Cross-Sectional Integration of LAM Resources on the Basis of Authority Data

Prospects for Museums

Angela Kailus

CIDOC Annual Conference, Dresden, 9th September 2014
An example from the Getty Museum

Work Record
Class [controlled]: • sculpture • European art
*Work Type [link]: • statue • bust
*Title: Bust of Jacob van Reigersberg
*Creator Display: Rombout Verhulst (Flemish, 1624-1698)
*Role [link]: sculptor [link]: Verhulst, Rombout
*Creation Date: 1671 [controlled]: • Earliest: 1671 • Latest: 1671
*Subject [links]: • portrait • Jacob van Reigersberg (Dutch aristocrat, 1625-1675) • commemoration
Culture [link]: Dutch
*Current Location [link]: J. Paul Getty Museum (Los Angeles, California, United States) • ID: 78.DE.65
*Measurements: 63 cm (height) (24 7/8 inches)
[controlled]: • Value: 53 Unit: cm Type: height
*Materials and Techniques: marble with extensive drillwork
Material [links]: • marble Technique [links]: • carving • drillwork
Inscriptions: inscribed on the front: MEA SORTE CONTENTIUS; signed on the left: R. Verhulst fec.; dated on the right: Anno 1671; inscribed on the back: DIT IS HET AFBEELTSEL VAN / IACOB VAN REIGERSBERG / GEBOREN IN MIDDELBURGH / DEN.X.APRIL.1625. / WEGENS DE PROVINIE / VAN ZEELANT GEDURETEERDT / TER VERGADERINGH VAN / HAER HOOGH MENGHEDEN / DEN.17.7.BER DES / IAEERS 1663 / STURF DEN.29.APRIL.1675
Description: The virtuosity of the sculptor is apparent in the rendering of a variety of textures, including flesh, hair, lace, satins. Verhulst has employed an ingenious method to mitigate the truncation of the figure at the shoulders and chest, namely by using decorative foliage and curving volutes below the armor. Jacob van Reigersberg was a wealthy provincial politician who had recently been sent to the States General, the national governing body of the Netherlands, to represent the Dutch province of Zeeland. His armor identifies him as a member of the noble class.

Required and recommended elements are marked with an asterisk.
Conceptual Reference Model (CRM)

ISO standard for data modelling in the heritage sector (ISO 21127:2006)
An example from the Getty Museum - participants

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An example from the Getty Museum – things/materials

Who?  
What?  
Where?  
When?  
Event

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An example from the Getty Museum - place

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What?

Where?

When?

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An example from the Getty Museum - time

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Required and recommended elements are marked with an asterisk.
An example from the Getty Museum - events

**Who?**

Bust of Jacob van Ruygersbergh

**What?**

*Work Record*
- **Class [controlled]:** sculpture • European art
- **Work Type [link]:** statue • bust
- **Title:** Bust of Jacob van Ruygersbergh
- **Creator [link]:** Rombout Verhulst (Flemish, 1624-1698)
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- **Description:** The virtuosity of the sculptor is apparent in the rendering of a variety of textures, including flesh, hair, lace, satins. Verhulst has employed an ingenious method to mitigate the truncation of the figure at the shoulders and chest, namely by using decorative foliage and curving volutes below the armor. Jacob van Ruygersbergh was a wealthy provincial politician who had recently been sent to the States General, the national governing body of the Netherlands, to represent the Dutch province of Zeeland. His armor identifies him as a member of the noble class.
- **Description Source [link]:** 1. Paul Getty Museum online. www.getty.edu

**Where?**

J. Paul Getty Museum (Los Angeles, California, United States)

**When?**

1671

**Event**

*Required and recommended elements are marked with an asterisk.*
Finding in diversified search contexts

Jacob von Reygersberg

Information on Rombout Verhulst

17th cent. items in US museums

Portraits of Dutch noblemen

Stein Büste pierre buste

Dutch politicians 1601-1800

Works by Flemish sculptors
Role of authority URIs (Uniform Resource Identifier)

Authorities as database backbone

• Identification of the entity
  • Deambiguation, qualification, contextualization
  • relating name variants, + identifying attributes to one entity
• Controlled access points to information about the resource (URIs for computerized access)

➤ Aim: precise documentation of the object
  Maintain specific semantic quality by using controlled vocabularies for attributes, roles and relations

➤ Aim: identification of the item the record is about (work of art, building, manuscript etc.)
  By creating/using authority URI references for works of art and artifacts
Which authorities to use?

Criteria

- Coverage of entities needed in your documentation
- Published on the web
- Addressable by URIs
- Open license: Re-use and inclusion in own data
- Native language + Multilinguality
- Maintenance of the authority
- Widespread use

➢ Publish high-quality data, fit for semantic web applications
### Authorities in collection documentation in Germany...

<table>
<thead>
<tr>
<th>Collection documentation</th>
<th>Who?</th>
<th>Where?</th>
<th>What?</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>creator (artist)</td>
<td>location</td>
<td>Object type (classification)</td>
<td>Date of production</td>
</tr>
<tr>
<td></td>
<td>collector / collection</td>
<td>Place of origin</td>
<td>Material</td>
<td>Date of find</td>
</tr>
<tr>
<td></td>
<td>patron</td>
<td>Site of discovery</td>
<td>Technique</td>
<td>Date of modification</td>
</tr>
<tr>
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<td>Depicted person</td>
<td>Depicted place</td>
<td>Depicted object / subject</td>
<td>Change of owner</td>
</tr>
</tbody>
</table>

### Authorities / vocabularies

- **AKL / Thieme-Becker**
- **Self-prepared materials**
- **GND persons, names**
- **Official gazetteers**
- **Self-prepared materials**
- **Various publ. classifications**
- **GND subject headings**
- **Self-prepared materials**
- **Self-prepared materials**
- **GeoNames**
- **Getty TGN**
- **Iconclass**
- **Getty-AAT**
## Recommended authorities

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## Authorities / vocabularies fit for LOD

- GND persons
- GND Corporate bodies
- Getty ULAN
- VIAF persons
- GND geogr. entities
- Getty TGN
- GeoNames
- VIAF geogr. names
- GND subject headings
- Getty AAT
- GND works / buildings
- VIAF works
- Iconclass
- ISO 8106
Advantages of GND use for museums

- GND provides authority data for most entities relevant in museum documentation
- German language
- GND ready to receive additional data for non-library institutions
- Linked Open Data: unrestricted availability and re-use of data, key role in semantic web applications
- Use services provided: Data available via OAI- und SRU-interfaces, download, web search

- Strategy for museums: enhancement of local data by existing, sharable resources
- Benefit from authority data maintenance and expansion by third party
- Libraries are globally leading in building interlinked information structures for the heritage sector
<table>
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<tr>
<th>Suchanfragen</th>
<th>Entitäten-</th>
<th>Titelnachweise</th>
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</thead>
<tbody>
<tr>
<td>Schinkel, Karl Friedrich, 1781-1841</td>
<td>Person</td>
<td>Denkmal auf dem Kreuzberg</td>
</tr>
<tr>
<td>Greßbach, August, 1831-1950</td>
<td>Person</td>
<td>Die alte deutsche Stadt in ihrer Stimmungseigenart</td>
</tr>
<tr>
<td>Mauch, Johann Matthias von, (1792-1856)</td>
<td>Person</td>
<td>Neue systematische Darstellung der architektonischen Gliederung der Gegenreformation</td>
</tr>
<tr>
<td>Friedrich-Werdersche Kirche (Berlin, Germany)</td>
<td>Körperschaft</td>
<td>Die Friedrich-Werdersche Kirche zu Berlin, c1992</td>
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<td>Alte Nazarethkirche (Berlin, Germany)</td>
<td>Geografikum</td>
<td>Radul Dufy, c1993</td>
</tr>
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<td>Schloss Charlottenhof (Potsdam)</td>
<td>Körperschaft</td>
<td></td>
</tr>
<tr>
<td>Exhibition Karl Friedrich Schinkel, 1781 – 1841</td>
<td>Körperschaft</td>
<td>Karl Friedrich Schinkel 1781 - 1841 ; the drama of architecture ; [a publication ...</td>
</tr>
<tr>
<td>Sankt Peter (Wesel)</td>
<td>Geografikum</td>
<td></td>
</tr>
<tr>
<td>Evangelische Dorfkirche Glienicke (Heiligengrabe)</td>
<td>Geografikum</td>
<td></td>
</tr>
<tr>
<td>Jagdschloss Granitz (Binz)</td>
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<tr>
<td>Kreuzbernde Viad (Berlin)</td>
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International data hubs: Wikipedia and DBpedia
Integrating authorities: what should collections do?

Essentials
- Cataloguing: identification of instances against the authority
- Integration of authority IDs (!) into local data

Enhance existing local data
- Matching of local authorities, thesauri and vocabularies against reference authority. Reference IDs connected/imported by use of local term
  - MuSIS Objektbezeichnungsthesaurus, DigiCULT, PartagePlus (Europeana)
- Direct post-enhancement by automated and/or manual matching processes
  - Historic-Biographical Information System (Bayer. Akademie), Digital Portrait Index, Wikimedia image donations

Contribute to reference authorities
- Add records for instances not yet covered
- Correct and extend existing records
  - IN2N – Cross-institutional integration of authority data (DNB/Dt. Filminstitut)
What should collections do?

- Establish URIs as identifiers for museum objects.

Objects become referenceable on the web.

Statement on Linked Data identifiers for museum objects

ICOM recognizes the accelerating trend for cultural resources to be described within digital environments. Huge digital libraries and aggregation services are collecting data and metadata about cultural objects, including museum objects. These services often rely on the principles and infrastructure of Linked (Open) Data as promoted by the World Wide Web Consortium (see http://www.w3.org/standards/semanticweb/data).

Accordingly, the publication of museum collections on the internet is becoming a matter of routine, and museum objects – traditionally identified in a museum collection by an accession and/or inventory numbers – become referenceable on the internet through URLs.

In order to support and advance the development and implementation of Linked Data technologies in a comprehensive way ICOM states the following principles:

- Museums are the sole authority with responsibility for establishing globally unique and persistent identities (URIs) for each of the objects in their collections;
- Each museum should establish and publish on the internet such a unique and persistent identity – preferably as http URI (=URL) – for each of its objects;
- This URL should resolve to a human-readable description of the object, which is sufficiently detailed to identify it unambiguously;
- Ideally, this URL should additionally resolve to a comparable description in a machine-processible format, using best practice Linked Data principles;
- When describing the relationship of the collection object to its cultural context (people, places, events, etc.), the museum should where possible use URIs from common frameworks, rather than minting its own URLs for these concepts;
- A museum can choose to delegate this responsibility;
- The museum should encourage other institutions to use this set of URLs, by publishing metadata such as VoID descriptions (see http://www.w3.org/TR/void) of its collection resources;

ICOM's International Committee for Documentation, CIDOC, and its Working Groups are committed to provide the museum community with hands-on documentation for the practical implementation of these principles.

Data enhancement in web portals

Tonkrug

**Contributor:**
Preuss, Konrad Theodor (Preuss, Konrad Theodor) ooo Date of death: 1938

**Geographic coverage:**
Colombia, Republic of Colombia; Los Nogales

**Date of creation:**
800-1550

**Type:**
Tonkrug

**Format:**
Ton, Objektmaß: 25 x 25,3 x 24,8 cm; Ton

**Identifier:**

**Rights:**
Staatliche Museen zu Berlin, Preußischer Kulturbesitz, Ethnologisches Museum

**Data provider:**
Ethnologisches Museum, Staatliche Museen zu Berlin

**Provider:**
EUInsideDA

**Providing country:**
Germany

**Auto-generated tags**
Data enhancement in web portals

Tonkrug

Schema display

http://d-nb.info/gnd/115544569
def:
Preuss, Konrad Theodor
def:
Preuss, K. Th.
Preuss, Konrad T.
Preuss, Theodor
def:
1938
def:
http://d-nb.info/standards/vocab/gnd/Gender#male
http://dbpedia.org/resource/Konrad_Theodor_Preuss
http://viaf.org/viaf/59143259
6391a495e4b02a1b1c88a065
Data enhancement in web portals
The record as information hub
Thank you for your attention!

Angela Kailus

kailus@fotomarburg.de