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WP8: Cultural Heritage

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Motivation

- ▶ New developments in technologies (e.g. Semantic Web) provide sophisticated information access to cultural heritage material
 - ▶ e.g. enables users to broaden/narrow search based on multiple criteria at once
- ▶ Emerging European project initiatives provide cross-collection, cross-museum and cross-subject access to bigger sets of data collections
 - ▶ MultimediaN E-culture, Europeana, Cornucopia, Michael



Direct access to cultural heritage objects

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facet views

Who	What	Where
Modigliani, Amedeo 140	papier 28483	Rijksmuseum_Volkenkunde 10944
Cézanne, Paul 127	prent 23525	Bibliopolis 1645
Picasso, Pablo 112	handwriting (1)	1900
David, Jacques-Louis 95	foto	
Rembrandt van Rijn 91	Foto	

Work What: oil paint

The Van de Venne brothers in their printing shop, together with Apollonius Schotter
<http://e-culture.multimedien.nl/ns/bibliopolis#1497>



An author (with glasses) is busy correcting a manuscript in a print shop. Behind him Adriaen en Jan van de Venne.

Property	Value
Creator	Venne, Adriaen van de
Date	1623
Location	Bibliopolis ; Daily Mail and General Trust
Measurements	46,5 x 76,2 cm.
Subject	Geschiedenis van de boekdrukkunst ; auteurs ; printing houses ; proof reading
Technique	oil paint ; olieverf
Title	The Van de Venne brothers in their shop, together with Apollonius Schotter; gebroeders Van de Venne in hun drukkerij ; samen met Apollonius Schotter
Type	easel paintings ; schilderij

links

- full view
- annotate

Printer and inker in...
Venne, Adriaen van de

Compositor in the pr...
Venne, Adriaen van de

The Van de Venne
Venne, Adriaen van de

Ein Karem

Triptych to the Fallen

For the Fall



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The domain ontology

The CIDOC Conceptual Reference Model (CIDOC CRM), developed by the International Committee for Documentation (CIDOC) of the International Council of Museums (ICOM) (Crofts et al., 2008).

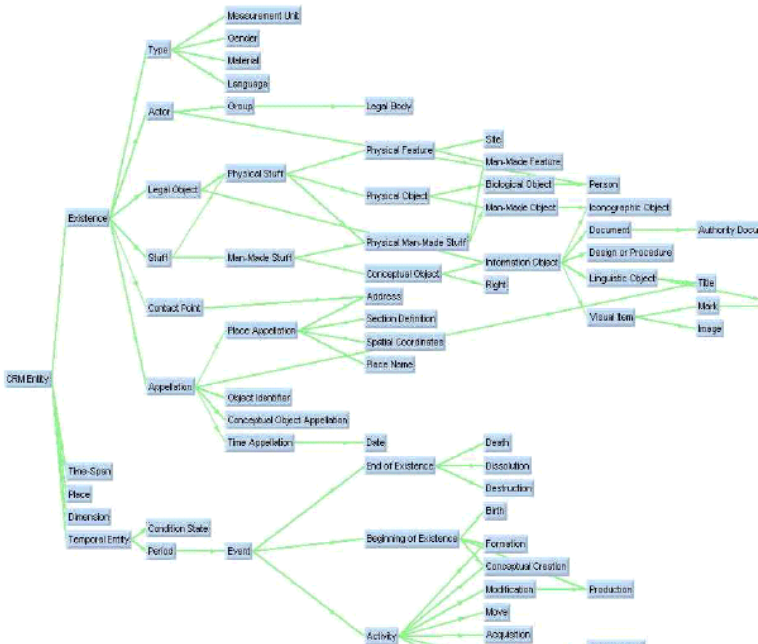
- ▶ ISO standard since 2006
- ▶ Based on data structures in museum applications
- ▶ 87 classes and 260 relationships
- ▶ Available in OWL



The CIDOC-CRM

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Objective

- ▶ Bridge between formal knowledge representation and well-formed written and spoken human language
- ▶ Communicate cultural heritage knowledge automatically using open-source state-of-the-art
- ▶ Harmonise existing tools for natural language generation and existing lexical resources
- ▶ Support learning for all categories of users



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Data and language resources

- ▶ Corpus of written object descriptions
 - ▶ National galleries catalogues and collections, E-libraries and open archives
- ▶ Formal representations of cultural objects
 - ▶ modelled in CIDOC-CRM
- ▶ Electronic lexical resources
 - ▶ PAROLE and SIMPLE, SALDO, WordNet and FrameNet
- ▶ The Grammatical Framework (GF)
 - ▶ Resource Grammar Library provides an API for 15 languages



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Summing up

- ▶ Enhance existing tools and linguistic data resources that are essential for both academia and industry
- ▶ Offer a progressive and innovative multilingual, multicultural learning experience
- ▶ Promote the creation of a full-scale computational lexical resource for modern Swedish
- ▶ Establish collaboration with cultural institutions