Getty Vocabularies: The Basics

OVERVIEW: ABRIDGED VERSION

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Getty Vocabulary Program

revised May 2020
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PREFACE

- Publications and online resources:
  - This presentation is a condensed introduction of the Getty vocabularies, AAT, TGN, ULAN, CONA, and IA
  - Editorial guidelines
  - Training materials
  - How to translate
  - Other materials

www.getty.edu/research/tools/vocabularies/index.html
For basic information on vocabularies, see Introduction to Controlled Vocabularies (Harpring, Baca editor, revised 2013) and its bibliography.

Defines the characteristics, scope, and uses of controlled vocabularies for art and cultural materials, and explains how vocabularies should be integrated in cataloging systems and utilized for indexing and retrieval.

Available in hardcopy and online.

Translated in Portuguese in 2016.
For basic information on cataloging and standards for art information, see Categories for the Description of Works of Art (CDWA), and Cataloging Cultural Objects (CCO), a subset of the CDWA.

Guidelines and the set of required “core” fields, among over 500 total fields, were the result of consensus of participants representing diverse professional communities from several nations:

- Art museums, art history community, archives, art libraries, special collections
- CDWA and CCO are complementary to the professional standards of their communities
- To inform use of other professional standards; maps to other standards
What Are Getty Vocabularies?

Discover, link, access, retrieve, research, catalogue, index
Enabling digital art history

- **AAT**, the *Art & Architecture Thesaurus®* includes generic terms, relationships, sources, and notes for work types, roles, materials, styles, cultures, and techniques (e.g., *amphora, oil paint, olieverf, peintures à l’huile, acetolysis, 玉器, Jadekünste, sintering, orthographic drawings, Olmeca, Rinascimento, Buddhism, watercolors, asa-no-ha-toji*)

- **TGN**, the *Getty Thesaurus of Geographic Names®* includes names, relationships, and coordinates for current and historical cities, nations, empires, archaeological sites, lost settlements, and physical features; through LOD, TGN may be linked to GIS and maps (e.g., *Diospolis, Acalán, Ottoman Empire, Mogao, Ch’ien-fu-tung, Ganges River, गंगा नदी*)

- **ULAN**, the *Union List of Artist Names®* includes names, relationships, notes, sources, and biographical information for artists, architects, firms, studios, repositories, patrons, sitters, and other individuals and corporate bodies, both named and anonymous (e.g., *Mark Rothko, Cai Xiang, 葵襄, Crevole Master, Riza Abbasi, Altobelli & Molins, Rajaraja Museum*)

- **IA**, the *Getty Iconography Authority™* includes proper names, relationships, and dates for iconographical narratives, religious or fictional characters, historical events, names of literary works and performing art (e.g., *Adoration of the Magi, Viaggio dei Re Magi, Flood of Deucalion, French Revolution, Olouaipipilele, Xibalba, Nifhheim, शिव, Bouddha couché*)

- **CONA**, the *Cultural Objects Name Authority®* includes titles, artist attribution, creation dates, relationships, and location for works of art, architecture, and other cultural works, whether extant or destroyed (e.g., *The Lacemaker, La Dentellière, Merlettaia, Lion Throne Room, 神奈川沖浪, Great Wave, Die große Welle, Chayasomesvara Temple, Hagia Sofia, Αγία Σοφία*)
What Are Controlled Vocabularies?

- A controlled vocabulary is an organized arrangement of words and phrases
- Typically includes preferred and variant terms
- Has a defined scope or describes a specific domain

Purpose of Controlled Vocabularies

- To provide terminology to catalog, document, retrieve, categorize, and discover information
- To capture the richness of variant terms
- For some users, to promote consistency in assignment of terms
- In retrieval and discovery, to utilize variant terms and broader/narrower contexts as structured vocabularies
What Are the Getty Vocabularies?

- **Structured vocabularies**
- **Relationships**: Thesauri, 3 relationships: equivalence (synonyms), hierarchical (broader-narrower), associative (btwn records, not hierarchical)
- **Standards-compliant**: Comply with standards for controlled vocabularies (ISO, NISO)
- **Authoritative**: Vocabularies cite authoritative sources and contributors; but not authoritarian (may use variant terms)
- **Scope**: Getty Vocabularies strive to be ever more multilingual, multicultural, and inclusive → **contributions**
- **Audience**: Traditional audience (art and architecture domains: visual resources, catalogers, museums), plus scholars, and related disciplines (archaeology, conservation)
- **Collaborative**: Grow through contributions from expert user community: institutions, consortia, and projects
Contributors to Vocabularies

Who are the contributors?
• Getty projects
• 300 institutions, consortia, research projects

How is the data generated?
• Contrib. may research and create original data for the purpose of contribution
  E.g., translations: Spanish, Dutch, Chinese, German, French, Croatian, Portuguese, Japanese
• Or may map data already collected in the course of their own work
  E.g., repositories and documentation projects, research projects
• Contributions = 10s of thousands per year

Provenance Index  GRI Photo Archive  GCI
GRI Special Collections  GRI Library  JPGM

Netherlands Institute for Art History (RKD)
Academia Sinica of Taiwan
Canadian Heritage Information Network
Avery Architectural & Fine Arts Library
Staatliche Museen zu Berlin Preussischer Kulturbesitz
Ctro. de Documentación de Bienes Patrimoniales, Santiago
Istituto Centrale per il Catalogo e la Documentazione, Rome
Courtauld Institute
Canadian Centre for Architecture (CCA)
Frick Art Reference Library
Indiana University Digital Collections
Harry Ransom Center, University of Texas at Austin
Bunting Visual Resources Library, U. of New Mexico
Pinacoteca do Estado de São Paulo
Rijksmuseum in Amsterdam
Mystic Seaport Museum in Connecticut
Smithsonian National Museum of African Art
Grove Art online
Florentine Codex Initiative (GRI)
Traditional Chinese Architecture (Vanderbilt, SEU)
## Getty Vocabularies Used in an Object Record

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<thead>
<tr>
<th>Catalog Level:</th>
<th>item</th>
<th>Classification:</th>
<th>paintings</th>
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</thead>
<tbody>
<tr>
<td>Work Type:</td>
<td></td>
<td>painting (visual work)</td>
<td>[AAT 300033618]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>scroll (information artifact)</td>
<td>[AAT 300028629]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title:</th>
<th>Scene of Early Spring</th>
<th>Type:</th>
<th>repository</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lang.:</td>
<td>English</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title:</th>
<th>宋郭熙早春圖 軸</th>
<th>Type:</th>
<th>repository</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lang.:</td>
<td>Chinese</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creator Display:</th>
<th>Guo Xi, Song Dynasty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index:</td>
<td>Guo Xi (Chinese painter, 1023 - ca.1085 CE)</td>
</tr>
<tr>
<td>Role:</td>
<td>artist</td>
</tr>
</tbody>
</table>

| Creation Date: | 1072 CE; fifth year of Xining, first era of the Shenzong Emperor, Northern Song Dynasty |
| Index: Start Date: | 1072 |
| End Date: | 1072 |

<table>
<thead>
<tr>
<th>Materials Display:</th>
<th>painted scroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index: color (pigment)</td>
<td>[AAT 300264870]</td>
</tr>
<tr>
<td>Index: ink</td>
<td>[AAT 300015012]</td>
</tr>
<tr>
<td>Index: silk (silkworm material)</td>
<td>[AAT 300014072]</td>
</tr>
<tr>
<td>Index: paper (fiber product)</td>
<td>[AAT 300014109]</td>
</tr>
</tbody>
</table>

[http://vocab.getty.edu/page/cona/700002851](http://vocab.getty.edu/page/cona/700002851)
Dimensions: 158.3 x 108.1 cm

Index: Value: 158.3 Unit: cm Type: height
Index: Value: 108.1 Unit: cm Type: width

Location: National Palace Museum (Taipei, Taibei, Taiwan)

Repository No.: Meta Data identification: 000053N0000000000
Credit Line: National Palace Museum

Inscription: On the right side, the painter wrote: "Early Spring. Painted by Guo Xi in the year of Ren-Zi (49th year of the Chinese sexagenary cycle, referring to 1072 AD)."; 畫幅右側畫家自題:「早春。壬子(1072)年郭熙畫。」顧名思義, 這幅畫作是在描寫瑞雪消融, 雲煙變幻, 大地復甦, 草木發枝, 一片欣欣向榮的早春景象

General Subject: landscapes

Specific Subjects: Renewal of Life [IA 901002238]
  - spring (season) [AAT 300133097] | shan shui [AAT 300387301]
  - trees [AAT 300132410] | streams [AAT 30008699]
  - Pinus (genus) [AAT 300343658] | travel [AAT 30080094]
  - floating perspective [AAT 300438516] Extent: design element

Descriptive Note: "Early Spring" is here conceived of as a mist and forest filled mountain. The brushwork registers infinite variations of pressure and ink: the silhouette of the rocks and boulders are delineated with a heavy touch, the fog-washed trees with a light one…. 


http://vocab.getty.edu/page/cona/70002851

Abridged Overview of Getty Vocabularies
Getty Vocabularies’ relationships

- Diagram illustrates how the Getty Vocabularies contain rich relationships
- Linked to each other
- Linked to other resources, through LOD
AAT, the Art & Architecture Thesaurus®

The AAT is a thesaurus containing generic terms, dates, relationships, sources, and notes for work types, roles, materials, styles, cultures, techniques, and other concepts related to art, architecture, conservation, other cultural heritage.

- Generic terms, not proper names
  - oil paint, olieverf, acetolysis, sintering, orthographic drawings, Olmeca, Rinascimento, Buddhism, watercolors, asa-no-ha-toji, srailais
- 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
### 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, 其特色是以繩織於線軸或核心...

**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, IFM-SMB-PK, CDPB-DIBAM  
**Sources:** Earnshaw, Claburn, Needleworker's Dictionary (1976); Identification of Lace, 2d ed. (1984); Ginsburg, Illustrated History of Textiles (1991)
Contributors are cited

AAT records are merged information from multiple contributors

 Getty Vocabularies grow through contributions from the expert user community

All information in a Getty Vocabulary record is attributed to a contributor and cites the published sources

- 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
Thesaural structure

- Sub-facets (called “hierarchies”) establish the context of the term
- Guide terms in angled brackets

---

**Work type:** carte-de-visite
Indexers may choose the term that best describes the work.
- The concept and each term are identified by unique numeric IDs.
- E.g., singular for a single item, language.
- Some systems or local cataloging rules do not allow linking at the term level.

**Work type:** carte-de-visite

**AAT subject_id:** 300127141

**carte-de-visite (card photograph)**

**term_id:** 1000127141

**term_id:** 1000299275

**term_id:** 1000271610

**term_id:** 1000271607

**term_id:** 1000271609

**term_id:** 1000271613

**term_id:** 1000606079

**term_id:** 1000606080

**term_id:** 1000438273

**term_id:** 1000438274
ULAN, the Union List of Artist Names®

ULAN contains names, relationships, notes, sources, and biographical information for artists, architects, firms, studios, repositories, patrons, sitters, and other individuals and corporate bodies, both named and anonymous.

- Named people and corporate bodies
  - Bartolo di Fredi, Xueshi Bai, 白雪石, National Palace Museum (Taipei)
  - Anonymous creators known by appellation: Santa Eufemia Master
  - Scope also includes “Non-Artists” (e.g., sitters and patrons)
  - “Unknown People by Culture” (e.g., unknown Aztec)
  - “Unidentified Named People” (e.g., known from archival documents)

- ULAN includes current and historical associative relationships
  (e.g., students to teachers; firm and studios to members)
  - Contributions to ULAN are from experts at authorized institutions (e.g., museums, special collections, art libraries, cataloging projects, bibliographic projects, etc.)
ULAN, the Union List of Artist Names®

Sample record

**ID:** 500060426

**Names:**
Hokusai, Katsushika (pref, en, ja-trans, de)
Katsushika Hokusai (en, ja-trans)
Hokusai (en, ja-trans)
葛飾 北斎 (ja)
Shunrō (en, ja-trans)
Tawaraya Sōri (en, ja-trans)
Kakō (en, ja-trans)
Tatsumasa (en, ja-trans)
Gakyōjin (en, ja-trans)
Taito (en, ja-trans)
līchi (en, ja-trans)
Manji (en, ja-trans)
Tokitarō (en, ja-trans)
時太郎 (ja)
葛飾北斎 (ja)

**Nationalities:**
Japanese (pref)

**Roles:**
artist
printmaker
caller
draftsman
landscapist
marine artist
figure artist
ukiyo-e artist

**Birth and Death Places:**
Born: Tokyo (Kanto, Japan) (inhab place)
Died: Tokyo (Kanto, Japan) (inhab place)

**Events:**
active: Tokyo (Kanto, Japan) (inhab place)
........ in Edo, modern-day Tokyo

**Associative Relationships:**
teacher of Taito, Katsushika, II
..............(Japanese printmaker, active ca. 1820-1850)
child of Nakajima Ise
..............(Japanese mirror maker, 18th century)
possibly identified with ... Tōshūsai Sharaku
..............(Japanese printmaker, active 1794-1795)

**Contributors:**
VP, Avery, GRL, BHA, CCA

**Sources:**
Bowie, Drawings of Hokusai (1964);
Grove Dictionary of Art online (1999-2002);
Library of Congress Authorities database (n.d.);
Metropolitan Museum of Art [online] (2003-);
Bouquillard, Hokusai: First Manga Master (2007)
TGN, the Getty Thesaurus of Geographic Names®

TGN focuses on places relevant to art, architecture, and related disciplines, recording names, relationships, place types, dates, notes, and coordinates for current and historical cities, nations, empires, archaeological sites, lost settlements, and physical features.

- Places relevant to art history
  - Thebes, Diospolis, Ottoman Empire, Mogao Caves, Ch’ien-fu-tung, Ganges

- TGN is a structured vocabulary
- TGN is a thesaurus compliant with ISO standards

- Focus on historical regions, archaeological sites, lost settlements, built upon a skeleton of the modern world from NGA/NIMA and USGS data sets

- TGN is not GIS, is a thesaurus focused on names and links. Why invent the wheel over again? Many sources of geographic data exist. However, TGN may be linked to GIS, maps, and other geographic resources.
### Sample record

**ID:** 7011179  

**Names:**  
- Siena  
- Σίενα (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)

**Place Types**  
- inhabited place settled by Etruscans (flourished by 5th century BCE)
  
  **Historical:** Late Etruscan

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

**Location:**  
- Lat: 43 19 07 N (43.3180)  
- Long: 011 19 50 E (11.3283)
  
  **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 ...

**Contributors:** BHA, FDA, GRLPSC, VP  

**Linked to other vocabularies**

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TGN, the Getty Thesaurus of Geographic Names®

---
IA, the Getty Iconography Authority™

IA is a thesaurus that covers topics relevant to art, architecture, and related disciplines; includes multilingual proper names, relationships, and dates for iconographical narratives, religious or fictional characters, themes, historical events, and named literary works and performing arts.

- Includes the proper names of subjects not covered by other Getty Vocabularies
- Scope is multicultural and multilingual, grows through contributions
- Includes links to other sources where there is overlap, such as Iconclass and US Library of Congress subject authorities
- The IA is compliant with the Subject Authority of CDWA and CCO (Categories for the description of Works of Art and Cataloging Cultural Objects)
- The IA has a thesaural structure; it includes equivalence, associative, and hierarchical relationships
- The IA is linked to the other Getty Vocabularies
Sample record

**AAT links**
role/characteristic is ... bodhisattva
symbolic attribute is ... lotus
culture/religion is ... Mahayana (Buddhism)
culture/religion is ... Theravada (Buddhism)

**Associative Relationships**
associated with .... Krishna (Hindu iconography)
counterpart is .... Guanyin (Buddhist iconography)

**Note** The bodhisattva of infinite compassion and mercy; embodies the compassion of all Buddhas. This bodhisattva is 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); **LC**: LC control no.: sh 85010492
CONA, the Cultural Objects Name Authority®

CONA compiles titles/names and other metadata for works of art, architecture, and other cultural works, current and historical, documented as items or in groups, whether works are extant, destroyed, or never built.

- In development, may be used to record works depicted in visual surrogates and for other purposes.
- CONA compiles titles, attributions, depicted subjects, and other metadata about works of art, architecture, and cultural heritage, both extant and historical works, works never built, disassembled works, conceptual works for multiples.
  - *Hagia Sophia*, *Mona Lisa*, *Thirty-six Views of Mount Fuji*, 富嶽三十六景
- Scope is multicultural and multilingual; grows through contributions.
- CONA is linked to images; CONA is linked to the AAT, TGN, ULAN, and IA.
- Through this rich metadata and links, CONA may provide a powerful conduit for research and discovery for digital art history.
The Simplified entity-relationship diagram for CONA is the same as CDWA / CCO

CONA (Work Records)

Source Records

ULAN

TGN

AAT

Iconography Authority

CONA (Work Records)
CONA, the Cultural Objects Name Authority®

Sample record

**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)

**Classifications:**
sculpture (preferred)

**Creation Date:** 1000/1200

**Creator Display:**
anoniem
sculptor: unknown Chola

**Locations:**
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

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

**Events:**
Metamorfoze/Geheugenproject Willem Witsen

**Cultures:**
Indian
Chola

**General Subject:**
human figure(s) (preferred)
religion and mythology

**Specific Subjects:**
Shivá (Hindu iconography)
mudrā (pose, <visual and representational concepts>)

**Contributors & Sources:**
[Rijksmuseum;VP]; Rijksmuseum XML file
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<tr>
<th>ID: 700000141</th>
<th>Titles/Names:</th>
<th>Work Types:</th>
<th>Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: original structure dated from 4th century CE; present structure built 532-537 CE; rebuilt in 12th century</td>
<td>Date: original structure dated from 4th century CE; present structure built 532-537 CE; rebuilt in 12th century</td>
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<td>Date: original structure dated from 4th century CE; present structure built 532-537 CE; rebuilt in 12th century</td>
</tr>
<tr>
<td>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)</td>
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</tr>
<tr>
<td>Materials: system bearing masonry, centralized plan; interior surfaces are sheathed with polychrome marble, porphyry, and mosaics</td>
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</tr>
<tr>
<td>Dimensions: central dome: diameter 31 m (102 feet), height 56 m (184 feet)</td>
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</tr>
<tr>
<td>General Subject: architecture Specific Subject: Holy Wisdom Religion/Mythology</td>
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<td>General Subject: architecture Specific Subject: Holy Wisdom Religion/Mythology</td>
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</tr>
<tr>
<td>Note: Domed basilica was constructed by the Emperor Justinian, built in Constantinople in 6th century...</td>
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<td>Note: Domed basilica was constructed by the Emperor Justinian, built in Constantinople in 6th century...</td>
<td>Note: Domed basilica was constructed by the Emperor Justinian, built in Constantinople in 6th century...</td>
</tr>
</tbody>
</table>

CONA, the Cultural Objects Name Authority®
Possible implementations of CONA

Movable works linked to architecture depicted

CONA ID 700000090  Class. architecture
Work Type: house
Title: Case Study House No. 21
Title: Bailey House  Title: CSH #21
Creator: architect: Pierre Koenig
Creation Date: 1956-1958; renovated 1998
Dimensions: 1 story, 1320 square feet, 4 rooms
and 2 baths, on a 110 x 160 foot lot
Mat & Tech: steel frame and flat roof deck
Current Location: Los Angeles (California, USA)
Address Note: 34.116634 -118.391623; 038
Wonderland Park Avenue, Hollywood Hills, Los Angeles, 90046

CONA ID 700000120  Work Type: photograph
Title: Case Study House No. 21
Creator: Julius Shulman
Current Location: GRI Special Collections, Getty Center (Los Angeles, California); 2004.R.10-26622-32-LF

CONA ID 700008539  Work Type: architectural drawing
Title: Case Study House No. 21
Creator: Pierre Koenig
Current Location: GRI Special Collections, Getty Center (Los Angeles, California) 2006.M.30-

Abridged Overview of Getty Vocabularies
### Possible implementations of CONA

**CONA ID: 700002923**

<table>
<thead>
<tr>
<th><strong>Catalog Level</strong></th>
<th>item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification</strong></td>
<td>architecture</td>
</tr>
<tr>
<td><strong>Work Type</strong></td>
<td>building complex</td>
</tr>
<tr>
<td><strong>Title/Name</strong></td>
<td>Temple of Heaven (en)</td>
</tr>
<tr>
<td></td>
<td>Tian Tan (zh-tr)</td>
</tr>
<tr>
<td></td>
<td>天壇 (zh)</td>
</tr>
</tbody>
</table>

**Creator** [display] first built by Ming Chengzu (1360-1424); extended by Ming Shizong (1507-1567); renovated by Qianlong (1711-1799)

**Creation Date** [display]: 1530, during Ming dynasty

**General Subject** architecture **Type**: isness

**Specific** Earth [TGN 7030638] **Extent**: dedication

**Current Location** Beijing (Beijing Shi (municipality), China) (nation) **Address Note**: 39°57′05″N 116°24′36″E

**Dimensions** [display] entire complex: 237 hectares

**Mat & Tech** [display] wood and stone [wood AAT 300011914 | stone AAT 300011176]

**Style**: Chinese [AAT 300018322] | Taoist [AAT 30014366]

**Contributors** JPJM VP GRISC BWR

**Sources**  
- Built Works Registry BWR3792244; Library of Congress Authorities online (2002-); n2011019454; Fodor’s Travel (2016); J. Paul Getty Museum, collections online (2000-); Great Buildings Online (1997-)

### Works linked to outside resources

**Merging information from multiple contributors**

- CONA ID uniquely identifies the work in CONA
- Links to other IDs, such as LOC, VIAF, BWR
<table>
<thead>
<tr>
<th>Possible implementations of CONA</th>
<th>Multiple opinions are accommodated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONA ID:</strong> 700000178</td>
<td><strong>Opinions vary, all may be included in the CONA record</strong></td>
</tr>
<tr>
<td><strong>Catalog Level</strong> item</td>
<td></td>
</tr>
<tr>
<td><strong>Classification</strong> paintings</td>
<td></td>
</tr>
<tr>
<td><strong>Work Type</strong> panel painting</td>
<td>altarpiece</td>
</tr>
<tr>
<td><strong>Title</strong> Adoration of the Magi</td>
<td></td>
</tr>
<tr>
<td>Adorazione dei Magi (repository title)</td>
<td></td>
</tr>
<tr>
<td><strong>Creator</strong> Bartolo di Fredi (Sienese painter, active by 1353, died 1410)</td>
<td></td>
</tr>
<tr>
<td><strong>Creation Date</strong> [display]</td>
<td></td>
</tr>
<tr>
<td>1380s/1390s; some scholars date it ca. 1400 or later</td>
<td></td>
</tr>
<tr>
<td><strong>Execution</strong> Start Date 1380 End Date 1399</td>
<td></td>
</tr>
<tr>
<td><strong>Alternative Date</strong> Start Date 1395 End Date 1409</td>
<td></td>
</tr>
<tr>
<td><strong>General Subject</strong> religion and mythology</td>
<td>human figures</td>
</tr>
<tr>
<td><strong>Specific</strong> Adoration of the Magi Extent: foreground</td>
<td>Siena</td>
</tr>
<tr>
<td>Journey of the Magi Extent: background</td>
<td>king</td>
</tr>
<tr>
<td><strong>Current Location</strong> Pinacoteca Nazionale di Siena (Siena, Italy); Repository No no. 104</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong> 195 x 158 cm (76 x 61 5/8 inches)</td>
<td></td>
</tr>
<tr>
<td><strong>Mat &amp; Tech</strong> tempera on panel</td>
<td></td>
</tr>
<tr>
<td><strong>Contributors</strong> BHA VP CD PNS GRI-PA</td>
<td></td>
</tr>
<tr>
<td><strong>Sources</strong> Pinacoteca Nazionale di Siena (2002-); Boucher and Fiorini, Magi Reconstructed (2012); Cole, Sienese Painting (1985); Freuler, Bartolo di Fredi (1994); Harpring, Bartolo di Fredi (1992)</td>
<td></td>
</tr>
</tbody>
</table>

**Links**

Abridged Overview of Getty Vocabularies
Possible implementations of CONA

IA ID 1000045
Names
• Xibalba
• Place of Fear

AAT ID 300191778
Terms
• skeleton [English]
• beendergestel [Dutch]
• esqueleto [Spanish]
• squelette [Italian]
• 骨架 [Chinese]

CONA ID 70000012 Class: Pre-Colombian art

General Subject:
• religion and mythology [General Subject ID 31801]

Specific Subjects:
• Xibalba (Maya underworld) [IA 1000045]
• Baby Jaguar (Maya character) [IA 901002211]
• Chahk (Maya deity) [IA 901002210]
• man (male human) [AAT 300025928]
• skeleton (animal component) [AAT 300191778]
• ax (weapon) [AAT 300024664]
• altar [AAT 300003725]
• death [AAT 300151836]
• celebration [AAT 300152441]

Works linked to subjects depicted
Value added: Contributions to CONA may be indexed for subject depicted access

OCLC survey, of core fields missing is subject depicted
Mining titles and text for subjects depicted, missing from museum data
Controlled by AAT, ULAN, TGN, CONA, and IA

Description:
Straight-sided ceramic vessels with painted decoration comprising complex scenes were common in eighth-century Maya art. The "codex-style" painting depicts a scene in the realm of the Lords of Death, where a dancing figure holds a long-handled axe and a handstone. On a monster-head altar lies Baby Jaguar, a deity figure, and beside the altar is a dancing, a skeletal death figure. The meaning has been variously interpreted as depicting either sacrifice or celebration.
Works depicted in visual surrogates

- What is advantage to linking to CONA for work depicted?
- Access for all surrogates for same work
- Multilingual access, links, etc.

**Surrogate in Photo Archive**

Velázquez et al copy in the Uffizi after Rubens

**LINKS**

Specific subject

Enough information in surrogate records to make minimal record for work depicted
What Do We Do?

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

- Contributors’ data is loaded and processed by the Getty Digital team and the Getty Vocabulary Program
- Data is merged, normalized, and published
- Exported data is refreshed for users every month
- Releases: Online search, Web services APIs, LOD, XML, and relational tables

At any time, could be 100s of thousands of candidate records, contributed but still in process

Editors have monthly quotas for work done
to allow anticipation of time frame for publications
to ensure not too much time is spent on unsolvable tasks
What do we do?

Coordinating contributions

• Nurturing relationships with contributors
• Advising re. mapping their existing data to format for loading into our editorial system
  E.g., Szeemann finding aids to ULAN
• Advising re. translation methodology and content issues
• Meetings and online conversations

The International Terminology Working Group (ITWG)—a collective of metadata and controlled vocabulary professionals and scholars from North and South America, Europe, Asia, and the Middle East—meet every year or so to discuss four AAT translation Projects (including the Dutch AAT), as well as new projects, the other vocabularies, and overall the challenges and opportunities in developing and maintaining multilingual electronic thesauri for use by cultural heritage institutions. Getty Center, February 2020.
Merging data in one record

- Getty vocabularies merge contributed records representing the same concept
- Example from ULAN: Three contributions; are any of these records for the same person?
  Yes, 1st and 3rd rows
- Merged by algorithm, if possible; if not, merged by editors

<table>
<thead>
<tr>
<th>ULAN ID</th>
<th>Matching name</th>
<th>Display biography</th>
<th>Roles (AAT-controlled)</th>
<th>Nationality (AAT-controlled)</th>
<th>Estimated birth date</th>
<th>Estimated death date</th>
</tr>
</thead>
<tbody>
<tr>
<td>500017409</td>
<td>Guardi, Francesco</td>
<td>Venetian painter, 1712-1793</td>
<td>artist painter landscapist</td>
<td>Venetian Italian</td>
<td>1712</td>
<td>1793</td>
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<tr>
<td>500312969</td>
<td>Guardi, Francesco</td>
<td>Italian noble, born 1514</td>
<td>noble</td>
<td>Italian</td>
<td>1514</td>
<td>1614</td>
</tr>
<tr>
<td>500412666</td>
<td>Guardi, Francesco</td>
<td>Italian artist, ca. 1712-1793</td>
<td>artist</td>
<td>Italian</td>
<td>1707</td>
<td>1793</td>
</tr>
</tbody>
</table>
Merging data in one record

Relationships and linking are built into and among the Getty vocabularies. The ULAN record is a merged, homogenous entity. Attribution to contributor and source is maintained, but merged and unified, and various “preferred” data is flagged.

Contributors
AVERY, BHA, GRISC, GRL, GRLPA, PROV, VP, WCI, WCP, WL-Courtauld

Sources
Avery Authority files (1963-)
Harald Szeemann papers, Finding Aid, GRI Special Collections (2011-)
J. Paul Getty Museum, collections online (2000-)
Library of Congress Authorities database (n.d.) n 50074509
M. Knoedler & Co. records, Finding Aid, GRI Special Collections (2012-)
Provenance Index Databases, Authority file (1985-)
RILA/BHA (1975-2000)
Witt Library, Authority files
Using data

- Online Web searches
- Access to training materials and editorial guidelines
- Highest number of pages accessed at GRI every month (17,000 page views, 200,000 queries)
- Among the highest at Getty overall
- Demonstrating usefulness is important to proving the value of the project, re. budgets, etc.

- In addition, Getty Vocabularies released as LOD with very high use
- AAT and other vocabs available at satellite sites and in vendor systems

<table>
<thead>
<tr>
<th>No.</th>
<th>Page</th>
<th>Views</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>Vocabs: ULAN</td>
<td>11,826</td>
</tr>
<tr>
<td>3</td>
<td>Vocabs: TGN</td>
<td>9,479</td>
</tr>
<tr>
<td>4</td>
<td>GRI landing page</td>
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<td>5</td>
<td>GRI list of resources</td>
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<td>6</td>
<td>Exhibition: monumentality</td>
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<td>7</td>
<td>Vocabs: general information</td>
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<td>8</td>
<td>Provenance: search</td>
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<td>Library</td>
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<td>Provenance: general information</td>
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<td>11</td>
<td>BHA (Bibliography for History of Art)</td>
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<td>13</td>
<td>GRI: Digital Collections: Turkey photos</td>
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<td>14</td>
<td>Vocabs: CONA</td>
<td>1,489</td>
</tr>
<tr>
<td>15</td>
<td>Vocabs: CDWA (cataloging rules for art)</td>
<td>1,143</td>
</tr>
</tbody>
</table>
Using data

- Vocabulary data is licensed and used by hundreds of institutions and vendors
- Collections management systems (e.g., TMS)
- We contribute to VIAF
- Now linking vocabulary data in LOD in hundreds or thousands of new ways

http://viaf.org/

- GRI (with ULAN and TGN) contributes to VIAF, the Virtual International Authority File.
- Link to other sources in Linked Open Data
Thank you.