

Exploring Annotated Multimedia Repositories

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What do we (CWI) have?

- Content
 - images, text, video
 - (growing) collection of Dutch cultural heritage artefacts
 - news stories, images and videos
- Annotations
 - tags, keywords, terms, concepts
- Semantics
 - KR languages: RDF(S), OWL
 - thesauri/ontologies: NewsCodes, Wordnet
 - linked data repositories: DBPedia, Geonames

What do users want to do with tagged media?

- Tag information
 - what do we want to tag?
 - how do we want to tag it?
- Search and browse collections
 - find specific items
 - understand collection as a whole
- Communicate information
 - human-human, web->human
- Communicate experiences
 - human-human


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Semantic autocompletion for tagging

Autocompletion for tagging


Task 2: autocompletion with alphabetical order 4 / 8

- Use the Wikipedia link to find the correct birth place.
- Enter the location in the textfield and select the correct answer from the autocompletion suggestions.




http://en.wikipedia.org/wiki/Linford_Christie

name :: Linford Christie
occupation :: Former athlete
birth date :: April 2, 1960
birth place ::




http://en.wikipedia.org/wiki/Noor_Hassanali

name :: Noor Hassanali
occupation :: Former Second president of the Republic of Trinidad and Tobago
birth date :: 19 March 1987
birth place ::



http://en.wikipedia.org/wiki/Helen_Elizabeth_Clark

name :: Helen Elizabeth Clark
occupation :: Prime Minister
birth date :: born February 26, 1950
birth place ::



Semantic autocompletion for tagging

Autocompletion for tagging

Give an autocompletion preference 7 / 8

Below you see the four interfaces you used before

- Please, rank the four interfaces from most preferred (1) to least preferred (4).

Task 1 no autocompletion	Task 2 autocompletion with alphabetical order	Task 3 autocompletion with grouping, first variant	Task 4 autocompletion with grouping, second variant
<p>select a rank ▾</p> <p>please provide a reason (obligatory)</p> <p>kingston [x]</p>	<p>select a rank ▾</p> <p>please provide a reason (obligatory)</p> <p>kingston</p> <ul style="list-style-type: none"> Kingston (Kingscreek), Ohio, United States place Kingston, Surrey, Jamaica city Kingston, Massachusetts, United States place Kingston, Oregon, United States place Kingston, New Jersey, United States place Kingston, New York, United States place Kingston (Kingstown), North Carolina, United States place Kingston, Ontario, Canada city 	<p>select a rank ▾</p> <p>please provide a reason (obligatory)</p> <p>kingston</p> <ul style="list-style-type: none"> Kingston city Australia Kingston, Queensland place Kingston Southeast, South Australia place Canada Kingston, Ontario city Kingston, Nova Scotia place Kingston Mills, Ontario place Jamaica Kingston, Surrey city 	<p>select a rank ▾</p> <p>please provide a reason (obligatory)</p> <p>kingston</p> <ul style="list-style-type: none"> Kingston Kingston Bagraize Kingston Bay Kingston Bay Marshes Kingston Branch Kingston Brook Kingston Canal Kingston Canyon Kingston Canyon Mine Kingston Cave Kingston Center Kingston Creek Kingstone Kingstone Creek Kingstone Estates <p>see more</p>

Browse collections using semantic dimensions

browser - Mozilla Firefox

http://newsml.ca.nl/epsilon/facet#139

K-Space NewsML Semantic news demonstrator

SEARCH BROWSE LOCAL VIEW ANNOTATE

Facets

subject

- golf
- luge
- motor racing
- motorcycling
- rugby union
- soccer

slugline

- FBL-WC2006-MATCH54-ITA-FRU
- FBL-WC2006-MATCH54-ITA-FRU
- FBL-WC2006-MATCH54-ITA-FRU
- FBL-WC2006-FRA-POR-FINIS
- FBL-WC2006-FRANCE

creator

- JACK_GUEZ
- "no label"
- OLIVIER_LABAN-MATTEI
- FLIPPO_MONTEFORTE
- KAMBOU_SIA

locCreated

- Paris
- Berlin
- Rome
- Stuttgart
- Photos-WC2006-all_data.rdf

location

- Brasil
- France
- Portugal
- Ukraine
- Switzerland

person

- Zidane, Zinedine
- Ronaldo
- Robinho
- Franci, Ribery
- Oleg, Gusev
- Zinedine, Zidane

CATEGORIES

Newsitem

Concept

soccer

Two teams of eleven try to kick or head a ball into the opponents goal over a match usually of 90 minutes

RESULTS

Group by: Newsitem

Newsitem (+1000)

Pa788550_2.rdf DANIEL_RAHING

Pa788547_2.rdf DANIEL_RAHING

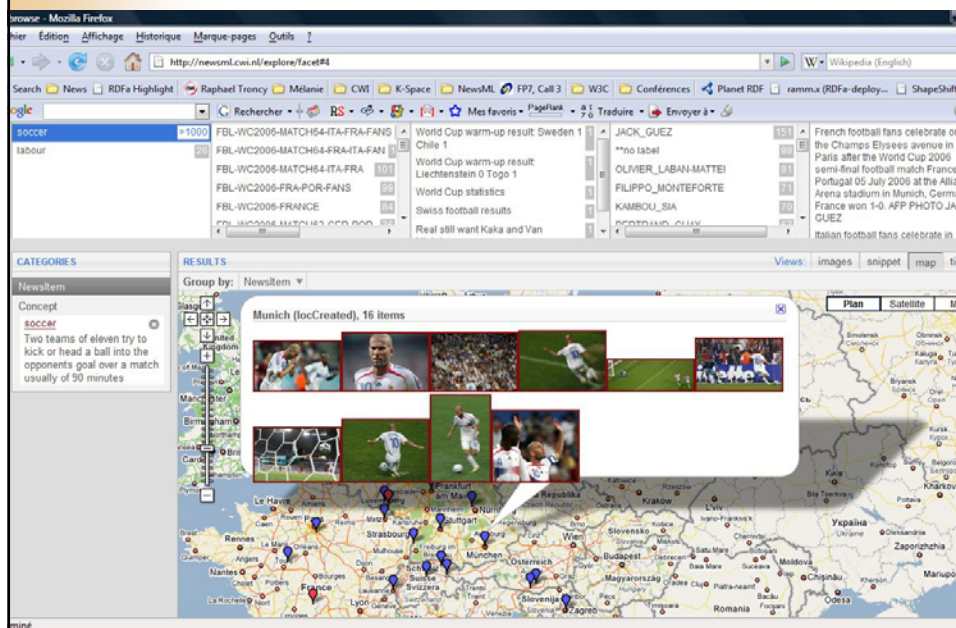
Pa788543_2.rdf JOHNS_ENSTROMER

Pa788540_2.rdf JOHNS_ENSTROMER

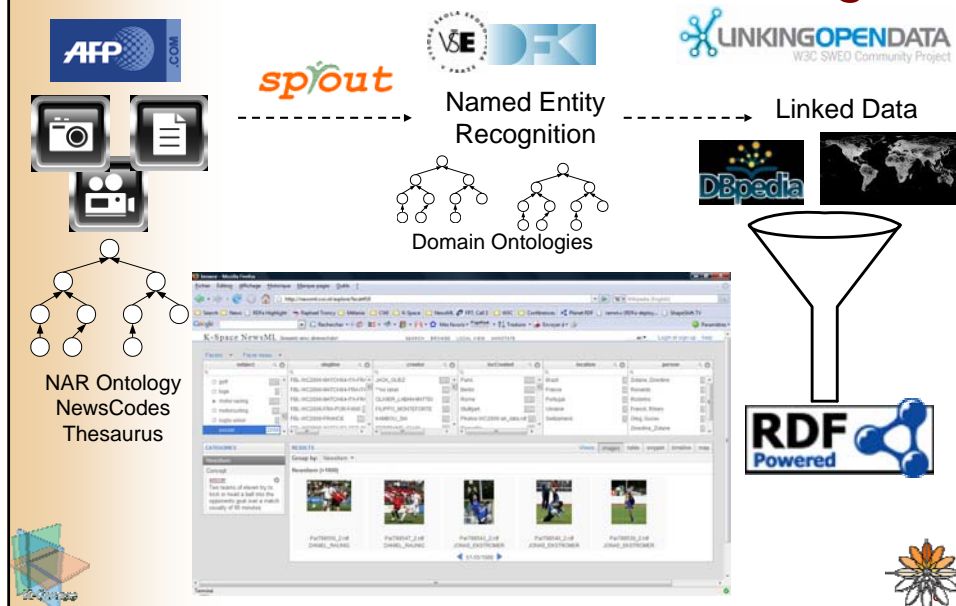
Pa788539_2.rdf JOHNS_ENSTROMER

51-55/1000

Relating semantic tags from different sources



Automatic Semantic Processing



Tagging media fragments (COMM)

Reg1



The "[Big Three](#)" at the Yalta Conference (Wikipedia)

- Localize a region (person)
- Annotate the content (interpretation)
[Winston Churchill](#), UK Prime Minister, Allied Forces, WWII
- Link to knowledge on the Web

```
:Reg1 foaf:depicts dbpedia:WinstonChurchill  
dbpedia:Churchill rdfs:label "Winston Churchill"  
dbpedia:Churchill rdf:type foaf:Person  
dbpedia:Churchill rdf:type wikipedia:UKPrimeMinister
```

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Generating video
documentaries from
annotated media repositories

Stefano Bocconi, Frank Nack (UvA)

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<http://www.interviewwithamerica.com>



Example: *What do you think of the war in Afghanistan?*



"I am never a fan of military action, in the big picture I don't think it is ever a good thing, but I think there are circumstances in which I certainly can't think of a more effective way to counter this sort of thing..."

What do you think of the war in Afghanistan?

I am not a fan of military actions



I cannot think of a more effective solution



War has never solved anything



Two billions dollar bombs on tents

The annotations

□ Rhetorical

- Rhetorical Statement
(mostly verbal, but visual also possible)
- Argumentation model: Toulmin model

□ Descriptive

- Question asked
- Interviewee (social)
- Filmic *next slide*

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Filmic annotations

Continuity, e.g.

- lighting conditions
- background sound
- gaze direction of speaker
left, centre, right
- framing continuity
close-up, medium shot, long shot
- camera movement
none, pan left/right, shaking, tilt up/down,
zoom in/out

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Potential research within Petamedia

- Make tags more semantic (concepts)
- Learn associations between semantic tags and visual features
- Provide user interfaces for tagging, querying, browsing and presenting media
 - should these be different?
- Learn from how users explore repositories
- Centralised -> distributed repositories

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