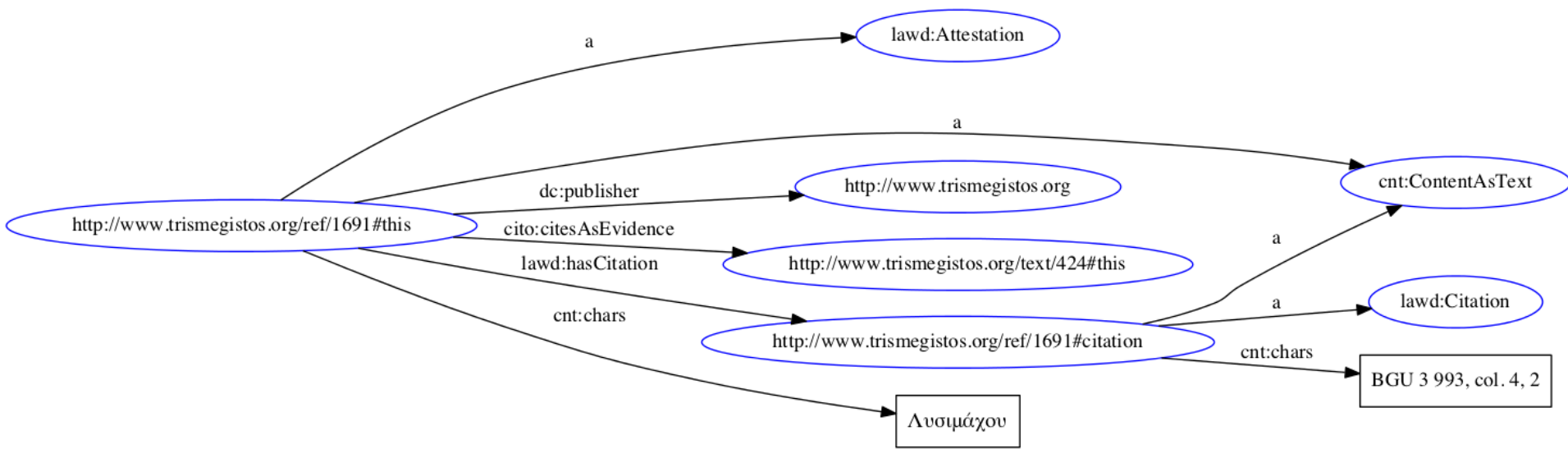
```
  lawd:hasCitation <http://www.trismegistos.org/ref/1691#citation> ;
```

```
  cnt:chars "Λυσιμάχου" .
```

```
<http://www.trismegistos.org/ref/1691#citation>
```

```
  a lawd:Citation, cnt:ContentAsText ;
```

```
  cnt:chars "BGU 3 993, col. 4, 2" .
```



Namespaces:  
 lawd: <http://lawd.info/ontology/>  
 dc: <http://purl.org/dc/terms/>  
 cito: <http://purl.org/spar/cito/>  
 cnt: <http://www.w3.org/2011/content#>



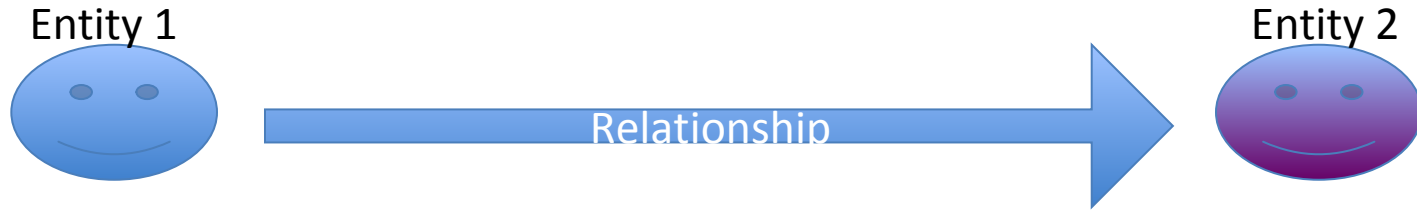
# Relationships

- People exist in a web of relationships
- Relationships
  - Can be part of of an entity's identifier
  - Can help substantiate an entity
  - Can help establish a context around an entity

# Current Options

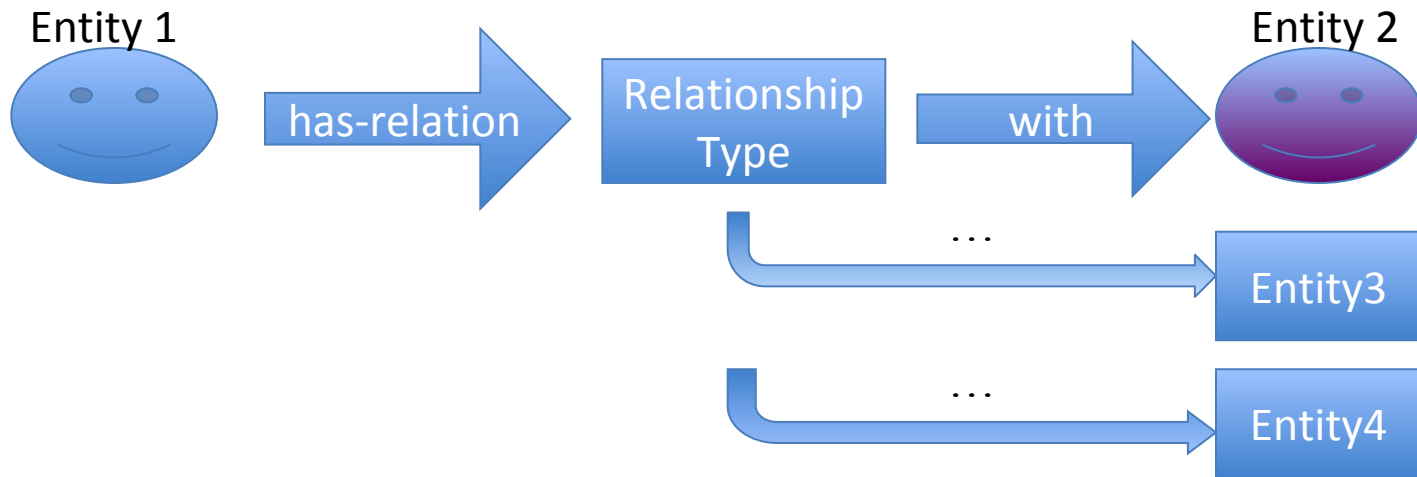
- FOAF
- FOAF Relationships
- CIDOC CRM/FRBR-OO
- OM Being/Traits
- ...

# Direct Relationships



[Entity1] - has-relationship (e.g. siblingOf) -> [Entity2]

# Class(ic) Relationships



[entity1] -has-relationship-> [relationship type e.g. Sibling]

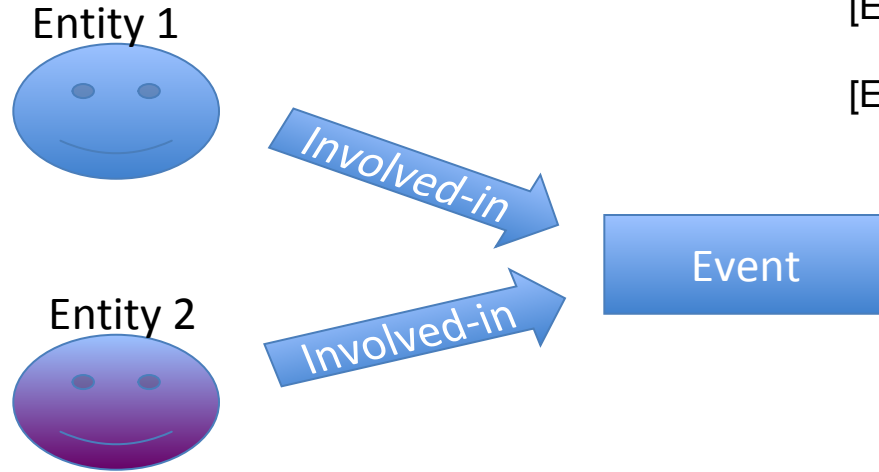
- appropriate-relationship-property-> [entity2]

- other-properties-TM-> [Thing]

- expressed-by-> [Reference]

- seeAlso-> [CiDOC Event]

# Event(ful) Relationships



[Entity1] -gave Birth-> [Event1 (Birth)]

[Event1 (Birth)] -Brought into Life-> [Entity2]

# Next Steps: Assertions

How to connect up persons, etc. after the data has been loaded?

One possible [example](#)