



# THE GETTY VOCABULARIES AND LINKED OPEN DATA: INTRODUCTION AND EDITORIAL PERSPECTIVE

CIDOC: Tuesday, 9 September 2014

Patricia Harpring  
Managing Editor, Getty Vocabulary Program

# Table of Contents



- What are the Getty vocabularies?
- Scope and content of the Getty vocabularies
- Getty vocabularies to LOD: Editorial perspective

## Presenters:

**14:00 Welcome**

**14:15 Patricia Harpring**, Managing Editor, Getty Vocabulary Program,  
Getty Research Institute

**14:30 Joan Cobb**, IT Specialist Project Manager, Information Technology  
Services, J. Paul Getty Trust

**14:45 Gregg Garcia**, Software Architect (Lead Developer),  
Information Technology Services, J. Paul Getty Trust

**15:00 Vladimir Alexiev**, Head, Data and Ontology Management, Ontotext

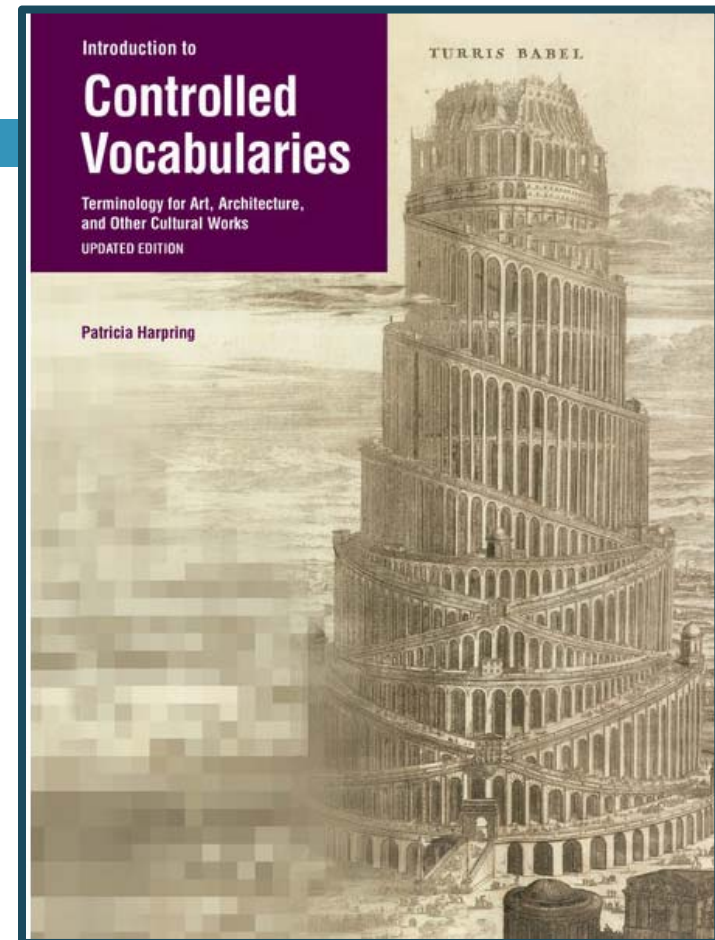
**15:15 Questions**

**15:30 Adjourn**

- [Please save your questions for the end, after all four presentations]
- My presentation will be followed by three presentations concerning technical issues and solutions arranged in order of increasingly technical material
- Don't worry if you miss something:
- Slides will be posted on the CIDOC site and the Getty vocabulary "Training Materials" page

[www.getty.edu/research/tools/vocabularies/training.html](http://www.getty.edu/research/tools/vocabularies/training.html)

- These presentations are not primers on **controlled vocabularies** nor on **what is LOD**
- They focus on issues surrounding the Getty vocabularies specifically
- For basic information on vocabularies, see *Introduction to Controlled Vocabularies* (Harpring, revised 2013) and its bibliography
- For basic information on what is LOD, see this Europeana video <http://vimeo.com/36752317>. World Wide Web Consortium (W3C) Glossary: [www.w3.org/TR/ld-glossary/](http://www.w3.org/TR/ld-glossary/)



[www.getty.edu/research/tools/vocabularies/index.html](http://www.getty.edu/research/tools/vocabularies/index.html)

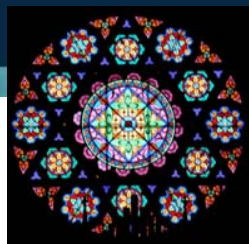
# What Are the Getty Vocabularies?

AAT TGN ULAN CONA



# The Getty Vocabularies

Discover, link, access, retrieve, research, catalogue, index  
Explore art, architecture, cultural heritage, conservation, archaeology, and beyond



## What are the Getty vocabularies?

- *Catherine wheel* or *rose window*? *Mona Lisa* or *La Gioconda*?
- The AAT, TGN, ULAN and CONA contain multilingual terminology and other related data to describe
  - visual art, architecture, other cultural heritage works, conservation, archaeology, archival materials, visual surrogates, and related bibliographic materials

# The Getty Vocabularies

Discover, link, access, retrieve, research, catalogue, index

Explore art, architecture, cultural heritage, conservation, archaeology, and beyond

- Getty vocabularies are valued as authoritative
  - Grow through contributions from experts
  - Contributors and sources are cited
- Compiled, merged, edited, and published by the Getty Vocabulary Program and our talented, tireless technical team
- **Data is made available in various ways:** via online searching; relational tables, XML format, Web services APIs
  - **Now as Linked Open Data:** structured and published to make it openly accessible and shareable on the Semantic Web
    - **Open Data Commons Attribution License (ODC-By) v1.0**
    - Allows sharing, creation, adaptation of data with attribution



# The Getty Vocabularies

Discover, link, access, retrieve, research, catalogue, index

Explore art, architecture, cultural heritage, conservation, archaeology, and beyond

- Getty vocabularies are thesauri compliant with national (NISO) and international (ISO) standards for thesaurus construction
- They are compliant with / map to other standards:
  - CDWA (Categories for the Description of Works of Art)
  - CCO (Cataloging Cultural Objects)
  - VRA Core (Visual Resources Association core categories)
  - LIDO (Lightweight Information Describing Objects)
  - CIDOC CRM (CIDOC Conceptual Reference Model) (ISO 21127:2006)
  - etc.

# The Getty Vocabularies

Discover, link, access, retrieve, research, catalogue, index

Explore art, architecture, cultural heritage, conservation, archaeology, and beyond

- Among the features that allow the Getty vocabularies to be used in cataloging, retrieval, and linking are the following:
  - Each Getty vocabulary records and terms are identified by **unique numeric IDs**
  - The Getty vocabularies are linked to each other
  - The Getty vocabularies share a core data structure

# Scope and Content of the Getty Vocabularies

AAT      TGN      ULAN      CONA



amfoor

amphorae

arc-boutant

brittleness

Buddhism

calligraphy

emulsifier

façades

flying buttress

飛扶壁

lithographer

litógrafos

luchtbogen

orthogonal plan

Macedonian

millwork

Rinascimento

stupa

Sturzbecher

travertine

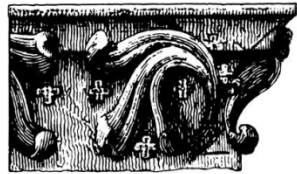
weft wrapping

yastiks

zeppelin

Zigula

zinc oxide



## AAT, the Art & Architecture Thesaurus®

Generic terms for describing art and architecture (decorative arts, other material culture, visual surrogates, archival materials, archaeology, and conservation) (e.g., *oil paintings, Baroque, lithographers, sintering*).

Current totals: 36,000 records; 245,000 terms

- AAT is multilingual; large translation projects are underway
- Conceptually organized from terms to describe abstract concepts to generic terms for concrete, physical artifacts
- Facets are the upper levels of the AAT structure
- AAT is not organized by subject matter or discipline

*Associated  
Concepts*

*Physical  
Attributes*

*Styles and  
Periods*

*Agents*

*Activities*

*Materials*

*Objects*



Thesaural relationships

*hierarchical*

Objects Facet  
 .... Furnishings and Equipment  
 ..... Containers  
 ..... culinary containers  
 ..... <vessels for serving / consuming food  
 .....



stirrup cups  
 coaching glasses  
 hunting glasses

*associative*



sturzbechers  
 Sturzbecher  
 stortebebers

distinguished  
 from

*equivalence*

rhyta  
 rhyton  
 rhytons  
 rhea  
 rheon  
 rheons  
 ritón





# AAT, the Art & Architecture Thesaurus®

## Sample record

**ID:** 300132869

**Terms:**

bobbin lace (pref, en)  
 bone lace (en)  
 cushion lace (en)  
 梭心蕾絲 (zh)  
 線軸編織花邊 (zh)  
 kloskant (nl)  
 dentelle aux fuseaux (fr)  
 encaje de bolillos (es)  
 encaje de bolillo (es)  
 Klöppelspitze (de)  
 Klöppelspitzen (de)

**Associative Relationships**

requires ... lace pillows (<textile fabricating tools and equipment>...Objects Facet) [300132869]

**Hierarchical Relationships (poly)**

.Objects Facet  
 ... Visual & Verbal Communication  
 ..... Visual Works  
 ..... visual works (works)  
 ..... <visual works by material >  
 ..... needlework (visual works)  
 ..... lace (needlework)  
 ..... bobbin lace

**Note:** With "needle lace," one of two primary types of handmade lace. It is characterized by being made by ...

**Chinese (traditional)** ..... 與「針織蕾絲 (needle lace)」同為主要的手工蕾絲，其特色是以纏繞於線軸或梭心...

**Dutch** ..... Een van de twee belangrijkste soorten met de hand vervaardigde kant; 'naaldkant' is ...

**German** ..... Zusammen mit der "Nadelspitze" eine der wichtigsten...

**Spanish** ..... Junto a "encaje a aguja", uno de los dos tipos principales de ...

**Contributors:** VP,CHIN,AS,RKD,lFM-SMB-PK,CDPB-DIBAM

**Sources:** Earnshaw, Claburn, Needleworker's Dictionary (1976); Identification of Lace, 2d ed. (1984); Ginsburg, Illustrated History of Textiles (1991)

Translations are underway

Research  
Research Home ▶ Tools ▶ Art & Architecture Thesaurus ▶ Full Record Display  
Art & Architecture Thesaurus® Online  
Full Record Display  
New Search Previous Page  
Semantic View (JSON, RDF, N3/Turtle, N-Triples)

bobbin lace ([preferred](#), [C,U,LC,English-P,D,U](#),  
bone lace ([C,U,English,UF,U,N](#))  
cushion lace ([C,U,English,UF,U,N](#))  
lace, bobbin ([C,U,English,UF,U,N](#))  
pillow lace ([C,U,English,UF,U,N](#))  
梭心蕾絲 ([C,U,Chinese \(traditional\)-P,D,U,U](#))  
線軸編織花邊 ([C,U,Chinese \(traditional\),UF,U,U](#))  
骨架花邊 ([C,U,Chinese \(traditional\),UF,U,U](#))  
枕墊花邊 ([C,U,Chinese \(traditional\),UF,U,U](#))  
suō xīn lěi sī ([C,U,Chinese \(transliterated Han](#)  
suo xin lei si ([C,U,Chinese \(transliterated Piny](#)  
so hsin lei ssu ([C,U,Chinese \(transliterated Wa](#)  
kloskant ([C,U,Dutch-P,D,U,U](#))  
dentelle aux fuseaux ([C,U,French-P,D,U,PN](#))  
merletto a tombolo ([C,U,Italian-P,D,U,PN](#))  
encaje de bolillos ([C,U,Spanish-P,D,U,PN](#))  
encaje de bolillo ([C,U,Spanish,AD,U,SN](#))  
Klöppelspitze ([C,U,German,AD,U,SN](#))  
Klöppelspitzen ([C,U,German-P,D,U,PN](#))  
Klöppeispitzen ([C,U,German-P,D,U,PN](#))

- **Getty Conservation Institute** (Los Angeles, California)
- **Academia Sinica** (Nankang, Taiwan)
- **Netherlands Institute for Art History** (RKD: Bureau AAT) (The Hague, The Netherlands)
- **Centro de Documentación de Bienes Patrimoniales** (Dirección de Bibliotecas, Archivos y Museos) (Santiago, Chile)
- **Staatliche Museen zu Berlin Preussischer Kulturbesitz** (Berlin, Germany)
- *[Canadian Heritage Information Network (CHIN) (Gatineau, Quebec, Canada), Istituto Centrale per il Catalogo e la Documentazione (Rome, Italy)(ICCD)] and other contributors of partial translations; future translations in French, Italian, Portuguese, other languages*

Angel Falls

Athens

Athínai

Αθήναι

Ayers Rock

Bay of Biscay

Bhārat

Bora-Bora

Burkina Faso

Casablanca

Chichén Itzá

Donner Pass

Firenze

Gdansk

Holy See

Los Alamos

Luxor

Micronesia

New Zealand

Perú

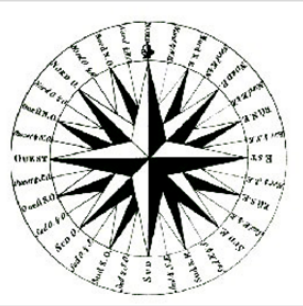
Rapa Nui

Taipei

臺北

Toronto

Yisrael



## TGN, the Getty Thesaurus of Geographic Names®

Names, other information for current & historical administrative places (cities, nations, empires) and physical features (e.g., *Firenze*, *Roman Empire*, *Ganges River*).

Current totals: 1,241,000; 1,800,000 names

- It includes formerly inhabited places, archaeological sites, and historical places with unknown exact locations (i.e., “lost settlements”)
- It focuses on places important to study of art and related disciplines
- It grows through contributions from large national geographic databases, the expert user community, archaeology projects, scholars, etc.





# TGN, the Getty Thesaurus of Geographic Names®

## Sample record

**ID:** 7011179

**Names:**

- Siena
- (it,en,es,fr,nl,de)
- Σιένα (el)
- Siyenah
- 锡耶纳 (zh)
- シエーナ (ja)
- Sienese (en-adj)
- Sienna (h-en)
- Sena Julia (h-la)
- Sanna (h)
- Saena (h)

**Hierarchical Rels. (polyhier.)**

- World (facet)
- .. Europe (continent)
- ... Italy (nation)
- .... Tuscany (region)
- ..... Siena (province)
- ..... Siena (inhabited place)

- World (facet)
- .. Europe (continent)
- ... Italian Peninsula (peninsula)
- .... Etruria (former confederation)
- ..... Siena (inhabited place)
- Historical: Late Etruscan

**Associative Rels**

- ally of Pisa ..(inhabited place) [7006082]
- Ghibelline allies, 13th-14th centuries

*Contributors:* BHA, FDA, GRLPSC, VP

*Sources:* Annuario Generale (1980); Canby, *Historic Places* (2007) 2/861; Dizionario Corografico Toscana (1977) 1508; Library of Congress Subject Headings (2002-); Milanesi, *Storia dell'Arte Senese* (1969) passim; NGA/NIMA database (2003-) -129709; TCI: Toscana (1984) 479 ff; Times Atlas of the World (1992) 183; UNESCO World Heritage Centre [online] (1992-) accessed 20 July 2010; Webster's Geographical Dictionary (2007) 1114

**Place Types**

- inhabited place settled by Etruscans
- (flourished by 6th century BCE)
- city
- archiepiscopal see
- commune (administrative) since 1125
- cultural center
- university center
- world heritage site

**AAT**

*Lat:* 43 19 07 N (43.3180)

*Long:* 011 19 50 E (11.3300)

*Elevation:* 1056.430 feet (322.0000 meters)

**Note:** Siena was founded as an Etruscan hill town; later was the Roman city of Sena Julia (3rd century BCE). It flourished under the Lombard kings (6th century CE) and was Medieval self-governing commune ...

Achilles Painter

An Qi

安岐

Bartolo di Fredi

Burgkmair, Hans,

the elder

Galleria degli Uffizi

Gilbert & George

Katsushika Hokusai

Kicking Bear

Master of Boi

Méraud, Pierre-

Antoine, père

Ngapatari, Hakaraia

O'Keeffe, Georgia

Pei, I. M.

Rothko, Mark

Sa'īd, Mahmūd

Skidmore, Owings

& Merrill

unknown Mende

Vikramaditya I

Wren, Christopher

Zeuxiades

Ζευξιάδης



## ULAN, the Union List of Artist Names®

Names, other information for people (artists, patrons, sitters) and corporate bodies (repositories, studios) related to the design, creation, patronage, collection, conservation, etc. of art, architecture, and other cultural materials (e.g., *Bartolo di Fredi, National Palace Museum*)  
Current totals: 223,000 records; 582,000 names

- It includes current and historical associative relationships (e.g., *student-teacher, firm-member*)
- Contributions to ULAN are from expert communities (museums, art libraries, cataloging projects, etc.)
- ULAN is contributed to the Virtual International Authority File (VIAF) (joint project with US Library of Congress and numerous libraries worldwide to combine name authority)



# ULAN, the Union List of Artist Names®

## Sample record

**ID:** 500115493

**Names:**

- Dürer, Albrecht (pref,de,en)
- Albrecht Dürer
- Duerer, Albrecht (en)
- Durer, Albrecht (en)
- Düro, Alberto (it)
- Durerus, Albertus (la)
- Direr, Albreht
- Djurer, Albrecht
- Dyûrâ, Albrecht
- Dîrers, Albrehts
- Alberto Duro Tedesco
- デューラー, アルブレヒト (ja)
- 阿尔布雷希特·丢勒 (zh)

**Nationalities:**

- German (pref)
- Bavarian

**AAT**

**Roles:**

- artist (preferred)
- painter
- printmaker
- engraver (printmaker)
- woodcutter
- draftsman
- illustrator
- designer
- mathematician
- theorist
- portraitist
- religious artist

**Gender:** male

**Birth and Death Places:**

- Born: Nuremberg (Bavaria, Germany) (inhab place)
- Died: Nuremberg (Bavaria, Germany) (inhab place)

**AAT**

**TGN**

**Events:**

- active: Nuremberg (Bavaria, Germany) (inhab pl)
- active: Venice (Veneto, Italy) (inhabited place)

**Associative Relationships:**

- apprentice of Wolgemut, Michael; 1486 to 1488  
.....(German painter, printmaker, 1434/1437-1519)
- child of Dürer, Albrecht, the elder  
.....(German goldsmith, 1427-1502)
- founder of ...Albrecht Dürer Workshop  
..... (German workshop, established 1495)
- patron was ...Maximilian I, Holy Roman Emperor  
..... (Roman emperor, 1459-1519)

**Contributors:**

VP,JPGM,Avery,WCI,Prov,GRLPSC,BHA,CCA

**Sources:** Bartrum, Albrecht Dürer and his Legacy (2002); Bénézit, Dictionnaire des Peintres (1976); Bartsch, Le peintre graveur.

Adoration of the Magi  
Tree of Life Quilt  
Bhimesvara Temple  
Cane Back Chair  
Château de Versailles  
Das Treffen der  
Heiligen Drei Könige  
Empire State Building  
Himeji Castle  
姫路城  
Irises  
La Gioconda  
Model for the Façade  
of San Lorenzo  
Mona Lisa  
MS Ludwig XV  
Pantheon  
Portrait of Napoleon  
Square Ting Vessel of  
Duke Kang  
西周早期 康侯方鼎  
Still Life with Flowers  
Venus and Cupid  
Warrior on Horseback  
Zwaardstootplaat



## CONA, the Cultural Objects Name Authority®

Titles, other information for moveable works (paintings, sculpture, prints, drawings, photographs, ceramics, etc.) and architecture (buildings, bridges, etc.) (e.g., *Hagia Sophia*, *Mona Lisa*, *Fantastic Landscape with a Pavilion*).

Current totals: [5,500 records; 9,300 titles]

- It includes works executed or designed (e.g., a built work for which only design drawings exist); extant or destroyed / historical
- CONA is a thesaurus; it is also mapped to CDWA, CCO, CIDOC CRM, and LIDO
- CONA grows through contributions from repositories of art and the expert cataloging and scholarly community

# CONA, the Cultural Objects Name Authority®

Under discussion are the possible applications of CONA:

Perhaps in the future

- CONA could be a resource to link the Getty vocabularies to records for art and architecture (in LOD or otherwise)
- CONA could link subject terminology to art and architecture records
- CONA could facilitate linking between works, including works held in different repositories but having historical relationships (e.g., studies, disassembled manuscripts, etc.)



# CONA, the Cultural Objects Name Authority®

## Sample record

### 1. CONA could link work records to Getty vocabularies

**ID:** 700001950

**Titles:**

Shiva met de maan in het haar (nl)  
Shiva with the Moon in his Hair (en)

**Catalog Level:** item

**Work Types:**

sculpture (visual work) **AAT**

**Classifications:**

sculpture (preferred)

**Creation Date:** 1000/1200

**Creator Display:**

anoniem  
sculptor: unknown Chola **ULAN**

**Locations:** **ULAN** **TGN**  
**Current:** Rijksmuseum (Amsterdam, North Holland, Netherlands) AK-MAK-1291; RM001.collect.910; Bruikleen van de Vereniging van Vrienden der Aziatische Kunst  
**Creation:** Tamil Nādu (India)

**Materials:** bronze founding **AAT**

**Dimensions:** 40 cm (height) x 24cm (width) x 10.5 (depth)

**Events:** exhibition: Metamorfoze/Geheugenproject Willem Witsen **AAT**

**Cultures:**

Indian Chola **AAT**

**General Subject:**

human figure(s) (preferred )  
religion and mythology

**Specific Subjects:**

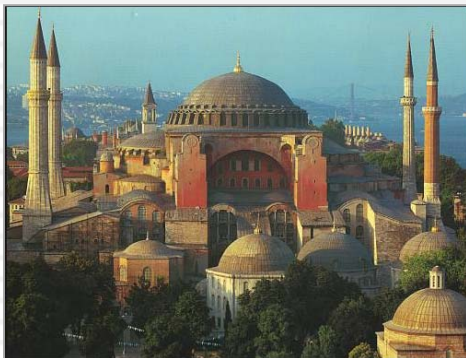
Shivá (Hindu iconography)  
mudrā (pose, <visual and representational concepts>)

*[link to Iconclass]*

**AAT**  
**TGN**  
**ULAN**  
**CONA**  
**CONA IA**

**Contributors & Sources:** [Rijksmuseum;VP]; Rijksmuseum XML file

Images may be under additional copyright



# CONA, the Cultural Objects Name Authority®

## Sample record

**ID:** 700000141

**Titles/Names:**

- Hagia Sophia (en,de,nl)
- Ayasofya (tr)
- Αγία Σοφία (el)
- Agia Sofia
- Haghia Sophia
- Sainte-Sophie (fr)
- Santa Sofía (es)
- Santa Sofia (it)
- Sancta Sophia (la)
- Sancta Sapientia (la)
- Holy Wisdom (en)
- Saint Sophia (en)
- 聖蘇菲亞大教堂 (zh)

**Work Types:** church; mosque; museum

**AAT**

**Date:** original structure dated from 4th century CE; present structure built 532-537 CE; rebuilt in 12th century

**ULAN**

**Creators:** Anthemios of Tralles (Byzantine architect, ca. 474-ca. 534) and Isidoros of Meletus, the Elder (Byzantine architect, active mid-6th century);  
**Patron:** Justinian I (Byzantine emperor, ca. 482-565)

Built Work

... Hagia Sophia

**Associative Relationship**

**depicted in** *View of the Hagia Sophia in Constantinople*; Eduard Hildebrandt; watercolor; ca. 1852; Hermitage Museum (Saint Petersburg, Russia) [700008345]

**Location:** İstanbul (Marmara, Turkey)

**TGN**

**Address Note:** 41.008548°N; 28.979938°E

**Materials:** system bearing masonry, centralized plan; interior surfaces are sheathed with polychrome marble, porphyry, and mosaics

**AAT**

**Dimensions:** central dome: diameter 31 m (102 feet); height 56 m (184 feet)

**General Subject:** architecture  
**Specific Subject:** Holy Wisdom Religion/Mythology

**AAT**  
**TGN**  
**ULAN**  
**CONA**  
**CONA IA**

**Note:** Domed basilica was completed by the Emperor Justinian; built in Constantinople in 6th century...

**Contributors:** Avery, BHA, FDA, VP

**Sources:** Fleming, *Penguin Dictionary of Architecture* (1999); Herrin, Judith, *Byzantium* (2007); Maidstone, *Hagia Sophia* (2002); Theoharidou, *Architecture of Hagia Sophia* (1988); Xydis, *Chancel Barrier of Hagia Sophia* (1947)

# CONA, the Cultural Objects Name Authority®

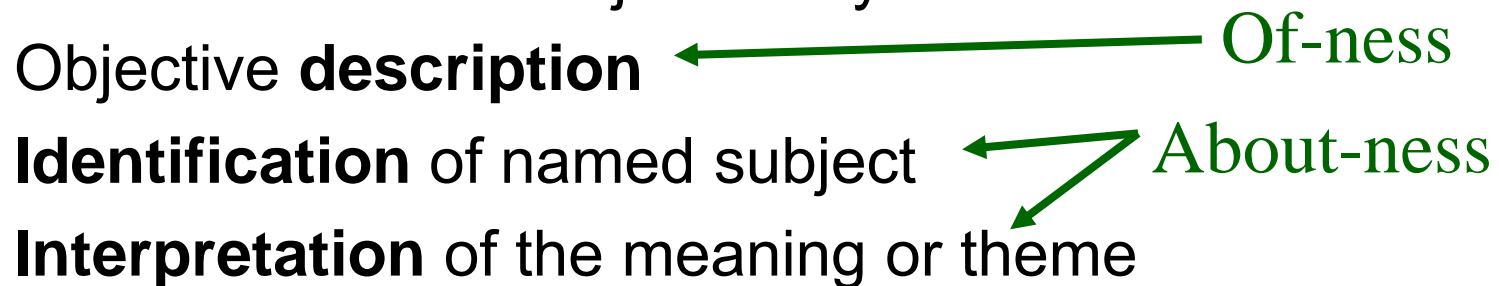
## 2. CONA could link depicted subjects

- ❑ Whereas libraries have a tradition of cataloging the subjects of works
- ❑ Many art museums typically do not index subject matter depicted in / represented by works
  - [sitters, places, events, iconographical themes, dedication of certain buildings, etc.]
  - In a survey conducted of American art museums' data, of the core fields (agreed by consensus in CDWA, CCO, etc.), all museums included all core fields except the subject [by OCLC (*Online Computer Library Center, a nonprofit computer library service and research organization*); core fields per CCO and CDWA (Categories for the Description of Works of Art)]



# CONA, the Cultural Objects Name Authority®

Index three levels of subject analysis



- For such subject indexing: CONA can link to AAT, TGN, ULAN, CONA itself, and the CONA Iconography Authority
- As well as to other sources for subjects, such as the US Library of Congress authorities and Iconclass (*we intend to work closely with Iconclass, a Dutch classification system, [www.iconclass.nl/](http://www.iconclass.nl/)*)

# CONA, the Cultural Objects Name Authority®

## Depicted Subjects



*Lincoln on the Battlefield of Antietam;*  
albumen print; Alexander Gardner  
(American photographer, 1821-1882);  
1862; 8 5/8 x 7 3/4 inches; J. Paul  
Getty Museum (Los Angeles, CA);  
84\_xm\_482.1

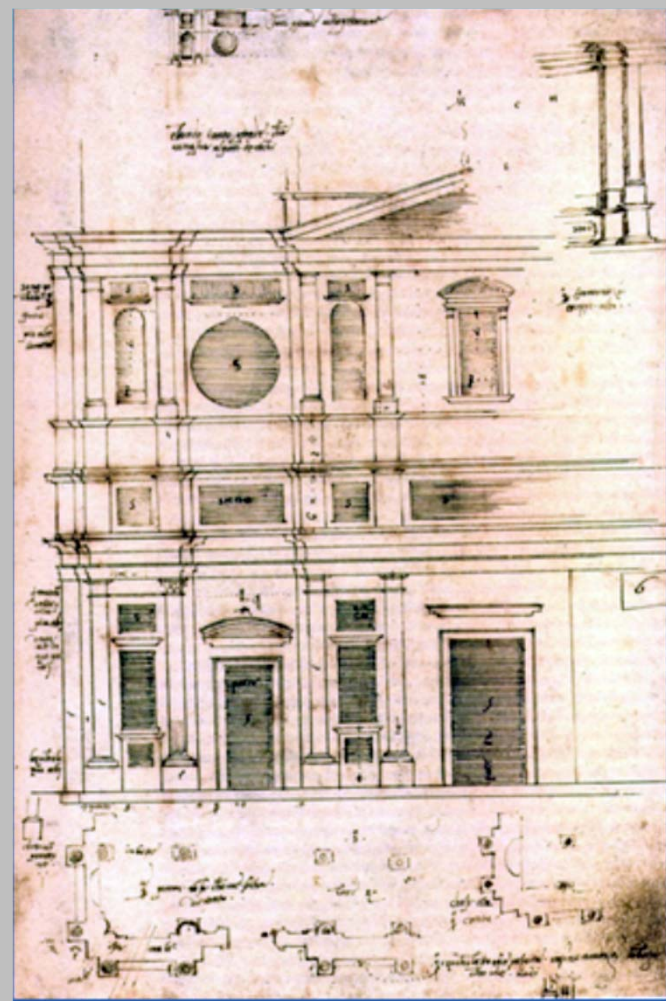
### General

portraits  
history and legend

### Specific

Antietam National Battlefield  
(Sharpsburg, Maryland, United States) . TGN  
American Civil War (event) . . . . . CONA IA  
Abraham Lincoln (American president  
1809-1865) . . . . . ULAN  
John McClelland (American Union  
General, 1812-1900) . . . . . ULAN  
Allan Pinkerton (American Secret  
Service agent, detective, 1819-1884) . ULAN  
army camp . . . . . AAT  
tents (portable buildings) . . . . . AAT

# CONA, the Cultural Objects Name Authority®



*Plan and Elevation of the façade of San Lorenzo; drawing; Aristotile da Sangallo after Michelangelo; late 15th century; 32.0 x 21.5 cm (12 1/2 x 8 3/8 inches); pen and sepia ink; Staatliche Graphische Sammlung (Munich, Germany) #33258*

## Depicted Subjects

**General**  
architecture

**Specific**

San Lorenzo (built work, Florence, Italy) . . . . .	CONA
church . . . . .	AAT
façade . . . . .	AAT
elevation . . . . .	AAT
plan . . . . .	AAT

# CONA, the Cultural Objects Name Authority®



## Depicted Subjects

### *General*

religion and mythology

human figure(s)

### *Specific*

bodhisattva . . . . . **AAT**

Avalokiteshvara. **CONA IA**

Maitreya . . . . . **CONA IA**

compassion . . . . . **AAT**

Battle of Little Bighorn  
Nohochacyum

Amun

Ἄμμων

Valhöll

Valhalla

Pied Piper of Hamelin

Rattenfänger von Hameln

Shiva

Siva

Xiva

शिव

Adoration of the Magi

Adorazione dei Magi

Anbetung der Heiligen

Drei Könige

Bambi

Battle of Salamis

Naumachia tēs Salaminos



## The CONA Iconography Authority

Named events, religious/mythological iconography, fictional characters and places, themes from literature

- Includes the proper names of subjects not covered by other Getty vocabularies
- The CONA Iconography Authority (IA) is a module within CONA; over time, it could become a stand-alone authority through contributions
- Includes links to other sources, such as Iconclass and the US Library of Congress subject authorities



Enthronement of Puyi  
溥儀的登基大典

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# The CONA Iconography Authority

## Sample record

**ID:** 1000085

**Names:**

Avalokiteshvara

Avalokiteśvara

अवलोकितेश्वर

Kannon

Guanyin

Guānzìzài

觀自在

觀音

观音菩萨

**AAT link:**

role/attribute bodhisattva

role/attribute Lotus (genus)

related to Mahayana Buddhism

related to Theravada Buddhism

AAT  
TGN  
ULAN  
CONA

**Associative Relationship:**

associated with .... Krishna (Hindu iconography)

**Note:** The bodhisattva of infinite compassion and mercy; embodies the compassion of all Buddhas. This bodhisattva is variably depicted and portrayed in different cultures as either female or male...

**Contributors & sources**

[VP] Encyclopedia Britannica Online (2002-); Bowker, Oxford Dictionary of World Religions (1997); Huntington, Art of Ancient India (1985)

**Iconclass:** no **LC:** LC control no.: sh 85010492

## Relationships in CONA

3. CONA could provide links between works

Whole/part relationships for groups, subgroups, items

*The Dissipation*; Jacques Callot (French, 1592-1635); etching; Lieure, no. 1407, State ii/iii; National Gallery of Art (Washington, DC); R.L. Baumfeld Collection; 1969.15.833.



# CONA, the Cultural Objects Name Authority®

## Relationships in CONA



- Whole/Part Records for a series and items (conceptual relationship)

*Great Wave at Kanagawa*; Katsushika Hokusai (Japanese, 1760-1849); published by Nishimura Eijudo (Japanese, 19th century); woodcut, polychrome ink and color on paper; 25.7 x 37.9 cm (10 1/8 x 14 15/16 inches); Metropolitan Museum of Art, New York, New York, USA), JP1847.





# CONA, the Cultural Objects Name Authority®

## Relationships in CONA

- CONA could virtually reconstruct disassembled works
- Held in different repositories or locations
- Manuscripts, paintings, sculpture, architecture, etc.



Proposed reconstruction of Matteo di Giovanni's Asciano Altarpiece by Rachel Billinge. Extant panels are now in National Gallery London, Siena, Asciano, Villa I Tatti, Esztergom, Altenburg, Rhode Island, and Private Collections.

# CONA, the Cultural Objects Name Authority®

## Relationships in CONA

Related works in different repositories may be linked



Jean-Auguste-Dominique Ingres; Study for the Dress and the Hands of Madame Moitessier; 1851; graphite on tracing pape; 13 15/16 x 6 5/8 inches; J. Paul Getty Museum (Los Angeles, California); 91.GG.79

*Associative Relationships*

study for

study is



Jean-Auguste-Dominique Ingres; Madame Moitessier; 1851; Samuel H. Kress Collection, National Gallery of Art (Washington, DC); 1946.7.18

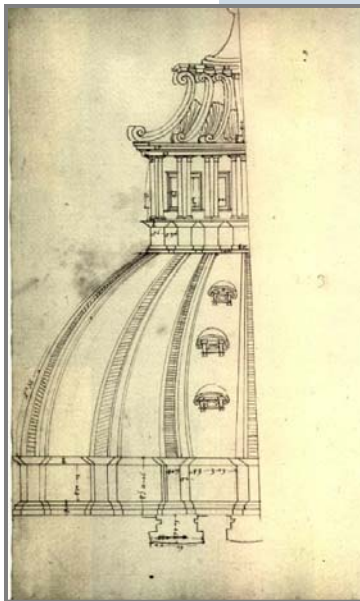
# CONA, the Cultural Objects



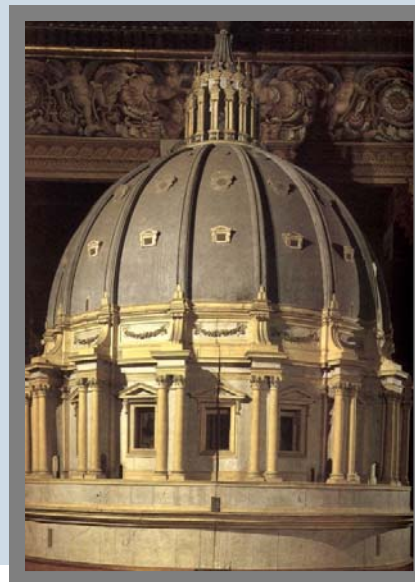
study for



part of



depicts



model for

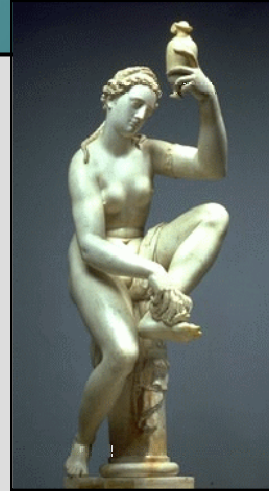
- Whole/part relationships
- Many complex relationships are possible
- *Built work – dome – design drawing – record drawing - model*

# Getty Vocabularies to LOD: Usage and Editorial Perspective

AAT TGN ULAN CONA



# How are vocabularies used?



**Giambologna**  
*Female Figure*;  
Marble; H: 48 in.; 2008 J.  
Paul Getty Museum;  
82.SA.37



**Giovanni Bologna;**  
*Triton*, 16th  
century (1560–70);  
Bronze; H. 36 in;  
Metropolitan Museum of  
Art; Bequest of  
Benjamin Altman, 1913  
(14.40.689)



**Jean Boulogne;**  
*Mercure volant*; Bronze;  
H 1,7 m; L 0,57m; Pr  
1,4 m; Musee du  
Louvre, Collection  
du duc de Brissac  
(saisie en 1794)?;  
MR



**Bologna, Giovanni da;** *Christ Crucified*,  
probably before  
1588; bronze,  
corpus, height including  
foot rest: 371 x 254 x .078 m ; National  
Gallery of Art, Washington, DC; Gift of  
Mr. and Mrs. John R. Gaines in memory  
...

- Traditional use of vocabularies for retrieval focuses on the names
- If a user asks for one name/term, all of the synonyms can be used for retrieval
- For example, if a user searches on “Giovanni da Bologna”

*From ULAN*

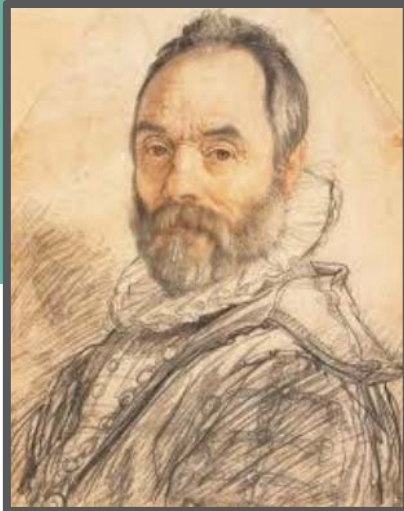
**Giambologna**  
**Giovanni da Bologna**  
**Giovanni Bologna**  
**Jean Boulogne**  
**Jean de Boulogne**  
**Bologna, Giovanni da**

“giambologna” OR “giovanni da bologna” OR “giovanni bologna” OR “jean boulogne” OR “bologna, giovanni da”

# How are vocabularies used?

- LOD and new retrieval methods can incorporate hierarchical and associative relationships, and other links or implied relationships to answer more interesting complex questions and aid serendipitous discovery

## Associative relationships



**Giambologna** (*Flemish sculptor and architect, 1529-1608, active in Italy*)

**Marie de Medici** (*French queen, patron, 1573-1642*)

had patron

patron of

**Tacca, Pietro** (*Italian sculptor and architect, 1577-1640*)

teacher of  
student of

Display Date: from 1592  
Start Date: 1592 End Date: 1608

# Editorial perspective: LOD

## Editorial rules

Consistency  
in application  
of rules

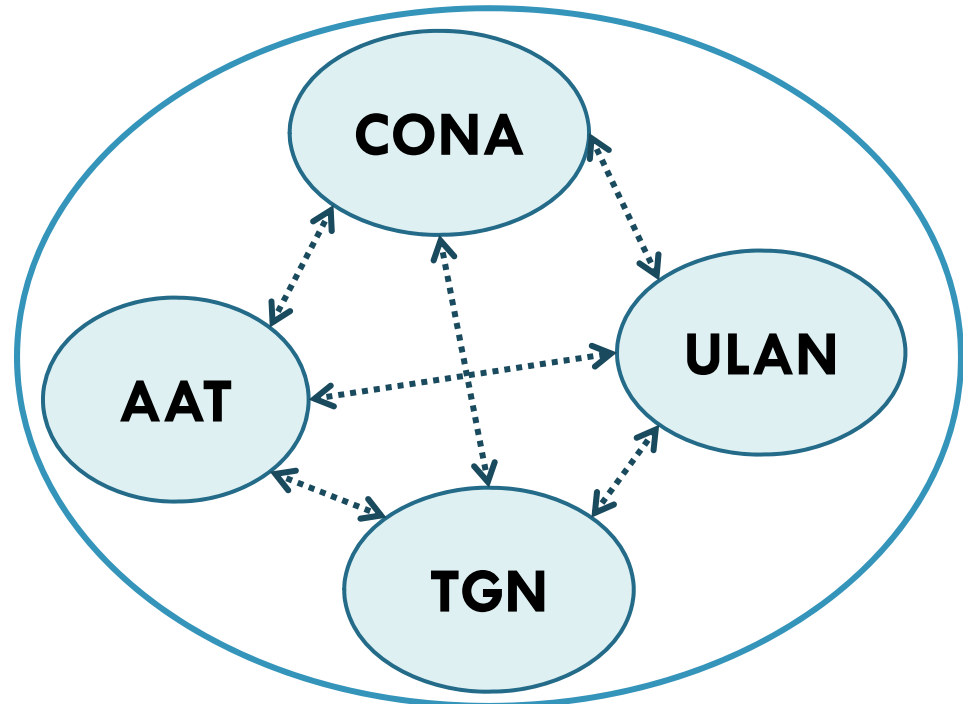
Consistency  
in content of  
controlled  
terminology  
within each  
vocabulary

Creating  
actual links  
between  
vocabularies

- The Getty vocabularies have always been compiled by experts
  - Using authoritative sources
  - Rules in extensive editorial manuals
  
- Seen through the LOD lens, any inconsistency or omission become ever more obvious
  
- Getty Vocabulary Program analyzes and cleans up of the data for LOD releases

# Editorial perspective: LOD

- **From conceptual to actual links**
- Lookup lists had been based on AAT, but had gotten out of sync with AAT over the years
- E.g., nationalities, roles in ULAN and place types in TGN must map to AAT terms



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}, {
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  "value": "rhyton"
}
```



# Editorial perspective: LOD

- *Nationality/ Culture/ Race/ Ethnicity* in ULAN was conceptual, now needed to be linked to AAT
- Certain matches must be resolved by hand

## Many links cannot be made automatically Matching ULAN Nationality to AAT

code	Nat/Culture ULAN	AAT subject_id	AAT term_id	AAT term
901614	Languedocian			
901615	Burgundian (Migration period)	300020847	1000020847	Burgundian (Migration
901620	Parisian			
901630	Gallic	300379855	1000540772	Gallic
901710	Swabian			
901800	German	300111192	1000111192	German
901810	East German			
901820	West German			
901830	Prussian			
901840	Bavarian	300385972	1000568017	Bavarian
901850	Hamburger			
901860	Hessian	300014076	1000014077	hessian
901870	Thuringian	300105675	1000105675	Thuringian
901880	Saxon	300379686	1000540441	Saxon
901890	Wendish	300263656	1000263656	Wendish
901900	Rhenish			
901910	Frankish	300019478	1000019478	Frankish
901920	Merovingian	300019512	1000019512	Merovingian (culture)
		300210049	1000210134	Merovingian (scripts)
901950	Carinthian	300385997	1000568044	Carinthian

This hessian is bad match, type of burlap

no match

false match

ambiguous match

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  "type": "literal"
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"http://vocab.getty.edu/aat/300019512",
"rhy"
}
```

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<http://vocab.getty.edu/aat/30019884> <http://www.w3.org/1999/02/22-rdf-syntax-ns#Property>  
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<http://vocab.getty.edu/aat/30019884> <http://www.w3.org/2000/01/rdf-schema#Property>

## Finis: Introduction to the Getty Vocabularies *(Please save questions for the end)*

- Next speaker:
  - Joan Cobb  
IT Specialist Project Manager  
Information Technology Services  
J. Paul Getty Trust



THE GETTY

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**Patricia Harpring**  
Managing Editor  
Getty Vocabulary Program  
Getty Research Institute

1200 Getty Center Drive  
Los Angeles, CA 90049

[pharpring@getty.edu](mailto:pharpring@getty.edu)