language **en**

The 'OntoSophia' ontology

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Abstract

The 'OntoSophia' ontology is written in OWL 2 DL. Its scope is to enable the formal characterisation of propositions, arguments, and quoted elements within the argumentative discussion in philosophical texts. Its structure follows the conceptual division between abstract arguments, abstract propositions and their expressions in texts, aiming to facilitate the representation of this division. This division enables to capture the cases where a restatement of an argument or proposition or a reference to the same argument or proposition occurs.

1. Introduction

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The scope of the 'OntoSophia' ontology is to enable the formal characterisation of propositions, arguments and quoted elements within the argumentative discussion in philosophical texts. Its structure follows the conceptual division between abstract arguments, abstract propositions and their expressions in texts, aiming to facilitate the representation of this division. This model enables to capture the cases where a restatement of an argument or proposition or a reference to the same argument or proposition occurs.

1.1. Namespace declarations

Table 1: Namespaces used in the document

[Ontology NS Prefix]	<http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275>
core	<http://www.w3.org/2004/02/skos/core>
0-1	<http://xmlns.com/foaf/0.1>
4	<http://www.semanticweb.org/ioanna/ontologies/2018/4>
owl	<http://www.w3.org/2002/07/owl>
rdf	<http://www.w3.org/1999/02/22-rdf-syntax-ns>
terms	<http://purl.org/dc/terms>
xsd	<http://www.w3.org/2001/XMLSchema>
rdfs	<http://www.w3.org/2000/01/rdf-schema>
cito	<http://purl.org/spar/cito>
dc	<http://purl.org/dc/elements/1.1>
deo	<http://purl.org/spar/deo>

2. The 'OntoSophia' ontology: Overview

back to ToC

This ontology has the following classes and properties.

Classes

Object Properties

3. The 'OntoSophia' ontology: Description

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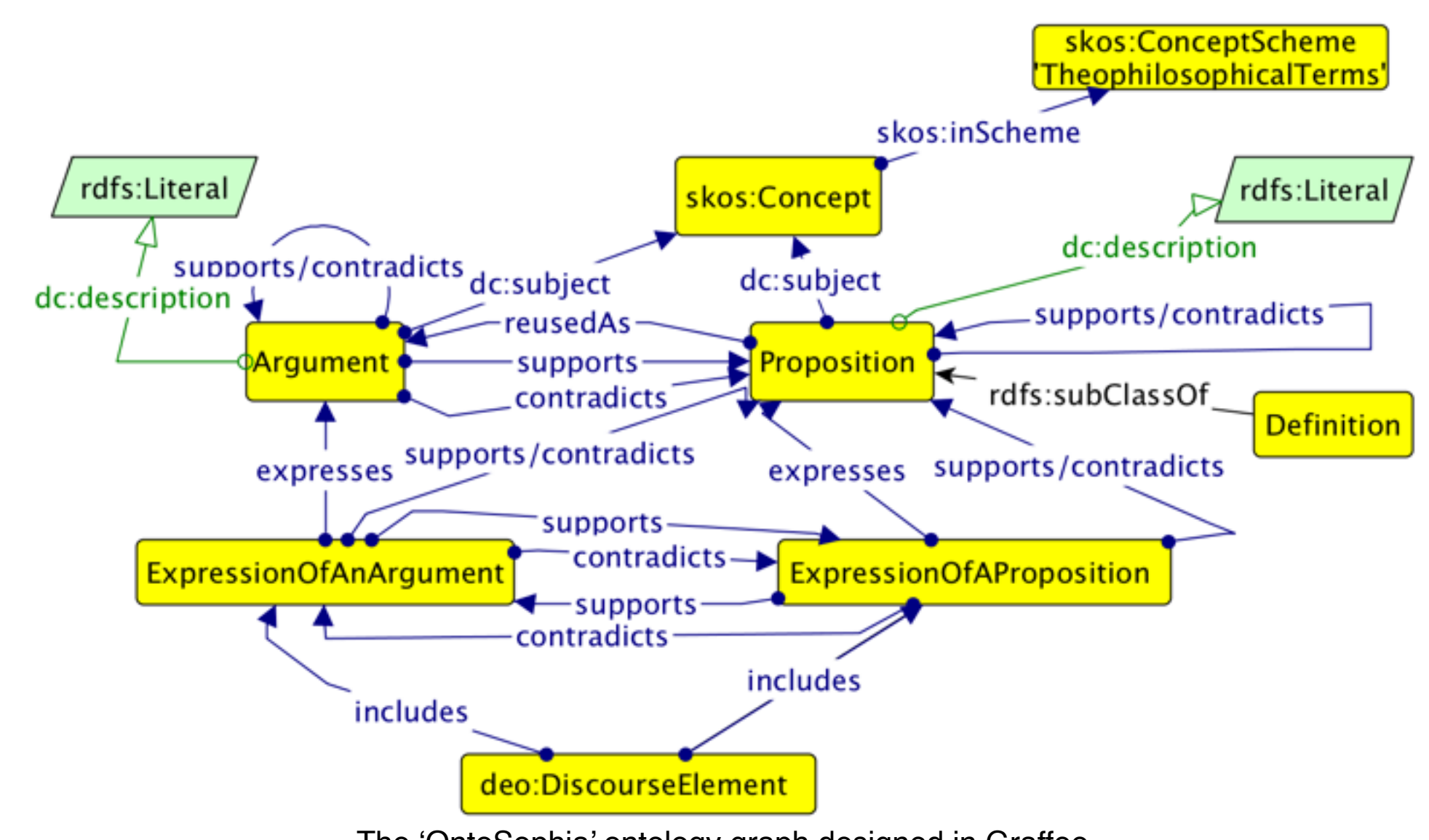
The graph illustrates the 'OntoSophia' ontology.



The 'OntoSophia' ontology graph designed in Graffoo.

4. Cross reference for the 'OntoSophia' ontology classes, properties and dataproperties

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This section provides details for each class and property defined by the 'OntoSophia' ontology.

4.1. Classes

Agent[c]

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IRI: http://xmlns.com/foaf/0.1/Agent

An agent (eg. person, group, software or physical artifact), reused from FOAF:http://xmlns.com/foaf/spec/#term_Agent.

Argument[c]

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IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#Argument

It represents the description of an abstract statement of the reasons for and against a proposition, which has different expressions in texts.

is in domain of
contradicts [op], description [dp], subject [op], supports [op]
is in range of
contradicts [op], expresses [op], supports [op]

concept[c]

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IRI: http://www.w3.org/2004/02/skos/core#Concept

Concept reused from https://www.w3.org/2009/08/skos-reference/skos.html.

is in domain of
in scheme [op]
is in range of
subject [op]

concept scheme[c]

back to ToC or Class ToC

IRI: http://www.w3.org/2004/02/skos/core#ConceptScheme

Reused class from the Simple Knowledge Organization System (SKOS):https://www.w3.org/2009/08/skos-reference/skos.html.

is in range of
in scheme [op]

Definition[c]

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IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#Definition

It represents what a philosophical concept means as defined by different authors and texts.

has super-classes
Proposition [c]

Discourse Element[c]

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IRI: http://purl.org/spar/deo/DiscourseElement

Reused class from the Discourse Elements Ontology (DEO) to represent the document part of the resource which carries out a rhetorical function. https://sparontologies.github.io/deo/current/deo.html#d4e325

is in domain of
includes [op]

Expression of a proposition[c]

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IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#ExpressionOfAProposition

It refers to an expression, i.e formulation of an abstract proposition in a text.

is in domain of
contradicts [op], expresses [op], supports [op]
is in range of
contradicts [op], includes [op], supports [op]

Expression of an argument[c]

back to ToC or Class ToC

IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#ExpressionOfAnArgument

It captures the expression, i.e. formulation of an abstract argument.

is in domain of
contradicts [op], expresses [op], supports [op]
is in range of
contradicts [op], includes [op], supports [op]

Proposition[c]

back to ToC or Class ToC

IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#Proposition

It refers to a statement or opinion, judgment or belief held to be true which is made justified by arguments.

has sub-classes
Definition [c]
is in domain of
contradicts [op], description [dp], subject [op], supports [op]
is in range of
contradicts [op], expresses [op], supports [op]

4.2. Object Properties

cites[op]

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IRI: http://purl.org/spar/cito/cites

Reused property from CiTO (http://purl.org/spar/cito/cites):The citing entity cites the cited entity, either directly and explicitly (as in the reference list of a journal article), indirectly (e.g. by citing a more recent paper by the same group on the same topic), or implicitly (e.g. as in artistic quotations or parodies, or in cases of plagiarism). https://sparontologies.github.io/cito/current/cito.html#d4e118

contradicts[op]

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IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#contradicts

has domain
Argument [c]
Expression of a proposition [c]
Expression of an argument [c]
Proposition [c]
has range
Argument [c]
Expression of a proposition [c]
Expression of an argument [c]
Proposition [c]

expresses[op]

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IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#expresses

has domain
Expression of a proposition [c]
Expression of an argument [c]
has range
Argument [c]
Proposition [c]

in scheme[op]

back to ToC or Object Property ToC

IRI: http://www.w3.org/2004/02/skos/core#inScheme

Reused property from the Simple Knowledge Organization System (SKOS):https://www.w3.org/2009/08/skos-reference/skos.html.

has domain
concept [c]
has range
concept scheme [c]

includes[op]

back to ToC or Object Property ToC

IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#includes

has domain
Discourse Element [c]
has range
Expression of a proposition [c]
Expression of an argument [c]

subject[op]

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

Reused property from the Dublin Core Metadata Initiative to capture the subject of Propositions and Arguments.

has domain
Argument [c]
Proposition [c]
has range
concept [c]

supports[op]

back to ToC or Object Property ToC

IRI: http://www.semanticweb.org/ioanna/ontologies/2018/4/untitled-ontology-275#supports

has domain
Argument [c]
Expression of a proposition [c]
Expression of an argument [c]
Proposition [c]
has range
Argument [c]
Expression of a proposition [c]
Expression of an argument [c]
Proposition [c]

Legend

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[c]: Classes
[op]: Object Properties
[dp]: Data Properties
[ni]: Named Individuals

5. Acknowledgements

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