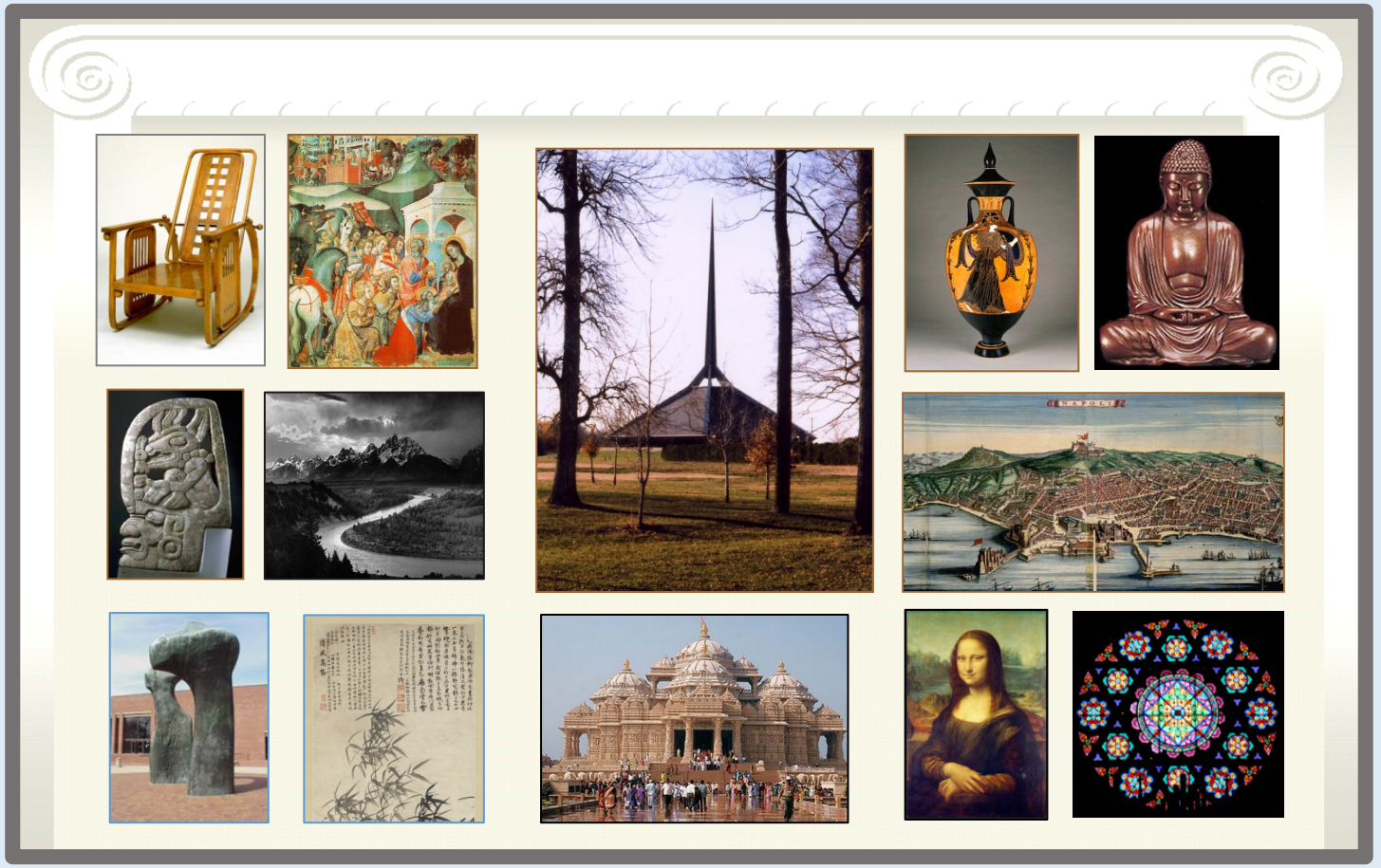

THE GETTY VOCABULARIES: USAGE EXAMPLES AND FUTURE INITIATIVES

Jonathan Ward
Senior Editor
Getty Vocabulary Program
CIDOC 2017, Tbilisi

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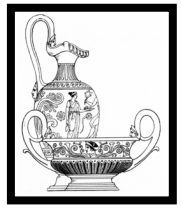
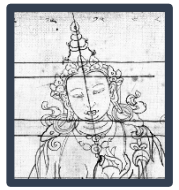
The Getty Vocabularies

Discover, link, access, retrieve, research, catalog, index





Who are our users? How do they access?

- *Museums, archives, universities, libraries, governments*
- *Incorporated into collection management systems locally, or into products like TMS (The Museum System by Gallery Systems)*
- *Incorporated into local thesauri, for smaller collections, for those who don't need the entire data set*
- *Online research tool, to populate catalog entries with Getty IDs*
- *Linked within online databases (standards: VIAF, Wikipedia)*

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- Why Vocabularies?
- There are many challenges and barriers to providing access to cultural heritage information
- The multilinguality and semantic links of the Getty vocabularies may aid breaking down some of these barriers
- *E.g., different cultures may refer to the style of very similar vases by different terms*

Top of the AAT hierarchies
.... Styles and Periods Facet
..... Styles and Periods (hierarchy name)
..... <styles, periods, and cultures by region>
..... Asian
..... East Asian
..... Chinese (culture or style)
..... Chinese ceramics styles
..... famille (ceramics style)
..... famille rose
..... fencai

Linguistic and Cultural Barriers to Access: Examples from National Palace Museum, Taipei, and the British Museum, London

Ch'ien-lung Reign, Ch'ing dynasty (1644-1911)
清 乾隆 粉彩蟠桃天球瓶

Ch'ien-lung Reign, Ch'ing dynasty (1644-1911)

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Explore more information

Category

Intended for

Clothing & dress

Made of

muka
dogskin
dog hair
natural dye

Type of

kahu kuri
cloaks

Technique used

weaving
hand sewing

Influenced by

Canis lupus familiaris
Te Huringa 1. 1800 - 1900
Te Āti Awa [attributed]

Place

Made in

New Zealand

People & Organisations

Made by

Unknown

Belonged to

Sir Walter Buller
Walter Buller Estate
Walter Leopold Buller

Te Papa Tongarewa museum
Wellington, NZ
AAT, TGN, ULAN linked terms

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Europeana enriches its data with the AAT

By Valentine Charles and Cécile Devarenne, Europeana Foundation

The Getty Research Institute announced last March the release of their Art and Architecture Thesaurus (AAT) as Linked Open Data. This release opened many opportunities for Europeana.

AAT is a rich, structured and multilingual vocabulary including terms, descriptions, and other information for generic concepts related to art, architecture, other types of cultural heritage and conservation.

AAT has always been an important resource for Europeana's data providers, especially museums. However, until now Europeana was not in the position to exploit it: firstly because the vocabulary was not openly available, secondly because Europeana didn't have the technical means to exploit it.

The implementation of the Europeana Data Model (EDM) was the first step towards the re-use of widespread vocabularies such as AAT. EDM embraces the principles of the Semantic Web and therefore can be seamlessly integrated with a network of vocabularies at a semantic level. EDM gives support for contextual resources — the so-called 'semantic layer', including concepts from 'value vocabularies' like thesauri, authority lists, classifications, either coming from the network of Europeana's providers or from third-party data sources. Since EDM is geared towards re-using existing semantic resources, the publication of AAT as Linked Open Data was an opportunity to seize.

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VIAF:
Virtual International Authority File

Wikipedia, Authority Control

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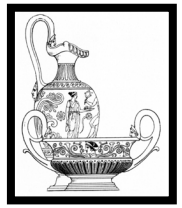
The Getty Vocabularies

Discover, link, access, retrieve, research, catalog, index



International Translation Projects

AAT: Chile, Germany, Taiwan and Mainland China translations. Future agreements for substantial amounts of terms in Polish, Hebrew, and Portuguese. We hope for Russian, Arabic, Japanese, and of course Georgian contributions as well.

Terms are loaded in batches. Translators usually progress through a single hierarchy, and concentrate on their most needed terms

New terms with no English equivalent are added

Translators are sourced and credited

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ID: 300053368

impasto (<painting techniques by application method or circumstances and Techniques (hierarchy name))

Note: Application of paint in thick, opaque masses, usually with a well-loade

Terms:

impasto (**preferred**,C,U,English-P,D,U,U)
(Spanish,AD,U,U)
(Dutch-P,D,U,U)
impasto painting (C,U,English,UF,U,U)
loaded brush painting (C,U,English,UF,U,U)
pastose painting (C,U,English,UF,U,U)
厚塗 (C,U,Chinese (traditional)-P,D,U,U)
厚塗法 (C,U,Chinese (traditional),UF,U,U)
hòu tú (C,U,Chinese (transliterated Hanyu Pinyin)-P,UF,U,U)
hou tu (C,U,Chinese (transliterated Pinyin without tones)-P,UF,U,U)
hou t'u (C,U,Chinese (transliterated Wade-Giles)-P,UF,U,U)
Pastos (impasto) (C,U,German-P,D,U,U)
pintura al impasto (C,U,Spanish-P,D,U,U)

Sources and Contributors:

厚塗..... [AS-Academia Sinica Preferred]
..... 藝術名詞與技法辭典 223
..... 雄獅西洋美術辭典 413
厚塗法..... [AS-Academia Sinica]
..... 大英百科全書線上繁體中文版 2011.08.29
..... 大英視覺藝術百科全書 Vol. 9,pp. 181
..... 智慧藏百科全書網 2011.08.29
hou tu..... [AS-Academia Sinica]
..... AS-Academia Sinica
hòu tú..... [AS-Academia Sinica]
..... AS-Academia Sinica
hou t'u..... [AS-Academia Sinica]
..... AS-Academia Sinica
impasto..... [CDBP-DIBAM, RKD, AAT-Ned Preferred, VP Preferred]
..... AAT-Ned (1994-)
..... Constable, Painter's Workshop (1954) 81, thick, opaque paint
..... Encyclopaedia Britannica (1973)
..... Jewett, Glossary for Recording the Condition of an Artifact (1980s)
..... Oxford Companion to Art (1984)
..... Pierce, From Abacus to Zeus (1987) paint applied as thick paste
..... Rico y Martínez, Diccionario Técnico Akal de conservación y restauraci
español-alemán-inglés-italiano-francés (2003) 788
impasto painting..... [VP]
..... Getty Vocabulary Program rules
loaded brush painting..... [VP]
..... Mayer, Dictionary of Art Terms and Techniques (1969)
Pastos (impasto)..... [VP]
..... Getty Vocabulary Program rules
pastose painting..... [VP]
..... Mayer, Dictionary of Art Terms and Techniques (1969)
pintura al impasto..... [CDBP-DIBAM Preferred]
..... TAA database (2000-)

Translations are loaded directly into existing records

Checked by editors
Published regularly

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Coordinating contributions

- Advising re. mapping their existing data to format for loading into our editorial system
- 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 America, Europe, Asia, and the Middle East—meet every year or so to discuss AAT translation Projects 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

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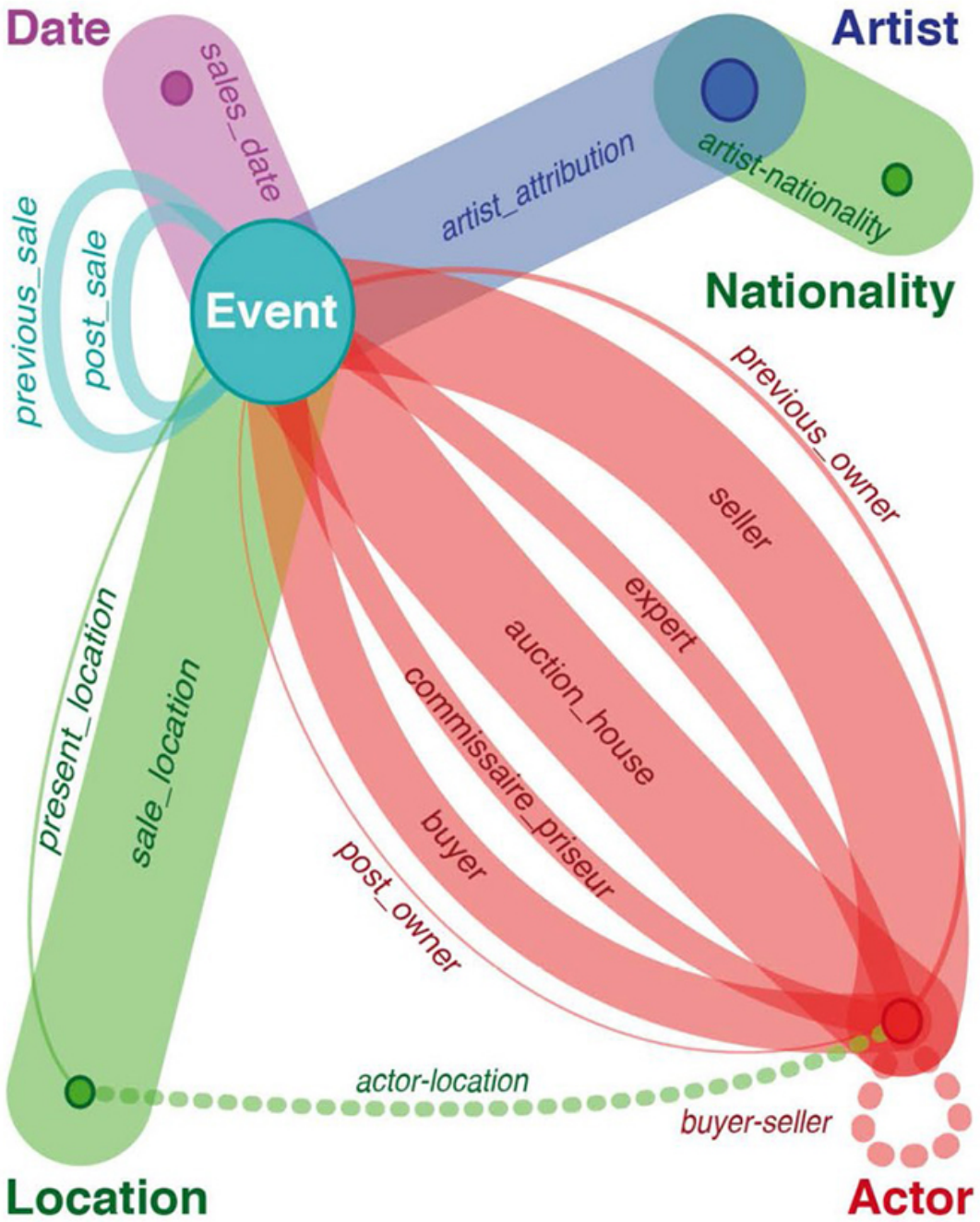

Provenance Index Remodel Project (PIR)

- Centuries of sales data of artworks, 1.7 million events, from ledgers and sales documents (sale events, artists, works, prices, locations, work types)
- Complete conceptual and technical overhaul of 30-year-old project
- Integration of Getty Vocabularies into data (ULAN: artists, TGN: places, AAT: work types and other data)
- All LOD

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Ongoing: Getty Iconography Authority

Sample record

Names in multiple languages

Users may choose the name appropriate for their needs

ID: 1000085

Names:

Avalokiteshvara
Avalokiteśvara
अवलोकितेश्वर
སྤྱན་རས་གཟིགས་
Spyan ras gzigs

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)

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…

Hierarchical Relationships

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

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*

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

Getty Vocabularies and Contributing

Presentations describing the history, scope, and characteristics of the Getty Vocabularies and how to contribute to them. For more details on contributions, see Contributing to the Getty Vocabularies. For detailed editorial rules for contributing, see the Editorial Guidelines. For comprehensive information on controlled vocabularies, see *Introduction to Controlled Vocabularies*.

- Introduction to Controlled Vocabularies: Companion Presentation ***(revised 2015)*** (PDF, 7 MB, 92pp)
- Overview of the Getty Vocabularies ***(revised 2016)*** (PDF, 5.8 MB, 103pp)
- Abridged Overview of the Getty Vocabularies ***(revised 2016)*** (PDF, 5.5 MB, 48pp)
- Multilinguality and Translating the Getty Vocabularies (PDF, 6.8 MB, 109pp)
- Contributing to the Getty Vocabularies ***(revised 2016)*** (PDF, 9.9 MB, 190pp)
- Indexing Using the Getty Vocabularies ***(revised 2016)*** (PDF, 9.9 MB, 115pp)
- AAT: Introduction and Overview ***(revised 2016)*** (PDF, 11.3 MB, 228pp)
- TGN: Introduction and Overview ***(revised 2016)*** (PDF, 4.2 MB, 100pp)
- ULAN: Introduction and Overview ***(revised 2016)*** (PDF, 5.2 MB, 116pp)
- CONA: Introduction and Overview ***(revised 2016)*** (PDF, 13.9 MB, 261pp)
- Developing Authorities Workshop (PDF, 13 MB, 332pp)
- CONA and Subject Access ***(revised 2016)*** (PDF, 4.5 MB, 116pp)
- IA: Iconography Authority: Introduction and Overview ***(revised 2016)*** (PDF, 1.9 MB, 93pp)
- Glossary and Bibliography for Vocabularies (PDF, 219 KB, 47pp)
- Getty Vocabulary Program: Overview of Our Work ***(revised 2017)*** (PDF, 7.7 MB, 96pp)

- Overviews
- Contributing
- Translating
- LOD
- ITWG
- Standards

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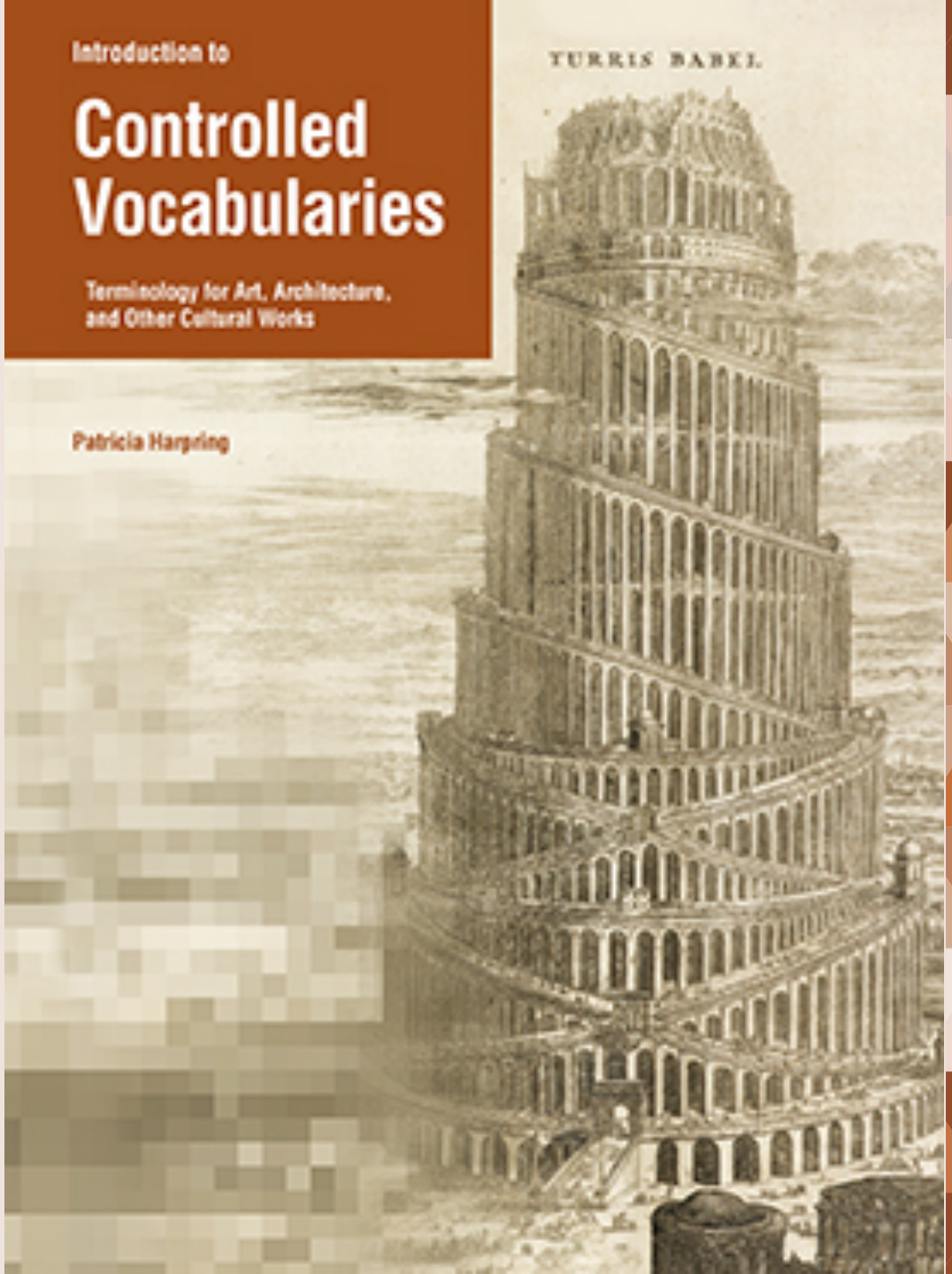
Introduction to

Controlled Vocabularies

Terminology for Art, Architecture, and Other Cultural Works

Patricia Harpring



Introdução aos

Vocabulários Controlados

Terminologia para arte, arquitetura e outras obras culturais

Patricia Harpring

COLEÇÃO GESTÃO E DOCUMENTAÇÃO DE ACERVOS:
TEXTOS DE REFERÊNCIA

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Contributions

- Easy as X-M-L…or even Excel!

- Contributors of bulk data will sign a letter of agreement

- Contributions must meet the following criteria:
  - must be submitted by an authorized contributor
  - must be within scope of the vocabulary
  - must include the minimum information
  - must be submitted in the prescribed format

- By contributing data to the vocabulary, the contributor agrees to its contributed data becoming a permanent part of the vocabulary, which is licensed in various formats and made available as Linked Open Data

vocab@getty.edu

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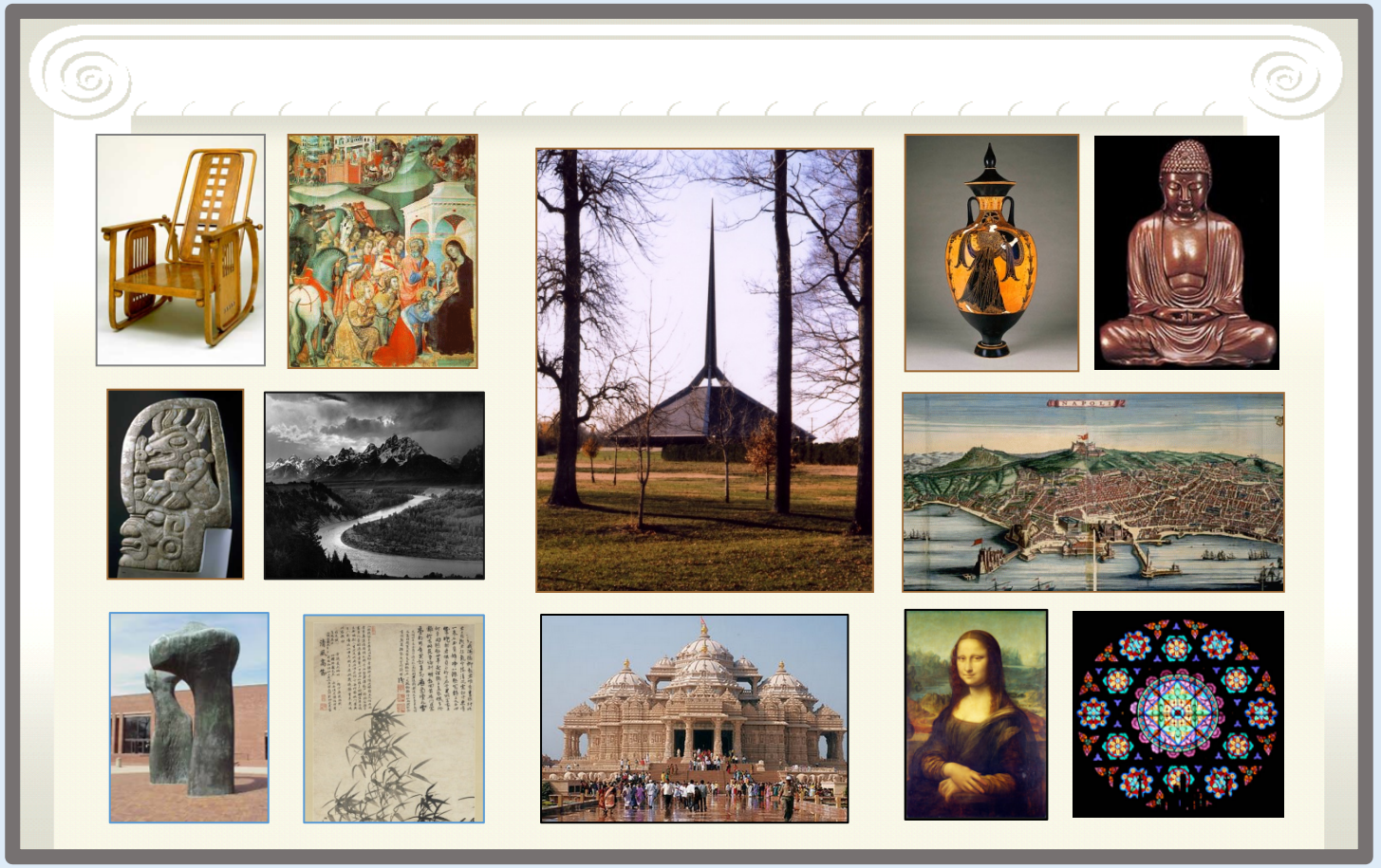

THE GETTY VOCABULARIES: USAGE EXAMPLES AND FUTURE INITIATIVES

Gregg Garcia
Software Architect
Getty Vocabulary Program
CIDOC 2017, Tbilisi

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Data Usage Examples

International translation projects of the AAT

Counts by term:

145178	English
60902	Dutch
55247	Spanish
34932	Chinese (traditional)
20471	German
19212	Chinese (transliterated Hanyu Pinyin)
19180	Chinese (transliterated Wade-Giles)
19131	Chinese (transliterated Pinyin without tones)
6510	French
5450	American English
3012	British English
2024	Latin
1793	Italian
564	Swedish
189	Portuguese

Counts by subject:

43158	English
35851	Dutch
31585	Spanish
20391	Chinese (traditional)
19145	Chinese (transliterated Hanyu Pinyin)
19136	Chinese (transliterated Wade-Giles)
19101	Chinese (transliterated Pinyin without tones)
8144	German
4101	French
1696	Latin
1394	American English
1393	British English
1272	Italian
432	Swedish
177	Portuguese

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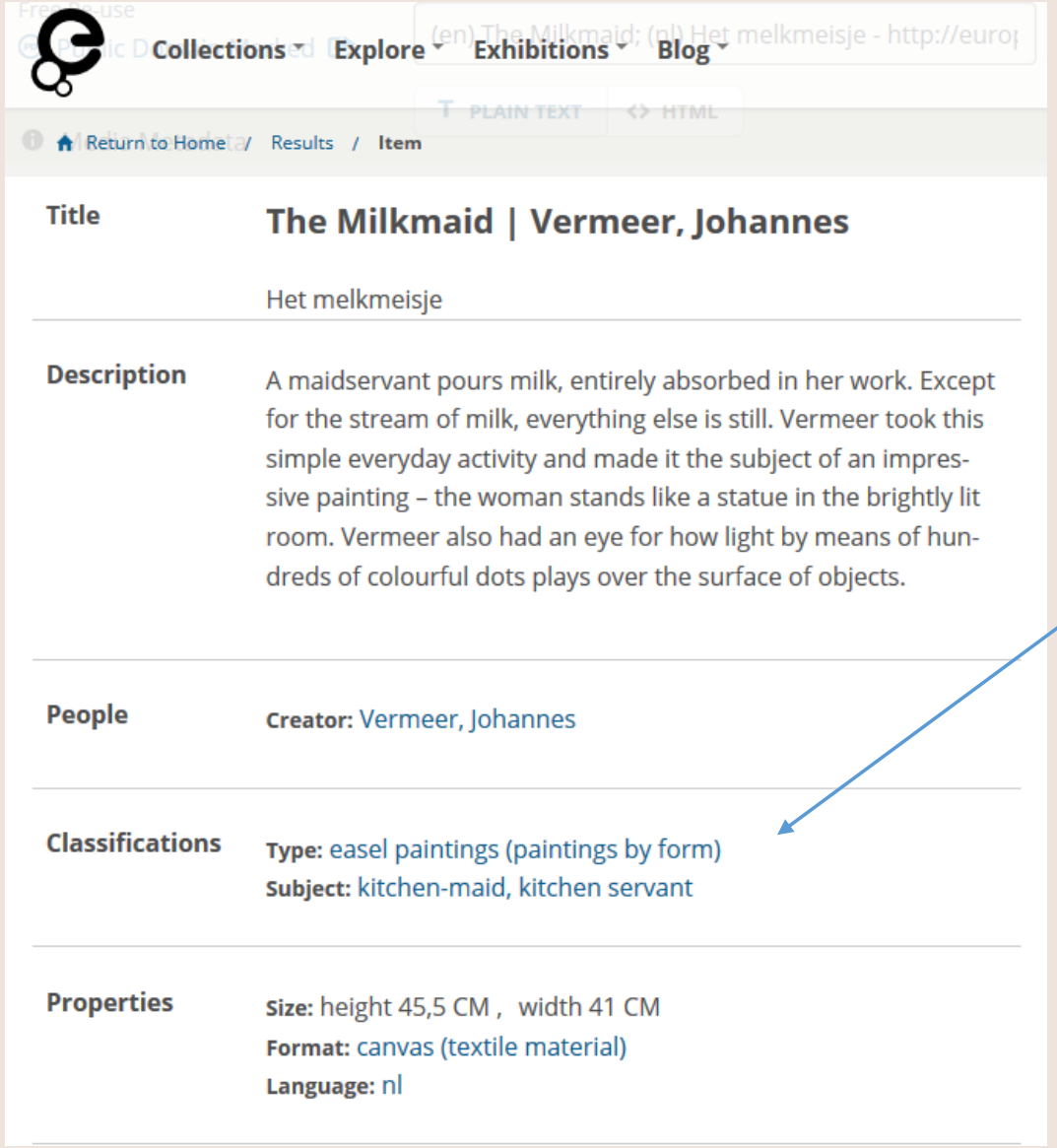
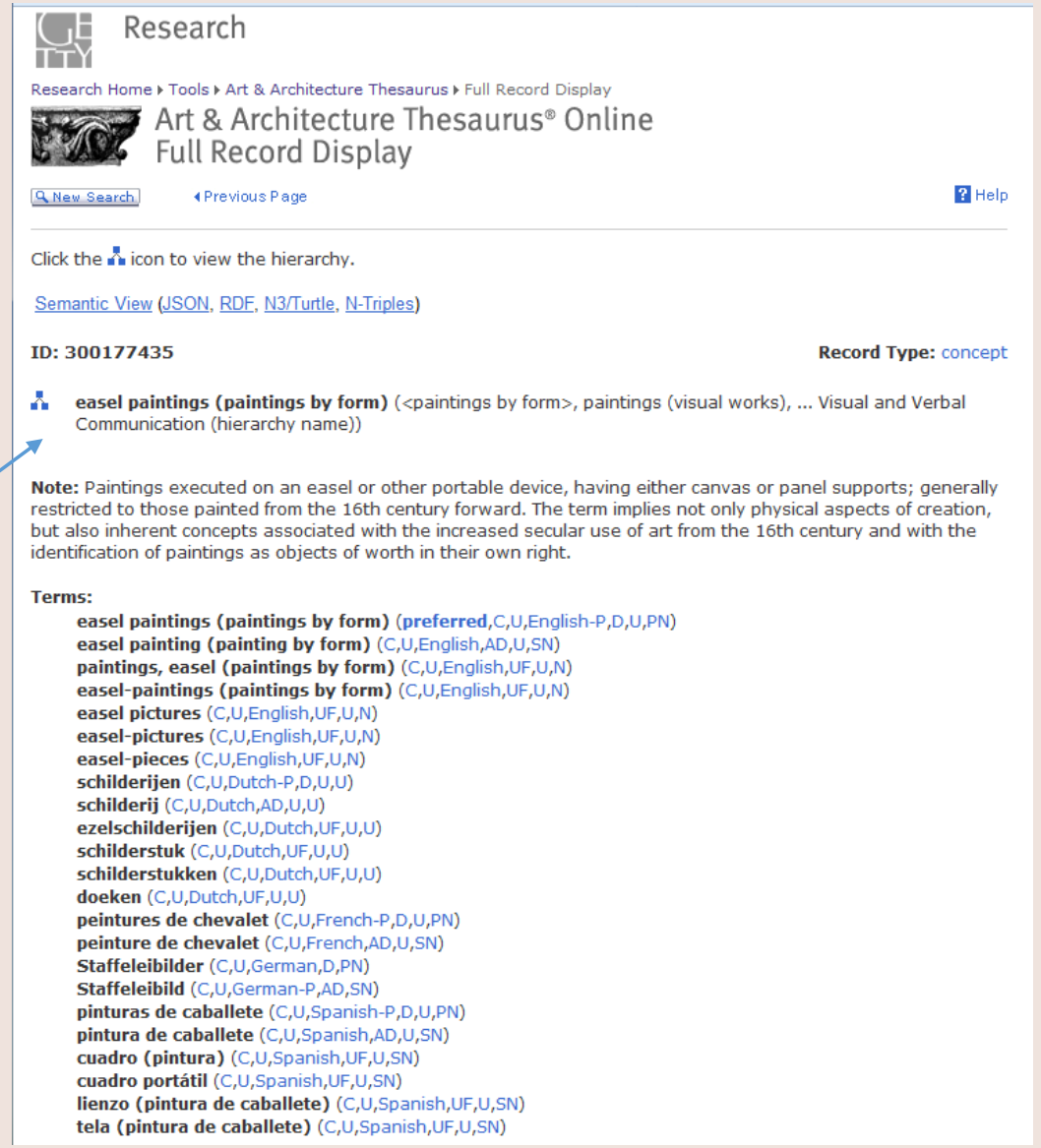
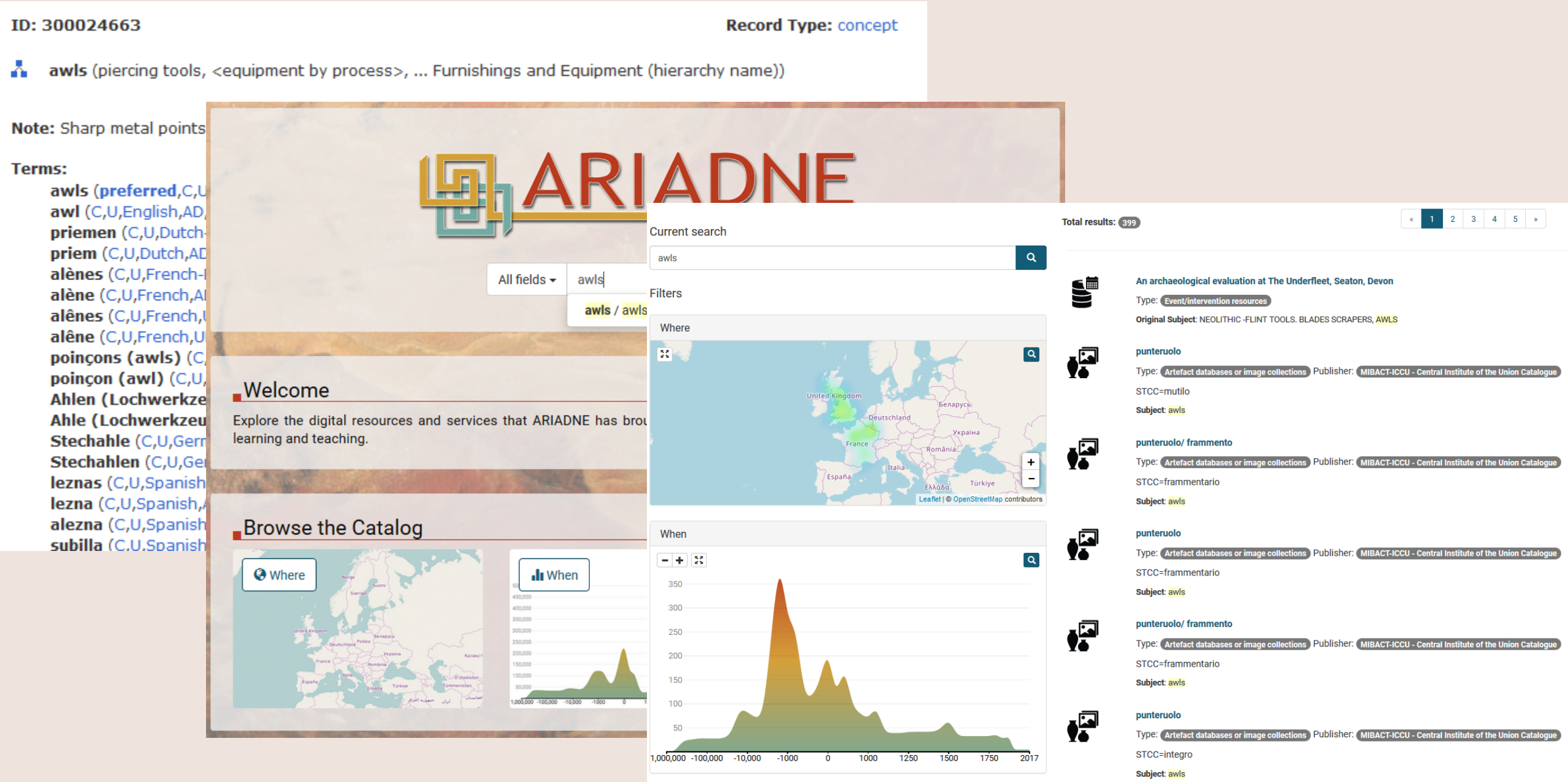
Using the Vocabularies for Indexing

- Europeana classifications linked to AAT (http://www.europeana.eu)





AAT used as “Hub” vocabulary in ARIADNE cross search for archaeological resources (http://ariadne-portal.dcu.gr/)



Getty Vocabularies in Museum collections

Gilcrease Museum, Tulsa, OK, USA

Landscape with Sunset Reflecting in Sky / Albert Bierstadt

Download Add Order Contact Enlarge

You may be interested in...

Art Item Information

About the Creator

From Gilcrease Museum:

Creator: Albert Bierstadt

Role(s): Artist

From Getty's Union List of Artist Names:

Names (all): Bierstadt, Albert

Birth Date: 1830

Death Date: 1902

Nationalities: American (North American)

Roles: American painter, 1830-1902

Gender: male

Note: Bierstadt was one of the most important landscape painters of the American West, producing large, romantic canvases of the Rocky Mountains, the Yosemite Valley, and the Native American tribes of the West. He also owned a successful photography business with his brothers, Charles and Edward, that operated in New York City from 1860 to 1866.

Related People:

- Bierstadt, Charles, partner of - person American photographer, 1819-1903
- Bierstadt, Edward, partner of - person American photographer, 1824 - ca. 1907
- Bierstadt, Charles, sibling of - person American photographer, 1819-1903
- Bierstadt, Edward, sibling of - person American photographer, 1824 - ca. 1907

Getty Vocabularies in Museum collections

Yale Center For British Art

YALE CENTER FOR BRITISH ART Search th

Collections Exhibitions Calendar Research Education Architecture Visit

Home -> Collections -> Search -> Fitzroy Street (William...

Search Details

Creator	Geoffrey Tibble, 1909–1952, British
Title	Fitzroy Street (William Coldstream and Graham Bell in an Interior)
Date	ca. 1935
Medium	Oil on canvas
Dimensions	27 x 32 inches (68.6 x 81.3 cm)
Credit Line	Yale Center for British Art, Gift of Joseph F. McCrindle, Yale LLB 1948
Accession Number	B1983.24.2
Collection	Paintings and Sculpture
Link to This Record	http://collections.britishart.yale.edu/vufind/Record/1665845
Subject Terms	artist | drawing room | family | fireplace | genre subject | hat | hearth | interior | lamp | men | mirror | molding | painter | paintings | reading | reception room | screen | visitor | women
Place Represented	England | Europe | Greater London | London | United Kingdom
Publications	*Acquisitions : The First Decade 1977-1986, Yale Center for British Art*, Yale Center for British Art, New Haven, CT, 1986, p. 19, no. 52, N590.2 A7 OVERSIZE (YCBA) Duncan Robinson, *Acquisitions : The First Decade 1977 - 1986, ,* Burlington Magazine, vol. 128, October 1986, p. 19, no. 52, N1 B87 128:3 OVERSIZE (YCBA)
Citation	Show | Text or SMS | Email
Export	RDF | XML

cropped to image, recto, unframed
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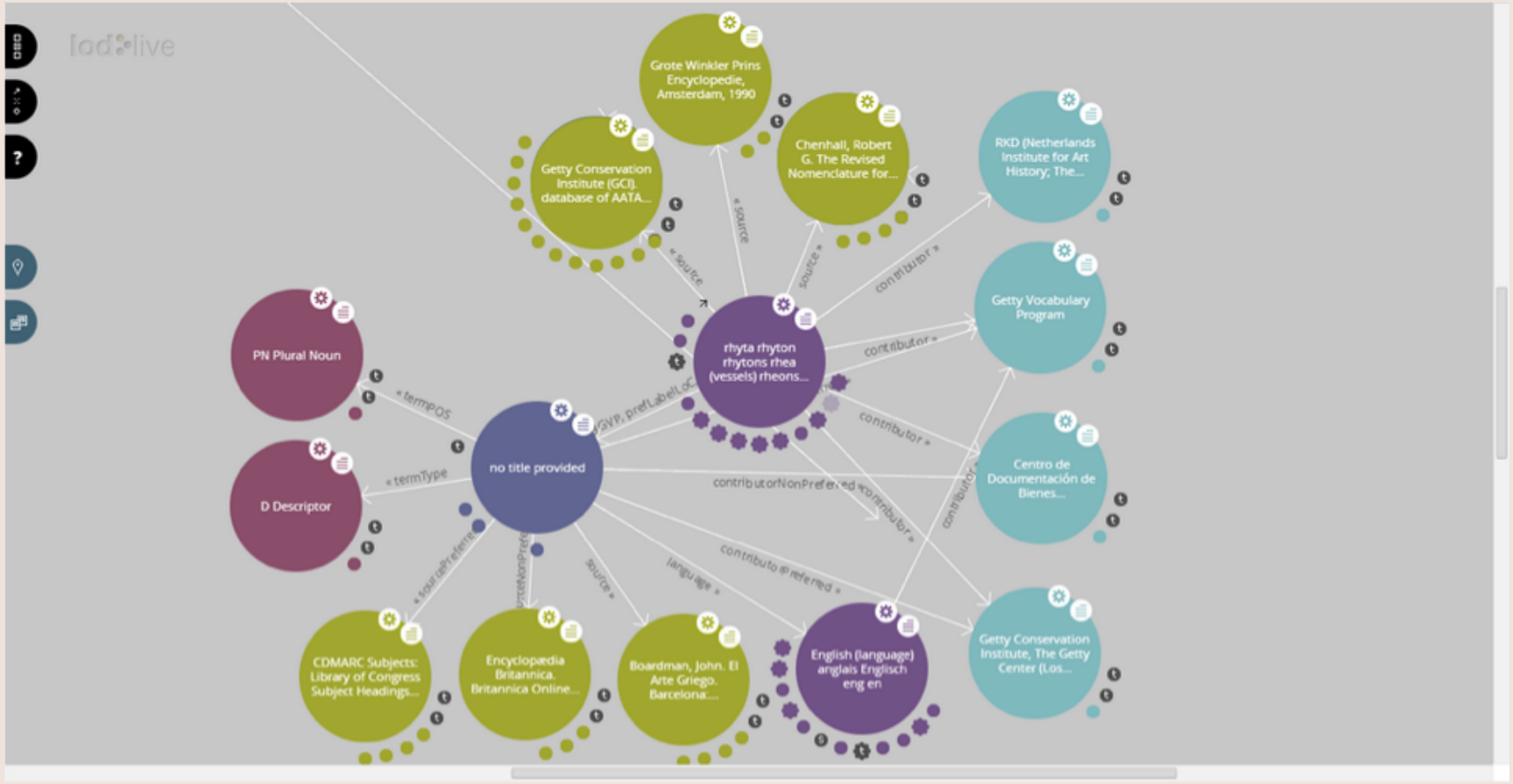
Request additional photography

If you have information about this object that may be of assistance please contact us.

	<http://vocab.getty.edu/ulan/500303557>
?:P52_has_current_owner	<http://vocab.getty.edu/ulan/500303557>
?:P55_has_current_location	<http://collection.britishart.yale.edu/id/object/1230/location/1> <http://collection.britishart.yale.edu/id/object/1230/location/2> <http://vocab.getty.edu/tgn/7014210>
?:P62_depicts	<http://collection.britishart.yale.edu/id/thesauri/genre/9> <http://collection.britishart.yale.edu/id/thesauri/subject/25883> <http://vocab.getty.edu/aat/300003990> <http://vocab.getty.edu/aat/300004417> <http://vocab.getty.edu/aat/300010279> <http://vocab.getty.edu/aat/300025103> <http://vocab.getty.edu/aat/300025136> <http://vocab.getty.edu/aat/300025928> <http://vocab.getty.edu/aat/300025943> <http://vocab.getty.edu/aat/300033618> <http://vocab.getty.edu/aat/300037592> <http://vocab.getty.edu/aat/300037682> <http://vocab.getty.edu/aat/300037737> <http://vocab.getty.edu/aat/300046106> <http://vocab.getty.edu/aat/300052267> <http://vocab.getty.edu/aat/300053134> <http://vocab.getty.edu/aat/300055474> <http://vocab.getty.edu/aat/300077176> <http://vocab.getty.edu/aat/300139140> <http://vocab.getty.edu/aat/300248178> <http://vocab.getty.edu/tgn/1000003> <http://vocab.getty.edu/tgn/7002445> <http://vocab.getty.edu/tgn/7008136> <http://vocab.getty.edu/tgn/7008591> <http://vocab.getty.edu/tgn/7011781>
?:P67_refers_to	<http://collection.britishart.yale.edu/id/getty/tgn/1000003> <http://collection.britishart.yale.edu/id/getty/tgn/7002445> <http://collection.britishart.yale.edu/id/getty/tgn/7008136> <http://collection.britishart.yale.edu/id/getty/tgn/7008591> <http://collection.britishart.yale.edu/id/getty/tgn/7011781>
?:P70_is_documented_in	<http://collection.britishart.yale.edu/id/object/1230/images>
?:P70i_is_documented_in	<http://collection.britishart.yale.edu/id/bibliography/192> <http://collection.britishart.yale.edu/id/bibliography/2335>
?:PX_display_wrap	Bibliograpic reference :: Acquisitions : The First Decade 1977-1986, Yale Center for British Art, New Haven, CT, 1986, p. 19, no. 52, N590.2 A7 + (YCBA) Bibliograpic reference :: Duncan Robinson, Acquisitions, The First Decade : 1977-1986, Burling October 1986, p. 19, no. 52, N1 B87 128:3 OVERSIZE (YCBA) Dimension height :: 68.6cm

Data Visualization Examples

Visualize a graph using lodlive (http://en.lodlive.it/?http://vocab.getty.edu/aat/300198841)



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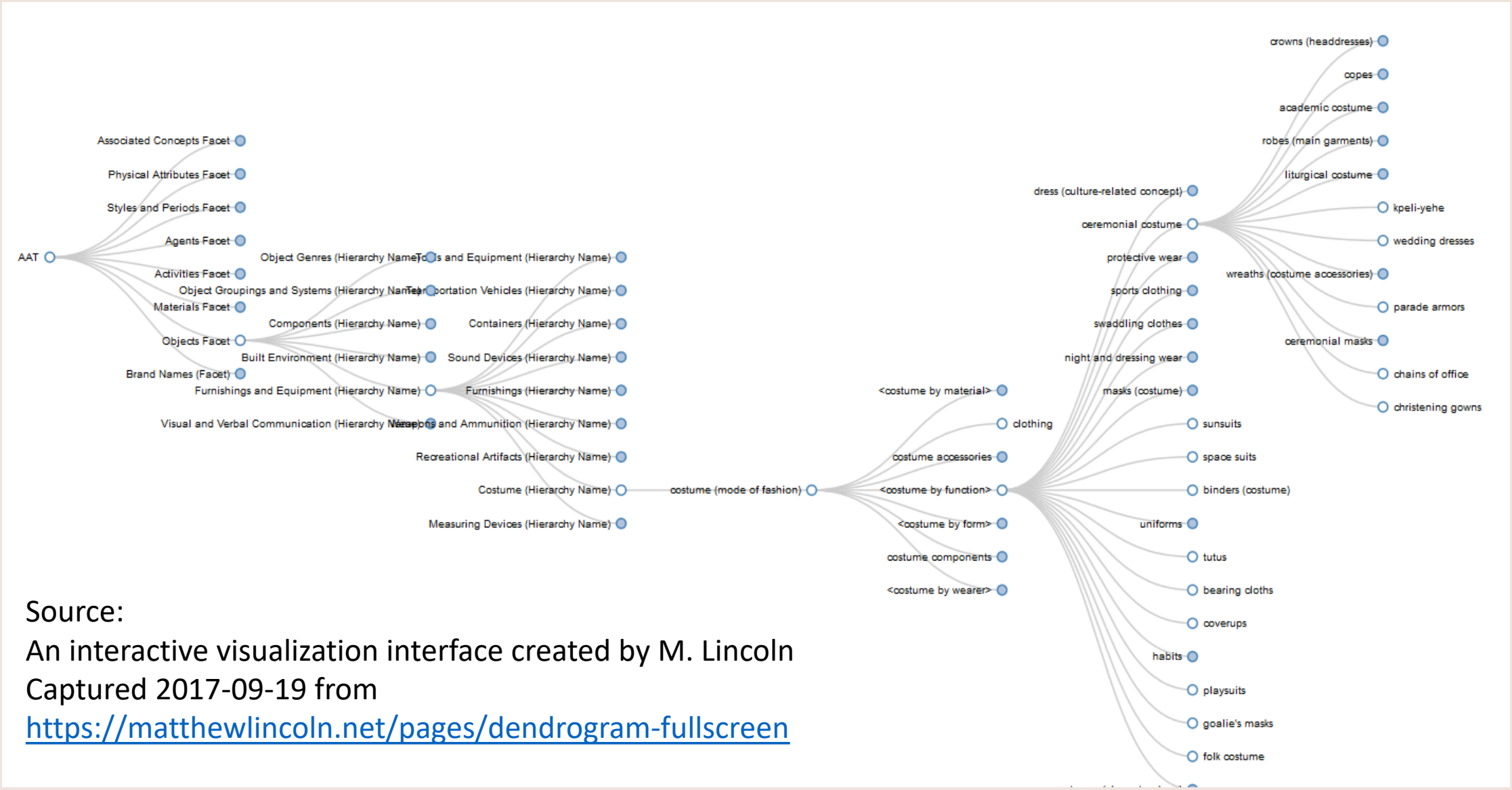
Collapsible dendrogram of AAT hierarchy by Matthew Lincoln using D3.js
https://matthewlincoln.net/2014/02/21/hierarchies-of-the-getty.html



Source:
An interactive visualization interface created by M. Lincoln
Captured 2017-09-19 from
https://matthewlincoln.net/pages/dendrogram-fullscreen

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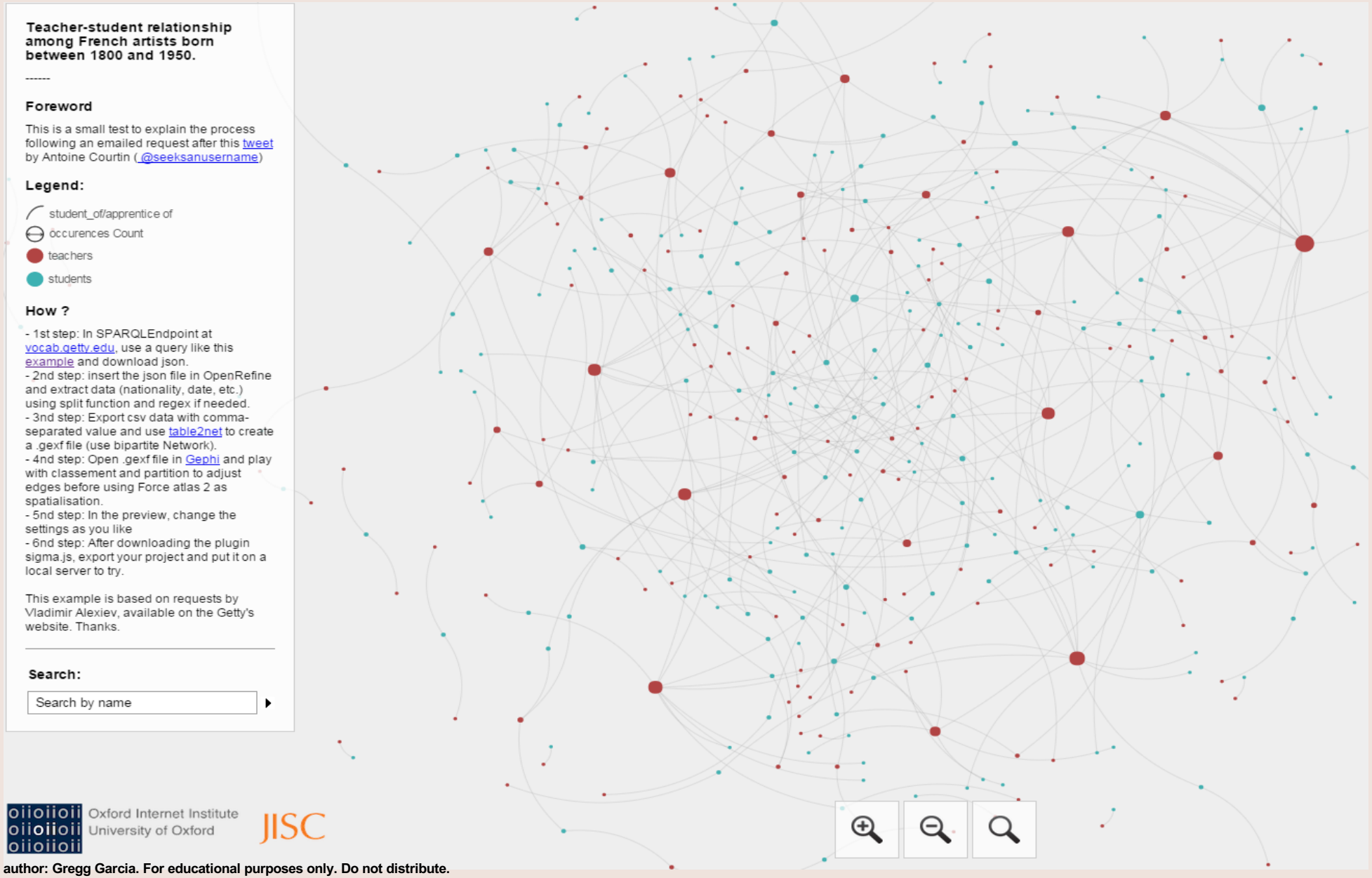
Visualization and exploration of graphs and networks using Gephi (https://gephi.org)



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The Future of the Getty Vocabularies LOD

- Current effort underway at the Getty to bring together all institutional data sets under one semantic architecture online
- ULAN data model / ontology first to be changed with standards such as CIDOC-CRM and Schema.org being evaluated
- AAT ontology definition will likely not change significantly
- TGN ontology definition will most likely change, but options have yet to be evaluated
- Focus will shift to providing the data in forms that are easier to understand and use, and services for both humans and machines on top of the data to help with discovery and reconciliation

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API: Application Programming Interface

The same data can be exposed in different ways to different audiences simultaneously.

- Need to understand how to access the data
- APIs can provide different functionality
- Fewer ways with more users is more sustainable
- Web provides HTTP protocol for data transport

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Data Profiles

Need the shape of the data to be consistent and easy to use.
Different audiences thus need different shapes.

- Current profile (SKOS-XL, custom GVP) for Researchers
- Add Linked Art profile for Museum audience
- Add schema.org profile for Web/SEO Audience

Different representations or descriptions of the same entity, not different entities.

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Developer-Friendly Format

```
{
  "@context": "https://lod.museum/ns/context/1/full.jsonld",
  "id": "https://lod.museum/example/object/1",
  "type": "ManMadeObject",
  "classified_as": "aat:300033618", # by reference
  "label": "Example Painting",
    "made_of": {
    "id": "aat:300015045", # by (minimal) value
    "type": "Material",
    "label": "watercolor"
  }
}
```

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Applications

Developers that can rely on consistent format, shape and interactions, can build robust and innovative applications.

- Need many such applications to validate usability
- Notifications of updates to remain synchronized
- Notifications of contributions to dataset
  - ... via reference to external entities?

Translations provide easy internationalization

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Contributing to the Getty Vocabularies

- Contact Getty Vocabulary Program and sign contributor agreement
- Input format is XML, but other formats are considered
- Required fields for each Vocabulary
- Custom merging algorithms combine data for concepts/people/places that already exist in data set

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

Future Challenges for Community Integration

- Data synchronization between Vocabularies and contributors
- Timely notifications of updates to user community
- New approach to data loads in order to simplify and speed up contributions
- Co-referencing of data repositories that aligned with the Vocabularies

Thank you!

Gregg Garcia, Software Architect

ggarcia@getty.edu

Jonathan Ward, Sr Editor

jward@getty.edu