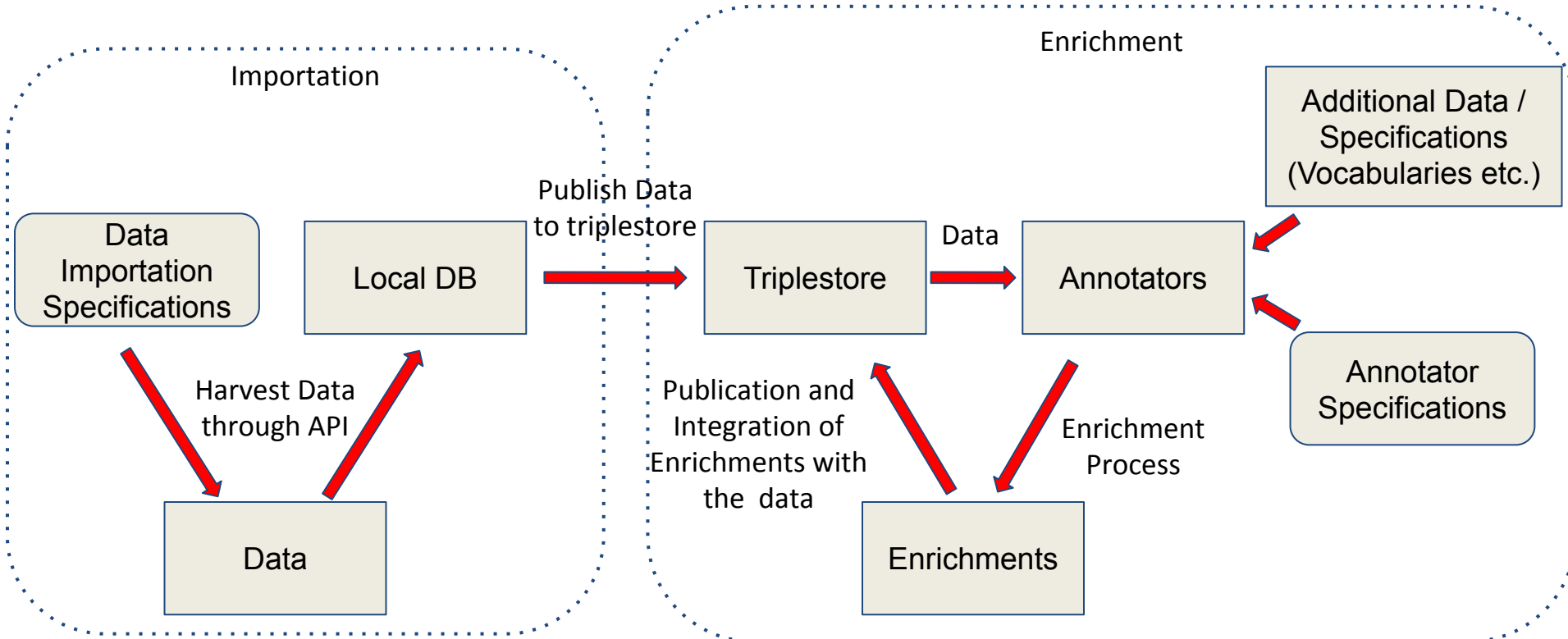


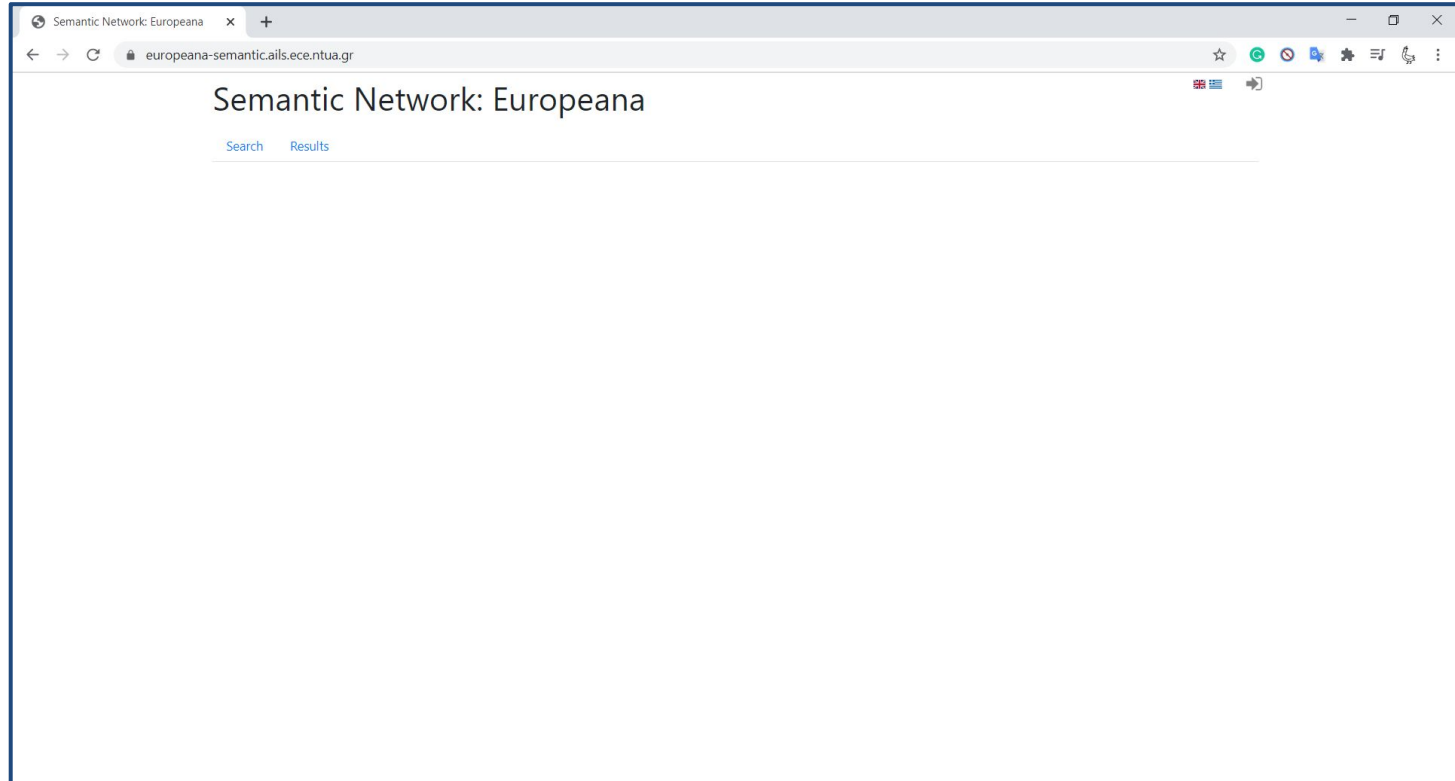
Auto Enrichment Tool

Orfeas Menis - Mastromichalakis

Workflow Overview



Main Page - Visitor



Login Page



Semantic Network: Europeana

Search Results

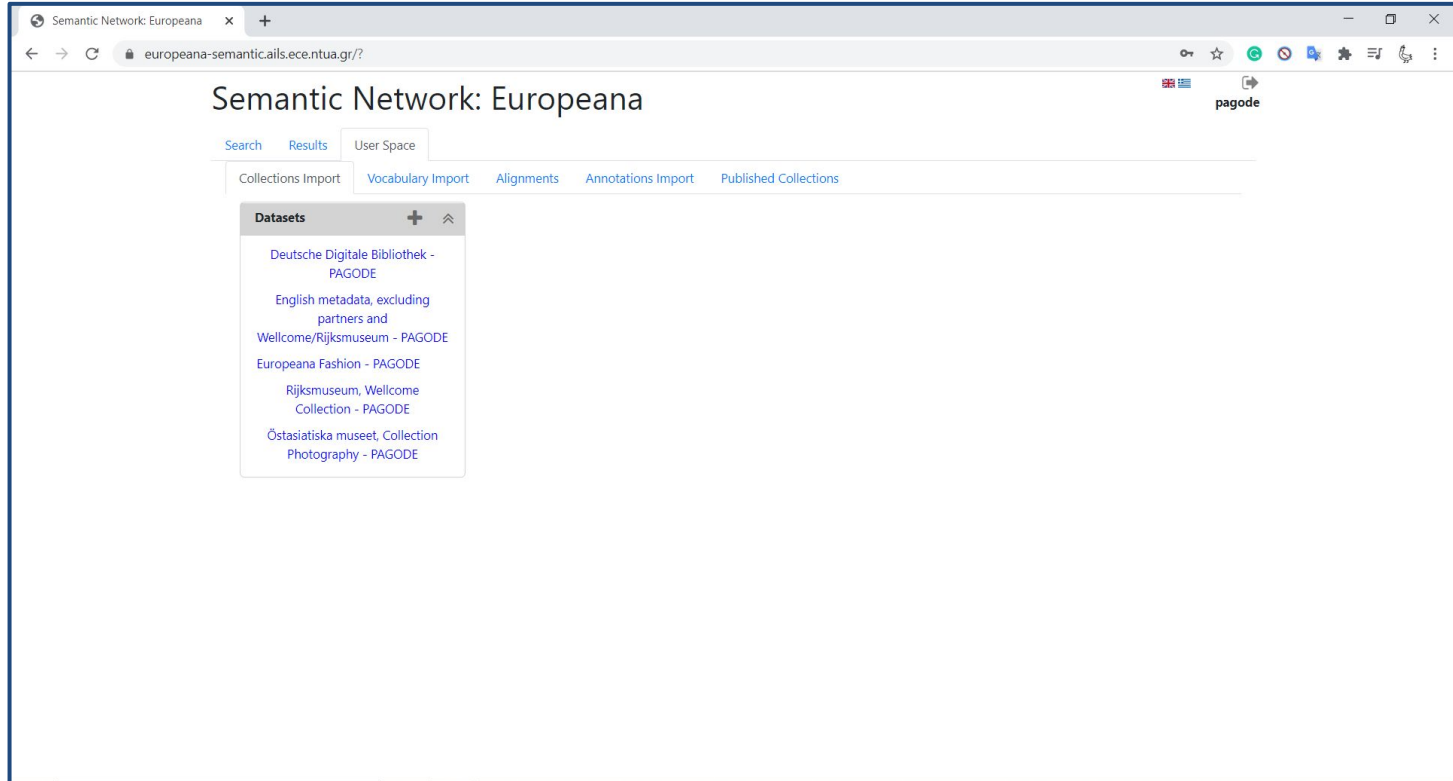
Sign In

Username

Password

OK Cancel

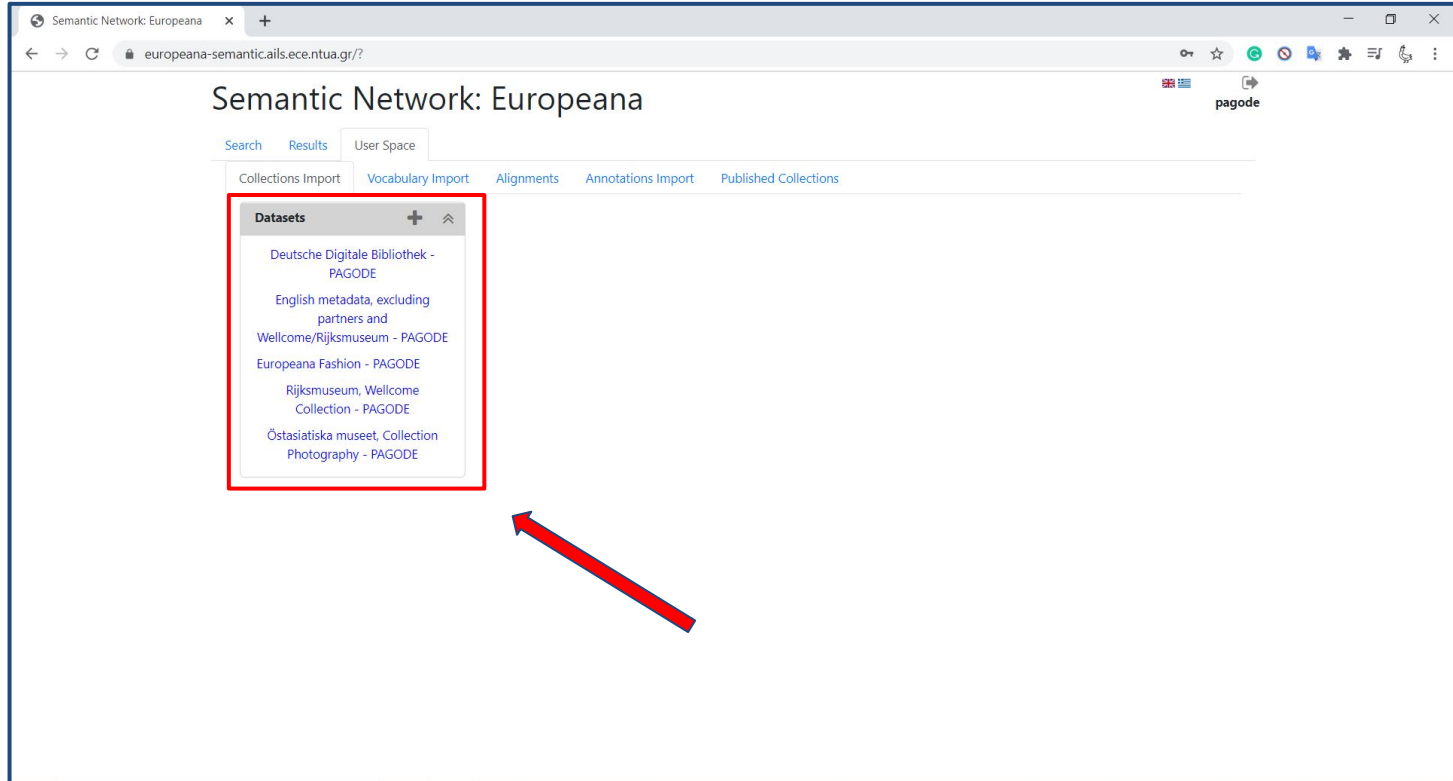
User Space - Collections Import



The screenshot shows a web browser window with the address bar displaying "europeana-semantic.ails.ece.ntua.gr/?". The page title is "Semantic Network: Europeana". The interface includes a navigation bar with tabs: "Search", "Results", and "User Space". Under "User Space", there are sub-tabs: "Collections Import", "Vocabulary Import", "Alignments", "Annotations Import", and "Published Collections". The "Collections Import" tab is active, showing a "Datasets" section with a list of datasets:

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

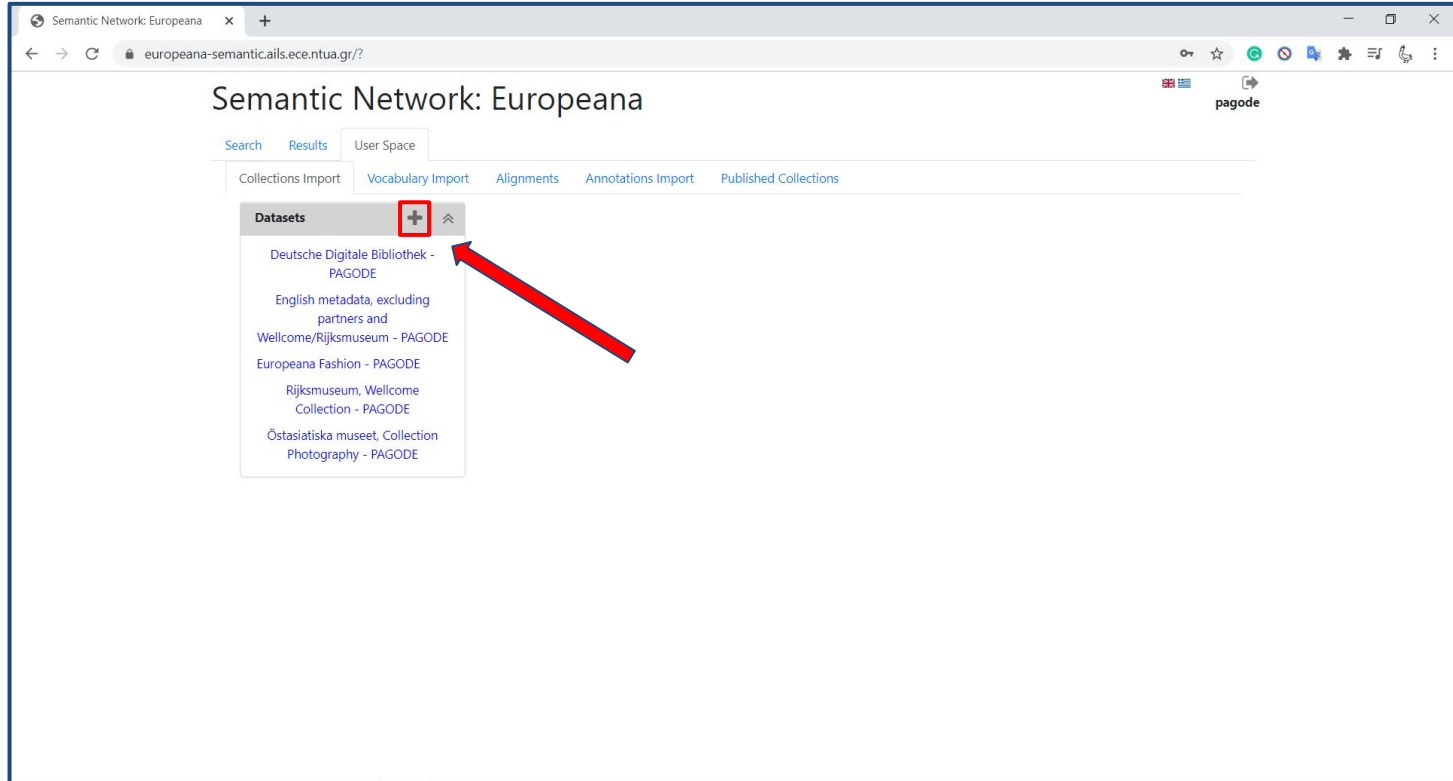
My Imported Collections



The screenshot shows the 'Semantic Network: Europeana' web application. The browser address bar displays 'europeana-semantic.ais.ece.ntua.gr/?'. The page has a navigation bar with tabs: 'Search', 'Results', 'User Space', 'Collections Import', 'Vocabulary Import', 'Alignments', 'Annotations Import', and 'Published Collections'. The 'Collections Import' tab is active. Below the navigation bar, a 'Datasets' panel is open, showing a list of imported collections. A red box highlights this list, and a red arrow points to it from below. The list contains the following items:

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

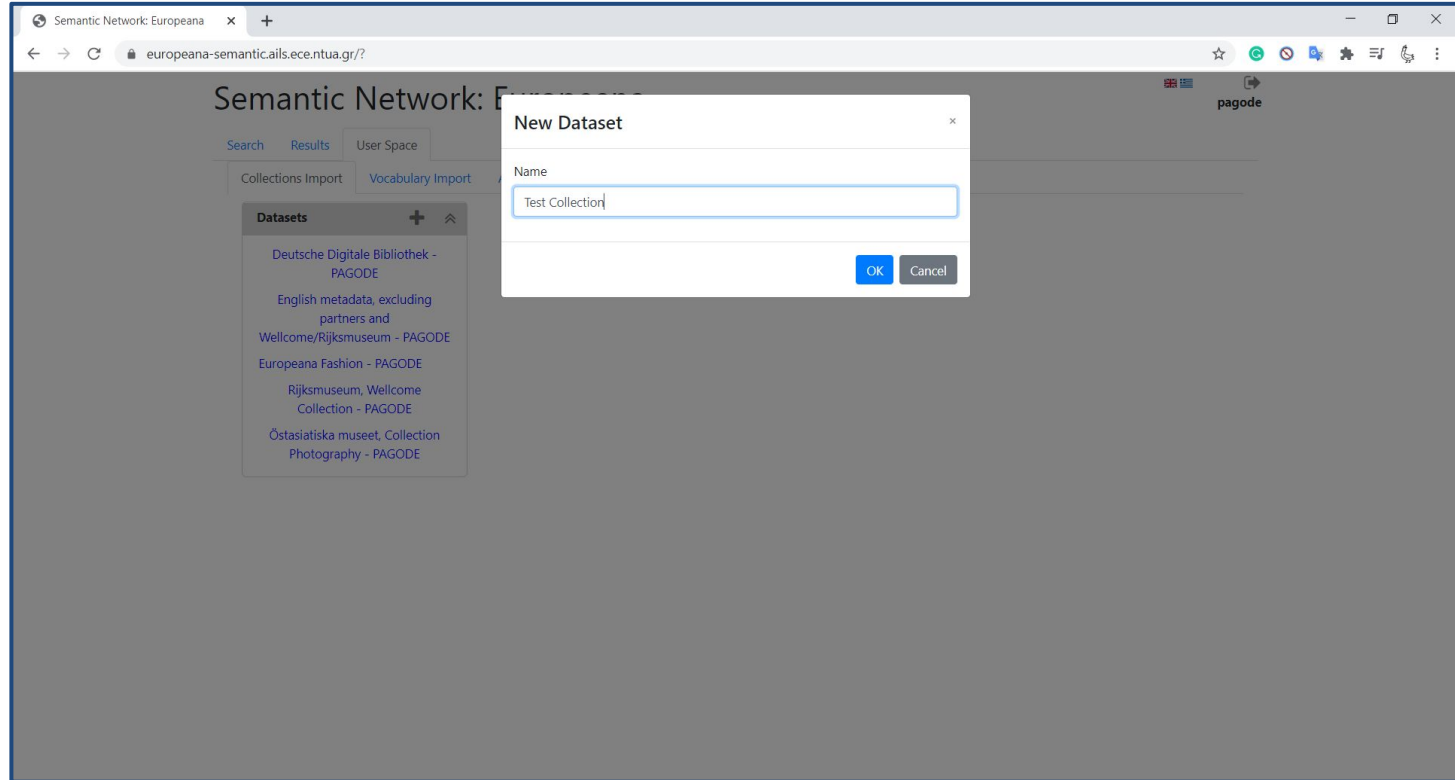
Add new Collection



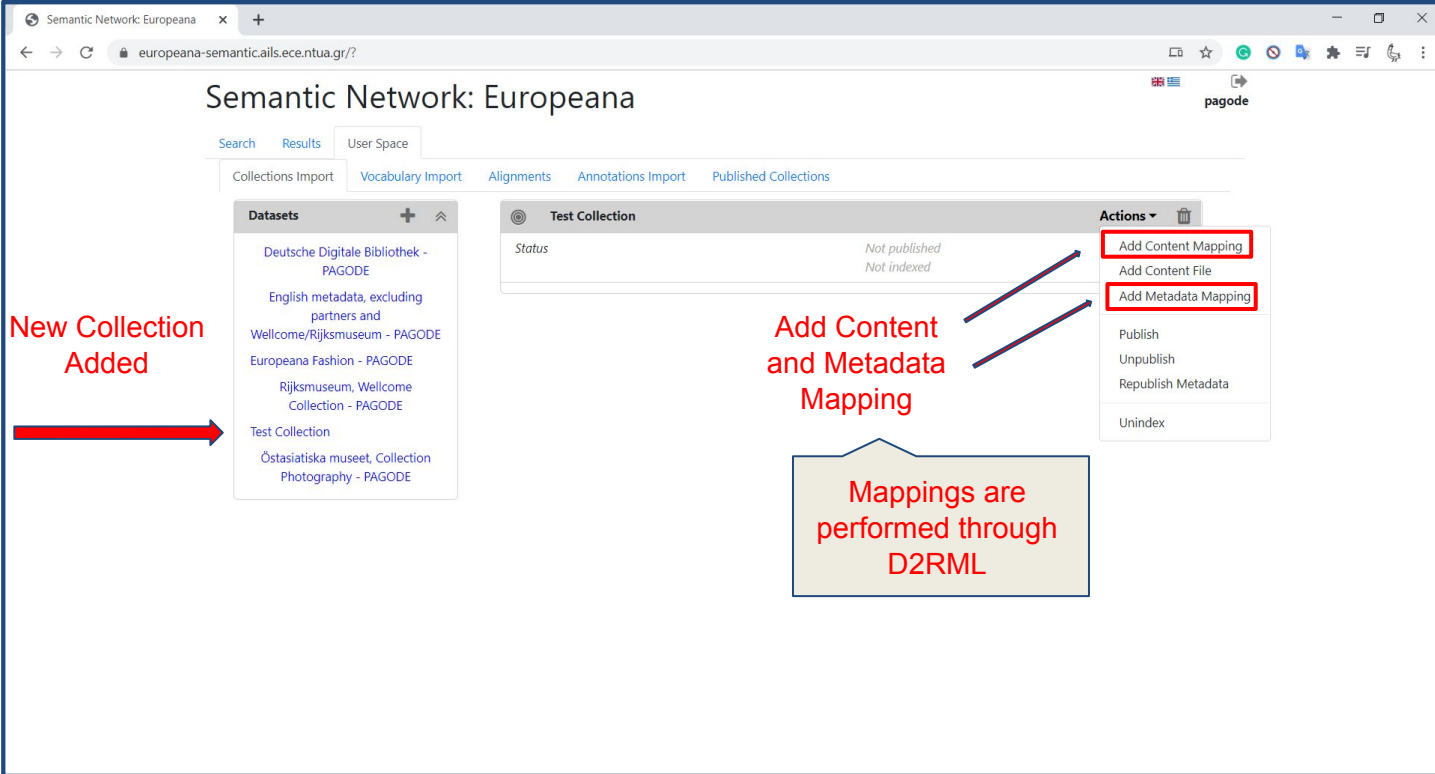
The screenshot shows the 'Semantic Network: Europeana' web application. The browser address bar displays 'europeana-semantic.ais.ece.ntua.gr/?'. The page features a navigation bar with tabs: 'Search', 'Results', and 'User Space'. Below this, there are links for 'Collections Import', 'Vocabulary Import', 'Alignments', 'Annotations Import', and 'Published Collections'. A 'Datasets' dropdown menu is open, showing a list of existing datasets. A red square highlights a '+' icon at the top of this menu, and a red arrow points to it from the right. The datasets listed are:

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

Add new Collection



Import new Collection



The screenshot shows the 'Semantic Network: Europeana' web interface. The browser address bar displays 'europeana-semantic.ails.ece.ntua.gr/?'. The page title is 'Semantic Network: Europeana'. The navigation bar includes 'Search', 'Results', 'User Space', 'Collections Import', 'Vocabulary Import', 'Alignments', 'Annotations Import', and 'Published Collections'. The 'Datasets' panel on the left lists several collections, with 'Test Collection' highlighted. A red arrow points to this collection with the text 'New Collection Added'. The 'Test Collection' details show its status as 'Not published' and 'Not indexed'. The 'Actions' dropdown menu is open, showing options: 'Add Content Mapping', 'Add Content File', 'Add Metadata Mapping', 'Publish', 'Unpublish', 'Republish Metadata', and 'Unindex'. The first three options are highlighted with red boxes. Two blue arrows point from the text 'Add Content and Metadata Mapping' to the 'Add Content Mapping' and 'Add Metadata Mapping' options. A callout box at the bottom states 'Mappings are performed through D2RML'.

New Collection Added

Add Content and Metadata Mapping

Mappings are performed through D2RML

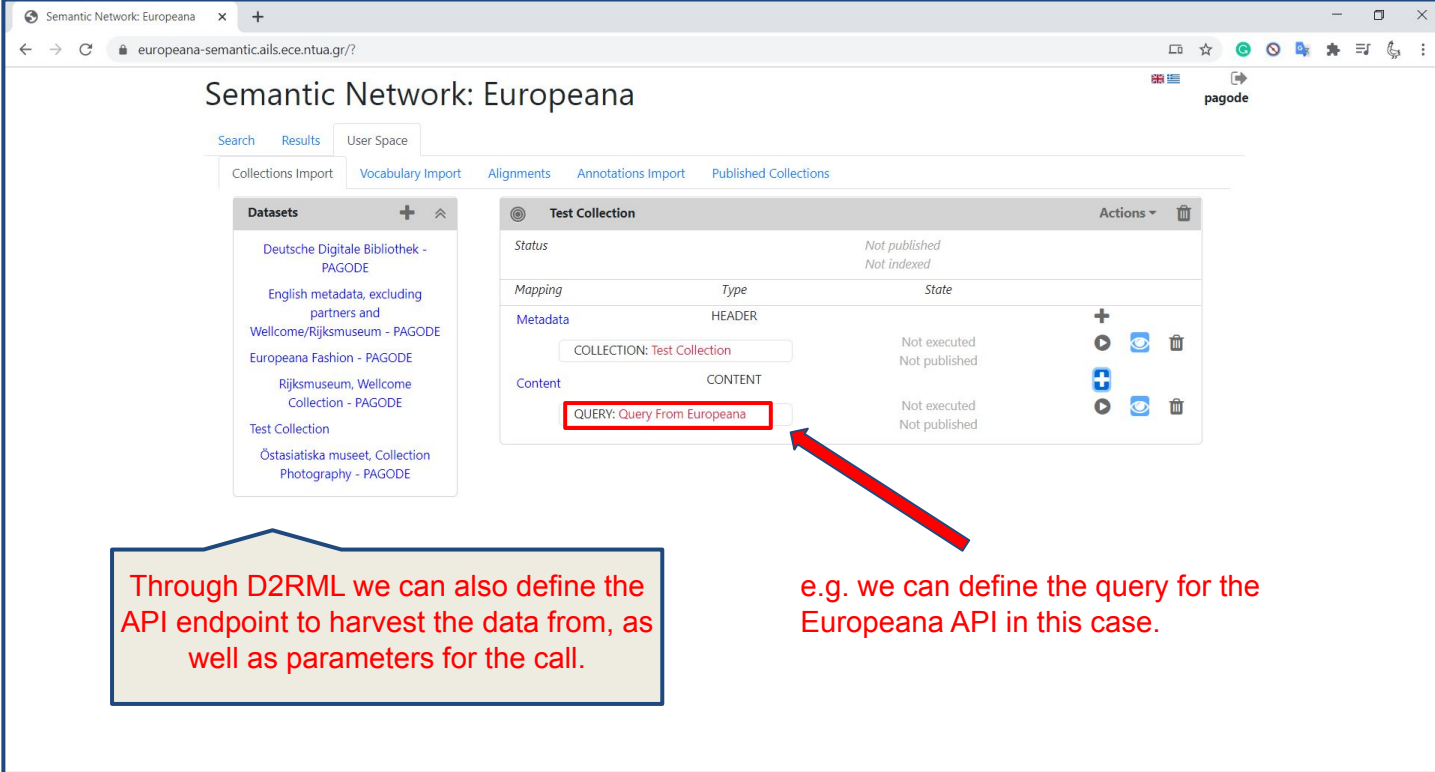
What is D2RML?

D2RML^[1] is a language for transforming heterogeneous data (from various sources and of various formats) to RDF datasets.

Extension of the R2RML mapping language.

Created by NTUA.

Import Data



The screenshot shows the 'Semantic Network: Europeana' web interface. The 'Test Collection' configuration is displayed, showing a table with columns for Mapping, Type, and State. The 'Query' field is highlighted with a red box and a red arrow pointing to it.

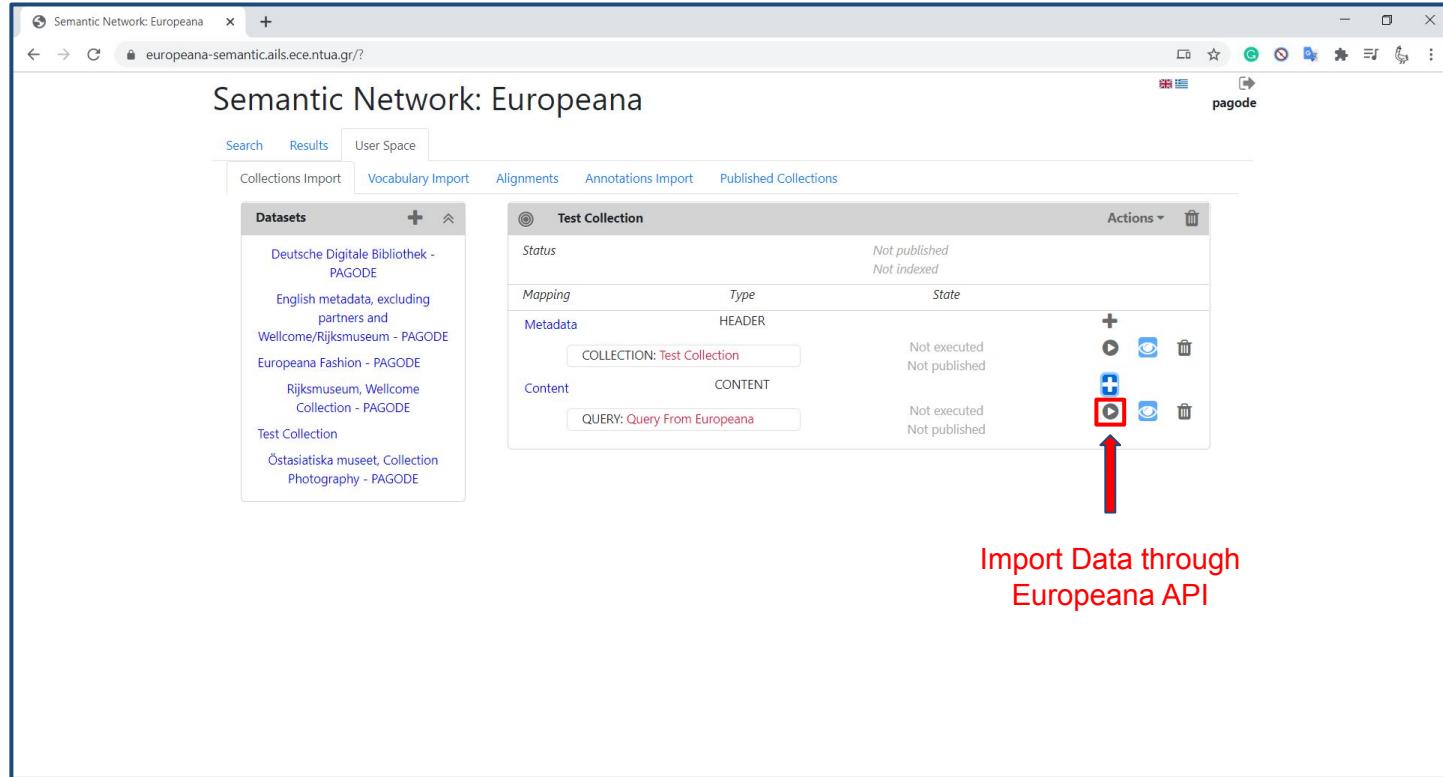
Mapping	Type	State
Metadata	HEADER	Not executed Not published
Content	CONTENT	Not executed Not published

The 'Query' field is highlighted with a red box and a red arrow pointing to it.

Through D2RML we can also define the API endpoint to harvest the data from, as well as parameters for the call.

e.g. we can define the query for the Europeana API in this case.

Import Data

The screenshot shows the 'Semantic Network: Europeana' web interface. The browser address bar displays 'europeana-semantic.ails.ece.ntua.gr/'. The page title is 'Semantic Network: Europeana'. The navigation bar includes 'Search', 'Results', 'User Space', 'Collections Import', 'Vocabulary Import', 'Alignments', 'Annotations Import', and 'Published Collections'. The 'Datasets' sidebar lists several collections, including 'Deutsche Digitale Bibliothek - PAGODE', 'English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE', 'Europeana Fashion - PAGODE', 'Rijksmuseum, Wellcome Collection - PAGODE', 'Test Collection', and 'Östasiatiska museet, Collection Photography - PAGODE'. The 'Test Collection' details are shown in the main area, including 'Status' (Not published, Not indexed), 'Mapping' (Metadata, Type: HEADER, State: Not executed, Not published), and 'Content' (CONTENT, QUERY: Query From Europeana, State: Not executed, Not published). A red arrow points to the 'Import Data through Europeana API' button, which is a blue circle with a white play icon.

Import Data through
Europeana API

Publish Imported Collection to TripleStore



Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import Alignments Annotations Import Published Collections

Datasets

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Test Collection
- Östasiatiska museet, Collection Photography - PAGODE

Deutsche Digitale Bibliothek - PAGODE

Status: Published private (at 9/22/2020, 1:37:25 PM)
Not indexed

Mapping	Type	State	
Metadata	HEADER	Executed	+
COLLECTION: Deutsche Digitale Bibliothek - PAGODE		(at 9/22/2020, 1:08:28 PM)	▶
		Published (at 9/22/2020, 1:37:25 PM)	
Content	CONTENT	Executed	+
QUERY: qf=PROVIDER%3A%22Deutsche%20Digitale%20Bibliothek%22&query=China		(at 9/22/2020, 1:36:09 PM)	▶
		Published (at 9/22/2020, 1:37:25 PM)	

Actions

- Add Content Mapping
- Add Content File
- Add Metadata Mapping
- Publish**
- Unpublish
- Republish Metadata
- Index
- Unindex

See Dataset/Collection Import Status



Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import Alignments Annotations Import Published Collections

Click on the Dataset name

Datasets

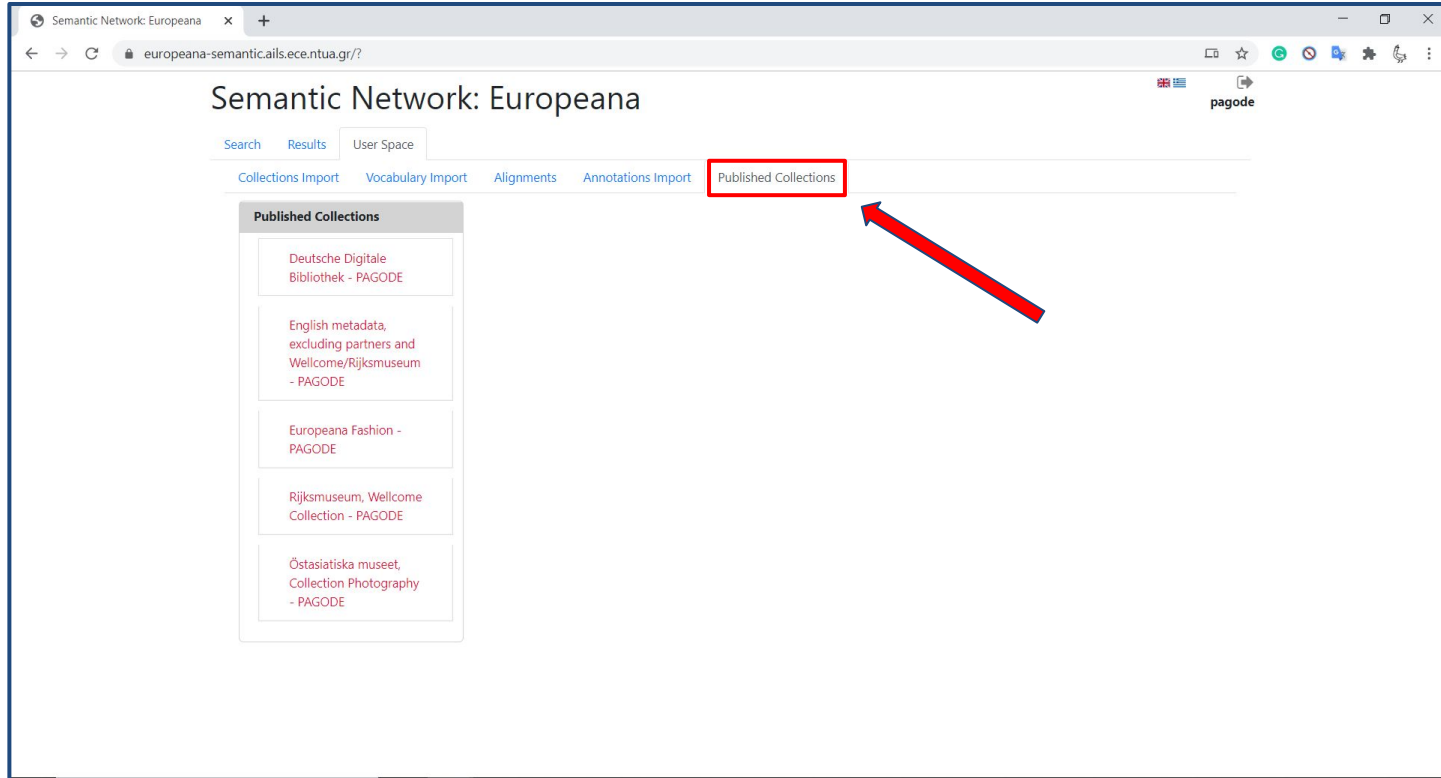
- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

Deutsche Digitale Bibliothek - PAGODE

Status: Published private (at 9/22/2020, 1:37:25 PM)
Not indexed

Mapping	Type	State	
Metadata	HEADER	Executed (at 9/22/2020, 1:08:28 PM)	+ 🔍 🗑️
COLLECTION: Deutsche Digitale Bibliothek - PAGODE			
Content	CONTENT	Executed (at 9/22/2020, 1:36:09 PM)	+ 🔍 🗑️
QUERY: qf=PROVIDER%3A%22Deutsche%20Digitale%20Bibliothek%22&query=China			
Published (at 9/22/2020, 1:37:25 PM)			

Published Collections



The screenshot shows a web browser window with the URL `europaana-semantic.ails.ece.ntua.gr/?`. The page title is "Semantic Network: Europeana". The navigation bar includes tabs for "Search", "Results", "User Space", "Collections Import", "Vocabulary Import", "Alignments", "Annotations Import", and "Published Collections". The "Published Collections" tab is highlighted with a red box and a red arrow. Below the navigation bar, the "Published Collections" section lists five collections:

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

Properties of Published Collection



Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import Alignments Annotations Import Published Collections

Published Collections

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE

URI	Nr. of values	Actions
http://www.europeana.eu/schemas/edm/ProvidedCHO	6104	
http://www.w3.org/2002/07/owl#sameAs	1	Actions
http://www.openarchives.org/ore/terms/Proxy	12212	
http://purl.org/dc/elements/1.1/contributor	3113	Actions
http://purl.org/dc/elements/1.1/coverage	67	Actions
http://purl.org/dc/elements/1.1/creator	1714	Actions
http://purl.org/dc/elements/1.1/date	6378	Actions
http://purl.org/dc/elements/1.1/description	6512	Actions
http://purl.org/dc/elements/1.1/format	2255	Actions
http://purl.org/dc/elements/1.1/identifier	10737	Actions

Click on the Dataset name

Nr. of values

See values

See field values



Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import

Published Collections

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiskt museet, Collection Photography - PAGODE

Values

Original Image	129
Painted in underglaze cobalt blue with a design of passing boats and a figure walking across a bridge.	100
Shelf Mark - Or.Ms 20	78
Information:	51
Porcelain saucer decorated on the interior with a design of passing boats and a figure on a bridge in underglaze cobalt blue with exterior café au lait glaze.	50
Porcelain tea bowl decorated on the interior with a design of passing boats and a figure on a bridge in underglaze cobalt blue with exterior café au lait glaze.	50
Long, narrow rectangular Chinese domino made of bone, marked with one red dot and three black dots on each end and on both obverse and reverse.@en	40
Extended description:	37
Long, narrow rectangular Chinese domino made of bone, marked with two red dots on each end and on both obverse and reverse.@en	35
Long, narrow rectangular Chinese domino made of bone, marked with eight red dots on each end and on both obverse and reverse.@en	35
Illustrations: Illustrations	29
This image is from a selection of images that have either been tagged as being natural history content, or are taken from books concerning natural history. They were digitised as part of the Microsoft books project, a collaboration between Microsoft and the British Library. Some of these images have been tagged by users of the image sharing site, flickr.@en	27
Engraving	22

Group by value

6104

1 Actions

12212

3113 Actions

67 Actions

1714 Actions

6378 Actions

6512 Actions

2255 Actions

10737 Actions

Add Annotator



Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import Alignments Annotations Import Published Collections

Published Collections

- Deutsche Digitale Bibliothek - PAGODE
- English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE
- Europeana Fashion - PAGODE
- Rijksmuseum, Wellcome Collection - PAGODE
- Östasiatiska museet, Collection Photography - PAGODE

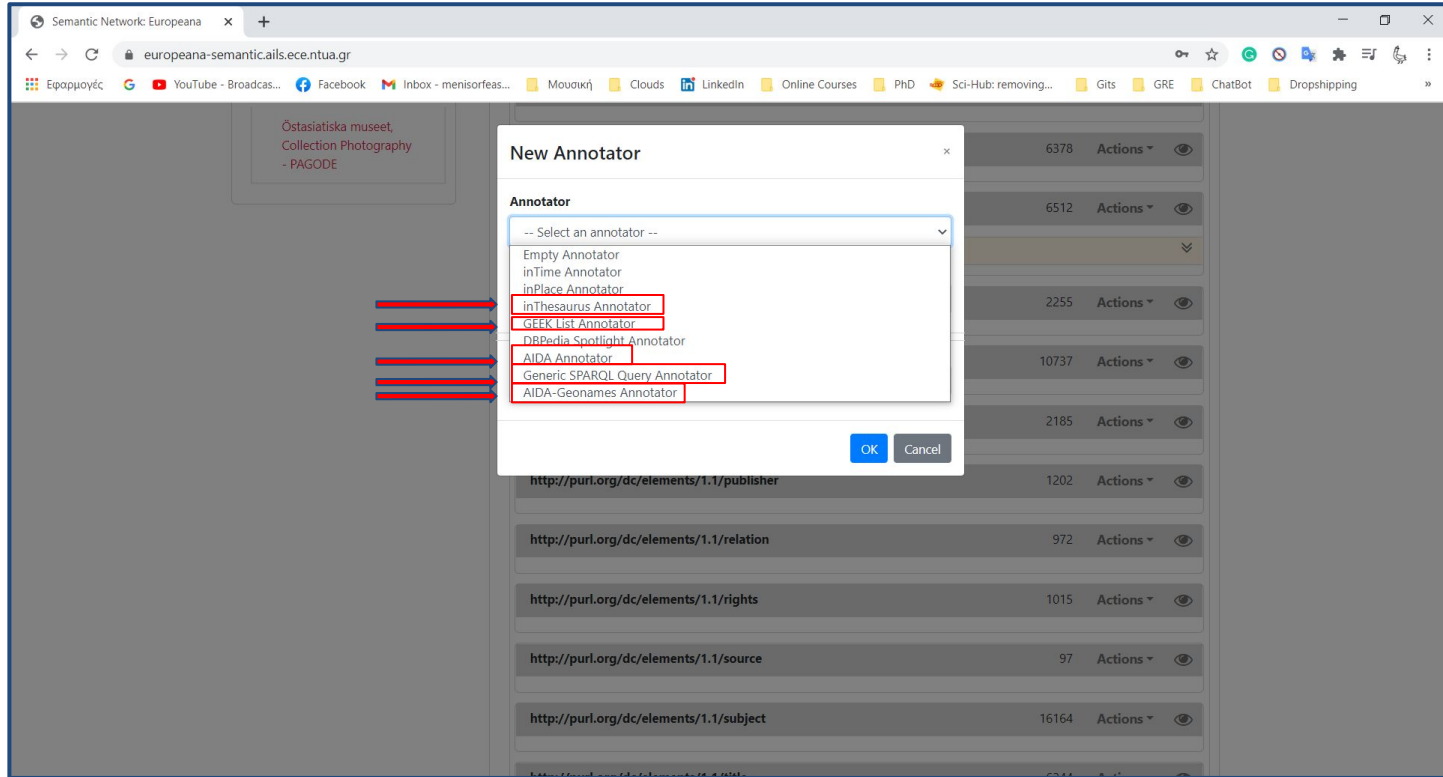
English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE Actions ▾

http://www.europeana.eu/schemas/edm/ProvidedCHO	6104	
http://www.w3.org/2002/07/owl#sameAs	1	Actions ▾
http://www.openarchives.org/ore/terms/Proxy	12212	
http://purl.org/dc/elements/1.1/contributor	3113	Actions ▾
http://purl.org/dc/elements/1.1/coverage	67	Actions ▾
http://purl.org/dc/elements/1.1/creator	1714	Actions ▾
http://purl.org/dc/elements/1.1/date	6378	Actions ▾
http://purl.org/dc/elements/1.1/description	6512	Actions ▾
http://purl.org/dc/elements/1.1/format	2255	Actions ▾
http://purl.org/dc/elements/1.1/identifier	10737	Actions ▾

Add Annotator

Vocabularize

Annotators

Semantic Network: Europeana

europaana-semantic.ails.ece.ntua.gr

Östasiatiska museet,
Collection Photography
- PAGODE

New Annotator

Annotator

-- Select an annotator --

- Empty Annotator
- inTime Annotator
- inPlace Annotator
- inThesaurus Annotator
- GEEK List Annotator
- DBpedia Spotlight Annotator
- AIDA Annotator
- Generic SPARQL Query Annotator
- AIDA-Geonames Annotator

OK Cancel

6378 Actions

6512 Actions

2255 Actions

10737 Actions

2185 Actions

1202 Actions

972 Actions

1015 Actions

97 Actions

16164 Actions

http://purl.org/dc/elements/1.1/publisher

http://purl.org/dc/elements/1.1/relation

http://purl.org/dc/elements/1.1/rights

http://purl.org/dc/elements/1.1/source

http://purl.org/dc/elements/1.1/subject

What is GEEK?

GEEK^[2] is a Named Entity Recognition and Disambiguation (NERD) system that extracts named entities in text and links them to a knowledge base using a graph-based method.

Created by NTUA.

What is AIDA?

AIDA^[3] is a framework and online tool for entity detection and disambiguation. Given a natural-language text or a Web table, AIDA maps mentions of ambiguous names onto canonical entities like people or places, registered in a knowledge base like DBpedia, Freebase, or YAGO.

Created by Max-Planck-Institut für Informatik.

What is a named entity?

In information extraction, a **named entity** is a real-world object, such as persons, locations, organizations, products, etc., that can be denoted with a proper name. It can be abstract or have a physical existence. Examples of named entities include Barack Obama, New York City, Volkswagen Golf, or anything else that can be named. [\[4\]](#)

NERD Example



“Leonardo painted Gioconda in the early 1500s, and now the painting is stored in the Louvre.”

Leonardo needs to be linked to the polymath, and not the famous Hollywood actor. Gioconda needs to be linked to Mona Lisa, and not Ponchielli’s opera. Louvre needs to be recognized as the French museum. The aim of a NERD tool is to eliminate such candidate entities that don’t appear to fit with the context of the given text.

Result of a NERD tool:

Leonardo → <https://www.wikidata.org/wiki/Q762> (Leonardo da Vinci)

Gioconda → <https://www.wikidata.org/wiki/Q12418> (Mona Lisa)

Louvre → <https://www.wikidata.org/wiki/Q1075988> (Louvre Palace)

What is SPARQL?

SPARQL is an RDF query language able to retrieve and manipulate data stored in RDF format. [\[5\]](#)

Wikidata provide a SPARQL endpoint, so through this annotator we can directly retrieve information from wikidata.

Place Annotator with Geonames URI.

2-Stage Annotator



In the future it will be implemented with GEEK as well.

Thesaurus Annotator



Smart String Matching with thesaurus terms.

Main annotator tool for PAGODE.

Multilingual.

Annotator Specifications



Semantic Network: Europeana x +

europaana-semantic.ails.ece.ntua.gr

http://purl.org/dc/elements/1.1/format

New Annotator

Annotator

inThesaurus Annotator

View as

http://sw.islab.ntua.gr/semaspace/ontology/term

language

en

scheme

mode

exact match URIs

Thesaurus

PAGODE Keywords

Preprocess

-- Select a function --

OK Cancel

2255 Actions

10737 Actions

1202 Actions

972 Actions

1015 Actions

97 Actions

16164 Actions

6244 Actions

614 Actions

1328 Actions

http://purl.org/dc/terms/created

Type of Annotator

Language

Thesaurus

Preprocessing

Preprocessing



Option to preprocess text before fed to the annotator.

Use Regular Expressions (RegEx) to manipulate text prior to enrichment process.

Very useful feature in combination with the SPARQL annotator to query wikidata for persons and/or organizations.

Enrichment Progress



Semantic Network: Europeana

europaana-semantic.ails.ece.ntua.gr

Wellcome/Rijksmuseum - PAGODE

Europeana Fashion - PAGODE

Rijksmuseum, Wellcome Collection - PAGODE

Östasiatiska museet, Collection Photography - PAGODE

<http://www.openarchives.org/ore/terms/Proxy> 12212

<http://purl.org/dc/elements/1.1/contributor> 3113 Actions

<http://purl.org/dc/elements/1.1/coverage> 67 Actions

<http://purl.org/dc/elements/1.1/creator> 1714 Actions

<http://purl.org/dc/elements/1.1/date> 6378 Actions

<http://purl.org/dc/elements/1.1/description> 6512 Actions

Annotators

☐ inthesaurus as <http://sw.islab.ntua.gr/semaspace/ontology/term> (since 10/23/2020, 12:31:10 PM) **Executing**

Parameters

Enr	SP#	4867	4867
0			

thesaurus: PAGODE Keywords
language: en
scheme:
mode: exact match URIs

Annotations

<http://sw.islab.ntua.gr/semaspace/ontology/term> Not executed Not published

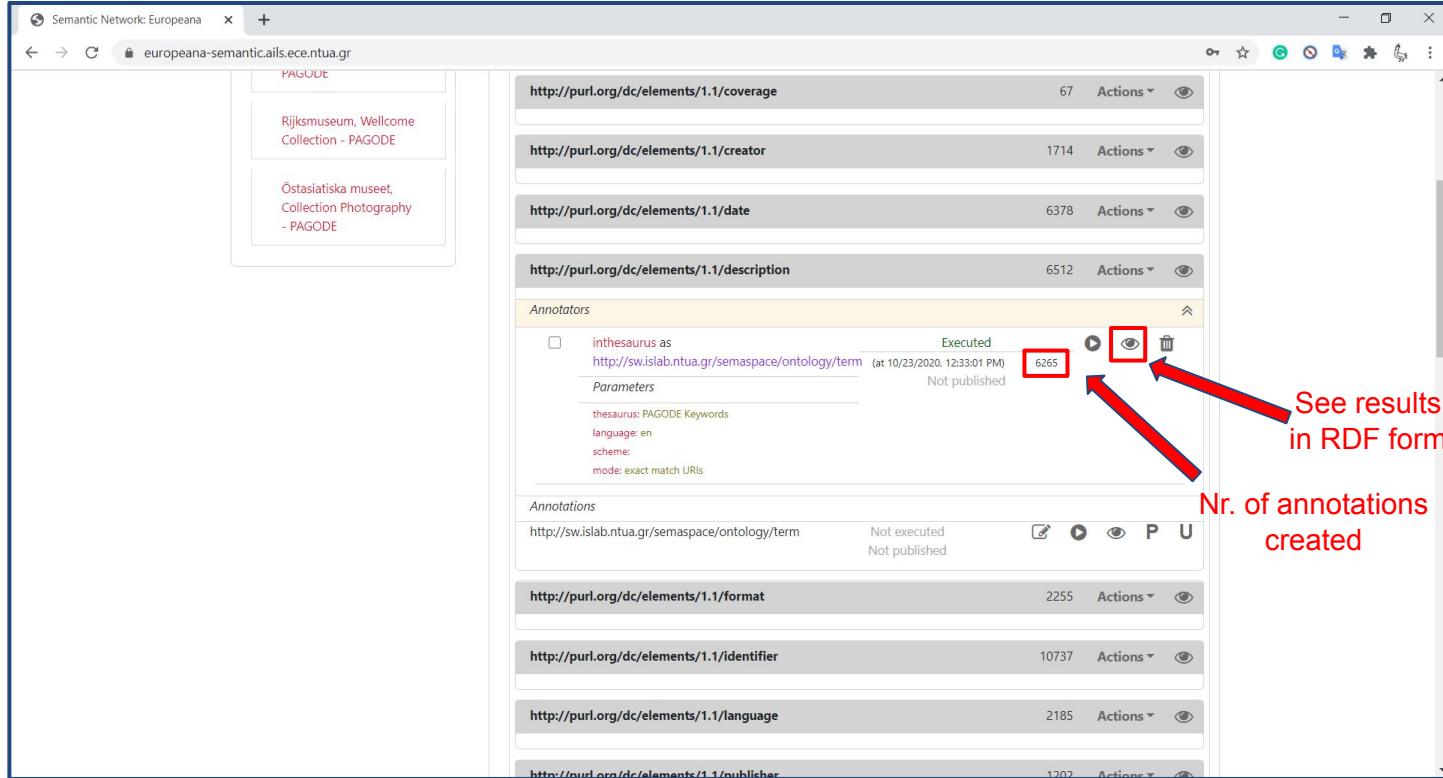
<http://purl.org/dc/elements/1.1/format> 2255 Actions

<http://purl.org/dc/elements/1.1/identifier> 10737 Actions

Status

Progress

Enrichment Finished



The screenshot displays the Semantic Network Europeana interface. On the left, a sidebar lists collections: PAGODE, Rijksmuseum, Wellcome Collection - PAGODE, and Östasiatiska museet, Collection Photography - PAGODE. The main area shows a list of URIs with their corresponding counts and actions. The URI <http://purl.org/dc/elements/1.1/coverage> has a count of 67. The URI <http://purl.org/dc/elements/1.1/creator> has a count of 1714. The URI <http://purl.org/dc/elements/1.1/date> has a count of 6378. The URI <http://purl.org/dc/elements/1.1/description> has a count of 6512. Below this, the 'Annotators' section shows a list of annotations. The first annotation is for the URI <http://sw.islab.ntua.gr/semaspace/ontology/term>, which has been executed at 10/23/2020, 12:33:01 PM. The number of annotations created is 6265, highlighted with a red box. A red arrow points from the text 'See results in RDF form' to the eye icon next to the 6265. Another red arrow points from the text 'Nr. of annotations created' to the 6265. The 'Annotations' section shows a list of annotations, including the URI <http://sw.islab.ntua.gr/semaspace/ontology/term>, which has not been executed and is not published.

Raw RDF Enrichments

Semantic Network: Europeana x +

europaana-semantic.ails.ece.ntua.gr

PAGODE

http://purl.org/dc/elements/1.1/coverage

Execution Result

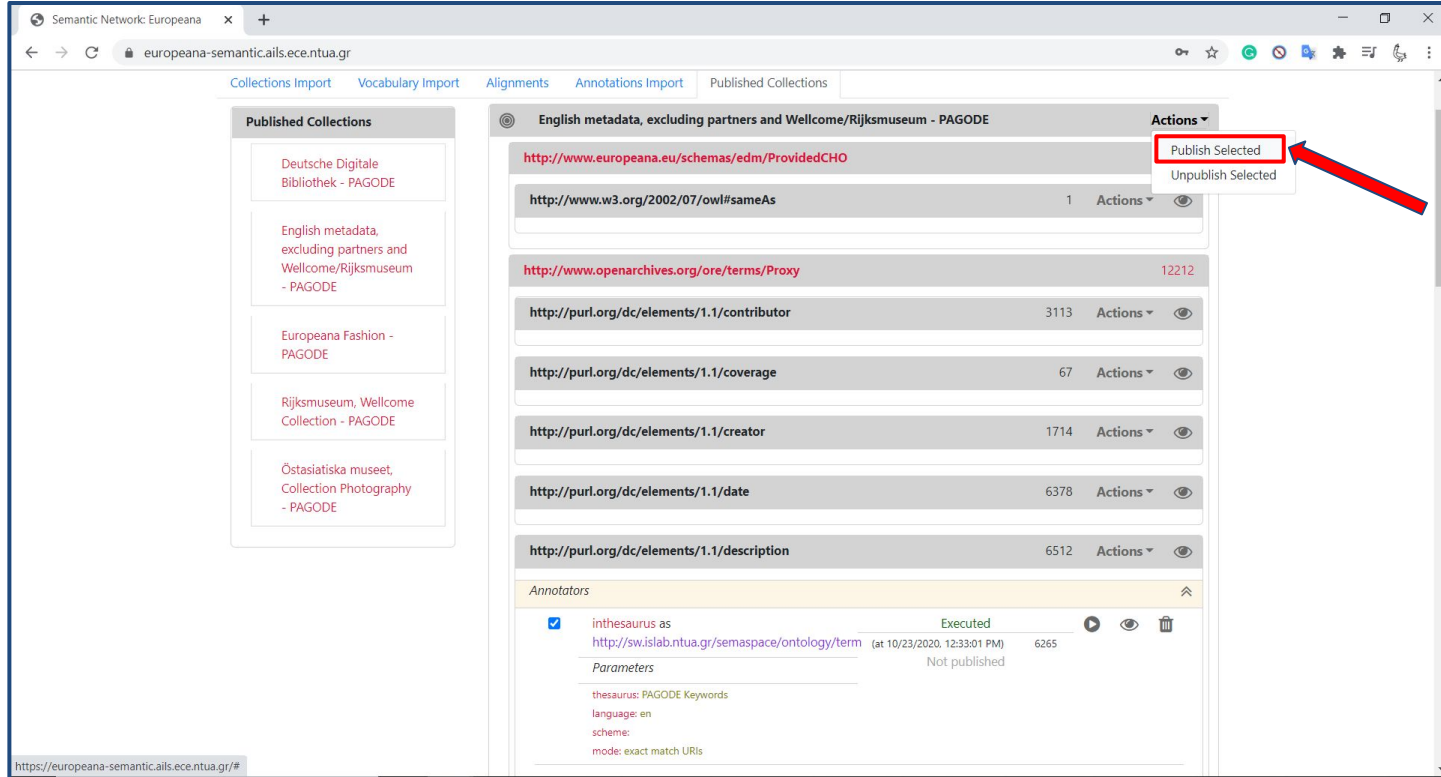
```
<http://sw.islab.ntua.gr/semaspace/resource/annotation/9ed8db00-a6ec-4ed8-bb1d-3b0e89c7bc59>
  a <http://sw.islab.ntua.gr/semaspace/model/TermAnnotation> , <http://www.w3.org/ns/oa#Annotation> ;
  <http://purl.org/dc/terms/created>
    "2020-10-23T09:31:10" ;
  <http://www.w3.org/ns/oa#hasBody>
    <http://www.wikidata.org/entity/Q97622398> ;
  <http://www.w3.org/ns/oa#hasTarget>
    [ <http://sw.islab.ntua.gr/annotation/end>
      404 ;
      <http://sw.islab.ntua.gr/annotation/onProperty>
        "<http://purl.org/dc/elements/1.1/description>" ;
      <http://sw.islab.ntua.gr/annotation/onValue>
        "In September 2006, Birmingham Archaeology undertook a programme of Historic Building Assessment and Recording at 13/14 Bradford Street, Walsall (NGR SP 0124898387) (SHR 13293). The work was commissioned by Dr C. Wong in order to fulfil a condition attached to planning permission to carry out a mixture of alterations and demolitions at the address in advance of its redevelopment as a Chinese restaurant. A desk-based assessment of all readily available published and unpublished documentary sources was undertaken. The building recording work of the principal structures was carried out to a degree equivalent to English Heritage (2006) level 3, whilst the sheds to the rear were recorded to Level 1. The street frontage building, which was constructed in the 1830s, retains some of its original features such as moulded picture rails and an elegant staircase. The industrial buildings to the rear were built in three distinct phases. It was found that the original function of the first phase of these buildings in the 1850s was for lorrying, or the production of metal horse furniture. These structures saw numerous changes in function; however, all were in some way associated with the leather industry."@en ;
      <http://sw.islab.ntua.gr/annotation/start>
        386 ;
      <http://www.w3.org/ns/oa#hasSource>
        <http://data.europeana.eu/proxy/provider/2020708/ADSlibrary_1099291>
    ] ;
  <https://www.w3.org/ns/activitystreams#generator>
    <http://apps.islab.ntua.gr/inknowledge/> .

<http://sw.islab.ntua.gr/semaspace/resource/annotation/cf9f9dcb9-2ab3-47b8-881e-0d173fe5fd27>
  a <http://sw.islab.ntua.gr/semaspace/model/TermAnnotation> , <http://www.w3.org/ns/oa#Annotation> ;
  <http://purl.org/dc/terms/created>
    "2020-10-23T09:31:10" ;
  <http://www.w3.org/ns/oa#hasBody>
    <http://www.wikidata.org/entity/Q383044> ;
  <http://www.w3.org/ns/oa#hasTarget>
    [ <http://sw.islab.ntua.gr/annotation/end>
      587 ;
      <http://sw.islab.ntua.gr/annotation/onProperty>
```

Close

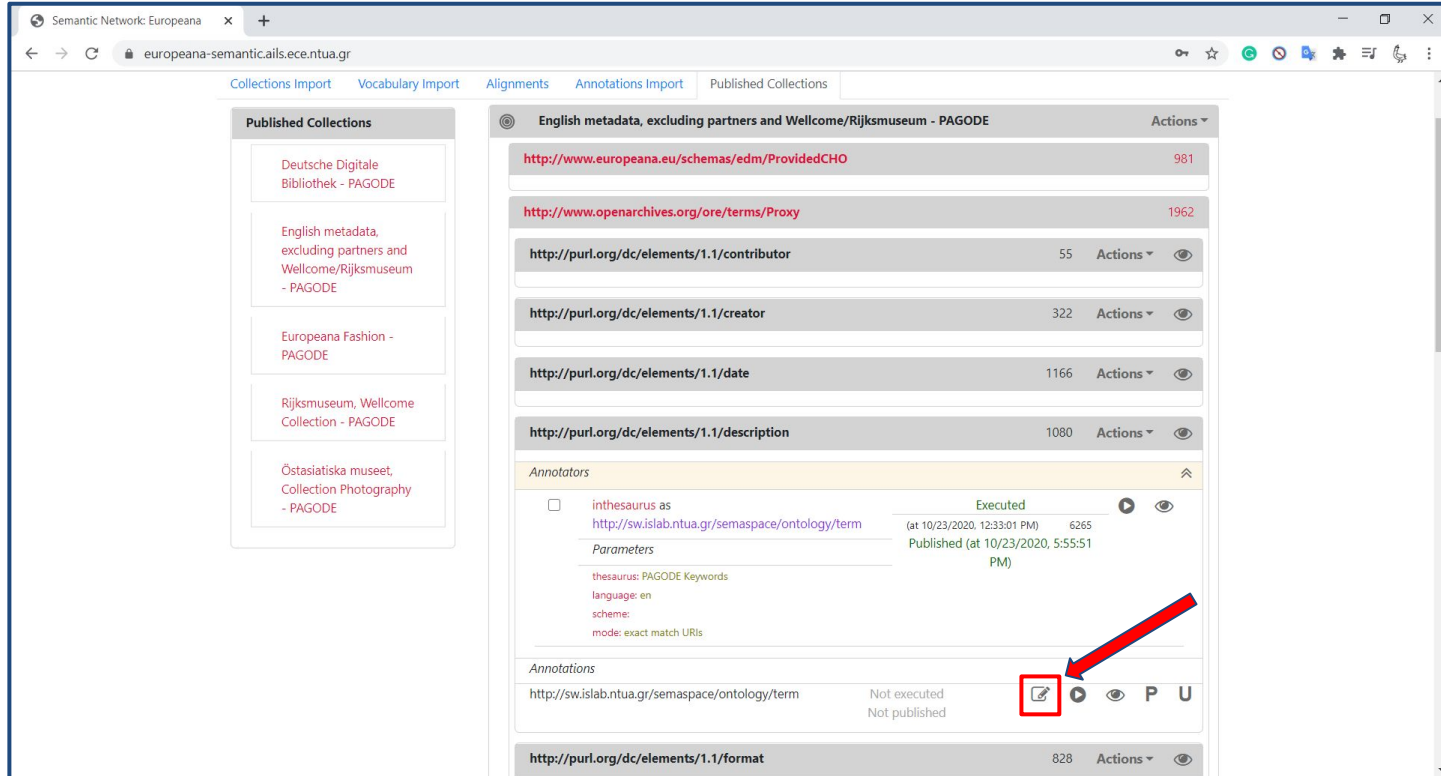
https://purl.org/dc/elements/1.1/coverage

Publish Enrichments to TripleStore



The screenshot shows the Semantic Network Europeana interface. The browser address bar displays `europaana-semantic.ails.ece.ntua.gr`. The interface includes tabs for 'Collections Import', 'Vocabulary Import', 'Alignments', 'Annotations Import', and 'Published Collections'. On the left, a sidebar titled 'Published Collections' lists several collections, including 'Deutsche Digitale Bibliothek - PAGODE' and 'English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE'. The main content area displays a list of metadata entries under the heading 'English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE'. Each entry includes a URL, a count, and an 'Actions' dropdown menu. A red box highlights the 'Publish Selected' button in the 'Actions' dropdown menu for the first entry, with a red arrow pointing to it. Below the list, there is an 'Annotators' section showing a list of annotations, including one for 'inthesaurus as' with a status of 'Executed' and a count of 6265.

See and Edit Enrichments



The screenshot shows the 'Semantic Network: Europeana' web application. The left sidebar lists 'Published Collections' including 'Deutsche Digitale Bibliothek - PAGODE', 'English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE', 'Europeana Fashion - PAGODE', 'Rijksmuseum, Wellcome Collection - PAGODE', and 'Östasiatiska museet, Collection Photography - PAGODE'.

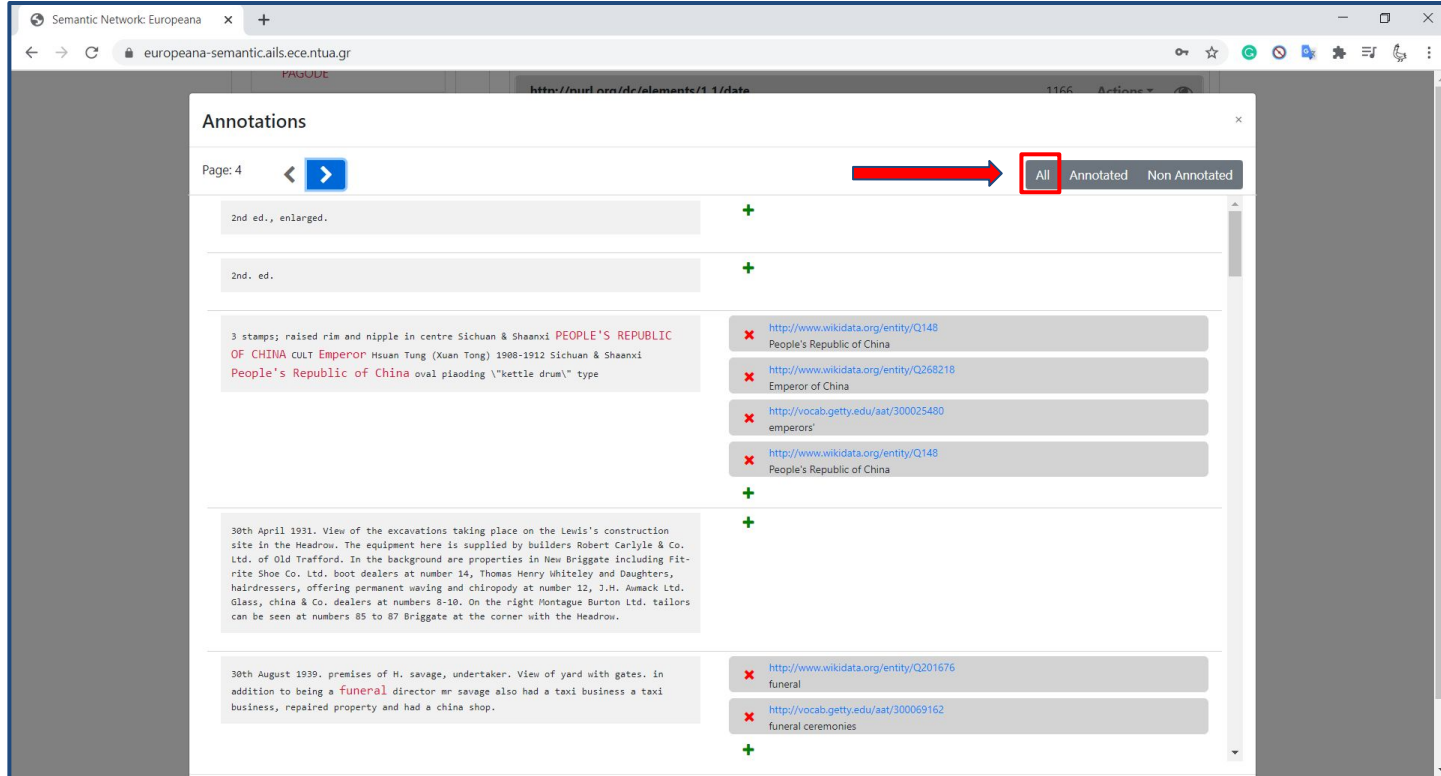
The main content area displays 'English metadata, excluding partners and Wellcome/Rijksmuseum - PAGODE'. It lists several URIs with their respective counts and 'Actions' links:

- <http://www.europeana.eu/schemas/edm/ProvidedCHO> (981)
- <http://www.openarchives.org/ore/terms/Proxy> (1962)
- <http://purl.org/dc/elements/1.1/contributor> (55)
- <http://purl.org/dc/elements/1.1/creator> (322)
- <http://purl.org/dc/elements/1.1/date> (1166)
- <http://purl.org/dc/elements/1.1/description> (1080)

Below the URIs is the 'Annotators' section, showing an annotation for 'inthesaurus as' with the URI <http://sw.islab.ntua.gr/semaspace/ontology/term>. The annotation is marked as 'Executed' and 'Published (at 10/23/2020, 5:55:51 PM)'. The parameters are: thesaurus: PAGODE Keywords, language: en, scheme: , mode: exact match URIs.

At the bottom, the 'Annotations' section shows the same URI with the status 'Not executed' and 'Not published'. A red box highlights the 'Edit' icon (a pencil) next to this annotation, with a red arrow pointing to it.

See and Edit Enrichments



The screenshot shows a web browser window with the URL europeana-semantic.ails.ece.ntua.gr. The main content area displays a list of annotations for a document. The 'Annotations' panel is open, showing a list of annotations with a red arrow pointing to the 'All' tab. The annotations are organized into two columns: 'All' (left) and 'Annotated' (right). The 'All' tab is selected, and the 'Annotated' tab is highlighted with a red box. The 'All' tab shows a list of annotations, including:

- 2nd ed., enlarged.
- 2nd. ed.
- 3 stamps; raised rim and nipple in centre Sichuan & Shaanxi PEOPLE'S REPUBLIC OF CHINA CULT Emperor Hsuan Tung (Xuan Tong) 1908-1912 Sichuan & Shaanxi People's Republic of China oval plaiding "kettle drum" type
- 30th April 1931. View of the excavations taking place on the Lewis's construction site in the Meadow. The equipment here is supplied by builders Robert Carlyle & Co. Ltd. of Old Trafford. In the background are properties in New Briggate including Fit-rite Shoe Co. Ltd. boot dealers at number 14, Thomas Henry Whiteley and Daughters, hairdressers, offering permanent waving and chiropody at number 12, J.H. Aumack Ltd. Glass, china & Co. dealers at numbers 8-10. On the right Montague Burton Ltd. tailors can be seen at numbers 85 to 87 Briggate at the corner with the Meadow.
- 30th August 1939. premises of H. savage, undertaker. View of yard with gates. In addition to being a funeral director mr savage also had a taxi business a taxi business, repaired property and had a china shop.

The 'Annotated' tab shows a list of annotations with a red 'X' icon, indicating that they are not yet annotated. The annotations in the 'Annotated' tab include:

- <http://www.wikidata.org/entity/Q148> People's Republic of China
- <http://www.wikidata.org/entity/Q268218> Emperor of China
- <http://vocab.getty.edu/aat/300025480> emperors'
- <http://www.wikidata.org/entity/Q148> People's Republic of China
- <http://www.wikidata.org/entity/Q201676> funeral
- <http://vocab.getty.edu/aat/300069162> funeral ceremonies

Example of Enrichments



Plate of **porcelain**, painted in **underglaze blue**. In the middle, in a landscape, a lady with a **qilin** from the mouth of which issues a book among flames. On the rim, **pine**-trees; underneath, **bamboo**-sprays.

✗ <http://www.wikidata.org/entity/Q130693>
porcelain

✗ <http://vocab.getty.edu/aat/300010662>
porcelain (material)

✗ <http://www.wikidata.org/entity/Q98876293>
Underglaze blue

✗ <http://www.wikidata.org/entity/Q14138>
qilin

✗ <http://www.wikidata.org/entity/Q12024>
Pinus

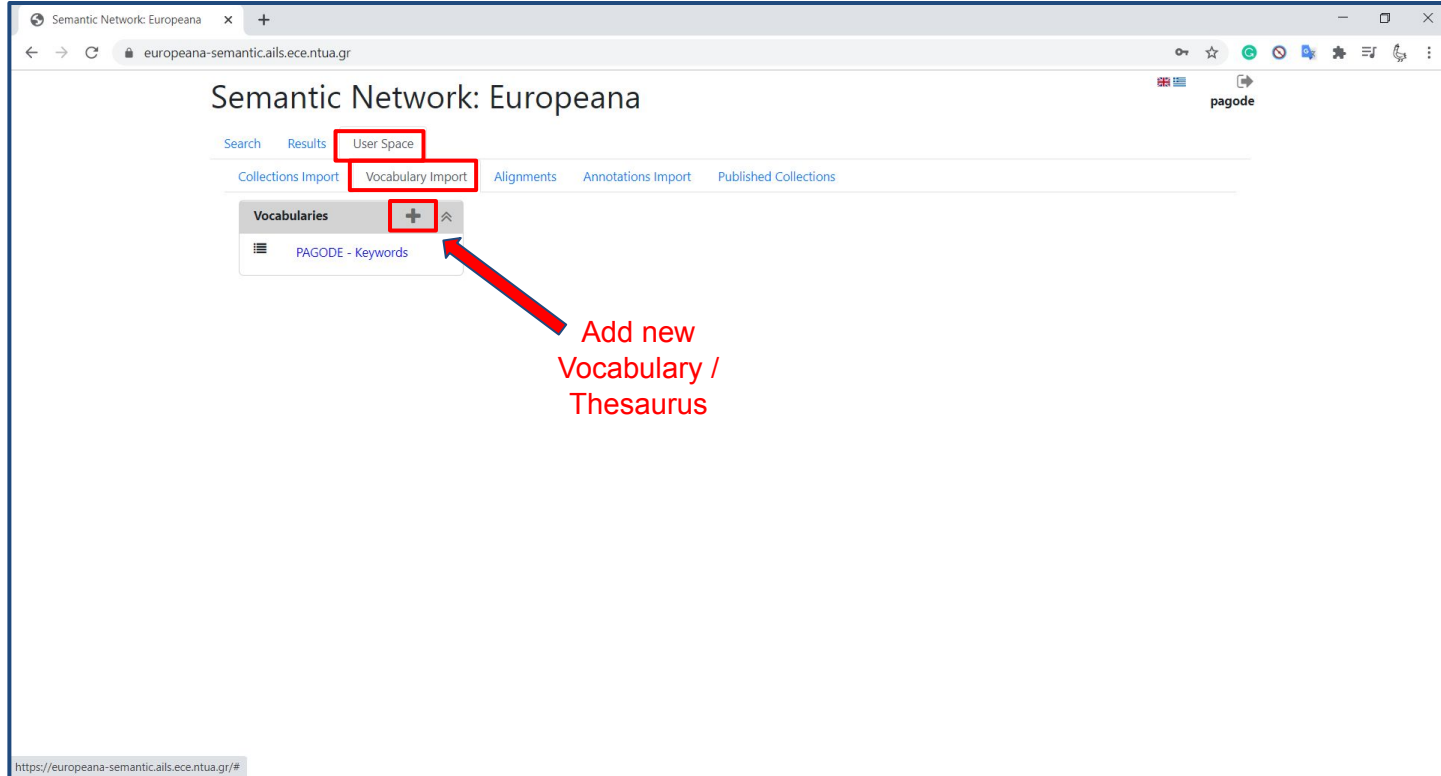
✗ <http://vocab.getty.edu/aat/300343658>
Pinus (genus)

✗ <http://vocab.getty.edu/aat/300311500>
bamboos (plants)

✗ <http://www.wikidata.org/entity/Q670887>
Bambusoideae



Import Vocabularies



Semantic Network: Europeana

Search Results **User Space**

Collections Import **Vocabulary Import** Alignments Annotations Import Published Collections

Vocabularies + Add

PAGODE - Keywords

Add new Vocabulary / Thesaurus

Import Existing Vocabulary or Create Custom Vocabulary

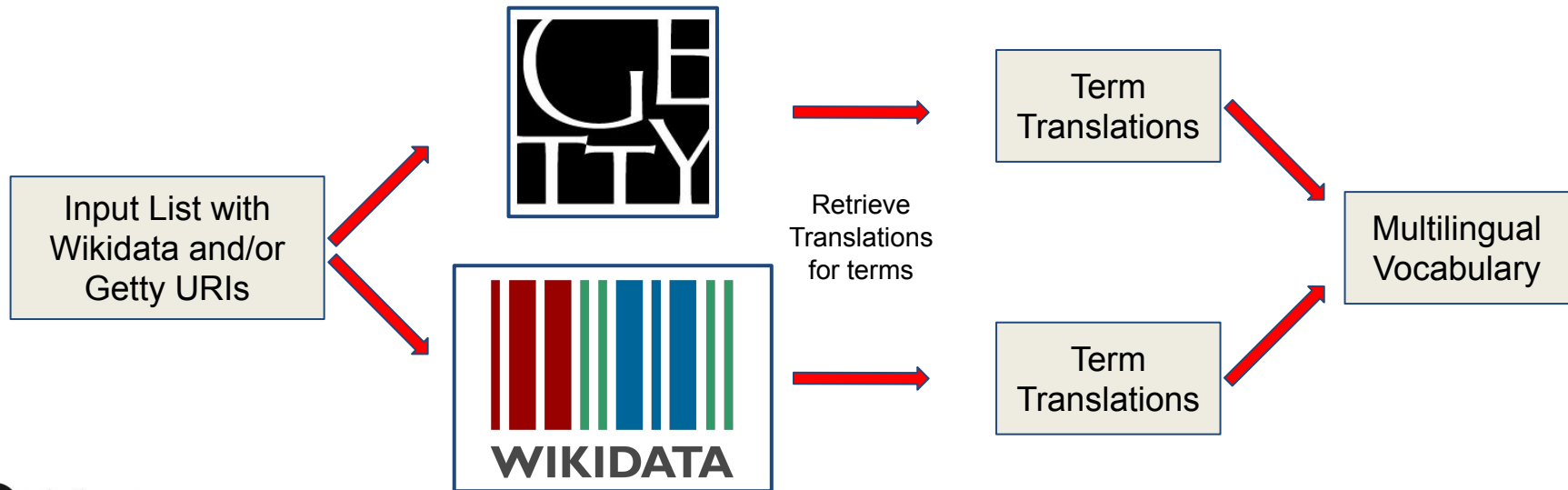
The user can import an existing vocabulary just by uploading the RDF file of the vocabulary.

There is also the option to create a custom vocabulary, like we did for PAGODE. D2RML handles the mapping and transforms a list of terms to an RDF vocabulary / thesaurus.

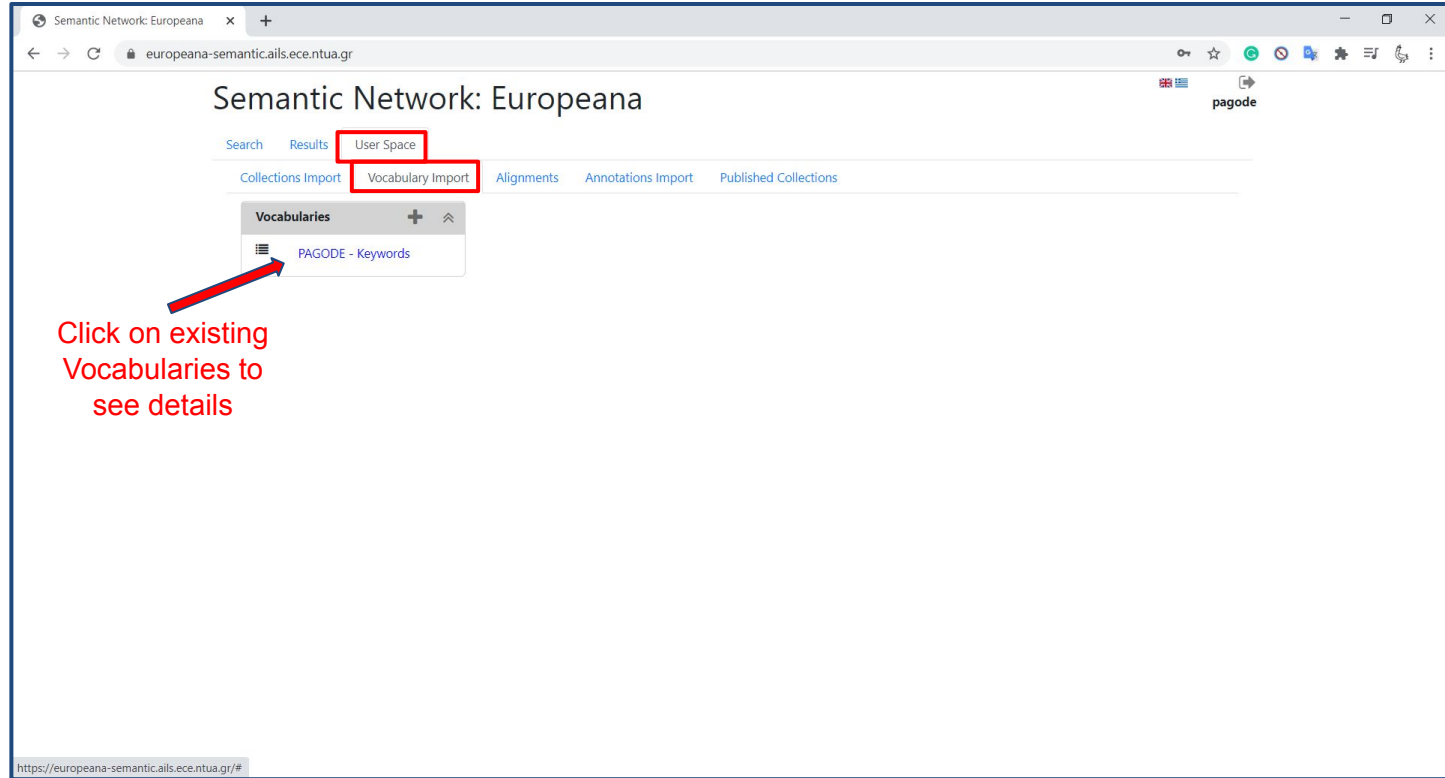
Multilinguality for Custom Vocabulary



Functionality to create multilingual vocabulary from list of URIs.



Vocabularies



Semantic Network: Europeana

Search Results **User Space** Collections Import **Vocabulary Import** Alignments Annotations Import Published Collections

Vocabularies + -

PAGODE - Keywords

Click on existing Vocabularies to see details

Vocabulary Properties

Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import Alignments Annotations Import Published Collections

Vocabularies

- PAGODE - Keywords

PAGODE - Keywords Actions

Status Published private (at 10/23/2020, 12:32:38 PM)
Not indexed

Mapping	Type	State
Metadata	HEADER	Executed (at 10/23/2020, 12:31:56 PM) 1 Published (at 10/23/2020, 12:32:38 PM)
Content	CONTENT	Executed (at 10/23/2020, 12:15:21 PM) 754 Published (at 10/23/2020, 12:24:53 PM)

Content

Prefixes Information Sources Transformations Mappings

owl	http://www.w3.org/2002/07/owl#	
xsd	http://www.w3.org/2001/XMLSchema#	
cmt	http://www.w3.org/2011/content#	
skos	http://www.w3.org/2004/02/skos/core#	
rdfs	http://www.w3.org/2000/01/rdf-schema#	
gr	http://sw.islab.ntua.gr/apollonis/kb/hmcs/	
collection	http://sw.islab.ntua.gr/europeana/kb/	

https://europeana-semanticails.ece.ntua.gr/#

Vocabulary Properties

Semantic Network: Europeana

Search Results User Space

Collections Import Vocabulary Import Alignments Annotations Import Published Collections

Vocabularies

- PAGODE - Keywords

PAGODE - Keywords Actions

Status Published private (at 10/23/2020, 12:32:38 PM)
Not indexed

Mapping	Type	State
Metadata	HEADER	Executed (at 10/23/2020, 12:31:56 PM) 1 Published (at 10/23/2020, 12:32:38 PM)
Content	CONTENT	Executed (at 10/23/2020, 12:15:21 PM) 754 Published (at 10/23/2020, 12:24:53 PM)

Content

Prefixes Information Sources Transformations Mappings

- GETTYSource
- ExcelSource
- WikidataSource

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<[https://en.wikipedia.org/wiki/SPARQL#:~:text=SPARQL%20\(pronounced%20%22sparkle%22%20%2F,Description%20Framework%20\(RDF\)%20format.>](https://en.wikipedia.org/wiki/SPARQL#:~:text=SPARQL%20(pronounced%20%22sparkle%22%20%2F,Description%20Framework%20(RDF)%20format.>)>

Thank you