



Lightweight Information Describing Objects

Lightweight Information Describing Objects

Contributing Content to Cultural Heritage Repositories

Why a standard format for contributing content?

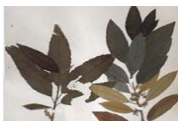
- Increasing relevance of internet presence for museums and other collections
- Increasing necessity to integrate your data in online services: facilitate resource discovery in a cross-collection and even cross-sectoral (archives, libraries, museums) manner
- Need for a convenient instrument to provide core data on museum objects
 - from different collections / object classes
 - from different data structures
 - from different software systems



Zoological Museums



Archaeological Museums



Botanical Gardens



Computer Collections



**Geological and Mineralogical
Museums**



**Medical and Pharmaceutical
Collections**



Museums of Cultural History



Museums of Fire Fighting



Theatre History Collections



Art Museums



Purpose

What it is

XML Schema for Contributing Content to Cultural Heritage Repositories

- For delivering metadata, for use in a variety of online services, from an organization's online collections database to portals of aggregated resources – as well as exposing, sharing and connecting data on the web.
- Intended to represent the full range of descriptive information about museum objects, e.g. art, cultural, technology and natural science.
- It supports multilingual environments.



Purpose

What it is NOT

LIDO is NOT

- A fully developed data exchange format.
- A format designed for proper cataloging – it is not intended to be used as a basis for a collection management system or to support loan and acquisition activities.

- Provide a specification and related XML schema that describes cultural materials appropriately
- Individual data providers can decide on how light – or how rich – they want their contributed metadata records to be
- Allow for delivering data and resources relating to your objects
- Include links from contributed metadata back to records in their 'home' context

Cont.:

- Allow for delivery of full information: a record can include all the necessary information for display and retrieval of your object
- Allow for identification of each referenced entity, e.g. provide references to controlled vocabulary and authority files.
- Provide optimised metadata for retrieval on one hand and for display on the other -> distinction of display and indexing elements

Descriptive and administrative information groups in LIDO

- *Object Classifications* –

Object / Work Type (*mandatory*)

Classification

- *Object Identifications* –

Title / Name (*mandatory*)

Inscriptions

Repository / Location

State / Edition

Object Description

Measurements

- *Events* –

Event Set

- *Relations* –

Subject Set

Related Works

- *Administrative Metadata* –

Rights

Record (*mandatory*)

Resource

- Object Classifications –

Object / Work Type (*mandatory*)

Classification

-Object Identifications –

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Record (*mandatory*)

Resource

Full support of multilinguality

- `xml:lang` mandatory for default language on high-level elements
`descriptiveMetadata` and `administrativeMetadata`

Two possibilities to provide multi-lingual entries:

- Repeat the high-level elements with different `xml:lang` attributes for fully multi-lingual resources

or

- Repeat text-level elements with different `xml:lang` attributes for providing translations only for just a few elements

Full support of multilinguality - Example

```

<lido:lido>
  <lido:lidoRecID lido:type="local">1300_MFV 1893-237</lido:lidoRecID>
  <lido:category lido:source="CIDOC_CPM_v5.0.1">E22.Man-Made_Object</lido:category>
  <lido:descriptiveMetadata xml:lang="de">
    <lido:objectClassificationWrap>...</lido:objectClassificationWrap>
    <lido:objectIdentificationWrap>...</lido:objectIdentificationWrap>
    <lido:eventWrap>
      <lido:eventSet>
        <lido:event>
          <lido:eventType>
            <lido:term>Production</lido:term>
          </lido:eventType>
          ...
          <lido:eventMaterialsTech>
            <lido:materialsTech>
              <lido:termMaterialsTech lido:type="Material">
                <lido:term>Ton</lido:term>
                <lido:term xml:lang="en">clay</lido:term>
              </lido:termMaterialsTech>
            </lido:materialsTech>
          </lido:eventMaterialsTech>
        </lido:event>
      </lido:eventSet>
    </lido:eventWrap>
  </lido:descriptiveMetadata>
  <lido:administrativeMetadata xml:lang="de">...</lido:administrativeMetadata>
</lido:lido>

```

xml:lang on high-level
element descriptiveMetadata

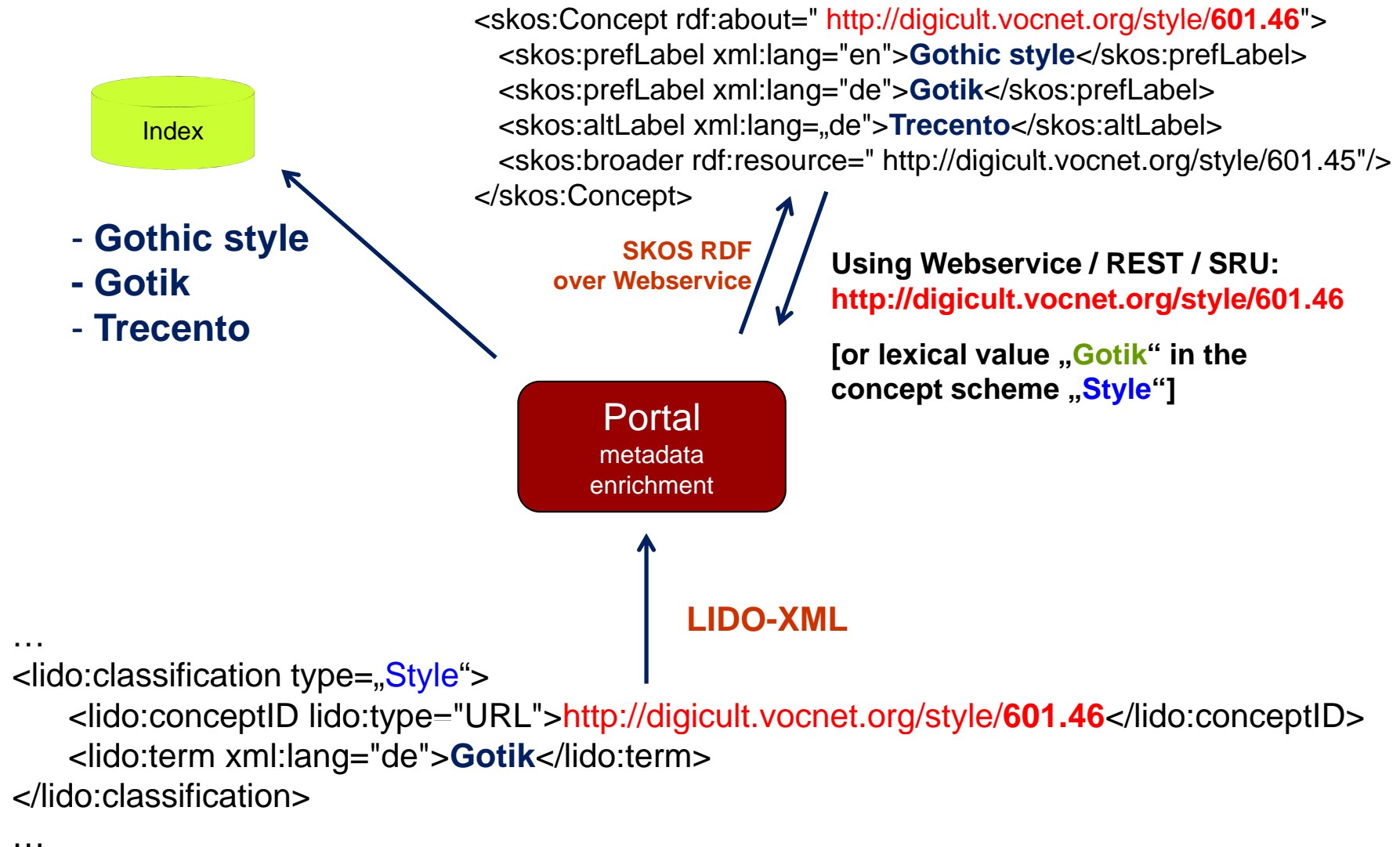
Material
Ton@de
clay@en



- Distinguish identifiers for an entity itself and a webresource about it!
- Identifiers are repeatable
- Entities including an identifier el.:
 - Concept
 - Actor / Legal Body Ref
 - Place
 - Event
 - Object
- Example:

```
<lido:conceptID lido:type="URL" lido:source="Iconclass"> http://iconclass.org/sw/44G123</lido:conceptID>
```

References to Controlled Vocabulary



Display and Index elements – basic structure:

xxxWrap (0-1)

xxxSet (0-unbounded)

displayXXX (0-unbounded) (for language variants only)

XXX (0-1)

e.g.

objectMeasurementsWrap

objectMeasurementsSet

displayObjectMeasurements

objectMeasurements

```
objectMeasurementsSet
displayObjectMeasurements: 44,3 x 35,4 cm (Blatt); 10 Bildfelder
objectMeasurements
measurementsSet: (value: 44,3) (unit: cm) (type: Höhe)
measurementsSet: (value: 35,4) (unit: cm) (type: Breite)
extentMeasurements: Blatt
```

Object Classification

- Object Classifications –

Object / Work Type (*mandatory*)

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Object Description

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Event Set

-Relations –

Subject Set

Related Works

-Administrative Metadata –

Rights

Record (*mandatory*)

Resource

Object Classification

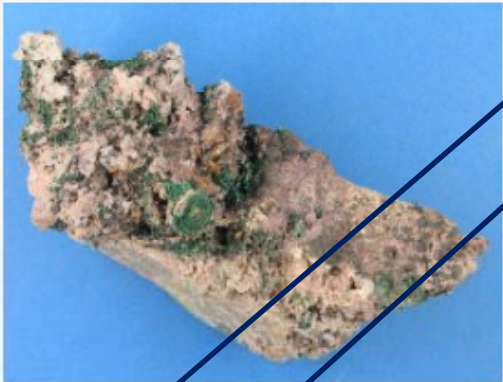
MUSEEN NORD
MUSEEN SCHLESWIG-HOLSTEIN & HAMBURG

Home Museen Veranstaltungen Objekte Bilder Impressum

Museum

- Geologisches und Mineralogisches Museum Institut für Geowissenschaften der CAU Kiel

« Malachit, Azurit »



« zurück zu Objektsuche zum Leuchtkasten hinzufügen »

Systematik:
Malachit, Azurit

Fundort:
Tsumeb, Otavibergland

Inventarnummer:
7367

Abteilung:
Mineralogisches Museum

Maße:
L: 12,5 cm, B: 7 cm, H: 4,2 cm,
Gewicht: 240 gr

objectWorkType: **Mineral**

classification: **Malachit**

type: Mineral systematic

classification: **Azurit**

type: Mineral systematic

Object Identification

- Object Classifications –

Object / Work Type (*mandatory*)

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Object Identification

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Gewicht: 240 gr

objectWorkType: **Mineral**

classification: **Malachit**

type: Mineral systematic

classification: **Azurit**

type: Mineral systematic

title: Mineral

type: **object name**

mandatory

Object Identification

MUSEEN NORD
MUSEEN SCHLESWIG-HOLSTEIN & HAMBURG

Home Museums Events Items Pictures Contact Links

Copyright

- Stiftung Seebüll Ada und Emil Nolde

Museum

- Museumsberg Flensburg Städtische Museen und Sammlungen für den Landesteil Schleswig

Emil Nolde: Hohe Wogen

« Back to item search Add to light box »

Artist: Emil Nolde

Object designation: Gemälde

Subject group: Malerei

Material: Öl auf Leinwand

Measures: H: 67 cm, B: 87 cm

Object history

Wie alle reinen Meeresbilder geht auch dieses Bild Emil Noldes auf eine Sturmfahrt vor der Insel Anholt zurück, an die der Maler sich sein Leben lang erinnerte. Über dem wogenden,

Title: Hohe Wogen

Dating: 1900

Iconography: Natur

Style: Expressionismus

Signature: bezeichnet (u. r.: Nolde)

objectWorkType: **Gemälde**

title: „**Hohe Wogen**“

pref: preferred

objectDescriptionSet

type: **Object history**

descriptiveNote: „**Wie alle reinen Meeresbilder ...**“

objectMeasurementsSet

displayObjectMeasurements: **H: 67 cm, B: 87 cm**

objectMeasurements

measurementsSet

unit: **cm**

type: **height**

value: **67**

measurementsSet

unit: **cm**

type: **width**

value: **87**

Object Identification

The screenshot shows the website for Museums Nord (MUSEEN SCHLESWIG-HOLSTEIN & HAMBURG). The main content area displays the painting 'Hohe Wogen' by Emil Nolde. A blue arrow points from the 'repositoryName' field in the LIDO data block to the museum name 'Museumsberg Flensburg' in the website's left sidebar.

objectWorkType: **Gemälde**

Designation and
unambiguous
identification of the
institution of custody

repository

repositoryType: **current**

repositoryName:

legalBodyID **http://d-nb.info/gnd/2166186-8**

legalBodyName **Museumsberg Flensburg**

workID: **23214**

type: **Inventarnummer**

exact Location

repositoryLocation: **House 1, Room Nr. 5**

isPartOf **Museumsberg**

isPartOf **Flensburg**

No artist? No creation date? No finding place?

Museum objects may relate to any actor, date, or place in two ways:

- The object was present at an event (such as creation, find, use, ...)
 - having participants / carried out by some actors
 - at some time
 - in some place

or

- The object refers to such entity by
 - depicting it
 - „being about“

- Object Classifications –

Object / Work Type *(mandatory)*

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State / Edition

Object Description

Measurements

-Events –

Event Set

-Relations –

Subject Set

Related Works

-Administrative Metadata –

Rights

Record *(mandatory)*

Resource

- Event Identifier
- Event Type
- Role in Event
- Event Name
- Event Actor
- Culture
- Event Date
- Period
- Event Place
- Event Method
- Materials / Technique
- Thing Present
- Event Related
- Event Description

Event

Startseite Projekte

Treffer 0 / 0

Schlosspark Nymphenburg, München - Nymphenburg
 Erweiterung: Charles Carbonet Gartenarchitekt
 Ausbau: Dominique Girard Gartenarchitekt
 Umbau: Joseph Effner Architekt
 Umgestaltung: Friedrich Ludwig von Sckell Gartenarchitekt
 ab 1664 Erweiterung: ab 1702, Ausbau: ab 1715 Umgestaltung: 1799-1823
 Schlosspark, Gartenkunst

Foto Marburg, Aufnahme-Nr. LAC 42.732;; (color); Aufn.-Datum: 1940/1949; Fotoinhalt: Blick von der Freitreppe nach Nordosten übers Hauptparterre

Foto Marburg Aufnahme-Nr. Aufn.-Datum: Fotoinhalt: I nach Weste des Bacchu 1782)

Foto Marburg, Foto: Schmidt-Glassner, Helga; Aufnahme-Nr. 1.554.091;; Aufn.-Datum: 1950/1955; Fotoinhalt: Blick von der Badenburg über den See zum Monopteros

Foto Marburg Aufnahme-Nr. Aufn.-Datum: Fotoinhalt: I Fenster der nach Norde Pagodenbur

Foto Marburg, Aufnahme-Nr. C 1.570.774;; (color); Aufn.-Datum: 1950/1955; Fotoinhalt: Blick aus einem Fenster der Pagodenburg nach Südosten zum See

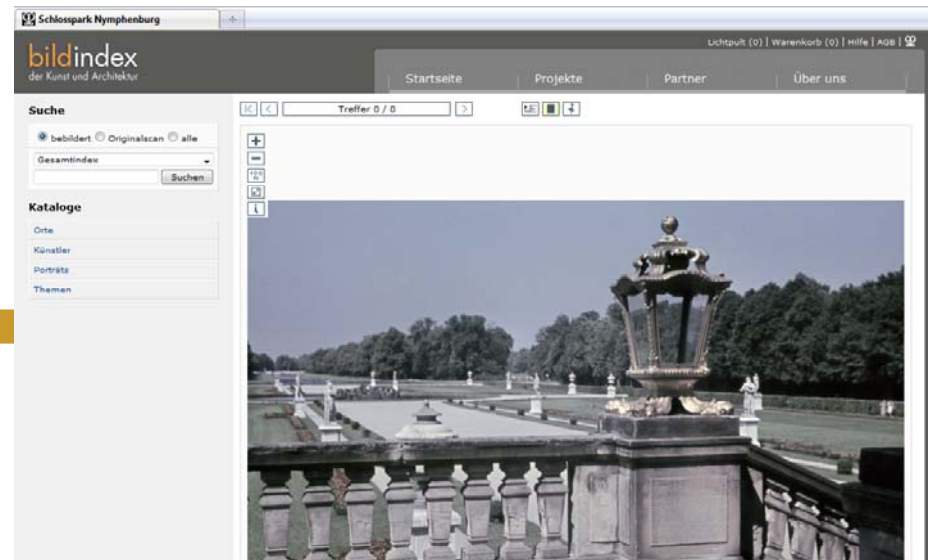
Foto Marburg Aufnahme-Nr. Aufn.-Datum: Fotoinhalt: I Fenster der nach SÜDOS

Abb. auf Microfiche: mi15652f03-mi15652f07
 Objekt 20144943 (Foto Marburg)

Bildarchiv Foto Marburg, Biegenstraße 11, D-35037 Marburg
 Tel. 0049-(0)6421-2823600, Fax: 0049- (0)6421-2828931, bildarchiv@fotomarburg.de

Event

- Event Identifier
- Event Type
- Role in Event
- Event Name
- Event Actor
- Culture
- Event Date
- Period
- Event Place
- Event Method
- Materials / Technique
- Thing Present
- Event Related
- Event Description



```

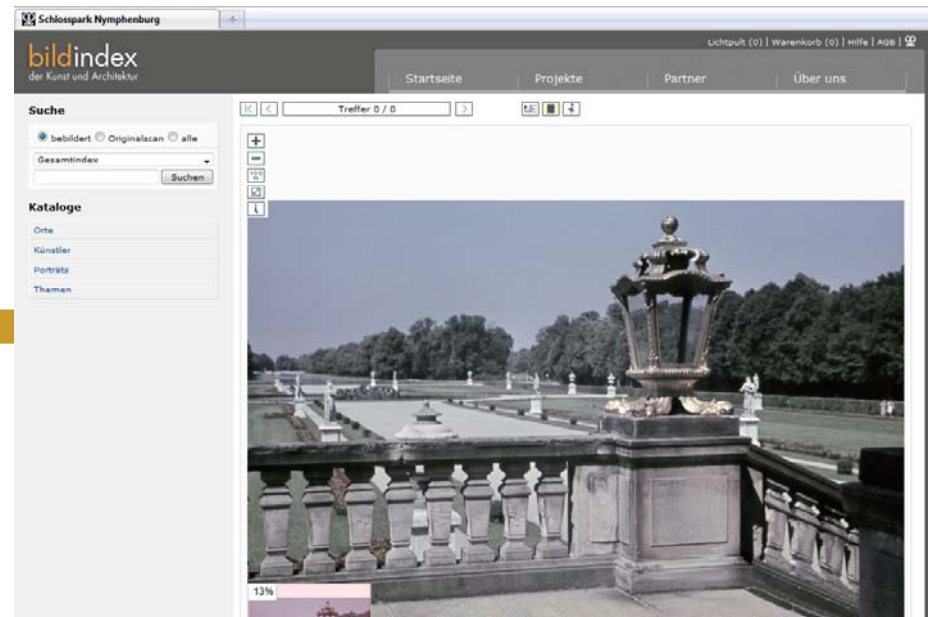
objectWorkType: Schlosspark
title: Schlosspark Nymphenburg

event
  eventType Herstellung / Creation
  eventActor
    displayActorInRole unknown

eventDate
  displayDate ab 1664
  date
    earliestDate 1664
    latestDate 1664
  eventPlace
    place
      namePlace München - Nymphenburg
  
```


Event

- Event Identifier
- Event Type
- Role in Event
- Event Name
- Event Actor
- Culture
- Event Date
- Period
- Event Place
- Event Method
- Materials / Technique
- Thing Present
- Event Related
- Event Description



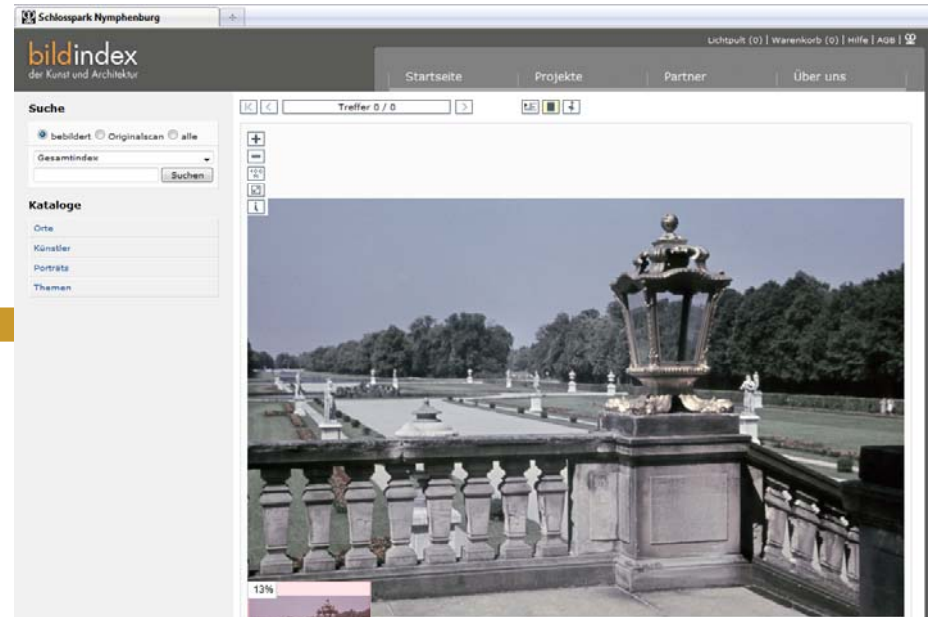
```

objectWorkType: Schlosspark
title: Schlosspark Nymphenburg

event
  eventType Erweiterung / Part Addition
  eventActor
    displayActorInRole Charles Carbonet (1701?-1711)
    actorInRole
      actor
        nameActor Carbonet, Charles
        roleActor Gartenarchitekt
  eventDate
    earliestDate 1702
    latestDate 1702
  eventPlace
    place
      namePlace München - Nymphenburg
  
```

Event

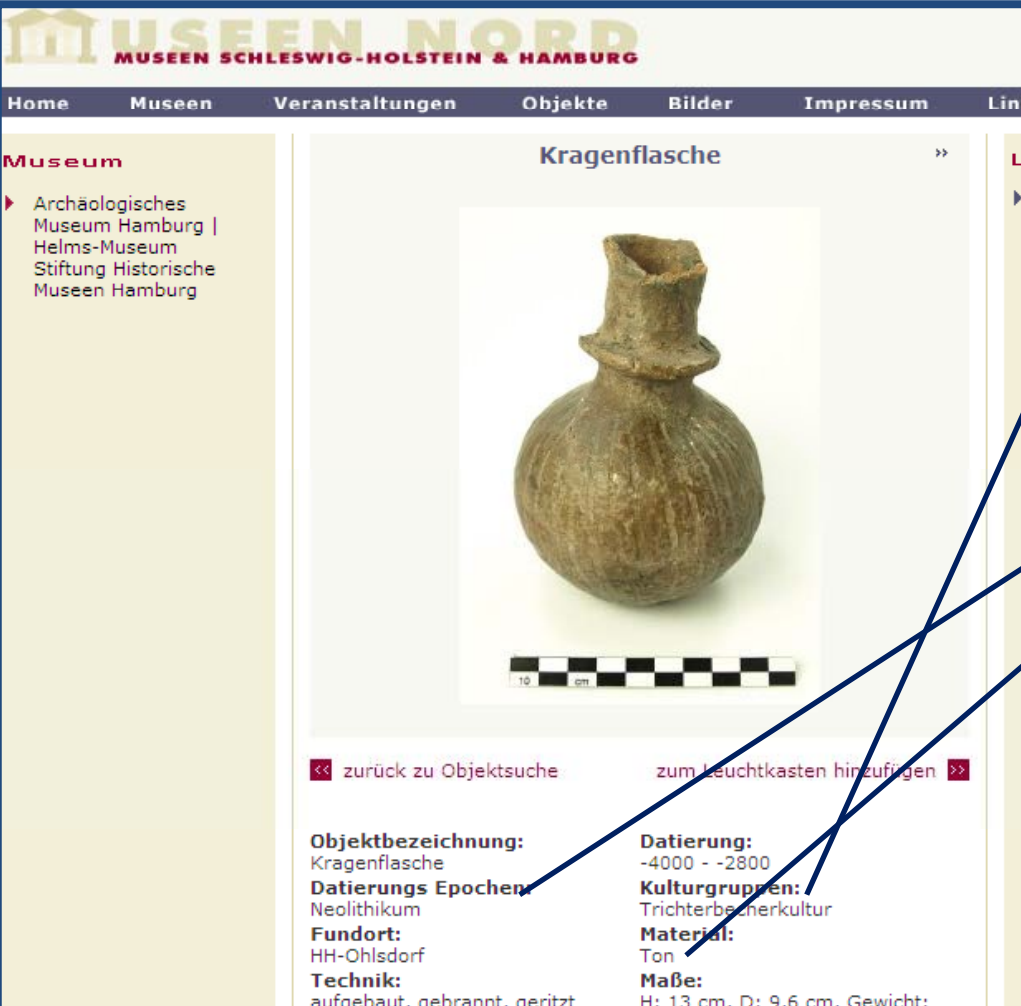
- Event Identifier
- Event Type
- Role in Event
- Event Name
- Event Actor
- Culture
- Event Date
- Period
- Event Place
- Event Method
- Materials / Technique
- Thing Present
- Event Related
- Event Description



```

objectWorkType: Schlosspark
title: Schlosspark Nymphenburg

event
  eventType Umgestaltung / Modification
  eventActor
    displayActorInRole Friedrich L. von Skell
    actorInRole
      actor
        nameActor Skell, Friedrich Ludwig von
        roleActor Gartenarchitekt
  eventDate
    earliestDate 1799
    latestDate 1823
  eventPlace
    place
      namePlace München - Nymphenburg
  
```



MUSEEN NORD
MUSEEN SCHLESWIG-HOLSTEIN & HAMBURG

Home Museen Veranstaltungen Objekte Bilder Impressum Lin

Museum

- Archäologisches Museum Hamburg | Helms-Museum Stiftung Historische Museen Hamburg

Kragenflasche

Objektbezeichnung: Kragenflasche
 Datierungs Epochen: Neolithikum
 Fundort: HH-Ohlsdorf
 Technik: aufgebaut, gebrannt, geritzt

Datierung: -4000 - -2800
 Kulturgruppen: Trichterbecherkultur
 Material: Ton
 Maße: H: 13 cm, D: 9,6 cm, Gewicht:

```

objectWorkType: Kragenflasche
event
  eventType Production
  culture Trichterbecherkultur
  eventDate
    earliestDate -4000
    latestDate -2800
  periodName Neolithikum
  eventMaterialsTech
    materialsTech
      termMaterialsTech Ton
    
```


MUSEEN NORD
MUSEEN SCHLESWIG-HOLSTEIN & HAMBURG

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Museum

- ▶ Archäologisches Museum Hamburg | Helms-Museum
- Stiftung Historische Museen Hamburg

Kragenflasche »



« zurück zu Objektsuche zum Leuchtkasten hinzufügen »

Objektbezeichnung:
Kragenflasche

Datierungs Epochen:
Neolithikum

Fundort:
HH-Ohlsdorf

Technik:
aufgebaut, gebrannt, geritzt

Datierung:
-4000 - -2800

Kulturgruppen:
Trichterbecherkultur

Material:
Ton

Maße:
H: 13 cm, D: 9,6 cm, Gewicht:

objectWorkType: **Kragenflasche**

event

eventType **Find**

eventPlace

place

namePlace **HH-Ohlsdorf**

partOfPlace

namePlace **Hamburg**

- Object Classifications –

Object / Work Type (*mandatory*)

Classification

-Object Identifications –

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Inscriptions

Repository / Location

State / Edition

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Measurements

-Events –

Event Set

-Relations –

Subject Set

Related Works

-Administrative Metadata –

Rights

Record (*mandatory*)

Resource

- Extent Subject
- Subject Concept
- Subject Actor
- Subject Date
- Subject Place
- Subject Event
- Subject Object

```

subjectSet
  subject (type: Ikonographie)
  subjectConcept
    conceptID: 25 I 24 (type: local) (source: Iconclass)
    term: Dorfbewohner, Dörfler

subjectSet
  subject (type: Ikonographie)
  subjectConcept
    conceptID: 46 A 13 2 (type: local) (source: Iconclass)
    term: öffentliche Straße in einem Dorf

subjectSet
  subject (type: Ikonographie)
  subjectConcept
    conceptID: 43 B 31 (type: local) (source: Iconclass)
    term: Gasthaus, Kaffeehaus, Kneipe, etc.
  
```





Holzschnitt/Woodcut:
Bildnis des Johann Aventinus

creator: Hans Sebald Lautensack -> Event

depicted Person: Johann Aventinus -> Subject Actor

07010042.T
H 462a

- Extent Subject
- Subject Concept
- Subject Actor
- Subject Date
- Subject Place
- Subject Event
- Subject Object

The screenshot shows the 'bildindex' website interface. The search results for 'Johannes Aventinus' include a woodcut portrait of the subject. A blue arrow points from the 'Subject Actor' entry in the list on the left to the 'subjectActor' field in the metadata block. A red arrow points from the 'http://d-nb.info/gnd/11850522X' value in the metadata block to the 'GND' source field.

objectWorkType: Druck

subject

subjectActor

displayActor

Johannes Aventinus

actor

actorID

type **URL**

source **GND**

http://d-nb.info/gnd/11850522X

nameActor

pref **preferred**

Aventinus, Johannes

nameActor

pref **alternate**

Thurmair, Johannes

nameActor

pref **alternate**

...

vitalDatesActor 1477-1534

Structure

Subject / Content

DNB, Katalog der Deutschen Nationalbibliothek - Mozilla Firefox

DEUTSCHE NATIONAL BIBLIOTHEK

LEIPZIG FRANKFURT AM MAIN BERLIN

KATALOG DER DEUTSCHEN NATIONALBIBLIOTHEK

<http://d-nb.info/gnd/11850522X>

Person Aventinus, Johannes (männlich)

Andere Namen Aventin, Johannes
Aventinus, ...
Thurmair, Johannes
Turmair, Johannes
Turmair, Johannes %(VD-16)
Auen., Johannes
Durmair, Johannes
Thurinomarus, Johannes Aventinus
Aventin, Iogann
Aventinus, Joannes
Aventin
Aventinus
Turmair, Johann
Turmair, Johannes [Wirkl. Name]
Turmair, Johann Georg
Aventin, ...
Aventinus, Johannes

Quelle M; LCAuth; NDB; ADB

Lebensdaten 1477-1534

Beruf(e) Historiker

Land Deutschland (XA-DE)

Weitere Angaben Bayerischer Hofhistoriograph; Dt. Historiker

Autor von / Beteiligt an 7 Publikationen

1. *Bayerische Chronik*
Aventinus, Johannes. - München : Diederichs, 1988, Erw.
Neuausg.

objectWorkType: **Druck**

subject

subjectActor

displayActor

Johannes Aventinus

actor

actorID

type **URL**

source **GND**

<http://d-nb.info/gnd/11850522X>

nameActor

pref **preferred**

Aventinus, Johannes

nameActor

pref **alternate**

Thurmair, Johannes

nameActor

pref **alternate**

vitalDatesActor **1477-1534**

Allows for full content description of event photographs



objectWorkType: **Photography**

title **Yalta summit in 1945 with Winston Churchill,
Franklin Roosevelt and Joseph Stalin**

subject

subjectEvent

event

eventType **Activity**

eventName **Yalta conference**

eventActor

nameActor **Churchill, Winston**

eventActor

nameActor **Roosevelt, Franklin D.**

eventActor

nameActor **Stalin, Joseph**

eventDate

earliestDate **1945**

latestDate **1945**

eventPlace

namePlace **Yalta**

Administrative Metadata

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Rights

Record (*mandatory*)

Resource

Administrative Metadata

The screenshot shows the 'bildindex' website interface. The search results for 'La Primavera / Der Frühling' by Sandro Botticelli are displayed. The main entry includes a description of the painting, its location in Berlin, and various metadata fields. Below the main entry, there are four smaller thumbnail images of the painting, each with its own set of metadata including image number and date.

```

recordID: 00154983 (type: local)
recordType: single object

recordSource
legalBodyID: info:isil/DE-Mb112 (type: URI) (source: ISIL (ISO 15511))
legalBodyName
  appellationValue: Deutsches Dokumentationszentrum für Kunstgeschichte - Bildarchiv Foto Marburg
legalBodyWebLink: http://www.fotomarburg.de

recordRights
rightsHolder
legalBodyID: info:isil/DE-Mb112 (type: URI) (source: ISIL (ISO 15511))
legalBodyName
  appellationValue: Deutsches Dokumentationszentrum für Kunstgeschichte - Bildarchiv Foto Marburg
legalBodyWebLink: http://www.fotomarburg.de

recordInfoSet
recordInfoLink: http://www.bildindex.de/dokumente/html/obj00154983 (formatResource: html)
recordInfoSet
recordInfoID: oai:bildindex.de:lidoWrap::DE-Mb112/lido-obj00154983 (type: oai)

resourceSet
resourceID: C-654.591 (type: local)
resourceRepresentation (type: image_thumb)
linkResource: http://www.bildindex.de/bilder/fmc654591 (formatResource: jpg)
resourceMeasurementsSet
  measurementType: width
  measurementUnit: pixel
  measurementValue: 120

resourceType
  term: digital image (addedSearchTerm: no)
resourceDescription: overall view
resourceDateTaken: 1949 (earliestdate: 1949) (latestdate: 1949)
resourceSource (type: holder of image)
legalBodyName
  appellationValue: Deutsches Dokumentationszentrum für Kunstgeschichte - Bildarchiv Foto Marburg

rightsResource
rightsHolder
legalBodyID: info:isil/DE-Mb112 (type: URI) (source: ISIL (ISO 15511))
legalBodyName
  appellationValue: Deutsches Dokumentationszentrum für Kunstgeschichte - Bildarchiv Foto Marburg
  
```



Lightweight Information Describing Objects

www.lido-schema.org