



The Canadian Writing Research Collaboratory  
Le Collaboratoire scientifique des écrits du Canada

# Adventures in Linked Data: Building a Connected Research Environment

Lisa Goddard, Memorial University Libraries

& INKE Research Group

Access 2012, Montreal QC

October 19<sup>th</sup>, 2012

# Canadian Writing Research Collaboratory (CWRC)

CFI funded initiative to  
establish an online  
infrastructure for  
literary research in and  
about Canada.



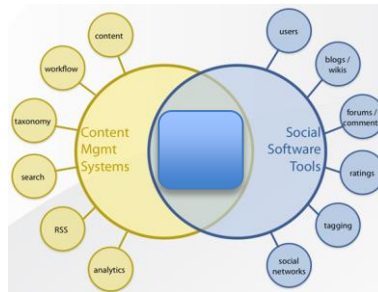
**[www.cwrc.ca](http://www.cwrc.ca)**

# Canadian Writing Research Collaboratory (CWRC)

“To enable unprecedented avenues for studying the words that most move people in and about Canada.”



Authoring



Dissemination



Discovery

# Collaboration

“We need to stop talking around the issue of the single-author monograph as the benchmark for excellence.” (DH Manifesto, 2004)



Senior Scholars



Librarians



Programmers



Emergent  
Scholars



Project  
Managers

# Why Linked Data for the Humanities?

# Improved Search

Find all references to food  
in Joyce's Ulysses.

# New Discovery Tools

Instead of looking for a needle in a haystack, an effective text mining tool will show you the shape of the haystack and tell you what needles are there that you'd want to stick in your foot. (Rockwell, 2011)

# Interoperability

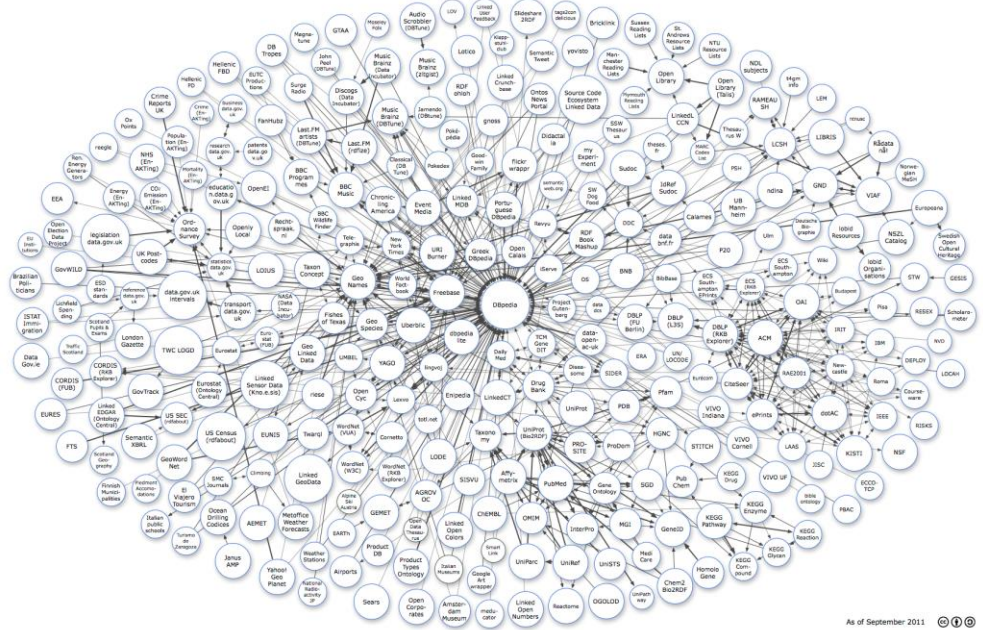
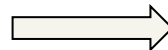
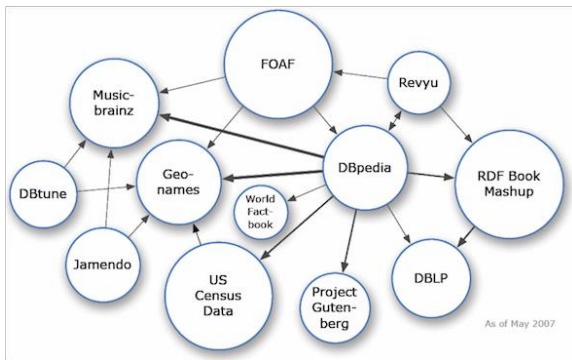


Disparate data sources and incompatible data structures are among the biggest obstacles for 21<sup>st</sup> century humanities researchers.

(RIN, 2011)

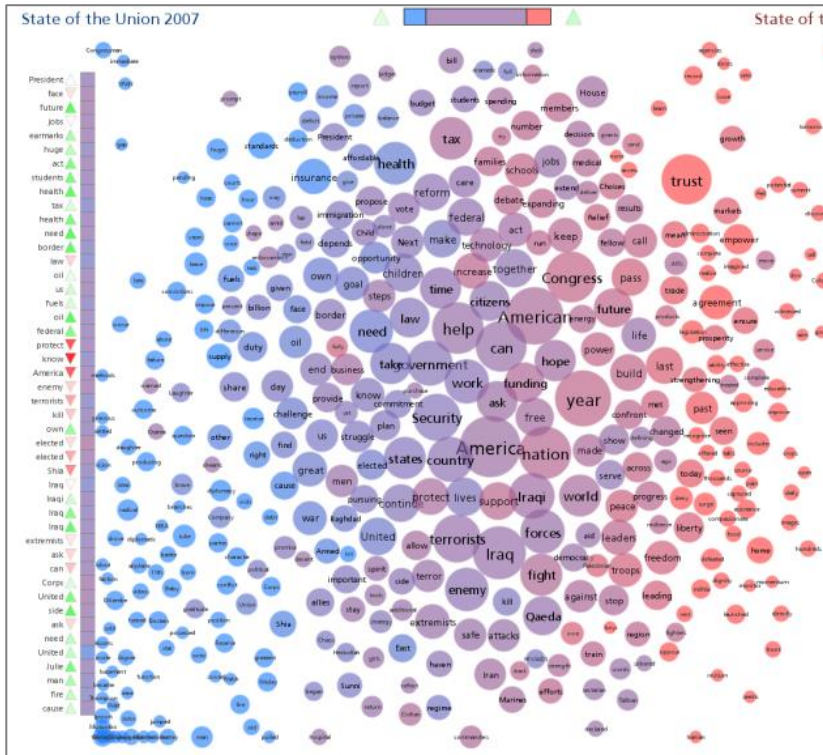


# Collaboration



Linked data doesn't just accommodate collaboration, it enforces collaboration.

# Big (Text) Data



Scale is a new horizon of intellectual inquiry. What kinds of humanistic phenomena appear only at scale? (Liu, 2012)

# Heterogeneity

Text data is messy.

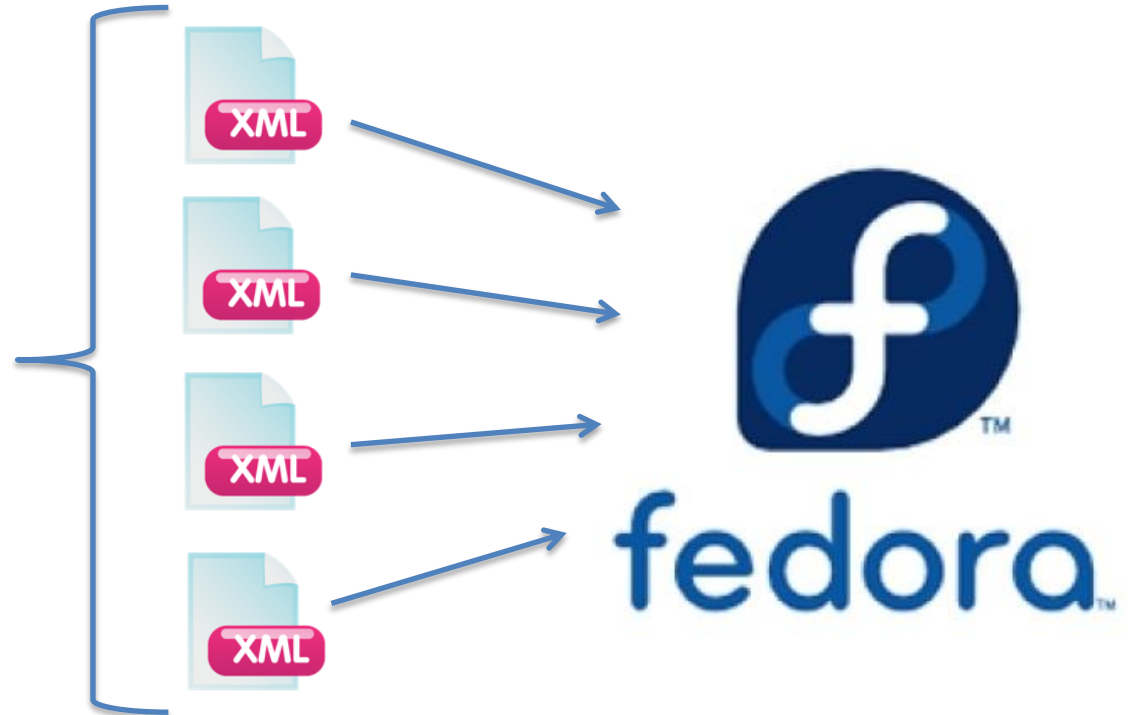


# Getting Started

# Dev Platform



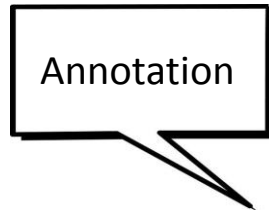
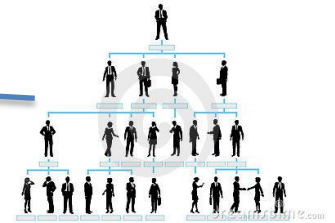
The Orlando Project



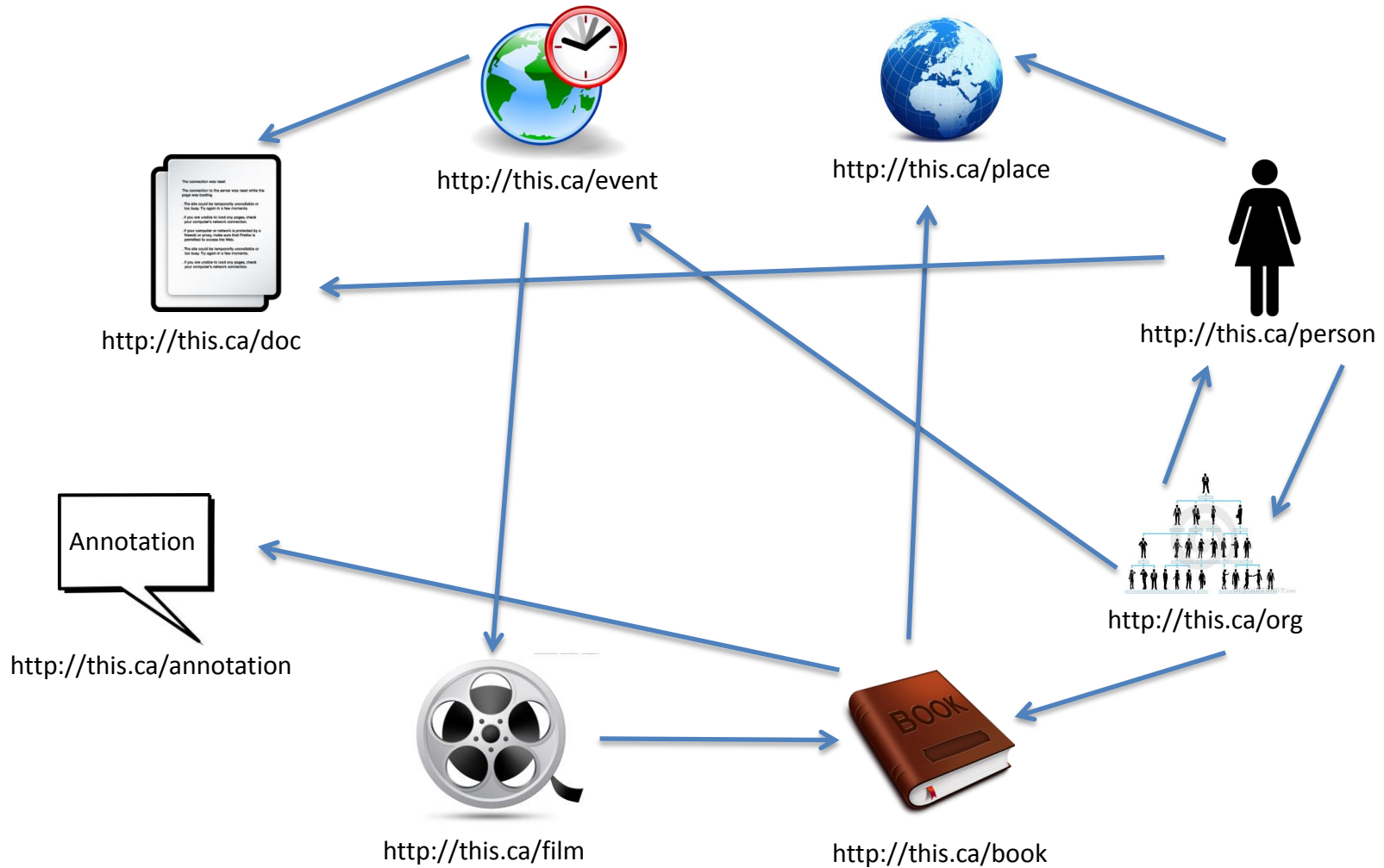
# Identify Top Level Entities



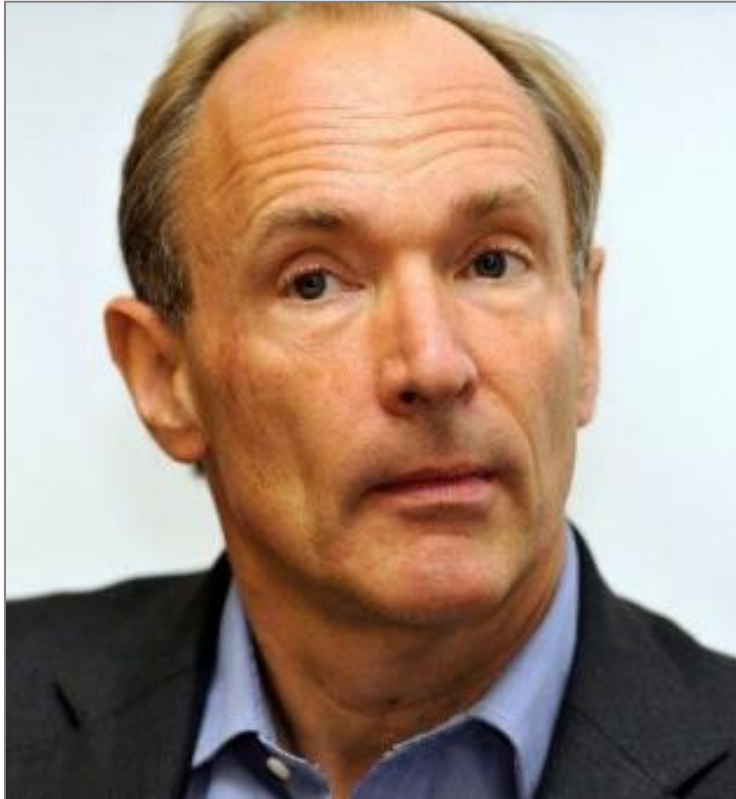
<http://domain.org/doc.html>



# Mint URIs for Entities



# Cool URIs Don't Change



Sir Tim Berners-Lee  
is judging you.

Do you really feel that the old URIs cannot be kept running? If so, you chose them very badly.

- Sir Tim



# Minting URIs

Abstract away from implementation details.

<http://tiger.cwrc.ca/person.php?id=virginia-woolf&format=rdf>



<http://cwrc.ca/person/virginia-woolf>



# Canonical URIs

[http://dbpedia.org/resource/Virginia\\_woolf](http://dbpedia.org/resource/Virginia_woolf)  
(303 redirects and content negotiation)



About: **Virginia Woolf**  
An Entity of Type: **writer**, from Named Graph: <http://dbpedia.org>, within Data Space: [dbpedia.org](http://dbpedia.org)

Adeline Virginia Woolf was an English writer, regarded as one of the foremost modernist literary figures of the twentieth century. During the interwar period, Woolf was a significant figure in London literary society and a member of the Bloomsbury Group.

Property	Value
<a href="#">dbpedia-owl:abstract</a>	<ul style="list-style-type: none"><li>Virginia Woolf va ser una escriptora anglesa. Va introduir-se en el món de la literatura gràcies al seu pare Sir Leslie Stephen. Mai no va anar a escola, els estudis els va fer a casa seva. El 1912 es va casar amb Leonard Woolf, que amb diversos companys fundaren l'anomenat grup de Bloomsbury (anomenat així arran del lloc on est situada la casa de la parella). Junts van amb el seu marit va fundar l'editorial Hogarth Press, que va donar a conèixer joves promeses de l'època que es van consagrar, com T.S. Eliot i K. Mansfield. Les novel·les L'hablador de Jacob, Mrs Dalloway (1925, que palesa la influència de la psicologia de Freud tot expressant els sentiments dels personatges mitjançant imatges, metòfors i símbols) i A la van destacar per a part del seu gènere, la seva gran originalitat. Cal destacar les novel·les Els anys i Entre els actes. També va ser una destacada defensora dels drets de la dona amb obres com Una habitació pròpia. Part de la mateixa psicologia anomenada trastorn bipolar i se suïcidà, el 28 de març de 1941 al riu Ouse fent-se pedres dins les buïdaques de fàbrica. La seva ànima de monòleg interior i estil poètic es consideren entre les contribucions més importants de la novel·la moderna.</li><li>Virginia Woolfova (původně Adeline Virginia Stephen) byla významná anglická spisovatelka, literární kritička, esejistka, vydavatelka, filozofka a feministka. Zároveň byla členkou Bloomsbury Group, což byla skupina avantgardních umělců a intelektuálů. Některá z jejích děl jsou součástí výuky o modernismu.</li><li>Virginia Woolf (ve dřívejší době byla britská Schriftstellerin und Verlegerin. Sie entstammte einer wohlhabenden Intellektuellen-Familie, die zahlreiche Kontakte zu Literaten hatte. Als Jugendliche erlebte sie noch die viktorianischen Beschränkungen für Mädchen und Frauen. Sie war früh als Literatinkubiklerin und Essayistin tätig; ihre Karriere als Romanautorin begann im Jahr 1915 mit The Voyage Out (Die Fahrt hinaus). Ende der 1920er Jahre war sie eine erfolgreiche und international bekannte Schriftstellerin. Woolfs Wiederentdeckung erfolgte in den 1970er Jahren, als ihr Essay A Room of One's Own zu einem der meistzitierten Texte der neuen Frauenbewegung wurde. Mit ihrem avantgardistischen Werk zählte sie wie auch Gertrude Stein zu den ersten Frauen der klassischen Moderne.</li><li>Adeline Virginia Woolf was an English writer, regarded as one of the foremost modernist literary figures of the twentieth century. During the interwar period, Woolf was a significant figure in London literary society and a member of the Bloomsbury Group. Her most famous works include the novels Mrs Dalloway (1925), The Waves (1931) and Orlando (1928), and the book-length essay A Room of One's Own (1929), with its famous dictum, "A woman must have money and a room of her own if she is to write fiction."</li><li>Adeline Virginia Woolf fue una novelista, ensayista, crítica de libros, feminista y escritora de cuentos británica, considerada como una de las más destacadas figuras del modernismo literario del siglo XX. Durante el período de entreguerras, Woolf fue una figura significativa en la sociedad literaria de Londres y un miembro del grupo de los Bloomsbury. Su obra más famosa es la novela Orlando. Al</li></ul>

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
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    <rdf:type rdf:resource="http://dbpedia.org/class/yago/ModernistWomenWriters"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/EnglishEssayists"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/BisexualWriters"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/Rhetoricians"/>
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    <rdf:type rdf:resource="http://dbpedia.org/class/yago/20th-century_Women_Writers"/>
    <rdf:type rdf:resource="http://umbel.org/umbel/foaf/PersonWithOccupation"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/WomenDiarists"/>
    <rdf:type rdf:resource="http://dbpedia.org/ontology/Agent"/>
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    <rdf:type rdf:resource="http://dbpedia.org/class/yago/AlumniOfKing%27sCollegeLondon"/>
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    <rdf:type rdf:resource="http://dbpedia.org/class/yago/LGBTWritersFromTheUnitedKingdom"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/EnglishWomenWriters"/>
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    <rdf:type rdf:resource="http://umbel.org/umbel/foaf/Writer"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/WomenOfTheVictorianEra"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/PeopleFromKensington"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/EnglishDiarists"/>
    <rdf:type rdf:resource="http://dbpedia.org/class/yago/PeopleWithBipolarDisorder"/>
    <rdf:type rdf:resource="http://umbel.org/umbel/foaf/Artist"/>
    <rdf:type rdf:resource="http://dbpedia.org/ontology/Writer"/>
  </rdf:Description>
</rdf:RDF>
```

[http://dbpedia.org/page/Virginia\\_Woolf](http://dbpedia.org/page/Virginia_Woolf)

[http://dbpedia.org/data/Virginia\\_Woolf.rdf](http://dbpedia.org/data/Virginia_Woolf.rdf)

# URI Patterns

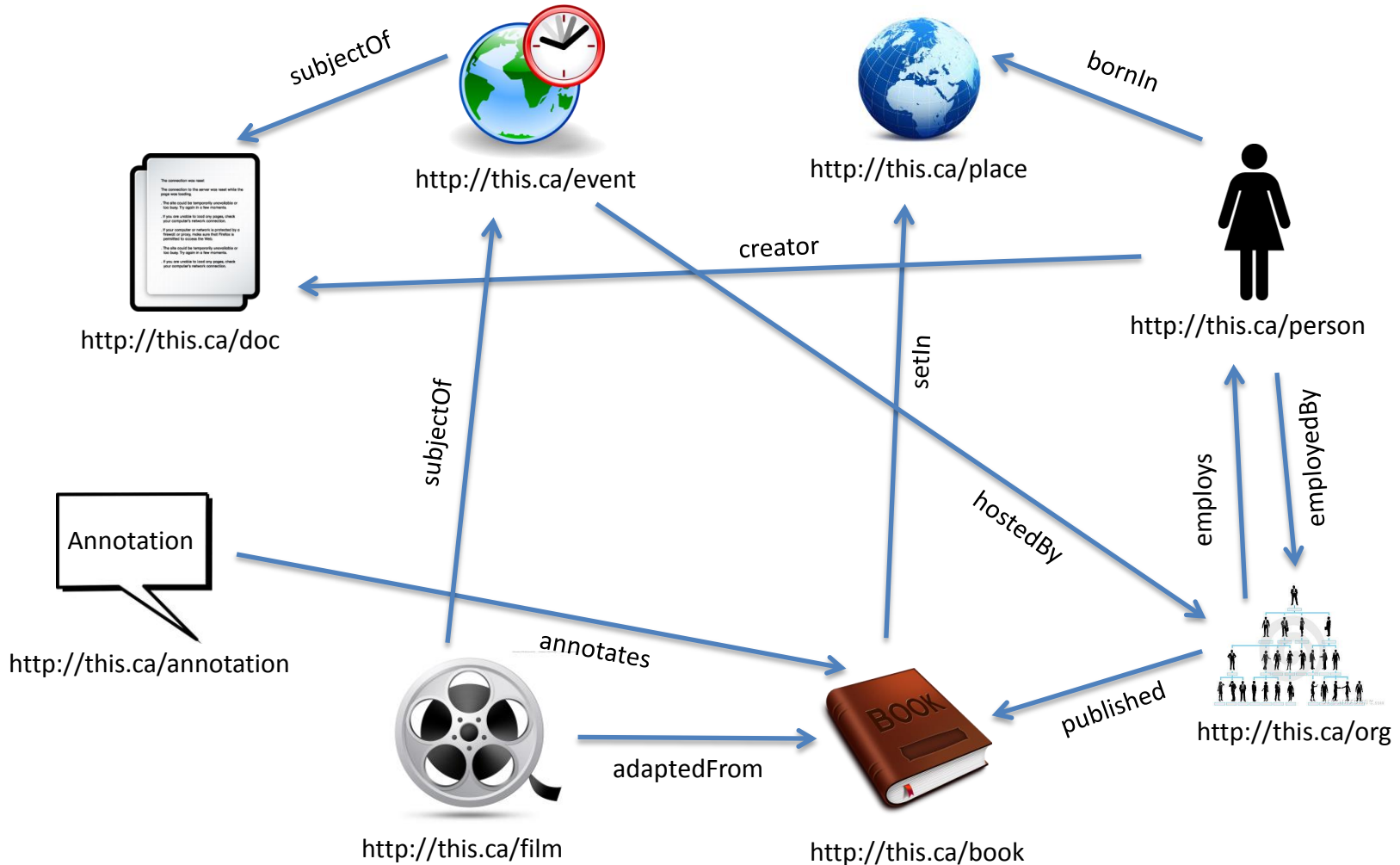
[http://dbpedia.org/resource/Mary\\_Shelley](http://dbpedia.org/resource/Mary_Shelley)

<http://id.loc.gov/authorities/names/n85300519>

<http://viaf.org/viaf/95216565/>

<http://cwrc.ca/person/6qMXIR5UNQSiupA>

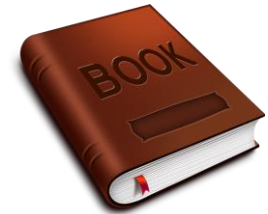
# Define Relationships



# RDF Statement

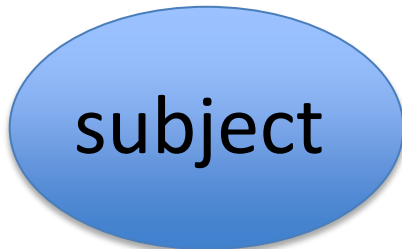


wrote

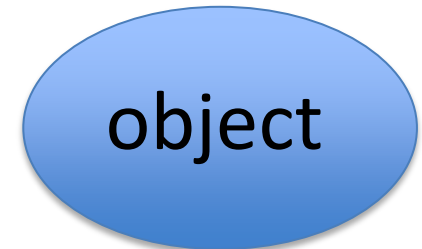


<http://viaf.org/viaf/39385478/>    [http://dbpedia.org/resource/Mrs\\_Dalloway](http://dbpedia.org/resource/Mrs_Dalloway)

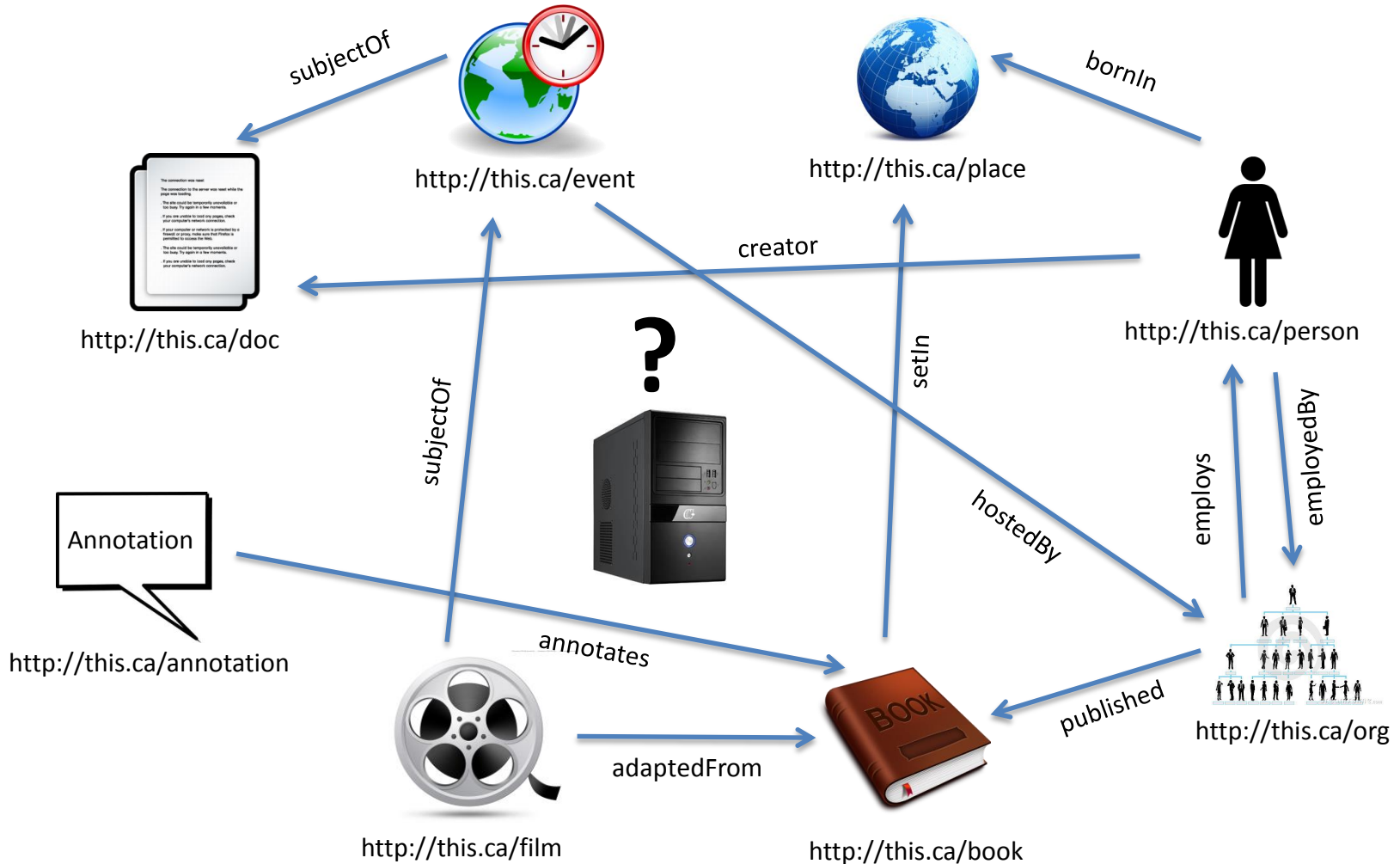
<http://purl.org/dc/elements/1.1/creator>



predicate



# Machine Readable Definitions



# Ontologies

The semantic web is basically an accessibility initiative for machines.

# Role of Ontologies

- Define entities (classes)
- Define relationships (properties)
- Impose rules to support machine reasoning.
- Machine-readable (RDF)



# Reuse or Build?

An ontology is for life.

# Ontology Dowsing



Linked Open Vocabularies (LOV)



developed by Pierre-Yves Vandenbussche

The "LOV Search" Features gives you the possibility to search for an existing element (property, class or vocabulary) in the Linked Open Vocabularies Catalogue.

[LOV Aggregator endpoint](#) and [metrics](#) about the use of vocabularies in the Semantic Web are used to bring you some relevant results.



Endpoint

Filter by Domain

- City (0)
- General and Meta (1)
- Library (9)
- Market (0)
- Media (0)
- Science (0)
- Web (0)
- Where & When (1)

Filter by Type

- rdfs:Class (10)
- rdf:Property (1)
  - voaf:Vocabulary (1)
  - Other (2)

12 results in 6 vocabularies

<a href="#">fabio:Poem</a> (owl:Class)	score:0.882	>>
<a href="#">rdfs:label</a> <b>poem</b> @en		
<a href="#">music:Symphonic_Poem</a> (owl:Class)	score:0.462	>>
<a href="#">rdfs:label</a> <b>Symphonic Poem</b>		
<a href="#">dctype:Text</a> (owl:Class)	score:0.131	>>
<a href="#">dc:description</a> ...ers, dissertations, <b>poems</b> , newspapers, artic... @en		
<a href="#">fabio:ArtisticWork</a> (owl:Class)	score:0.038	>>
<a href="#">rdfs:comment</a> ...h as a novel, play, <b>poem</b> or song. @en		
<a href="#">fabio:Anthology</a> (owl:Class)	score:0.020	>>
<a href="#">rdfs:comment</a> ... works, for example <b>poems</b> , short stories, pl... @en		
<a href="#">doco:Stanza</a> (owl:Class)	score:0.014	>>
<a href="#">rdfs:comment</a> ...nit within a larger <b>poem</b> . A stanza consists ... @en		

# foaf:Person (Class)

Class: foaf:Person

*Person* - A person.

**Status:** stable

**Properties include:** [myersBriggs](#) [familyName](#) [publications](#) [lastName](#) [family\\_name](#) [firstName](#) [currentProject](#) [surname](#) [knows](#) [workInfoHomepage](#) [pastProject](#) [geekcode](#) [schoolHomepage](#) [workplaceHomepage](#) [img](#) [plan](#)

**Used with:** [knows](#)

**Subclass Of** [Agent](#) [Spatial Thing](#) [Person](#)

**Disjoint With:** [Organization](#) [Project](#)

The [Person](#) class represents people. Something is a [Person](#) if it is a person. We don't nitpic about whether they're alive, dead, real, or imaginary. The [Person](#) class is a sub-class of the [Agent](#) class, since all people are considered 'agents' in FOAF.

# frbr:Work (Class)

## work

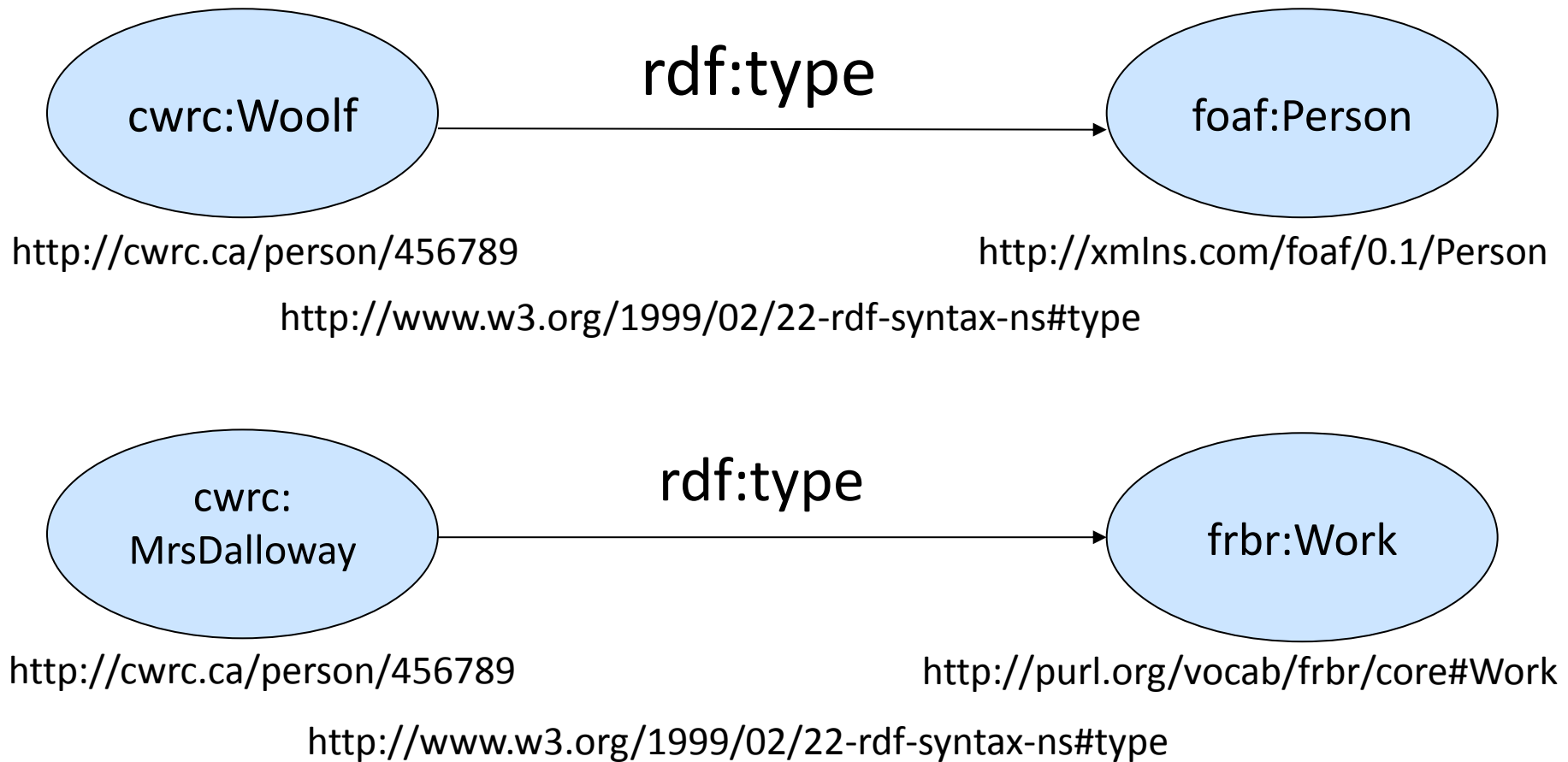
**URI:** <http://purl.org/vocab/frbr/core#Work>

A class whose members are an abstract notion of an artistic or intellectual creation. This class corresponds to the FRBR group one entity 'Work'.

## Semantics

Being a member of this class implies also being a member of [endeavour](#) and <http://xmlns.com/wordnet/1.6/Work~2>. No member of this class can also be a member of [expression](#), [manifestation](#) or [item](#). Having a [realization](#), a [creator](#) or a [subject](#) implies being a member of this class. Things are a member of this class if they are the value of a [realization of](#) or a [creator of](#).

# Assigning Entities to Classes



# Ontology: Predicates

Person to Person

e.g. Relationship Ontology (rel:[EnemyOf](#))

Document to Document

e.g. Bibliographic Ontology (bibo:[reviewOf](#))

Annotation to Document

e.g. Open Annotation Ontology (oa:[hasTarget](#))

# Ontology: Predicates



## Life Partner of

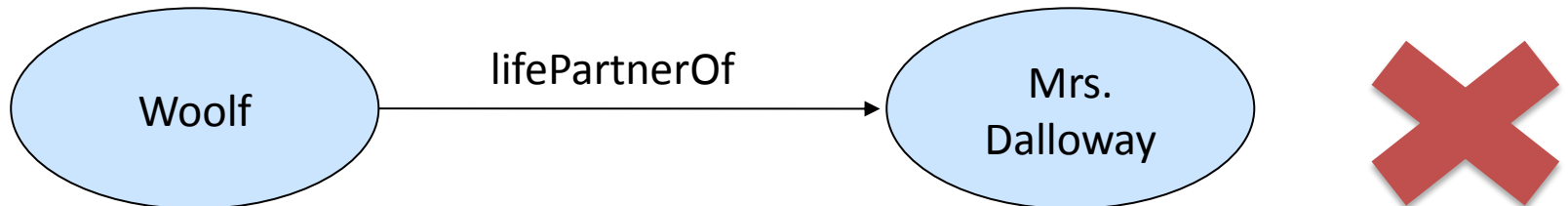
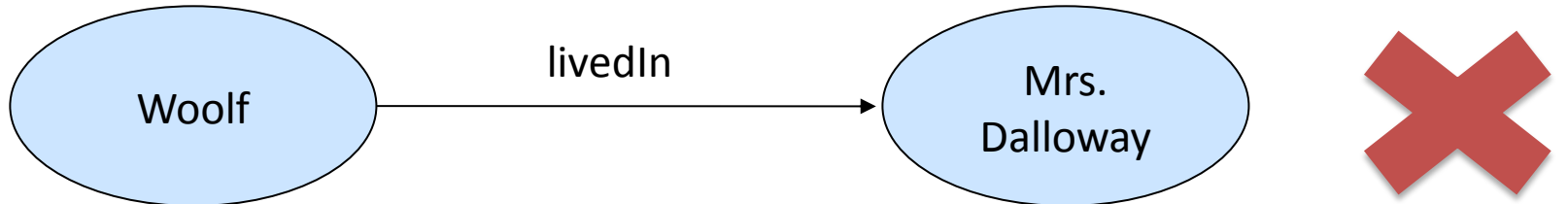
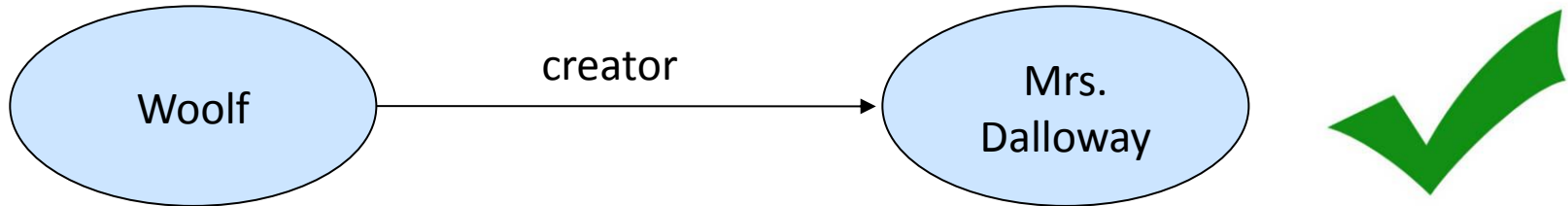
**URI:** <http://purl.org/vocab/relationship/lifePartnerOf>

A property representing a person who has made a long-term commitment to this person

### Semantics

This property is symmetrical. Having this property implies being a [foaf:Person](#). Every value of this property is a [foaf:Person](#). It is a sub-property of [foaf:knows](#) and [owl:differentFrom](#).

# Classes and predicates work together to support reasoning.





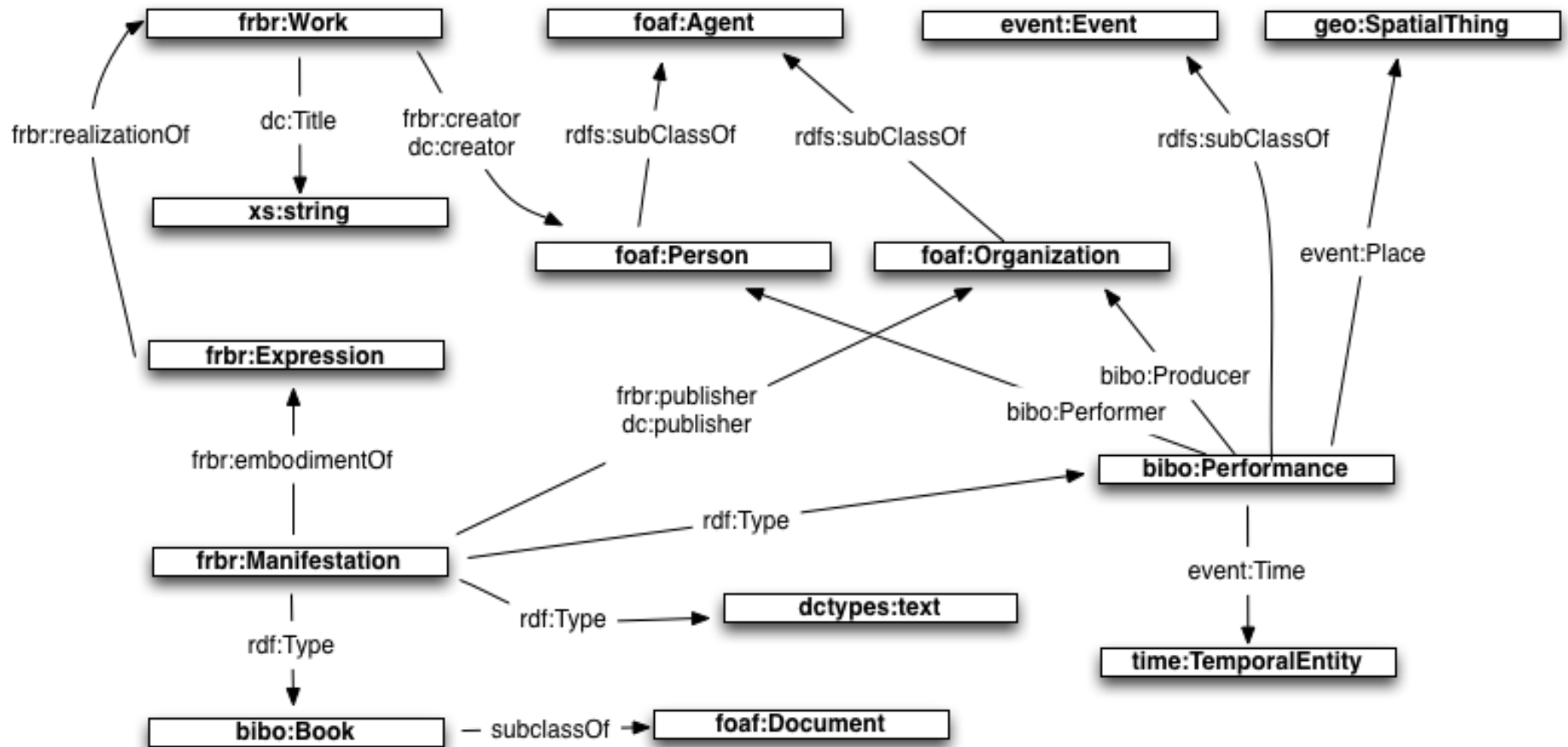
# CWRC RDF Ontologies

Entity	Relevant Ontologies
Person	FOAF, MADS, EAC-CPF
Work	FRBR, MODS, DC
Place	WGS84 Geo Positioning, Geonames
Organization	FOAF, EAC-CPF
Event	OWL Time, Event
Annotation	Open Annotation, OAI-ORE

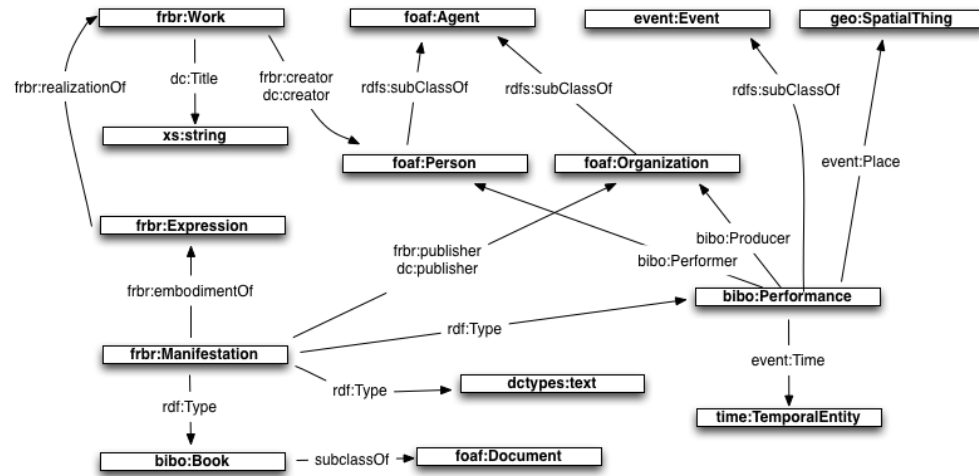
# So Far

- defined our major entities and relationships
- minted URIs to represent those things within the CWRC data store
- selected ontologies that will help computers to reason about our entities and relationships

# Data Model



# Integrating the Data Model



?



Creates



# CWRC-Writer

## an open-source editor for online digital scholarship

This is an early prototype for demonstration purposes: certain features are not yet functional and there are many bugs. The editor works best with the current version of the Firefox browser (available [here](#)).

For more information or to help with testing CWRC-Writer, visit [here](#).

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Load an Existing Document

Create a Letter

See a Sample Letter

Create a Poem

See a Sample Poem

Create Prose

Create an Event

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The Canadian Writing Research Collaboratory  
Le Collaboratoire scientifique des écrits du Canada

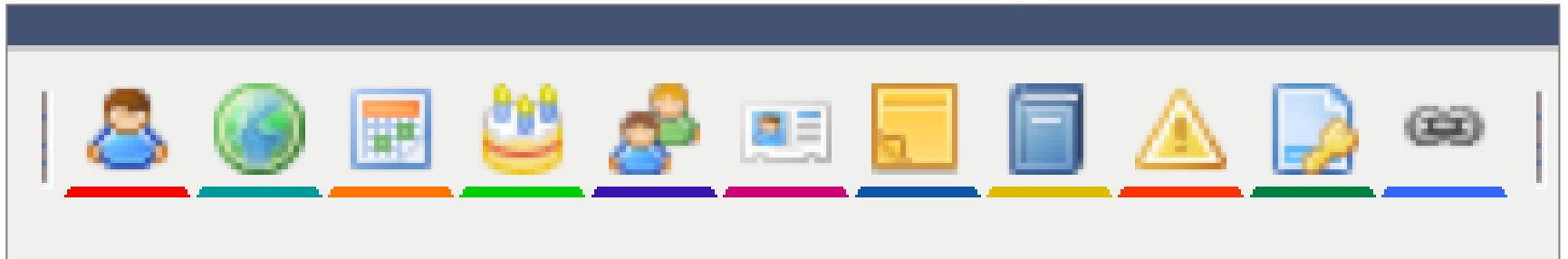
**INNOVATION.CA**

CANADA FOUNDATION  
FOR INNOVATION

FONDATION CANADIENNE  
POUR L'INNOVATION



# CWRC-Writer Tagging Toolbar





TEI » text » body » head » title

Sample Letter - **Bertrand Russell** to Patricia Spence - October 21, 1935

Bad writing due to shaky train

In train

Oslo to Bergen

21.10.35

Dearest -

I have had no letter from you since I left Stockholm, but I had a nice one from John in an envelope you had sent him. I had sent him one addressed to Copenhagen but he hadn't used it.

When I reached Oslo yesterday evening, Brynjulf Bull should have been there to meet me, but wasn't. He is not on the telephone, so I took a taxi to his



## Tag Person

Search

### ▼ Results from cwrc Project

Arthus Bertrand  
Oscar Bertrand  
Bertrand, Thérèse  
Russell, Bertrand  
Sir Bertrand: A Fragment  
Jouvenel, Bertrand de  
Arthus-Bertrand, Yann  
Bertrand, Jean-Baptiste  
Bronson, Bertrand H.  
Smith, Hastings Bertrand Lees  
Moleville, Antoine-François Bertrand de  
Penn, Bertrand Edward,,, Viscount Dawson of

▶ Results from Web

▶ Alternate Identifier

This identification is:

Definite

Reasonably Certain

Speculative

Results from  
Authority File.

TEI » text » body » head » title

Sample Letter - Bertrand Russell to Pa

Bad writing due to shaky train

Dearest -

I have had no letter from you since I  
envelope you had sent him. I had sent  
used it.

When I reached Oslo yesterday evening  
but wasn't. He is not on the telephone  
a students' club with no one about on  
non-plussed. But presently he turned  
when he had found he had missed me  
right one. He left me at 10, and then I  
lasts from 9 till 9 - fortunately one of  
Tomorrow I lecture at Bergen to the A  
lecture there Fri. and Sat. and then sta

Bull is a nice young man but incompe



TEI » text » body » head » title

Sample Letter - Bertrand Russell to Pa

Bad writing due to shaky train

In train

Oslo to Bergen

21/03/55

Darkest

I have had no letter from you since I l

envelope you had sent him. I had sen  
used it.

When I reached Oslo yesterday eveni  
but wasn't. He is not on the telephone  
a students' club with no one about on  
non-plussed. But presently he turned  
when he had found he had missed m  
right one. He left me at 10, and then I  
lasts from 9 till 9 - fortunately one of t  
Tomorrow I lecture at Bergen to the A  
lecture there Fri. and Sat. and then sta

Bull is a nice young man but incompe

### Tag Person

Search

▶ Results from cwrc Project

▼ Results from Web

- Bertrand Russell, 1872-1970
- Bertrand Russell peace foundation
- Bertrand Russell society
- Bertrand Russell Research Centre
- Bertrand Russell Archives
- Bertrand Russell Peace Foundation. Australian Branch
- Bertrand Russell Centenary Symposium on Spheres of Influence in the Age of Imperialism 1972 Linz, Austria
- Bertrand Russell peace foundation (New York)
- Bertrand Russell Tribunal 2 1974 - 1976 Roma; Bruxelles
- Bertrand Russell memorial logic conference 1971 Uldum, Denmark

▶ Alternate Identifier

This identification is:

Definite
  Reasonably Certain
  Speculative

API Lookup to  
Web Services.

# VIAF OpenSearch

<http://viaf.org/viaf/search?query=local.names+all+%22margaret%20atwood%22+&maximumRecords=100&startRecord=1&sortKeys=holdingscount&httpAccept=application/rss%2Bxml>

## VIAF Search: margaret atwood

VIAF: Results of search: local.names all "margaret atwood"

[Atwood, Margaret, 1939-....](#)

21 September, 2012 9:54 AM

[Atwood, Margaret](#)

16 November, 2010 1:37 AM

[Margaret Atwood Society](#)

17 December, 2010 1:51 AM

[Judson, Margaret Atwood, 1899-1991](#)

22 May, 2012 4:37 AM

[Robinson, Margaret A.](#)

22 February, 2010 3:14 AM

# DBpedia RESTful API

```
curl -H "Content-Type: text/xml" -d @post.xml  
http://dbpedia.org/fct/service > result.xml
```

```
<?xml version="1.0"?>  
<query  
  xmlns="http://openlinksw.com/services/facets/1.  
0" inference="" same-as="">  
  <text>Mary Shelley</text>  
  <view type="text" limit="5" offset=""/>  
</query>
```

### Tag Person

Search

- ▶ Results from cwrc Project
- ▶ Results from Web

▼ Alternate Identifier

Name ?

Local Identifier ?

URI ?

This identification is:

TEI » text » body » head » title

Sample Letter - Bertrand Russell to

Bad writing due to shaky train

In train

Oslo to Bergen

21 10 35

Dearest  
I had a letter from you since  
envelope you had sent him. I had

When I reached Oslo yesterday ev  
wasn't. He is not on the telephone,  
students' club with no one about c  
But presently he turned up. He ha  
he had missed me he phoned to ev  
and then I had to do a Sunday Ref  
one of the most beautiful railway j  
Anglo-Norwegian Society. Next da  
for home via Bergen.

Bull is a nice young man but incor  
socialists too mild.

I am unhappily wondering what y

Add custom identifier.



true

Russell Bertra

### New Person

Name Part :  [?]

Name Part Type : **surname** [?]

[+] [-]

▼ Variant Names

Name Part :  [?]

Name Part Type : **surname** [?]

[+] [-]

Variant Name Type : **Birth Name** [?]

[+] [-]

Name authorized by :  [?]

[+] [-]

Same as entity described in :  [?]

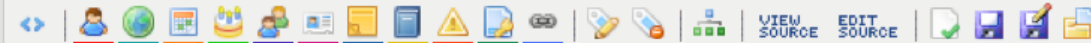
Certainty :  definite [?]  
 reasonably certain  
 probable

save cancel

Entities Structure Relations

Sort By Sequence Category

Bertrand Russell

**term:** Bertrand Russell, 1872-1970**viafid:** 36924137**ptbnp:** 24066**nla:** 000035468761**nliheb:** 000247171**niilat:** 000114833**nkc:** jn20000604734**nliara:** 000161714**egaxa:** vtls000835566**bne:** xx986609**bnf:** 11923140

TEI » text » body » head » title

Sample Letter - **Bertrand Russell** to Patricia Spence - October 21, 1935

Bad writing due to shaky train

In train

Oslo to Bergen

21.10.35

Dearest -

I have had no letter from you since I left Stockholm, but I had a nice one from John in an envelope you had sent him. I had sent him one addressed to Copenhagen but he hadn't used it.

When I reached Oslo yesterday evening, Brynjulf Bull should have been there to meet me, but wasn't. He is not on the telephone, so I took a taxi to his address, which turned out to be a students' club with no one about on Sundays, so I went to a hotel feeling rather non-plussed. But presently he turned up. He had got the time of my arrival wrong, and **when** he had found he had missed me he phoned to every hotel in Oslo till he hit on the right one. He left me at 10, and then I had to do a Sunday Referee article. Today my journey lasts from 9 till 9 - fortunately one of the most beautiful railway journeys in the world. Tomorrow I lecture at Bergen to the Anglo-Norwegian Society. Next day I go back to Oslo, lecture there Fri. and Sat. and then start for home via Bergen.

Bull is a nice young man but incompetent - can't quite stand the communists, but finds the

# Entity in XML

```
<span name="ent_1798" class="entity person  
start" type="person" entity="true" />
```

Russell Bertrand

```
<span name="ent_1798" class="entity person  
end" type="person" entity="true" />
```



# Entity in RDF

```
<rdf:Description rdf:ID="ent_1798">
  <w:type type="props">person</w:type>
  <w:content type="props">Bertrand Russell</w:content>
  <w:term type="info">Bertrand Russell, 1872-1970</w:term>
  <w:viafid type="info">36924137</w:viafid>
  <w:bnf type="info">11923140</w:bnf>
  <w:dnb type="info">118604287</w:dnb>
  <w:lc type="info">n79056054</w:lc>
  <w:certainty type="info">definite</w:certainty>
</rdf:Description>
```

TEI » text » body » opener » not

Sample Letter - (Bertrand  
Bad writing due to shaky  
In train  
Oslo to Bergen  
21.10.35  
Dearest -  
I have had no letter from  
envelope you had sent hi  
When I reached Oslo yes  
wasn't. He is not on the t  
students' club with no or  
But presently he turned u  
he had missed me he pho  
and then I had to do a Su  
one of the most beautiful  
Anglo-Norwegian Societ  
for home via Bergen.  
Bull is a nice young man  
socialists too mild.  
I am unhappily wonderin

### Tag Place

Search

▶ Results from cwrc Project

▼ Results from Web

- Oslo filharmoniske orkester
- Oslo nye teater
- Oslo**
- Oslo kunstforening
- Oslo merkantile høyskole
- Oslo bolig- og sparelag
- Oslo børs
- Oslo filharmoniske kor
- Oslo) CICERO (Senter for klimaforskning)
- Oslo Byplankontoret

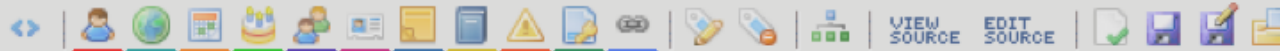
▶ Alternate Identifier

This identification is:

Definite  Reasonably Certain  Speculative

Edit Header

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ssed.  
found  
e at 10,  
nately  
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n start  
he



TEI » text » body » title

Sample Letter - (Bertrand Ru

Bad writing due to shaky tra

In train

(Oslo) to (Bergen)

21.10.35

Dearest -

I have had no letter from you  
envelope you had sent him. I

When I reached Oslo yesterd  
wasn't. He is not on the telep  
students' club with no one al  
But presently he turned up. I

he had missed me he phoned to every hotel in Oslo till he hit on the right one. He left me at 10, and then I had to do a **Sunday Referee** article. Today my journey lasts from 9 till 9 - fortunately one of the most beautiful railway journeys in the world. Tomorrow I lecture at Bergen to the Anglo-Norwegian Society. Next day I go back to Oslo, lecture there Fri. and Sat. and then start for home via Bergen.

Bull is a nice young man but incompetent - can't quite stand the communists, but finds the socialists too mild.

I am unhappily wondering what you are feeling about me.

**Tag Text/Title**

## Type

- Analytic (article, poem, or other item published as part of a larger item)
- Monographic (book, collection, single volume, or other item published as a distinct item)
- Journal (magazine, newspaper or other periodical publication)
- Series (book, radio, or other series)
- Unpublished (thesis, manuscript, letters or other unpublished material)

Equivalent title (optional)  (standard form of title)Refer to text (optional)  Unformatted

Tag Text/Title

Cancel



TEI » text » body » head » title

Sample Letter - (Bertrand Russell) to Patricia Spence - October 21, 1935

Bad writing due to shaky

In train

(Oslo) to (Bergen)

21.10.35

Dearest -

I have had no letter from you in an envelope you had sent him. I didn't used it.

When I reached Oslo yesterday, I met me, but wasn't. He is not on the telephone, so I took a taxi to his address, which turned out to be a students' club with no one about on Sundays, so I went to a hotel feeling rather non-plussed. But presently he turned up. He had got the time of my arrival wrong, and when he had found he had missed me he phoned to every hotel in Oslo till he hit on the right one. He left me at 10, and then I had to do a (Sunday Referee) article. Today my journey lasts from 9 till 9 - fortunately one of the most beautiful railway journeys in the world. Tomorrow I lecture at Bergen to the (Anglo-Norwegian Society). Next day I go back to Oslo, lecture there Fri. and Sat. and then start for home via Bergen.

Bull is a nice young man but incompetent - can't quite stand the communists, but finds the socialists too mild.

I am unhappily wondering what you are feeling about me.

## Tag Date

Date 1935-10-21

 Date Date Range

Form e.g. 2



Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Tag Date

Cancel

List of named entities.

Add Relationship.

**CWRC-Writer v0.3** Settings Help Edit Header

Entities Structure Relations

Sort By Sequence Category

- Bertrand Russell
- October 21, 1935
- Oslo
- Bergen
- Stockholm
- John
- Copenhagen
- Brynjulf Bull
- Sunday Referee
- Anglo-Norwegian Society

TEI » text » body » opener » dateline » date

Sample Letter - (Bertrand Russell) to Patricia Spence - (October 21, 1935)

Bad writing due to shaky train

In train

(Oslo) to (Bergen)

21.10.35

Dearest -

I have had no letter from you since I left (Stockholm), but I had a nice one from (John) in an envelope you had sent him. I had sent him one addressed to (Copenhagen) but he hadn't used it.

When I reached Oslo yesterday evening, (Brynjulf Bull) should have been there to meet me, but wasn't. He is not on the telephone, so I took a taxi to his address, which turned out to be a students' club with no one about on Sundays, so I went to a hotel feeling rather non-plussed. But presently he turned up. He had got the time of my arrival wrong, and when he had found he had missed me he phoned to every hotel in Oslo till he hit on the

Add Relation

Subject	Predicate	Object
Bertrand Russell		Bertrand Russell
Oslo		Oslo
Bergen		Bergen
Stockholm		Stockholm
John		John
Copenhagen		Copenhagen
Sunday Referee		Sunday Referee
Anglo-Norwegian Society		Anglo-Norwegian Society
Brynjulf Bull		Brynjulf Bull
October 21, 1935		October 21, 1935
<input type="text" value="Custom Subject"/>	<input type="text" value="Custom Predicate"/>	<input type="text" value="Custom Object"/>

Add Relation

Close











m (John) in an  
 ut he hadn't

re to meet me,  
 urred out to  
 g rather  
 wrong, and  
 e hit on the  
 day my  
 neys in the  
 day I go back

## Add Relation



### Subject

-  Bertrand Russell
-  Oslo
-  Bergen
-  Stockholm
-  John
-  Copenhagen
-  Sunday Referee
-  Anglo-Norwegian Society
-  Brynjulf Bull
-  October 21, 1935











Custom Subject

### Predicate

- is located within
- contains

Custom Predicate

### Object





















-  Bertrand Russell
-  Oslo
-  Bergen
-  Stockholm
-  John
-  Copenhagen
-  Sunday Referee
-  Anglo-Norwegian Society
-  Brynjulf Bull
-  October 21, 1935

Custom Object

Oslo

Add Relation

### Add Relation ✕

Subject	Predicate	Object
 <b>Bertrand Russell</b>	is a child of	 Bertrand Russell
 Oslo	is a parent of	 Oslo
 Bergen	is related to	 Bergen
 Stockholm	was born on	 Stockholm
 John	died on	 <b>John</b>
 Copenhagen		 Copenhagen
 Sunday Referee		 Sunday Referee
 Anglo-Norwegian Society		 Anglo-Norwegian Society
 Brynjulf Bull		 Brynjulf Bull
 October 21, 1935		 October 21, 1935
<input type="text" value="Custom Subject"/>	<input type="text" value="Custom Predicate"/>	<input type="text" value="Custom Object"/>

**Bertrand Russell is a parent of John.**



## Relations Tab

CWRC-Writer v0.3

Settings Help Edit Header

Entities Structure Relations

TEI > text > body

Sample Letter - (Bertrand Russell) to Patricia Spence - (October 21, 1935)

Bad writing due to shaky train

In train

(Oslo) to (Bergen)

21.10.35

Dearest -

I have had no letter from you since I left (Stockholm), but I had a nice one from (John) in an envelope you had sent him. I had sent him one addressed to (Copenhagen) but he hadn't used it.

When I reached Oslo yesterday evening, (Brynjulf Bull) should have been there to meet me, but wasn't. He is not on the telephone, so I took a taxi to his address, which turned out to be a students' club with no one about on Sundays, so I went to a hotel feeling rather non-plussed. But presently he turned up. He had got the time of my arrival wrong, and when he had found he had missed me he phoned to every hotel in Oslo till he hit on the right one. He left me at 10, and then I had to do a (Sunday Referee) article. Today my journey lasts from 9 till 9 - fortunately one of the most beautiful railway journeys in the world. Tomorrow I lecture at Bergen to the (Anglo-Norwegian Society). Next day I go back to Oslo, lecture there

# Relationship in RDF

```
<rdf:Description rdf:about="ent_1798"  
  w:external="false">  
  <w:isAParentOf w:text="is a parent of"  
    w:external="false">  
    <rdf:Description rdf:about="ent_1802"  
      w:external="false" />  
    </w:isAParentOf>  
  </rdf:Description>
```

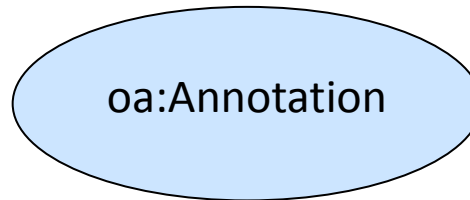
# Entity in RDF

```
<rdf:Description rdf:ID="ent_1798">  
  <w:id type="offset">ent_1798</w:id>  
  <w:offset type="offset">117</w:offset>  
  <w:length type="offset">16</w:length>  
  <w:entity type="offset">>true</w:entity>  
  <w:type type="props">person</w:type>  
  <w:content type="props">Bertrand Russell</w:content>  
  <w:term type="info">Bertrand Russell, 1872-1970</w:term>  
  <w:viafid type="info">36924137</w:viafid>  
  <w:bnf type="info">11923140</w:bnf>  
  <w:dnb type="info">118604287</w:dnb>  
  <w:lc type="info">n79056054</w:lc>  
  <w:certainty type="info">definite</w:certainty>  
</rdf:Description>
```



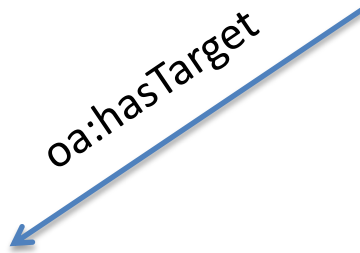
# Open Annotation Core Data Model

Community Draft, 09 May 2012



<http://cwrc.ca/annotation/12345>

oa:hasTarget



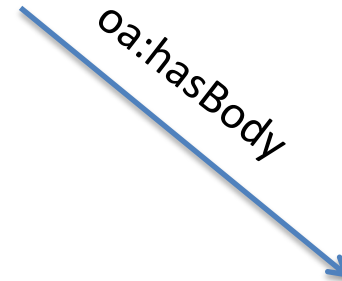
<http://cwrc.ca/work/12345>

oa:hasSemanticTag



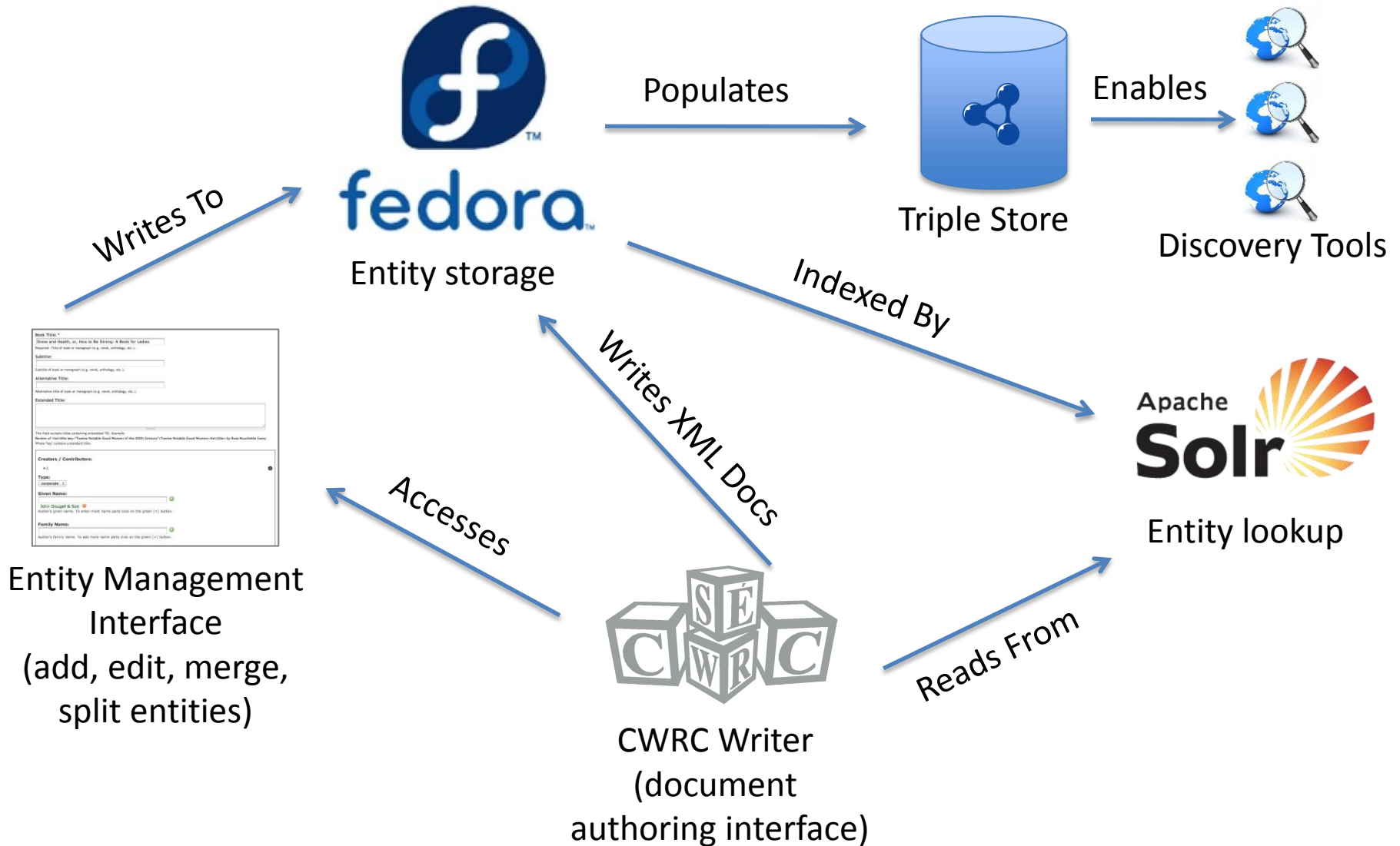
<http://cwrc.ca/person/12345>

oa:hasBody



“Patricia Spence was nanny to Russell’s children before becoming his third wife.”

# CWRC Entity Management System



# Credits

CWRC

Susan Brown  
Mariana Parades-Olea  
Jeffery Antoniuk  
Denilson Barbosa  
Ruth Knetchel  
Omar Rodriguez-Arenas

INKE

Ray Siemens  
Stan Ruecker  
Harvey Quamen  
John Simpson  
Jentery Sayers

# Related Links

CWRC Writer Beta:

<http://cwrctc.artsrn.ualberta.ca/>

CWRC Writer Overview:

<http://www.cwrc.ca/projects/infrastructure-projects/technical-projects/cwrc-writer/>

About CWRC:

<http://www.cwrc.ca/about/>