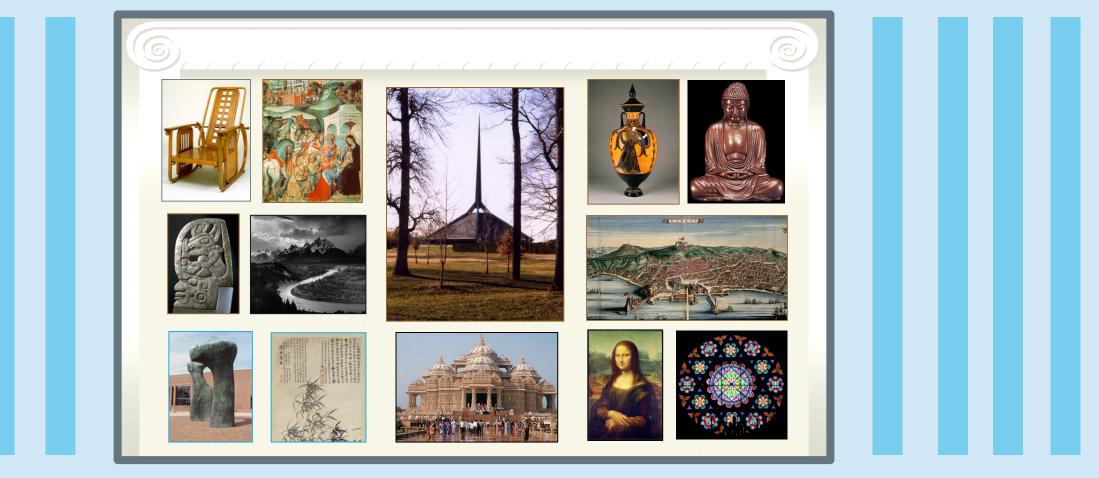
The Getty Vocabularies: Content Review and Usage Status

CICOC 2017, Tbilisi, Georgia Gregg Garcia, Software Architect Jonathan Ward, Senior Editor Getty Research Institute, Los Angeles



The Getty Vocabularies

- Part 1- Multilingual Thesauri for Access to Art History
- Part 2 Linked Open Data and the Getty Vocabularies: Expanding Access
- Part 3 Usage Examples and Future Initiatives
- Part 4 Conclusion: The Vocabulary Program's Commitment to Access



THE GETTY VOCABULARIES: MULTILINGUAL THESAURI FOR ACCESS TO ART HISTORY

Jonathan Ward

Senior Editor, Getty Vocabulary Program CIDOC 2017, Tbilisi











Catherine wheel or rose window? Mona Lisa or La Gioconda?

- The Getty Vocabularies are structured vocabularies that comply with national and international standards for thesaurus construction
- They contain multilingual terminology and other related data for art, architecture, other cultural heritage works, conservation, archaeology, archival materials, visual surrogates, and bibliographic materials
- The Getty vocabularies allow for categorization, indexing, and powerful retrieval of information
- For each concept, a preferred term is flagged, representing common usage in authoritative sources; users may choose that term, or use any of the other terms in the record





Art & Architecture Thesaurus ${
m \Bbb R}$

AAT = terms for generic concepts, relationships, other data

- (e.g., watercolors, 玉器, amphora, asa-no-ha-toji)
- *Getty Thesaurus of Geographic Names* ® TGN = names for administrative, physical places, relationships, historical information, coordinates, other data
 - (e.g., Diospolis, Acalán, Ottoman Empire, Ganges River)
- Union List of Artist Names ®

ULAN = names for people, corporate bodies, biography, relationships, other data

• (e.g., Christopher Wren, Altobelli & Molins, Anp'yŏng Taegun)



- *Cultural Objects Name Authority* ® CONA = not only titles/names of art and architecture
 - (e.g., Mona Lisa, Livre de la Chasse, Chayasomesvara Temple)
- <u>In development</u>: CONA links rich metadata for works to allow a conduit for research and discovery in the broader, ever expanding arena of digital art history



- Getty Iconography Authority
 - (e.g., Adoration of the Magi, Zeus, French Revolution, Der Ring des Nibelungen, Reclining Buddha)
- <u>In development</u>: Now a module of CONA, includes names for iconographical narratives, religious or fictional characters, historical events, names of literary works and performing arts













- Developed in the 1980s from a need within the museum and library communities
- Standardized, well-sourced vocabularies for collection management systems
- Free, open, and collaborative
- International and multilingual
- Metadata: the key to art and image access
- Consistently one of the most popular tools on the Getty website









Getty Vocabularies are compliant with / map to standards:

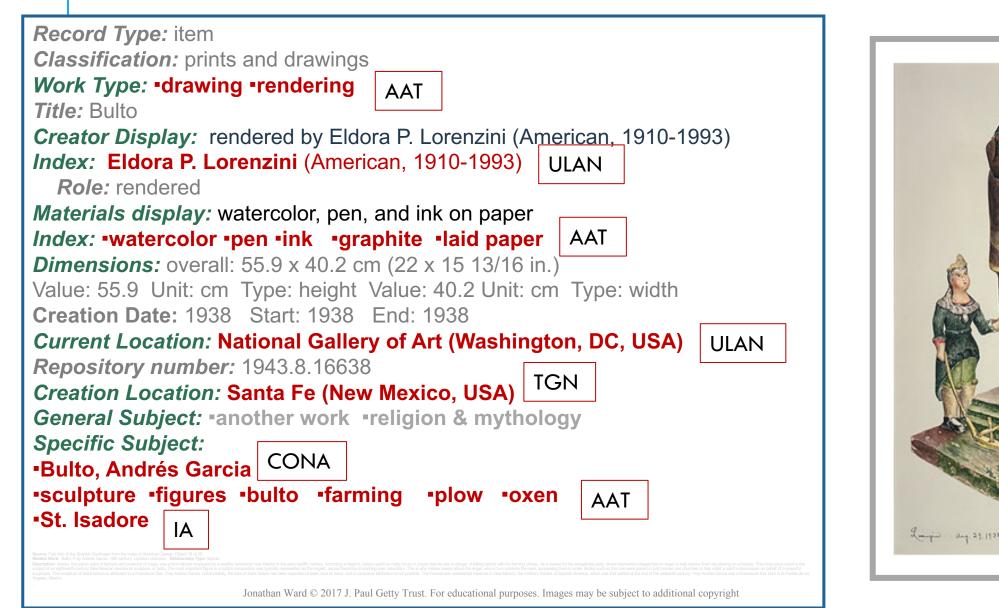
- CDWA (Categories for the Description of Works of Art)
- CCO (Cataloging Cultural Objects)
- VRA Core (Visual Resources Association core categories)
- LIDO (Lightweight Information Describing Objects)
- CIDOC CRM (CIDOC Conceptual Reference Model) (ISO 21127:2006)
- etc.

Getty vocabularies are **thesauri** compliant with national (NISO) and international (ISO) standards for thesaurus construction





VOCABULARIES ARE USED TO INDEX A WORK RECORD



AAT VOCABULARIES ARE USED

Record Type: item *Classification:* prints and drawings *Work Type:* •drawing •rendering

AAT

Creator Display: rendered by Eldora P. Lorenzini (A Index: Eldora P. Lorenzini (American, 1910-1993)

Role: rendered

Title: Bulto

Materials display: watercolor, pen, and ink on paper Index: •watercolor •pen •ink •graphite •laid pape Dimensions: overall: 55.9 x 40.2 cm (22 x 15 13/16 i Value: 55.9 Unit: cm Type: height Value: 40.2 Unit: Creation Date: 1938 Start: 1938 End: 1938

Current Location: National Gallery of Art (Washing

Repository number: 1943.8.16638

Creation Location: Santa Fe (New Mexico, USA) General Subject: •another work •religion & mythe

Specific Subject:

-Bulto, Andrés Garcia CONA

IA

•sculpture •figures •bulto •farming •plow Terms:

watercolor (paint) (preferred, C, U, American English-P, D, U, N) watercolors (paint) (C,U,American English,AD,U,N) water color (paint) (C,U,American English,UF,U,N) watercolor paint (C,U,American English,UF,U,N) water color paint (C,U,American English,UF,U,N) water-colour (paint) (C,U,British English-P,D,U,N) water-colours (paint) (C,U,British English,AD,U,N) colour, water (paint) (C,U,British English,UF,U,N) water colour (paint) (C,U,British English,UF,U,N) watercolour (paint) (C,U,British English,UF,U,N) water-colour paint (C,U,British English,UF,U,N) akvarel C,U,Danish-P,D,U,N) waterverf (C,U,Dutch-P,D,U,U) aquarelverf (C,U,Dutch,UF,U,U) aquarelle (peinture) (C,U,French-P,D,U,N) aquarelles (peinture) (C,U,French,AD,U,N) Aguarell (C,U,German-P,D,U,N) acquerello (pigmento, pittura) (C,U,Italian-P,D,U,N) acquarello (C,U,Italian,AD,U,U) akvarell (C,U,Norwegian (Nynorsk)-P,D,U,N) (Swedish-P,D,U,N) akwarela (C,U,Polish-P,D,U,N) aguarela (C,U,Portuguese-P,D,U,N) acuarela (C,U,Spanish-P,D,U,N)



•St. Isadore

OX

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



Zigula

zinc oxide



Art & Architecture Thesaurus ®

AAT, the Art & Architecture Thesaurus®, includes generic terms, relationships, sources, and scope notes for work types, materials, styles, cultures, processes, techniques, activities, roles, and abstract concepts.

- AAT is multilingual; large translation projects are underway
 - Centro de Documentación de Bienes Patrimoniales, Chile; Netherlands Institute for Art History (RKD); Academia Sinica of Taiwan; the Staatliche Museen zu Berlin Preussischer Kulturbesitz
- AAT grows through contributions, translations and others, e.g., GCI for conservation terms, multicultural terms for indigenous cultures' works; contributors and sources are cited
- The scope is global: AAT includes generic terms to describe art, architecture, decorative arts, design, artifacts, other material culture, visual surrogates, archival materials, archaeology, and conservation
- The major subdivisions (facets) are the following:

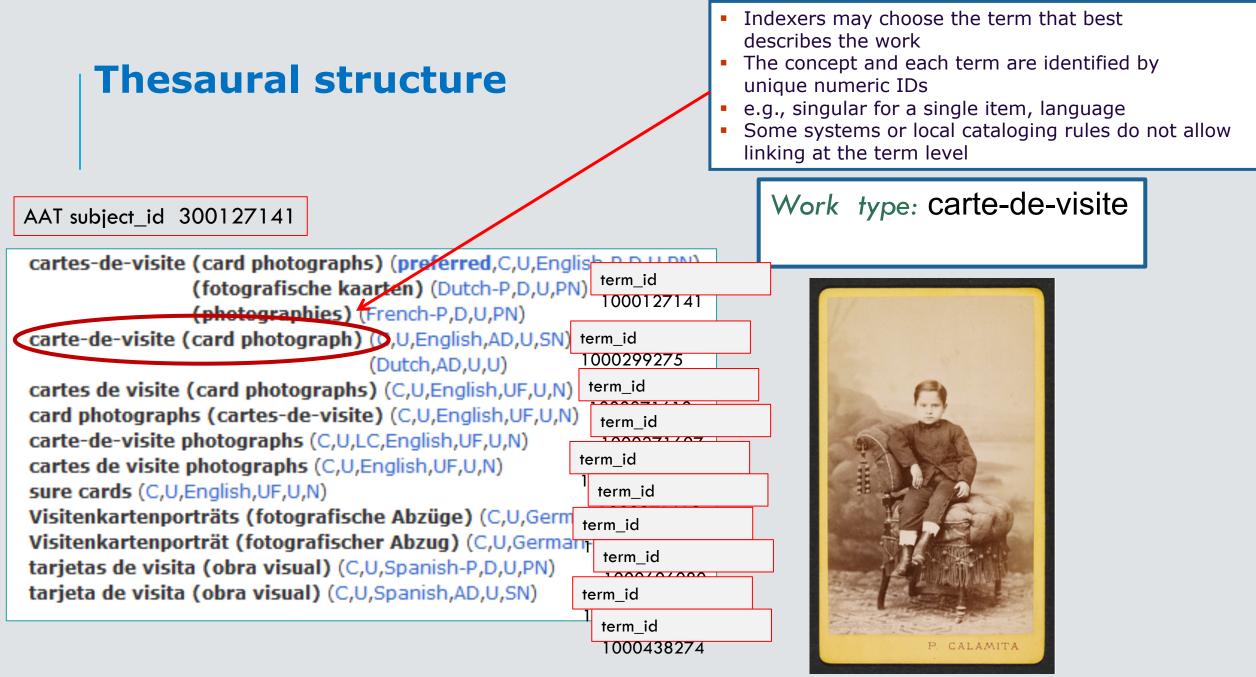




Thesaural structure

- Top of the AAT hierarchies \sim ~ Objects Facet Visual Works (hierarchy name) visual works (works) <visual works by material or technique> Ω photographs <photographs by form 🖌 ~ card photographs (photographs) boudoir midget mounts boudoir photographs cabinet <u>photographs</u> ~ imperial photogra panel photographs promenade photographs victoria cards (photographs) gem photographs lantern slides
- Sub-facets (called "hierarchies") establish the context of the term
 Guide terms in angled brackets









AAT, the Art & Architecture Thesaurus®

Sample record

preferred flagged, but not required to use it; based on local rules 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,IfM-SMB-PK,CDPB-DIBAM *Sources:* Earnshaw, Clabburn, Needleworker's Dictionary (1976); Identification of Lace, 2d ed. (1984); Ginsburg, Illustrated History of Textiles (1991)



Achilles Painter An Qi 安岐 Bartolo di Fredi Burgkmair, Hans,

the elder Galleria degli Uffizi Gilbert & George Katsushika Hokusai Kicking Bear Master of Boí Méraud, Pierre-Antoine, père Ngapatari, Hakaraia O'Keeffe, Georgia Pei, I. M.

Rothko, Mark Saʻīd, Mahmūd

Skidmore, Owings

& Merrill

unknown Mende

Vikramaditya I

Wren, Christopher

Zeuxiades

Ζευξιάδης



Union List of Artist Names ®

ULAN, the Union List of Artist Names[®], includes names, appellations (e.g., Master of ...), dates, sources, relationships, nationality, and life roles for artists, architects, firms, studios, repositories, patrons, sitters, and other individuals and corporate bodies, both named and anonymous.

- ULAN is multilingual
- The scope is global; ranges from prehistory to the present
- ULAN includes current & historical relationships (e.g., *student-teacher, firm-member*)
- ULAN contains hierarchical, equivalence, & associative relationships
- ULAN grows through contributions from expert users, scholars, & art repositories (e.g., GRISC finding aids); contributors and sources are cited
 - Major subdivisions include the following: People who are artists, Corporate bodies (studios, firms, repositories), People who are not artists, Unknown people by culture (e.g., *unknown Aztec*), and Unidentified named people (e.g., *Reverend Smith [unidentified]*)





ID: 500115493

Names:

Dürer, Albrecht (pref,de,en) Albrecht Dürer Duerer, Albrecht (en) Durer, Albrecht (en) Durero, Alberto (it) Durerus, Albertus (la) Direr, Albreht Djurer, Albrecht Dyura, Albrecht **Dirers**, 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)

ULAN, the Union List of Artist Names®

Sample record



Display biography

German printmaker and painter, 1471-1528 Birth and Death Dates: Birth: 1471 Death: 1528 **Birth and Death Places:**

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

TGN active: Nuremberg (Bavaria, Germany) (inhab p) active: Venice (Veneto, Italy) (inhabited place)

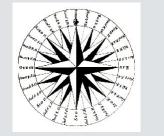
Associative Relationships:

apprentice of Wolgemut, Michael; 1486 to 1489(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 0graveur.

- 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
- Neur Zeelen
- New Zealand
- Perú
- Rapa Nui
- Taipei
- 臺北
- 至心
- Toronto
- Yisrael



Getty Thesaurus of Geographic Names •

TGN, the Getty Thesaurus of Geographic Names®, includes names, relationships, dates, sources, and coordinates for current & historical cities, nations, empires, archaeological sites, & physical features.

- TGN is multilingual; the scope is global; it ranges from prehistory to the present
- TGN focuses on places important to art and material culture
- TGN includes current and historical cities, nations, and empires
- TGN includes real places, not mythical or legendary; however, TGN includes formerly inhabited places and historical places with unknown exact locations ("lost settlements")
- TGN is a thesaurus, compliant with international standards for thesaurus construction; it contains hierarchical (polyhierarchical), equivalence, & associative relationships
- TGN includes current and historical relationships
- TGN is not a GIS (Geographic Information System), but may be linked to maps & GIS
- TGN grows through contributions from the expert user and scholar communities, large national geographic databases; contributors and sources are cited
- Major subdivisions include continents, nations, empires World (Africa, Alexandrian Empire, Antarctica, Asia, Europe, Holy Roman Empire, etc.); Extraterrestrial Places (Milky Way Galaxy, etc.)





TGN, the Getty Thesaurus of Geographic Names®

Sample record

	Hierarchical Rels. (polyhierarchical)	Place Types
<i>ID:</i> 7011179	World (facet)	inhabited place settled by Etruscans (flourished by 6th century BCE)
	Europe (continent)	city AAT
Names:	Italy (nation)	archiepiscopal see
Siena	Tuscany (region) Siena (province)	commune (administrative) since 1125
(it,en,es,fr,nl,de)	Siena (inhabited place)	cultural center
		university center
Σιένα (el)	World (facet)	world heritage site
Siyenah	Europe (continent)	Lat: 43 19 07 N (43.3180)
· ·	Italian Peninsula (peninsula)	Long: 011 19 50 E (11.3300)
锡耶纳 (zh)	Etruria (former confederation)	Elevation: 1056.430 feet (322.0000 meters)
シエーナ (ja)	Siena (inhabited place)	Note: Siena was founded as an Etruscan hill
Sienese (en-adj)	Historical: Late Etruscan	town; later was the Roman city of Sena Julia
	Associative Rels	(3rd century BCE). It flourished under the
Sienna (h-en)	ally of Pisa(inhabited place) [7006082]	Lombard kings (6th century CE) and was
Sena Julia (h-la)	Ghibelline allies, 13th-14th centuries	Medieval self-governing commune
Sanna (h)		
	Contributors: BHA, FDA, GRLPSC, VP	in Planna (2007) 2/961: Divingeria Carografian
Saena (h)	Sources: Annuario Generale (1980); Canby, Histori Toscana (1977) 1508; Library of Congress Subject	· · · · · ·

2010; Webster's Geographical Dictionary (2007) 1114

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

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The Nightwatch 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

Cultural Objects Name Authority •

CONA, the Cultural Objects Name Authority®, is a new resource available for contributions. CONA compiles titles, creator attributions, depicted subjects, physical characteristics, and other metadata about works of art, architecture, and cultural heritage, both extant and historical. Sources include museum collections, special collections, archives, libraries, scholarly research, conservation projects, and documentation projects. CONA is linked to AAT, TGN, ULAN, and IA.

- CONA is multilingual; the scope is global; ranges from prehistory to the present
- CONA includes current and historical relationships (e.g., folios for a lost manuscript)
- CONA is compliant with *Categories for the Description of Works of Art* (CDWA) and *Cataloging Cultural Objects* (CCO); mapping to CIDOC CRM being investigated
- CONA is a thesaurus, compliant with international standards for thesaurus construction
- CONA contains hierarchical (polyhierarchical), equivalence, & associative relationships
- Minimum data includes title or name, work type, creator, creation date, materials, dimensions, subject, geographic location (for architecture) or repository and repository ID
- CONA grows through contributions from art repositories, expert users, and scholars
- Major subdivisions include the following: Built Works, Movable Works, Visual Surrogates, Conceptual Works, Unidentified Named Works







CONA, the Cultural Objects Name Authority®

Sample record

CONA links 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: AAT sculpture (visual work)



Classifications:

sculpture (preferred)

Creation Date: 1000/1200

Creator Display: anoniem sculptor: unknown Chola ULAN

ULAN Locations: 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 **Cultures**: AAT Indian Chola AAT **General Subject: TGN** human figure(s) (preferred) **ULAN** religion and mythology **CONA** Specific Subjects: **CONA IA** Shivá (Hindu iconography) AAT mudrā (pose, <visual and representational concepts>) [link to lconclass] Contributors: Rijksmuseum; VP Sources: Rijksmuseum XML file





Adoration of the Magi Adorazione dei Magi Coronation of Louis XIV Death and the Miser Ganesh Hades Hercules Herakles Olouaipipilele Niflheim Reclining Buddha Bouddha couché 涅槃仏 Storming of the

Bastille

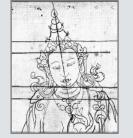
The Divine

Comedy

Virgin Hodegetria World War I

WWI

Xibalba



Getty Iconography Authority ™

IA, the Getty Iconography Authority[™], is a new resource available for contributions. It includes named events, religious & mythological iconography, fictional characters & places, themes from literature.

- IA is multilingual; scope is global; includes topics from all places and periods
- IA includes the proper names of subjects referenced in art and cultural heritage but not covered by the other Getty vocabularies (AAT = generic concepts,
 - TGN = real places, ULAN = real people, CONA = names of art objects and architecture)
- IA is compliant with the Subject Authority of CDWA (*Categories for the Description of Works of Art*) and the Subject Authority of CCO (*Cataloging Cultural Objects*)
- IA is a thesaurus, compliant with international standards for thesaurus construction
- IA contains hierarchical (polyhierarchical), equivalence, & associative relationships
- IA grows through contributions to CONA, and independently from expert users, scholars, and repositories of art
- Includes links to resources such as *Iconclass* and US Library of Congress authorities
- As of this writing, IA is a module within CONA; over time, IA will become a standalone authority
- IA includes the following major subdivisions: Legend, Religion, Mythology; Literature and Performing Arts; Named Events; Miscellaneous (Miscellaneous Allegory, Symbolism; Characters; Legendary Places; Themes and Narrative)







Power of Term Relationships



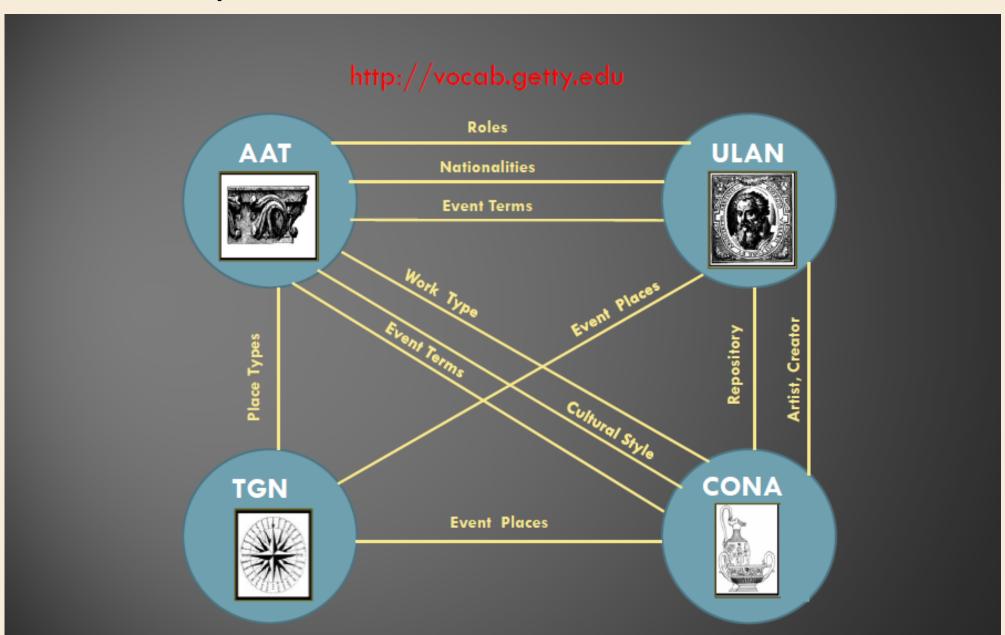
Hierarchical: all records have parent-child relationships





- Equivalence: variant terms
- **Associative**: records can be linked between hierarchies

Getty vocabularies are linked to each other



Search Tools & Databases

- Primo Search
- Getty Research Portal
- Collection Inventories & Finding Aids
- Photo Archive
- Research Guides & Bibliographies
- Digital Collections
- Article & Research Databases
- Collecting & Provenance Research
- BHA & RILA
- Getty Vocabularies
 - Art & Architecture Thesaurus (AAT) ®
 - Cultural Objects Name Authority (CONA) ®
 - Getty Thesaurus of Geographic Names (TGN) ®
 - Union List of Artist Names (ULAN) ®
 - Contribute
 - Editorial Guidelines
 - Getty Vocabularies as Linked Open Data
 - Frequently Asked Questions
 - Obtain the Getty Vocabularies
 - Training Materials

Getty Vocabularies as Linked Open Data

The Getty vocabularies are constructed to allow their use in linked data. A project to publish them to the LOD (Linked Open Data) cloud is underway. The documents on this page contain news and presentations about releasing the Getty vocabularies as LOD. These materials are subject to frequent modification and addition.



- News and Status of the Project
- What Is LOD?
- Introduction to Getty Vocabularies as LOD (PDF, 3.8 MB, 46pp)
- List of External Advisors (PDF, 88KB, 7pp)

The AAT, TGN, and ULAN are now available as LOD. They are published under the Open Data Commons Attribution License (ODC-By) 1.0.

• Attention developers and programmers:

Technical documentation to assist in exploring the AAT, TGN, and ULAN data is available at the SPARQL endpoint at vocab.getty.edu

News and Status of the Project

Releasing the Getty vocabularies as Linked Open Data is part of the Getty's ongoing effort to make our knowledge resources freely available to all. Making the Getty vocabularies available to the research community as LOD could have a truly

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Uses



- Vocabulary data is licensed and used by hundreds of institutions and vendors, or downloaded as LOD
- Collections management systems (e.g., TMS)



- Online data searches
- Now linking vocabulary data in LOD in hundreds or thousands of new ways









Access

•Data is made available in various ways: via online searching; Web services APIs; licensed relational tables and XML format annual releases



 Download Center – sample data, schemas http://getty.edu/research/tools/vocabularies/obtain/download.html



•Linked Open Data: SPARQL endpoint, sample queries http://getty.edu/research/tools/vocabularies/lod/index.html

Training Pages:

http://www.getty.edu/research/tools/vocabularies/training.html



Contribute:

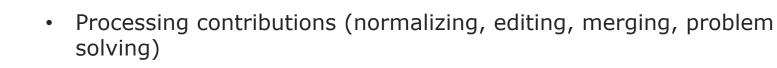
http://getty.edu/research/tools/vocabularies/contribute.html





Our Team: What We Do

1 Managing Editor, 3 Editors, Software Architect



- Mapping contributor data to correct fields and controlled lists
- Checking exports, communication with our partners
- Education, outreach, future projects





TYPVS ORBIS TERRARVM.

Getty Museum, Research Institute, Provenance Index, Photo Archive, Library Centro de Documentación de Bienes Patrimoniales, Chile Netherlands Institute for Art History (RKD) Academia Sinica of Taiwan Pinacoteca do Estadao Sao Paulo, Brazil Staatliche Museen zu Berlin Preussischer Kulturbesitz **Courtauld Institute** Grove Art online ARTStor Rijksmuseum Indiana University slide library Victoria and Albert Museum Istituto Centrale per il Catalogo e la Documentazione, Rome Canadian Heritage Information Network (CHIN) Canadian Centre for Architecture Frick Art Reference Library Auckland Museum Smithsonian Institution National Museum of African Art National Art Library, London Avery Index Architectural Periodicals Mystic Seaport Museum Harry Ransom Humanities Research Center at the University of Texas at Austin Bunting Visual Resources Library at the University of New Mexico



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