Achieving interoperability between the CARARE schema for monuments and sites and the Europeana Data Model

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Europeana.eu, Europe’s cultural heritage portal

Text

Video

Image

3D

Sound
Europeana’s aggregation network

29M objects from 2,200 European galleries, museums, archives and libraries
CARARE: Bringing content for archaeology and historic buildings to Europeana users

- 3 year project (2010-2013)
- Heritage organisations, archaeological museums, research institutions and specialist digital archives
  - 29 partners in 21 countries
- Aggregation services and good practices for organisations with content relating to archaeological monuments and historic sites
  - Metadata repository (MORE)
  - Metadata schema

http://www.carare.eu
CARARE Content

→ Images, text, videos, 3D models…
CARARE Metadata Schema

Acts as an intermediary between the native metadata of content providers and Europeana

Heritage asset

4 themes

Activities

Collection

Digital resources

http://www.carare.eu/eng/Resources/CARARE-Documentation
Heritage Assets

Monuments, landscape areas, artefacts...

→ Title, Description
→ Characteristics
  • Type, Materials, Dimensions, Inscriptions
  • Spatial (place, address, map coordinates)
  • Temporal (date, time span, period)
→ Actors
→ Designation, Condition
→ References
→ Relations
Digital Resources

Images, texts, videos, audio, 3D models

→ Title, Description
→ Characteristics
→ Publication statement
→ Actors
→ Link to the object (URL)
→ Rights
→ Relations
EDM rationale

1. Distinguish “provided objects” (painting, book, movie, etc.) from their digital representations
2. Distinguish object from its metadata record
3. Allow multiple records for a same object, containing potentially contradictory statements about it
4. Support for objects that are composed of other objects
5. Support for contextual resources, including concepts from controlled vocabularies
Europeana Data Model: an example

Clavecin

Description: 2 claviers: C / E à C"m", 45 notes * 3 rangs de Cordes: 2 x 8" + 1 x 4" * Table en épicea (?) * T * Collection Geneviève Thibault de Chambure

Creator: http://www.mimo-db.eu/InstrumentMaker/Person/593; Cristofori

Coverage: http://sws.geonames.org/3176959/

Date: fin 17e

Type: http://www.mimo-db.eu/InstrumentsKeywords/2251; http://www.mimo-db.eu/HorbostelAndSachs/6461

Identifier: #CM:0161930

Data provider: Cité de la musique

Provider: MIMO - Musical Instrument Museums Online

Providing country: MUL

Auto-generated tags ▸
Provided Cultural Heritage Object (CHO) and descriptive metadata

edm:ProvidedCHO
#CM:0161930

"Clavecin"@fr
"Cristofori"

dc:title

dc:creator

dc:description

"2 claviers : C / E à C'', 45 notes * 3 rangs de Cordes : 2 x 8'' + 1 x 4'' * Table en épica (?) * T * Collection Geneviève Thibault de Chambure"@fr

dc:type

skos:Concept
http://www.mimo-db.eu/InstrumentsKeywords/2251

skos:prefLabel

"Clavecin"@fr
Web Resources – digital representations

edm:WebResource
http://www.mimo-db.eu/media/CM/IMAGE/CMIM000030829.jpg

edm:rights
http://creativecommons.org/licenses/by-nc-sa/3.0/

edm:WebResource
http://www.mimo-db.eu/media/CM/IMAGE/CMIM000030828.jpg

edm:rights
http://creativecommons.org/licenses/by-nc-sa/3.0/
Aggregations – Bundling it all together
ESE, EDM and data providers’ duties & benefits

Mapping the data to EDM is harder than with previous Europeana schema, but it has benefits

- Data gets closer to original metadata
- Data can be contextualized, semantically linked to other data
Objectives

Mapping: finding correspondences between the elements of both models so that CARARE can send good data to Europeana

Why is it important to report on this here?

→ Mapping is rarely an easy issue
→ Models are complex, with subtle differences in world views
→ Both CARARE and Europeana benefits from “mapping meditation”
   One of the hardest (confronting) metadata exercises!
→ Sharing concrete experiences benefits to all Europeana partners
   And beyond: cf. goals of DC, “a metadata ecosystem”
Questions so far?
Mapping CARARE data to EDM

A CARARE object becomes one or several EDM Provided Cultural Heritage Objects with:

- Related web resources
- Aggregations
- Contextual information about place

Some activity and spatial data cannot currently be mapped
Creating EDM resources from CARARE data

CARARE’s Heritage Assets always give rise to one EDM ProvidedCHOs with its companion Aggregation

Heritage Asset’s identifier
PamFond/1978155

edm:ProvidedCHO
HA:PamFond/1978155

ore:Aggregation
http://store.carare.eu/uid/iid:1655549/HA:PamFond/1978155

The next issue is whether CARARE’s Digital Resources are also EDM CHOzs…

→ It depends on the collection!
Scenario 1: cultural objects representing the CARARE HA count as CHOs

Heritage Asset

Title: Casa di L. Popidius Secundus
ID: 6396
Description:
regio: 1, insula: 4, civico: 5,6,25.
Source:
Scuola Normale Superiore - La Fortuna Visiva di Pompei
Rights:
CCO 1.0 Universal Public Domain Dedication for metadata describing this monument

Related Digital Resources

Title: Italienische Reise. Immagini pompeiane nelle raccolte archeologiche germaniche
Title: Italienische Reise. Immagini pompeiane nelle raccolte archeologiche germaniche
Digital Resource details
Title: Giuseppe Fiorelli, Carlo Sorgente, Tabula coloniae Veneriae Corneliae Pompeia...
Scenario 2:
Digital Resources are cultural objects qualifying as EDM CHOs but some are shared among several Heritage Assets.
Scenario 3:
Digital Resources that are views of lesser cultural importance are treated as EDM Web Resources.
Contextual Resources – e.g., Places

Dolní Kounice

From Wikipedia, the free encyclopedia

Dolní Kounice (Czech pronunciation: [dolɲiː ˈkounɪʦɛ]; German: Kanitz) is a small town in the South Moravian Region of the Czech Republic. It has around 2,400 inhabitants.

CARARE’s geospatial enrichment represented with EDM contextual resource class
Conclusions

Reflecting previous ‘objectives’ slides…

CARARE provides better metadata to Europeana for 2M objects

In the process:

- We identifying and solved non-trivial issues
- We documented solutions (this paper!)
- It prompted updates to CARARE’s schema (3D ICONS project)
- It confirms the relevance of a richer model like EDM for Europeana
Thank you!

Questions?

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Lessons learned

- Having a rich intermediary schema accommodates differences at home, and protects providers from changes in the target schema.
- No matter how good the technologies, the quality of metadata is not ensured.
- Human supervision is required to achieve good quality at all stages.
- Technical support is very important.