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BANKEN

WP8 Case study: Cultural Heritage

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MOLTO 2011
2011-03-10



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WP8: Timeline and participants

March 2011 – August 2012

- ▶ University of Gothenburg (UGOT)
- ▶ Ontotext
- ▶ University of Helsinki (UHEL)
- ▶ Universitat Politècnica de Catalunya (UPC)



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WP8: Goals

- ▶ To build an ontology-based multilingual grammar for museum information starting from the CIDOC-CRM ontology for artefacts at Gothenburg City Museum
- ▶ To cover 15 languages for baseline functionality and 5 languages with a more complete coverage
- ▶ To build a prototype of a cross-language retrieval and representation system to be tested with objects in the museum, and automatically generate Wikipedia articles for museum artefacts in 5 languages



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WP8: Achievements

- ▶ Access to the Gothenburg City Museum database
- ▶ Study existing categorizations and metadata schemas adopted by museums in Sweden
- ▶ English and Swedish corpora of written descriptions of artworks
- ▶ Analysis of the linguistic features that characterize written descriptions of artworks



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Examples of written descriptions of museum objects I

Eng> This painting has been dated to Cranach's later period, 1526 - 1537. When purchased it was obliquely cropped at the bottom, and it may be a fragment from an earlier, larger depiction.

Swe> Målningen har daterats till Cranachs senare verksamhetsperiod, till åren 1526 - 1537. Den var vid inköpet snett avskuren nedtill och kan vara ett fragment från en tidigare större framställning.



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Examples of written descriptions of museum objects II

Eng> This painting is an example of Salviati's mature work. Its composition shows the influence of the schools of Parma and Florence. The costume of the sitter suggests a date in the early 1540s.

Swe> Rembrandts självporträtt är en till formatet litet målning – den mäter endast 12,2x15,5 cm. Underlaget är kopparplåt täckt av ett lager blyvitt och därefter överdraget med heltäckande bladguld. Porträttet inköptes till Nationalmuseum i samband med Rembrandtutställningen år 1956.



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A record from the Gothenburg City Museum database

Field name	Value
Field nr.	4063
Prefix	GIM
Object nr.	8364
Search word	painting
Class 1	353532
Class 2	Gothenburg portrait
Amount	1
Producer	E.Glud
Produced year	1984
Length cm	106
Width cm	78
Description	oilpainting represents a studio indoors
History	Up to 1986 belonged to Datema AB, Flöjelbergsg 8, Gbg
Material	oil colour
Current keeper	2
Location	Polstjärnegatan 4
Package nr.	299
Registration date	19930831
Signature	Bl
Search field	BO:BU Bilder:TAVLOR PICT:GIM



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WP8: State of the current work

- ▶ We are developing an ontology which accounts for the general nature of paintings
- ▶ The ontology is based on empirical evidence
- ▶ It re-uses namespaces from CRM, EDM (Europeana Data Model), SUMO and MILO (Mid-Level Ontology)
- ▶ It captures the essence of the semantics and the syntax of written artwork descriptions

The painting ontology





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WP8: Plans for future work

- ▶ Verbalize and lexicalize the ontology direct in GF — UGOT
- ▶ Align the ontology with the upper-level ontology in the base knowledge set – Ontotext
- ▶ Grammar and generation based on query language – UGOT, Ontotext
- ▶ Create the translation grammar and further extend it – UGOT, UHEL, UPC, Ontotext



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WP8: Deliverables

- ▶ D8.1 Ontology and corpus study of the cultural heritage domain (M18)
- ▶ D8.2 Multilingual grammar for museum object descriptions (M24)
- ▶ D8.3 Translation and retrieval system for museum object descriptions (M30)