

Resource Description Framework

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Resource Description Framework *for lovers*

Edward Anderson

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I

love

you

I



subject

love



verb

you



object

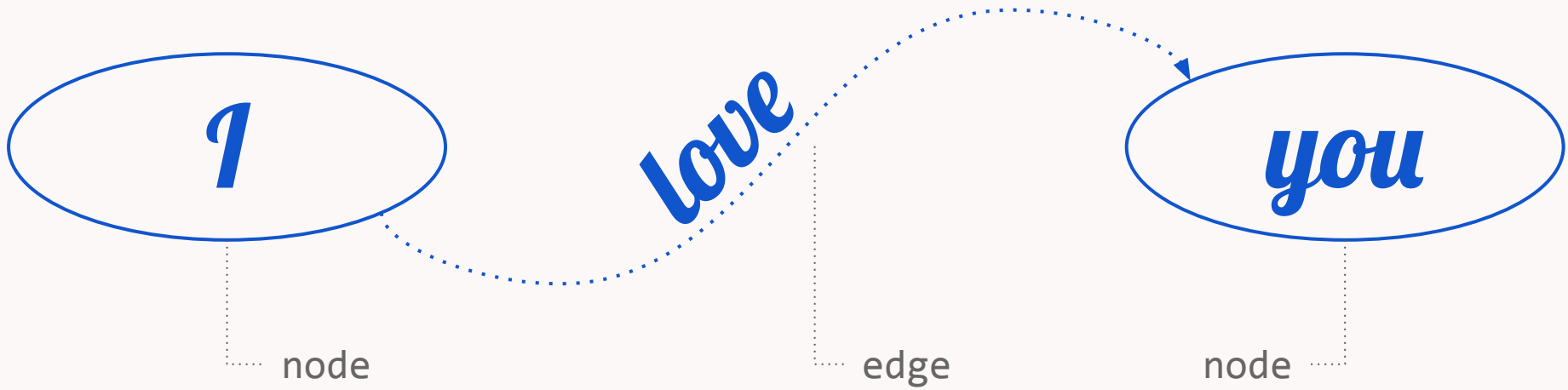


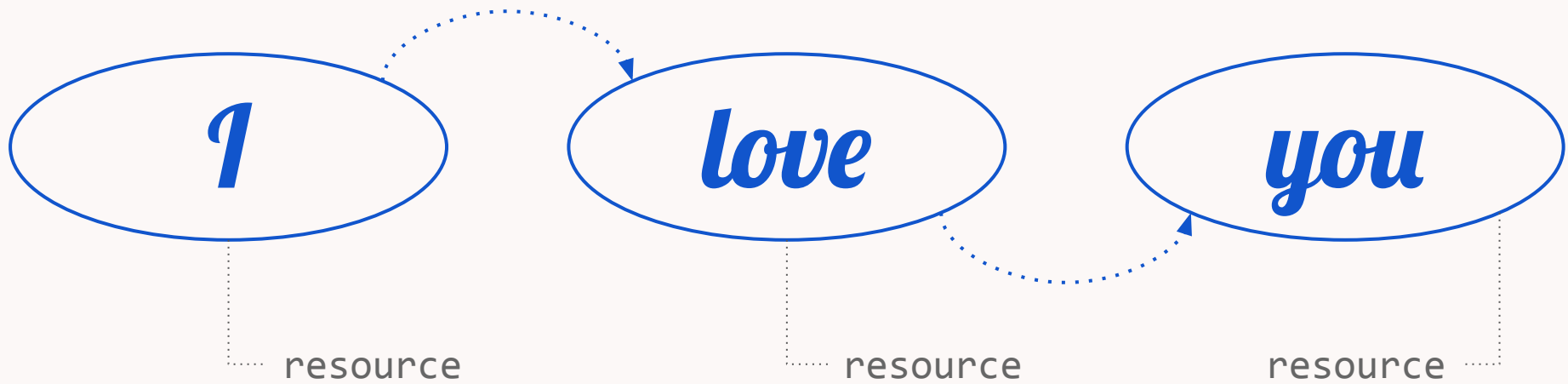
node

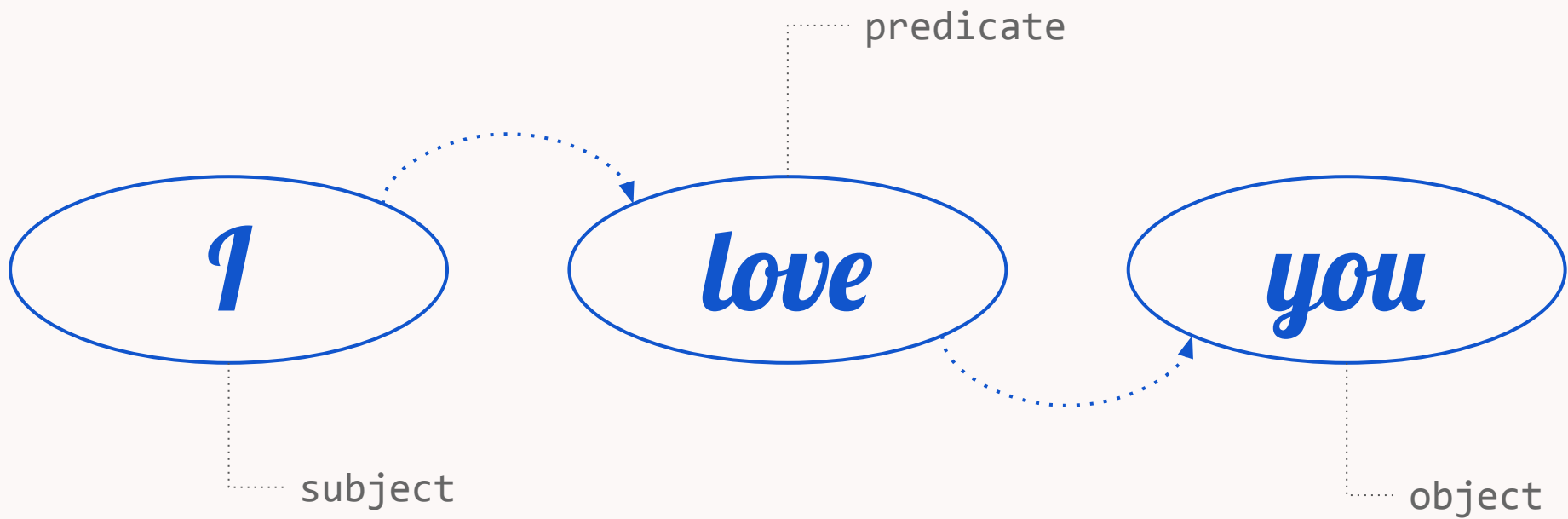
love

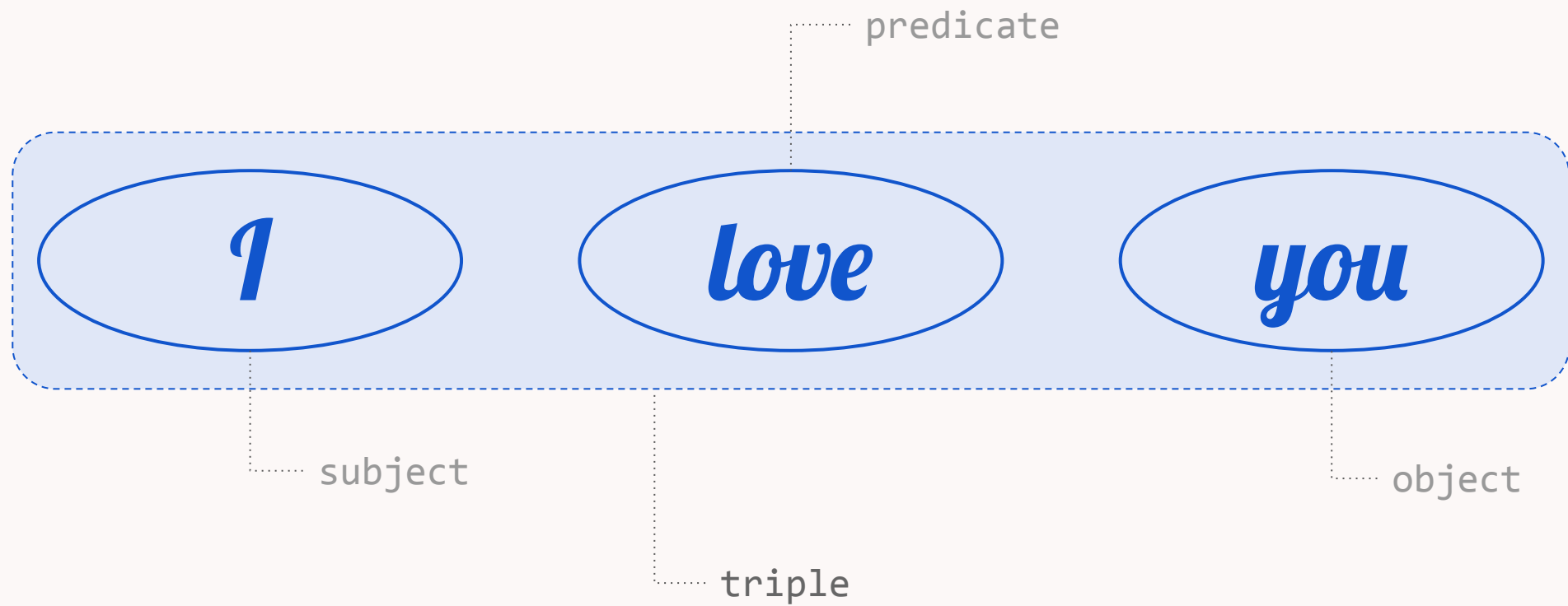


node











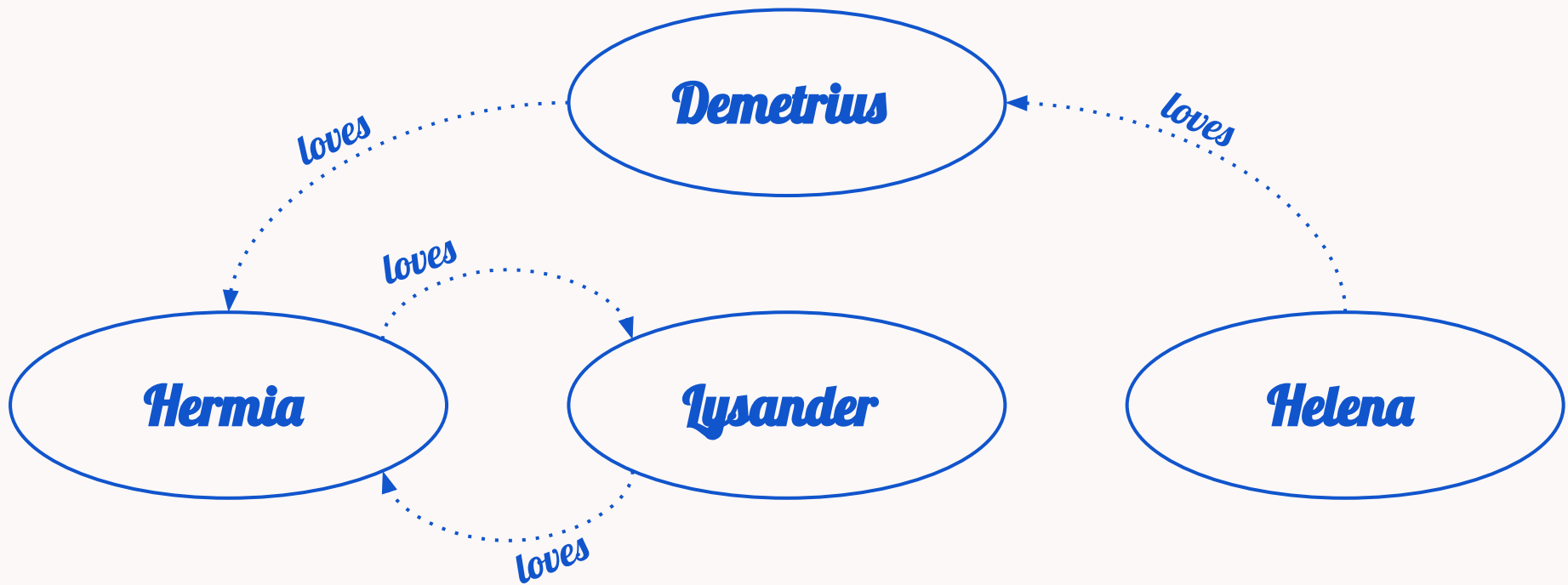
<https://www.rijksmuseum.nl/en/collection/RP-P-1987-52>

Demetrius

Hermia

Lysander

Helena



Hermia

loves

Lysander

Lysander

loves

Hermia

Demetrius

loves

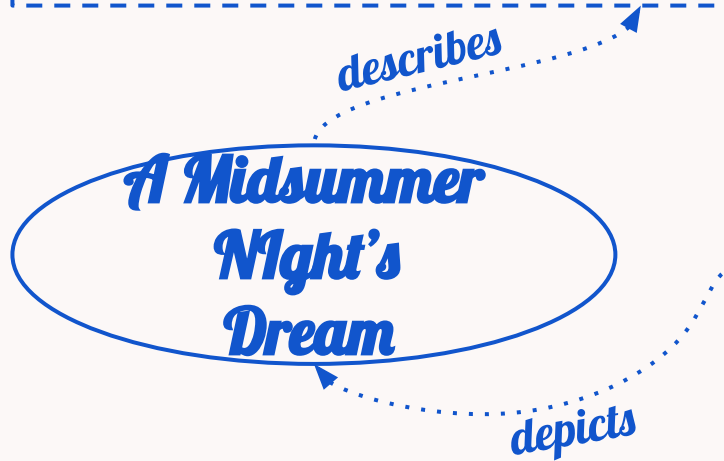
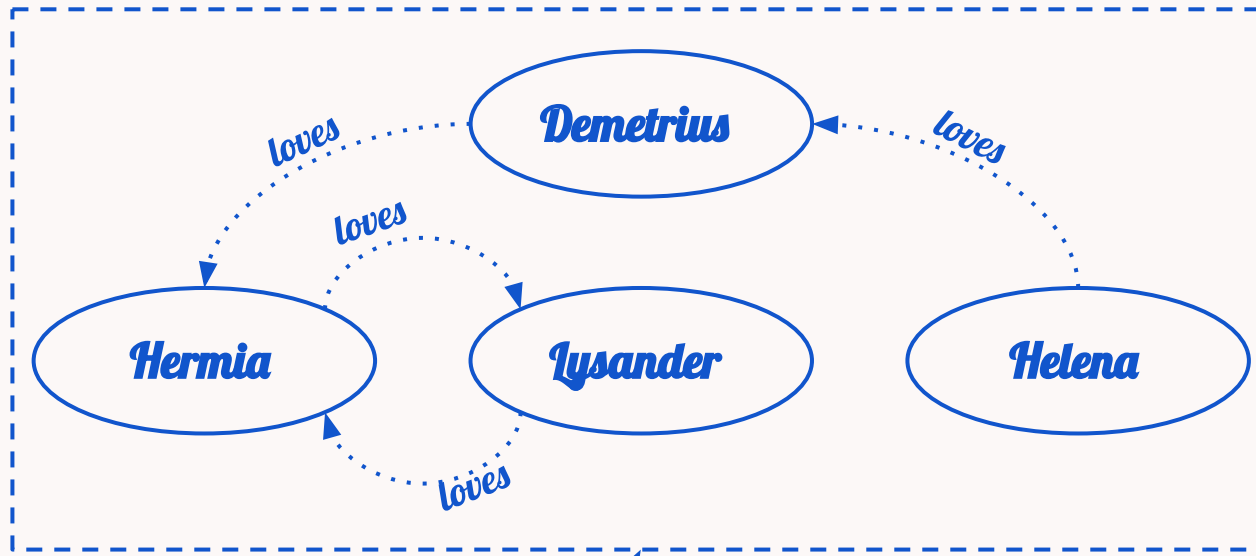
Hermia

Helena

loves

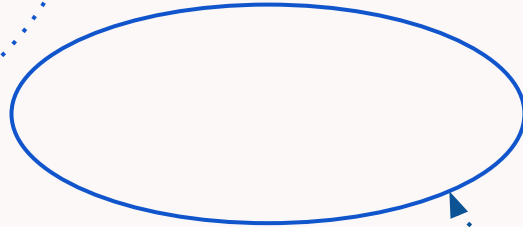
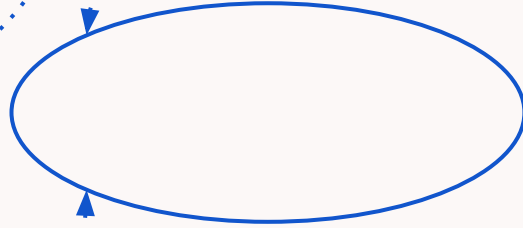
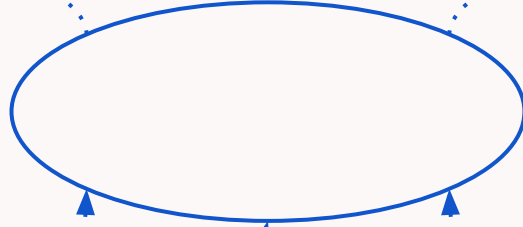
Demetrius

<Hermia> <loves> <Lysander> .
<Lysander> <loves> <Hermia> .
<Demetrius> <loves> <Hermia> .
<Helena> <loves> <Demetrius> .



base <<https://dahss.iarthislab.eu/2024/>>

```
<situationship> {  
  <Hermia> <loves> <Lysander> .  
  <Lysander> <loves> <Hermia> .  
  <Demetrius> <loves> <Hermia> .  
  <Helena> <loves> <Demetrius> .  
}  
<midsummer night's dream> <describes> <situationship> .  
<RP-P-1987-52> <depicts> <midsummer night's dream> .
```



<https://www.rijksmuseum.nl/en/collection/SK-A-5033>

<https://www.rijksmuseum.nl/en/collection/SK-C-1768>

Rembrandt

created



depicts

Marten



depicts

Oopjen

spouse



Rembrandt

created



Rembrandt

created



depicts

Marten



depicts

Oopjen

Marten

spouse

Oopjen



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[Random Item](#)
[Query Service](#)
[Nearby](#)
[Help](#)
[Donate](#)

Special page

Search

To search for Wikidata items by their title on a given site, use [Special:ItemByTitle](#).

Advanced search:

Search in:

<http://www.wikidata.org/entity/Q5598>

wd:Q5598

wd:Q5598

Rembrandt

created

wd:Q19421105

wd:Q19421160



depicts

depicts

wd:Q19421058

Marten

wd:Q19421075

Oopjen

spouse

FOAF Vocabulary Specification 0.99

Namespace Document 14 January 2014 - *Paddington Edition*

This version:

<http://xmlns.com/foaf/spec/20140114.html> (rdf)

Latest version:

<http://xmlns.com/foaf/spec/> (rdf)

Previous version:

<http://xmlns.com/foaf/spec/20100809.html> (rdf)

Authors:

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Contributors:

Members of the FOAF mailing list (foaf-dev@lists.foaf-project.org) and the wider [RDF and Semantic Web developer community](#). See [acknowledgements](#).

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This work is licensed under a [Creative Commons Attribution License](#). This copyright applies to the *FOAF Vocabulary Specification* and accompanying documentation in RDF. Regarding underlying technology, FOAF uses W3C's [RDF](#) technology, an open Web standard that can be freely used by anyone.



Property: foaf:made

made - Something that was made by this agent.

Status: stable

Domain: having this property implies being a [Agent](#)

Range: every value of this property is a [Thing](#)

Property: foaf:depicts

depicts - A thing depicted in this representation.

Status: testing

Domain: having this property implies being a [Image](#)

Range: every value of this property is a [Thing](#)

<http://xmlns.com/foaf/spec/>

wd:Q5598

Rembrandt

foaf:made



created

wd:Q19421105

wd:Q19421160



foaf:depicts



depicts

foaf:depicts



depicts

wd:Q19421058

Marten

wd:Q19421075

Oopjen

spouse

RELATIONSHIP: A vocabulary for describing relationships between people

Other formats: [RDF/XML](#)

Creators

[Ian Davis](#)

Eric Vitiello Jr

A vocabulary for describing relationships between people

Please direct feedback on this document to the [FOAF-DEV mailing list](#)"

Spouse Of

URI: <http://purl.org/vocab/relationship/spouseOf>

A person who is married to this person

<https://vocab.org/relationship/>

wd:Q5598

Rembrandt

foaf:made

created

wd:Q19421105

wd:Q19421160



foaf:depicts

depicts

wd:Q19421058

Marten

foaf:depicts

depicts

wd:Q19421075

Oopjen

rel:spouseOf ✨

spouse

wd:Q5598 foaf:made wd:Q19421105 .
wd:Q5598 foaf:made wd:Q19421160 .
wd:Q19421105 foaf:depicts wd:Q19421058 .
wd:Q19421160 foaf:depicts wd:Q19421075 .
wd:Q19421058 rel:spouseOf wd:Q19421075 .
wd:Q19421075 rel:spouseOf wd:Q19421058 .

```
prefix wd: <http://www.wikidata.org/entity/>
prefix foaf: <http://xmlns.com/foaf/0.1/>
prefix rel: <http://purl.org/vocab/relationship/>

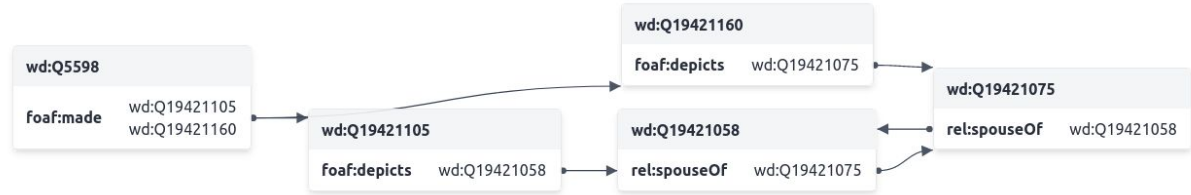
wd:Q5598 foaf:made wd:Q19421105 .
wd:Q5598 foaf:made wd:Q19421160 .
wd:Q19421105 foaf:depicts wd:Q19421058 .
wd:Q19421160 foaf:depicts wd:Q19421075 .
wd:Q19421058 rel:spouseOf wd:Q19421075 .
wd:Q19421075 rel:spouseOf wd:Q19421058 .
```

RDF editor

text/turtle

```
1 prefix wd: <http://www.wikidata.org/entity/>
2 prefix foaf: <http://xmlns.com/foaf/0.1/>
3 prefix rel: <http://purl.org/vocab/relationship/>
4
5 wd:Q5598 foaf:made wd:Q19421105 .
6 wd:Q5598 foaf:made wd:Q19421160 .
7 wd:Q19421105 foaf:depicts wd:Q19421058 .
8 wd:Q19421160 foaf:depicts wd:Q19421075 .
9 wd:Q19421058 rel:spouseOf wd:Q19421075 .
10 wd:Q19421075 rel:spouseOf wd:Q19421058 .
```

Representation



May 15, 2020

1 Network Analysis of RDF Graphs

In this notebook we provide basic facilities for performing network analyses of RDF graphs easily with Python [rdflib](#) and [networkx](#)

We do this in 4 steps: 1. Load an arbitrary RDF graph into [rdflib](#) 2. Get a subgraph of relevance (optional) 3. Convert the [rdflib](#) Graph into an [networkx](#) Graph, as shown [here](#) 4. Get an network analysis report by running [networkx](#)'s algorithms on that data structure

1.1 0. Preparation

```
[13]: # Install required packages in the current Jupyter kernel
      # Uncomment the following lines if you need to install these libraries
      # If you run into permission issues, try with the --user option
      import sys
      # !pip install -q rdflib networkx matplotlib scipy
      !{sys.executable} -m pip install rdflib networkx matplotlib scipy --user

      # Imports
      from rdflib import Graph as RDFGraph
      from rdflib.extras.external_graph_libs import rdflib_to_networkx_graph
      import networkx as nx
      from networkx import Graph as NXGraph
      import matplotlib.pyplot as plt
      import statistics
      import collections
```