Getty Vocabulary Program: Update
ITWG 2020

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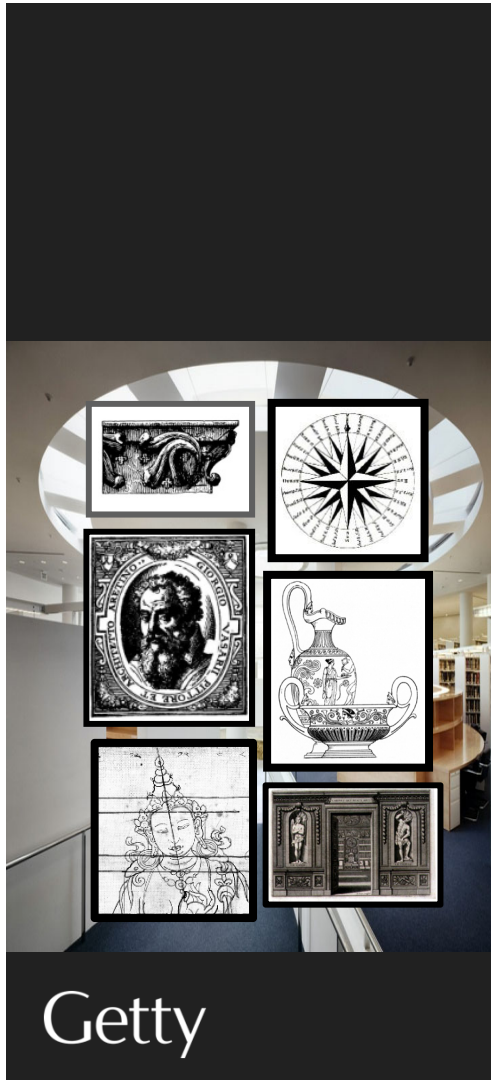
6 February 2019

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Getty Vocabularies General Update:
Then, Now, Future
background, statistics, new activities

Patricia Harpring, Managing Editor
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What Are the Getty Vocabularies?

- AAT, TGN, ULAN, CONA, and IA contain structured terminology
- Thesauri, 3 relationships: equivalence (synonyms), hierarchical (broader-narrower), associative (btwn records, not hierarchical)
- Standards-compliant: comply with standards for controlled vocabularies (ISO, NISO); technical, releases also compliant
- Collaborative: Getty Vocabularies grow through contributions from expert user community --

  institutions, consortia, and projects (300); contributing institutions share terminology gathered in the course of their own work, or through translation projects, for the benefit of the community
- Authoritative: Vocabularies cite authoritative sources and contributors
- Scope: Vocabularies strive to be ever more multilingual, multicultural, and inclusive

  Traditional audience (art: visual resources, catalogers, museums), plus scholars, and related disciplines (archaeology, conservation)

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Summary of Recent Activities

- Processing contributions and growing Vocabularies
  - AAT: Translations: Processing Chinese, Dutch, German, French. Other terms for conservation, new media, multicultural terminology
  - TGN: Ancient sites; a few modern hierarchies, upon which we build historical data
  - ULAN: Loading contributions women artists, IMJ artists, modern artists, German and Austrian artists; African American artists
  - CONA: Architectural records in pre-processing
  - IA: Precolumbian iconography, with Iconclass, Buddhist iconography
- OpenRefine Reconciliation Service using Getty Vocabularies
- Outreach: Presenting and publishing in various venues, AB, RJ, JW, PH; JW vice-chair of the board ICOM/CIDOC
- Strategic planning at GRI
- GDi technical roadmap, applications using Vocabularies

Statistics in Context

History of Getty Vocabularies
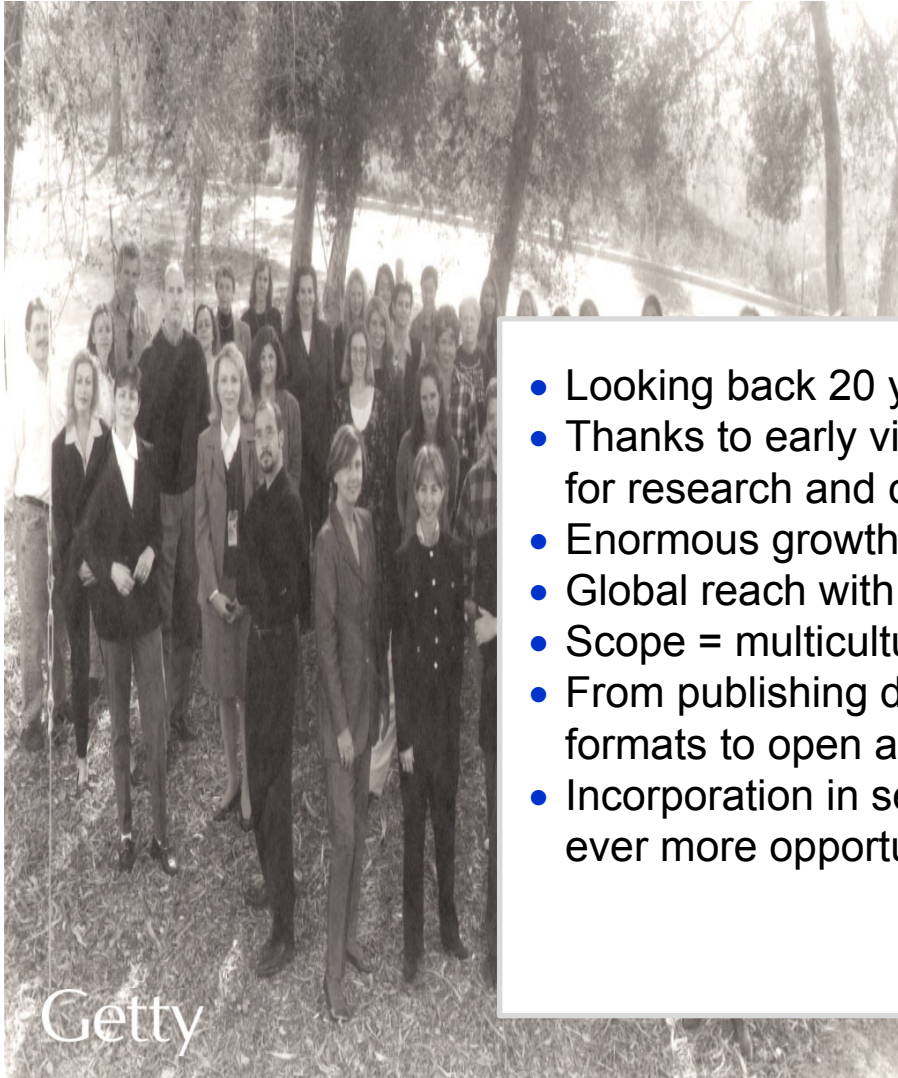
- Looking back 20 years, as we begin a new decade*
- Thanks to early visionaries committed to art information access for research and cataloging, began in 1979
- Enormous growth in size and scope
- Global reach with international partners: **THANK YOU!**
- Scope = multicultural and multilingual
- From publishing data in hardcopy books and limited licensed formats to open access and linking (LOD)
- Incorporation in search engines & collections management systems, ever more opportunities in expanding technical environment

* 00 vs 01

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Growth of the Getty Vocabularies

- Comparison of numbers of concepts and terms over the last two decades (linked to each concept may be multiple terms / names)

Growth of Getty Vocabularies concepts / terms

	1997 *	2010	2020
	concepts/terms	concepts/terms	concepts/terms
AAT	30,000/70,000	48,100/131,000	70,000/436,300
TGN	904,500/922,600	912,100/1,106,000	2,532,000/4,086,000
ULAN	93,800/206,500	209,850/293,000	313,850/935,800
CONA	0/0	0/0	6,750/13,400
IA	0/0	0/0	1,900/5,200

AAT

TGN

ULAN

* Year that the Getty Center opened
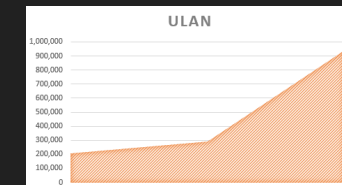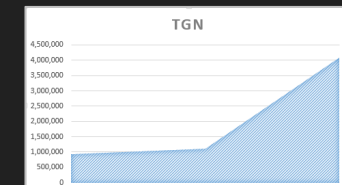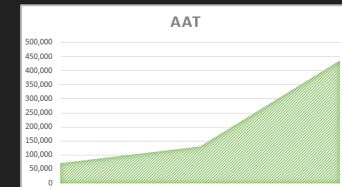
Recent/current preprocessing, loads *(no. of concepts)*

AAT: Chinese translation, festival terms, Academia Sinica (7,610)
AAT: French/English terms CHIN/Nomenclature (15,000)
AAT: Dutch terms, RKD & Belgian (1,410)
AAT: German terms, IfM-SMB (5,300)
AAT: Spanish, Chilean indigenous terms, CDBP-SNPC TRP (760)
AAT: Hebrew terms, IMJ (nnnnn)
AAT: Fashion terms, Europeana (480)
AAT: Italian, architecture, Bib. dell'Ac., Mendrisio (440)
AAT: Italian terms, ICCD (10,000, in processing)
AAT: various, Snite Museum, Notre Dame (31)
TGN: China & Switzerland, NGA/NIMA (650,170)
TGN: archaeological sites, NRW, Bonn (310)
ULAN: Israel Museum, Jerusalem (10,175)
ULAN: NMWA, Washington (2,250)
ULAN: Provenance Index, artists, owners (46,500)
ULAN: Knoedler, Szeemann archives, GRISC (30,300)
ULAN: recent NACO contributions, GRI Library
ULAN: ancient potters, etc., INHA (660)
ULAN: artists, Belvedere, Vienna (22,000)
ULAN: various, A&AAL-UO 48
ULAN: various, SNITE: 27
CONA: architecture, BWR (70,000)

2016 -2020

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ITWG 2020: Getty Vocabularies Update

**Examples of pending loads
and selected contributions under discussion**

AAT: Chinese terms, Traditional Chinese Architecture Project
AAT: Japanese terms, NMJH
AAT: French terms, European BEINFRAT
AAT: Portuguese terms, Pinacoteca de São Paulo/U of São Paulo
AAT: Arabic terms, Louvre Abu Dhabi
AAT: Croatian terms, University of Zagreb
AAT: Nahuatl terms, Florentine Codex (4,000)
AAT: bronze casting, CASTing, JPGM Conservation et al (500)
TGN: various nations, NGA/NIMA (>200 files)
TGN: various places, Native American, Heard Museum
ULAN: Japanese artists, TNRICP
ULAN: Native American artists, Heard Museum, Phoenix (26,000)
CONA: visual surrogates ?
IA: Aztec iconography, Florentine Codex
IA: association with Iconclass ?
IA: Buddhist iconography ?

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- Selected additions are posted quarterly for users
- For new data files, see monthly data releases

The Getty Vocabularies

AAT, TGN, ULAN, CONA, IA

Newsletter: The Getty Vocabularies grow

This document is intended for the general information of Getty Vocabulary end users, demonstrating the additions to the Getty Vocabularies over a given period of time, including new records and previous

AAT: Added October-December 2019
7,938 new records, examples below. (Total does not include new data incorporated in "merged" records (such as the Chinese or French translations of existing terms) or otherwise processed as additions to existing records; does not include records loaded but still having "candidate" status.)

300024379 | **animal cages** | animal husbandry containers, <containers by function or context>, ... Objects Facet

300241994 | **hallmarking** | stamping (marking), <surface marking processes and techniques>, ... Activities Facet

300242002 | **strain cracking** | cracking, surface or structural changes, ... Activities Facet

300249525 | **animals (general term)** | <animals by form>, Animalia (kingdom), ... Agents Facet

300262597 | **nyais** | <people in service occupations>, <people by occupation>, ... Agents Facet

300262621 | **simars** | vestments (ecclesiastical costume), liturgical costume, ... Objects Facet

300262697 | **tobacco rasps** | <equipment for smoking and tobacco use>, personal equipment, ... Objects Facet

300262909 | **revetments (icon covers)** | cases (containers), <containers by form>, ... Objects Facet

300263098 | **display easels** | easels, support furniture, ... Objects Facet

300263099 | **suppedions** | cushions, soft furnishings, ... Objects Facet

300263101 | **étagères dressoirs** | <storage and display furniture>, <furniture by form or function>, ... Objects Facet

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Growth of Contributor Community

Numbers of contributing institutions

1997	2020
23 in USA, Canada, UK, Italy	300 globally

Contributors to the Getty Vocabularies

The Getty vocabularies grow in large part through continued efforts and contributions from the expert user community. Below is a list of contributors to the Getty vocabularies. The list is extensible and subject to frequent updates.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Brief Name	Full Name
A	
AAT-AD	AAT Advisory Committee (Williamstown, Massachusetts)
AS-Academia Sinica	Academia Sinica (Nankang, Taiwan)
AALStanford	Art & Architecture Library, Stanford (Stanford, CA)
UTA	Art and Art History Department, University of Texas at Austin

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Growth of Users

- Usage steadily grows over time
- When data available as LOD, APIs, at other sites (RKD, Taiwan, etc.) online-search copy-and-paste usage on our site drops somewhat
- But still remain the most visited resources at GRI every month
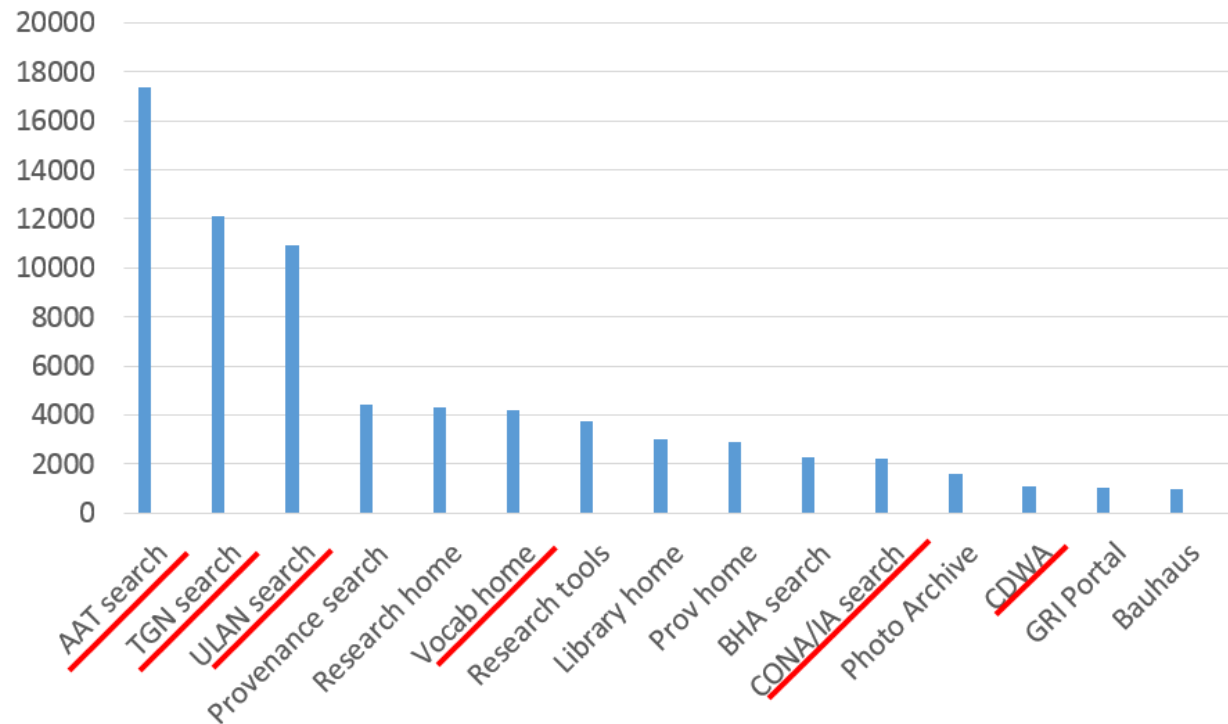

Visits / total page views

Growth of Getty Vocabularies user community

average per month	1997	2010	2020
Users of online-search	1,500 mo	12,100 mo	11,600 mo
Visits / total page views	6,000 / 20,000	31,800 / 140,000	28,700 / 170,000
Users of LOD	0	0	7,000
Visits / hits on LOD	0/0	0/0	20,500 / 2,900,000
Locations where users are located	3 nations	85 nations	100 nations

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Usage on GRI site

AAT search	**17380**
TGN search	**12117**
ULAN search	**10907**
Provenance search	4425
Research home	4311
Vocab home	**4165**
Research tools	3746
Library home	3015
Provenance home	2885
BHA search	2247
CONA/IA search	**2210**
Photo Archive	1570
CDWA home	**1055**
GRI Portal	1018
Bauhaus	969

Top 15 GRI Page Views, November 2019

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Usage of LOD releases

	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019

Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2019	3,990	11,733	1,322,167	1,470,187	103.15 GB
Feb 2019	3,954	10,827	994,686	1,124,275	105.60 GB
Mar 2019	4,439	11,733	910,193	1,067,689	85.48 GB
Apr 2019	4,567	13,155	1,190,836	1,358,900	91.36 GB
May 2019	9,009	26,632	1,164,260	1,376,214	107.38 GB
Jun 2019	8,537	27,478	2,605,747	2,773,705	100.35 GB
Jul 2019	5,283	18,156	1,384,780	1,617,029	77.43 GB
Aug 2019	15,826	56,284	1,800,772	2,022,622	90.76 GB
Sep 2019	9,026	23,889	2,223,145	2,437,841	187.77 GB
Oct 2019	5,251	15,412	3,090,488	3,349,368	117.34 GB
Nov 2019	4,600	15,497	8,461,928	8,617,574	168.43 GB
Dec 2019	4,620	15,123	7,849,274	8,001,555	191.50 GB
Total	79,102	245,919	32,998,276	35,216,959	1426.55 GB

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Improving the Process

What Do We Do?

Contributions are preprocessed, loaded, and processed

- The Getty vocabularies grow through contributions from the expert user community

- Compiled and disseminated by Getty Vocabulary Program (GRI) and Getty Digital

- Released in online search, XML, Relational Tables, Web Services, JSON, RDF, N3/Turtle, N-Triples

AAT, ULAN, TGN, CONA, IA

Acquire contribution → Load / Process data → Distribute data

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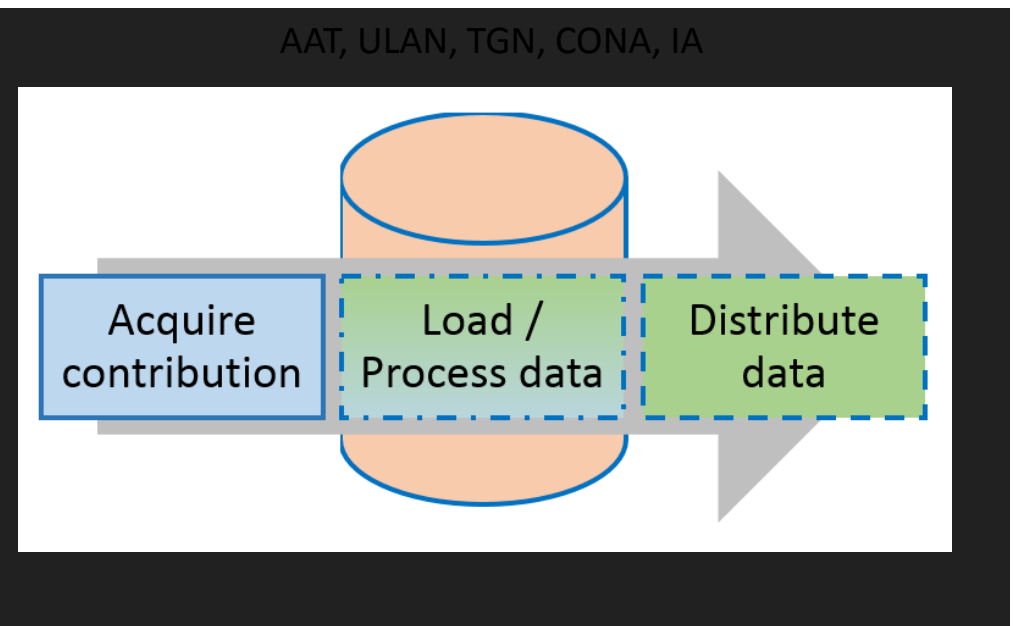
What Do We Do?

System loader reconciliation gives us reports for near matches

automated and manual

reconciliation

- Contributions arrive in various formats and states of compliance

- Pre-Load data reconciliation
- During Load, merging, integration
- Post-Load, editing as necessary

Prov place name	Problem	Place name in ULAN -- from TGN	ULAN Code
(Kartause) Champmol	not found	Chartreuse de Champmol (C$03ote-d'Or, Bourgogne, France	4151060737
?	not found	[leave blank -- no link]	
Aix	multiple matches	Aix-en-Provence (Bouches-du-Rh$03one, Provence-Alpes-C$	4151000064
Albany	multiple matches	Albany (Albany county, New York state, United States) (inhab	5600001030
Alessandria	multiple matches	Alexandria (Al-Iskandar$01iyah governorate, Urban, Egypt) (ir	1123000108
Algier	multiple matches	Algiers (El Djaza$04ir department, Algeria) (inhabited place)	1001000031
Algiers	multiple matches	Algiers (El Djaza$04ir department, Algeria) (inhabited place)	1001000031
Alsace	multiple matches	Alsace-Lorraine (Europe) (general region)	4000000002
America |a 1765-1771	not found	United States (North and Central America) (nation)	5600000000
Amersfoort	multiple matches	Amersfoort (Utrecht province, Netherlands) (inhabited place)	4390000025
Amiens	multiple matches	Amiens (Somme, Picardy, France) (inhabited place)	4151000131
Amsterdam	not found	Amsterdam (North Holland, Netherlands) (inhabited place)	4390000029
Amsterdam	multiple matches	Amsterdam (North Holland, Netherlands) (inhabited place)	4390000029
Amsterdam (Noord-Holland)	not found	Amsterdam (North Holland, Netherlands) (inhabited place)	4390000029
Ancona	multiple matches	Ancona (Ancona province, Marches, Italy) (inhabited place)	4243000167
Anet	multiple matches	Anet (Eure-et-Loir, Centre region, France) (inhabited place)	4151000158

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What Do We Do?

Finding matches, merging duplicates representing the same person

automated and manual

integration

- Contributions arrive in various formats and states of compliance

- Pre-Load data reconciliation
- During Load, merging, integration
- Post-Load, editing as necessary

merging

ULAN ID	Matching name	Display biography	Roles (AAT-controlled)	Nationality (AAT-controlled)	Estimated birth date	Estimated death date
500017409	Guardi, Francesco	Venetian painter, 1712-1793	artist painter landscapist	Venetian Italian	1712	1793
500312969	Guardi, Francesco	Italian noble, born 1514	noble	Italian	1514	1614
500412666	Guardi, Francesco	Italian artist, ca. 1712-1793	artist	Italian	1707	1793

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ULAN record is a merged, homogenous entity

Union List of Artist Names® Online
Full Record Display

New Search   ◄ Previous Page   ? Help

Click the icon to view the hierarchy.

Semantic View (JSON, JSONLD, RDF, N3/Turtle, N-Triples)   ▪ Represent

Guardi, Francesco (Italian painter, 1712-179

Note: Venetian painter, during the first half of his
on decorations and church paintings; later becam
vedutista (view painter) of Venetian urban life.

Names:
Guardi, Francesco (**preferred**,V,index,LC)
Francesco Guardi (V,display)
Gardi, Francesco (V)
Garde, Francesco (V)
Gardis, Francesco (V)
Gauda, Francesco (V)
Guada, Francesco (V)
Guarde, Francesco (V)
Guardet, Francesco (V)
Gvardi, Franchesko (V)
Guardi, François (V)
Guardi, Francisco (V)

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

Attribution to
contributor and
source is
maintained, but
merged, unified, and
"preferred" is
flagged

Links back to sources
or contributors

Improving the Process

How to streamline the processes?

- **Clearing the bottleneck**
  from contribution to publication
- Loading (GDi), pre-processing/processing (GVP)
  = points of congestion in workflow
- Critical to maintain high quality and
  authoritativeness in Getty vocabularies;
  careful vetting and sources =
  our greatest strengths
- Need to balance the speed of data release with
  avoiding publishing in-flux and wrong information

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**loading
contribution → processing → publication**

Clearing the bottleneck
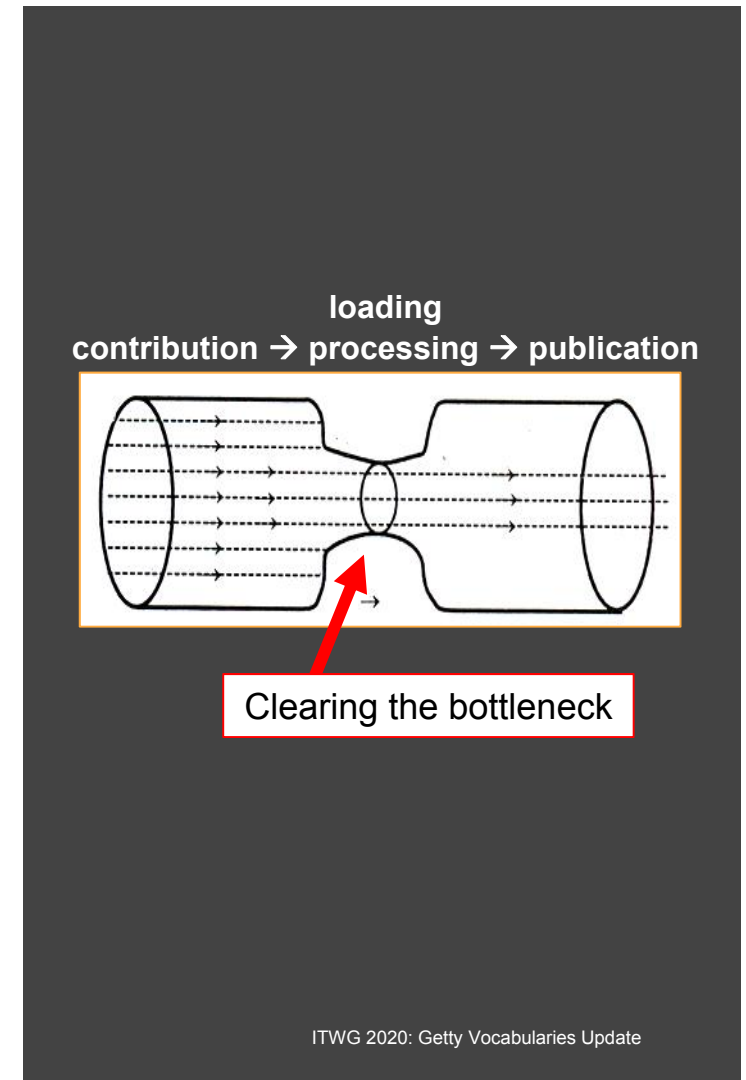
Improving the Process

How to keep quality high, but publish promptly

- Choose contributors with authoritative data
- If possible XML (many spreadsheets)
- <u>Completeness of contributions</u> = faster publication

- Goal: 80% of contributed records should require no editorial work, other than placing in hierarchy GVP has taken steps to relieve "processing" bottleneck (loading is GDi)
- Creation of holding hierarchies, published w/IDs
- OpenRefine being used for preprocessing
- Technical support for preprocessing, editors taking control where we can
- New or improved editorial system on the horizon
- Possibly new solutions to assist contributors

loading
contribution → processing → publication

Clearing the bottleneck

ITWG 2020: Getty Vocabularies Update
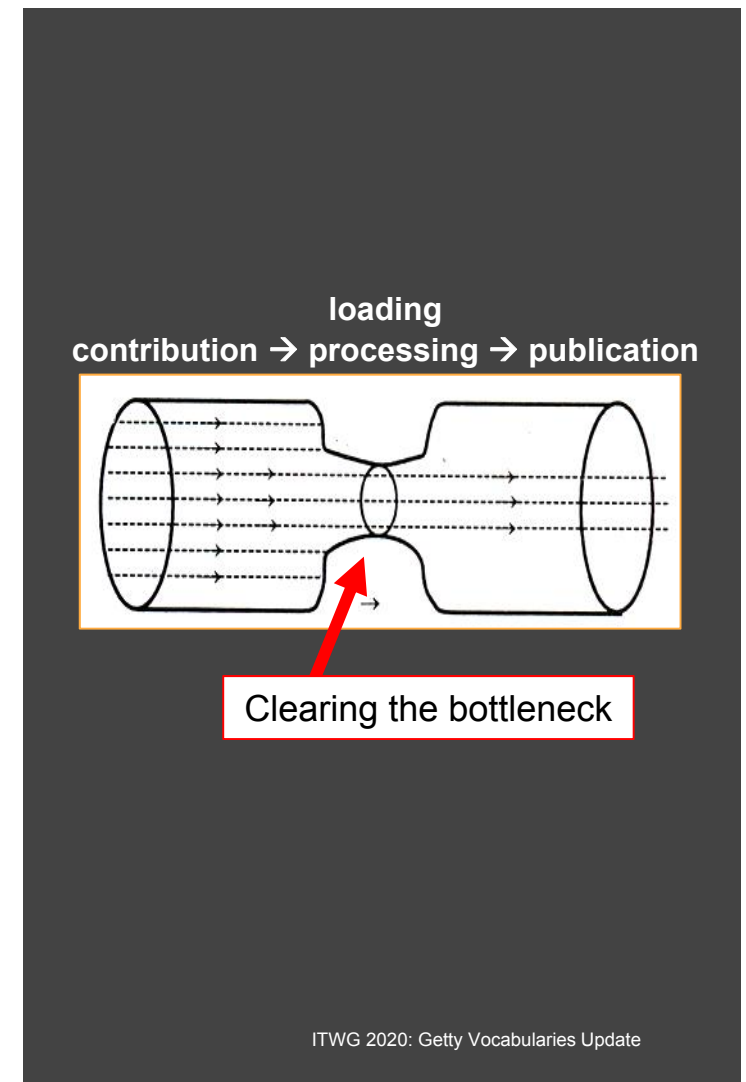
AAT Totals:
concepts / terms
69,856   436,334

candidates: 15,032 *
in load queue: [1000]

TGN Totals:
concepts / terms
2,531,895 / 4,086,081

candidates: 26,425 *
in load queue: 200 files

ULAN Totals:
concepts / terms
313,825 / 935,788

candidates: 1,262 *
in load queue: 22,000

Tracking candidates & unloaded files

- Numbers of candidates loaded, awaiting processing
- In "temp.parents," not published
- Numbers of records or files awaiting loading

Top of the ULAN list / hierarchy
+   temp.parent/Candidates (undetermined)
<temp.parent/GRI Library Person--probably IA> (temp.par
Abraham (artist)
Adam (artist)
Alexandra (artist)
Andrew (artist)
Anne (artist)
Belshazzar (artist)
Catherine (artist)

* AAT: Italian terms; TGN: not places, but cultures;
  ULAN: attribution statements, not people

Improving the Process

Holding hierarchies

- Releasing concepts in holding hierarchies
- E.g., "Unidentified Named…"
- IDs are available to users
- But should be used with caution, as they may be merged with existing records later
- We will show you example of AAT load, for which the most of the merging was done prior to publication

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Top of the ULAN list / hierarchy

.... **Unidentified Named People and Firms** (ULAN facet)

.... **Naboth** (Unknown artist)

.... **Nachshen, Sonia** (British artist)

.... **Nachshon Dotan, Rachel** (photographer)

.... **Nachshon, Tammy** (Israeli artist)

.... **Nachtwey, Benjamin** (artist, active 20th century)

.... **Nachtwey, James** (artist, active 20th century)

.... **Nada Farm Museum of Archetypes** (artist)

.... **Nadar, Félix** (artist, 1820-1910)

.... **Nadel, Hanna** (painter)

.... **Nadiv, Giora** (painter)

.... **Nadler, Lea** (painter)

.... **Naedler, Rolf** (artist, active 20th century)

.... **Naef, Alex** (artist, active 20th century)

.... **Naef, Doris** (artist, active 20th century)

Improving the Process

Editors participating in more pre-processing

- OpenRefine Reconciliation service using the Getty Vocabularies
- OR used to normalize, clean up data
  (parse names, make consistent)
- Reconciliation with AAT for role, nationality
- Editors are in training, will train contributors

Search Tools & Databases

- A-Z List
- Article & Subscription Databases
- Library Catalog
- Getty Research Portal
- Collection Inventories & Finding Aids

Getty Vocabularies OpenRefine Reconciliation

Data managers, developers, and others who wish to reconcile data sets to the Getty Vocabularies may now do so using OpenRefine, an open-source tool for data cleanup and transformation.

- Experienced users of the tool may reconcile their data when in OpenRefine
  cab/reconcile/
  e available in the Getty
  B MB, 25pp). Technical

ss comparing target data against
his process include data migration or
liation is to standardize data, for
ndard controlled vocabulary. This
ds or columns of data.

s, may use data reconciliation to
Vocabularies in order to map to them.
ory of art can be mapped to a
(ULAN) record identifiers. Similarly, a
cile their terms for artist role, e.g.,
& Architecture Thesaurus (AAT) in order
tercolorist, or AAT_300025157.

tches are suggested by the service, but
a fully automated process would not
d judgment are essential. Through the
ervice, the user has the option to
m a list of results.

OpenRefine NMWA_PH_names xlsx Permalink

2251 rows

Show as: **rows** records   Show: 5 **10** 25 50 rows

All	pref_name	name direct ord	birth_year	death_year	birth_place	death_pla
☆ 👎 1.	(Kolbrun Björgolfsdottir), Kogga	Kogga (Kolbrun Björgolfsdottir)	1952			

Training Materials

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Going Forward

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Into the future

- We strive to make Getty Vocabularies ever more multilingual, multicultural, and inclusive

- Creating rich, authoritative vocabularies
- In order to meet requirements of GRI, Getty, and the field

- We plan to analyze weak areas or lacunae
- To seek contributors and sources of open data to fill the gaps

- Also, to address other issues that will enable Getty Vocabularies to remain relevant in the scholarship of various art histories
- Including linking to other resources
- And considering possibilities of digital scholarship and rapid advancement of technology

Examples of Links and Integration

- **VIAF:** ongoing, ULAN , concordance of IDs from resources globally **IMJ** provided IDs

- **Internal integration**
  - **Provenance Index:** AAT, ULAN, TGN; issue = local authority for artists verbatim names
  - **PhotoTech:** AAT, ULAN, TGN; ? CONA
- **TMS:** Gallery Systems, updating Getty Vocabs on board; or link in a new Web product
- **Ex Libris:** Alma, how to incorporate Getty Vocabs, to enable reconciliation

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Increase Links, Integration

- To strengthen Getty Vocabularies' five-star LOD status See Zeng (2016): https://www.getty.edu/research/tools/vocabularies/zeng_vocabs_and_five_star_lod.pdf
- We need more links out
- Also, suggested: Which links _**in**_ do we track?

VIAF
Virtual International Authority File

Gogh, Vincent van 1853-1890
Gogh, Vincent van
Vincent van Gogh
Van Gogh, Vincent, 1853-1890
غوخ، فينسنت فان، 1890-1853
Гог, Винсент ван, 1853-1890.
גוך, וינסנט ון, 1853-1890
Van Gogh, V. 1853-1890 Vincent
Gogh, Vincent Willem van
http://vocab.getty.edu/page/ulan/500115588
Gogh, Vincent van (Dutch painter and draftsman, 1853-1890)
جوخ، فنسنت فان، 1890-1853
VIAF ID: 9854560 (Personal)
Permalink: http://viaf.org/viaf/9854560

Status of Multicultural ULAN

Multicultural ULAN:

Records total: 313,850

Nat/cultures total linked: 362,063
[a person may have multiple nationalities, cultures]

Partial list of Nationality/Culture/Ethnicity

American 57,624

Canadian 4,812

European 212,286

Mexican, Central-South 11,652

Native American, First Nations 4,394
   [possible 26,000 Heard Museum]

African American 548

African 2,588

Middle Eastern 5,600

Indian subcontinent 1,370

East Asian 6,270

Other 49,945

Totals for Nat/Culture

- Other
- American
- Canadian
- European
- Mexico,C&S Am
- Native Am
- African Am
- Middle E
- Indian subc
- East Asian
- African
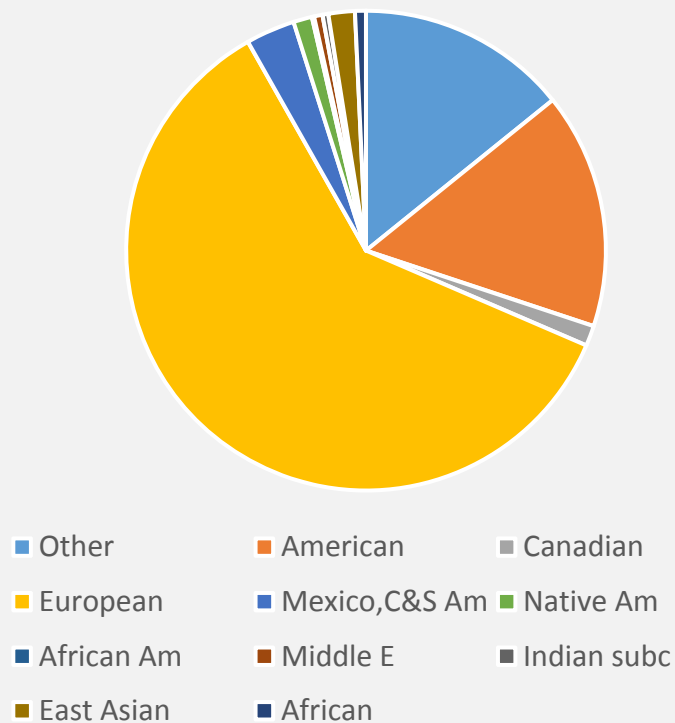
Status of Multilingual AAT

Multilingual terms in AAT

Records total: 69856

Terms total: 436,334

Languages on terms total: 461,926

[a term may link to multiple languages]

Selected languages with term count

English 176,899 *[including loan terms]*

Chinese 102,620

Dutch 63,341

Spanish 56,182

German 21,315

French 21,139

Italian 4,439

Portuguese 247

Greek 63

Hebrew 29 *[pending IMJ]*

Russian 20

Arabic 16

Japanese 14

Persian 7

Other 13,873

Total Languages with Terms

Legend:
- English
- Chinese
- German
- Dutch
- Spanish
- Italian
- French
- Portuguese
- Greek
- Hebrew
- Russian
- Japanese
- Other

ITWG 2020: Getty Vocabularies Update

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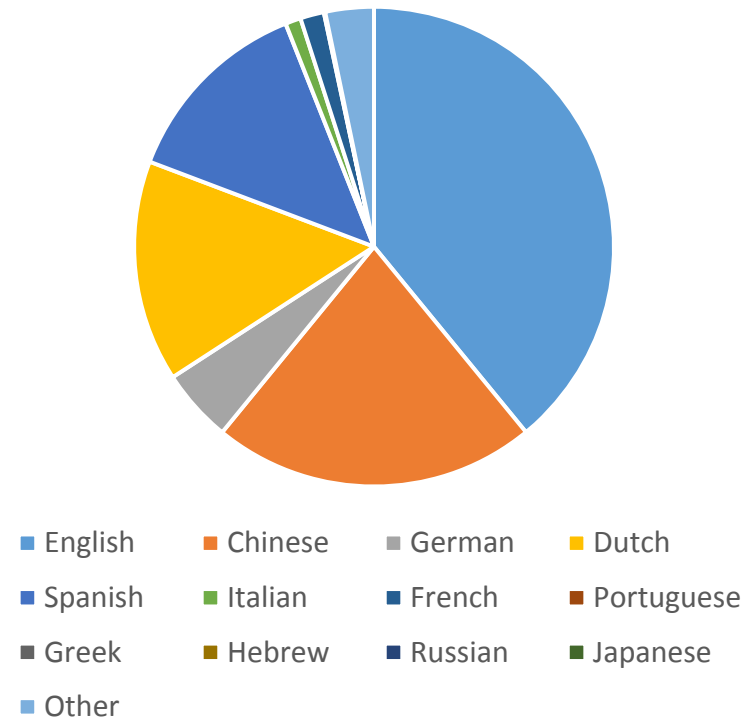
Status of International Usage

Distribution of users, Vocabs online search
149 countries total; top 50

Country	Users	Country	Users
United States	79597	Colombia	612
United Kingdom	9125	New Zealand	594
Canada	6528	South Korea	565
Germany	5809	Portugal	553
France	5687	Sweden	542
Italy	4847	Czech Republic	522
Spain	4343	Ireland	480
Netherlands	4025	Ukraine	468
Australia	3378	Hungary	443
Belgium	2106	Slovakia	348
Poland	2017	Turkey	348
Switzerland	1962	Chile	336
Russia	1602	Indonesia	330
Japan	1572	Denmark	324
Mexico	1543	Croatia	306
Brazil	1398	Finland	300
China	1200	Norway	294
Greece	1200	Singapore	283
Argentina	1188	Puerto Rico	270
Taiwan	1087	Egypt	246
Israel	896	Bulgaria	234
Austria	894	unidentified	222
India	876	South Africa	215
Hong Kong	721	Thailand	193
Philippines	667	Saudi Arabia	168

Getty

Total users by country online search
12 months 2019
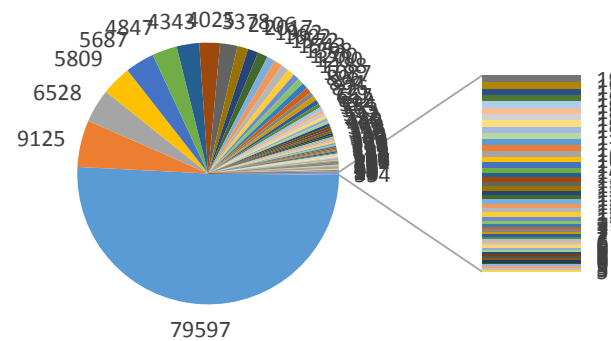
Update:
Getty Iconography Authority (IA)
and Cultural Objects Name Authority (CONA)

Accessing IA and CONA

- CONA and IA available in online search
- Also accessible as XML files, refreshed monthly
- Service for full list of records as XML is here:
  - http://vocabsservices.getty.edu/CONAService.asmx
- Service for individual records as XML is here:
  - http://vocabsservices.getty.edu/CONAService.asmx?op=CONAGetSubjectWeb

Getty

IA Sample Record

IA, Getty Iconography Authority™

http://vocab.getty.edu/page/ia/901000085

**Links to other resources
LOC, Iconclass**

ID: 901000085

Names:
Avalokiteshvara (pref, en) [5000191]
   Qualifier: Buddhist bodhisattva
Avalokiteśvara [5001067]
अवलोकितेश्वर (sa) [5001068]
 སྤྱན་རས་གཟིགས (bo) [5002308]
Spyan ras gzigs (tibt) [5002308]

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

**AAT
TGN
ULAN
CONA**

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

Hierarchical Relationships
Top of the IA hierarchies
   Legend, Religion, Mythology
      Buddhist iconography
         Buddhist characters
            Avalokiteshvara (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

Includes proper names, relationships, and dates for iconographical narratives, religious or fictional characters, historical events, names of literary works and performing art

Getty

Indexing Subject Matter

- **description, identification, interpretation**
- What the work is "of" and "about" (*ofness, aboutness, isness*) *
- Common iconographic themes, stories, and characters

- Iconography Authority used to index subjects not included in other Getty Vocabularies

CONA ID 70000012 Class: Precolombian art
Current Location: Metropolitan Museum of Art (New York, New York, USA)

General Subject:
- religion and mythology *[General Subject ID 31801]*

Specific Subjects:
- Xibalba (Maya underworld) *[IA 1000045]* — Identification
- Baby Jaguar (Maya character)) *[IA 901002211]*
- man (male human) [AAT 300025928] — Description
- skeleton (animal component) [AAT 300191778]
- ax (weapon) [AAT 300024664]
- altar [AAT 300003725]
- death [AAT 300151836] — Interpretation
- celebration [AAT 300152441]

Getty

IA and Iconclass

- Relationship between IA and Iconclass is currently under discussion
- Overlap, particularly for Western iconography; also, Iconclass maps to AAT

  - IA contains names or short phrases in hierarchical arrangement; associative relationships
  - Long descriptive phrases have been considered out of scope for the IA, although IA links to the code (73E31)

Top of the IA Hierarchies

.... **Legend, Religion, Mythology**

.... **<Christian iconography>**

.... **<Other Christian narratives>**

.... **Life of Saint Mary Magdalene (Christian iconograp**

.... **Noli me tangere (New Testament narrative)** [N

.... **Repentant Magdalene (Christian iconography)**

Iconclass

11A · Deity, God (in general) ~ Christian religion

11B · the Holy Trinity, 'Trinitas coelestis'; Father, Son and Holy Ghost ~ Christian religion

11C · God the Father

11D · Christ

11E · the Holy Ghost

11F · the Virgin Mary

11G · angels

11H · saints

11I · prophets, sibyls, evangelists, Doctors of the Church; persons ~ the Bible (not in biblical con

11K · devil(s) and demons

11L · Christian doctrine

11M · 'Sapientia' and the Seven Virtues, i.e. the Three Theological and the Four Cardinal Virtues

73E31 Mary Magdalene kneeling before Christ, who is usually represented as a gar

11DD3343 Christ with penitent sinners (Adam, David, prodigal son, Mary Magdalene

73E25 John, Peter and Mary Magdalene approaching the open tomb of Christ

73E231 angel(s) addressing Mary Magdalene ~ Resurrection of Christ

73E232 Mary Magdalene draped with the shroud of Christ

Getty

CONA Sample Record

CONA, the Cultural Objects Name Authority®
http://vocab.getty.edu/page/cona/700001650

This is a full record
Minimal record
contains 5 fields
Link to GRI collection

ID: 700001650

Titles/Names:
Arc de triomphe de Loüis XIV a la porte St. Antoine (pref, fr, en) *Type:* repository [1000003746]

Triumphal Arch for the marriage of Louis XIV at the gate St. Antoine (en) *Type:* descriptive [1000017304]

Arcus triumphalis Ludouici Magni ad Portam Antonianam (la) [1000017157]

Arc de Triomphe du Trône (fr) [1000004139]

Catalog level: item
Class: prints
Work Type: engraving (print) reproductive prints   AAT
Date: Published 1679
Creator: Sébastien Le Clerc (engraver, 1637-1714)   ULAN
Materials: 1 print: engraving, b&w   AAT
Dimensions: plate mark 40.8 x 50.2 cm, on sheet 45.3 x 53.4 cm
Inscriptions: Arc de triomphe de Louis XIV a la porte St. Antoine Arcus triumphalis Ludouici Magni ad Portam Antonianam / S. Le Clerc sculps. 1679.
Associative Relationship
depicts … Arc de Triomphe du Trône (built work) [700001288]
Hierarchical Relationship
Movable Works

Location:
current: Getty Research Institute, Special Collection (Los Angeles, California)   **Repository Numbers:** 2853-663; 853663; accession number: 2009.PR.66   ULAN TGN
Note: The ephemeral arch was designed by Claude Perrault to commemorate Louis XIV's entry …
General Subject:
architecture
event
another work   AAT TGN ULAN CONA CONA IA
Specific Subjects:
Arc de Triomphe du Trône [CONA 700001288]
Marriage of Louis XIV and Marie-Thérèse of Austria [IA 901001452]
Louis XIV, King of France (French king, 1638-1715) [ULAN 500122256]
Contributors: VP, GRISC
Sources: GRI Special Collections databases (1983-)
853663

Getty

Getty Vocabularies Update: IA and CONA

Possible implementations of CONA

To record works depicted in other works (photo archive, prints, etc.)

To record works that are lost or designed but never built

Destroyed, ephemeral triumphal arch

CONA ID 700001288
Classification: architecture
Work Type: triumphal arch
Title: Arc de Triomphe du Trône
Location: Paris (France)
Creator: based on designs by Charles Perrault (French architect, 1613-1688), built by Claude Perrault (French architect, physician, scientist, 1613-1688)
Date: begun 1670, demolished 1716
Materials: stone and plaster
Dimensions: unavailable
General subject: architecture
Type: isness
Specific Subject: Louis XIV
Extent: honoree
ephemeral structure   Extent: purpose

LINKS

depicts
depicted in

CONA ID 700001650

depicts
depicted in
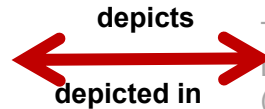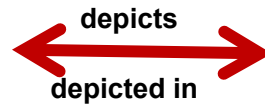
CONA ID 700001650

Possible implementations of CONA

To link multiples

CONA ID 700008519
Catalog Level: multiples
Classification: prints and drawings
Work Type: drypoints
Title: Christ Presented to the People
Creator: Rembrandt van Rijn (Dutch, 1606–1669)
Description: Rembrandt treated this large drypoint almost as a painting, making marked changes to the composition as he reconceived …

State: 1
State: 2
State: 3
State: 4
State: 5
State: 6
State: 7
State: 8

- Note that each item, in various repositories, is cataloged as a unique work
- Then linked to the state, a conceptual relationship (not a physical relationship)

Getty

In Pharos project

In PhotoTech project ❓
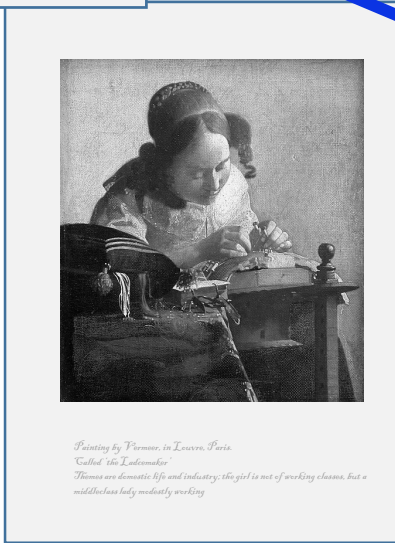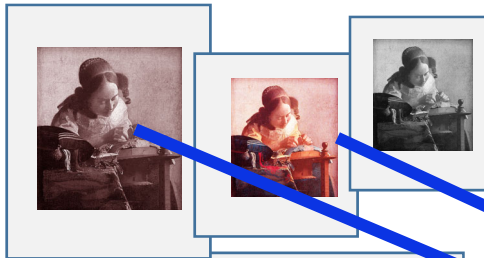
Painting by Vermeer, in Louvre, Paris.
'Called 'the Lacemaker'
Themes are domestic life and industry; the girl is not of working classes, but a
middleclass lady modestly working

LINKS

Possible implementations of CONA

To record the work depicted in the surrogate

- What is advantage to linking to CONA for work depicted for Photo Archives? PhotoTech, PHAROS ?
- Access for all surrogates that depict the same work
- If the work is not already in CONA, the cataloger could make a minimum record on-the-fly, to link to CONA ID
- If later the CONA record is merged, IDs are tracked

http://vocab.getty.edu/page/cona/700009600

ID: 700009600   Record Type: Movable Work
Page link: http://vocab.getty.edu/page/cona/700009600

The Lacemaker (undetermined (information indicator); Johannes ou Jan Vermeer (Delft, 1632 - Delft, 1675); vers
1669/1670; Louvre Museum (Paris, Île-de-France, France); M.I. 1448;)
Note: Genre scene of a woman making lace. The book in the foreground is probably the Bible, setting the tone of
morality infused with religion. The woman is not wearing work clothes, so she is a housewife not a manufactory worker.
The colored cushion on the left is a sewing cushion.
Titles:
    The Lacemaker (preferred,C,U,English-P,U,U)
    La Dentellière (C,U,RP,French-P,U,U)
    Merlettaia (C,U,Italian,U,U)
    De kantwerkster (C,U,Dutch-P,U,U)
    织花边的少女 (C,U,Chinese-P,U,U)
    レースを編む女 (C,U,Japanese-P,U,U)
Catalog Level: item
Work Types:
    undetermined (information indicator) [300379012] (preferred)
    ..... (Associated Concepts Facet, Associated Concepts (hierarchy name), multidisciplinary concepts)

Classifications:
    not applicable (preferred)

Creation Date: vers 1669/1670

Creator Display:
    Johannes ou Jan Vermeer (Delft, 1632 - Delft, 1675) [preferred]
        painter Vermeer, Johannes (Dutch painter, 1632-1675) [500032927]
Locations:
    Current: Louvre Museum (Paris, Île-de-France, France) [500125189] Corporate Bodies (Corp. Body)
        Repository Numbers: M.I. 1448
        Credit Line: Acquis à la vente Vis Blokhuyzen, Paris, 1870
        Address Note: Richelieu wing; 2nd floor; Room 837
Display Materials: Oil on canvas
    oil paint (paint) [300015050]
    ....(Materials Facet, Materials (hierarchy name), materials (substances), <materials by function>, coating (material),
    <coating by form>, paint (coating), <paint by composition or origin>)
    canvas (textile material) [300014078]
    ....(Materials Facet, Materials (hierarchy name), materials (substances), <materials by form>, <materials by
    physical form>, <fiber and fiber by product>, <fiber by product>, textile materials, <textile materials by process or
    technique>)

Dimensions: H. : 0,24 m. ; L. : 0,21 m.
General Subject:
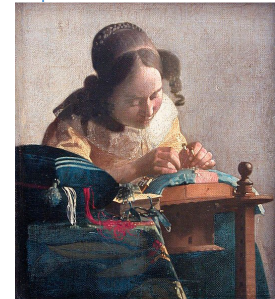
Getty Vocabularies Update: IA and CONA

Possible implementations of CONA

To record architectural works

Built Works Registry (Columbia, ARTstor)

BWR data is in the queue for loading

Merging information from multiple contributors

CONA ID: 700002923
Catalog Level item **Classification** architecture
Work Type building complex | temple
Title/Name Temple of Heaven (en)
  Tian Tan (zh-tr) | T'ien-t'an (zh-tr) | 天坛 (zh)
  | 天壇 (zh) | 천단 (ko)
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 hecatres
Mat & Tech [display] wood and stone [wood AAT 300011914 | stone AAT 300011176]
Style: Chinese [AAT 300018322] | Taoist [AAT 300143666]
Contributors JPGM VP GRISC BWR

LINKS

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-)

- CONA ID uniquely identifies the work in CONA
- Links to other IDs, such as LOC, VIAF, BWR
- Minimal record contains 5 fields
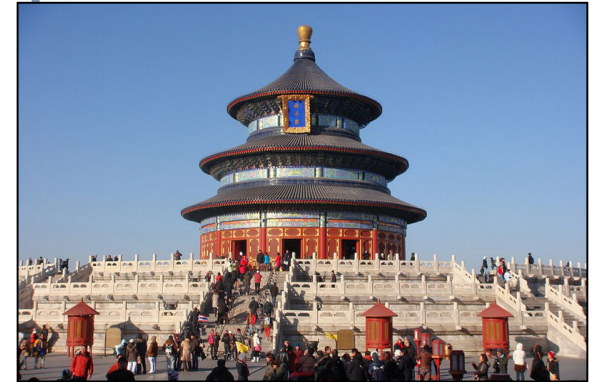
Getty

Thank you.

Getty

Getty Vocabularies: ULAN
National Museum of Women in the Arts Contribution Project

Robin Johnson
Editor, Getty Vocabulary Program
Getty Research Insitute

National Museum of Women in the Arts (NMWA) Database

NMWA in Washington DC features over 4,500 works of art by over 1,000 women artists in a variety of styles and media, spanning from the 16th century to present day.

2,250 records with various issues:

- **Missing Nationality, Roles, Dates**
  Example: Nil Yalter (artist, b. 1938)

- **Two names for one artist in a record;**
  Example: Kogga (Kolbrun Björgolfsdottir)

- **Two separate artists names in one record**
  Example: Forbush, Ann P. and Katherine M.D. Lobo

Getty

OpenRefine:
Transforming Messy Data, One Column at a Time

Standardizing a Field in OpenRefine:

Example: Role

- **Mapping Roles to terms in AAT Using Getty Vocabulary Reconciliation Service**

- **Separate multiple strings of roles in a single column into separate coumns**

- **Uses default Role "artist" where role is blank**

Reconcile column "pref_role"

Services

Wikidata (en)

Getty Vocabularies Reconciliation Service

Column11

NMWA_preferred_role
☑ ☑ Create new item

ceramicist
☑ ☑ ceramicists (14)
☑ ☑ Create new item
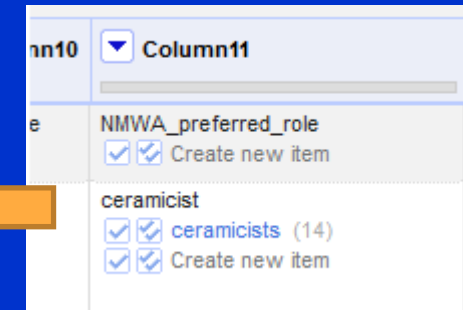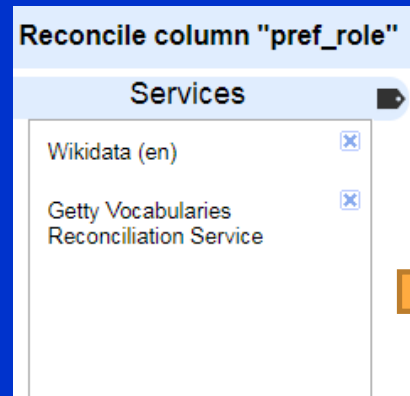
British, 1729-1807	Artist; silversmith
American, 1908-2009	Artist; editor; author
American, b. 1953	Artist; installation artist; sculptor; photographer
American illustrator, born 1940.	illustrator
English	

Getty

Loading NMWA Records into VCS

Example:

Abakanowicz, Magdalena (Polish textile artist, sculptor, 1930-2017)

Artist; weaver; textile artist; sculptor

○ NMWA record merged with ULAN record (if one already exists)

○ Fields, such a roles, went from being all in one Excel field, to being verified in OpenRefine, to VCS

Artist; weaver; textile artist; sculptor
- ☑☑ textile artists (29)
- ☑☑ artist dolls (21)
- ☑☑ artist associations (21)
- ☑☑ artist painters (20)
- ☑☑ artist groups (20)

Role
artist
weaver
textile artist
sculptor
painter

Getty

Associative Relationships in ULAN:
Meaningful links between Artists and Corporate Bodies

Aalto, Aino Marsio (Finnish architect, designer, 1894-1949)

Note: Architect and designer, and chief of interior design for Artek. Aalto's "Bölgeblick" design serves as inspiration for a line of dinnerware produced by the Finnish decor company Iittala. Spouse and frequent collaborator of Alvar Aalto.

Related People or Corporate Bodies:
  collaborated with .... Aalto, Alvar
  .... (Finnish architect and designer, 1898-1976) [500002617]
  related to .... Artek
  .... (Finnish company, contemporary) [500261915]
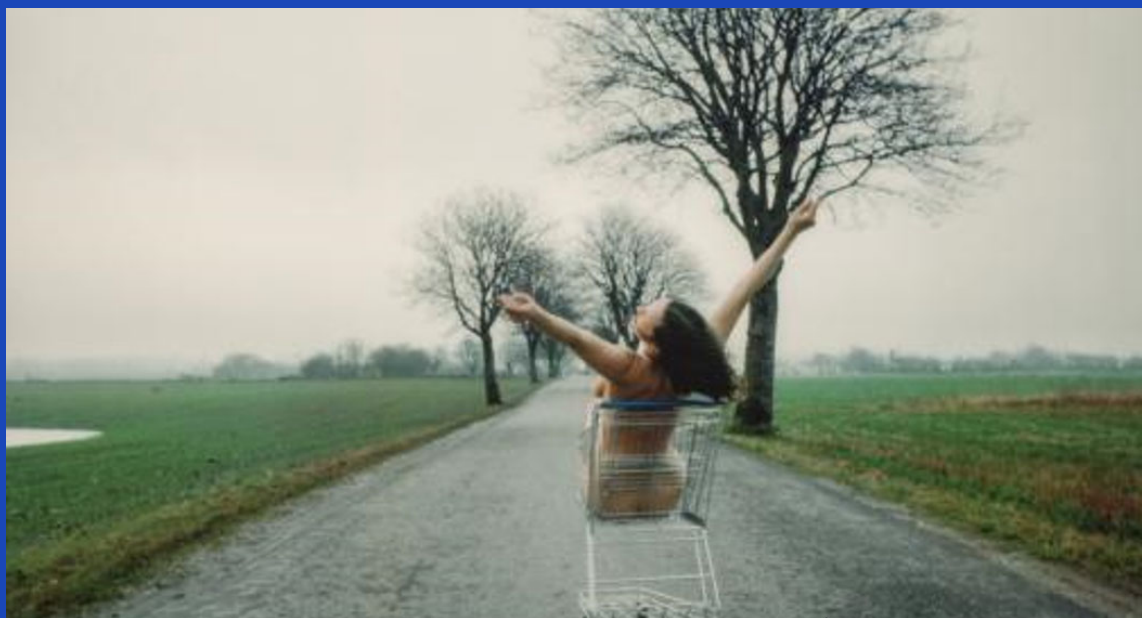
Thank you.

Getty

TGN In Focus: The Ancient World

Jonathan Ward
Editor, Getty Vocabulary Program

TGN In Focus: The Ancient World

→**Over 10,000 archaeological sites**

Includes places described as ruins, former settlements, rock shelters, and otherwise ancient sites.

→**Over 400 ancient kingdoms and empires**

Focus on African and Asian empires; Pre-Columbian, Native American / First Nations sites.

◆ **Focus on: places ignored by geodata systems**
Various satellite and geodata systems bypass historic places entirely.

◆ **Focus on: value-added data for scholars / historians**
Associative relationships; hierarchical relationships between historic places; linking a cultural object to a place in history.

Getty

TGN In Focus – Creating Links

1. ☐ ⛶ **Adal** .... (former nation/state/empire)
   (World, Africa) [6000047]
   Adal Kingdom

2. ☐ ⛶ **Ajuran Sultanate** .... (former nation/state/empire)
   (World, Africa, Somalia) [8698189]
   Ajurān

3. ☐ ⛶ **Akwamu** .... (former nation/state/empire)
   (World, Africa) [8711722]

4. ☐ ⛶ **Alwa** .... (former nation/state/empire)
   (World, Africa, Nubia) [6000219]
   Alodia

5. ☐ ⛶ **Anziku, Kingdom of** .... (former nation/state/empire)
   (World, Africa, Congo) [8698248]
   Kingdom of Anziku
   Teke
   Teke, Kingdom of
   Tio kingdom
   Tyo
   Tyo, Kingdom of

6. ☐ ⛶ **Ashanti** .... (former nation/state/empire)
   (World, Africa, Ghana) [6000434]
   Asante
   Asante empire
   Ashanti empire

7. ☐ ⛶ **Axumite Empire** .... (former nation/state/empire)
   (World, Africa, Ethiopia) [7024409]
   Vernacular: Aksum
   Aksoum, Le Royaume d'
   Aksum
   Aksumite Empire
   Aksum, Kingdom of
   Axum
   Axum, Kingdom of
   Kingdom of Aksum
   Kingdom of Axum
   Mangiśta Aksum
   Royaume d'Aksoum

➡ **Names:**
   Kush (**preferred**,C,V,display)
   Cush (C,V)
   Kingdom of Kush (C,V)
   Kush, Kingdom of (C,V)

➡ **Hierarchical Position:**
   ⛶ World (facet)
   ⛶ .... Africa (continent) (P)
   ⛶ .... Nubia (general region) (P)
   ⛶ .... Kush (former nation/state/empire) (P)

➡ **Place Types:**
   former nation/state/empire (**preferred**, C) .... ca. 1440 BCE-300 CE
   historical region (C)
   national region (H)
   kingdom (H)
   Nubian (C)

➡ **Related geographic places:**
   capital is .... **Napata** .... (deserted settlement)
   .... (World, Africa, Sudan, Northern) [8711647]
   .... ca. 790-591 BCE
   capital of .... **Meroë** .... (deserted settlement)
   .... (World, Africa, Sudan, Nile) [7000856]
   .... from 591 BCE

Getty

TGN In Focus – Broadening Hierarchies

Hierarchical Position:
- ⬡ World (facet)
- ⬡ .... Africa (continent) (P)
- ⬡ .... Egypt (former nation/state/empire) (P)

Additional Parents:
- ⬡ World (facet)
- ⬡ .... Byzantine Empire (former nation/state/empire) (P,H)
- ⬡ .... Egypt (former nation/state/empire)

- ⬡ World (facet)
- ⬡ .... Roman Empire (former nation/state/empire) (P,H)
- ⬡ .... Egypt (former nation/state/empire) (P,H) from 30 BCE

⬡ Top of the TGN hierarchy (hierarchy root)
⬡ .... World (facet)
⬡ .... Africa (continent)
➡ .... Nubia (general region)
.... Alwa (former nation/state/empire)
.... Ballānah (area) [N]
.... Buhen (deserted settlement) [N]
⬡ .... Kush (former nation/state/empire)
.... Makuria (former nation/state/empire) [N]
.... Mirgissa (deserted settlement) [N]
.... Qustul (area) [N]
.... Semna (deserted settlement) [N]
.... Wawat (former nation/state/empire)

☐ ⬡ Top of the TGN hierarchy (hierarchy root)
☐ ⬡ .... World (facet)
☐ ⬡ .... Africa (continent)
☐ ⬡ .... Nubia (general region)
☐ ➡ .... Kush (former nation/state/empire)
☐ .... Athar an Naq`a (deserted settlement) [N]
☐ .... Athar el Musawwrat es Safra (deserted settlement) [N]
☐ .... Kerma (deserted settlement) [N]
☐ .... Meroë (deserted settlement) [N]
☐ .... Napata (deserted settlement) [N]

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TGN In Focus – Current and Upcoming
Native American / First Nation sites – Florentine Codex Project

⚑ Kituhwa (deserted settlement)

Coordinates:
Lat: 35 26 13 N *degrees minutes*   Lat: 35.4370 *decimal degrees*
Long: 083 24 25 W *degrees minutes* Long: -83.4071 *decimal degrees*

Note: Kituhwa is the site of the Cherokees' most important town and spiritual/cultural center, and is considered by some to be the originating point of all Cherokees. Moundworks, farms, and a council house were known to exist here prior to the mid-1800s. By the 1860s, the land was taken by settlers and the town destroyed. In 1996, the land was purchased by Cherokee elders to preserve the site.

Names:
  Kituhwa (**preferred**,C,V)

Hierarchical Position:
  World (facet)
  .... North and Central America (continent) (P)
  .... United States (nation) (P)
  .... North Carolina (state) (P)
  .... Swain (county) (P)
  .... Kituhwa (deserted settlement) (P)

Place Types:
  deserted settlement (**preferred**, C)
  historic site (C)
  mound (C)
  Cherokee (C)

Names:
  Nicoya (**preferred**,C,V,Spanish....N)
  Necoc Yaotl (H,V,Nahuatl,U)   .... meaning "between two waters [rivers]"

Hierarchical Position:
  World (facet)
  .... North and Central America (continent) (P)
  .... Costa Rica (nation) (P)
  .... Guanacaste (province) (P)
  .... Nicoya (inhabited place) (P)

Getty
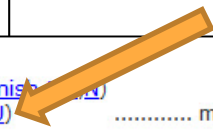
TGN In Focus: The Future

→ **Investigate inclusion of public data sets**

Sites like scholar-driven Pleiades offer free and open, downloadable archaeological data that can integrate / merge with TGN; ARIADNE project partners; Wikidata?

→ **Continued outreach with Getty partners**

◆ **GCI – AATA submissions; Linked Conservation Data**
Florentine Codex project

◆ **Continue with lost kingdoms/settlements/sites**

Getty

Thank you.

Getty

CHIN, RCIP, AASLH, Nomenclature Contributions to the
Art & Architecture Thesaurus

Antonio Beecroft
Data Standards Editor, Getty Vocabularies

Getty

CHIN/RCIP/Nomenclature Contributions to the AAT

Réseau canadien d'information sur le patrimoine (RCIP) and Canadian Heritage Information Network (CHIN) submitted approximately 15,000 records to the AAT, of which ~5000 were merged into existing records. These represent French/English equivalents, expanding the number of French terms in the AAT, and adding more granular content, particularly in the Objects facet of the AAT.

CHIN/Nomenclature Contributions Process

1. Broader hierarchical contexts of contributed terms are mapped from Nomenclature to AAT to make potential merges of individual concepts possible (the CHIN/Nomenclature hierarchical structure does not match AAT).

2. Data in Nomenclature records is matched to and merged with existing AAT concepts.

3. New concepts that are not merged are moved to <temporary alphabetical lists> in appropriate places in the AAT hierarchy.

4. Placement of new concepts in AAT is evaluated, and checked again for duplicates (where CHIN/Nomenclature English Descriptors diverge from the AAT English Descriptor) .
Comparing the Nomenclature hierarchy with the AAT, in around 70% of cases it seems that the anticipated placement is close, but 30% or more diverge and an editorial decision must be made.

5. Records in temporary hierarchies gain additional content and context (Scope Notes, Associative Relationships, plural Descriptors) and are moved to more specific places in the AAT.

Getty

Hierarchies were mapped from Nomenclature to AAT to ensure accurate merges (Nomenclature, AAT hierarchies do not match one-to-one).

Matching subjects required the broader concepts for terms for the purpose of mapping.

CHIN/Nomenclature broader contexts were mapped to AAT broader contexts (in a spreadsheet).

	300238982 personal equipment		NA		300238982 personal equipment	300178802 costume OR 300212998 costume components OR 300236657 equipment for costume OR 300210821 costume groupings OR 300238982 personal equipment OR 300198399 containers for personal use	Orthopedic Brace	Neck Brace	
2774									
2775	300238982 personal equipment		NA		300238982 personal equipment	300178802 costume OR 300212998 costume components OR 300236657 equipment for costume OR 300210821 costume groupings OR 300238982 personal equipment OR 300198399 containers for personal use	Pacifier		

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2. CHIN/Nomenclature records are matched to and merged with existing AAT concept records under matching broader concepts.

Sources and Contributors:

油畫 (視覺作品)............ [AS-Academia Sinica Preferred]
.... 大英百科全書線上繁體中文版 September 15, 2009
.... 大英簡要藝術百科全書 Vol. 9,pp. 186
.... 故宮後設資料需求規格書 p.6
.... 智慧藏百科全書網 September 15, 2009
.... 航文當代大辭典 p.1226
.... 牛津當代大辭典 p.1275
huile (œuvres visuelles)............ [CHIN / RCIP, VP]
.... CHIN database (1988-)
huiles (œuvres visuelles)............ [CHIN / RCIP, VP]
.... CHIN database (1988-)
Ölmalerei............ [Belvedere Preferred, VP]
.... Österreichische Galerie Belvedere database (2000-)
oil painting (visual work)............ [VP]
.... Getty Vocabulary Program rules
oil paintings (visual works)............ [VP Preferred]
.... Constable, Painter's Workshop (1954) 96, in text
.... Doerner, Materials of the Artist (1934) 98, in text
.... Gottsegen, Manual of Painting Materials (1987) 226, section title, & index
.... Grove Art Online (2008-)
.... Moreau-Vauthier, Technique of Painting (1912) IND
.... Zinkham and Parker, Descriptive Terms for Graphic Materials (1986)
oils (visual works)............ [VP]
.... Getty Vocabulary Program rules
Ölgemälde............ [IfM-SMB-PK Preferred]
.... Duden [online] (2011-) http://www.duden.de/node/717480/revisions/1200139/view
.... DWDS - Digitales Wörterbuch der deutschen Sprache [online] (2008-) http://www.dwds.de
/?view=1&qu=%C3%96lgem%C3%A4lde
.... GND - Gemeinsame Normdatei http://d-nb.info/gnd/4043238-5
olieverfschildering............ [RKD, AAT-Ned]
.... AAT-Ned (1994-)
olieverfschilderingen............ [RKD, AAT-Ned Preferred]
.... AAT-Ned (1994-)
paintings, oil (visual works)............ [VP]
.... Getty Vocabulary Program rules
peinture à l'huile (œuvres visuelles)............ [CHIN / RCIP, VP]
.... CHIN database (1988-)
peintures à l'huile (œuvres visuelles)............ [CHIN / RCIP Preferred, VP]
.... CHIN database (1988-)
pintura al óleo (obra visual)............ [CDBP-SNPC Preferred]
.... Alvarez et al., Diccionario de la decoración (1968) 498
.... Dewey, Sistema de Clasificación Decimal Dewey e Índice Relativo (2000) 591
.... Moliner, Diccionario de uso del español (2004) 684
pinturas al óleo (obra visual)............ [CDBP-SNPC]
.... Comité, Plural del término en singular
you hua............ [AS-Academia Sinica]
.... AS-Academia Sinica data (2014-)
yóu huà............ [AS-Academia Sinica]
.... AS-Academia Sinica data (2014-)
yu hua............ [AS-Academia Sinica]
.... AS-Academia Sinica data (2014-)

Subject: ..... [AS-Academia Sinica, CDBP-SNPC, CHIN / RCIP, IfM-SMB-PK, RKD, AAT-Ned, VP]
.... AAT-Ned (1994-)
.... CHIN database (1988-)

Sources and Contributors:

body color (water-base paint)............ [VP]
.... Mayer, Artist's Handbook of Materials and Techniques (1981)
.... Mayer, Dictionary of Art Terms and Techniques (1969) 42
.... Webster's Third New International Dictionary (1961)
body colour (water-base paint)............ [VP]
.... Lucie-Smith, Thames & Hudson Dictionary of Art Terms (1986) syn. to gouache
gouache (paint)............ [CDBP-SNPC Preferred, CHIN / RCIP Preferred, GCI Preferred, RKD, AAT-Ned Preferred, VP Preferred]
.... AAT-Ned (1994-)
.... AATA database (2002-) 124305 checked 26 January 2012
.... Chambers, Diccionario científico y tecnológico (1979) 135
.... CHIN database (1988-)
.... Collocott, Chambers diccionario científico (1979) 135
.... Gottsegen, Manual of Painting Materials (1987) 248
.... Lucie-Smith, Thames & Hudson Dictionary of Art Terms (1986)
.... Mayer, Artist's Handbook of Materials and Techniques (1981) 306; 291
.... Mayer, Dictionary of Art Terms and Techniques (1969) 173
.... MFA Conservation and Art Material Encyclopedia Online: CAMEO (2005-)
.... Museum Prototype Project, Medium of Objects Frequency Report (1985)
.... Tesauro de Arte & Arquitectura (TAA) [online] (2000-)
.... Van Dale Engels-Nederlands (1989)
.... Worcester Art Museum Library, List of subject headings, unpub. (1976) reference given after "water color painting"
guache (paint)............ [VP]
.... MFA Conservation and Art Material Encyclopedia Online: CAMEO (2005-)
Guasch............ [VP]
.... MFA Conservation and Art Material Encyclopedia Online: CAMEO (2005-)
guazzo (paint)............ [VP]
.... MFA Conservation and Art Material Encyclopedia Online: CAMEO (2005-)
opaque watercolor............ [VP]
.... Gottsegen, Manual of Painting Materials (1987) 248
.... Wehlte, Materials and Techniques of Painting (1982) 480
opaque watercolour............ [VP]
.... Lucie-Smith, Thames & Hudson Dictionary of Art Terms (1986) used in entry for "gouache"
pintura al gouache............ [CDBP-SNPC, VP]
.... Mayer, Materiales y técnicas del arte, 1985 271
.... Tesauro de Arte & Arquitectura (TAA) [online] (2000-)

Subject: ..... [CDBP-SNPC, CHIN / RCIP, GCI, RKD, AAT-Ned, VP]
.... AATA database (2002-) 124305 checked 26 January 2012
.... CHIN database (1988-)
.... Van Dale Engels-Nederlands (1989)

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Concepts new to the AAT

For terms that are new to AAT, many remain in a temporary alphabetical lists, until they are reviewed and incorporated into the logical structure of the AAT.

Research

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Full Record Display

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Click the 🔧 icon to view the hierarchy.

Semantic View (JSON, RDF, N3/Turtle, N-Triples)

ID: 300435751
Page Link: http://vocab.getty.edu/page/aat/300435751

Record Type: guide term

🔧 **<temporary alphabetical list: equipment for transmitting and reproducing sound>** (<equipment for transmitting and reproducing sound>, <equipment by process>, ... Furnishings and Equipment (hierarchy name))

Terms:
  temporary alphabetical list: equipment for transmitting and reproducing sound (preferred,C,U,English,UF,U,U)

Facet/Hierarchy Code: V.TH

Hierarchical Position:
  🔧 Objects Facet
  🔧 .... Furnishings and Equipment (hierarchy name) (G)
  🔧 .... Tools and Equipment (hierarchy name) (G)
  🔧 .... equipment (G)
  🔧 .... <equipment by process> (G)
  🔧 .... <equipment for transmitting and reproducing sound> (G)
  🔧 .... <temporary alphabetical list: equipment for transmitting and reproducing sound> (G)

Sources and Contributors:

  Subject: ..... [VP]

.. <equipment for transmitting and reproducing sound>
.... <temporary alphabetical list: equipment for transmitting and reproducing sound>
.... annunciator bell
.... audio amplifier
.... audiocassette player
.... audiocassette recorder
.... audio disk recorder
.... audio equipment case
.... audio mixer
.... audio player
.... audio recorder
.... audio recording album
.... audio recording case
.... audiotape album
.... audiotape case
.... audio tape eraser
.... audio wire recorder
.... bullhorn
.... call button
.... clip microphone
.... console phonograph
.... dictating machine
.... dictating machine shaver
.... digital audio player
.... dinner bell
.... dinner horn
.... eight-track player
.... factory bell
.... factory whistle
.... fire trumpet
.... gong mallet
.... hailing trumpet
.... jukebox speaker
.... phonograph case
.... phonograph crank
.... phonograph foil
.... phonograph horn
.... phonograph key
.... phonograph mandrel
.... phonograph needle cutter
.... phonograph winder
.... portable phonograph

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Concepts with homographs

candle extinguisher [English]
(candle extinguisher/temp.parent/CHIN lighting devices/lighting devices/furnishings by form or function/furnishings/Furnishings/Furnishings and Equipment/Objects Facet)
ID: 300422535   Cand/Stat: C/NC   Contributors: CHIN / RCIP; AASLH

Match: extinguishers (candlestick accessory) Variant: candle extinguishers [English]
(extinguishers/lighting device components/furnishings components/components by specific context/components/Components/Objects Facet)
ID: 300037668   Cand/Stat: N/IP   Contributors: VP; CDBP-SNPC; RKD, AAT-Ned

crusie lamp [English]
(crusie lamp/temp.parent/CHIN lighting devices/lighting devices/furnishings by form or function/furnishings/Furnishings/Furnishings and Equipment/Objects Facet)
ID: 300424131   Cand/Stat: C/NC   Contributors: CHIN / RCIP; AASLH

Match: crusies Variant: crusie lamps [English]
(crusies/wick channel lamps/lamps by form/lighting devices by form/lighting devices/furnishings by form or function/furnishings/Furnishings/Furnishings and Equipment/Objects Facet/lamps)
ID: 300037599   Cand/Stat: N/IP   Contributors: IfM-SMB-PK; VP; AS-Academia Sinica; CDBP-SNPC

fluorescent tube [English]
(fluorescent tube/temp.parent/CHIN lighting devices/lighting devices/furnishings by form or function/furnishings/Furnishings/Furnishings and Equipment/Objects Facet)
ID: 300425762   Cand/Stat: C/NC   Contributors: CHIN / RCIP; AASLH

Match: fluorescent lamps (lighting device components) Variant: fluorescent tubes [English]
(fluorescent lamps/electric discharge lamps/electric lamps/light bulbs/lighting device components/furnishings components/components by specific context/components/Components/Objects Facet)
ID: 300037666   Cand/Stat: N/IP   Contributors: VP; CDBP-SNPC; GCI; RKD, AAT-Ned

incandescent bulb [English]
(incandescent bulb/temp.parent/CHIN lighting devices/lighting devices/furnishings by form or function/furnishings/Furnishings/Furnishings and Equipment/Objects Facet)
ID: 300426433   Cand/Stat: C/NC   Contributors: CHIN / RCIP; AASLH

Match: incandescent lamps (lighting device components) Variant: incandescent bulbs [English]
(incandescent lamps/electric lamps/light bulbs/lighting device components/furnishings components/components by specific context/components/Components/Objects Facet)
ID: 300180294   Cand/Stat: N/IP   Contributors: VP; CDBP-SNPC; GCI; RKD, AAT-Ned

Matching Duplicate Concepts/Terms

Duplicate reports match new records to homographs in the AAT. For CHIN/Nomenclature records, comparing a branch of hierarchy from a given parent key to another branch.

Not all homographs are duplicates. Editors determine what is, and is not, a potential merge.

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Records in temporary hierarchies are reviewed, and additional content and context is added

Ongoing review and edits:

- *Addition of English Descriptors in plural form.*

- *Addition of Scope Notes and sources.*

- *Records are moved to appropriate places in AAT and attendant adjustments where parent/child relationships must be reconciled is made.*

- *Assign Associative Relationships where appropriate.*

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Thank you.

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