# Term extraction from FactForge

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## The ontology

- FactForge: http://factforge.net/
- RDF triples
- Search by SPARQL queries

#### Term extraction

- Pre-constructed queries, user writes only the keyword
- Options:
  - Search for similar terms
  - Search for subterms

• The pre-constructed query is like this:

```
SELECT ?item ?name
WHERE {
?item <isA> <ourTopic> .
?item <isNamed> ?name
}
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• In place of <isNamed>:
```

http://rdf.freebase.com/ns/type.object.name

http://www.w3.org/2000/01/rdf-schema#label

http://dbpedia.org/property/name

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  - http://dbpedia.org/property/name
  - http://www.w3.org/2000/01/rdf-schema#label
- In place of <isA>:
  - ?item http://www.w3.org/2004/02/skos/core#subject ?category
  - ?category http://www.w3.org/2004/02/skos/core#broader ?category



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         ?category
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         ?category

    ?item ??? ?item
```

#### Problems with isA relation

- The ontology doesn't have one.
- Category vs. item
- Category: "Horses in art", "Leonardo da Vinci paintings", "Seafood"
- Item: "Knight (chess)", "Mona Lisa", "Lobster"
- Rembrandt vs. Category:Rembrandt

#### Problems with isA relation

- Domain-specific relations
- All paintings belonging to some genre:
  - ?artwork rdf:visual\_art.artwork.art\_genre dbpedia:Abstract\_art
- All paintings painted by Rembrandt
  - ?artwork rdf:visual\_art.artwork.artist dbpedia:Rembrandt
  - ?artwork skos:subject dbpedia:Category:Rembrandt\_paintings

#### The idea

- An early draft of a museum grammar can I extend its vocabulary with ontology search?
- Starting point: words already in grammar

### The starting point

```
painting : Work;
portrait : Work;
self_portrait : Work;
study : Work;
Rembrandt : Person;
Sofia_Magdalena : Person;
Queen : Person -> Person;
Eric_XIV : Person;
```

## Term: painting

- subterms in Category:Painting 82 results
- usable results around 20: Cabinet painting, Digital painting, En plein air, Figura serpentinata, Italian Renaissance painting, History painting, Landscape art, Mural, Oil painting, Overdoor, Pentimento, Predella, Polyptych, Renaissance art, Self-portrait, Tenebrism, Triptych, Watercolor, Watercolor painting
- Coverage for languages
  - en:82
  - de:22
  - es:21
  - fr:20
  - it:13
  - sv:13
  - fi:12

### Term: portrait

- similar in 3 different superclasses, look at them later
- subterms 444 results, names of portraits. Only 22 have translations in other language than English
- Coverage for languages
  - en:444
  - es:16
  - it:13
  - de:9
  - fr:5
  - sv:2

## Superclasses: portrait

- Photography by genre
- Portrait art
- Art genres

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- Photography by genre
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- Art genres

## Term: portrait, similar terms via superclass Portrait art

- 24 subterms
- <10 relevant results: Conjectural portrait, Conversation piece, Giovio series, Monidło, (Portrait, Self-portrait,) Tronie
- Coverage for languages
  - en:24
  - de.it:3
  - es,fr:2
  - sv,fi:1

### Term: portrait, similar terms via superclass Art genres

- 175 subterms
- Nearly all usable: Arabesque, Diorama, Figure study, Folk art, Islamic art, Grotesque, Scenic painting, Trompe-l'œil
- not usable as terms: Horses in art, Synth (video game)
- Coverage for languages
  - en:174
  - es:51
  - it:42
  - de:66
  - fr:60
  - . 44
  - sv:44
  - fi:43

#### Subterms of various terms found in last slides

- portrait < art genres > Folk art > 45 terms
- portrait < art genres > Figure study > 3 painting names
- painting > Landscape art > 26 subterms
- portrait < art genres > arabesque < Visual motifs > 51 terms

#### Term: Rembrandt

- similar terms in 10 superclasses
- subterms in Category:Rembrandt 11, such as Rembrandt House Museum, relatives/friends of Rembrandt

•

#### Term: Rembrandt, superclasses

- 1669 deaths
- 1606 births
- Portrait artists
- Dutch engravers
- Dutch Golden Age painters
- People from Amsterdam
- People from Leiden
- Leiden University
- Dutch Golden Age printmakers
- Rembrandt

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# Term: Rembrandt, similar terms via superclass Portrait artists

- 433 results, names of artists. 144 in more than 1 language.
- Language coverage
  - en:411
  - es:38
  - it:46
  - de:105
  - fr:74
  - sv:14
  - fi:7

## Term: Rembrandt paintings, subterms

- 17 results
- Language coverage
  - en:17
  - es:4
  - it:10
  - de:4
  - fr:3
  - sv:3
  - fi:0