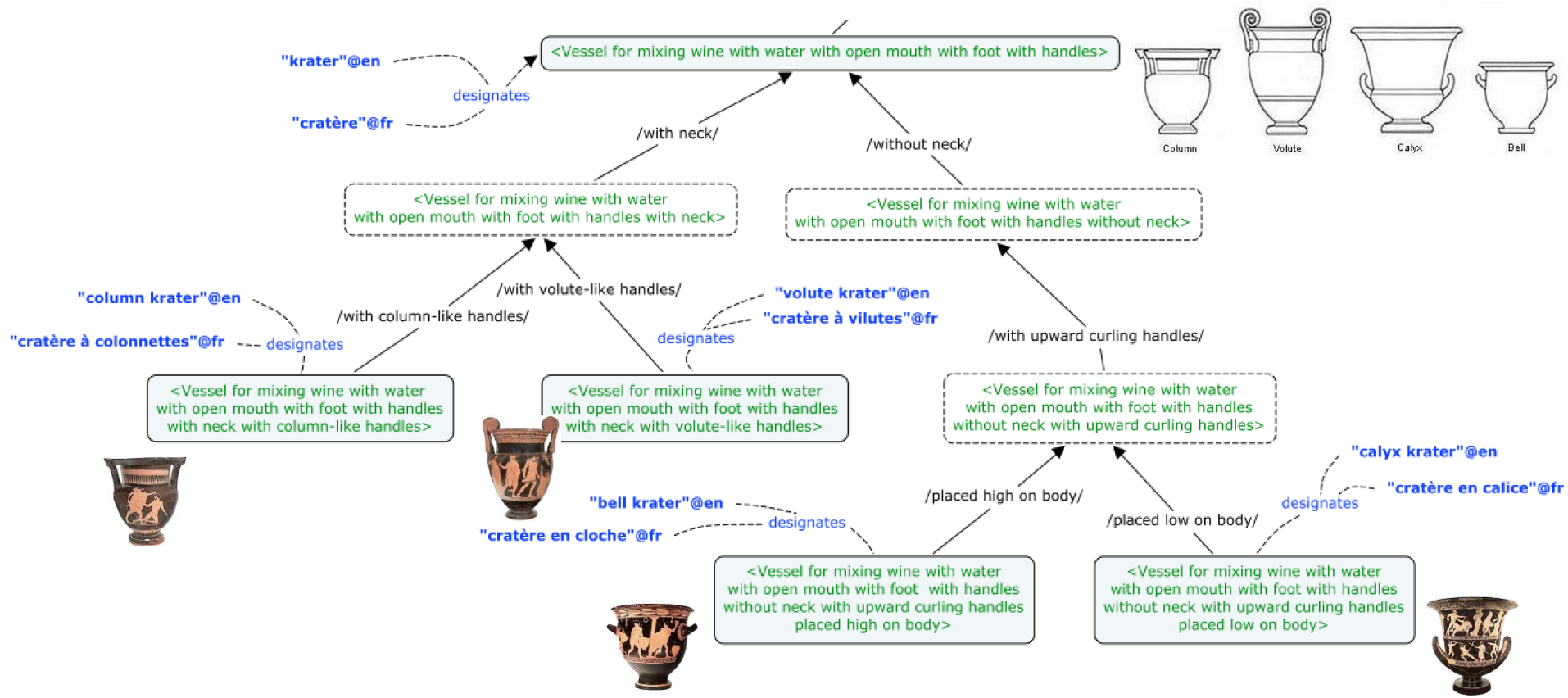
Ontoterminology Export in RDF: the example of Kraters

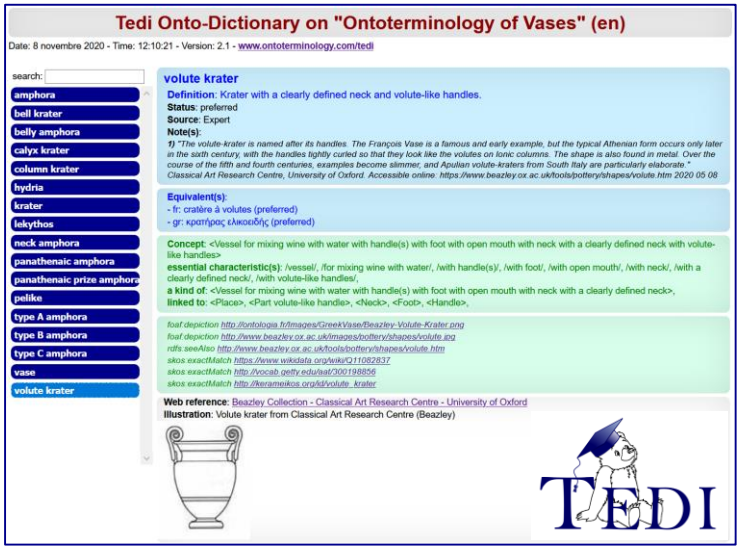
The term 'krater' suggests a mixing-vessel (compare Greek kerannumi - to mix), and we know that the wine served at the symposium was mixed with water. On vases decorated with symposium-scenes, a large open container with a foot is often depicted, and the name krater is appropriate. Examples can be traced back to the large Geometric examples that were used as grave-markers, and this funerary connection continues to be important. Excavations of burial-sites have shown that they could be used in Greek settlements overseas as containers of ashes, and South Italian, especially Apulian, volute-kraters often carry explicit funerary iconography. In the Athenian repertoire, there are four main types identified today: column-, volute-, calyx- and bell-. The psykter is a short-lived shape, used to cool the liquid. It is discussed here because it is often shown being used in kraters.

ClassicalArtResearchCenter – UniversityofOxford – www.beazley.ox.ac.uk/tools/pottery/shapes/kraters.htm

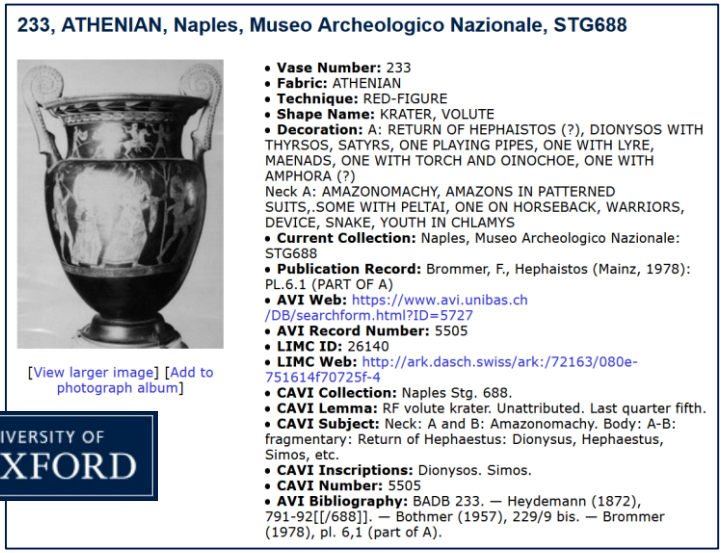


Volute Krater

E-Dictionary



Beazley Archive



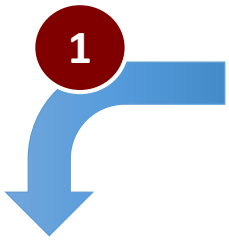
https://www.beazley.ox.ac.uk/XDB/ASP/recordDetails.asp?id=6A46BB09-3325-4737-A1F4-2A89C74DD7E3&noResults=&recordCount=&databaseID=&search=

RDF Format

```
<owl:Class rdf:about="#Vessel_for_mixing_wine_with_water_with_handles_with_foot_with_
open_mouth_with_neck_with_a_clearly_defined_neck_with_volute-like_handles">
    <rdfs:label xml:lang="en">volute krater</rdfs:label>
    <skos:prefLabel xml:lang="en">volute krater</skos:prefLabel>
    <skos:definition xml:lang="en">Krater with a clearly defined neck and
    volute-like handles.</skos:definition>
    <skos:note xml:lang="en">"The volute-krater is named after its handles. The
    François Vase is a famous and early example, but the typical Athenian form
    occurs only later in the sixth century, with the handles tightly curled so that
    they look like the volutes on Ionic columns. The shape is also found in metal.
    Over the course of the fifth and fourth centuries, examples become slimmer, and
    Apulian volute-kraters from South Italy are particularly elaborate." Classical
    Art Research Centre, University of Oxford. Accessible online:
    https:www.beazley.ox.ac.uktoolspotteryshapesvolute.htm 2020 05 08</skos:note>
    <rdfs:label xml:lang="fr">cratère à volutes</rdfs:label>
    <skos:prefLabel xml:lang="fr">cratère à volutes</skos:prefLabel>
    <skos:definition xml:lang="fr">Cratère avec cou, avec des anses en forme de
    volutes.</skos:definition>
    <rdfs:label xml:lang="gr">κρατήρας ελικοειδής</rdfs:label>
    <skos:prefLabel xml:lang="gr">κρατήρας ελικοειδής</skos:prefLabel>
    <skos:definition xml:lang="gr">Κρατήρας με λαιμό και ελικοειδείς λαβές.</skos:
    definition>
```

SPARQL

The Ontoterminology Process



http://ontologia.fr/OTB/krater.rdf

RDF Export

```
<?xml version="1.0" encoding="utf-8"?>
<!-- Ontoterminology: Ontoterminology of Vases -->
<!-- Author: Maria Papadopoulou -->
<!-- Creation date of ontoterminology: 28 avril 2019 -->
<!-- Export date: 28 décembre 2020 time: 00:07:22 -->
<!-- Generated by Tedi version: 2.5 - http://ontoterminology.com/tedi -->

<rdf:RDF xmlns="http://www.ontologia.fr/OTB/krater#"
    xml:base="http://www.ontologia.fr/OTB/krater"
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:owl="http://www.w3.org/2002/07/owl#"
    xmlns:skos="http://www.w3.org/2004/02/skos/core#"
    xmlns:foaf="http://xmlns.com/foaf/0.1/"
    xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:xml="http://www.w3.org/XML/1998/namespace"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema#"
    xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
    xmlns:otv="http://www.ontologia.fr/OTB/otv#"
    xmlns:vs="http://www.w3.org/2003/06/sw-vocab-status/ns#"
    xmlns:vann="http://purl.org/vocab/vann/"
    xmlns:ontolex="http://www.w3.org/ns/lemon/ontolex#">

    <!--
    ///////////////////////////////////////////////////////
    //
    // SKOS
    //
    ///////////////////////////////////////////////////////
    -->

    <!--  SKOS Concept Scheme -->

    <skos:ConceptScheme rdf:about="http://www.ontologia.fr/OTB/krater">
        <dc:title>Ontoterminology of Vases</dc:title>
        <dc:description>Archaic and Classical Periods, from -700  BC to -323.
The concepts of the ontology are linked with a skos:exactMatch to Getty Vocabularies, Wikidata and
Kerameikos.
The ontology of kraters is populated with all the kraters of the collection of the National
Archeological Museum (NAM) in Athens  representing medata from the Beazley Archive Pottery
Database. Each object is linked with a skos:ExactMatch to its  web description in Beazley.</dc:
description>
        <dc:issued rdf:datatype="http://www.w3.org/2001/XMLSchema#date">2019-4-28</dc:issued>
        <dc:modified rdf:datatype="http://www.w3.org/2001/XMLSchema#date">2020-12-27</dc:modified>
        <dc:creator>Maria Papadopoulou</dc:creator>
        <dc:publisher>Condillac</dc:publisher>
    </skos:ConceptScheme>
```

RDF
RDFS
SKOS
FOAF
DC
OntoLex
OWL
OTV

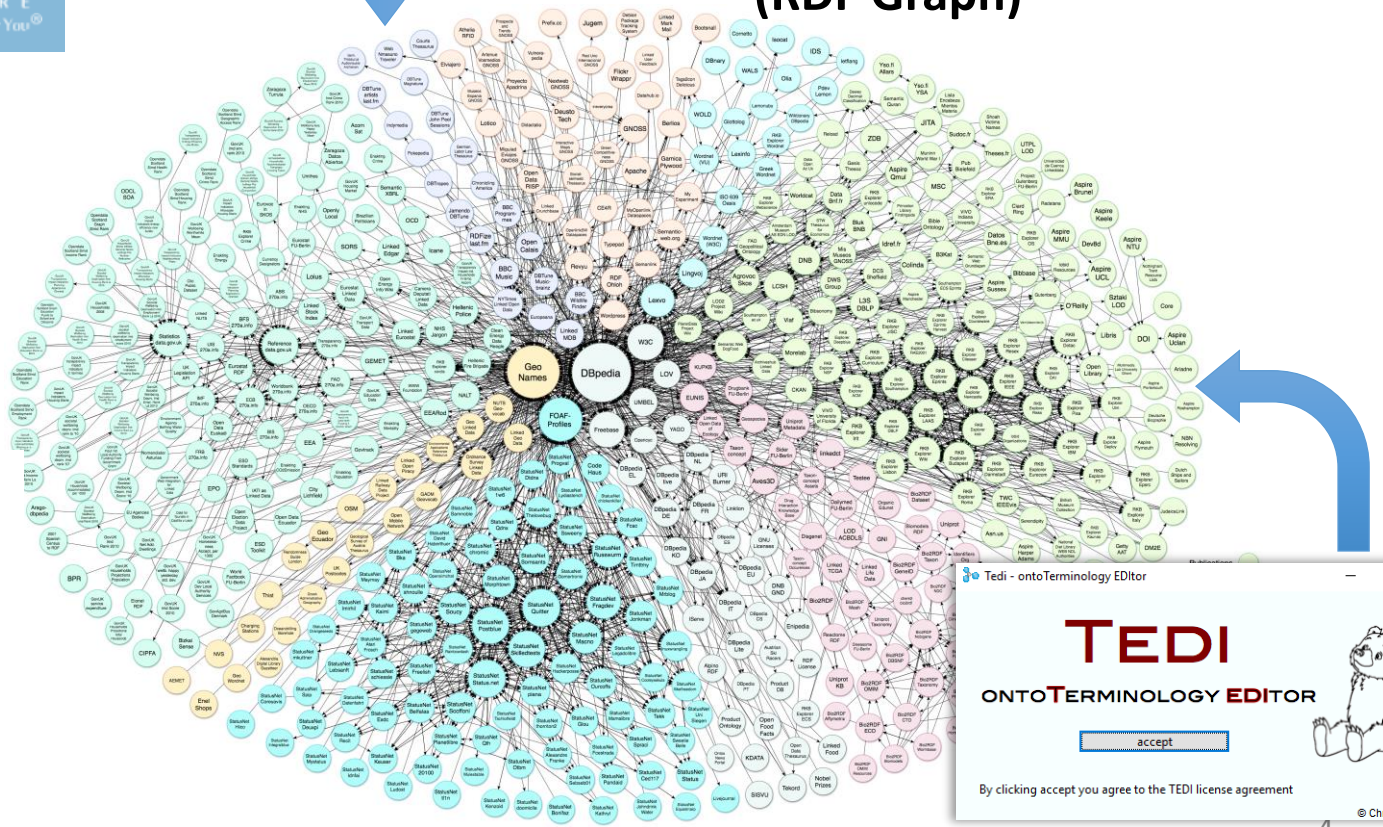
Protégé

Querying in SPARQL

SPARQL Query Editor

OPENLINK SOFTWARE
Making Technology Work For You®

Knowledge Graph
(RDF Graph)

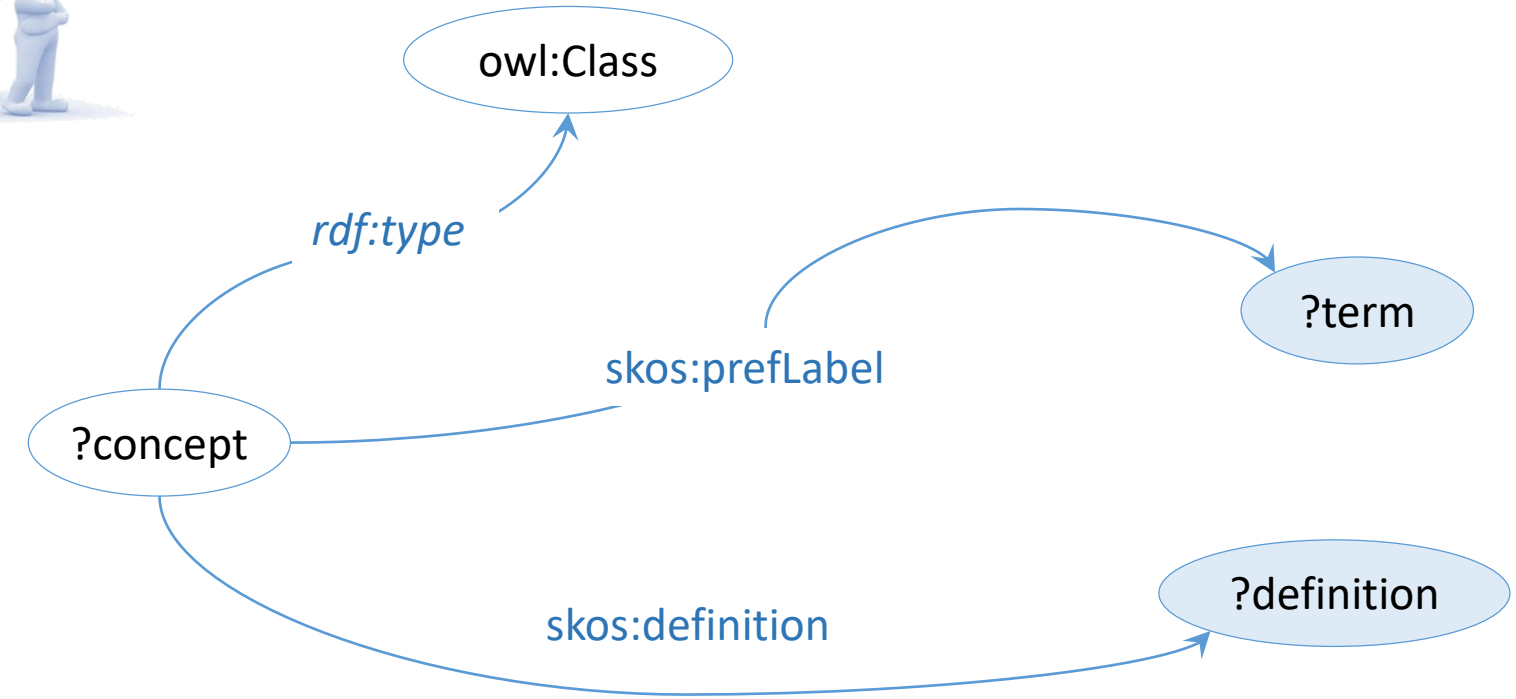


Protégé

Querying in SPARQL

http://ontologia.fr/OTB/Krater.owl

Display the list of the terms in English with their definition

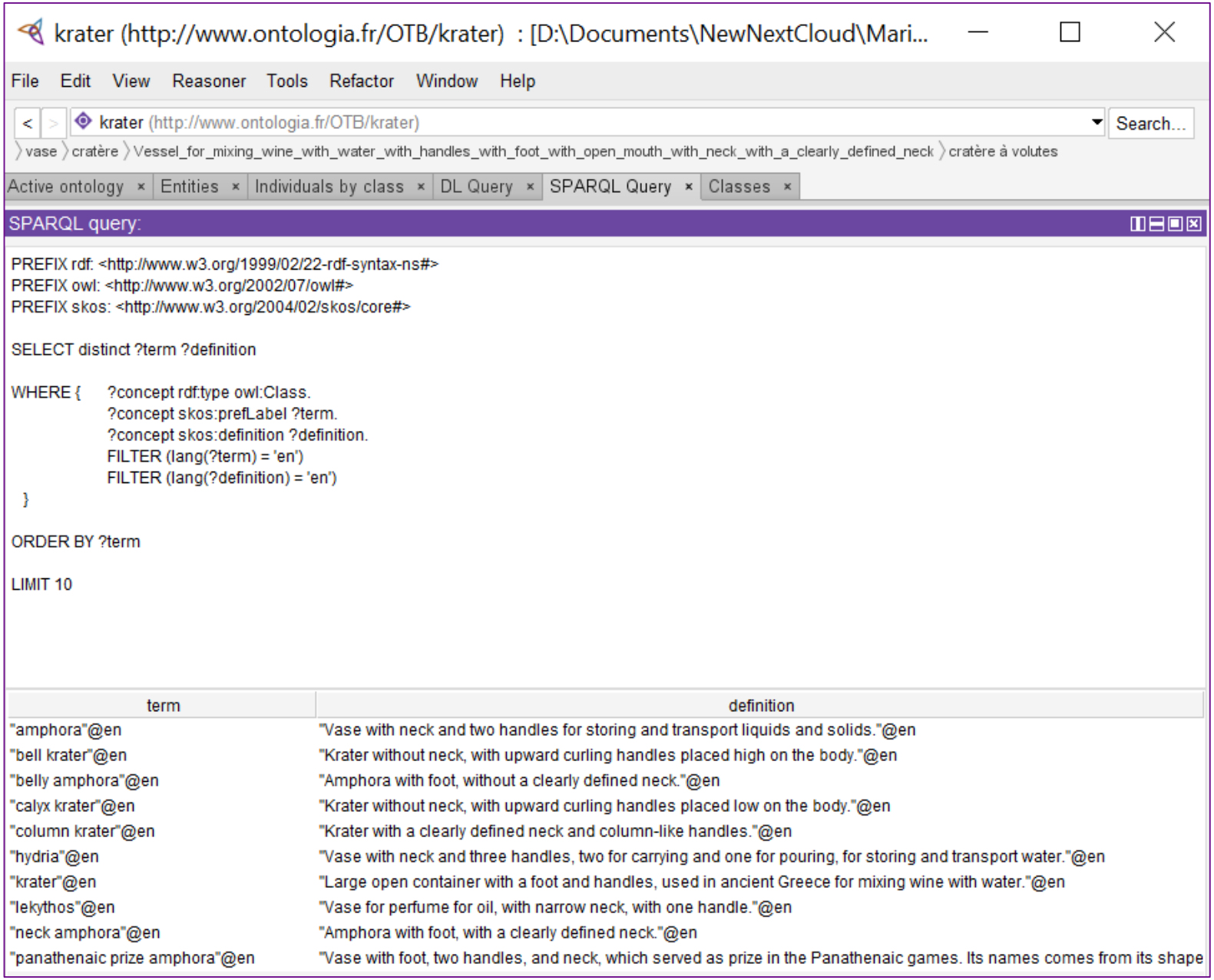


SPARQL Query Editor

http://demo.openlinksw.com/sparql

term	definition
"amphora"@en	"Vase with neck and two handles for storing and transport liquids and solids."@en
"bell krater"@en	"Krater without neck, with upward curling handles placed high on the body."@en
"belly amphora"@en	"Amphora with foot, without a clearly defined neck."@en
"calyx krater"@en	"Krater without neck, with upward curling handles placed low on the body."@en
"column krater"@en	"Krater with a clearly defined neck and column-like handles."@en
"hydria"@en	"Vase with neck and three handles, two for carrying and one for pouring, for storing
"krater"@en	"Large open container with a foot and handles, used in ancient Greece for mixing wine
"lekythos"@en	"Vase with neck for perfume."@en

Protégé


krater (http://www.ontologia.fr/OTB/krater) : [D:\Documents\NewNextCloud\Mari...
File Edit View Reasoner Tools Refactor Window Help
krater (http://www.ontologia.fr/OTB/krater)
Search...
vase cratère Vessel_for_mixing_wine_with_water_with_handles_with_foot_with_open_mouth_with_neck_with_a_clearly_defined_neck cratère à volutes
Active ontology Entities Individuals by class DL Query SPARQL Query Classes
SPARQL query:
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
SELECT distinct ?term ?definition
WHERE { ?concept rdf:type owl:Class.
?concept skos:prefLabel ?term.
?concept skos:definition ?definition.
FILTER (lang(?term) = 'en')
FILTER (lang(?definition) = 'en')
}
ORDER BY ?term
LIMIT 10
term
definition
"amphora"@en
"Vase with neck and two handles for storing and transport liquids and solids."@en
"bell krater"@en
"Krater without neck, with upward curling handles placed high on the body."@en
"belly amphora"@en
"Amphora with foot, without a clearly defined neck."@en
"calyx krater"@en
"Krater without neck, with upward curling handles placed low on the body."@en
"column krater"@en
"Krater with a clearly defined neck and column-like handles."@en
"hydria"@en
"Vase with neck and three handles, two for carrying and one for pouring, for storing and transport water."@en
"krater"@en
"Large open container with a foot and handles, used in ancient Greece for mixing wine with water."@en
"lekythos"@en
"Vase for perfume for oil, with narrow neck, with one handle."@en
"neck amphora"@en
"Amphora with foot, with a clearly defined neck."@en
"panathenaic prize amphora"@en
"Vase with foot, two handles, and neck, which served as prize in the Panathenaic games. Its names comes from its shape