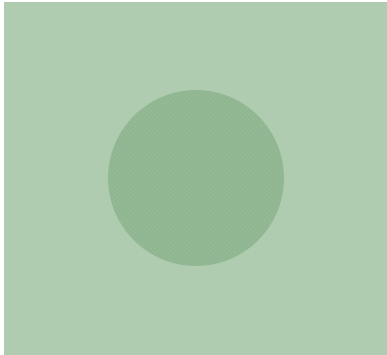


DEVELOPING AUTHORITY FILES FOR ART INFORMATION: CCO, CDWA, AND THE CONA MODEL

Patricia Harpring
Managing Editor, Getty Vocabulary Program
Workshop: Expanded Version
Revised May 2015

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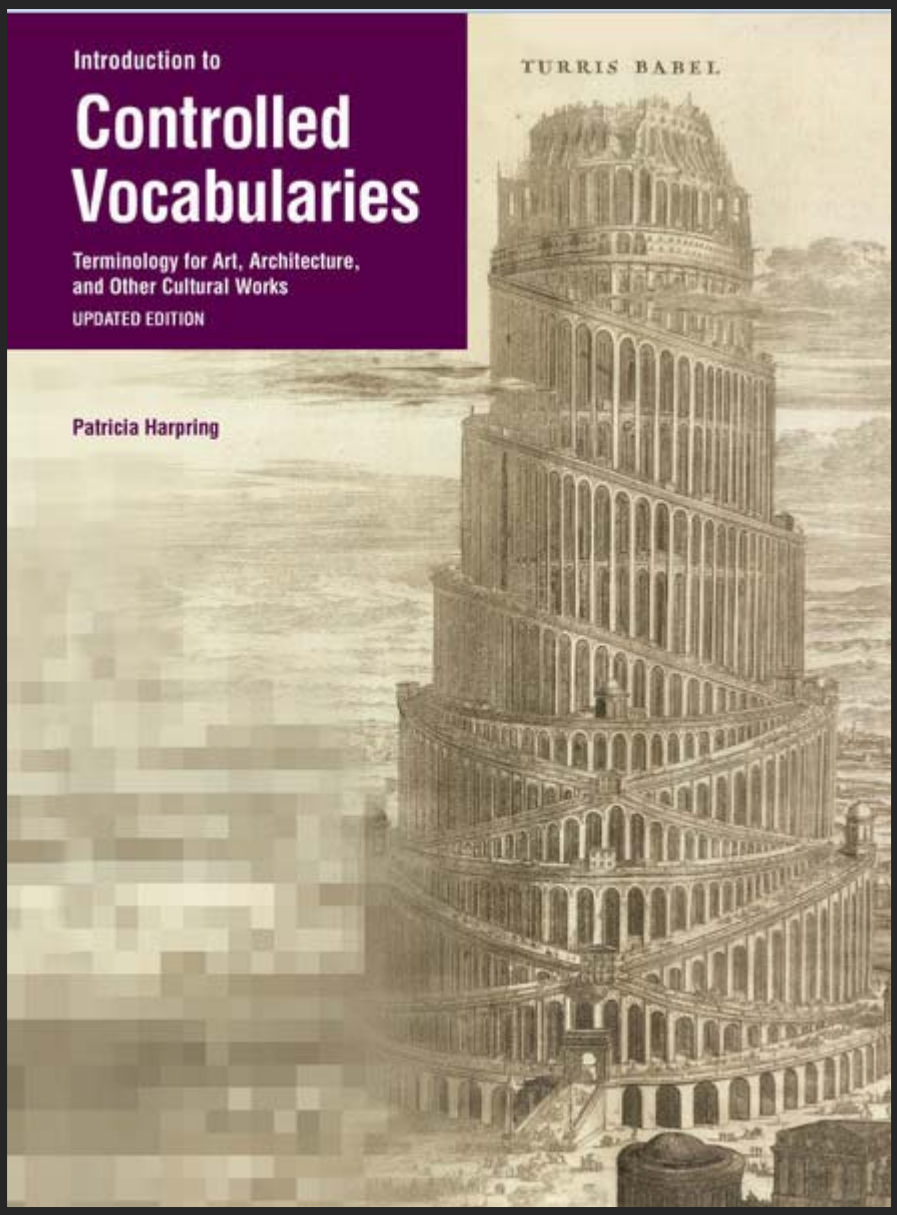
- Materials in this workshop are largely derived from this book ***Introduction to Controlled Vocabularies***
- ***Revised edition***
- The published book is available online and in hard copy
- Patricia Harpring, with series editor Murtha Baca

http://www.getty.edu/research/publications/electronic_publications/intro_controlled_vocab/index.html

File Edit View Favorites Tools Help

Introduction to
Controlled Vocabularies
Terminology for Art, Architecture,
and Other Cultural Works
UPDATED EDITION

Patricia Harpring



ISBN 978-1-60606-018-6 (pbk.)
ISBN 978-1-60606-026-1 (PDF)
ISBN 978-1-60606-027-8 (HTML)


The publication that defines the characteristics, scope, and uses of controlled vocabularies for art and cultural materials, and shows how vocabularies should be integrated in cataloging systems and utilized for indexing and retrieval.

Introduction to Controlled Vocabularies is available for purchase or on loan from the Getty Bookstore.

Image: The story of the Tower of Babel (Genesis 11) was an allegory to explain why different societies spoke different languages (in response to the obvious warnings against pride and the deity and urban evils). Babel was a city in Mesopotamia, where after the great flood, humanity gathered in one large urban center, speaking a single language. In their pride, the inhabitants began the construction of the Tower of Babel, with the intention of reaching the clouds of heaven. Their grand plan was foiled by God, who scattered them across the earth and confused their language so they could no longer understand each other.

Engraver: Lieven Cruyl (Flemish, ca. 1640–ca. 1700); etcher: Coenraet Decker (Dutch, 1651–1700); *Tower of Babel*; etching; folio height 39 cm (15 3/8 inches); in Athanasius Kircher (German, 1601/1602–1680); *Athanasii Kircheri e Soc. Jesu Turris Babel*; published: Amsterdam: Ex officina Johannis Ianssonio-Waeshermanni. 1679; Research Library.

http://www.getty.edu/research/publications/electronic_publications/cdwa/

 [Back to Electronic Publications](#)

Categories for the Description of Works of Art

Home
Introduction
Overview of Categories
Definitions of Categories
CDWA Lite
CDWA
CATEGORIES:
OBJECT,
ARCHITECTURE,
GROUP
Object/Work ♦
Classification ♦
Titles or Names ♦
Creation ♦
Styles/Periods/
Groups/
Movements
Measurements ♦
Materials and
Techniques ♦
Descriptions/
Marks
State
Edition
Fracture

1. Object/Work

DEFINITION

An identification of the type and number

SUBCATEGORIES

- 1.1. Catalog Level **Core**
- 1.2. Object/Work Type **Core**
- 1.3. Object/Work Type Date
 - 1.3.1. Earliest Date
 - 1.3.2. Latest Date
- 1.4. Components/Parts
 - 1.4.1. Components Quantity
 - 1.4.2. Components Type
- 1.5. Remarks
- 1.6. Citations
 - 1.6.1. Page

Examples

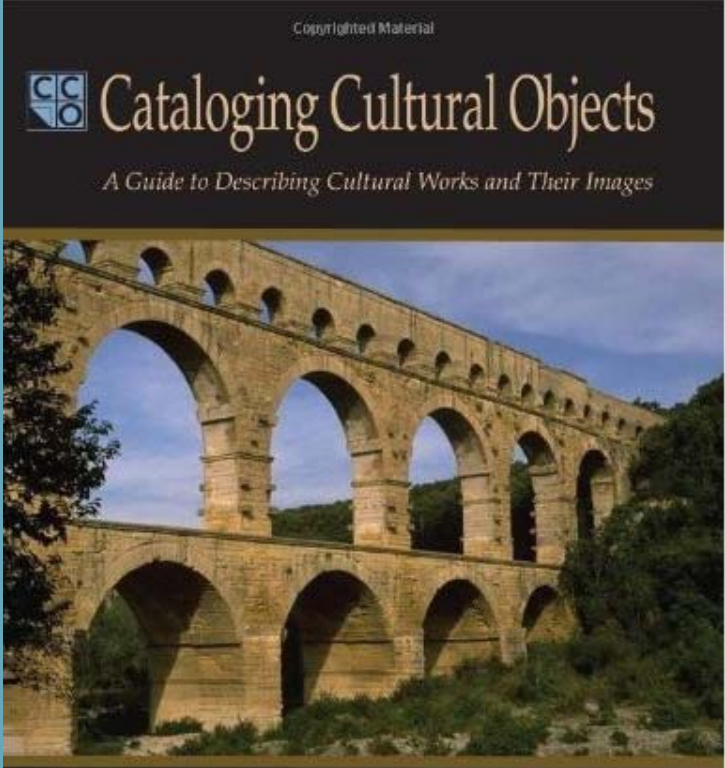
GENERAL DISCUSSION

This category identifies the logical focus possible to find works of a particular type

Works of art or architecture may be co

- Also compliant with briefer discussions and rules in CCO (*Cataloging Cultural Objects*) and CDWA (*Categories for the Description of Works of Art*)

Copyrighted Material



Cataloging Cultural Objects
A Guide to Describing Cultural Works and Their Images

Murtha Baca • Patricia Harpring • Elisa Lanzi
Linda McRae • Ann Whiteside
On behalf of the Visual Resources Association
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Cataloging Cultural Objects: A Guide to Describing Cultural Works and Their Images [Paperback]
[Murtha Baca](#) (Author), [Patricia Harpring](#) (Author), [Elisa Lanzi](#) (Author), [Linda McRae](#) (Author), [Ann Baird Whiteside](#) (Author)

STARTING TOGETHER: WHAT IS A VOCABULARY?

Let's get on
the same
page



What Are Controlled Vocabularies?

- A controlled vocabulary is an organized arrangement of words and phrases used to index content and/or to retrieve content through browsing or searching
- Typically includes preferred and variant terms and has a defined scope or describes a specific domain

Purpose of Controlled Vocabularies

- To organize information and to provide terminology to catalog and retrieve information
- To capture the richness of variant terms
- To promote consistency in preferred terms and the assignment of the same terms to similar content



What Are Controlled Vocabularies?

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- Typically includes preferred and variant terms and has a defined scope or describes a specific domain

Purpose of Controlled Vocabularies

- At the indexing phase = because without them catalogers will not consistently use the same term to refer to the same person, place, or thing
- In retrieval process = various end users may use different synonyms or more generic terms to refer to a given concept
- End users are often not specialists, may not know the correct term



What Are Controlled Vocabularies?

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- Typically includes preferred and variant terms and has a defined scope or describes a specific domain

Purpose of Controlled Vocabularies

- The most important functions of a controlled vocabulary are
- to gather together variant terms and synonyms for concepts
- to link concepts in a logical order or sort them into categories

Are a rose window and a Catherine wheel the same thing? How is pot-metal glass related to the more general term stained glass?

The links and relationships in a controlled vocabulary ensure that these connections are defined and maintained, for both cataloging and retrieval



Controlled Vocabularies vs. Controlled Format

- Controlled vocabularies are organized sets of controlled terminology values (often with other information as well)
 - Controlled format refers to rules concerning the allowable data types and formatting of information
-
- Fields may have controlled format in addition to being linked to controlled vocabulary
 - Or the controlled format may exist in the absence of any finite controlled list of acceptable values



Controlled Vocabularies vs. Controlled Format

Controlled format

- May govern the expression of Unicode or other characters in either a free-text field or in a field that is linked to a controlled vocabulary
- Also for recording measurements, geographic coordinates, and other information in fields where numbers or codes are used
- Restrictions may be placed on the field in order to regulate the number of digits allowed, the expression of decimals and negative numbers, and so on, ideally in compliance with ISO, NISO, or another appropriate standard where possible



Controlled Vocabularies vs. Controlled Format

Examples

Materials/Techniques Description: egg-tempera paint with tooled gold-leaf halos on panel

Role: medium **Material Name:** egg tempera | gold leaf

Role: support **Material Name:** wood panel

Technique Name: painting | gold tooling

Dimensions Description: comprises 10 panels; overall: 280 x 215 x 17 cm (110 1/4 x 84 5/8 x 6 3/4)

Extent: components

Value: 10 **Type:** count

Value: 280 **Unit:** cm **Type:** height

Value: 215 **Unit:** cm **Type:** width

Value: 17 **Unit:** cm **Type:** depth

TYPES OF CONTROLLED VOCABULARIES

You may use
various
types of
vocabularies



Types of Controlled Vocabularies

- Most controlled vocabularies in art indexing are structured vocabularies
 - Structured vocabulary = emphasizes relationships
-

Relationships in General

- Relationship means a state of connectedness or an association between two things in a database—in this case, fields or tables in a database for a controlled vocabulary
- Between equivalents (synonyms)
- Other relationships = hierarchical or associative (links that organize concepts and provide context)
- Note: types of vocabularies are not always mutually exclusive; for example, a single vocabulary can be both a thesaurus and an authority



Types of Controlled Vocabularies

The most common types of controlled vocabularies used for art and architecture

- subject heading lists
 - simple controlled lists
 - synonym ring lists
 - taxonomies
 - thesauri
-
- Many of the definitions in *Introduction to Controlled Vocabularies* are based on the discussions in *ANSI/NISO Z39.19-2005: Guidelines for the Construction, Format, and Management of Monolingual Controlled Vocabularies* and the related international standard, *ISO 2788:1986: Documentation—Guidelines for the Establishment and Development of Monolingual Thesauri*.



Subject Heading Lists

Uniform words or phrases intended to be assigned to books, articles, or other documents in order to describe the subject or topic of the texts and to group them with texts having similar subjects.

Examples:

Library of Congress Subject Headings (LCSH)

Bicycle racing--United States

Medical Subject Headings (MeSH)

Embryonic and Fetal Development

- Typically arranged in alphabetical order, with cross-references between the preferred and other nonpreferred headings
- Differ from other vocabularies = precoordination of terminology = combine several unique concepts together in a string

Medieval bronze vessels

- Combines a period, a material, and a work type in one heading



Other Headings

- Other types of headings or labels may be used to uniquely identify or disambiguate one vocabulary entry from another
- *E.g., name of a creator may be listed with a short biographical string to form a heading or label for display in a work record*

Pierre Koenig (American architect, 1925-2004)

Subject ID: 700000090 Review: **New VP** Merged: Not Merged Publish: Not Published
Parent: 700000001 Record: Built Work Candidate: Non Candidate
Label: C

Label: Case Study House No. 21 (house; architect: Pierre Koenig (American architect, 1925-2004); 1956-1958; renovated 1998)

Note Language
English

the middle class. Case Study House No. 21 was considered by the architect to be his masterpiece. It is a minimalist classic Modern design in an open-plan steel-and-glass structure. The glass-walled house is surrounded by five reflecting pools. It comprises two

Titles/Names

#	P	H	V	Terms/Names	Display Dt	Start Dt	End Dt	Term ID	Disp Nm	AACR2 Flag	Other
1	P	C	U	Case Study House No. 21				1000000209	N/A	N/A	artist's
2	V	C	U	Bailey House				1000000210	N/A	N/A	N/A
3	V	C	U	CSH #21				1000000211	N/A	N/A	N/A

WorkType/Class/Level **Creator Display** Related Person/Corp Creation Date Location Physical Characteristics

architect: Pierre Koenig (American architect, 1925-2004)



Controlled Lists

A controlled list is a simple list of terms used to control terminology

A well-constructed controlled list, the following is true:

- each term is unique
- terms are not overlapping in meaning
- terms are all members of the same class (i.e., having the same level of rank in a classification system)
- terms are equal in granularity or specificity
- terms are arranged alphabetically or in another logical order

Also called *flat term lists* or *pick lists*, referring to the typical method of their implementation in an information system

Should be derived from larger published standard vocabularies if appropriate

Usually designed for a very specific database or situation and may not have utility outside that context

They are best employed in certain fields of a database where a short list of values is appropriate and where terms are unlikely to have synonyms or ancillary information

Controlled Lists

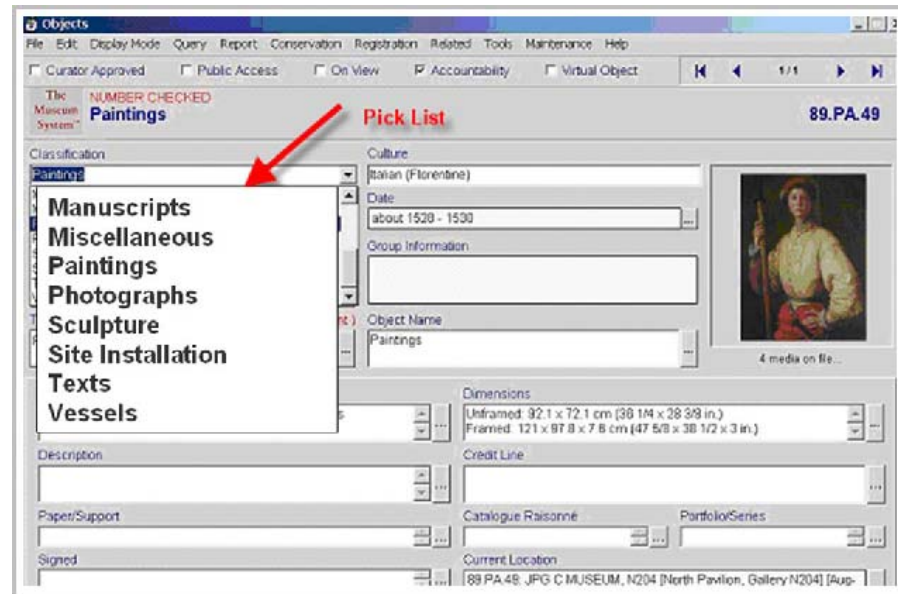
Pick Lists

lead users to a small set of choices of terms for a given field

often implemented as drop-down lists

Example of a pick list from The Museum System (TMS) application for the J. Paul Getty Museum

- | | |
|-----------------|-------------------|
| architecture | manuscripts |
| armor | miscellaneous |
| books | paintings |
| coins | photographs |
| decorative arts | sculpture |
| drawings | site installation |
| implements | texts |
| jewelry | vessels |



From the end-user perspective, such short lists may be easier to navigate than more complex lists, particularly for nonspecialist users



Controlled Lists

Pick Lists

In cataloging systems, the advantage of such lists is that the cataloger or indexer has only a short list of terms from which to choose, thus ensuring more consistency and reducing the likelihood of error

Examples of fields where controlled lists are appropriate:

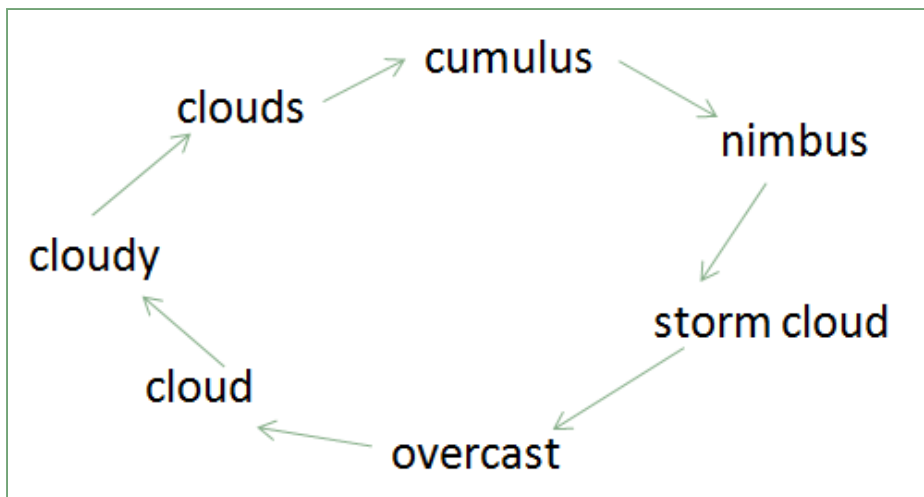
Classification field, Title Type (e.g., artist's, descriptive, inscribed, etc.), Title Language (e.g., English, French, German, Italian, Spanish, etc.), or Title Preference (e.g., preferred, alternate)

Dozens of areas of a work record may be better suited for a short controlled list rather than a more complex controlled vocabulary

Disadvantages are that it limits choices to user, if used in retrieval would not allow retrieval by synonyms and related terms

Synonym Ring Lists

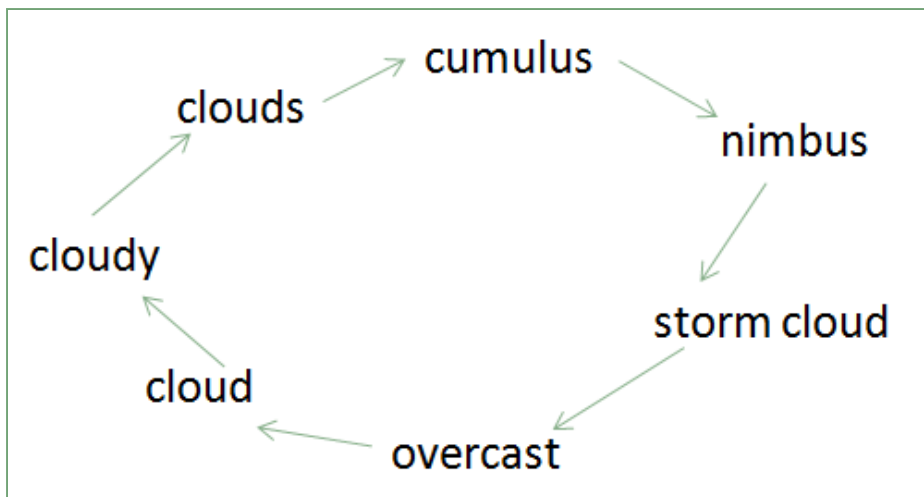
- Simple set of terms considered equivalent for the purpose of retrieval
- Equivalence relationships in most controlled vocabularies should be made only between terms and names that have genuine synonymy or identical meanings
- Synonym rings are different



- Even though classified as controlled vocabularies, usually used in retrieval rather than indexing
- Specifically to broaden retrieval (query expansion): may contain near-synonyms that have similar or related meanings rather than only terms with true synonymy

Synonym Ring Lists

- Typically occur as sets of flat lists
- Used behind the scenes of an electronic information system
- Most useful for providing access to content that is represented in texts and other instances of natural, uncontrolled language.
- Even though catalogers do not use synonym rings for indexing, subject experts should be involved in the creation of synonym rings for retrieval



- Successful synonym rings are best constructed manually by subject matter experts who are also familiar with the specific content of the information system, user expectations, and likely searches



Authority Files

Set of established names or headings and cross-references to the preferred form from variant or alternate forms

E.g., LCNAF—the Library of Congress/NACO (Name Authority Cooperative Program) Authority File—an authority widely used in libraries in North America

Common types of authority files are name authority files and subject heading authority files

- However, any listing of terms, names, or headings that distinguishes between a preferred term, name, or heading and alternate or variant names may be used as an authority
- Almost any type of controlled vocabulary—with the exception of a synonym ring list—may be used as an authority

Authority Files

LC Control Number: n 79003969

HEADING: Moses, Grandma, 1860-1961

000 00578cz a2200193n 450

001 1418836

005 19910703055707.6

008 790117n| acannaab |a aaa

010 __ |a n 79003969

035 __ |a (DLC)n 79003969

040 __ |a DLC |c DLC |d DLC-R

100 10 |a Moses, |c Grandma, |d 1860-1961

400 00 |a Grandma Moses, |d 1860-1961

400 10 |w nna |a Moses, Anna Mary Robertson, |d 1860-1961

400 10 |a Mōzesu, |c Guranma, |d 1860-1961

670 __ |a Her Grandma Moses ... 1946.

670 __ |a Her Guranma Mōzesu ten, 1990: |b t.p. (Grandma Moses)

952 __ |a RETRO

953 __ |a xx00 |b zz00

- *Authority control* refers as much to the methodology as to a particular controlled vocabulary
- If a controlled vocabulary is accepted by a given community as authoritative, and if it is used in order to provide consistency in data, it is being used as an authority

Taxonomies

A taxonomy is an orderly classification for a defined domain. It may also be known as a faceted vocabulary. It comprises controlled vocabulary terms (generally only preferred terms) organized into a hierarchical structure. Each term in a taxonomy is in one or more parent/child (broader/ narrower) relationships to other terms in the taxonomy

- [Flavobacterium](#) [LinkOut](#) *Click on organism name to go to*
 - [Flavobacterium algicola](#) [LinkOut](#)
 - [Flavobacterium anhuiense](#) [LinkOut](#)
 - [Flavobacterium antarcticum](#) [LinkOut](#)
 - [Flavobacterium aquatile](#) [LinkOut](#)
 - [Flavobacterium aquidurense](#) [LinkOut](#)
 - [Flavobacterium arcticum](#)
 - [Flavobacterium banpakuense](#)
 - [Flavobacterium branchiophilum](#) [LinkOut](#)
 - [Flavobacterium branchiophilum FL-15](#)
 - [Flavobacterium ceti](#) [LinkOut](#)
 - [Flavobacterium cheniae](#) [LinkOut](#)
 - [Flavobacterium chungangense](#) [LinkOut](#)
 - [Flavobacterium columnare](#) [LinkOut](#)
 - [Flavobacterium croceum](#) [LinkOut](#)
 - [Flavobacterium cucumis](#) [LinkOut](#)
 - [Flavobacterium daejeonense](#) [LinkOut](#)
 - [Flavobacterium defluvii](#) [LinkOut](#)
 - [Flavobacterium degerlachei](#) [LinkOut](#)
 - [Flavobacterium denitrificans](#) [LinkOut](#)

- There can be different types of parent/child relationships, such as whole/part, genus/species, or instance relationships. However, in good practice, all children of a given parent share the same type of relationship
- A taxonomy may differ from a thesaurus in that it generally has shallower hierarchies and a less complicated structure
- For example, it often has no equivalent (synonyms or variant terms) or related terms (associative relationships)

Taxonomies

The scientific classifications of animals and plants are well-known examples of taxonomies. A partial display of Flavobacteria in the taxonomy of the U.S. National Center for Biotechnology Information is above.

- [Flavobacterium](#) [LinkOut](#) *Click on organism name to go to*
 - [Flavobacterium algicola](#) [LinkOut](#)
 - [Flavobacterium anhuiense](#) [LinkOut](#)
 - [Flavobacterium antarcticum](#) [LinkOut](#)
 - [Flavobacterium aquatile](#) [LinkOut](#)
 - [Flavobacterium aquidurense](#) [LinkOut](#)
 - [Flavobacterium arcticum](#)
 - [Flavobacterium banpakuense](#)
 - [Flavobacterium branchiophilum](#) [LinkOut](#)
 - [Flavobacterium branchiophilum FL-15](#)
 - [Flavobacterium ceti](#) [LinkOut](#)
 - [Flavobacterium cheniae](#) [LinkOut](#)
 - [Flavobacterium chungangense](#) [LinkOut](#)
 - [Flavobacterium columnare](#) [LinkOut](#)
 - [Flavobacterium croceum](#) [LinkOut](#)
 - [Flavobacterium cucumis](#) [LinkOut](#)
 - [Flavobacterium daejeonense](#) [LinkOut](#)
 - [Flavobacterium defluvii](#) [LinkOut](#)
 - [Flavobacterium degerlachei](#) [LinkOut](#)
 - [Flavobacterium denitrificans](#) [LinkOut](#)

- In common usage, the term taxonomy may also refer to any classification or placement of terms or headings into categories, particularly a controlled vocabulary used as a navigation structure for a Web site.
- A display of data from the U.S. National Center for Biotechnology Information illustrating the taxonomic placement of genus Flavobacterium with narrower contexts (species)

Alphanumeric Classification Schemes

Controlled codes (letters or numbers, or both letters and numbers) that represent concepts or headings

Generally have an implied taxonomy that can be surmised from the codes

Dewey	LC	General Subject
000, 040, 080	AC	General Collections
010, 020, 090	Z	Library Science
030	AE	Encyclopedias
050	AP	Periodicals
060	AS	Academies, Societies
070	PN	Literature (Gen.)
100	B-BJ	Philosophy (Gen.)
110-120	BD	Speculative Philosophy
130, 150	BF	Psychology
140, 180, 190	B	Philosophy (Gen.)
160	BC	Logic
170	BJ	Ethics
200, 210, 290	BL	Religions. Mythology
220	BS	The Bible
230	BT	Doctrinal Theology
240, 250	BV	Practical Theology
260, 270	BR	Christianity
280	BX	Christian Denominations
300	H	Soc. Sci. (General)

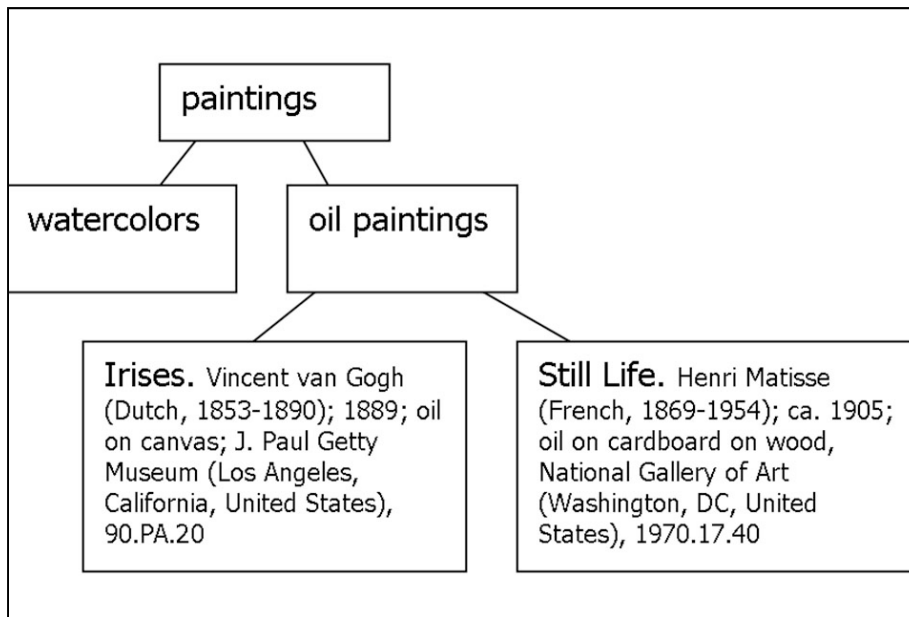
Dewey	LC	General Subject
570	GN, QH	Anthropology. Nat. Hist.
580	QK	Botany
590	QL	Zoology
600	T-TX	Technology
610	R	Medicine (General)
620	TA	Engineering
630	S, HD	Agriculture. Land Use
640	TX	Home Economics
650	HF	Commerce
660	TP	Chemical Technology
670, 680	TS, HD	Manufactures
690	TH	Building Construction
700	N	Visual arts
710	SB	Plant culture
720	NA	Architecture
730	NB	Sculpture
740	NC	Drawing. Design
750	ND	Painting

Dewey Decimal Classification and Library of Congress Classification systems

Ontologies

Formal, machine-readable specification of a conceptual model in which concepts, properties, relationships, functions, constraints, and axioms are all explicitly defined

Not a controlled vocabulary, but uses one or more controlled vocabularies and expresses the vocabulary in a representative language that has a grammar for using vocabulary terms to express relationships

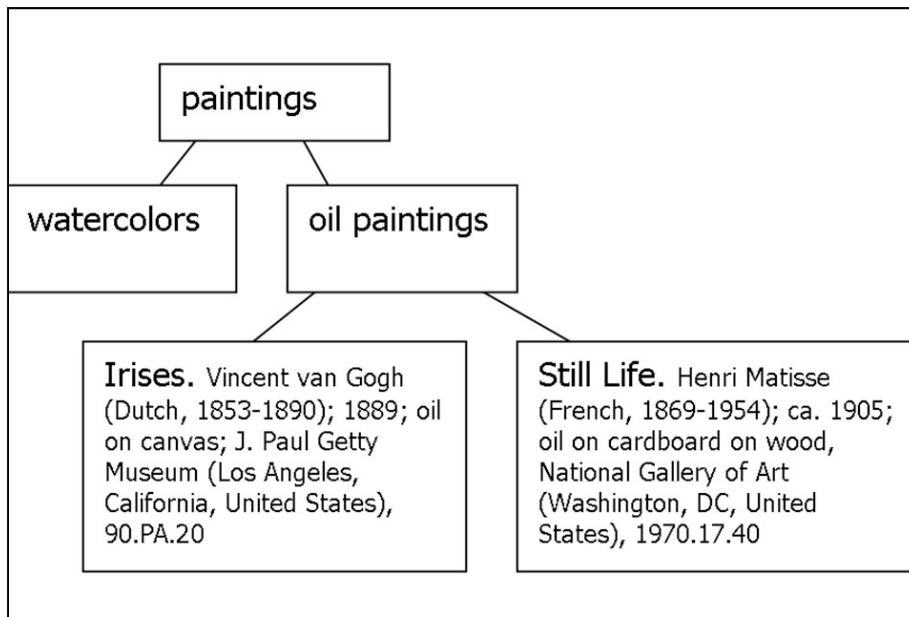


- Ontologies generally divide the realm of knowledge that they represent into the following areas: individuals, classes, attributes, relations, and events
- Ontologies generally divide the realm of knowledge that they represent into the following areas: individuals, classes, attributes, relations, and events

Ontologies

Have some characteristics in common with faceted taxonomies and thesauri, but ontologies use strict semantic relationships among terms and attributes with the goal of knowledge representation in machine-readable form, whereas thesauri provide tools for cataloging and retrieval

- Ontologies are used in the Semantic Web, artificial intelligence, software engineering, and information architecture as a form of knowledge representation in electronic form about a particular domain of knowledge



A detail of a sample ontology for Vincent van Gogh's *Irises* and Henri Matisse's *Still Life*, illustrating how the works are part of a subset of oil paintings under the category paintings

Folksonomies

An assemblage of concepts represented by terms and names (called tags) that are compiled through social tagging; became prominent ca. 2004

Social tagging is the decentralized practice of individuals and groups create, manage, and share tags (terms, names, etc.) to annotate and categorize digital resources in an online social environment

animals **jesus** lion shore **chair** scale noah war elephant still life fashion candles
architecture clay bomb eastern state penitentiary dragon mythology water rescue george
washington twenties swatches rabbit grace kelly panorama medieval period teahouse oriental
rug readymade classical modern pen painting candlesticks window soldiers knife goddess
drawing bull black and white wood paneling eagle whistler deities chair utamaro durer
oriental tournaments teaching combat couture picture surgery fireplace music 19th century
white philosophy vase wedding tribal abstract pop art phonograph mary sword dessert
seashells merry-go-round african american **surrealism** eating utensils optical illusion
tomb uklyo-e sketch folk costume double portrait poetry **cubism** waves stone
japonisme toy jug birds period room **impressionist** third eye zebra helmet dog
post-impressionist skeleton sculpture hindu **deity** jainism fire money portrait wine
dress coffee transportation contemporary bench hare chinese calendar rifle trees vacation
lord shiva angel tea cross jail wharton esherick children landscape costume designer time
bird ornamental kitchen **buddhism** ark prison horse gown insect storm polar bear
snake mythological character geisha tomb funerary stone birds lions helen rose ceramics
beach impressionism boxer virgin mary blue pole arms japanese post modern doorway
flowers coat of arms side table cyclist biblical characters ink pet bones tree love
battle butterfly arctic lotus throne guns hindu god dutch tiles gospel brooding sewing
knight mushroom cloud biblical stories glasses transparent vintage furniture wood foot
book native americans 1950s funerary writing taoism beth karle baroque storage
contemplating **light** seasons drinking mug bible woodblock print 20th century

- Not necessarily collaborative, because the effort is typically not organized, not working together and standardization and common vocabulary are not employed

Tag cloud, Philadelphia Museum of Art

Folksonomies

Do not typically have hierarchical structure or preferred terms for concepts, and they may not even cluster synonyms

Not considered authoritative because they are typically not compiled by experts

animals **jesus** lion shore **chair** scale noah war elephant still life fashion candles
architecture clay bomb eastern state penitentiary dragon mythology water rescue george
washington twenties swatches rabbit grace kelly panorama medieval period teahouse oriental
rug readymade classical modern pen painting candlesticks window soldiers knife goddess
drawing bull black and white wood paneling eagle whistler deities chair utamaro durer
oriental tournaments teaching combat couture picture surgery fireplace music 19th century
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dress coffee transportation contemporary bench hare chinese calendar rifle trees vacation
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knight mushroom cloud biblical stories glasses transparent vintage furniture wood foot
book native americans 1950s funerary writing taoism beth karle baroque storage
contemplating **light** seasons drinking mug bible woodblock print 20th century

- But can be useful in situations where controlled tagging is not possible: also can provide additional access points not included in more formal vocabularies
- Potential for enhanced retrieval by linking terms and names from folksonomies to more rigorously structured controlled vocabularies

Thesauri

- Thesaurus: A semantic network of unique concepts
- Thesauri may be monolingual or multilingual
- Thesauri may have the following three relationships:
 - Equivalence Relationships
 - Hierarchical Relationships
 - Associative Relationships



stirrup cups
coaching glasses
hunting glasses



sturzbechers
Sturzbecher
stortebeckers

associative

hierarchical

Objects Facet

- Furnishings and Equipment
- Containers
- <culinary containers>
- <vessels for serving / consuming food>

distinguished from

equivalence

rhyta
rhyton
rhytons
rhea
rheon
rheons
ritón

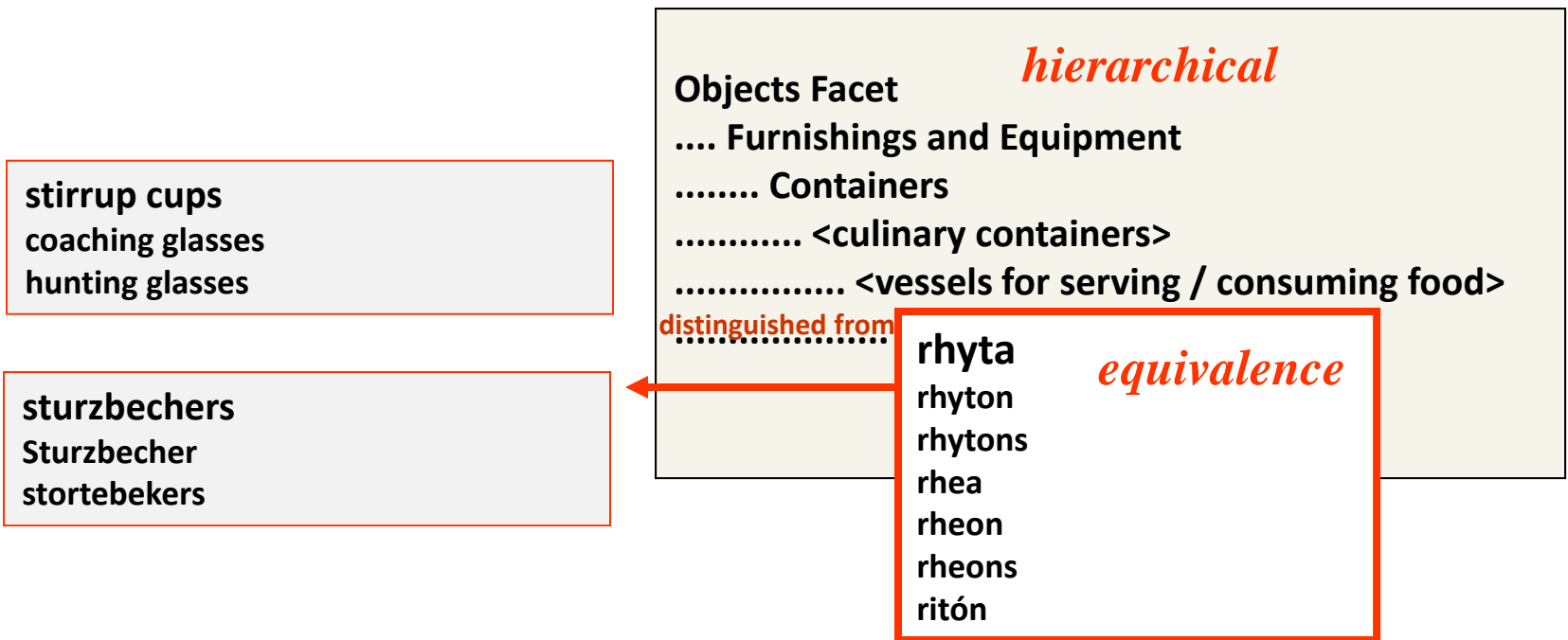


Thesauri

Combine the characteristics of synonym ring lists and taxonomies, together with additional features

May also include additional peripheral or explanatory information about a concept, including a definition (or scope note), bibliographic citations, and so on

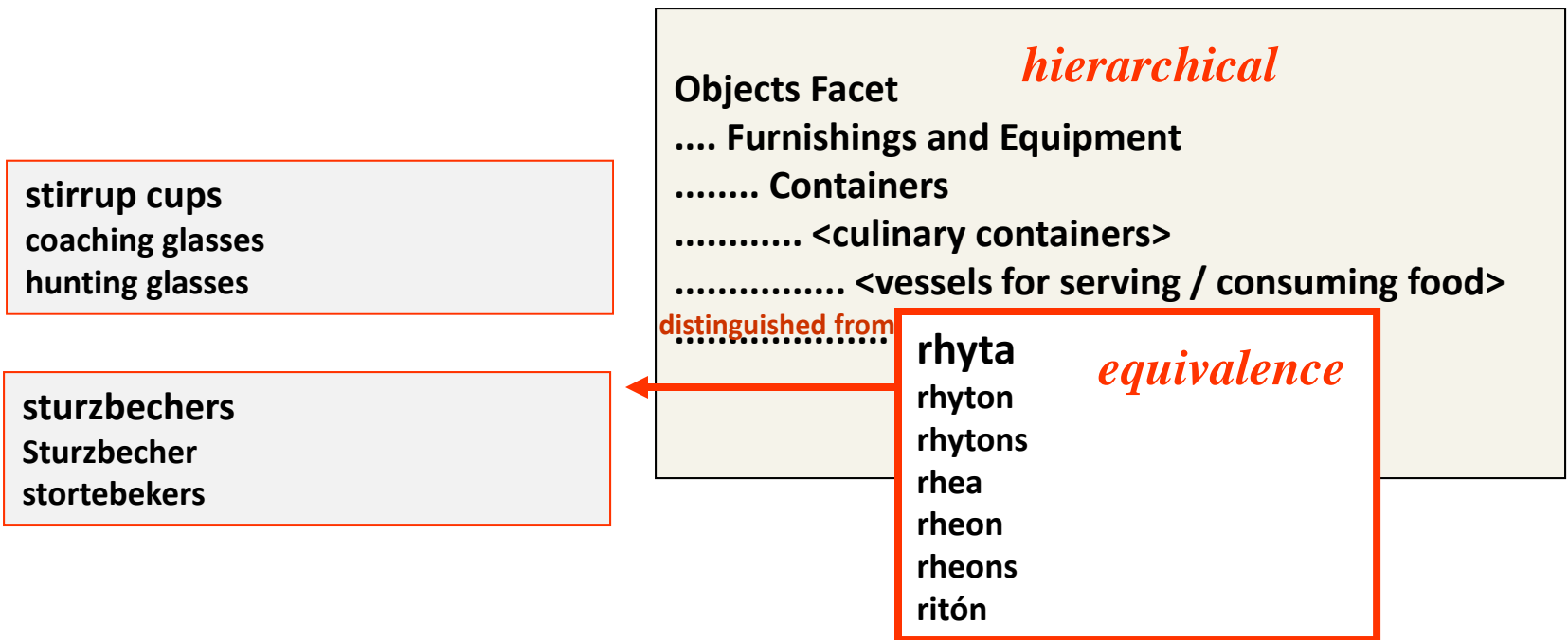
More complex than a simple list, synonym ring list, or simple taxonomy



Thesauri

Thesauri employ the versatile and powerful vocabulary control generally recommended for use as authorities in databases relating to art and cultural heritage

Thesauri that contain art terminology include the Getty vocabularies, Chenhall's Nomenclature, and the TGM

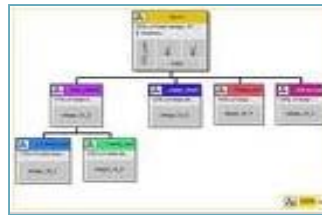
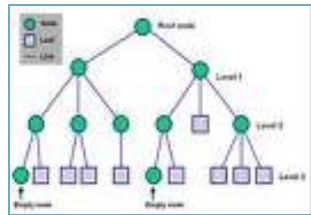


Using Multiple Vocabularies

Catalogers of art information require multiple vocabularies because no single vocabulary provides the full set of terminology needed to catalog or index a given set of cultural heritage data

A combination of vocabularies is necessary for indexing

- Separate vocabularies may be required for retrieval; ideally, retrieval vocabularies are based on indexing vocabularies but may be optimized and applied differently for this purpose



TYPES OF CONTENT IN VOCABULARIES

Various Scopes
of Vocabularies
for Art



VOCABULARIES FOR ART

- ◎ As described in CDWA and CCO
 - ◎ Personal and Corporate Name authority
 - ◎ Geographic Place authority
 - ◎ Generic Concept authority
 - ◎ Iconography authority

*“Type” of vocabulary referring to
a.) form or structure of the vocabulary or
b.) the scope of the content*



VOCABULARIES FOR ART

- ⊙ As described in CDWA and CCO
 - ⊙ Personal and Corporate Name authority
 - ⊙ Geographic Place authority
 - ⊙ Generic Concept authority
 - ⊙ Iconography authority

Models of these types of vocabularies corresponding to CDWA/CCO standards are AAT, TGN, ULAN, and the Iconography Authority module of CONA

Vocabularies for Art

- *classification terms:*
 - **Antiquities**
- *object names:*
 - **Panathenaic amphora**
storage vessels
- *personal names:*
 - **Painter of the Wedding Procession** (Greek vase painter, active ca. 360s BCE)
 - **Nikodemos** (Attic potter, active ca. 362 BCE)
- *material / technique names:*
 - **terracotta**
 - **turning**
 - **sintering**
 - **vase painting**
- *geographic names:*
 - **Athens** (Periféreia Protevoúsis, Greece)
- *corporate names:*
 - **Getty Villa Malibu, J. Paul Getty Museum**
(Los Angeles, California, United States)
- *subject terms:*
 - **religion and mythology**
 - **Nike crowning the victor**



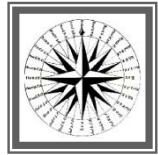


THE GETTY VOCABULARIES



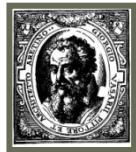
- *Art & Architecture Thesaurus* ® (AAT)

- 34,878 'records'; 245,531 terms



- *Getty Thesaurus of Geographic Names* ® (TGN)

- 992,307 'records'; 1,711,115 names



- *Union List of Artist Names* ® (ULAN)

- 202,718 'records' ; 638,903 names



- *Cultural Objects Name Authority* ® (CONA)

- *under development*

- All four focus on the visual arts and architecture
- Grow through contributions from the user community
- Compiled, maintained, distributed by the **Getty Vocabulary Program**, a unit of the Getty Research Institute (GRI) in Los Angeles



THE GETTY VOCABULARIES



- AAT terms = generic concepts

- (e.g., *watercolors, amphora*)



- TGN names = administrative, physical places

- (e.g., *Los Angeles, Ottoman Empire, Bavarian Alps*)



- ULAN = person, corporate body names

- (e.g., *Christopher Wren, Altobelli & Molins*)



- CONA = titles/names of art and architecture

- (e.g., *Mona Lisa, Empire State Building*)

- One main characteristic making the vocabularies and CONA useful in linking is that each vocabulary record is identified by a unique, persistent numeric ID
- Meaning if a record changes or is merged, the original ID remains

INTRODUCING CONA

BTW,
What Is
CONA?

What is CONA?

New Getty resource in development:

- The *Cultural Objects Name Authority*® (CONA) is currently in development
- It compiles titles, attributions, depicted subjects, and other metadata about works of art, architecture, and cultural heritage, both extant and historical
- Metadata is gathered or linked from museum collections, special collections, archives, libraries, scholarly research, and other sources
- CONA is linked to the Getty's structured vocabularies, the Art & Architecture Thesaurus® (AAT), the Getty Thesaurus of Geographic Names® (TGN), and the Union List of Artist Names® (ULAN)
- Through rich metadata and links, it is hoped that CONA will provide a powerful conduit for research and discovery for digital art history and related disciplines



Cultural Objects
Name Authority®

What is CONA?

New Getty resource in development:

- CONA contains same basic core thesaurus structure of AAT, TGN, ULAN
- To which additional fields are added
- Compliant with CDWA / CCO, which represent best practice as agreed by consensus of wide range of repositories, including museums, archives, special collections, bibliographic projects, and others who collect and document art information
- CCO is mapped to CIDOC CRM



Cultural Objects
Name Authority®

What is CONA?

New Getty resource in development:

- **Why CONA?** The Getty vocabularies provide terminology and other information about the objects, artists, concepts, and places important to various disciplines that specialize in art, architecture and other material culture. CONA is linked to the Getty vocabularies, which in turn are linked to other metadata. "CONA" is a misnomer, in that it contains much more than simply variations on titles and names for a work. CONA contains links to artists and patrons, style, dates, locations, studies and other related works, bibliography, and the subjects depicted in the works. It contains links to images of the works. It provides unique, persistent numeric identifiers for the work and all of its associated information, allowing disambiguation between similar works and authoritative identification of the work in a linked environment.



Cultural Objects
Name Authority®

What is CONA?

New Getty resource in development:

- In the new realm of digital art history, CONA brings the three Getty vocabularies together as it focuses on the works themselves, whether built works or movable works, whether extant or historical. Even works that are destroyed, disassembled, or planned but not constructed may be included. For example, if an altarpiece or manuscript has been disassembled and the parts reside at multiple repositories, a CONA record may link all the pertinent information to virtually reconstruct the lost work from the dispersed pieces. Series of works and archival groups may be included. Multiples, such as prints, may be linked and described as separate states for research and discovery.



Cultural Objects
Name Authority®

What is CONA?

New Getty resource in development:

- While the information provided by the repository or owner of the work is considered most authoritative in a CONA record, other scholarly opinions and historical information about the work may be included to reflect and link the full history and scholarly discussion about a given work over time.



Cultural Objects
Name Authority®

What Is CONA?

Scope: CONA includes records for cultural works: architecture and *movable works*

- The focus of CONA is works cataloged in scholarly literature, museum collections, visual resources collections, archives, libraries, and indexing projects with a primary emphasis on art, architecture, or archaeology
- The coverage is global, from prehistory through the present
- Names or titles may be current, historical, and in various languages

What Is CONA?

Built works:

- For CONA, built works include structures or parts of structures that are the result of conscious construction, are of practical use, are relatively stable and permanent, and are of a size and scale appropriate for—but not limited to—habitable buildings
- Models and miniature buildings are not built works (they are movable works)
- Most built works in CONA are manifestations of the built environment that is typically classified as fine art, meaning it is generally considered to have aesthetic value, was designed by an architect (whether or not his or her name is known), and constructed with skilled labor

What Is CONA?

Movable works:

- For CONA, movable works include the visual arts that are of the type collected by art museums and special collections
- Note that the objects themselves may actually be held by an ethnographic, anthropological, or other museum, or owned by a private collector
- e.g., paintings, sculpture, prints, drawings, manuscripts, photographs, ceramics, textiles, furniture, and other visual media such as frescoes and architectural sculpture, performance art, archaeological artifacts, and various functional objects that are from the realm of material culture and of the type collected by museums



Elements of a CONA record



titles/names

Irises
Les Iris
Piante di iris
Die Irisse
Irysy
Irissen

creator

Vincent van Gogh
(Dutch, 1853-1890)

date

1889

work type

painting

style

Post Impressionist

subject

botanical
nature
irises
regeneration
soil

work

800123

materials

oil on canvas, applied
with brush and palette
knife

measurements

71 x 93 cm (28 x 36 5/8
inches)

notes

This work was painted when
the artist was recuperating
from a severe attack of
mental illness; it depicts the
garden at the asylum at
Saint Rémy...

sources

J. Paul Getty Museum. Handbook of the
Collections. Los Angeles: J. Paul Getty
Museum, 1991.

current location

Paul Getty Museum (Los Angeles,
California, United States)

creation location

Saint Rémy de Provence (Provence
Alpes Côte d'Azur, France)



Elements of a CONA record



titles/names

Great Wave at
Kanagawa
La Vague
Die große Welle
Kanagawa oki
nami ura
神奈川沖浪裏

notes

The large wave dominates the scene, with the small mountain in the background. It is said to have inspired said to have inspired both Debussy's "La Mer" ...

broader context

Katsushika Hokusai (Japanese, 1760-1849); Thirty-six Views of Mount Fuji (Fugaku sanjurokkei): First Series; 1827-1837

sources

Hibbard, Metropolitan Museum Of Art (1988)
Meech, Oliver, and Carpenter, Designed for Pleasure (2008)

creator

Katsushika Hokusai
(*Japanese, 1760-1849*);
published by
Nishimura Eijudo
(*Japanese, 19th century*)

date

ca.
1831/1833

work type

color
woodcut

style

Edo (Japanese)

subject

seascape
wave
fishermen
boat
Mount Fuji
(Chubu,
Japan)
Kanagawa
(Kanto, Japan)

work

800123

materials

woodcut, polychrome ink
and color on paper

measurements

25.7 x 37.9 cm (10 1/8 x 14
15/16 inches)

current location

Metropolitan Museum of Art, New York,
New York, United States); JP1847



Elements of a CONA record



titles/names
Hagia Sophia
Ayasofya
Sancta
Sophia
Agia Sofia
Ἁγία Σοφία

creator

Isidoros of Miletus
(*Asia Minor, active mid-6th century*) and
Anthemius of Tralles
(*Asia Minor, ca. 474-ca. 534*), for Justinian I
(*Byzantine emperor, 483-565*)

date

present
structure
built 532-
537 CE

work type

church
mosque
museum

notes

The current church was rebuilt under the personal supervision of emperor Justinian I; it was rededicated on 27 December 537 ...

work
800789

materials/technique

system bearing
masonry, centralized
plan

measurements

height 56 meters (184
feet)

subject

architecture
Holy Wisdom

style

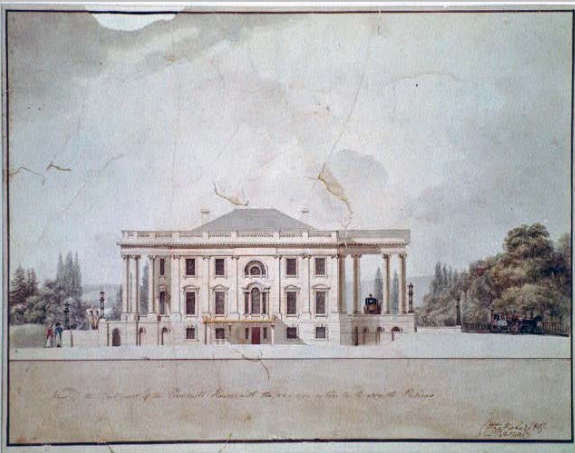
Byzantine

sources

Fletcher, *History of Architecture* (1987)
Piltz, *Byzantium in the Mirror* (2005)

current location

Istanbul (Marema region, Turkey)



Required elements

Defaults are set for missing data, e.g., unknown artist, measurements are unavailable, etc.

Work Type

Title

Creator

Creation Date

Current Location

Materials

Measurements

Subject

CONA Record

CONA ID: 700000082

Catalog Level: item

Work Type: design drawing

Title: Design for the Addition of Porticoes on the North and South Fronts of the President's House

Creator: Benjamin H. Latrobe (British, 1764-1820)

Creation Date: 1807

Current Location: Library of Congress (Washington, DC)

Materials: ink and watercolor on paper

Measurements: 39.12 x 50.8 cm (15 3/8 x 20 inches)

Subject: architecture

White House (Washington, DC)

Descriptive Note: Latrobe worked with President Jefferson to

CONA Equivalence Relationships

Titles/Names:

Eiffel Tower

Preference: preferred

Tour Eiffel

Preference: alternate

Torre Eiffel

Preference: alternate

Eiffelturm

Preference: alternate

Three-Hundred-Meter Tower

Preference: alternate *Title Type:* former



Titles and alternate titles to refer to same work

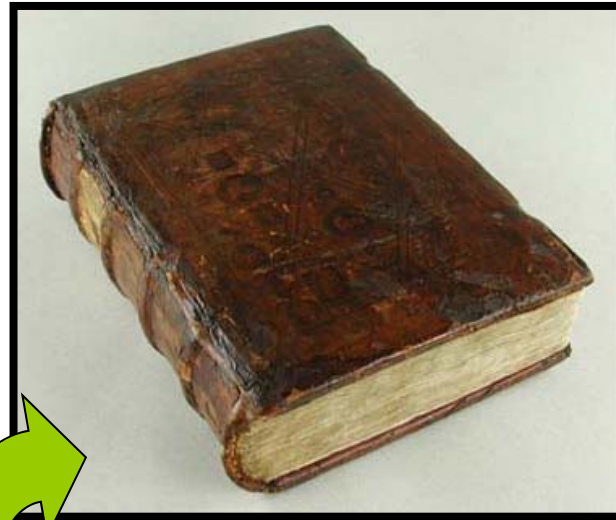
CONA Hierarchical Relationships

Catalog Level: component
Class: prints and drawings
Work Type: engraving
Title: Spring Flowers in a Chinese Vase
Creator: Maria Sibylla Merian
(German, 1647-1717)

Relationship Type:
broader context

Related Work: New Book of Flowers.
Nuremburg: 1680.

Relationship Number:
volume 3 plate 2

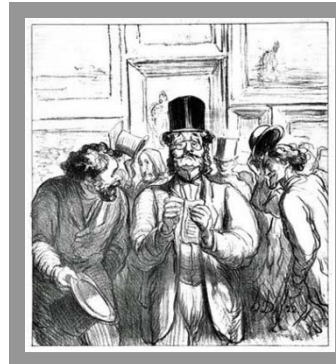


Record for the print is linked to separate record for the book as a whole



CONA Hierarchical Relationships

Whole/part relationships for groups, subgroups, items



CONA Hierarchical Relationships

Christ Presented to the People

State 1

State 2

State 3

State 4

State 5

State 6

State 7

State 8

- Whole/Part Records for multiples



CONA Associative Relationships

Relationships are reciprocal



study for

study is



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

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

**Linked to Getty
Vocabularies**

- In addition to compliance with ISO and NISO for controlled vocabularies
- CONA complies with entity relationship diagram for CCO/CDWA

Authorities

ULAN

TGN

AAT

Iconography
Authority

Work Records

Source Records

**Linked to Getty
Vocabularies**

- Is the first Getty vocabulary to be actually linked to the others (others have controlled lists based on another vocabulary, e.g., “roles” in ULAN based on AAT terms)

Authorities

ULAN

TGN

AAT

Iconography
Authority

Work Records

Source Records

PERSONAL AND CORPORATE NAME AUTHORITY

Individuals or
groups of
individuals
working
together
(corporate
bodies)



Elements of a ULAN record



Daoji. Winding Stream. Leaf 5 from "Album for Liu Shitou (Liu Lang). Qing dynasty, dated 1703. Ink and color on paper. Museum of Fine Arts (Boston, Massachusetts). Accession number: 48.11.5.

names

Shitao
Daoji
Yuanji
Tao-chi
Shih-t'ao
Zhu, Ruoji
Dadizi
Kuguaheshang
石涛
釋道
Qingxianglaoren

artist

500014514

- *The Focus of each vocabulary record is a concept - not a "term"*
- Conceptual record identified by unique numeric ID
- Linked to each artist record are names, related artists, sources for the data, and notes



Elements of a ULAN record



Daoji. *Winding Stream*. Leaf 5 from "Album for Liu Shitou (Liu Lang). Qing dynasty, dated 1703. Ink and color on paper. Museum of Fine Arts (Boston, Massachusetts). Accession number: 48.11.5.

names

Shitao
Daoji
Yuanji
Tao-chi
Shih-t'ao
Zhu, Ruoji
Dadizi
Kuguaheshang
石涛
釋道
Qingxianglaoren

life dates

Birth: 1642
Death: 1707

roles

artist
painter
calligrapher

artist

500014514

geographic location

Guilin (Guangxi,
China)
Yangzhou
(Jiangsu, China)

nationalities

Chinese
Qing

related people

collaborated with
Wang Yuanqi

note: Most commonly referred to as Daoji or Shitao in modern Western sources, although he himself preferred the name Yuanji. He was a descendant of the Ming dynasty (1368–1644) imperial Zhu family. In 1645, fleeing from invading Manchu troops, he fled to Buddhist monastic life in Quanzhou, Guangxi Province. Many of the sobriquets Daoji adopted sprang from his connection with Buddhism. ...

sources

Library of Congress Name
Authority Headings (2002-)
Grove Art Online (2008-)
Cheng, Shitao 1642-1707: La
Saveur (1998)
Hay, Shitao: Painting and
Modernity (2001)

SCOPE OF ULAN

- ⊙ Individuals or groups of individuals working together (corporate bodies) (*this component of scope is common to any similar authority*)
- ⊙ From Antiquity to the present
- ⊙ Anonymous masters and Unknown artists = appellations referring to the culture that created the work (e.g., *unknown Aztec*)
- ⊙ Involved in the conception or production of visual arts and architecture
- ⊙ May include artists, architects, craftsmen, as well as people and corporate bodies closely related to artists, including rulers, prominent patrons, museums and other repositories of art
- ⊙ Sitters and other subjects of works of art to control CONA terminology



PERSONAL AND CORPORATE NAME AUTHORITY FIELDS TO INCLUDE

- ① Unique identifier
- ① Names
- ① Sources
- ① Birth and Death Dates
- ① Nationality
- ① Life Roles

PERSONAL AND CORPORATE NAME AUTHORITY

Full list of elements in CDWA

- 28.1. Person Authority Record Type
- 28.2. Person/Corporate Body Name **Core**
 - 28.2.1. Preference
 - 28.2.2. Name Type
 - 28.2.3. Name Qualifier
 - 28.2.4. Name Language
 - 28.2.5. Historical Flag
 - 28.2.6. Display Name Flag
 - 28.2.7. Other Name Flags
 - 28.2.8. Name Source **Core**
 - 28.2.8.1. Page
 - 28.2.9. Name Date
 - 28.2.9.1. Earliest Date
 - 28.2.9.2. Latest Date
- 28.3. Display Biography **Core**
- 28.4. Birth Date **Core**
- 28.5. Death Date **Core**
- 28.6. Birth Place
- 28.7. Death Place
- 28.8. Person Nationality/Culture/Race **Core**
 - 28.8.1. Preference
 - 28.8.2. Nationality/Culture Type
- 28.9. Gender
- 28.10. Life Roles **Core**
 - 28.10.1. Preference
 - 28.10.2. Role Date
 - 28.10.2.1. Earliest Date
 - 28.10.2.2. Latest Date
- 28.11. Person/Corporate Body Event
 - 28.11.1. Event Date
 - 28.11.1.1. Earliest Date
 - 28.11.1.2. Latest Date
 - 28.11.2. Event Place
- 28.12. Related Person/Corporate Body
 - 28.12.1. Person Relationship Type
 - 28.12.2. Person Relationship Date
 - 28.12.2.1. Earliest Date
 - 28.12.2.2. Latest Date
- 28.13. Person/Corporate Body Broader Context
 - 28.13.1. Broader Context Date
 - 28.13.1.1. Earliest Date
 - 28.13.1.2. Latest Date
- 28.14. Person/Corporate Body Label/Identification
- 28.15. Person/Corporate Body Descriptive Note
 - 28.15.1. Note Source
 - 28.15.1.1. Page

GEOGRAPHIC NAME AUTHORITY

Administrative
and physical
places;
historical and
current

ELEMENTS OF A TGN RECORD



place
7004333



names

Munich
München
Monaco
Munichen

parent place

Germany
Bavaria
Oberbayern

place types

inhabited place
state capital

coordinates

48 08 N, 011 35 E

dates

founded near an older
settlement in 1157

note

Capital of Bavaria and the third-largest city in Germany; is situated on both sides of the Isar River, north of the Alps. Henry the Lion, duke of Bavaria, established it in 1157 as a mint and market for Benedictine monks from Tegernsee ...

sources

Baedekers: München (1955); Cambridge Italian Dictionary (1962); Canby, Historic Places (1984); Columbia Lippincott Gazetteer (1961); Enciclopedia Europea (1978); Times Atlas of the World (1992); USBGN: Foreign Gazetteers; Webster's Geographical Dictionary (1988)



SCOPE OF TGN

- TGN places include political entities and physical features
- Scope is global, some extraterrestrial
- Includes all current continents and nations
- Historical places, including nations and empires
- Prehistory to the present
- Real places, not mythical
- May include formerly inhabited places, historical places with unknown exact locations “lost settlement”
- Focus on places important to art and material culture



GEOGRAPHIC PLACE NAME AUTHORITY FIELDS TO INCLUDE

- ① Unique identifier
- ① Names
- ① Sources
- ① Place Types
- ① Broader Context



GEOGRAPHIC PLACE NAME AUTHORITY

Full list of elements in CDWA

- 29.1. Place Authority Record Type
- 29.2. Place Name **Core**
 - 29.2.1. Preference
 - 29.2.2. Name Type
 - 29.2.3. Name Qualifier
 - 29.2.4. Name Language
 - 29.2.5. Historical Flag
 - 29.2.6. Display Name Flag
 - 29.2.7. Other Name Flags
 - 29.2.8. Name Source **Core**
 - 29.2.8.1. Page
 - 29.2.9. Name Date
 - 29.2.9.1. Earliest Date
 - 29.2.9.2. Latest Date
- 29.3. Geographic Coordinates
- 29.4. Place Types **Core**
 - 29.4.1. Preference
 - 29.4.2. Place Type Date
 - 29.4.2.1. Earliest Date
 - 29.4.2.2. Latest Date

- 29.5. Related Places
 - 29.5.1. Place Relationship Type
 - 29.5.2. Place Relationship Date
 - 29.5.2.1. Earliest Date
 - 29.5.2.2. Latest Date
- 29.6. Place Broader Context **Core**
 - 29.6.1. Broader Context Date
 - 29.6.1.1. Earliest Date
 - 29.6.1.2. Latest Date
- 29.7. Place/Location Label/Identification
- 29.8. Place/Location Descriptive Note
 - 29.8.1. Note Source
 - 29.8.1.1. Page
- 29.9. Remarks
- 29.10. Citations
 - 29.10.1. Page
- 29.11. Place Authority Record ID

GENERIC CONCEPT AUTHORITY

Terms not
proper names



ELEMENTS OF AN AAT RECORD

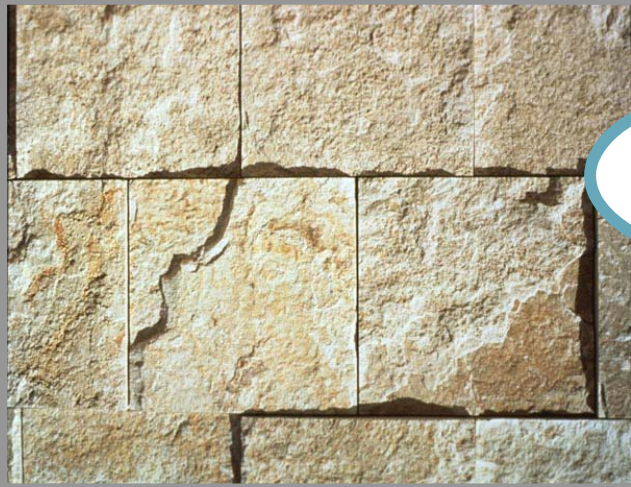
names/terms

travertine
travertine marble
travertine stone
roachstone
lapis tiburtinus

related concepts

tufa
onyx marble

concept
300011329



scope note

A dense, crystalline or microcrystalline limestone that was formed by the evaporation of river or spring waters. It is named after Tivoli (*Tibur* in Latin)...

parent concept

Materials Hierarchy
.....limestone
.....sinter
.....travertine



sources

Sturgis, Dictionary of Architecture and Building (1902); Roberts, Construction Industry Thesaurus (1976); Brady and Clauser, Materials Handbook (1977); Dictionary of Geological Terms (1984); Oxford English Dictionary (1989); Encyclopaedia Britannica (1973)

SCOPE OF AAT

- ◎ **Scope is from prehistory to the present**
- ◎ **No geographic limitations**
- ◎ Terms for concepts, activities, and objects discussed within the literature of the fields of art, architecture, decorative arts, archaeology, material culture, art conservation, archival materials, or related topics
- ◎ **Concepts identified by terms *excluding* proper names**
- ◎ Thus it can be described as containing information about *generic concepts* (as opposed to proper nouns or names)
- ◎ Must fit into the hierarchies already established in the AAT

*Associated
Concepts*

*Physical
Attributes*

*Styles and
Periods*

Agents

Activities

Materials

Objects

SCOPE OF AAT

Outside the scope of AAT:

- Geographic names (see TGN)
- Personal names (for artists, see ULAN)
- Corporate names
- Iconographic themes (see ICONCLASS)
- Titles of works of art or names of buildings (CONA)
- Brand names



GENERIC CONCEPT AUTHORITY FIELDS TO INCLUDE

- ① Unique identifier
- ① Names
- ① Sources
- ① Broader Context
- ① Scope Note



GENERIC CONCEPT AUTHORITY

Full list of elements in CDWA

- 30.1. Concept Authority Record Type
- 30.2. Generic Concept Term **Core**
 - 30.2.1. Preference
 - 30.2.2. Term Type
 - 30.2.3. Term Qualifier
 - 30.2.4. Term Language
 - 30.2.5. Historical Flag
 - 30.2.6. Display Term Flag
 - 30.2.7. Other Term Flags
 - 30.2.8. Term Source **Core**
 - 30.2.8.1. Page
 - 30.2.9. Term Date
 - 30.2.9.1. Earliest Date
 - 30.2.9.2. Latest Date

- 30.3. Related Generic Concepts
 - 30.3.1. Concept Relationship Type
 - 30.3.2. Concept Relationship Date
 - 30.3.2.1. Earliest Date
 - 30.3.2.2. Latest Date
- 30.4. Concept Broader Context **Core**
 - 30.4.1. Broader Context Date
 - 30.4.1.1. Earliest Date
 - 30.4.1.2. Latest Date
- 30.5. Generic Concept Label/Identification
- 30.6. Concept Scope Note **Core**
 - 30.6.1. Note Source **Core**
 - 30.6.1.1. Page
- 30.7. Remarks
- 30.8. Citations
 - 30.8.1. Page
- 30.9. Concept Authority Record ID

ICONOGRAPHIC SUBJECT AUTHORITY

Subjects not
included in
other three
vocabularies

ELEMENTS OF A CONA IA



iconograph
-ical
subject
1000083

names

Adoration of the Magi
Adoration of the Three Kings
Adoration of the Wise Men
Adorazione dei Magi
Anbetung der Könige
Adoración de los Reyes Magos
Adoration des mages

parent concept

Religion/Mythology
...Christian iconography
.....New Testament

other relationships

magi
kings
gifts
worship
Epiphany

type
religion/
mythology

related iconography

Gaspar
Melchior
Balthasar
Jesus Christ
Blessed Virgin Mary
Saint Joseph

note

Episode in the Life of Christ in which the three magi travel from the East, following a star, to worship the newborn ...

sources

Ferguson, Signs and Symbols in Christian Art (1966); Grabar, Christian Iconography: Study of Its Origins (1981); Harpring, Bartolo di Fredi (1993); New Catholic Encyclopedia [online] (2003-); Iconclass 2100 Browser (2009-)

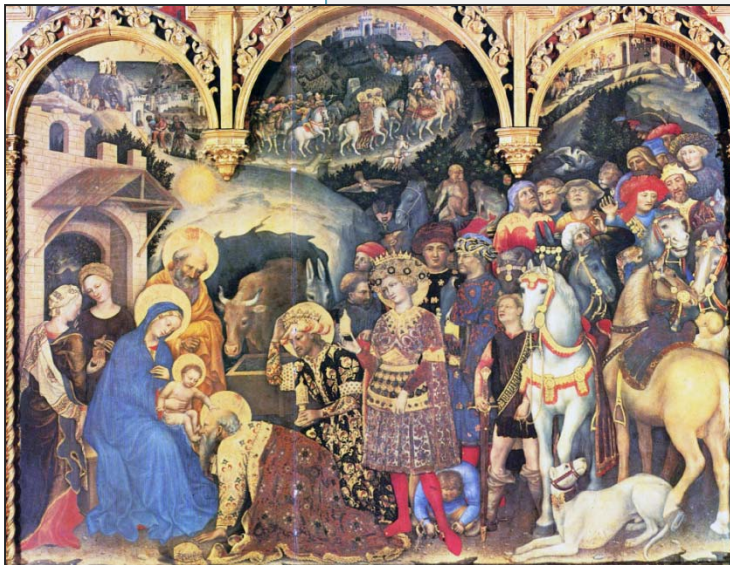
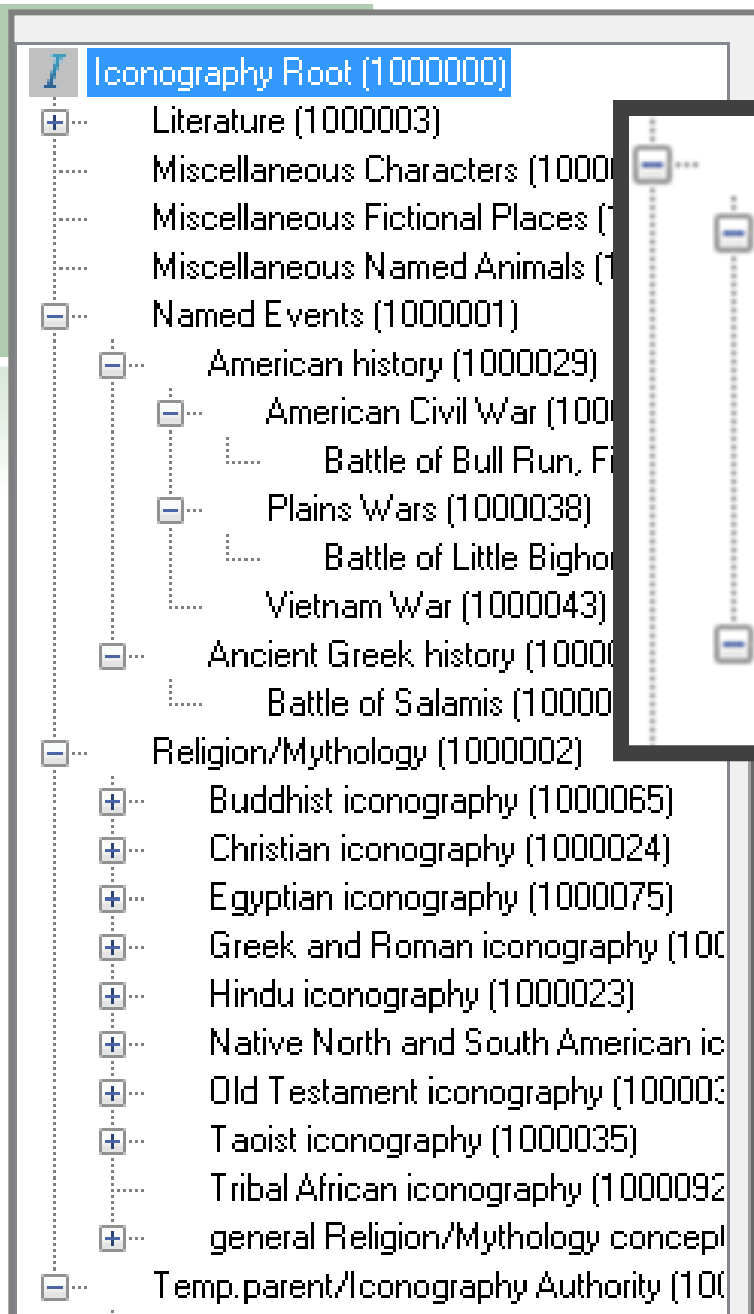


Image: Uffizi, Gentile da Fabriano, Adoration of the Magi




SUBJECTS FROM THE CONA ICONOGRAPHY AUTHORITY

- The CONA Iconography Authority (IA), contains names/terms and other information for iconography and other subject terminology not contained in the other linked vocabularies
- The IA includes proper names for events, religion/mythology, fictional characters, named animals, themes from literature, and fictional places
 - E.g., mythological and fictional places and characters (e.g., *Zeus*), the names of specific events, (e.g., the *American Civil War*), or iconographic themes (e.g., the *Adoration of the Magi*)



- CONA Iconography Authority is a thesaurus in structure
- Includes equivalence, hierarchical, and associative relationships
- Links to AAT, ULAN, TGN, CONA work records



ICONOGRAPHIC SUBJECT AUTHORITY FIELDS TO INCLUDE

- ① Unique identifier
- ① Names
- ① Sources
- ① Broader Context

ICONOGRAPHIC SUBJECT AUTHORITY

Full list of elements in CDWA

- 31.1. Subject Authority Record Type
- 31.2. Subject Name **Core**
 - 31.2.1. Preference
 - 31.2.2. Name Type
 - 31.2.3. Name Qualifier
 - 31.2.4. Name Language
 - 31.2.5. Historical Flag
 - 31.2.6. Display Name Flag
 - 31.2.7. Other Name Flags
 - 31.2.8. Name Source **Core**
 - 31.2.8.1. Page
 - 31.2.9. Name Date
 - 31.2.9.1. Earliest Date
 - 31.2.9.2. Latest Date
- 31.3. Subject Date
 - 31.3.1. Earliest Date
 - 31.3.2. Latest Date
- 31.4. Subject Roles/Attributes
 - 31.4.1. Preference
 - 31.4.2. Role Date
 - 31.4.2.1. Earliest Date
 - 31.4.2.2. Latest Date
- 31.5. Related Subject
 - 31.5.1. Subject Relationship Type
 - 31.5.2. Subject Relationship Date
 - 31.5.2.1. Earliest Date
 - 31.5.2.2. Latest Date
- 31.6. Subject Broader Context **Core**
 - 31.6.1. Broader Context Date
 - 31.6.1.1. Earliest Date
 - 31.6.1.2. Latest Date
- 31.7. Related Place/Location
 - 31.7.1. Place Relationship Type
- 31.8. Related Person/Corporate Body
 - 31.8.1. Person Relationship Type
- 31.9. Related Generic Concept
 - 31.9.1. Concept Relationship Type
- 31.10. Subject Label/Identification
- 31.11. Subject Descriptive Note
 - 31.11.1. Note Source
 - 31.11.1.1. Page
- 31.12. Remarks
- 31.13. Citations
 - 31.13.1. Page

WHAT IS SUBJECT?

- The subject matter of a work of art (sometimes referred to as its content)
- is the narrative, iconic, or non-objective meaning conveyed by a figurative or an abstract composition.
- It is what is depicted in and by a work of art.
- It also covers the function of an object or architecture that otherwise has no narrative content.

- In CCO and CDWA it is broadly defined
- “Core” information
- For *all* objects, even those that have no “subject” in the traditional sense

WHAT IS SUBJECT?

Quick overview

You are probably accustomed to thinking of subject in these ways:

Representational, narrative

Tells a story

Representational, not a story

Portraits, landscapes, still lifes, genre scenes, architectural drawings, allegories

But these may also be “subject”:

Nonrepresentational

Abstract

Decoration

Function

Implied themes or attributes

General Subject

advertising & commercial	allegory	animal
apparel	architecture	botanical
cartographic	ceremonial object	cityscape
didactic & propaganda	funerary art	genre
history & legend	human figure	interior architecture
landscape	literary theme	machine
military	mixed motif	nonrepresentational art
object (utilitarian)	performance	portrait
religion and mythology	seascape	still life

- Choose appropriate general subjects
- In addition, add terms to describe subject as specifically as possible

Level of Subject Indexing

- ◎ Three levels of analysis

(“indexing type” in CONA)

Of-ness

- ◎ Objective **description**

About-ness

- ◎ **Identification** of named subject

- ◎ **Interpretation** of the meaning or theme

Loosely based on method prescribed by Erwin Panofsky

Description

Identification

Interpretation

Indexing type may be used as a systematic method for analysis, even if the three levels are not labeled

* *Subject*
human figures

women

nudes

fruit

mask

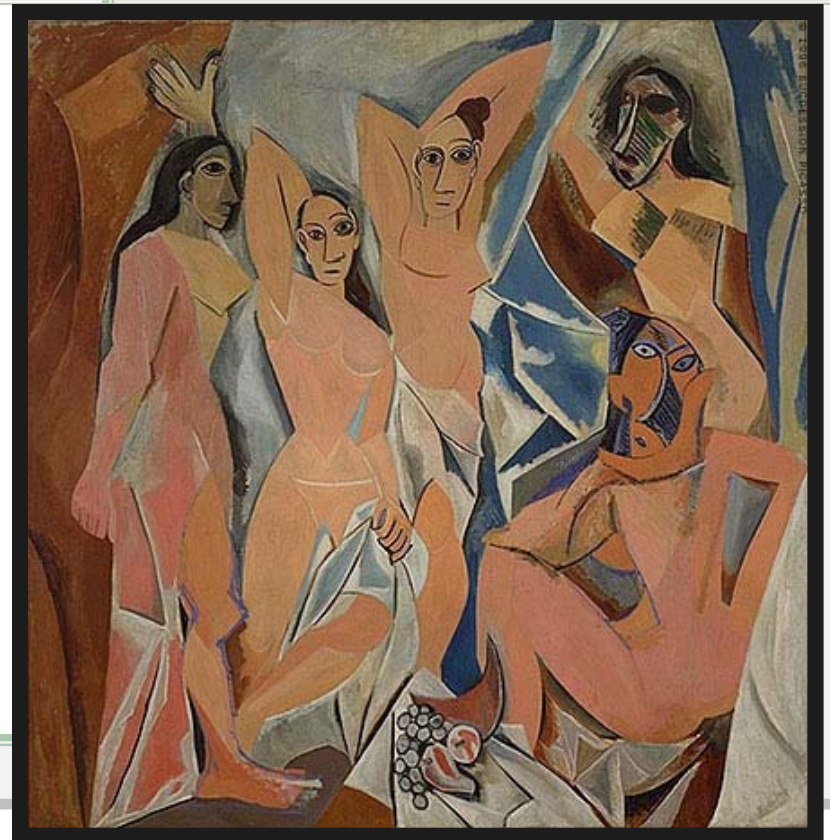
African

Iberian

Carrer d'Avinyó (Barcelona, Spain)

brothel

prostitution





Description

Identification

Interpretation

Issue: But if you do not label identification and interpretation, how can you distinguish a portrayal of the "Resurrection" from this allegory for the "Resurrection"?

Subject:

animal

religion and mythology

literary theme

pelican

blood

feeding

Hugh of Fouilloy, *De Avibus*

Psalm 102:6

Holy Eucharist

Resurrection of Christ

Bust of Jacob van Reygersberg
 Rombout Verhulst; 1671; marble; height: 24 3/4 inches; J.
 Paul Getty Museum (Los Angeles, California); 84.SA.743



- Subjects that are historical people (vs. fictional) are controlled by ULAN

General Subject

#	P	General Depicted	Indexing Type	Subject Extent
1	P	portrait		
2	N	human figure(s)		

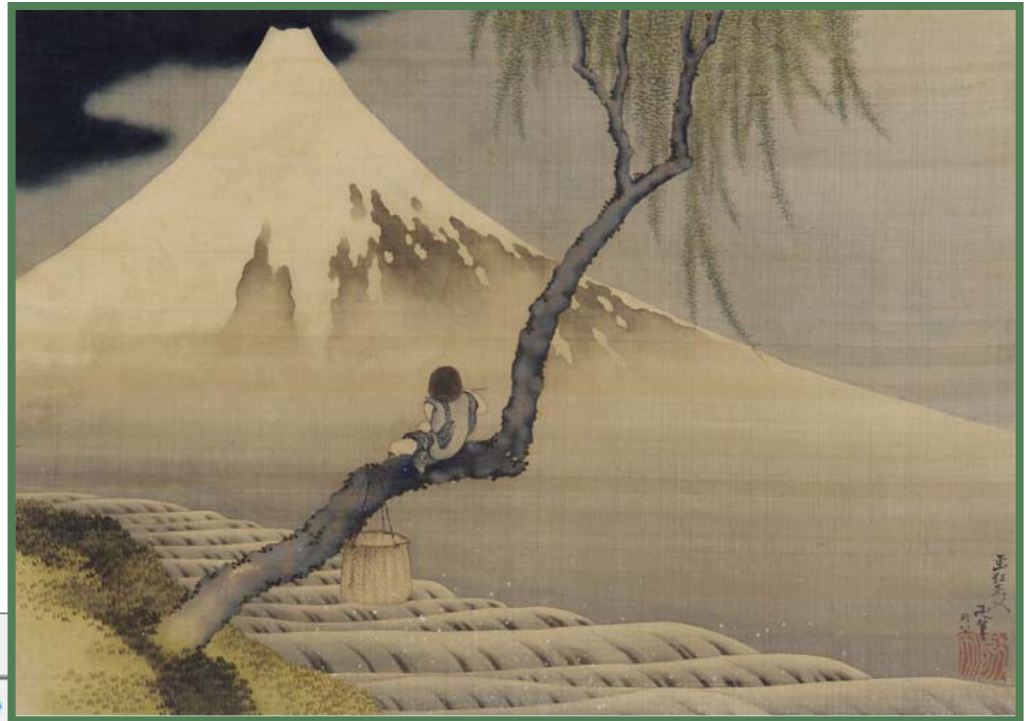
Specific Subject

#	P	Depicted Label	CONA ID	ULAN ID
1	P	Jacob van Reygersberg (Dutch noble and patron, 1624-1694)		500329592
2	N	commemoration (event) (Events, Events, Activities & Events)		300214143
3	N	human males (<people by gender>, people, People, A		300025928

- Issue: Scope of ULAN is artists, architectural firms, repositories
- Facet for non-artists has been added in ULAN, to record patrons and sitters, etc.

Boy Viewing Mount Fuji

Katsushika Hokusai, (Japanese, 1760-1849); 1839, Edo period; ink and color on silk; height: 127.0 width: 69.2 cm; Freer Sackler Museums, Smithsonian Institution; Washington (DC); Gift of Charles Lang Freer; F1898.110



General Subject

#	P	General Depicted	Indexing Type
1	P	landscape	

Depicted Label	CONA ID	ULAN ID	TGN ID
Fuji, Mount (Ch\$01ubu, Nihon, Asia, World, Top of the			1107685
2 N Kanagawa Yokohama Kanagawa-ken Kanto Nihon			1004814

- Physical features (e.g., mountains) and administrative places (e.g., cities, empires) are controlled by TGN

General Subject

#	P	General Depicted	Indexing Type
1	P	botanical	



Specific Subject

#	P	Depicted Label	AAT ID
1	P	Nature (<philosophical concepts>, Associated Co	300179372
2	N	Iris (genus) (Iridaceae, Asparagales, Angiosperma	300343602
3	N	regeneration (events, Events, Activities Facet)	300343606

AAT record

#	P	H	V	Terms/Names
1	P	C	U	Nature
2	V	C	U	natuur
3	V	C	U	natura
4	V	C	U	naturaleza

- Terms in other languages and hierarchy of "Nature" in the AAT may be used to retrieve van Gogh's Irises in CONA

Iconography Id: 1000085 Iconography Parent: 1000065

Iconography Type: Religion/Mythology

unique ID of record
type
descriptive note
date for subject

Descriptive Note: The bodhisattva of infinite compassion and mercy, possibly the He supremely exemplifies the bodhisattva's resolve to postpone helped every being on earth achieve emancipation.

Date:

Type	Name
# D	Avalokiteshvara
UF	Guanyin
UF	观音菩萨
UF	Kannon

Qualifier	Iconography Name Id
	000191
	000192
	000194
	000193

names
multiple languages
qualifier
unique ID of name
languages
source

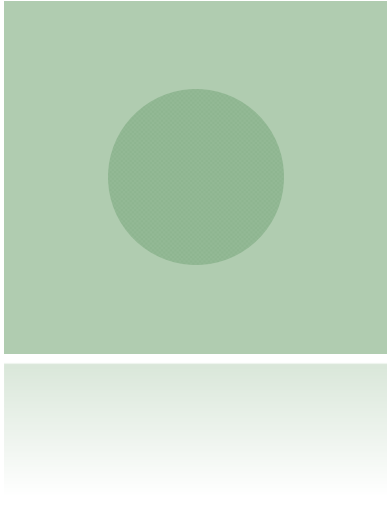
N Chinese (transliterated)
N English

N Encyclopedia Britannica Online (2002-)

links to sources
to AAT, TGN, ULAN, CONA IA

Sources Associative Rels AAT Rels Place Rels Person/Corp Rels

Rel Type	Label	AAT ID
role/attribute	bodhisattva (<Buddhist doctrinal concepts>, <doctrinal co	300264360
role/attribute	Buddhist doctrinal concepts (<doctrinal concepts>, <religi	300264529



Subjects from other sources

- ① CONA allows references to other sources of subject, such as Iconclass or LC subject headings
- ① For contributors who are already using these sources for subject indexing
- ① These references are in the Depicted Subject of the Work record

Iconclass

<i>Depicted Subject</i>	<i>Outside Iconography</i>	<i>Culture/Style</i>	<i>Other Displays</i>	<i>Events</i>	<i>Subject Contribs/Sources</i>	<i>Notes</i>	<i>Media</i>	<i>Addl Subject Fields</i>
Outside Iconography Term		Outside Iconography Code		P	Source			
Hercules		94L		N	Iconclass 2100 Browser (2009-)			

<i>Depicted Subject</i>	<i>Outside Iconography</i>	<i>Culture/Style</i>	<i>Other Displays</i>	<i>Events</i>	<i>Subject Contribs/Sources</i>	
Outside Iconography Term		Outside Iconography Code				
Hercules		94L				

LC subject headings

<i>Depicted Subject</i>	<i>Outside Iconography</i>	<i>Culture/Style</i>	<i>Other Displays</i>	<i>Events</i>	<i>Subject Contribs/Sources</i>	<i>Notes</i>	<i>Media</i>	<i>Addl Subject Fields</i>
Outside Iconography Term		Outside Iconography Code		P	Source			
Little Bighorn, Battle of the, M					gs [online] (200			

<i>Depicted Subject</i>	<i>Outside Iconography</i>	<i>Culture/Style</i>	<i>Other Displays</i>	<i>Events</i>
Outside Iconography Term		Outside Iconography Code		
Little Bighorn, Battle of the, Mont., 1876		sh 85077676		

BUILDING LOCAL AUTHORITIES

But don't
reinvent
the wheel

Local Authorities

Systems for cataloging art information should incorporate local authorities to control terminology

Local authorities may provide terms not found in published authorities, including local terms that are out of scope for published vocabularies, nonexpert terms

A common way of creating local authorities is through derivation (also called modeling) based on a published vocabulary. In this approach, an appropriate controlled vocabulary is selected as a model for developing controlled terminology for local use, so that the local terms will be interoperable with it

- Local authority file is often compiled from terminology from one or more published standard controlled vocabularies





Constructing a Vocabulary or Authority

- Constructing a rich and complex controlled vocabulary or authority is a time-consuming and labor-intensive process
- Benefits are worth the cost, because the resulting vocabulary helps to ensure consistency in indexing and facilitates successful retrieval
- Saves labor, because catalogers do not have to repeatedly record the same information
- **As much as possible, use standard controlled vocabularies rather than building new ones unnecessarily**

General Criteria for the Vocabulary

Where you must build new vocabularies, determine intended compliance with standards, construction methods, plans for maintenance, desired structure, types of relationships, display formats, and policies regarding compound terms, true synonymy, and types of acceptable warrant

First step in resolving these issues is to determine the purpose, scope, and audience of the vocabulary.



Scope of the Vocabulary

No vocabulary can contain all terminology. Boundaries for the vocabulary should be set, and the realm of knowledge encompassed should be precisely defined.

Will it have a broad scope but shallow depth? Or will it have narrow or specific scope, but deep depth?

An example of the latter is the AAT, for which the scope is limited to art and architecture, but the depth of hierarchies within this realm may be very extensive

- If the vocabulary is complex, facets and other divisions should be established in order to divide the terms in a logical and consistent way
- Vocabulary may grow and change over time, requiring additional divisions within the hierarchies
- Levels of granularity and specificity that will be needed by the users of the vocabulary should be carefully considered



Use Established Standards

When populating the authority, use established authoritative standards and vocabulary resources for models, rules, and values

In order to avoid duplication of effort and to allow future interoperability, developers of a new vocabulary should attempt to incorporate existing authoritative standards and vocabularies

Whenever possible, the vocabulary should be populated with terminology from existing controlled vocabularies, such as the Getty vocabularies and the Library of Congress Authorities, rather than inventing terms from scratch

- The unique numeric or alphanumeric identifiers of incorporated records should be included so that information may be exchanged with others and updates from the original vocabulary sources may be received
- E.g., AAT subject_ID = **300011973** for *birch (wood)*



Use Established Standards

Standard, published sources for terms or names and other information should be used when it is necessary to make new vocabulary records

Sources for information in the authority record should be systematically cited

If the name or term does not exist in a published source, it should be constructed according to CDWA, CCO, the Editorial Guidelines of the Getty Vocabulary Program, AACR2, or other appropriate rules

Among synonyms, one of the terms or names should be flagged as the preferred term/name and chosen according to established rules and standards



Maintaining the Vocabulary

Terminology for art and material culture changes over time; vocabularies must be living, growing tools.

What methodology will be used for keeping up with changing terminology?

- If it is possible to contribute terminology to a published vocabulary (such as the Getty vocabularies or the Library of Congress Authorities), a plan and methodology should be developed to submit new terms and to keep your vocabulary in synch with the standard vocabularies
- Contributing to a common resource allows an institution and others in the academic or professional community to effectively share terminology, thus avoiding redundant efforts and enhancing interoperability
- Linked data: Use Web Services or another means of keeping your terms in synch with the master files



Purpose of the Vocabulary

What is the purpose and intended audience of the new vocabulary or local authority?

Vocabularies and authorities are typically used for cataloging, retrieval, or navigation

In an ideal situation, separate—although closely related—vocabularies are used for cataloging and for retrieval

Vocabulary for cataloging

- expert terminology
- designed to encourage the greatest possible consistency among catalogers by limiting choices of terminology according to the scope of the collection and the focus of the field being indexed

Vocabulary for retrieval

- typically broader in scope
- contains more nonexpert terminology

Vocabulary for navigation or browsing on a Web site

- very simple
- aimed at the nonexpert audience rather than at specialists
- typically not used for cataloging or retrieval beyond navigation



Which Fields Should Be Controlled?

Systems developers must understand that a system for cataloging art and cultural heritage objects requires certain fields that allow data to be formatted for display to end users

- Display information may be free text or concatenated from controlled data, depending upon the requirements of a given field
- For many other fields, it is necessary to use controlled vocabulary for indexing
- A general guideline is that any information required as a variable in a retrieval query should be indexed in controlled fields to allow efficient retrieval
- Indexing is done using standard vocabulary, local vocabulary, controlled list, or controlled format



Structure of the Authority

Local authorities should be compliant with ISO and NISO standards for thesauri; they should be structured as hierarchical, relational databases, as recommended and discussed in CDWA and CCO

Consult existing vocabulary data models such as those used for the Getty vocabularies

Standards recommend the use of a relational database because of the complexity of cultural information and the importance of linking to authority records

Relational database provides a logical organization of interrelated information (e.g., data about works and images, authority files, and so on) that is managed and stored in a single information system



Structure of the Authority

Establish the entity-relationship model and data structure

After the scope is defined, the relationships between various types of data should be established

- Which data needs to have controlled terminology?
- Which elements must be a text field?
- Where multiple values may exist for a field, which fields must be grouped together?
- How are various types of information otherwise related?
- What technology will be used?
- How will authority files, lists, and other controlled vocabularies be integrated into the rest of the system?

Answers depend upon local needs and resources

If an institution is tied to a particular software, a vocabulary that operates within the parameters of that software may have to be designed, and compromises relative to the standards should be made as necessary

Unique IDs in the Authority

Referencing unique numeric identifiers is a common way to express relationships in an information system

Subject Edit - Term:rhyta, S:300198841, P:300194567

Subject ID: 300198841	Review: <input type="text" value="In Process"/>	Merged: <input type="text" value="Merged"/>	Publish: <input type="text" value="Published"/>
Parent: 300194567	Record: <input type="text" value="Concept"/>	Candidate: <input type="text" value="Non Candidate"/>	

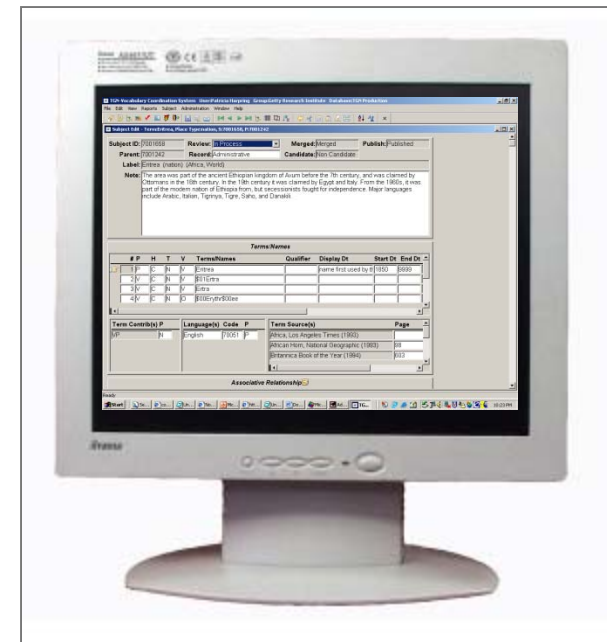
Label: rhyta (drinking vessels, vessels for serving and consuming food, containers for serving and consuming food, cu

#	P	H	V	Terms/Names	Display Dt	Start Dt	End Dt	Term ID
1	P	C	U	rhyta				1000198841
2	V	C	U	rhyton				1000297235
3	V	C	U	rhytons				1000316909
4	V	C	U	rhea				1000272716

Data Model and Rules

The following basic issues related to the data model, minimum records, editorial rules, and other topics should be resolved before beginning work on a new vocabulary

- Logical focus of the record
- Controlled fields vs. free-text fields
- Minimum information





Logical Focus of the Record

Establish the logical focus of each vocabulary record

If only a small number of terms are needed for an application, perhaps all terminology may be included in a single vocabulary, distinguishing broad types with facets

For medium-sized and large vocabularies, generally more efficient to create separate vocabularies for different types of data

- A primary criterion for judging when to make separate vocabularies or a single vocabulary is to consider how similar the data is for various records
- For example, a vocabulary for people's names requires information that is quite different from information about geographic names: people have biographies and very shallow hierarchies (if any), while geographic places have coordinates and a position in an administrative hierarchy. Based on these differences, it is more efficient to create separate vocabularies for people and geographic places



Controlled Fields vs. Free-Text Fields

Accommodate both controlled fields and free-text fields

Controlled fields contain data values drawn from controlled terms and are formatted to allow for successful retrieval

Free-text fields communicate nuance, uncertainty, and ambiguity to end users.

- The primary function of an indexed field is to facilitate end-user access
- Access is improved when controlled terms are used to populate database fields
- Fields in one controlled vocabulary may be controlled by terms in another controlled vocabulary; for example, the place names in a personal name vocabulary may be controlled by a geographic place name vocabulary
- Consistency is less important for a free-text field than for a controlled field, but it is still desirable
- Although free-text fields by definition contain uncontrolled terminology, the use of terminology that is consistent with the terms in controlled fields is recommended for the sake of clarity
- Using a consistent style, grammar, and sentence structure is also recommended.



Controlled Fields vs. Free-Text Fields

It is often necessary to allow fuzziness in the expression of information that at the same time must be retrievable via terminology from a controlled vocabulary; in certain key areas of a work record, this is accomplished by including separate display and indexing fields for the same information

Most effective way to express the nuances of such information is to use natural language in a display field and to index the same information separately, using controlled vocabulary

Creator Description: Vincent van Gogh (Dutch, 1853–1890)

Role: painter **Identity:** Gogh, Vincent van

Creator Description: Marco Ricci (Venetian, 1676–1730),
figures by Sebastiano Ricci (Venetian, 1659–1734)

Role: painter **Extent:** landscape | architecture

Identity: Ricci, Marco

Role: painter **Extent:** figures **Identity:** Ricci, Sebastiano



Minimum Information

Establish the minimum required information for each record by determining which information in the data model is required and which is optional

Consult standards and published vocabularies

Data that is needed in order to use and display the vocabulary must be decided upon and supplied for every record

E.g., preferred terms and hierarchical placement is required for every record

- Other data may be desirable but not required
- Strategy may be adopted for data to be supplied incrementally over time
- E.g., developers of the vocabulary could work in phases, beginning with a set of minimal records and then, at a later date, filling out and supplementing the records

EDITORIAL ISSUES

**For
consistency
and
authoritative-
ness**



Rules for Constructing a Vocabulary

Devise consistent editorial rules for the establishment of warrant, choice of terms, placement in the hierarchy, and writing of scope notes and other data

Where possible, existing rules should be consulted, including the Editorial Guidelines of the Getty vocabularies, the CCO and CDWA chapters on authorities, AACR2, or other standard guidelines

Documentation

Vocabulary creators should provide user documentation for the controlled vocabulary, explaining the scope, development process, structure, basic rules for construction, and how to use the vocabulary.

Separate documentation may be desirable for vocabulary creators, indexers, and searchers

Editorial Rules

Identify and adopt appropriate editorial rules for building the vocabulary to ensure consistent data

If an existing set of standard rules must be altered due to local requirements, the local rules should be thoroughly documented



- Once the rules are in place, they should be applied consistently and without fail
- To avoid altering established rules on a case-by-case basis when existing rules do not work in a given situation, a system should be in place whereby an authorized individual or team may update the rules and distribute the revisions to all users of the vocabulary



Characteristics of Displays

Designing a good display is critical; willingness and ability to use the vocabulary are dependent upon how well users can understand and find terms

Several types of possible displays, ranging from simple alphabetical listings to complex graphical displays

Often desirable to provide multiple views of the vocabulary, including hierarchical displays, full record displays, and search results displays

Various methods of display, typography, capitalization, sorting, and arrangement of the data on the page or screen can be used to make terms easy to find and understand

Usability and accessibility standards should be applied rigorously to all controlled vocabulary display designs

User interface design should take into consideration accessibility issues for people with disabilities, which is a growing area of research and standardization



Characteristics of Displays

Many issues regarding display are discussed in CCO, CDWA, and in greater detail in Introduction to Controlled Vocabularies and the Getty vocabularies' Editorial Manuals

Among the critical issues regarding display:

Format of Display

Display Independent of DB Design

Notation vs. Indentation

alternative Hierarchical Displays

Display of Polyhierarchy

Sorting of Siblings

Classification Notation or Line

Number

Faceted Displays and Guide Terms

Full Record Display

Displaying Equivalents

Permuted Lists and Inverted Forms

Displaying Homographs

Sorting and Alphabetizing Terms

Diacritics in Sorting

Display of Diacritics

Search Results Displays

Headings or Labels

Ascending or Descending Parents

Displaying Search Results

Pick Lists



Characteristics of Displays

Format of Display

Controlled vocabularies may be delivered in print or electronic formats

Display Independent of Database Design

As far as possible, display or technical constraints should not drive the database design

Allowing local display issues or the limitations of a particular computer system to drive how a database is designed or how information is inputted may offer short-term solutions to some problems but will make it more difficult to migrate and share vocabulary data in the long term

When vocabularies are used in an application for indexing or retrieval, the application must deal with issues surrounding how to gain access to the vocabulary data itself, how to display vocabulary data, and how to apply vocabulary data in a query across target resources

Displaying Hierarchies

Thesauri, taxonomies, and any vocabularies with established relationships between records should include a hierarchical display that illustrates the relationships

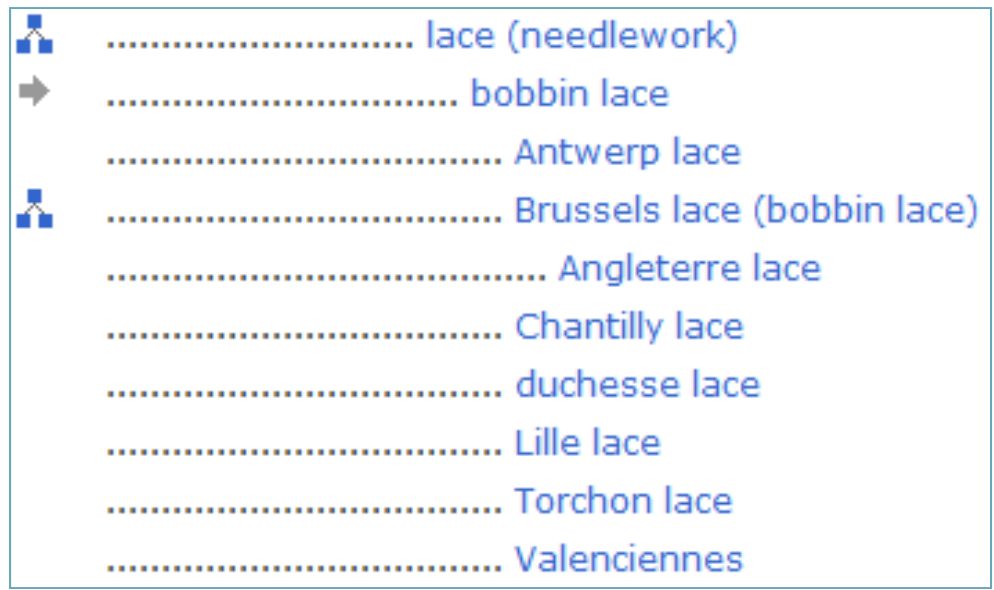
How to represent the relationships, whether through notation codes, indentation, or other graphical displays

Notations vs. Indentation

Flat display often used in printed publications = the hierarchical relationships of thesauri indicated with relationship notations, such as BT (broader term), NT (narrower term), and UF (used for term)

Indentation is more user-friendly for non-expert

bobbin lace
BT lace
NT Antwerp lace
NT Brussels lace
NT Chantilly lace
NT duchesse lace





Displaying Hierarchies

Displaying hierarchies brings up many issues
See *Introduction to Controlled Vocabularies* for complete discussion

Alternative Hierarchical Displays

Algorithms may be established to allow display of the hierarchy by different languages or by other alternative displays

Display of Polyhierarchy

If a record has multiple parents, and if that record also has children, the children must display with the parent in all hierarchical views

Sorting of Siblings

Siblings in hierarchical displays are generally arranged alphabetically; may also be arranged chronologically or in another logical order

Classification Notation or Line Number

In a tree structure, each term may be assigned a classification notation or line number, often built from the top down



Displaying Hierarchies

Displaying hierarchies brings up many issues

See *Introduction to Controlled Vocabularies* for complete discussion

Faceted Displays and Guide Terms

The display of records may be organized according to the broad categories or facets. Facets may have a further hierarchical arrangement as well so that narrower facets are arranged within broader categories

Top of the AAT hierarchies

Styles and Periods Facet

Styles and Periods

<styles and periods by region>

<The Americas>

<American regions>

Central American

Caribbean

North American

South American

Pre-Columbian

Guide terms (node labels) are used to group both narrower and related terms into categories; distinguish guide terms from postable terms by placing them in angled brackets



Other Display Issues

Full Record Display

Full record displays (also called term detail displays) include complete details for each record, including equivalence, associative, and hierarchical relationships as well as scope notes, sources, and other related information

Displaying Equivalence and Associative Relationships

Relationships between terms in a record (equivalence relationships) and between records (associative relationships, or nonhierarchical relationships) should be clearly designated to users. It should be obvious to the user which terms are descriptors, as distinguished from alternate descriptors and other variant terms (called used for terms)

Permuted Lists and Inverted Forms

Some controlled vocabularies include an auxiliary permuted or rotated list that gives access to every word in all the terms



Other Display Issues

Displaying Homographs

Homographs are terms or names that are spelled alike but have different meanings. Homographs must be distinguished in displays, typically by qualifiers in parentheses

Sorting and Alphabetizing Terms

Terms consisting of alphabetic characters may be sorted word-by-word or letter-by-letter. Word-by-word sorting is familiar to users from alphabetized telephone directories. In word-by-word sorting, a space is significant (it is also called nothing before something filing); it keeps together terms that begin with the same word

word-by-word sorting:

book catalogs
book cloth (textile material)
book cupboards
bookbinding
bookcases
bookends

letter-by-letter sorting:

bookbinding
bookcases
book catalogs
book cloth (textile material)
book cupboards
bookends



Other Display Issues

Diacritics in Sorting

A typical database requires implementers to identify one—and only one—language for the data; the system applies pre-established sorting algorithms based on that language. However, the vocabularies discussed in this book include terms and names in many languages. Since it is impossible to create a sorting rule that recognizes diacritics while still obeying rules of alphabetization for all languages, and since most Web users are accustomed to seeing terms and names sorted by standard ASCII characters without special weighting of diacritics, normalized diacritics should be used for sorting.

Display of Diacritics

The display of diacritics may necessarily differ in systems for creators and for end users of vocabularies. Full diacritics or diacritical codes should display in the system used by creators of vocabularies and indexers. Adoption of Unicode is eliminating many earlier problems.



Other Display Issues

Search Results Displays

Results of search queries should display both the terms that met the criteria of the search and an indication of the hierarchy and other context of the terms

Headings or Labels

Headings or labels are used in search results displays and in other displays where a brief listing of the vocabulary record is required. The heading or label is a short display that identifies the vocabulary concept, combining the term or name with additional information. Ideally, the information is recorded in separate fields and concatenated with the name or term for heading displays

Ascending or Descending Order of Parents

Ascending order refers to the display of hierarchical entities in a heading from smallest to largest, familiar to users in the U.S. from mailing addresses. Descending order refers to the display of hierarchical entities in a heading from largest to smallest. This display may be familiar to users from back-of-book indexes



Other Display Issues

Displaying the User's Search Term

The results list should clearly demonstrate to the user why the results were returned. The users' search string may not necessarily match the preferred term; regardless, the term that made the match should be included in the results

Pick Lists

Some electronic implementations of controlled vocabularies use pick lists as a way to lead users to a small set of choices of terms for a given field

EDITORIAL RULES

Basics of
creating
authoritative
information



Editorial Rules

What do editorial rules comprise?

- list of which fields are required
- how to choose a preferred term for each record
- which variant terms to include
- required parameters for choosing hierarchical positions for new records and how to construct new branches of the hierarchies
- how to establish other relationships between terms and records
- format and syntax used to fill in each field
- language allowed for each field (is the data in English only or multilingual?)
- character sets
- authorized sources for each field
- decision trees regarding how to choose which information is preferred when sources disagree

Ideally, the rules should include many examples illustrating how to enter the data and make decisions

References to a computer system should be as generic as possible in the editorial rules, so that they do not have to be entirely rewritten when new systems are adopted over time



Editorial Rules

- Avoid plagiarism
 - Do not copy texts from published sources verbatim!
 - Read, analyze, and rephrase the material
 - Do not jump to conclusions or state more than is discussed in your sources
- It is required to cite the published sources of names and the information in notes, include the page number
- Sources may be linked directly to each Name and to the Descriptive Note



Editorial Rules

Display vs. Indexing

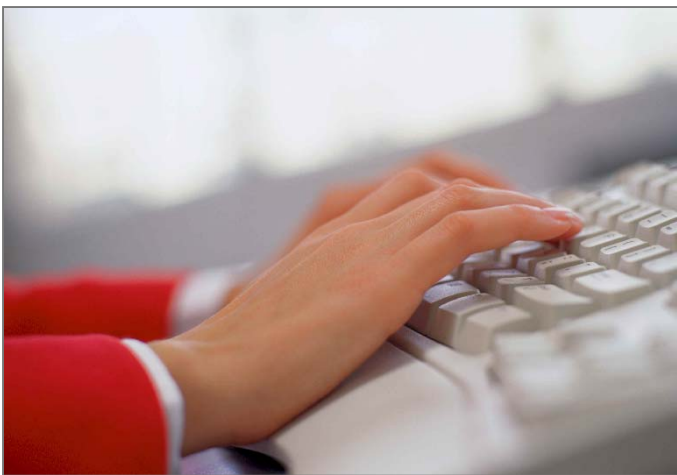
- Display fields in free text allow for expression of uncertainty and nuance
- and Indexing fields using controlled vocabulary to allow good access to the information
- When information is uncertain, record the information with an indication of uncertainty or approximation in a Descriptive Note, Display Biography, or Display Date field (e.g., "ca." or "probably")
- For important information in the note or display field, index it using appropriate indexing fields and estimating data for retrieval

Imprecise Information

For vocabularies covering art and cultural heritage, must allow for the expression of multiple possibilities and the flagging of information as possibly or probably

Vocabularies may track such uncertain or ambiguous information in several ways, often all used together in one vocabulary

- Ambiguous information accommodated via repeatable fields to allow indexing of multiple possible values (e.g., multiple possible nationalities or loci of activity for an artist, El Greco was a Greek artist who worked in Spain)



Imprecise Information

For vocabularies covering art and cultural heritage, must allow for the expression of multiple possibilities and the flagging of information as possibly or probably

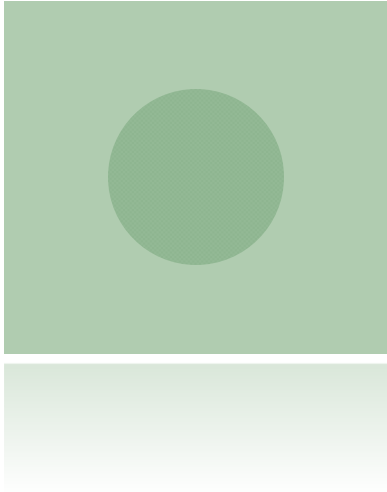
Vocabularies may track such uncertain or ambiguous information in several ways, often all used together in one vocabulary

- Where uncertainty or variability may exist in the hierarchical context, polyhierarchical links allow multiple parents to be recorded
 - Note fields may be used throughout the record to allow expression and explanation of ambiguity
 - (e.g., artist's life dates for display may be *born ca. 532 BCE, died before 490 BCE*
 - then be indexed as *birth date:–542, death date:–490*, with rules provided for estimating uncertain life spans



HOW TO CHOOSE TERMS OR NAMES

**Equivalence
Relationships**



Relationships in Controlled Vocabularies

The three primary relationships relevant to the vocabularies discussed here are

equivalence

hierarchical

associative relationships

Relationships in a controlled vocabulary should be reciprocal

- Reciprocal relationships are known as asymmetric when the relationship is different in one direction than it is in the reverse direction—for example, broader term/narrower term (BT/NT)
- If the relationship is the same in both directions, it is symmetric—for example, related term/related term (RT/RT). the record.



Equivalence Relationships

Equivalence relationships are the relationships between synonymous terms or names for the same concept

A good controlled vocabulary should include terms representing different forms of speech and various languages where appropriate. Below are examples of terms in several languages that all refer to the same object type.

ceramics
ceramic ware
ware, ceramic
cerámica
Keramik

Ideally, all terms that share an equivalence relationship are either true synonyms or lexical variants of the preferred term or name or another term in the record.

Equivalence Relationships



- **Synonyms** = terms referring to the same concept may exist in different forms
- multiple languages, multiple spellings, modern and historical usage



Harlem Renaissance

Negro Renaissance

New Negro Movement

Renaissance de Harlem

Renaissance, Harlem

Equivalence Relationships

Mississippi River

Mississippi

Mississippi, fleuve

Fiume del Missisipi

Fleuve Mississippim

Chicagua

Chucagua

La Grande Riviere

Malabanchia

Malabouchia

Masciccipi

Meact-Chassipi

- ⊙ One name is required
- ⊙ Many records have multiple names
- ⊙ "Preferred" name is the one used most often in standard authoritative published sources



Confluence of the (left) Mississippi and Ohio rivers at Cairo, Ill.
Image from Encyclopedia Britannica Online, Copyright Alex S. MacLean/Landslides

Equivalence Relationships

Kahlo, Frida

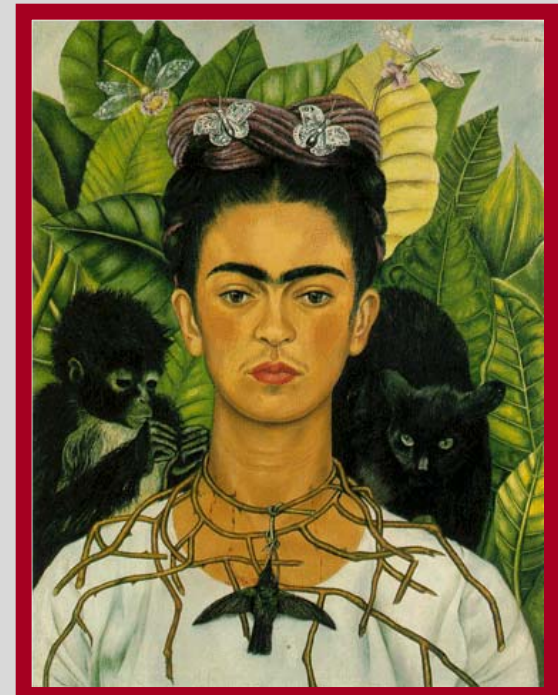
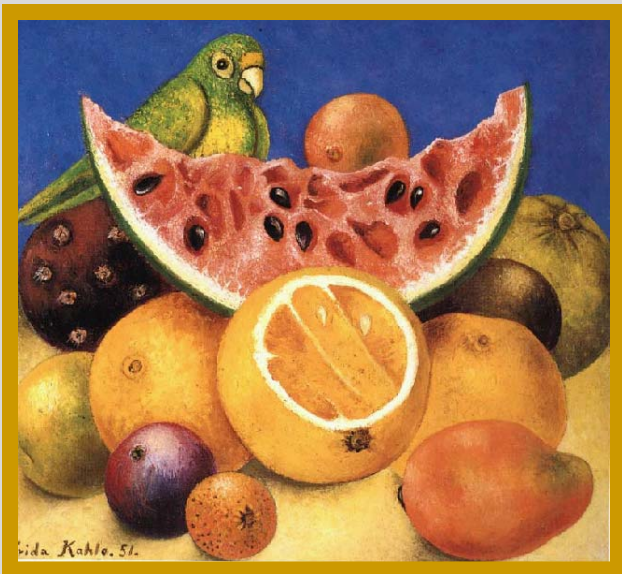
Frida Kahlo

Kahlo de Rivera, Frida

Rivera, Frida

Kahlo y Calderon, Magdalena Carmen Frida

- ⊙ One name is required – inverted and natural order
- ⊙ Many records have multiple names
- ⊙ “Preferred” name is the one used most often in standard authoritative published sources



Equivalence Relationships

Niflheim
Niflheimr
Nivlheim
Nylfheim
Neiflheim
Nibelheim
Nebelheim
Dunkelheim
Dimhöljda Världen
Monde de la brume
House of Mists
Terra delle nebbie

⊙ Include variant spellings and alternate names, so long as they are synonyms





Establishing Terms

Terms should be included based on how closely they represent concepts included in the vocabulary

- For persons, places, and iconography, the name must be proven to represent the person, place, or subject intended by a given vocabulary record
- For terms in a Generic Concept Authority, the terms representing a given concept should be true synonyms for the concept, established through literary warrant

Criteria in choosing terms should include the elimination of ambiguity and the control of synonyms



Establishing Terms

For each term = provide descriptors, alternate descriptors, and other variant terms (used for terms) based on the principle of true synonymy

Terms that represent variant spellings, current and historical usage, various languages, and various forms of speech should be included

- The preferred term and other descriptors should be flagged
- Preferred term should be the one most commonly used in scholarly literature in the language of the catalog record
- If sources disagree on the preferred form of the name or term, the source highest in the list of prioritized preferred sources should determine which name or term to use



Establishing Terms

Develop a methodology for establishing authoritative terms already in use or a means to test and validate emerging terms through usage

Literary Warrant

- Literary warrant is recommended for validating terms and distinguishing them from a word or words used in a casual sense
- To establish literary warrant, the term should be found in scholarly authoritative literature or reference sources
- Usage of the term should consistently refer to the same concept in the sources
- Use these sources to establish both descriptors and variants based on common usage



Establishing Terms

User Warrant

For less formal vocabularies, as in a local online retrieval system, terms may be based on user warrant, which takes into account the language of users

For such vocabularies, developers should look at searches in search and retrieval systems to help devise nonexpert paths to the more formal expert terminology and associated materials

Organizational Warrant

Organizational warrant may be another informal means of establishing vocabulary terms for local use, based on the needs and conventions of the organization for which the vocabulary is being developed

What Is a Term or Name in the Vocabulary?

- A word or phrase denoting a discrete concept in the context of a particular subject
 - Must be used consistently in multiple sources to always refer to exactly the same concept
 - It is not the same thing as a “heading,” which may concatenate multiple “terms” together in a string
 - Terms or names may be combined to create headings where necessary for local use, but not in term “field” of the authority

What Is a Term or Name in the Vocabulary?

- *All names, appellations, and designations used to identify the person or corporate body, geographic place, subject, or generic concept*
 - Full name, historical names, official name, names in various languages
 - May include honorifics or titles
- **MUST be equivalents: Refer to the same entity**
 - E.g., if an anonymous hand is “probably” the same as a named artist, these are two separate records and linked through Associative Relationships

What Is a Term or Name in the Vocabulary?

For People and Corporate Bodies

- | | |
|-----------------------------|---|
| Kalf, Willem | ■ inversions |
| Willem Kalf | ■ natural order |
| Pei, I. M. | ■ initials |
| L\$00opez, Jos\$00e Antonio | ■ diacritics |
| Burgkmair, Hans, the elder | ■ elder, younger, titles |
| Bartolo di Fredi | ■ patronymics and place names |
| Gentile da Fabriano | ■ nicknames and pseudonyms |
| Masaccio | ■ transliterations and translations |
| Le Corbusier | ■ anonymous artists, hand is identified |
| Katshushika Hokusai | ■ corporate bodies |
| Kicking Bear | |
| Monogrammist ELA | |
| Borden Limner | |
| Adler and Sullivan | |
| Savonnerie Manufactory | |
| National Gallery of Art | |

What Is a Term or Name in the Vocabulary?

For Geographic Places

Firenze	■ vernacular names
Florence	■ variant names in other languages (English)
Fiorenza	■ historical names
Tel Hazor	■ transliterations
Tel <u>H</u> az <u>o</u> r	■ variations in spelling, diacritics, punctuation, or capitalization
Tel-Haz <u>o</u> r	■ nicknames
Big Apple	■ translations
City of Brotherly Love	■ inversions (physical features)
Michigan, Lake	■ adjectival forms
Florentine	

What Is a Term or Name in the Vocabulary?

For Generic Concepts

rhyta	▪ plural
rhyton	▪ singular
color proofs	▪ American English
colour proofs	▪ British English
stilleven	▪ other languages
gilding	▪ synonyms that have various etymological roots
gilded	▪ noun form
raking cornices	▪ other forms of speech
cornices, raking	▪ natural order
	▪ inverted order

What Is a Term or Name in the Vocabulary?

For Iconographic Subjects

Adoration of the Magi

Adorazione dei Magi

Hercules

Herakles

Ganesha

World War I

WWI

American Civil War

Olouaipipilele

Death and the Miser

Snow White and the

Seven Dwarfs

- proper names
- American English
- other languages
- variant names
- abbreviations

What Is a Term or Name in the Vocabulary?

column kraters

column krater

column craters

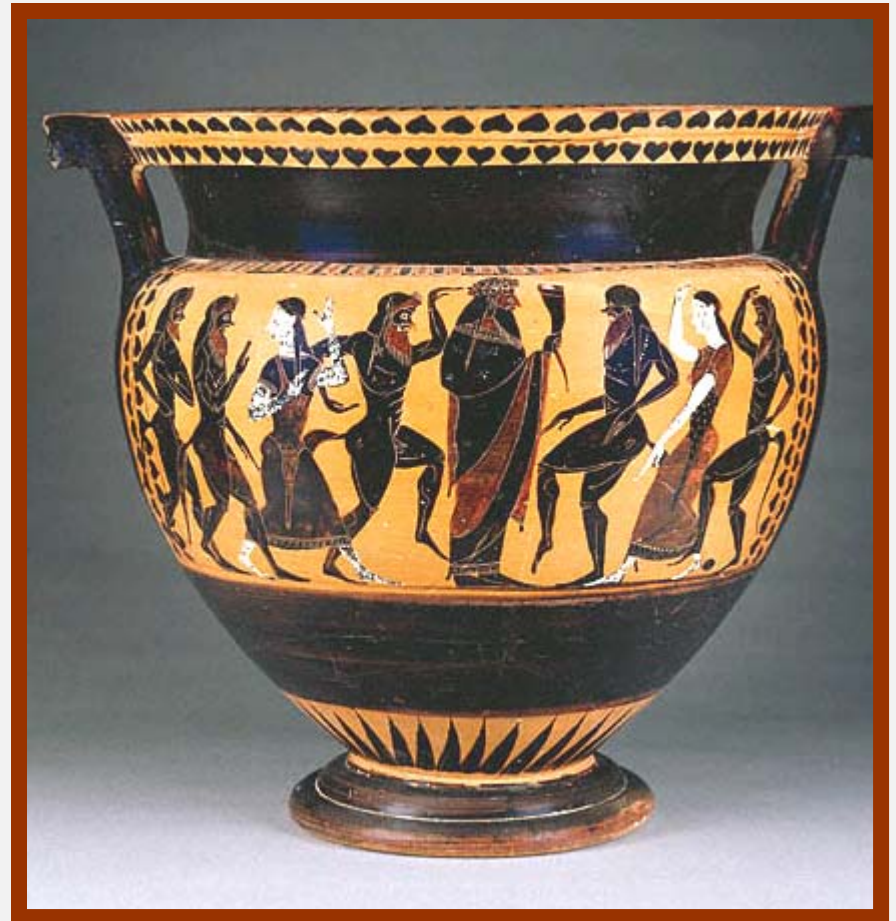
column-kraters

Corinthian craters

Corinthian kraters

kraters, column

- one term is required
- many records have multiple terms



What Is a Term or Name in the Vocabulary?

Firenze (*preferred, vernacular, Italian-preferred*)

Florence (*English-preferred*)

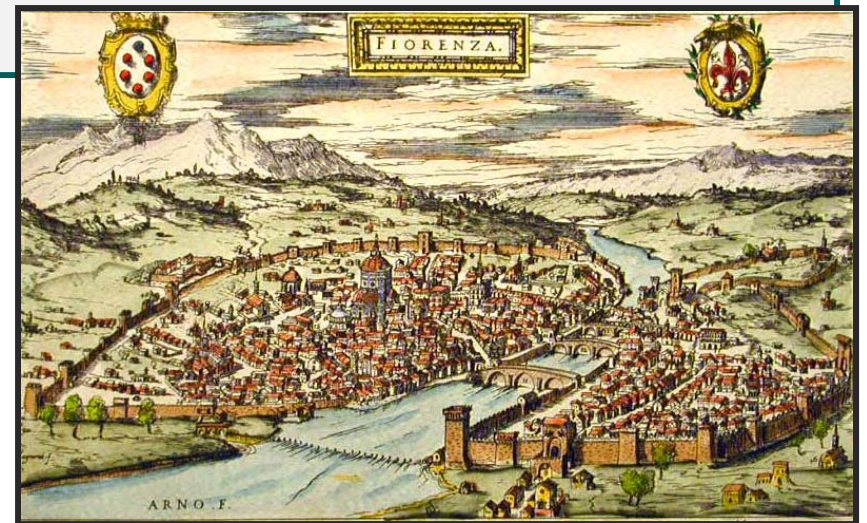
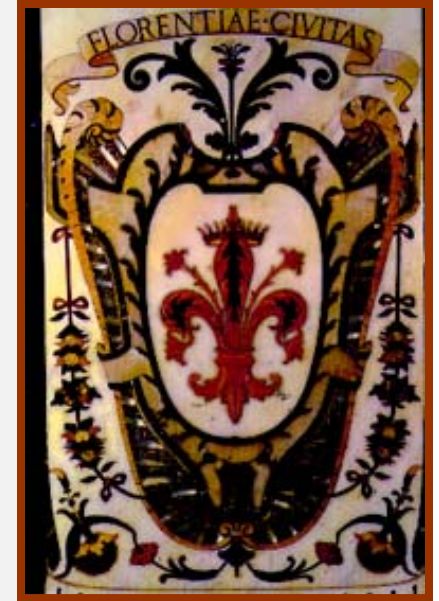
Florenzia (*Spanish-preferred*)

Florenz (*German-preferred*)

Fiorenza (*historical*)

Florentia (*historical, Latin*)

Florentine (*adjectival, English*)



- All names ***MUST*** refer to the same concept
- Record names in lower case or mixed case (not all caps)
- Include historical and variants, but not obscure archival names for general use; do include published names and signatures or published inscriptions

What Is a Term or Name in the Vocabulary?

Pei, I. M. (preferred,V,index,LC)

I. M. Pei (V,display)

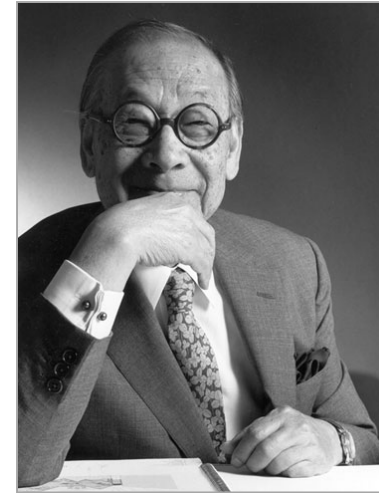
Pei, Ieoh Ming (V)

Pei, Yü-Ming (V)

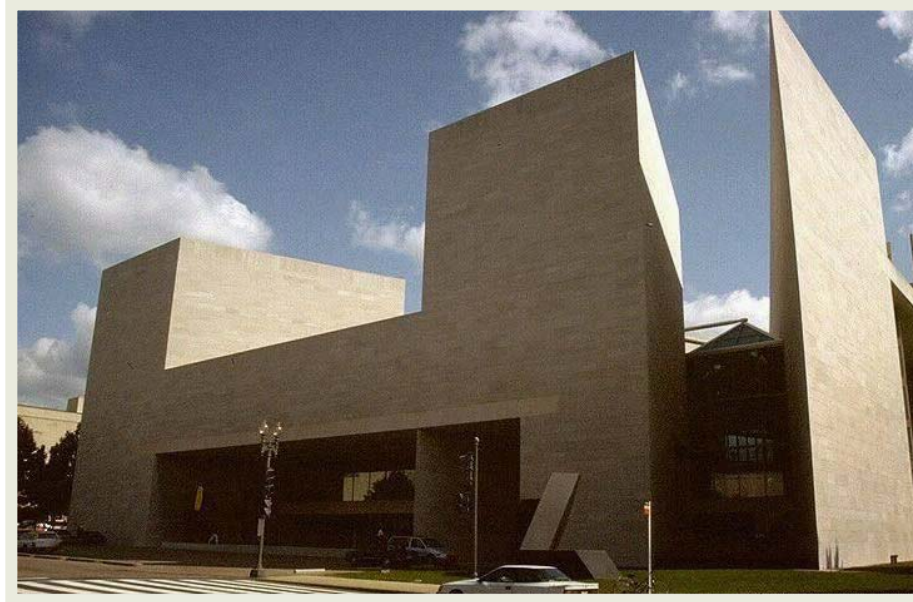
Bèi Yù Míng (V,Chinese (transliterated Pinyin),NA,U)

Bei, Yuming (V)

贝聿铭 (V, Chinese)



- Use the initials or abbreviations in the preferred name only when established by common usage warrant
- Include fuller name as variant name



What Is a Term or Name in the Vocabulary?

Brueghel, Jan, the elder (*preferred, index*)

Jan Brueghel the Elder (*display*)

Bruegel, Jan (*LC*)

Brueghel, Jan, le jeune

Brueghel, Jan, I

Brueghel, Jan



- ***Preferred name:*** For members of same family that have same name, distinguish between the people by including *the younger, the elder, Jr.,* or *Sr.,* applied strictly according to the Editorial Rules
- ***Preferred name:*** “I”, “II” are generally for members of a family with the same name, but not parent-child
- **Other languages included as variant names (e.g., *le jeune*)**

What Is a Term or Name in the Vocabulary?

Gogh, Vincent van (*preferred, index, LC*)
Vincent van Gogh (*display*)
Gogh, Vincent Willem van
van Gogh, Vincent



- Modern Western names, preferred name is inverted
- Include name in display order
- Division of words and capitalization of articles and prepositions (e.g., *la, del, von, van der*) depends upon common usage in standard authoritative sources, but generally not first word in last name

What Is a Term or Name

- Term should represent a single bound concept
 - rose windows
 - onion domes
 - books of hours
 - Brewster chairs
 - prayer rugs
 - china cabinets
 - measuring cups
- *Baroque cathedral* is NOT a term. It comprises two terms (not bound).



What Is a Term or Name in the Vocabulary?

COMPOUND TERMS – Bound Terms

Do not make a compound term composed of a noun phrase containing an adjective that designates material, style, attribute, or technique. Doing so would mean that these adjectives would recur in infinite combinations throughout the AAT.

[examples of what are NOT allowed as compound terms]

Baroque + churches

stone + walls

Baroque + painting

stone + churches

Baroque + sculpture

stone + steps

***lantern slides* comprises two words. Is it a ‘term’?**

What Is a Term or Name in the Vocabulary?

COMPOUND TERMS – Bound Terms

lantern slides (*preferred, descriptor*)

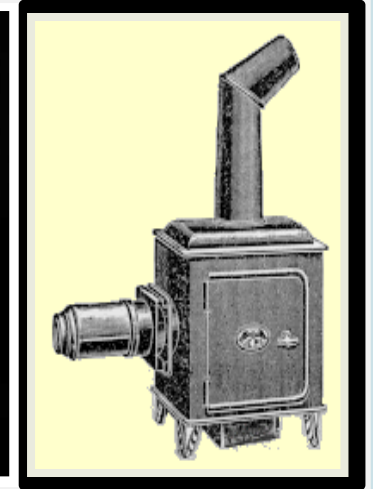
lantern slide (*alternate descriptor*)

lantern slide transparencies (*used for*)

magic lantern slides (*used for*)

slide, lantern (*used for*)

slides, lantern (*used for*)



Yes. The words used together have different meaning than separately. The words are found together used as a distinct “term” in published sources.

***lantern slides* comprises two words. Is it a ‘term’?**

What Is a Term or Name in the Vocabulary?

COMPOUND TERMS – Bound Terms

- Multiword or *compound terms* must be capable of being arranged in a genus-species relationship within the existing AAT hierarchies
- Each term must represent a single concept or unit of thought
- A compound term typically has a focus word and one or more modifiers

[examples of valid single and multiword terms in the AAT]

domes	stained glass
watercolor	High Gothic
onion dome	art historians
flying buttresses	Felis domesticus

- **A quick test:** If either component of a compound term - when separate - expresses concepts different than when they are part of a compound term, bind them together in a compound term
- **If components of a compound term express the same meaning whether they are individual terms or part of a compound term, do NOT make a compound term.**

What Is a Term or Name in the Vocabulary?

▪ Consult the Rules for detailed advice about creating compound terms

** When to create a compound term

Make a compound term when one or more of the following conditions exist:

- When the meaning of the expression cannot be accurately reconstructed from the constituent independent parts, generally because the modifier or the focus term changes its meaning in the compound expression (e.g., *High Gothic*).
- When the modifier suggests a resemblance, as in a metaphor, to an unrelated thing or event (e.g., *rose windows*, *barrel organs*, *spade money*, *saddlebag houses*).
- When the modifier defines a specific shape or type of the focus term (e.g., *sleigh beds*, *basket capitals*, *window seats*, *ice houses*).
- When the modifier defines the purpose or function of the focus term, and this purpose or function gives the focus term a specific form (e.g., *prayer rugs*, *china cabinets*, *crib barns*, *measuring cups*).
- When components of a compound term are too vague to stand on their



Preferred Terms

still lifes (preferred,C,U,English-P,D,U,PN)

still life (C,U,English,AD,U,SN)

still lives (C,U,English,UF,U,N)

still-lifes (C,U,English,UF,U,N)

still-life (C,U,English,UF,U,N)

bodegones (still lifes) (C,U,English,Spanish,UF,U,N)

stillevens (C,U,Dutch-P,D,U,U)

stilleven (C,U,Dutch,AD,U,PN)

nature morte (C,U,French-P,D,Italian,UF,U,N)

Stilleben (C,U,German-P,D,U,PN)

natura morta (C,U,Italian-P,D,U,PN)

naturaleza muerta (C,U,Spanish-P,D,U,PN)

- In each record, one name must be flagged “preferred”
- “Preferred” name is the name or term most commonly used in the literature
- Chosen from authoritative scholarly sources and general reference works



Preferred Terms

still lifes (preferred,C,U,English-P,D,U,PN)

still life (C,U,English,AD,U,SN)

still lives (C,U,English,UF,U,N)

still-lifes (C,U,English,UF,U,N)

still-life (C,U,English,UF,U,N)

bodegones (still lifes) (C,U,English,Spanish,UF,U,N)

stillevens (C,U,Dutch-P,D,U,U)

stilleven (C,U,Dutch,AD,U,PN)

nature morte (C,U,French-P,D,Italian,UF,U,N)

Stilleben (C,U,German-P,D,U,PN)

natura morta (C,U,Italian-P,D,U,PN)

naturaleza muerta (C,U,Spanish-P,D,U,PN)

- Use language of users; vernacular or American English
- Transliterated into Roman alphabet where necessary
- Include variant names as well, including names in other languages
- Proper names in mixed case
- Terms generally in lower case, except scientific terms, styles, other terms capitalized based on warrant (e.g., *Angevin Gothic*, *Brussels lace*, *Tudor roses*)

Preferred Terms

When multiple terms refer to the same concept, one term is flagged as a preferred term and the others are variant terms

Preferred term should be the name or term most often found in contemporary published sources in the language of the users
In thesaurus jargon, the *preferred term* is always called a *descriptor*, and other terms may be called *alternate descriptors*, or *used for terms*.

Shiva (English-P,D) **Preferred**

Siva (English, UF)

Siwa (English, UF)

शिव (Sanskrit-P,D)

Śiva (Sanskrit (transliterated)-P, D)



Preferred Terms

Preferred terms should be selected to serve the needs of the majority of users, relying upon established and documented criteria

Criteria should be applied consistently throughout the controlled vocabulary, e.g., regarding language, general or specialist audience, etc.

Be consistent in capitalization, singular vs. plural (e.g., in AAT, descriptors for objects are plural (*paintings*), but materials are singular (*travertine*))

Shiva (English-P,D)

Siva (English, UF)

Siwa (English, UF)

शिव (Sanskrit-P,D)

Śiva (Sanskrit (transliterated)-P, D)



Preferred Terms

The vocabulary may flag terms or names that are preferred in various languages

Terms preferred in other languages are also descriptors; that is, one record may have multiple descriptors

Alexandria (*Preferred, C,O,English-P,U,N*)

Al-Iskandarīyah (*C,V,Arabic (transliterated)-P,U,N*)

الإسكندرية (*C,V,Arabic-P,U,N*)

Iskindiriya (*C,V*)

El Iskandariya (*C,V*)

Alexándria (*C,V,Greek (transliterated)-P,U,N*)

Αλεξάνδρεια (*C,V,Greek-P,U,N*)

Alexandrie (*C,O,French-P,U,N*)

Alejandría (*C,O,Spanish-P,U,N*)

Alessandria (*C,O,Italian-P,U,N*)

Alessandria d'Egitto (*C,O,Italian,U,N*)

Alexandria Aegypti (*H,O*)

Alexandria Ad Aegyptum (*H,V*)

Rhakotis (*H,V*)



Preferred Terms

Each language may have a descriptor; however, only one of the descriptors should be flagged as preferred for the entire record

Ideally, any of these descriptors – or alternate descriptors and used for terms – may be chosen by end-users; that is an end-user implementation issue

Alexandria (*Preferred, C,O,English-P,U,N*)

Al-Iskandarīyah (*C,V,Arabic (transliterated)-P,U,N*)

الإسكندرية (*C,V,Arabic-P,U,N*)

Iskindiriya (*C,V*)

El Iskandariya (*C,V*)

Alexándria (*C,V,Greek (transliterated)-P,U,N*)

Αλεξάνδρεια (*C,V,Greek-P,U,N*)

Alexandrie (*C,O,French-P,U,N*)

Alejandría (*C,O,Spanish-P,U,N*)

Alessandria (*C,O,Italian-P,U,N*)

Alessandria d'Egitto (*C,O,Italian,U,N*)

Alexandria Aegypti (*H,O*)

Alexandria Ad Aegyptum (*H,V*)

Rhakotis (*H,V*)



Preferred Terms

Goya, Francisco de (*preferred*)
Francisco de Goya
De Goya, Francisco
Goya, Francisco
Goya y Lucientes, Francisco José de
Goya y Lucientes, Francisco Paula José de



- Preferred name is the name most often used in publications
- Not necessarily the most complete or the official name



Preferred Terms

Le Corbusier (*preferred, display, LC*)

Corbusier, Le

Corbu

Jeanneret, Charles-Édouard

Jeanneret, Charles Edouard

Jeanneret-Gris, Charles-Edouard

Jeanneret, Charles-Edouard

- Preferred name may be a pseudonym or nickname



Preferred Terms

Le Corbusier (*preferred, display, LC*)

Corbusier, Le

Corbu

Jeanneret, Charles-Édouard

Jeanneret, Charles Edouard

Jeanneret-Gris, Charles-Edouard

Jeanneret, Charles-Edouard

- Do not include parenthetical names in one field
- Include other names as variant names in separate fields

~~**Le Corbusier (Charles-Édouard Jeanneret)**~~





Synonyms

Synonyms may include names or terms of different linguistic origin, dialectical variants, names in different languages, and scientific and common terms for the same concept

Synonyms are names or terms for which meanings and usage are identical or nearly identical in a wide range of contexts

True synonyms are relatively rare in natural language

In many cases, different terms or names may be interchangeable in some circumstances, but they should not necessarily be combined as synonyms in a single vocabulary record

Likewise, names for persons, places, events, and so on, may be used interchangeably in certain contexts, but their meanings may actually differ



Synonyms

Various factors must be considered when designating synonyms, including how nuance of meaning may differ and how usage may vary due to professional versus amateur contexts, historical versus current meanings, and neutral versus pejorative connotations

The creator of the vocabulary must determine whether or not the names or terms should be included in the same record or in separate records that are linked via associative relationships because they represent related concepts but are not identical in meaning and usage

elevators
lifts

Ancestral Puebloan
Ancestral Pueblo
Anasazi
Basketmaker-Pueblo
Moqui

Le Corbusier
Jeanneret, Charles Édouard
Jeanneret-Gris, Charles Édouard

Synonyms

London plane wood (wood) (preferred,C,U,English-P,D,U,N)

London planetree (wood) (C,U,English,UF,U,U)

hybrid plane (wood) (C,U,English,UF,U,U)

lacewood (C,U,English,UF,U,N)

English sycamore (wood) (C,U,English,UF,U,U)

- Terms must have true synonymity
- *If the variant term is not of the same etymological origin, be especially careful*



Synonyms

Felis domesticus (species) (*preferred, descriptor, scientific name*)
domestic cats (*alternate descriptor, common name*)
domestic cat (*used for*)
house cats (*used for*)

- Flag scientific and common name (be sure they are synonyms)
- Common name may actually be broader – may refer to multiple scientific terms, may require separate record



Synonyms

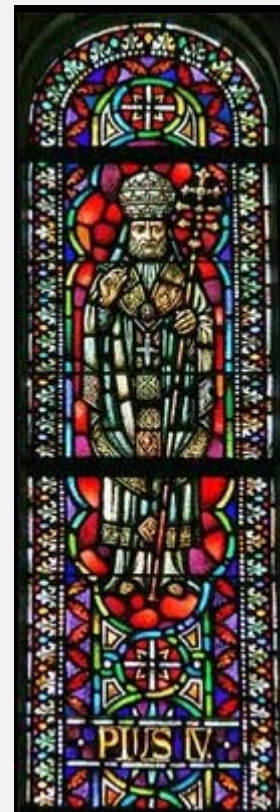
Pius IV, Pope (preferred,U,index)

Pope Pius IV (U,display)

Medici, Gian Angelo de' (U)

Medici, Giovanni Angelo de' (V)

- These names are very different, but they refer to the same person at different points in his life
- Ideally, end user may choose any name – not always the preferred name – to use in a given circumstance



Synonyms

- Include spelling variations, former names (e.g., appellations used when the artist was anonymous)
- E.g., True name now known, formerly works attributed to two anonymous masters

Bulgarini, Bartolomeo

Bartolomeo Bolgarini

Bartolomeo Bolghini

Bartolomeo Bulgarini

Bartolommeo Bulgarini da Siena

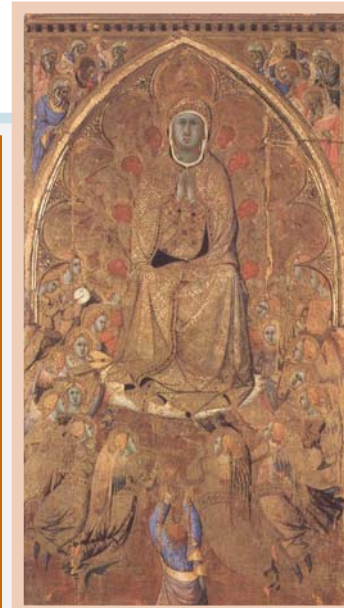
Maestro d'Ovile

Master of the Ovile Madonna

Ovile Master

Lorenzetti, Ugolino

Ugolino Lorenzetti



Assumption of the Virgin, Pinacoteca Nazionale, Siena image from: Carli, Enzo, *Sieneese Painting*, Harper & Row, 1983;
The St. Catherine of Alexandria, National Gallery of Art, Washington DC, 1943.4.20, image from nga.gov

Synonyms

But do NOT include names/terms in same record unless it is generally agreed in scholarly sources that they are the same person. If uncertain, link as Related People

Master of Moulins (painter, probably Netherlandish, active ca. 1480-

Note: Painter of South Netherlandish origin active in France. The Master of Moulins is possibly identified as Jean Hey. He is named after the triptych of the Virgin and Child Adored by Angels with Saints and Donors in Moulins Cathedral. Many of the works attributed to the Master of Moulins can be associated with members of the Bourbon court at Moulins, and he may have been their court painter. Given the poor survival rate of French 15th-century panels, a surprising number of works can be attributed to him and his workshop. His works combine the daring color and compositional ideas of van der Goes with the looser technique and Italianate motifs fashionable in France at the time.

Names:

Master of Moulins (preferred, V, display)

Maître de Moulins (V)

Master of the Bourbons (V)

Related People or Corporate Bodies:

possibly identified with ... Hey, Jean

(Netherlandish painter, active ca. 1480-ca. 1504

possibly identified with ... Hey, Jean

..... (Netherlandish painter, active ca.1480-ca.1504, active in France) [500012005]

possibly identified with Prévost, Jean

..... (French glass painter and glazier, died 1503 or 1504) [500122083]

Synonyms

Skidmore, Owings & Merrill

(preferred,V,display,LC)

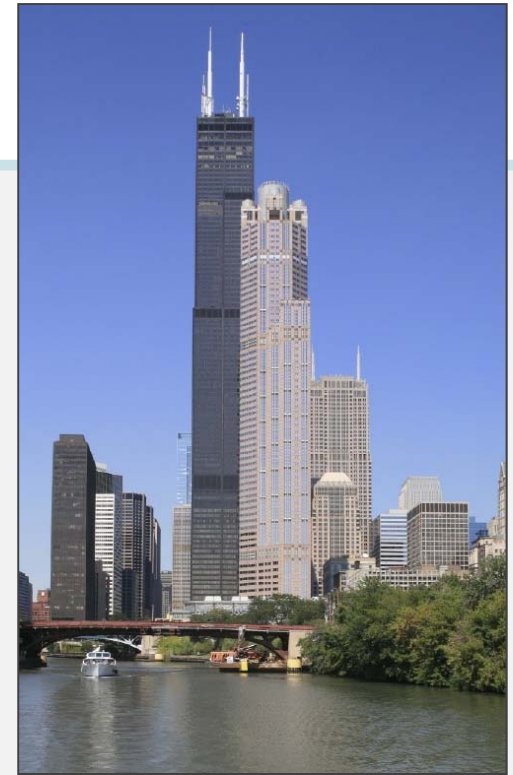
Skidmore, Owings and Merrill (V)

SOM (V)

Skidmore, Owings & Merrill, LLP (V)

Owings & Merrill (V)

- When firms change names, are these the same entity or separate ones?
- Check editorial rules; based on whether firm is contemporary or historical, current firms' preferences
- If separate, link through Associative Relationships



Synonyms

Hierakonpolis, Egypt

Kawm Al-Ahmar (preferred)

Kom al Ahmar

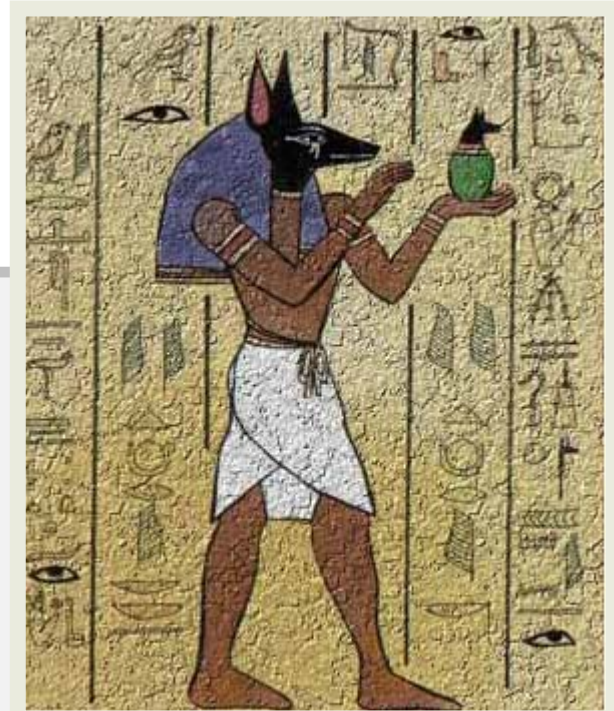
Hierakonpolis (historic, **site name**)

... meaning "City of the Hawk"

Hieraconpolis (historic)

Nekhen (historic)

Nekhab (historic)



- Are all settlements at the same coordinates the same place, even though separated by time? For inhabited places, yes.
- If boundaries are the same for nations, etc., yes. Otherwise, not.
- Site name
 - Use when the modern name for the place is not the same name used by scholars to refer to the ancient site

Lexical Variants

Although they are grouped with synonyms for practical purposes, lexical variants technically differ from synonyms in that synonyms are different terms for the same concept, while lexical variants are different word forms for the same expression

Lexical variants may result from spelling differences, grammatical variation, and abbreviations

Terms in inverted and natural order, plurals and singulars, and the use of punctuation may create lexical variants. In a controlled vocabulary, such terms should be linked via an equivalence relationship

mice
mouse

watercolor
water color
watercolour
water-colour
color, water

Romania
ROM



Lexical Variants

For the preferred term or descriptor, and for other terms as necessary, include both the natural order form of the term for display, and the inverted form (if any) to be used in indexes

bigleaf maple (wood) (preferred,C,U,English-P,D,U,N)

maple, bigleaf (wood) (C,U,English,UF,U,N)

big-leaf maple (wood) (C,U,English,UF,U,N)

broadleaved maple (wood) (C,U,English,UF,U,N)

Wren, Christopher (preferred,V,index,LC)

Christopher Wren (V,display)

Wren, Christopher, Sir (V)

- Whether the inverted form is the preferred term or a variant will depend upon the type of vocabulary
- E.g., the preferred term for generic concepts generally should not be inverted, but the names of people are typically inverted; refer to Editorial Rules for guidance on this issue



Lexical Variants

Certain lexical variants could be flagged as alternate descriptors (AD), meaning that the AD and the descriptor (D) are equally preferred for indexing

e.g., for objects, animals, and other concepts expressed as singular and plural nouns, the plural may be the descriptor, while the singular would be the alternate descriptor

In other cases, the past participle or an adjectival form may be an alternate descriptor.

baluster columns (D)

baluster column (AD)

laminating (D)

laminated (AD)

mathematics (D)

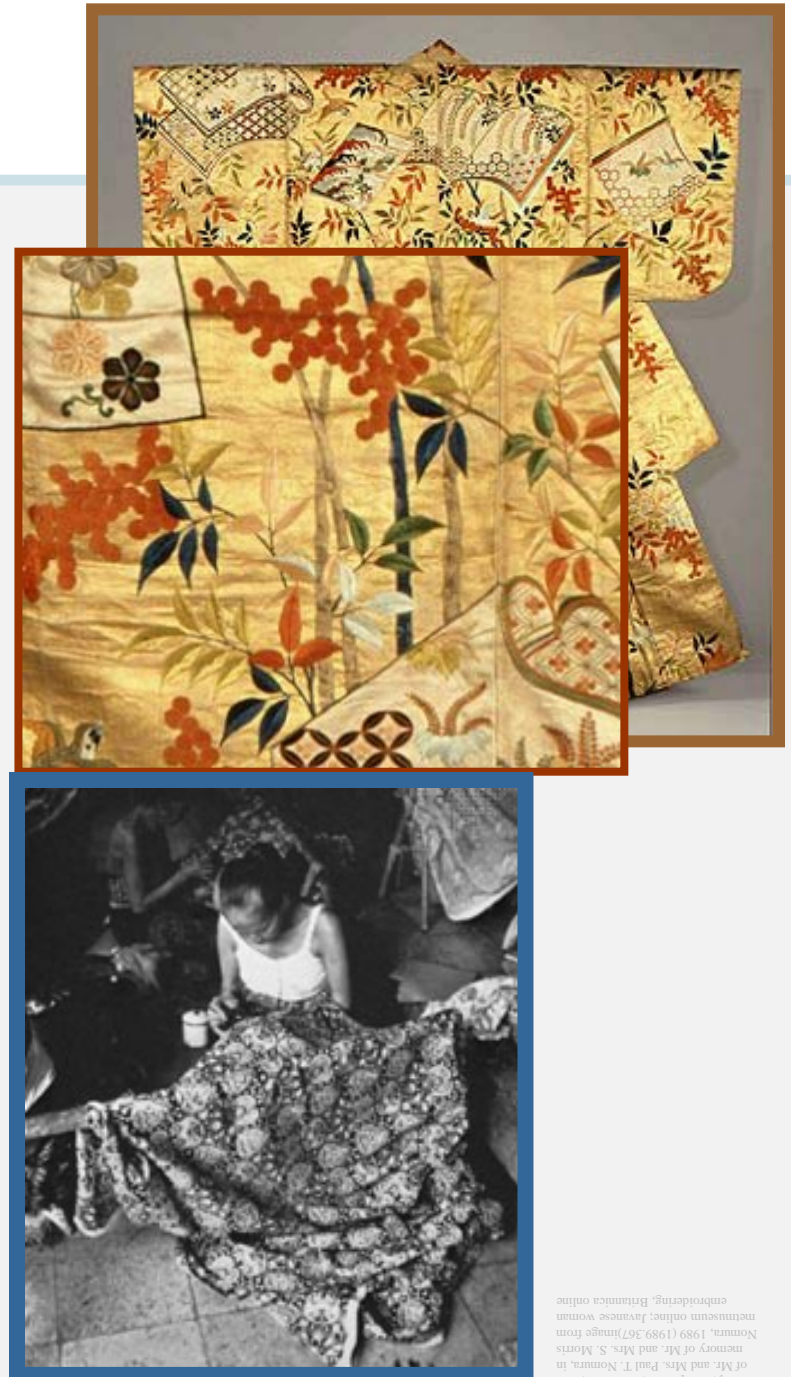
mathematical (AD)

Lexical Variants

embroidering (*preferred, descriptor*)
embroidered (*alternate descriptor*)
embroidery (process) (*used for*)

Past participle *embroidered* is included in the record for the process embroidering (needleworking (process

- Alternate descriptor is past participle for processes, techniques, functions, and activities
 - **scumbling** ALT **scumbled**
 - **cataloging** ALT **cataloged**



18th century; Edo period (1615-1868) Gift of Mr. and Mrs. Paul T. Nomura, in memory of Mr. and Mrs. S. Morris Nomura, 1989 (1989.367) Image from metmuseum online; Japanese woman embroidering, Britannica online



Historical Name Changes

Political and social changes can cause a proliferation of terms or names that refer to the same concept

E.g., term used to refer to the ethnic group of mixed Bushman-Hamite descent with some Bantu admixture, now found principally in South Africa and Namibia, was previously Hottentot

That term now has derogatory overtones, so the term KhoiKhoi is preferred; however, a vocabulary such as the AAT would still link both terms as equivalents so that retrieval is thorough



Historical Name Changes

Names of people and places also change through history:

when a title is bestowed or a woman marries

when a town changes names

Determining when names are equivalents and when they instead refer to different entities is not always clear

For example, modern Egypt is not the same nation as ancient Egypt—neither in terms of borders nor of administration—therefore the names may be homographs, but not necessarily equivalents

Kolkata (preferred,C,V)

Calcutta (C,V)

কলকাতা (C,V)

Kalkutta (C,V)

Kalikata (C,V)

Kalikātā (C,V)

Fort William (H,V)

• E.g., officially preferred spelling was changed in 1999

Historical Name Changes

Siena (**vernacular, preferred**) *used since 13th century*
(start: 1200, end: 9999)

Sienna (**English**) *obsolete spelling* (start: 1500, end: 1900)

Senae (**historical**) *medieval* (start: 800, end: 1500)

Sanna (**historical**)

Saena Julia (**historical**) *Roman* (start: -100, end: 300)

Sena Julia (**historical**)

Sena (**historical**) *Etruscan* (start: -800, end: -100)

- names may be current or historical
- names may have display dates
- years delimiting span



Historical Name Changes

Ancestral Puebloan (*preferred, descriptor*)

Ancestral Pueblo (*used for*)

Anasazi (*used for*)

Basketmaker-Pueblo (*used for*)

Hisatsinom (*used for*)

Moki (Pre-Columbian Pueblo style) (*used for*)

Moqui (*used for*)

- Usage changes
- Prefer culturally sensitive vs. derogatory
e.g., *Ancestral Puebloan* is now preferred by Native Americans, and in most common usage
- But include all variant or alternate terms to provide access



Historical Name Changes

Airy, Anna (preferred,V,index)

Anna Airy (V,display)

Pocock, Mrs. Geoffrey Buckingham (V)

- Include married names, other such name changes for people or places





Differences in Language

Vocabularies may be monolingual or multilingual

The AAT, TGN, ULAN, and CONA are monolingual vocabularies with multilingual terms and scope notes; they are not fully multilingual because other fields are expressed in English

Having multilingual terms allows for retrieval and the primary displays in multiple languages

Differences in Language

Regional and linguistic differences in terminology are among the most common factors influencing variation among terms that refer to the same concept in monolingual vocabularies

English barns (preferred,C,U,English-P,D,U,PN)

English barn (C,U,English,AD,U,SN)

barns, English (C,U,English,UF,U,N)

3-bay barns (C,U,English,UF,U,N)

three-bay barns (C,U,English,UF,U,N)

Connecticut barns (C,U,English,UF,U,N)

New England barns (C,U,English,UF,U,N)

Yankee barns (C,U,English,UF,U,N)

Battle of Bull Run, First (preferred,C,U,English-P,D,U,PN)

Battle of Manassas, First (English, UF, U,PN)



Differences in Language

Generic terms and iconographical subject terms are usually expressed with different words in different languages

copper (metal) (preferred,C,U,LC,English-P,D,U,N)

Cu (C,U,A,English,UF,U,N)

koper (C,U,Dutch-P,D,U,N)

cuivre (metal) (C,U,French-P,D,U,N)

Kupfer (C,U,German-P,D,U,N)

rame (C,U,Italian-P,D,U,N)

cuprum (C,U,Latin-P,D,U,N)

cobre (C,U,Spanish-P,D,Portuguese-P,D,U,N)

koppar (C,U,Swedish-P,D,U,N)



- Forming equivalents is not just a matter of providing literal translations
- Translated terms must have exactly the same meaning

Differences in Language

More often, proper names are the same in multiple languages

But in certain cases names are different in different languages

Giambologna (preferred, English-P,Italian-P,V,display,LC)

Giovanni da Bologna (V,Italian,NA,U)

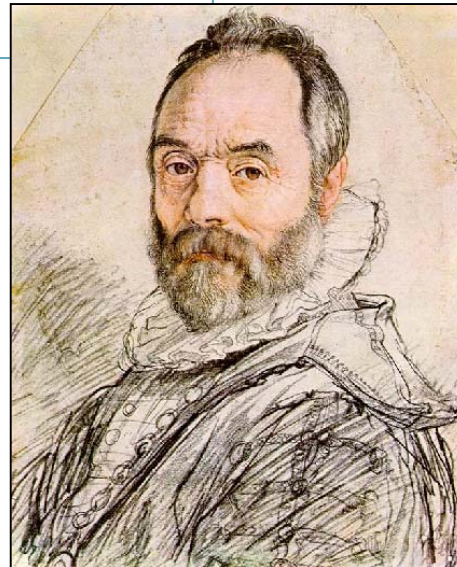
Bologna, Giovanni da (V,Italian,NA,U)

Bologna, Giovanni (Italian,NA,U)

Gian Bologna (V,Italian,NA,U)

Bologne, Jean de (V,French-P,NA,U)

- E.g, Artist born in French-speaking Flanders, worked in Italy



Differences in Language

More often, proper names are the same in multiple languages

But in certain cases names are different in different languages

German museum, Berlin, founded in 1873 in its current configuration

Ethnological Museum (preferred,C,V,English-P)

Ethnologisches Museum (C,German-P)

Musée ethnologique (C,French-P)

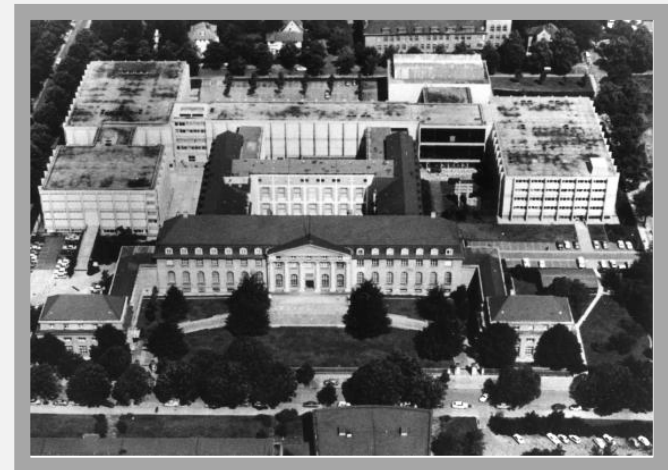
Museu Etnológico (Portuguese-P)

Ethnographische Sammlung (H,German)

Ethnographic Collection (H,English)

Cabinet of Art and Rarities (H,English)

Kunst- und Raritätenkabinett (H,German)



- Language is more of an issue with corporate bodies than people
- since corporate body names are often translated in published sources (while people's names only rarely are)

Differences in Language

More often, proper names are the same in multiple languages

But in certain cases names are different in different languages

Aignay-le-Duc (preferred, English-P,French-P,Spanish-P, C,V)

Aniacum (Historical,O)

Atanacum (Historical,O)

London (preferred,English-P,C,V)

Londres (C,O,French-P,Spanish-P,U,N)

Londra (C,O,Italian-P,U,N)

Lundenwic (H,V)

Londinium (H,V)

- Names of places are generally the same in multiple languages
- Famous places and nations typically have different names or different spellings in different languages

Differences in Language

Names of in languages using non-Roman alphabet

Beijing (preferred, C, V, Chinese (transliterated Pinyin)-P, U, N)

Peking (C, V, Chinese (transliterated Wade-Giles)-P, U, N)

北京 (C, V, Chinese, U)

Pékin (C, V)

Pei-Ching (C, V)

Pei-p'ing (C, V)

Peiching (C, O)

Pekin (C, O)

Pechino (C, O)

Peiping (C, V)

Ch'i (H, V)

Khanbalik (H, O)

Cambaluc (H, O)

- Additional variations occur when names are transliterated by different methods into the Roman alphabet



Differences in Language

guilloche (preferred,C,U,English-P,D,Dutch-P,D,Spanish,UF)

guilloché (English-UF,French-P)

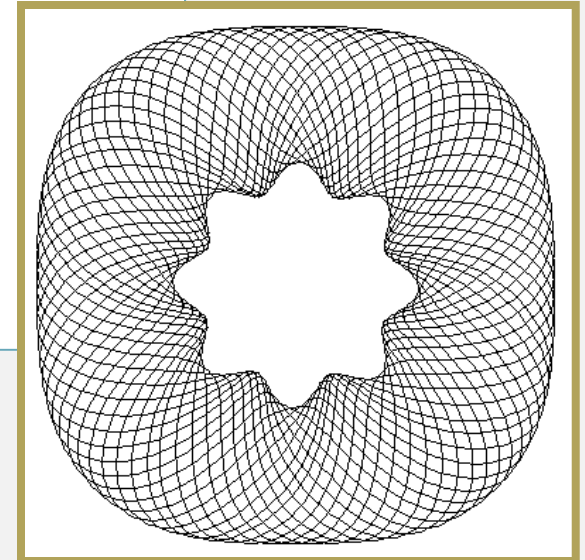
Guilloche (German-P)

water pattern (C,U,English,UF)

water-pattern (C,U,English,UF)

guilloque (C,U,Spanish-P,D)

- Names and terms that are similar or identical except for the use of diacritics, punctuation, or capitalization should typically be included as variant names



Differences in Language

Nemean lion (*English-P*)

leone nemeo (*Italian-P*)

Λέων της Νεμέας (*Greek-P*)

Léōn tēs Neméas (*Greek (transliterated)-P*)

Leo Nemaeus (*Latin-P*)

león de Nemea (*Spanish-P*)

Nemeïsche leeuw (*Dutch-P*)

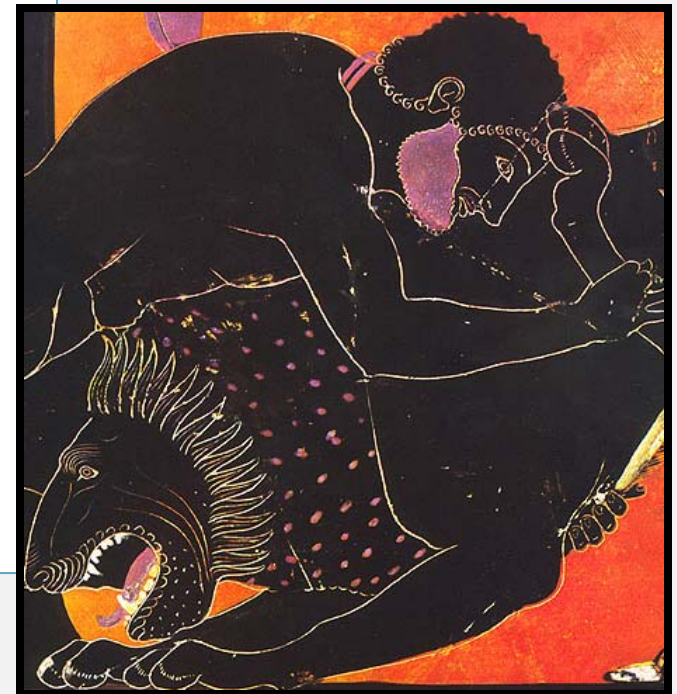
Nemäische Löwe (*German-P*)

中文 (*Chinese-P*)

日本語 (*Japanese-P*)

Немейский лев (*Russian-P*)

- Capitalization, etc. should respect rules of the language, as found in published sources



TYPES OF POSSIBLE MATCHES IN TRANSLATING VOCABULARIES



- When translating, recommendation is that terms must be exact equivalents, true synonyms for the source language

stirrup cups (*preferred, English-P*)
stirrup cup (*English*)
stirrup-cups (*English-*
coaching glasses (*English*)
hunting glasses (*English*)

mapping to AAT

Steigbügelbecher (*German-P*)
Steigbügeltrunk (*German*)



TYPES OF POSSIBLE MATCHES IN TRANSLATING VOCABULARIES

Exact equivalence: The most desirable match involves terms in each language that are identical, or nearly identical, in meaning and scope of usage in each language.

Inexact and partial equivalences: *In cases where a suitable preferred term with the exact meaning and usage of the original term is not available in the second language, terms are sometimes linked as equivalents when they have only inexact or partial matches in scope and meaning.*

Single-to-multiple term equivalence: *If there is no match in scope and meaning between terms, sometimes a concept in one vocabulary is matched to multiple descriptors in the second language.*

Non-equivalence: *Sometimes there is no exact match, no term in the second language has partial or inexact equivalence, and there is no combination of descriptors in the second language that would approximate a match.*

NOTE: Only Exact Equivalence is allowed in the AAT



LOAN WORDS

A “loan term” is a foreign word or phrase that is routinely used instead of a translation of the term into the native language

- Terms borrowed from other languages that have become naturalized in English
 - lits à la duchesse
 - mihrabs
 - sotto in su
 - Schnitzaltars
 - Rathäuser
- May be preferred in English and also preferred in the other language

LOAN WORDS

- In the absence of an exact match between terms in different languages when translating, fill a gap in one language with a loan term from the other



bi (ceremonial objects) (*Chinese (transliterated Pinyin)-P, English-P*)
pi (*Chinese (transliterated Wade-Giles)-P*)
璧 (*Chinese (traditional)-P*)

LOAN WORDS

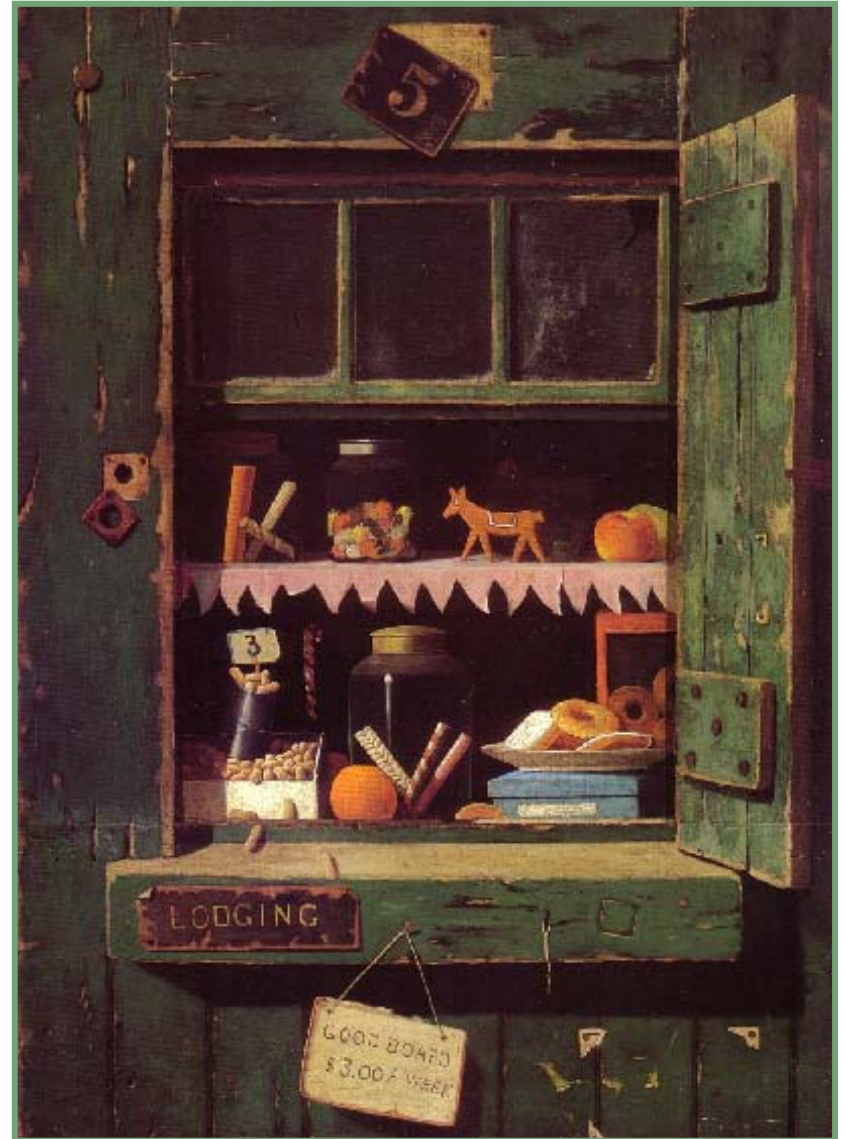
trompe-l'oeil

(preferred, C,U,D, English-P,
French-P)

trompe l'oeil

(C,U,UF, English)

- Do not coin a new term by translating from the other language
- E.g., do not invent a translated English *deceive-the-eye* for the French *trompe-l'oeil*
- All descriptors should have warrant from multiple authorized sources
- Do not coin D, AD, or UF
- You may coin Guide Terms



John Frederick Peto, *The Poor Man's Store*; 1885, Oil on canvas and panel/wood, Museum of Fine Arts, Boston, Gift of Maxim Karolik for the M. and M. Karolik Collection of American Paintings, 1815–1865, 1962, 35 1/2 x 25 5/8 in. (90.2 x 65.1 cm)

LOAN WORDS

- Terms are borrowed with varying degrees of retention of the original spelling
- Plural in English is often Anglicized
- Initial capital in other language may be lowercase in English
- Diacritics can be omitted



Schnitzaltars (*preferred, C,U,D, English-P*)
Schnitzaltar (*C,U,AD, English, German*)
Schnitzaltäre (*C,U,UF, German-P*)

LOAN WORDS

trousseaux (*preferred, C, U, D, English-P, French-P*)
trousseau (*C, U, AD, English, French*)
trousseaus (*C, U, UF, English*)

- Most loan words in English Anglicize the plural
- Some use the plural of the original language



THE TROUSSEAU

Harrison Fisher



Near Synonyms

Although it is generally advisable to link only true synonyms and lexical variants as equivalents, in some vocabularies the equivalence relationship may also include near synonyms and generic postings in order to broaden retrieval or cut down on the labor involved in building a vocabulary

Near synonyms, also known as *quasi-synonyms*, are terms with meanings that are regarded as different, but the terms are treated as equivalents in the controlled vocabulary to broaden retrieval

In other cases, antonyms—for example, ***smoothness*** and ***roughness***—may be linked via the equivalence relationship in a vocabulary

Near Synonyms

ice cream



gelato



E.g., Both are frozen desserts made from dairy products, but ice cream is usually made with cream, and gelato is usually made with milk and has less air incorporated than ice cream



Near Synonyms

The phrase *generic posting* refers to the practice of putting terms with broader and narrower contexts together in the same record

- E.g., if egg-oil tempera were linked as an equivalent to tempera, this would be a generic posting because egg-oil tempera is a type of tempera.
- In a vocabulary striving for more precise relationships, these terms should be linked with appropriate hierarchical relationships or associative relationships rather than as equivalents



Misspellings: Search Engine Issue or Indexed in the Data?

Should you include misspellings in your vocabulary?

O'Keefe, Georgia (preferred,V,index,LC)
Georgia O'Keefe (V,display)
Stieglitz, Georgia O'Keefe (V)
O'Keefe, Georgia Totto (V)
Stieglitz, Mrs. Alfred (V)
Stieglitz, Alfred, Mrs. (V) in use 1924-1946
O'Keefe, Georgia (V) common misspelling

Bartolo di Fredi (preferred,V,display)
Bartalo di Fredi (V)
Bartalus magistri Fredi (V)
Bartholus magistri Fredi (V) one form of his signature
Bartolus Magistri Fredi de Senis (V)

- Include only published misspellings
- Do not include misspellings that you anticipate end-users may use; accommodating end-user errors is a search engine issue – do not clutter the vocabulary with such terms
- At the same time, keep in mind that historical spellings are not “misspellings”; it is only relatively recently that “correct” spellings were the norm



Homographs

A **homograph** is a term that is spelled identically to another term but has a different meaning

Words can be homographs whether or not they are pronounced alike

bow
bough

Homophones are terms that are pronounced the same but spelled differently; controlled vocabularies generally need not concern themselves with labeling homophones.

Homonyms have different meanings and unrelated origins, whereas **polysemes** are usually considered to have multiple meanings






Homographs and Qualifiers

Note that a controlled vocabulary is constructed differently from a dictionary

In a dictionary, homographs are listed under a single heading, with several definitions

- E.g., in a dictionary, drum would be listed as a noun, with several definitions under a single entry
- In a controlled vocabulary, each homographic term is in a separate record

-  **drums (walls)**
(<walls by location or context>, walls, ... Components (Hierarchy Name)) [300001313]
-  **drums (column components)**
(<shaft components>, <shafts and shaft components>, ... Components (Hierarchy Name)) [300001733]
-  **drums (membranophones)**
(membranophones, <sound devices by acoustical characteristics>, ... Furnishings and Equipment (Hierarchy Name)) [300041729]



Homographs and Qualifiers

Controlled vocabularies must distinguish between homographs. One way to do this is to add a qualifier

A qualifier consists of one or more words used with the terms to make the specific meaning of each unambiguous, as seen in the examples below

drums (column components)

drums (membranophones)

drums (walls)

- Qualifiers should be distinguished from the term itself in displays
- Traditionally, parentheses are used
- In order to make construction of and use of the vocabulary more versatile, it is useful to place the qualifier in a separate field in the database rather than in the same field as the term itself

Term: drums

Qualifier: column components



Homographs and Qualifiers

If a term is a homograph to another term in the vocabulary, at least one qualifier is necessary

- However, best to add a qualifier for both terms for clarity
- Homographs and their qualifiers may occur not only with descriptors but also with alternate descriptors and used for terms
- In addition, if a term is a homograph for another common term in standard language, even if the second term is not in the vocabulary, it is useful to add a qualifier for clarity



Homographs and Qualifiers

Qualifiers used only to disambiguate homographs

Not to represent a compound concept, define a term, or establish a term's hierarchical context (*although it may do so coincidentally because these characteristics may be what distinguish a term from its homograph*)

To make a bound compound concept, construct a descriptor rather than using a qualifier (e.g., phonograph record, not record (phonograph))

Homographs and Qualifiers















keys (hardware)

keys (sound device components)

keys (texts)



- Homographs are spelled the same, disregarding capitalization and punctuation
- Include a qualifier if the term is a homograph for another term in the AAT
- Or if it is a homograph for another common term in standard language
- Qualifier is recorded in separate field from term; displayed w/parens in publication

London Key Map Symbols			
 M41	Motorway		Postal District Boundary
 A4	Primary Route		Main Railway Station
 A40	'A' Road		Other Railway Station
 B	'B' Road		London Underground Station
	Other Road		Docklands Light Rail Station
	Toll		Bus/Coach Station
	Street Market		Car Park

Homographs and Qualifiers

How to Choose a Qualifier for a Term















keys (hardware)

keys (sound device components)

keys (texts)

- Qualifiers are usually derived from a word or words in the parent; UFs may use descriptor as qualifier
- May combine both parent-derived and descriptor-derived in same record
- If this does not sufficiently disambiguate, create a qualifier from scratch



London Key Map Symbols			
 M41	Motorway		Postal District Boundary
 A41	Primary Route		Main Railway Station
 A40	'A' Road		Other Railway Station
 B501	'B' Road		London Underground Station
	Other Road		Docklands Light Rail Station
	Toll		Bus/Coach Station
	Street Market		Car Park

Homographs and Qualifiers

How to Choose a Qualifier for a Term

Qualifiers should be as brief as possible, ideally consisting of one or two words

In most cases, a word or words from a broader context of the term should be used as the qualifier (e.g., stained glass (*material*), where stained glass is a hierarchical descendant of *materials*)

Qualifiers for all homographs should clearly disambiguate the terms in displays. For example, stained glass (material) and stained glass (visual works) distinguish the material from the artworks made from the material

If words taken from the broader context do not sufficiently disambiguate between homographs, use words that describe another significant distinguishing characteristic



London Key Map Symbols			
M41	Motorway		Postal District Boundary
A4	Primary Route		Main Railway Station
A	'A' Road		Other Railway Station
B	'B' Road		London Underground Station
	Other Road		Docklands Light Rail Station
	Toll		Bus/Coach Station
	Street Market		Car Park

Homographs and Qualifiers

How to Choose a Qualifier for a Term

Qualifiers should be standardized as much as possible within a controlled vocabulary

E.g., *films* and *motion pictures* should not both be used as qualifiers because *films* is a used for term for motion pictures

When possible, the qualifier should have the same grammatical form as the term, as with the nouns and gerunds below

Term: trailers *Qualifier:* motion pictures

Term: trailers *Qualifier:* vehicles

Term: forging *Qualifier:* copying

Term: forging *Qualifier:* metal forming

Homographs and Qualifiers

chiffoniers (sideboards) (preferred English-P)
chiffonier (sideboard) (C,U,English)
 (trincherero) (Spanish-AD)
 (buffet) (French-AD)
chiffonnières (zijtafels) (C,U,Dutch-P)
chiffonnière (zijtafel) (C,U,Dutch)



- Qualifiers are in the language of the term, if possible
- Structure of the vocabulary should allow one term to have multiple qualifiers associated with one term that represents multiple languages



Other Ways to Disambiguate Names

Headings and labels

Qualifiers are used frequently in controlled vocabularies containing terminology for object types, generic concepts, etc.

For other vocabularies, such as personal name and geographic name vocabularies, data from various fields may be concatenated with the name or term to disambiguate entries

Headings and labels may be used not only to disambiguate homographs but also to provide context for terms and names when displayed in any horizontal string

Johnson, John (English architect, 1754–1814)

Springfield (inhabited place) (Tuolumne county, California, United States)

Other Ways to Disambiguate Names

Homographs with labels to form a heading in results display

[Johnson, John](#)

(British draftsman and engraver, died ca. 1797) [500007991]

[Johnson, John](#)

(English architect, 1754-1814) [500008543]

[Johnson, John](#)

(American photographer, died 1871) [500099783]

[Johnson, John](#)

(British printer, 1882-1956) [500101358]

-
- **Johnson, John (English architect, 1754–1814)**
 - **Springfield (inhabited place) (Tuolumne county, California, United States)**

Other Ways to Disambiguate Names

 [Top of the ULAN list / hierarchy](#)

 [Corporate Body](#) (ULAN facet)

 [National Museums in Berlin](#) (German federation of museums in Berlin)

 [Art Library](#) (German art library, Berlin, founded in 1867)

 [Museum of Photography](#) (German art museum, Berlin, founded in current configuration in 2004)

..... [Helmut Newton Foundation - Museum for Photography](#) (German art collection, Berlin, founded 2003)

..... [Bode Museum](#) (German art collection, Berlin, dating to 19th century)

..... [Collection of Classical Antiquities](#) (German museum, Berlin, founded in 1698)

..... [Egyptian Museum](#) (German museum, Berlin, founded in 1828)

..... [Ethnological Museum](#) (German museum, Berlin, founded in 1873 in its current configuration)

..... [Friedrich Christian Flick Collection](#) (German art collection, Berlin, contemporary)

..... [Friedrichswerdersche Kirche collection](#) (German art collection, Berlin, dating to 19th century)

..... [Gemäldegalerie](#) (German art collection, Berlin, dating to 19th century)

..... [Hamburger Bahnhof - Museum für Gegenwart](#) (German art collection, Berlin, in current configuration since 1996)

..... [Museum Berggruen](#) (German art museum, Berlin, founded in 2000)

..... [Museum for Pre- and Early History](#) (German museum, Berlin)

In a hierarchical display

Other Ways to Disambiguate Names

Geographic places in
a results list

13.  **Springdale** (inhabited place)
(World, North and Central America, United States, Ohio, Hamilton county) [2081988]
Springfield
14.  **Springfield** (inhabited place)
(World, Africa, South Africa, Province of Northern Cape) [1093651]
15.  **Springfield** (inhabited place)
(World, Europe, United Kingdom, England, Essex) [7026328]
16.  **Springfield** (inhabited place)
(World, North and Central America, Canada, Nova Scotia) [1014512]
17.  **Springfield** (inhabited place)
(World, North and Central America, Canada, Ontario) [1015128]
18.  **Springfield** (inhabited place)
(World, North and Central America, United States, Alabama, Clarke county) [2005356]
19.  **Springfield** (inhabited place)
(World, North and Central America, United States, Alabama, Elmore county) [2687993]
20.  **Springfield** (inhabited place)
(World, North and Central America, United States, Alabama, Lauderdale county) [2005354]

Other Ways to Disambiguate Names

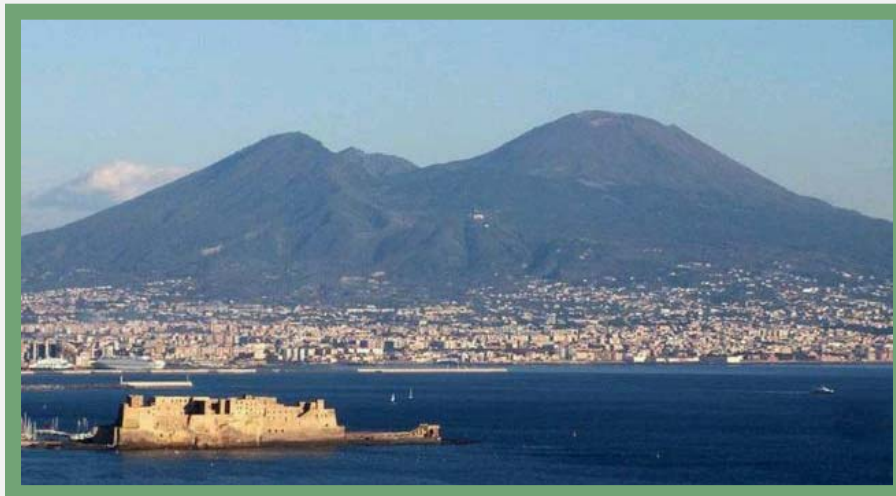
Napoli (**Napoli province**, Campania, Italia, Europe)

Napoli (vernacular preferred)

Naples (English-preferred)

Napoli province (display name)

- Flag “display name” = special name flagged for horizontal displays or “headings”
- Where simple name is confusing
- *(Display name may also be the natural order form of a name, if the preferred name is inverted)*



SOURCES FOR THE VOCABULARY

Authoritative
sources and
minimum
warrant

SOURCES

- For preferred term or name, prefer the most authoritative, up-to-date sources available.

1. Standard general reference sources

- major authoritative encyclopedia, dictionaries

2. Other authoritative sources

- other authoritative thesauri and controlled vocabularies, such as LC Authorized Headings
- textbooks, such as Gardner and Janson

3. Other material on specialized and pertinent topics

- books, journal articles, and newspaper articles
- archives, historical documents, and other original sources (for historical terms only)

4. Other sources

- databases of contributors
- museum or university Web sites

SOURCES

How many sources are required?

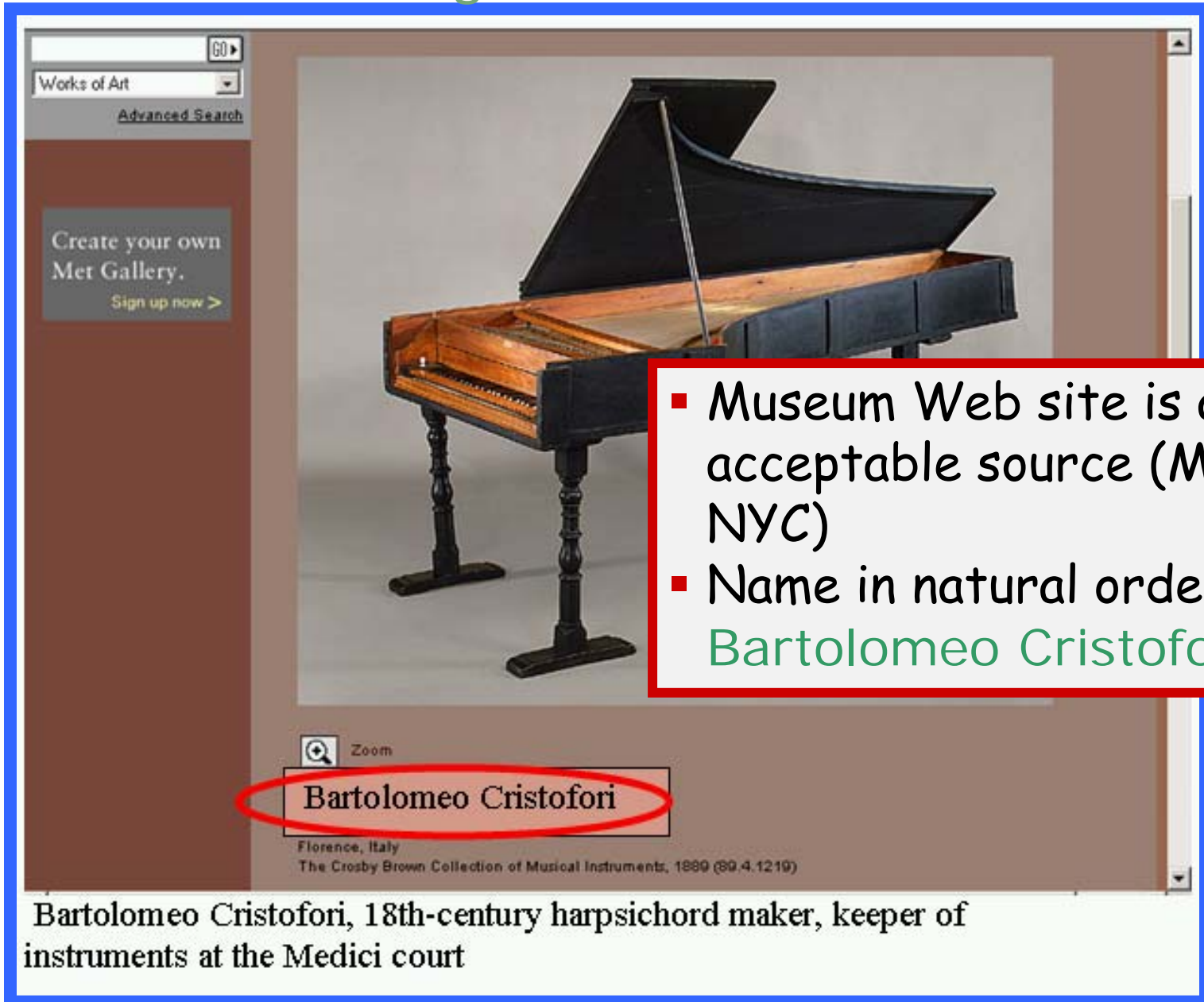
- A name for person, place, or iconographical subject requires at least one good piece of warrant
- Each descriptor in a generic concept authority requires a minimum of three sources, or "literary warrant," to establish common usage
- One of the three sources for descriptors can be a cataloging institution's database
- At least one good source for UFs
- Other information in the record must also come from published authoritative sources



Establishing Warrant

- Must be enough warrant to be able to define the term or name and distinguish it from other terms and names
- Published evidence must establish form and spelling for a particular meaning
- Usage is dictated by scholars and practitioners
- Source should be in American English sources; use other sources in pertinent language for names or terms in additional languages

Establishing Warrant



The image is a screenshot of a museum website. At the top left, there is a search bar with a 'GO' button and a dropdown menu labeled 'Works of Art'. Below the search bar is a link for 'Advanced Search'. On the left side, there is a promotional box that says 'Create your own Met Gallery. Sign up now >'. The main content area features a large photograph of a black harpsichord with its lid open. Below the photograph, there is a 'Zoom' icon and the name 'Bartolomeo Cristofori' in a serif font, which is circled in red. Underneath the name, it says 'Florence, Italy' and 'The Crosby Brown Collection of Musical Instruments, 1889 (89.4.1219)'. A red-bordered box on the right side of the image contains two bullet points: 'Museum Web site is an acceptable source (Met, NYC)' and 'Name in natural order Bartolomeo Cristofori'. At the bottom of the screenshot, there is a caption: 'Bartolomeo Cristofori, 18th-century harpsichord maker, keeper of instruments at the Medici court'.

- Museum Web site is an acceptable source (Met, NYC)
- Name in natural order
Bartolomeo Cristofori

Bartolomeo Cristofori
Florence, Italy
The Crosby Brown Collection of Musical Instruments, 1889 (89.4.1219)

Bartolomeo Cristofori, 18th-century harpsichord maker, keeper of instruments at the Medici court

Establishing Warrant

Grove Art online

Musical instruments, §1(ii): Western, 16th century to mid-20th

 Print this page

 Email this page

(a) Keyboard instruments.

Because almost all keyboard instruments have a large cabinet or permanent case, they are subject to various kinds of decorative treatment. Of all Western keyboard instruments, the harpsichord is most responsive to changing concepts in furniture design. The earliest surviving stringed keyboard instrument is the spinet of the 16th century; the 'arpicordo' is the first documented reference to the piano.

Bartolomeo Cristofori (1655-1731)

Europe. Be it Renaissance strapwork or Baroque scrolls, it varied greatly according to fashion. An old instrument may be dated one or more times, so dating an instrument by its style is inadvisable.

Craft techniques applied to keyboard instruments include (besides fine joinery) carving, casting, inlay, marquetry, matched

- Online art encyclopedia entry, but in running text (not heading)
- Name in natural order
Bartolomeo Cristofori

- You may infer the inverted order because it is a modern Western name
- But better to find inverted form in a source
- Consult the Rules

Establishing Warrant

Encyclopedia Britannica online

Cristofori, Bartolomeo (di Francesco)
Encyclopædia Britannica

Page 1 of 1

born May 4, 1655
Venice
died January 27, 1731

Italian harpsichordist and inventor, credited with the invention of the piano. He is known for his *col piano e forte* (soft and loud) name refers to the amount of pressure applied to the harpsichord. Cristofori's invention of the plucking mechanism was capable of striking the strings with greater or lesser force.

Little is known of **Cristofori's** life, and his invention was not well known in his lifetime. He moved from Padua to Florence around

- General encyclopedia entry, parentheses = you must interpret for ULAN = NO parentheses
- For this source, preferred name in inverted order (spelling agrees w/others)

Cristofori, Bartolomeo

- Variant name

Cristofori, Bartolomeo di Francesco

Establishing Warrant

LIBRARY OF CONGRESS AUTHORITIES

Help | New Search | Search History | Headings List | Start Over

◀ Previous Next ▶

MAR

LC Control Number: nr 89005347

HEADING: Cristofori, Bartolomeo

000 00833cz a2200193n 4

001 2560893

005 19890522054751.8

008 890504n| acannaab |a

010 __|a nr 89005347

035 __|a (DLC)nr 89005347

040 __|a NjP |c NjP

100 10|a Cristofori, Bartolomeo

400 10|a Cristofori, Bartolommeo

forms Giustini sonatas on the 1720 Cristofori piano

[SR] p1980: |b container (Bartolommeo Cristofori, b. Padua 1655, d. Florence 1-27-1731; harpsichord maker and inventor of piano)

670 __|a LC in RLIN, 5-2-89 |b (hdg.: Cristofori, Bartolomeo, 1655-1732)

670 __|a Encic. europea |b (Cristofori, Bartolomeo, 1655-1732)

670 __|a Nuova encic. della musica Garzanti |b (Cristofori, Bartolomeo, 1655-1732)

052 |a 8900

- For LC, preferred name in inverted order 100 field, agrees
Cristofori, Bartolomeo
- Variant name 400 field, 2 ms
Cristofori, Bartolommeo

Establishing Warrant

Historical pianos

Musical Instruments of the World

Bartolommeo Cristofori

...most popular of first piano was n, Bartolommeo Cristofori, who was experimenting to produce a keyboard instrument that was more responsive to the player's touch than the harpsichord. The new instrument might have passed unnoticed but for the interest of a writer, Scipione Maffei, in an article he wrote after a visit to Cristofori's

workshop was later translated into German and probably inspired Gottfried Silbermann to start making pianos. In 1760 Johannes Zumpe, one of Silbermann's pupils, took the art of piano making to England, and there developed his compact "square" piano. Developments in manufacture continued in Europe and America during the

- Specialty encyclopedia
- Running text, not separate entry

Bartolommeo Cristofori



Establishing Warrant

Enciclopedia Universal Ilustrada. 16:368

- Preferred for this source
Cristofori, Bartolomé (\$00e)

- Variant names for this source
Cristofani, Bartolomé
Cristofali, Bartolomé

CRISTOFORI, CRISTOFANI o CRISTOFALI (BARTOLOMÉ)

- in ULAN ALL three are variants, not preferred (based on other sources)

Metropolitan Museum of Art site



Enlarge



Zoom



Add to My Met Gallery

Description

▼ Signature, Marks, and Inscriptions

Alternate Views

Note to the Reader

Signature, Marks, and Inscriptions

Marks: 1) (on
hammer rail, p
CHRISTOPHORIS PATAVINUS INVENTOR FACIEBAT FLORENTIAE · MDCCXX 3)
(in ink at left of hammer rail) Restaurata l'Anno 1875/ da Cesare Bonicchi/

BARTHOLOMAEUS DE
CHRISTOPHORIS PATAVINUS

ink on present
EUS DE

- Signature is a welcome variant name
- Either indirectly in published source or directly from object
 - (Do not transliterate a signature in a non-Roman alphabet unless you are an expert)
- But obscure archival reference used only once is generally not desirable (unless of particular historical interest)

Establishing Warrant

display name = natural order
form of inverted preferred
name

ULAN preferred name
indexing form of descriptor
LC preferred name

1. Cristofori, Bartolomeo (*preferred, index, LC*)
2. Bartolomeo Cristofori (*display*)
3. Cristofori, Bartolommeo
4. Cristofori, Bartolomeo di Francesco
5. Cristofori, Bartolom\$00e
6. Cristofani, Bartolom\$00e
7. Cristofali, Bartolom\$00e
8. Bartholomaeus de Christophoris Patavinus

All others are variants, arranged roughly in order
of importance, i.e., frequency of use

Establishing Warrant

Random House Unabridged Dictionary (1993)

lan' tern slide, -s, *n.* a slide or transparency for projection by a slide projector or magic lantern [1870-1875]



Webster's Third New International Dictionary (2002)

lantern slide, -s | *noun:* a photographic transparency adapted for projection in a slide projector

- Dictionaries: Objects in singular (preferred in AAT is plural)
- Need three sources (plural descriptor + singular alternate descriptor)
- May use "Getty Vocabulary Program rules" as source for one or the other, if necessary (does not count as one of the three required sources)

Establishing Warrant

Oxford English Dictionary

Lost for Words?  lantern slide  Find Word

lantern, ~~11.~~ SECOND EDITION 1989

lant, *n.* 1
lant, *n.* 2
lant, *n.* 3
lant, *v.*
lantado, lantedo
lantana
lantanuric, *a.*
lantcha
lanterloo

lecture, -photograph, -plate, -size, *slide*; (sense 4) lantern roof, tower, turret. b. objective, as lantern-bearer, carrier, -maker. c. instrumental, as lantern-fruited, -led, -lighted, -lit adjs.

1565 COOPER *Thesaurus, Laternarius*, a *lanterne bearer. 1883 STEVENSON *Treas. Isl.* I. v, A rush was made upon the 'Admiral Benbow', the lantern-bearer following.

- Dictionaries: Compound terms may require interpretation

Establishing Warrant

slide : *n.* **1.** an act of moving smoothly along a surface while remaining in contact with it; **2.** a plaything consisting of a sloping chute down which children can slide; **3.** any sloping channel through which things can descend; **4.** a small flat rectangular piece of glass on which specimens can be mounted for microscopic study; **5.** a transparency mounted in a frame for viewing with a slide projector; **6.** (geology) the descent of a large mass of earth or rocks or snow etc.; **7.** (music) rapid sliding up or down the

- Dictionaries: Note that dictionaries include homographs as a single entry, with different definitions (in the AAT, these are typically separate terms)

Establishing Warrant

Encyclopedia of Photography. International Center of Photography. 1st ed. New York: Crown, 1984.

and maintained a major position in

American photography until
some 20 years later

Lantern Slide

A lantern slide is a positive
made or mounted on glass for
The term originated in the 19th
projectors were called magic
There were several slide forms
Today black-and-white pro

Lambert see: light units

lamination

87 ff.

Land, Edwin Herbert

754, 876

landscapes

23, 45-49, 129

Lange, Dorothea

276

Langenheim, Friedrich

102, 238

Langenheim, Wilhelm

102, 238, 242 ff.

lantern slide

34-36, 94

Lartigue, Jacques-Henri

358

laser

111

217, 310-313

- Encyclopedia entry
- Entry in an index
- Always be careful of capitalization (see text)

Grove Art Online

for all aspects of the visual arts

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Lantern slide

Lantern slide.

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See under [PHOTOGRAPHY, §I](#).

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[How to cite Grove Art Online](#)

Gro
for all

Article

[Magic lantern](#)
BIBLIOGRAPHY

with 'lantern shows'.

Early magic-lantern spectacles had often consisted of supernatural images, sometimes projected on to smoke or a semi-transparent screen (e.g. Robertson's *Fantasmagorie*), which satisfied a public taste for the ghoulish and macabre in the theatre. Gradually, however, the more sophisticated and sophisticated, at least, well developed, entertainment. In addition, around this time the photographic lantern slide

- Term in running text: "lantern slide" or "photographic lantern slide"

around this time the photographic lantern slide (first developed

- How to determine it is actually a term?
- Italicized words may indicate a “term” rather than just a string of words

sequential photographs of successive phases of the walk, the trot, and the gallop. When the pictures were published internationally in the popular and scientific press, they demonstrated that the positions of the animal's legs differed from those in traditional hand-drawn representations. To prove that his photographs were accurate, Muybridge projected them as *lantern slides* (transparent positive images on glass) upon a screen one after the other with a projector he had built for the purpose; the result was the world's first motion-picture presentation. This memorable event took place at the San Francisco Art Association in 1880.

Establishing Warrant

em·broi·der : im-'broi-d&r : **em·broi·dered**;
em·broi·der·ing *v. tr.* 1 a : to ornament
with needlework b : to form with
needlework ; 2 : to elaborate on; embellish.
v. intr. 1 : to make embroidery ; 2 : to
provide embellishments | - **em·broi·der·er**
/-'broi-d&r-&r/ *n.*

- For processes, often *verbal nouns*, you will often have to extrapolate from dictionaries or encyclopedia

Encyclopædia Britannica

PRINT PAGE

PRINT ARTICLE

E-M



Comments or Suggestions?

basic implement used in sewing or **embroidering** and, in variant forms, for knitting and crocheting. The sewing needle is small, slender, rodlike, with a sharply pointed end to facilitate passing through fabric and with

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THE NATIONAL ARCHIVES ARCHIVES.GOV Research

Research Formats Guide to the Still Picture Branch Holdings

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Guide to the Holdings of the Still Picture Branch of the National Archives and Records Administration

Compiled by Barbara Lewis Burger

Table of Contents

- [Introduction](#)
- [Illustrations](#)
- [Organization of the Guide and Scope of the Entries](#)
- [Part I. Federal Records](#)
- [Part II. Donated Materials](#)
- [Index](#)

Introduction

The National Archives and Records Administration (NARA) is the permanently valuable non-current records of the Federal Government. These archival

- Web sites may be sources if they are scholarly and authoritative
- E.g., NARA, Museum sites, University sites, etc.

SLIDES - refers to positive transparencies in cardboard mounts - 2"x2" in size.

LANTERN SLIDES - refers to positive transparencies made or mounted on glass - usually 3 1/4"x4" in size.

ART, WORKS OF ART - General terms. When specific art techniques are known, they are indicated.

Establishing Warrant

The Library of Congress

>> [Go to Library of Congress Online](#)



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Headings List

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MARC Display

Labelled Display

LC Control Number: sh 94005668

HEADING: Lantern slides

000 00970nz a2200241n 450

001 4861441

005 19971205150257.2

008 940804i| anannbabn |a ana

035 __ |a (DLC)sh 94005668

906 __ |t 9434 |u te04 |v 0

010 __ |a sh 94005668

040 __ |a DLC |c DLC |d DLC

053 _0 |a TR505 |c Photography

150 __ |a Lantern slides

450 __ |a Magic lantern slides

- LC Subject headings:
- Be careful because LC has "headings" NOT "terms" (e.g., *Gothic architecture*)
- Capitalization

Establishing Warrant

Oxford Companion to Art

TEN

devoted itself principally to the temple and, since the functional requirements were very simple, aesthetic effects could become paramount. The basic temple (*cella*) was at that time a rectangular room with low-pitched roof. It might be elaborated in various ways—with a PORCH at the front, a second (often false) porch at the back, and a surrounding colonnade. To judge by siting, the three-quarter view was considered of first importance. As regards decoration and certain details of plan there were two principal systems, the Doric and the Ionic (see ORDERS OF ARCHITECTURE). For further embellishment sculpture might be added. The Doric style normally permitted free statues at the six corners of the roof (ACROTHERIA), more or less free statuary in the gables (PEDIMENTS), and high RELIEF on the METOPES. In the Ionic there might

effects of dramatic NATURALISM reminiscent of the style initiated by CARAVAGGIO. One of the earliest artists to adopt this style was Juan Fernández de NAVARRETE, known as El Muto.

The name 'tenebristi' was also used of early 17th-c. Italian painters, chiefly in Naples, who were much under the influence of Caravaggio.

TENIERS. The Flemish painter DAVID TENIERS the Elder (1582–1649) is a shadowy figure and there is no firm basis for the numerous pictures ascribed to him. His famous son, DAVID TENIERS the Younger (1610–90), is said to have been his pupil. David the Younger's early biblical pictures show the influence of his father-in-law Jan BRUEGHEL and Frans FRANCKEN II. His peasant pictures are derived from BROUWER, but he never captured Brouwer's humour or tension. David the Younger's finest paintings were made during the 1640s. They are characterized by a silvery palette and are

TEQUITQUI STYLE. See MESTIZO.

TERBORCH (TER BORCH), GERARD THE YOUNGER (1617–81). Dutch painter and draughtsman of interiors and small portraits. One of the most precocious artists who ever lived—his earliest dated drawing (Rijksmuseum, Amsterdam) is from 1625—Terborch

- Entry in all caps
- Must interpret for entry to AAT

TENEBRISMO

Green and Grey, Art Inst., Chicago; *Girl at Desk*, Met. Mus., New York; *A Musician*, Luxembourg

term in Spanish painting for an emphatic use of CHIAROSCURO to achieve

Webster's unabridged, p. 2355

Main Entry: **ten·e·brism**

Pronunciation: 'te-n&-''bri-z&m

Function: *noun*

Usage: *often capitalized*

Etymology: Latin *tenebrae* darkness

: a style of painting especially associated with the Italian painter

Caravaggio and his followers in which most of the figures are engulfed in shadow but some are dramatically illuminated by a concentrated beam of light usually from an identifiable source

- **ten·e·brist** /-brist/ *noun or adjective, often capitalized*

- Rarely a term may be capitalized
- In this case, make a variant name in caps
 - tenebrism (preferred)
 - tenebrist (AD)
 - Tenebrism (UF)

Establishing Warrant

Material Name: borax

[field definitions](#) | [units](#) | [correct this record](#) | [print this page](#) | [print this record](#) | [edit synonym](#)

Description

A natural product composed of hydrated [sodium borate](#). Borax is produced by the evaporation of water in shallow lakes. Borax was used by the Egyptians for mummification and by the Romans for glassmaking. In the 9th century, it was used as a flux for soldering gold in Arabia and by the 10th century, borax was being used in ceramic glazes in northern China. By the 13th century, tincal (borax) was regularly imported from Tibet to Europe for use in Venetian glass. The white powder is now mined from deposits in India, Russia, Persia, and the U.S. (California). Borax is used as a flux, cleansing agent, tanning agent, water softener, preservative, fungicide, and as an alkaline ingredient in glass, ceramics, and glazes.

Synonyms and Related Terms

sodium borate decahydrate; sodium diborate; tincal; sodium boration; sodium tetraborate; rasilite; (It.)

Composition	Na ₂ B ₄ O ₇ ·10H ₂ O
CAS	1303-96-4
Mohs Hardness	2.0 - 2.5
Melting Point	75
Molecular Weight	mol. wt. = 381.4
Density	1.715
Refractive Index	1.4630 (fused)
Boiling Point	320

- Be careful: source may not define synonyms as AAT does
- E.g., "synonyms and related terms" in MFA CAMEO

Material Name: tincal

[field definitions](#) | [units](#) | [correct this record](#) | [print this page](#) | [print this record](#) | [edit synonym](#)

Description

Common name used for crude borax prior to the 1800s when chemical compound names were standardized (Schur 1985). Crude borax deposits often contain multiple borate minerals such as borax and tincalconite.

Synonyms and Related Terms

tincal; borax; tincalconite

Additional Information

S. Schur, "Conservation Terminology: A Review of Past & Current Nomenclature of Materials", *Technology and Conservation*, 1985.

Last updated on: 10/23/2007 9:03:08 PM

<input type="checkbox"/>	[6]	[Stereo daguerreotype of the Laocoön].		1859
		Library Location: SPECIAL COLLECTIONS - CONTACT REFERENCE	Call Number: 2005.R.3	Status: Available
<input type="checkbox"/>	[7]	Stereograph and the lantern slide in education / by G.E. Hamilton.	Hamilton, George Earl,	1946-
		Libra	Stereograph and the lantern slide in education / by	
<input type="checkbox"/>	[8]	Victorian Britain through the magic lantern : illustrated by Lear's magical lantern slides / Steve Humphries.	Humphries, Stephen.	1989-



lantern slides photography projector

Search

[Advanced Scholar Search](#)
[Scholar Preferences](#)
[Scholar Help](#)

Scholar All articles [Recent articles](#) Results 1 - 10 of about 342 for [lantern slides photography projector](#). (0.12 sec)

[The Slide Lecture, or the Work of Art" History" in the Age of Mechanical Reproduction](#)

RS Nelson - *Critical Inquiry*, 2000 - JSTOR

... multiple **slide** projectors and thousands of **lantern slides**.⁴¹ Some ... he put it, "so that two glass **slides** could be ... M. Freitag, "Early Uses of **Photography** in the ...

[Cited by 7](#) - [Related Articles](#) - [Web Search](#) - [BL Direct](#)

- Titles of books or articles may be warrant
- May use library catalog, AATA entries, BHA, Google Scholar, etc.
 - cite the book/article, put "title" in the page field (see Rules)

GO Germundson - 1988 - St. Cloud State College
[Web Search](#) - [Library Search](#)

F Mystery of the Libyan desert glasses

Authors: Frischat G.H.¹; Heide G.¹; Müller B.²; Weeks R.A.³

Source: Physics and Chemistry of Glasses - European Journal of Glass Science and Technology Part B, Vol. 51, No. 1, 2010, pp. 1-10

Publisher: Society of Glass Technologists

< previous article | next article >

Articles provide variant spellings and information for the Scope Note

<mark item

Key: F - Free content N - New Content S - Subscribed Content T - Free Trial Content

Abstract:

High and low temperature and terrestrial and extraterrestrial origins have been proposed for the formation of Libyan desert glass (LDG). This paper reports results on the homogeneity of the LDG on the nanometre scale and on its thermal expansion with commercial SiO₂ glasses and with natural opal, agate and flint displays a sharp increase in thermal expansion with prepared SiO₂ glasses, whereas the LDG shows a low temperature formed natural SiO₂

High and low temperature and terrestrial and extraterrestrial origins have been proposed for the formation of Libyan desert glass (LDG).

- LDG is a separate variant term.
- Do NOT put parenthetical name in the same field as *Libyan desert glass*

LDG is a separate variant term. Do NOT put parenthetical name in the same field as *Libyan desert glass*



- [Find Similar Abstracts](#) (with [default settings below](#))
- [Full Refereed Journal Article](#) (PDF/Postscript)
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- [References in the article](#)
- [Citations to the Article \(2\)](#) (Citation History)
- [Refereed Citations to the Article](#)
- [Also-Read Articles](#) (Reads History)
- [Translate Abstract](#)

Title: Evidence for shock metamorphism in sandstones from the Libyan desert glass strewn field

Authors: [Morgan, J. W.](#); [Walker, D. J.](#); [Langenhorst, Falko](#)

Affiliation: AA(Windeckstrasse 6, 1 Mannheim, Germany), (Windeckstrasse 6, D 68163 Mannheim, Germany), AF(Windeckstrasse 6, D 68163 Mannheim, Germany)

Publication: Meteoritics & Planetary Science

“Evidence for shock metamorphism in sandstones from the Libyan desert glass strewn field”

Microscopic analysis of sandstones from the southern Libyan Desert Glass (LDG) strewn field reveals a sequence of progressive deformation features which

- **NOTE: For information in the Scope Note, etc., defer to the most recent authoritative source**
- **If a point is not fully agreed upon by experts, explain the controversy (e.g., shock metamorphism or impact?)**

Libyan Desert Glass.

The image shows a screenshot of a Wikipedia article titled "Desert glass". The article text states: "Desert Glass, Libyan Desert Glass (LDG), Edeowie Glass, or Great Sand Sea Glass is found in large (tens of kilometers) regions of sandy deserts in the Libyan Desert, Africa, and in South Australia." A red box highlights two bullet points: "Wikipedia is not an authoritative source" and "But it can be a useful source for sources". A red arrow points from the first bullet point to the word "Africa" in the article text. Another red arrow points from the second bullet point to the "References" section of the article.

Wikipedia is not an authoritative source

But it can be a useful source for sources

References

- ^ Rand Flem-Ath and Colin Wilson, *The Atlantis Blueprint*, ISBN 0-7515-3100-6

Literature

- V. de Michele (ed.): *Proceedings of the Silica '96 Meeting on Libyan Desert Glass and related desert events*, Bologna, 1997 [Contents](#)
- P.A. Clayton / L.J. Spencer: *Silica Glass from the Libyan Desert*, Vortrag vom 09.11.1933 [online](#)

External links

- [Google Scholar: "Desert Glass"](#)

Establishing Warrant



Coin depicting the Sanctuary of Hercules, excavated in the ruins of Erythrae, Turkey

- What is preferred spelling?
- Where is the ancient site?
Same as a modern town?
- What is the hierarchical parent of this place?

- Inscription on object may be a source for a variant name
- But DO NOT transliterate the Greek name unless you are an expert! ερυθραία,
- Use sources with Roman alphabet.

Establishing Warrant

Carlson, Deborah N., "The Classical Greek Shipwreck at Tektaş Burnu, Turkey," *American Journal of Archaeology*, 107/4 (2003): 63 ff.

The Classical Greek Shipwreck at Tektaş Burnu, Turkey

DEBORAH N. CARLSON

Abstract

The remains of a fifth-century B.C. shipwreck were discovered off the Aegean coast of Turkey by the Institute of Nautical Archaeology (INA) in 1996. Excavations of the wreck between 1999 and 2001 determined that the ship had been carrying a cargo of wine contained in about 200 amphoras of the so-called pseudo-Samian type, which have been found at various sites along the Black Sea coast but are not presently attributed to any specific site. An amphora stamp from the wreck, however, suggests that these 200 amphoras may have been produced at nearby Erythrae. The ship was also carrying lesser quantities of other types of Greek pottery, and amphoras from Chios, Mende, and Samos. Remains of the ship include a pair of *aptheloi*—the only eyepieces ever found in association with an ancient vessel—

INA's annual surveys for shipwrecks in Turkey. At that time, divers located a mound

- Names often found in an article without context
- May not know the modern administrative parent
- With homographs, how do you know which place is intended?
- Spelling = Erythrae

In 1336, Erythrae came under the rule of the Turks

Establishing Warrant

Grove online

Ionia.

 Print this page

 Email this page

Ancient region covering the central part of the west coast of Asia Minor (modern Turkey) from the Bay of Izmir south to Bargyla. It included the cities of Miletos, Myous, Priene, Ephesos, Kolophon, Teos, Lebedos, **Erythrai**, Klazomenai, Phokaia and Smyrna, and the adjacent islands of Samos and Chios. Herodotos (*Histories* I.cxliv–cxlviii) and Thucydides (*History of the Peloponnesian War* I.xii) claimed that Greeks fleeing the Dorian invasion colonized the region in the 11th century BC, but excavators have discovered Late Bronze Age (13th century BC) Mycenaean objects in the area, and

ort.

- Art encyclopedia
- Name in running text, spelled with "i" = Erythrai
- Does not state modern parent

Establishing Warrant

Princeton Encyclopedia of Classical Sites

ERYTHRAI (İldırı)

Note diacritics:
İld\$73ir\$73i

- Encyclopedia of historical places
- Know your source! Princeton often does NOT mean the parenthetical place is exactly the same place

Establishing Warrant

Encyclopedia Britannica Online:

Erythrae

Encyclopædia Britannica

Page 1 of 1

PRINT PAGE

PRINT ARTICLE

E-MAIL ARTICLE

CITE ARTICLE

ancient Ionic city on the Mimas (now Kara Burun) peninsula in western Turkey. The original site of traditionally Cretan and later Ionian settlement is uncertain, but from the 4th century BC the city was located at modern **Ildir** where traces of the wall circuit, theatre, and citadel are visible.

Expand your Research:

> [Journals And Magazines](#)

> [The Web's Best Sites](#)

About 453 BC **Erythrae**, refusing to pay tribute, seceded from the Delian League. A garrison and a new government restored the

- Encyclopedia entry
- Name in article heading
- Text states that the place is the same as modern town Ildir
- Name = **Ildir** (Roman lowercase "i," no diacritic)

Establishing Warrant

Canby, 1:279

ERSEKUTVAR. See NOVÉ ZÁMKY.

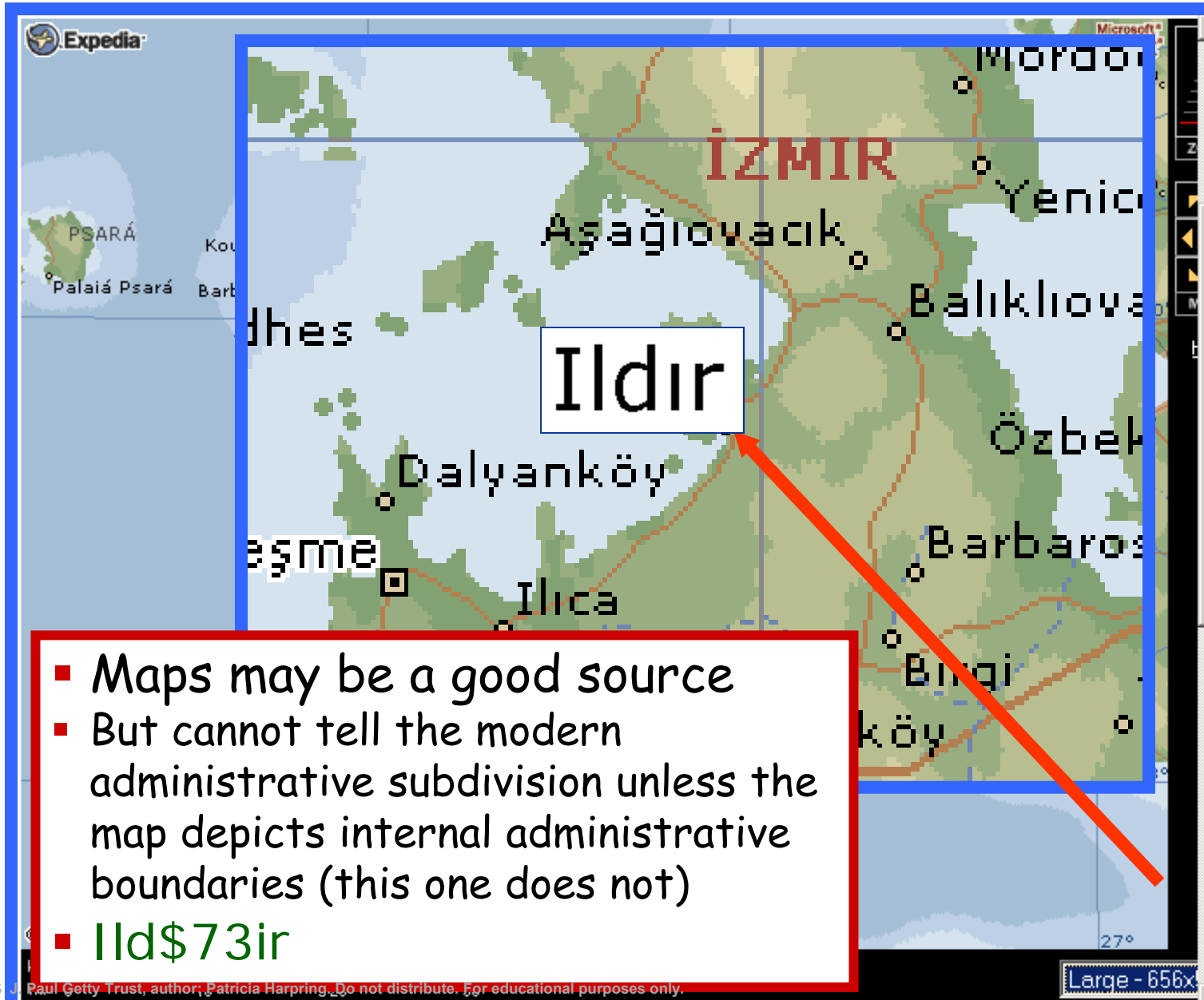
ERYTHRAE (Turkey) Ionian city of ancient LYDIA, now in Izmir province, on the Kara Burun peninsula, opposite CHIOS. It seceded from an alliance with ATHENS in 453 BC by refusing to pay tribute. This link was restored by a new government, but the city rebelled again in the Peloponnesian Wars. Liberated from Persian rule in 334 BC by Alexander the Great, it became a free city in the Roman province of ASIA after 133 BC. One of 12 important Ionian cities, it was famous for its sibyls Herophile and Athenais. It remained a wealthy city of the

PIRE but su

ERYX [Erice] (Ita

- Encyclopedia of historical places
- Name in article heading
- Text states that the place is now in Izmir province = Parent
- NOT all caps in TGN = Erythrae

Establishing Warrant



Expedia

Microsoft

IZMIR

Aşağıovacak

Yenice

Balıkköy

Özbek

Barbaros

Bingöl

Ilica

Ildır

- Maps may be a good source
- But cannot tell the modern administrative subdivision unless the map depicts internal administrative boundaries (this one does not)
- Ildır

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Large - 656x

Geonames Area Help

Country Code	Country Name	ADMI Code	ADMI Name
TU	TURKEY	35	Izmir

Izmir

NGA/NIMA Site:

Search Results

JOG NO.	UFI	UNI	PPL CLASS	MOD. DATE
NJ35-				

Variant **Ildir, Gulf of** (UNI= -1078025)

Variant **Eritra Körfezi** (UNI= -1078334)

Variant **Eritra Bay** (UNI= -1068333)

Variant **Eritra, Bay of** (UNI= -1068332)

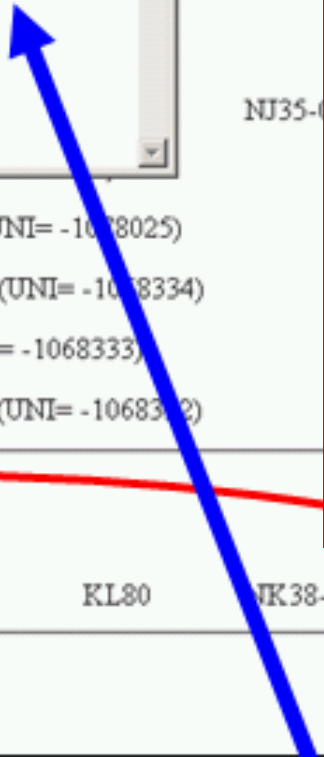
BGN Standard **Ildir**

(4)	PPL	40° 41' 00" N 042° 28' 00" E <u>TU25</u>	KL80	NK38-10	-754263	-1078024	1993-12-18
-----	-----	--	------	---------	---------	----------	------------

BGN Standard **Ildir**

(4)	PPL	38° 23' 02" N 026° 28' 36 E <u>TU35</u>	262		-1078023		2003-02-05
-----	-----	--	-----	--	----------	--	------------

- Once you know that Ildir is the modern site for Erythrae, use NIMA for coordinates and parent
- Ild\$73ir



- Atlases and gazetteers usually have degrees, minutes, seconds for coordinates
- GIS and other sources may use decimal fractions of degrees
- Enter in correct field

38.3838889

-26.4766667

38° 23' 02" N 026° 28' 36" W



	Latitude	Longitude	Elevation (meters)	Elevation (feet)	
Ikramiye	Sakarya Ili	40.6161111	30.2691667	595	1952
Ilbeyi	Bingol Ili	39.3666667	40.4333333	2062	6765
Ildir	Erzurum Ili	40.6833333	42.4666667	1586	5203
Ildir	Izmir Ili	38.3838889	26.4766667		
Ilecik	NA	40.5166667	39.0833333	1607	5272

- Atlases and gazetteers usually have degrees, minutes, seconds for coordinates
- GIS and other sources may use decimal fractions of degrees
- Click appropriate button and transcribe

COORDINATES (latitude and longitude, in degrees/minutes/seconds or decimal degrees)

degrees/minutes/seconds **decimal degrees**

[Latitude Degree](#) [Minute](#)

[Longitude Degree](#) [Minute](#)

Elevation Feet **Elevation Meters** (Note: Add only feet if meters)

[Elevation Feet](#)

38.3838889 26.4766667

38° 23' 02" N 026° 28' 36 E



LIBRARY OF CONGRESS AUTHORITIES

- Help
- New Search
- Search History
- Headings List
- Start Over

SOURCE OF HEADINGS: Library of Congress Online Catalog

YOU SEARCHED: Subject Authority Headings = erythrae

SEARCH RESULTS: Displaying 1 through 25 of 25.

#	Words	Authority H	Previous	Type of He
2	Erythræ.			subject h
2	1 Erythrae (Ancient city)			subject h
3	1 Erythraea. [from old catalog]			subject h
References	4	0 Erythraean Sea		subject h
References	5	0 Erythraeus, 16th cent.		subject h
Authorized Heading	6	0 Erythraeus, Janus Nicius, 1577-164		subject h
References	7	0 Erythraeus, Mison, 1634-1706		LC subject h

- LC subject headings and authorities may be a source
- In this case, our Erythrae is a subject heading, spelling with digraph **Erythr\$70ae**

Establishing Warrant

TGN names:

1. Ild\$73ir (*vernacular, preferred*)
2. Ildir
3. Ild\$73ir\$73i
4. Erythrae (*historical, site name*)
5. Erythr\$70ae (*historical*)
6. Erythrai (*historical*)

TGN preferred name =
current name most often used

Preferred name for the ancient
site

Historical arranged below current names
In reverse chronological order, if relevant

HOW TO BUILD A HIERARCHY AND CLASSIFY

Hierarchical
Relationships



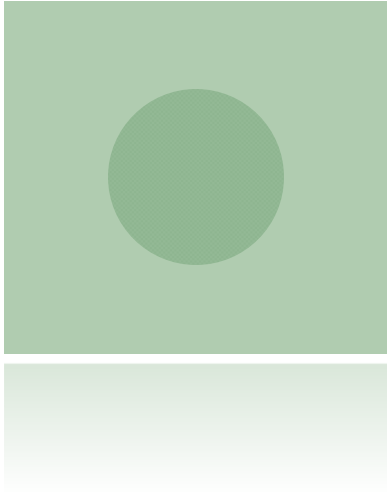
Hierarchical Relationships

Hierarchical relationships are the broader and narrower (parent/child) relationships between logical records (where each record represents a concept)

The hierarchical relationship is the primary feature that distinguishes a thesaurus or taxonomy from simple controlled lists and lists of synonym rings

Hierarchical relationships are referred to by genealogical terms such as *child, children, siblings, parent, grandparent, ancestors, descendants, etc.*

whole/part
genus/species
instance



Whole/Part Relationships

Whole/part relationships are typically applied to geographic locations, parts of corporate bodies, parts of the body, and other types of concepts that are not readily placed into genus/species relationships

Each child should be a part of the parent and all the other ancestors above it

Whole/Part Relationships

Top of the TGN hierarchy (*hierarchy root*)

.... **World (*facet*)**

..... **North and Central America (*continent*)**

..... **Costa Rica (*nation*)**

..... **Alajuela (*province*)**

..... **Cartago (*province*)**

..... **Guanacaste (*province*)**

..... **Heredia (*province*)**

..... **Limón (*province*)**

..... **Puntarenas (*province*)**

..... **San José (*province*)**

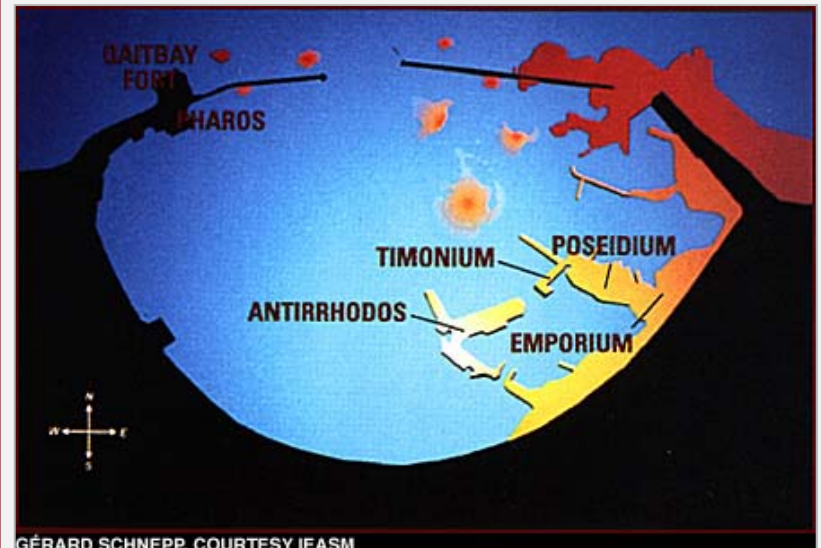
- provinces are part of the nation
- displayed with indentation
- indicated by linking each place to its “parent”



Whole/Part Relationships

..... Egypt (nation)
..... Urban (region)
..... Al-Iskandariyah (governorate)
..... Alexandria (inhabited place)
..... Antirrhodos (former island)

- Some places may no longer exist , e.g., submerged island of Alexandria, Egypt



GÉRARD SCHNEPP, COURTESY IEASM

Whole/Part Relationships

Gobelins

- Gobelins Furniture Manufactory
- Gobelins Marquetry Studio
- Gobelins Pietra Dura Studio
- Gobelins Metalwork Studio
- Gobelins Engraving Studio
- Gobelins Silversmiths' Studio
- Gobelins Painting Studio
- Gobelins Sculpture Studio
- Gobelins Tapestry Manufactory
- Gobelins Dye Works

- Studios are part of larger corporate body



Le Cheval Rayé; artist: Gobelins tapestry manufactory, based on sketches by Albert Eckhout; ca. 1690-1730; wool and silk; 326 x 580.2 cm ; J. Paul Getty Museum (Los Angeles, CA), 92.DD.21



Genus/Species Relationships

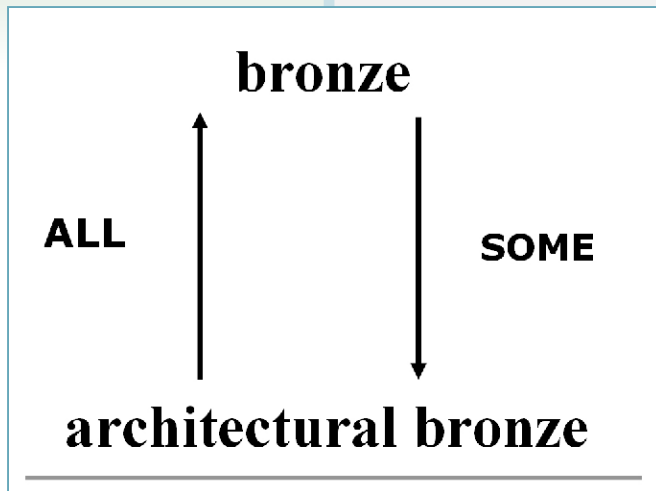
The genus/species, or generic relationship, is the most common relationship in thesauri and taxonomies because it is applicable to a wide range of topics

All children in a genus/species relationship should be a kind of, type of, or manifestation of the parent

(compare to instance relationship, where children are an *example of* the parent)

Genus/Species Relationships

Placement of a child may be tested by the **all/some argument**



- Top of the AAT hierarchies
- Materials Facet
- Materials
- materials
- <materials by composition>
- inorganic material
- metal
- <metal by composition or origin>
- nonferrous metal
- <copper and copper alloy>
- copper alloy
- bronze (metal)
- architectural bronze
- bell metal
- Corinthian bronze
- gunmetal (casting bronze)
- lead bronze
- manganese bronze [N]
- nickel bronze
- phosphor bronze
- statuary bronze

Genus/Species Relationships

Processes and Techniques Hierarchy

<image-making processes and techniques>

projection

azimuthal projection

azimuthal equidistant projection

gnomonic projection

polar projection

stereographic projection

central projection

conic projection

polyconic projection

cylindrical projection

Mercator projection

equidistant projection

parallel projection

axonometric projection

dimetric projection

isometric projection

oblique projection

orthographic projection

multiview projection

- Logic must hold true all the way up, through all ancestors





Instance Relationships

In addition to the whole/part and genus/species relationships, some vocabularies may utilize a third type of hierarchical relationship, the instance relationship

mountains

Alps

Apennines

Rocky Mountains

Himalayas

rivers

Amazon River

Colorado River

Mississippi River

Nile River

Ohio River

Thames

Yellow River

This is most commonly seen in vocabularies where proper names are organized by general categories of things or events

Instance Relationships

Top of the ULAN list / hierarchy

.... Corporate Bodies (*ULAN facet*)

.... Persons, Artists (*ULAN facet*)

.... Unknown Artists (*ULAN facet*)

.... Non-Artists (*ULAN facet*)

..... Abarca de Bolea, Pedro Pablo (Spanish statesman, 1

..... Abati Olivieri, Giulia degli (Italian aristocrat, 1630-17

..... Abbas, M. A. (Hong Kong author and critic, born 1942)

..... Abd el-Maksond, Mohamed (Egyptian author, conte

..... Abdülmecit, Sultan of the Turks (Ottoman ruler, 182

..... Abrams, Harry N. (American publisher, collector, 1904-

..... Acacius, Patriarch (Greek patriarch, died 489)

..... Acevedo y Zúñiga, Manuel de (Spanish patron, 1590

..... Adalbert, Abbot (German abbot, 8th century)

..... Adalbert, Archbishop (German archbishop, noble, ca. 1000-1072)

..... Adalbert, Bishop (German bishop, died 961, from Lorraine)

..... Adalbert, Prince of Prussia (German prince, 1811-1873)

..... Adams, Abigail (American first lady, 1744-1818)

- Examples of instance relationships = upper facets in ULAN, and for categories of subject in CONA IA
- E.g., proper names are examples of Non-Artists (not types of, or parts of the hierarchical parent)



Facets and Guide Terms

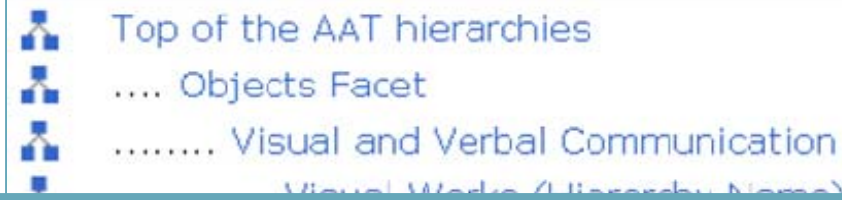
Facets provide the primary subdivisions of a hierarchy, typically located directly under the root or top of the hierarchy

Subfacets, also called hierarchies, may subdivide the facets

Guide terms (types of node labels) are additional levels that collocate similar sets or classes of records (illustrated in the example below with angled brackets)

They should logically illustrate the principles of division among a set of sibling terms

- E.g., a logical classification of the terms under the top of the hierarchy, a facet, subfacet (hierarchy), and guide terms in angled brackets, which organize the terms by form, function, and other logical divisions



..... <visual works by form>

..... dioramas

..... diptychs

..... duein fubara

..... medals

..... polyptychs

..... tapestries [N]

..... triptychs

..... <visual works by function>

..... cartoons (humorous images)

..... clip art

..... emblems (allegorical pictures)

..... masterpieces (visual works)

..... models (representations)



Facets and Guide Terms

Visual Works Hierarchy

...<visual works by medium of
.....photographs
.....<photographs by form>
.....negatives
.....positives
.....<transparencies: ph
.....<photographs by form: color>
.....<photographs by form: format>
.....card photographs
.....boudoir midget mounts
.....cabinet photographs
.....cartes-de-visite
.....cameo prints
.....gem photographs
.....lantern slides
.....slides (photographs)

- Commonly *form, function, material, location*
- but levels vary depending upon necessity of a given hierarchy



Unidentified middle class Black New Yorker. cabinet photograph. Artist: Butler studios, 7 Bond St., Brooklyn. 5 1/2 x 4 1/8 inches, mounted on stiff gray card (6 1/2 x 4 1/4 inches), blind-stamped and printed with name and address of photo studio. N.d. (c. 1880's). Image: arttext.com.

Facets and Guide Terms

- Facets are the top level of the AAT structure
- AAT is not organized by subject matter or discipline
- "Hierarchies" are arranged within the seven facets
- Conceptually organized in a scheme that proceeds from abstract concepts to concrete, physical artifacts

<i>Associated Concepts</i>	<i>Physical Attributes</i>	<i>Styles and Periods</i>	<i>Agents</i>	<i>Activities</i>	<i>Materials</i>	<i>Objects</i>
----------------------------	----------------------------	---------------------------	---------------	-------------------	------------------	----------------



Polyhierarchies

Some concepts logically belong to more than one broader context

To accommodate this situation, the data structure of a properly constructed thesaurus should allow polyhierarchical relationships

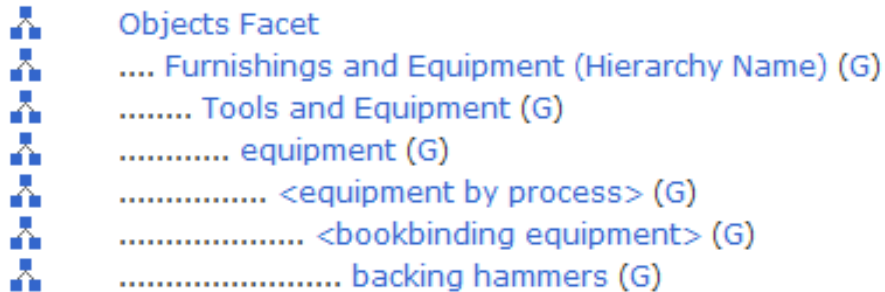
Each record exists only once in the vocabulary but may be linked to multiple parents and can thus appear in multiple hierarchical views

Polyhierarchies

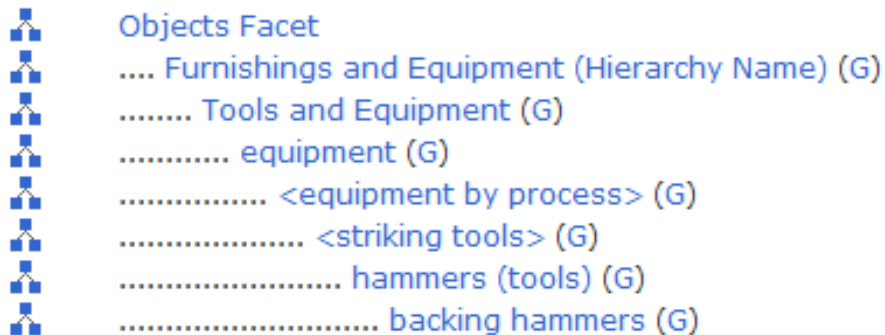
The criteria for creating polyhierarchical relationships should be explicitly established

Children should be placed under multiple parents only when they logically belong to those parents

Hierarchical Position:



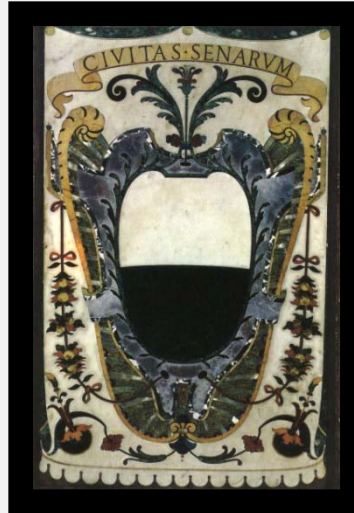
Additional Parents:



- E.g., AAT, a *backing hammer* should be located under the guide term
- *<bookbinding equipment>*
- but it also belongs under *hammers (tools)*

Polyhierarchies

Modern world
Italy
Tuscany
Siena province



Historical world
Etruria

Siena

- Multiple hierarchical relationships may include historical parents
- The date of the relationship may also be included



- .. **Italian Peninsula (peninsula)**
- **Etruria (former group of nations/states/cities)**
- **Arezzo (inhabited place) [N]**
- **Bologna (inhabited place) [N]**
- **Cerveteri (inhabited place) [N]**
- **Chianciano Terme (inhabited place) [N]**
- **Chiusi (inhabited place) [N]**
- **Cortona (inhabited place) [N]**
- **Fiesole (inhabited place) [N]**
- **La Foce (inhabited place) [N]**

/cities)

[N]

- View in TGN of non-preferred (historical) parent Etruria and towns in modern Tuscany

- **Orte (inhabited place) [N]**
- **Orvieto (inhabited place) [N]**
- **Perugia (inhabited place) [N]**
- **Pisa (inhabited place) [N]**
- **Populonia (inhabited place) [N]**
- **Rusellae (deserted settlement) [N]**
- **Siena (inhabited place) [N]**
- **Tarquinia (deserted settlement) [N]**
- **Veio (deserted settlement) [N]**

Whole/Part Relationships



- Views of multiple parents for *mboko – containers by form* and also *ceremonial vessels*

Hierarchical Position:

- Objects Facet
- Furnishings and Equipment (Hierarchy Name) (G)
- Containers (Hierarchy Name) (G)
- containers (receptacles) (G)
- <containers by form> (G)
- mboko (containers) (G)

Additional Parents

- Furnishings and Equipment (Hierarchy Name) (G)
- Containers (Hierarchy Name) (G)
- containers (receptacles) (G)
- <containers by function or context> (G)
- ceremonial containers (G)
- mboko (containers) (G)

- Objects Facet
- Object Genres (Hierarchy Name) (G)
- <object genres (Guide Term)> (G)
- <object genres by function> (G)
- divination objects (G)
- mboko (containers) (G)

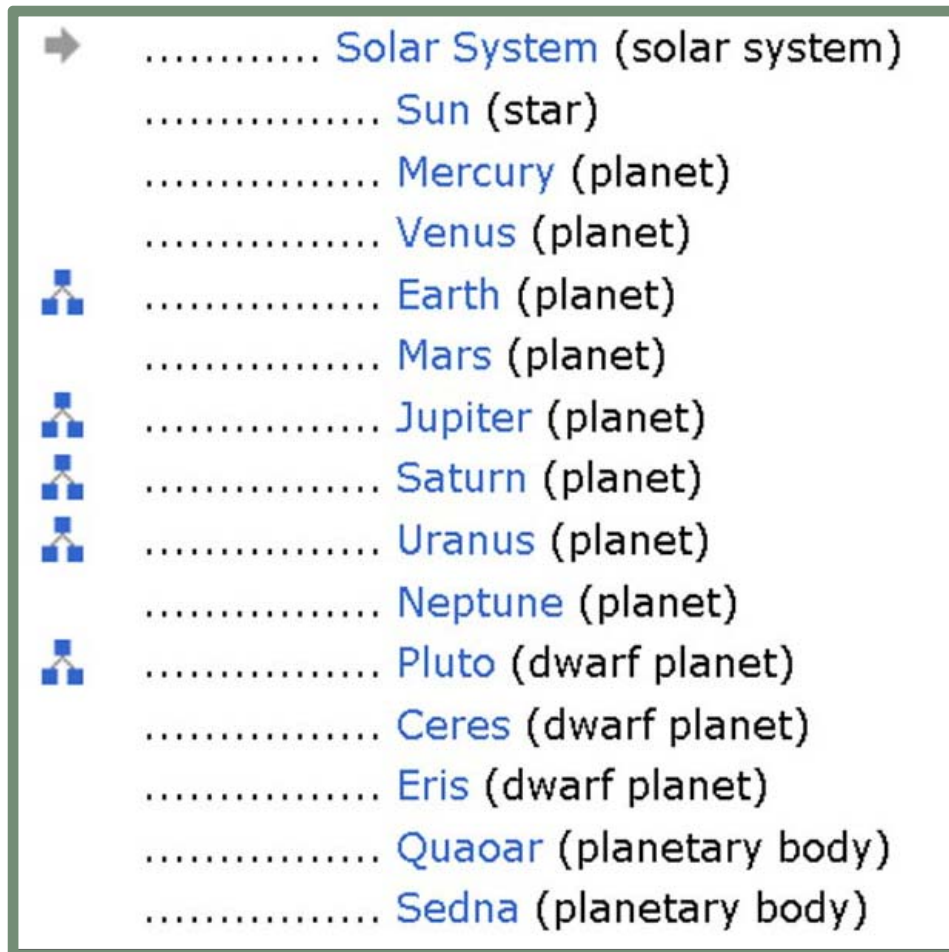
- ceremonial vessels
- ampullae
- bratinas [N]
- charkas [N]
- great salts [N]
- kernoï
- kero cups
- kiddush cups

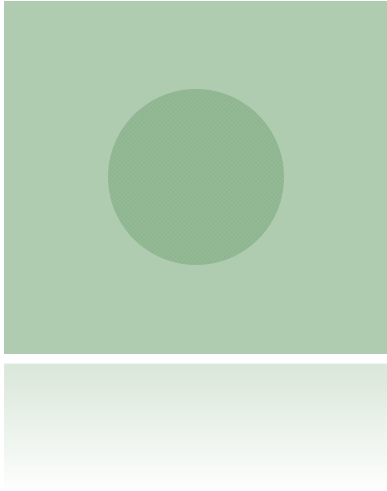
- mboko (containers) [N]

Whole/Part Relationships

Sorting of siblings: Usually alphabetical, but chronological, spatial, or another logical order may be used

- E.g., spatial for planets in solar system, chronological for Roman periods

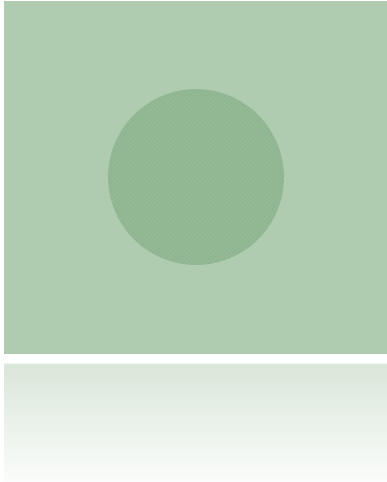




How to Classify

Classification, here referring to positioning in a hierarchy, has two goals:

- To organize the content so that it can be found quickly
- To place the content in context so that it becomes part of a cohesive body of knowledge



How to Classify

How to build a hierarchy

In the beginning:

Have a long-term perspective

Plan for the total content – don't just design for the content you have today

Avoid duplication

Do as much testing as possible

Get feedback

Take your time; consider each classification carefully

How to Classify

Adding to an established hierarchy:

Choosing the parent

- To add a new record to a hierarchy, you must determine the correct level or parent under which the record will be placed
- Criteria will differ for Persons/Corporate Bodies, Geographic Places, Iconographic Subjects, and Generic Concepts
- Consult the Editorial Rules and pay strict attention to precedent for similar records in the hierarchy

How to Classify

Choosing the parent

- Under the most logical broader term
- Under the most specific parent possible
- Be consistent with the precedent of other records in the same or similar sections of the hierarchies
- With the descriptor of the concept record in mind, determine if this concept is a *type of*, *kind of*, *example of*, or *manifestation of* the proposed parent concept
- For whole/part relationships, the child must be a part of the parent; for instance relationships, child must be an example of
- Make sure each subset of narrower terms clustered under broader term is independent and mutually exclusive in meaning
- Occasionally meanings may overlap among siblings, but avoid this when possible

How to Classify

Choosing the parent

- **Hint:** E.g., in the AAT – To find the correct parent for your new term, look up a term in the AAT that you think is related to or similar to the term you want to add
- Will your term logically fit under that parent too, based on other terms under that parent and the Scope Note of the parent?
- Be sure that the genus/species logic holds true upwards through all levels of the hierarchy above the concept

HOW TO SELECT RELATED CONCEPTS

Associative
Relationships

Associative Relationships

Associative relationships exist between records that are conceptually close, but where the relationship is neither equivalent nor hierarchical

The most basic type of associative relationship is simply *related to*

More specific types of associative relationships may be designated

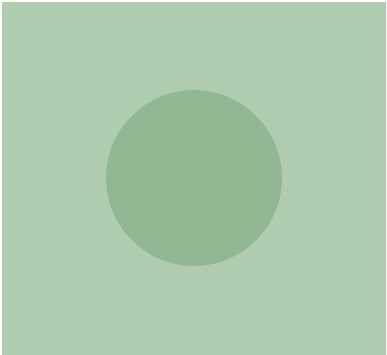
Jean-Honoré Fragonard
(French painter and draftsman, 1732-1806)

student of

Jean-Siméon Chardin *(French painter and draftsman, 1699-1779)*

spouse of

Marie-Anne Fragonard
(French painter and miniaturist, 1745-1823)



Types of Associative Relationships

Associative relationships may be made between records in the same hierarchy or in different hierarchies

May be relationships between overlapping siblings or other terms where the meanings are similar and the terms are occasionally (but not generally) used as synonyms

In general, terms that are mutually exclusive do not require associative relationships, particularly if they cannot be confused with one another, whether or not they share the same parent

Final Neolithic

sectores de las islas de Gran Bretaña.

Related concepts:

meaning/usage overlaps with Early Bronze Age

..... (Bronze Age, <three-age system>, ... Styles and Periods)

[300019276]

Types of Associative Relationships

There should be associative relationships between terms that are intended to be used as separate concepts but may be confused by users

ID: 7024272

Record Type: [administrative](#)



Lorraine (historical region)

Co
Lat: 49 00 00 N *degrees minutes* Lat: 49.0000 *decimal degrees*
Long: 006 00 00 E *degrees minutes* Long: 6.0000 *decimal degrees*

Note: Area of northwestern Europe contained in modern Belgium, the Netherlands, Luxembourg, Alsace-Lorraine (France), and northwestern Germany. The kingdom was established when the Carolingian empire split; it was divided into two duchies in 959. It was ruled by a ducal family from the 11th century. It was held permanently by France from 1766, except when it went to Germany (with Alsace) for a time after the Franco-Prussian War in 1871. See also the modern region of Lorraine, France.

Names:

Lorraine	
(preferred , C , V , N , English-P , French-P)	
Lothringen (H , V , N , Germanic language) named for grandson of Charlemagne, Lothair I
Lotharingia (H , V , N) name really applies to medieval kingdom of Lorraine, later divided
Lotharii Regnum (H , V , N , Latin-P) Latin for "kingdom of Lothair," named by Lothair II (died 869)

Hierarchical Position:



Related geographic places:

distinguished from Lorraine (region)

..... (World, Europe, France) [7002888]

- E.g., Lorraine the current region of France may be confused with the larger historical area known by the same name



Relationship Types

- Relationship Type is a term or phrase characterizing the relationship between the person or corporate body at hand and the linked person or corporate body
- Do not make multiple relationships between the same two entities (list only most important)
- Choose the specific suitable Relationship Type, if possible; if absolutely necessary, use the broad *related to* as a default



Relationship Types

The types of relationships will vary from vocabulary to vocabulary, depending upon the nature of the terms and how they are intended for use in retrieval

E.g., relationships between generic terms would differ from relationships between people, which could include familial and professional relationships

Code	Focus Entity	Related Code
5000	related to	5000
5001	formerly related to	5001
5003	associated with	5003
5100	distinguished from	5100
5110	meaning/usage overlaps with	5110
5210	focus of	5211
5211	focus was	5210
5250	attribute of	5351
5251	attribute was	5250
5301	manifestation of	5302
5302	manifestation was	5301
5310	predecessor of	5311

When to Make Associative Relationships

Avoid making unnecessary links between related concepts

Relationships should be made only between records that are directly related, but where hierarchical and equivalent relationships are inappropriate

- If a thesaurus is bound together by too many associative relationships between entities that are only loosely or indirectly related, the value of the relationships in retrieval is lost
- Consider this question: if the end user is interested in retrieving Concept X, might he or she possibly also want to retrieve Concept Y? If not, there probably should not be an associative relationship between the two records

5001	formerly related to	5001
5003	associated with	5003
5100	distinguished from	5100
5110	meaning/usage overlaps with	5110
5210	focus of	5211
5211	focus was	5210
5250	attribute of	5351
5251	attribute was	5250
5301	manifestation of	5302
5302	manifestation was	5301
5310	predecessor of	5311

When to Make Associative Relationships

Associative relationships are always reciprocal

For some relationships, the relationship type is the same on both sides of the link (e.g., related to); however, for others it is different depending upon which record is the focus

Vocabulary editors must be very careful to choose the correct relationship for the focus record (i.e., the record being edited when the relationship is made) -- the teacher must be described as the teacher of his or her student, while from the student's record, the reciprocal relationship displays

5100	distinguished from	5100
5110	meaning/usage overlaps with	5110
5210	focus of	5211
5211	focus was	5210
5250	attribute of	5351
5251	attribute was	5250
5301	manifestation of	5302
5302	manifestation was	5301
5310	predecessor of	5311

When to Make Associative Relationships

Materials

building materials
coating (material)
lacquer
plaster

arriccio
intonaco
stucco

photographic materials
solvent

Visual Works

drawings
design drawings
preliminary drawing

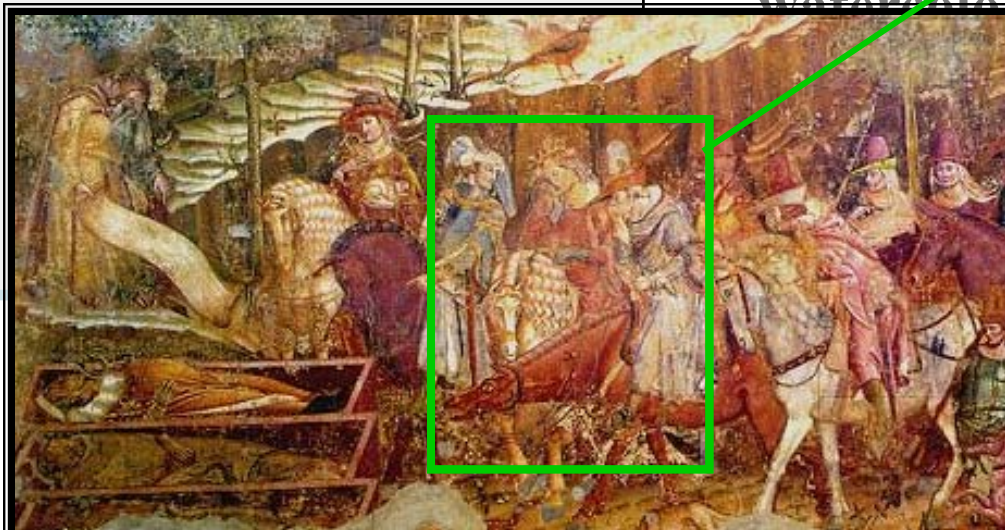
sinopie

environmental art
mosaics
paintings

finger paintings

frescoes

watercolors



- There may be associative relationships between concepts
- mural painting (fresco) and the plasters, and drawing (sinopia) underneath

When to Make Associative Relationships

RELATIONSHIP TYPE:

members are

RELATED PERSONS:

Richard Meier

Michael Palladino

James R. Crawford

Bernhard Karpf

Reynolds Logan

Richard Meier & Partners **Architects** LLP



- “associative relationship”
- e.g., a corporate body may be related to persons

When to Make Associative Relationships

for Albrecht Dürer (German, 1471-1528)

Relationship Type: sibling of

Related Person: Hans Dürer

Relationship Type: student of

Related Person: Michael Wolgemut

Display Date: from 1486 through 1490

Start Date: 1486 **End Date:** 1490

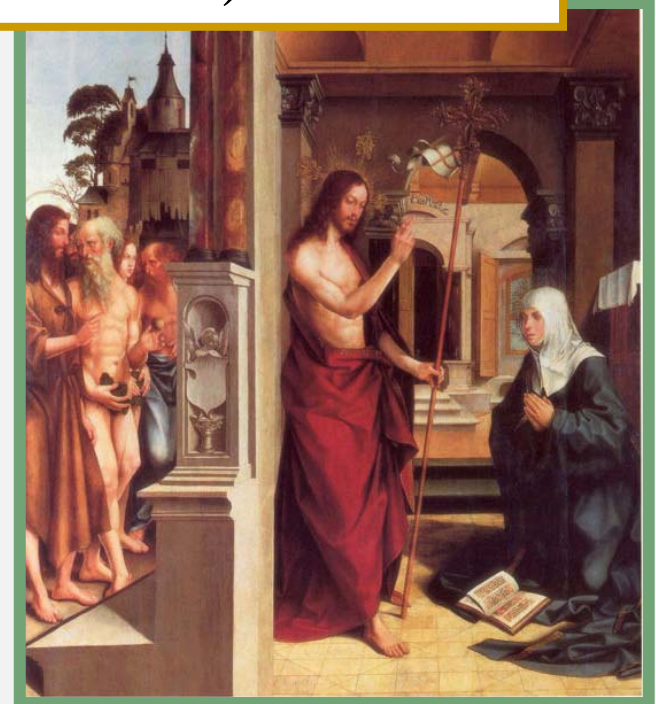


- student/teacher relationships
- familial relationships if the relative is also an artist
- dates of relationship
- Start and End dates are used for searching, do not display to end user

When to Make Associative Relationships

Jorge Afonso (*Portuguese painter and court artist, born ca. 1470-1475, died before 1540*)

Master of 1515 (*Portuguese painter, active 1515*)



Relationship Type: possibly identified with

Related Person:

Master of 1515 (*Portuguese painter, active 1515*)

- Use for artists who are perhaps the same person
- If scholars are not sure, do not put the names in the same record

When to Make Associative Relationships

for Niflheim, place in Nordic creation story

Relationship Type: actor is

Related Subject: Hel (Norse goddess)



- **Associative Relationships are links to other entities in the same authority**
- **CONA Iconography Authority can also link to AAT, TGN, and ULAN – this is linked data in a broader sense**

Relationship Dates

- Dates for associative relationships

[in the record for "rapiers"]

Relationship Type: **thing(s)**
needing context is

Related Concept: **cup-hilts**

Display Date: **cup-hilts were
found on rapiers beginning in
the 17th century**

Start Date: **1600**

End Date: **9999**



Francesco-Maria Rivotta, ca. 167-1680, Milan, steel, bequest of Carl Otto Kretschmar von Kienbusch, 1977. Image: Philadelphia Museum of Art online

HOW TO WRITE A SCOPE OR DESCRIPTIVE NOTE



Scope Notes and Descriptive Notes

A Scope Note, or Descriptive Note

- Describes how the term should be used within the context of the thesaurus
- Provides descriptive information about the concept
- Expands upon information recorded in other fields
- Differs from a definition in a dictionary or glossary in that, rather than providing all the possible meanings for a word, it identifies a single concept and explains its particular meaning

Scope Notes and Descriptive Notes

- Complete sentences are recommended to unambiguously convey meaning. Follow all other grammatical rules for standard English composition
- Values may include any ASCII character. Do not use carriage returns or tabs. No special characters are allowed, including smart quotes, M-dashes, and superscripts. Diacritics must be expressed according to the Diacritical Codes
- Do not plagiarize or quote a source verbatim
- All information in the descriptive note must be derived from an authoritative source and the source must be cited in the **Note Source** field. Acceptable sources are listed in the Rules
- The note should be brief and concise. The descriptive note is intended to touch upon major relevant points; it is not a comprehensive encyclopedia entry. A minimum note may be one or two lines of text

Scope Notes and Descriptive Notes

- Any important information in the Note must be indexed in appropriate fields as warranted
- If an issue is in dispute, be careful not to express it as a certain fact. On the other hand, be careful not to imply that a fact is unknown simply because you happen not to know it
- Avoid bias or critical judgment, both negative and positive. Express all information in a neutral tone. Do not write from a subjective or biased point of view, even if your source expresses a fact in a subjective way. Avoid expressing biased or insensitive views regarding religion, politics, or culture.
- You may mention one or two works if necessary to make a point, but avoid making a long list of an artist's works

Scope Notes and Descriptive Notes

For Gaul (historical region)

Note: Refers to the region inhabited by the ancient Gauls, comprising modern-day France and parts of Belgium, western Germany, and northern Italy. It was a powerful ancient country. Inhabited from ca. 600 BCE by Celtic Galli. French Gaul (the area of Gaul that is modern France) was later divided by Rome into four provinces: Narbonensis, Aquitania to the west and south of the Loire, Lugdunensis in central France between the Loire and the Seine, and Belgica in the north and east.

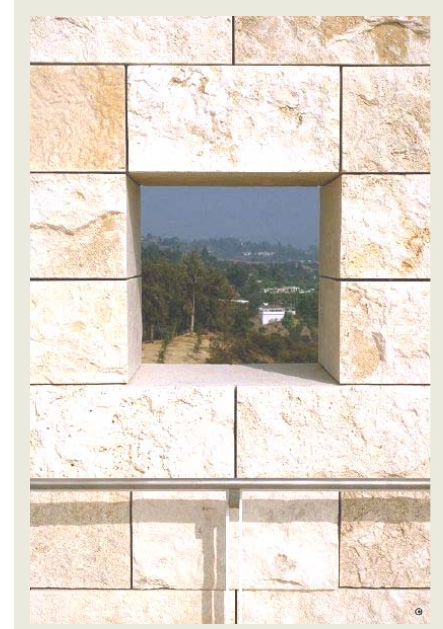
- **disputed issues, sovereignty, or ambiguity regarding the names or critical facts about the place**
- **possible confusion of the place due to its name being a homograph for a nearby place**
- **physical description**
- **description of its location (do NOT repeat the hierarchy information, but you may mention physical features, etc.)**
- **the first habitation of the place**
- **its political history, in chronological order**
- **its importance relative to other places or to the history of art and architecture**
- **for modern nations, include the languages spoken**
- **population may be included for inhabited places, provided you cite the date of your source**

Scope Notes and Descriptive Notes

For travertine

Note: A dense, crystalline or microcrystalline limestone that was formed by the evaporation of river or spring waters. It is named after Tivoli, Italy ("Tibur" in Latin), where large deposits occur, and it is characterized by a light color and the ability to take a good polish. It is typically banded, due to the presence of iron compounds or other organic impurities. It is often used for walls and interior decorations in public buildings. It is distinguished from "tufa" by being harder and stronger.

- The **usage** of the descriptor, alternate descriptors, and used for terms in the record
- The **meaning and context** of the descriptor and other terms in the record
- **Distinguishing between terms** that are in different records and have overlapping meanings or that may otherwise be confused by users



Scope Notes and Descriptive Notes

For Art Nouveau

Note: Refers generally to the style of painting, architecture, and the decorative and applied arts that flourished in Europe and the United States from about 1890 to 1910. The style is characterized by an emphasis on fluid, undulating, or serpentine lines or contours based on organic forms and the use of modern materials such as iron and glass.

- **Style of the note:** Complete sentences are recommended when necessary to unambiguously convey meaning
- Follow all other grammatical rules for standard English composition
- Follow style specified in the Editorial Rules



Scope Notes and Descriptive Notes

For Aethelwold (English calligrapher, bishop, active 963-984)

Note: Bishop of Winchester from 963 to 984. He was said to have cultivated music and various arts, and to have been a skilled penman and metalworker.

- **Brevity:** Should be brief and concise, intended to touch upon major relevant points
- Not a comprehensive encyclopedia entry.
- Minimum note may be one or two lines of text; may not be longer than 250 words

Scope Notes and Descriptive Notes

For First Battle of Bull Run

Note: One of two battles fought a few miles north of the crucial railroad junction of Manassas, Virginia. The First Battle of Bull Run (called First Manassas by the South) was fought on July 21, 1861, at a very early stage of the war. Both armies were ill-prepared, but political pressures forced the Northern General Irvin McDowell to advance to a small stream named Bull Run near Manassas in northern Virginia, southwest of Washington; this was a move against the Southern city of Richmond, Virginia.

- **Index info:** Any important information in the Note

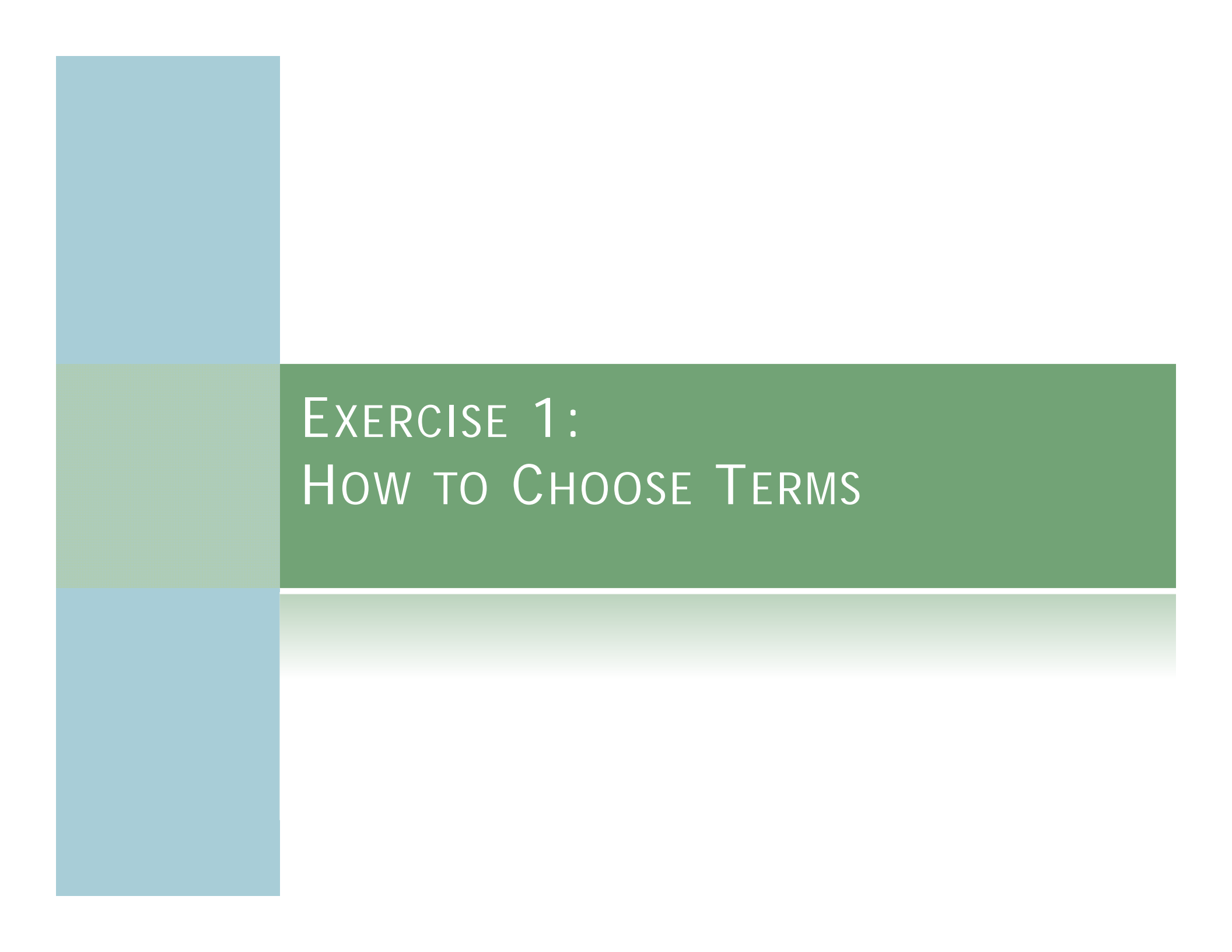
Scope Notes and Descriptive Notes

For Machupicchu (deserted settlement)

Note: Located on a high ridge between two sharp peaks, Machu Picchu (Old Peak) and Huayna Picchu (New Peak), overlook the Urubamba river valley. It was formerly believed to be Tampu Tocco, the "lost city of the Incas," but now is generally thought to have been the royal retreat of Inca emperor Pachacuti. It declined after the Spanish Conquest. The site was brought to the attention of scholars by archaeologist Hiram Bingham in 1911.

- **Index info:** Note any controversies concerning name or other issues

EXERCISES



EXERCISE 1: HOW TO CHOOSE TERMS

Exercise 1: Establish preferred and variant terms for a record

Scope Note: Wood of the species *Betula populifolia*, found in clusters on moist sites in northeastern North America. It is for turnery and for fuel.

- If you were developing your own local authority, your first source would be the AAT. But for the purposes of today's exercises, please use only the other sources provided.

* Sources used here may have been altered for demonstration purposes

Materials Handbook:

Encyclopedia for Managers, Technical Professionals, Purchasing and Production

Managers, Technicians, and Supervisors

by George S. Brady and Henry R. Clauser

11th ed. New York: McGraw-Hill Book Co., 1977

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BIRCH: The wood of birch trees, of which more than 15 varieties grow in the northeastern and Lake states of the United States and Canada, and other varieties in Europe and north Asia. The wood of the American birches has a yellow color; is tough, strong, hard, and close-textured; and polishes well. Birch is used in construction work for trim, and paneling, for furniture, and for turned articles such as handles. **Yellow birch**, *Betula lutea*, highly prized for furniture, is now getting scarce. **Gray birch**, *B. populifolia*, is also used for commercial purposes. It is also called **oldfield birch**. **Sweet birch**, *B. lenta* ranks next in importance. It is called **black birch, cherry birch...**

* Sources used here may have been altered for demonstration purposes



Main Entry: gray birch

Function: noun

Date: 1840

Merriam-Webster Dictionary

Search Dictionary



1: a small birch (*Betula populifolia*) of northeastern North America that has many lateral branches, grayish-white bark, triangular leaves, and that occurs especially in old fields reverting to woodland; also called *old field birch*. Also refers to the soft, weak wood of this tree.

2: **yellow birch**

* Sources used here may have been altered for demonstration purposes

View full results for 'oldfield birch'

Print | Save | Email | Cite

old field birch, *n.*

Text size:

View as: [Outline](#) | [Full entry](#)

Quotations: [Show all](#) | [Hide all](#)

Pronunciation: Brit. /,əʊl(d) fi : ld 'bæ : tʃ/ , U.S. /,ou(l)d ,fild
'bærtʃ/

Etymology: < OLD FIELD *n.* + BIRCH *n.*

Trees or wood from the North American birch *Betula populifolia*.
Also called the **grey birch** (or **gray birch** in the U.S.).

[Thesaurus »](#)
[Categories »](#)


* Sources used here may have been altered for demonstration purposes

The image is a screenshot of the Britannica Academic Edition website. At the top, the logo for Britannica Academic Edition is visible on the left, and a search bar with a 'Go' button and 'Advanced Search' link is on the right. Below the logo, there is a 'Science & Technology' tag and a link to 'Encyclopædia Britannica'. A navigation menu on the left side includes options like 'Video, Images & Audio', 'Related Articles, Books & More', 'Web Links', 'Article History', 'Contributors', 'Dictionary & Thesaurus', 'Workspace', and 'Widgets'. The main content area shows the title 'gray birch' in a large font, with a 'Table of Contents' dropdown menu above it. To the right of the title are buttons for 'EDIT', 'SAVE', 'PRINT', 'E-MAIL', and font size adjustments 'A+' and 'A'. Below the title, there is a bar indicating 'ARTICLE from the Encyclopædia Britannica' and social media sharing options for 'Get involved', 'Share', and 'Like'.

gray birch, also spelled *grey birch*, also called *oldfield birch*, *wire birch*, or *poplar-leaved birch*, is the birch species *Betula populifolia*, a slender ornamental tree found in clusters on moist sites in northeastern North America. Rarely 12 m (40 feet) tall, it is covered almost to the ground with flexible branches that form a narrow, pyramidal crown. The thin, glossy, dark green, triangular leaves have long, thin stems that flutter in the wind. In one variety, the leaves are purplish when young.

Gray birch often is injured by ice and snow. Quick growing but short-lived, it seeds prolifically, providing burned or abandoned areas with a ground cover that protects the seedlings of more permanent trees. It is also planted as an ornamental in naturalistic landscapes. Gray birch wood is used in turnery and for fuel; see also [birch](#).

* Sources used here may have been altered for demonstration purposes

gray birch [Betulaceae](#) *Betula populifolia* Marsh.  symbol: BEPO



AKA: wire birch, poplar leaf birch. Sometimes mistakenly called “silver birch,” although that name is more correctly used for *B. papyrifera*, *American silver birch*.

Leaf: Alternate, simple, pinnately-veined, triangular with a very elongated acuminate tip, 2 to 3 inches long, doubly serrate margin, green above and paler below.

Flower: Monoecious; preformed male catkins near the end of the twig, 3/4 inch long, usually single; female upright, 1/2 inch long; appear or elongate (males) in early spring.

Fruit: Cone like, cylindrical, 3/4 inch long, deciduous at maturity, releasing tiny 2-winged nutlets. Matures in autumn, disperses over winter.

Twig: Slender, orange-brown to gray in color with warty, raised lenticels that give the twig a rough feel; buds are slender, pointed, green and brown, terminal bud is lacking.

Bark: Reddish brown with numerous lighter lenticels on very young stems, later turning gray to white and very chalky; remains smooth and generally does not peel.

Wood: Used for fuel, woodworking

Form: Small tree rarely over 30 feet tall typically with multiple trunks and a limby bole. The crown is irregular in shape with somewhat drooping slender branches.



* Sources used here may have been altered for demonstration purposes


cameo

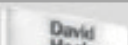
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Material Name: fire birch

[field definitions](#) |
 [units](#) |
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 [print this page](#) |
 [print this record](#) |
 [edit synonym list](#)

Description

A slender deciduous tree, *Betula populifolia*, native to southeastern Ontario east to Nova Scotia, and south to Pennsylvania and New Jersey, with disjunct populations in Indiana, Virginia, and North Carolina. The fire birch produces a light yellow wood that is soft but naturally waterproof. It has been used for utensils, handles, toys, and fuel.

Synonyms and Related Terms

grey birch; gray birch; oldfield birch; Grau-Birke (Deut.); grijze berk (Ned.); bouleau gris (Fr.); abedul gris (Esp.)

* Sources used here may have been altered for demonstration purposes

NCBI Taxonomy Browser

Entrez PubMed Nucleotide Protein Genome Structure PMC

Search for gray birch as complete name lock

Display 3 levels using filter: none

Betula populifolia

Taxonomy ID: 216989

Inherited blast name: eudicots

Rank: species

Genetic code: Translation table 1 (Standard)

Mitochondrial genetic code: Translation table 1 (Standard)

Other names:

synonym: Betula populifolia Marshall

common name: gray birch

common name: fire birch

Lineage(full)

cellular organisms; Eukaryota; Viridiplantae; Streptophyta; Streptophytina; Embryophyta; Tracheophyta; Euphyllophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; fabids; Fagales; Betulaceae; Betula

Comments and References:

GRIN taxonomy: Name verified on date of entry into database in: USDA, ARS, National Genetic Resources Program.

* Sources used here may have been altered for demonstration purposes



[Go to Print Version](#)

Results of: Search in every Kingdom for all containing 'gray birch'

Betula populifolia Marsh.

Taxonomic Serial No.: 19497

Download data

[Download](#) *Betula populifolia* TSN 19497

Taxonomy and Nomenclature

Kingdom:	Plantae
Taxonomic Rank:	Species
Synonym(s):	
Common Name(s):	gray birch

Taxonomic Status:

Current Standing:	accepted
-------------------	----------

Data Quality Indicators:

Record Credibility Rating:	verified - standards met
----------------------------	--------------------------

* Sources used here may have been altered for demonstration purposes



Key to Answers for Exercise 1

Pref?	Order	Term	Language	D,AD,UF
P	1	gray birch	English	D
N	2	birch, gray	English	UF
N	3	grey birch	English	UF
N	4	oldfield birch	English	UF
N	5	old field birch	English	UF
N	6	poplar-leaved birch	English	UF
N	7	poplar leaf birch	English	UF
N	8	wire birch	English	UF
N	9	fire birch	English	UF
N	10	bouleau gris	French	D
N	11	abedul gris	Spanish	D
N	12	Grau-Birke	German	D
N	13	grijze berk	Dutch	D

Pref?	Order	Term	Language	D,AD,UF
P	1	gray b		
N	2	birch,		
N	3	grey b		
N	4	oldfie		
N	5	old fie		
N	6	popla		
N	7	popla		
N	8	wire b		
N	9	fire bi		
N	10	boule		
N	11	abedu		
N	12	Grau-		
N	13	grijze berk	Dutch	D

- Qualifier: If you are making records for species, which could have same names, then add qualifier “wood” to all terms, boid, madera, Holz, hout, etc. for other languages.
- The species binomial *Betula populifolia* could be a variant; but in AAT species are separate records and linked to the corresponding wood as material through Associative Relationships
- What about “silver birch”? Best to put it with a separate record for *American silver birch*, and designate as “distinguished from” with Associative Relationships
- Is “grey birch” a British spelling? Could be designated as language “British English”
- Order: most frequently cited terms near the top, all of one language together; maybe French (Canadian) after English, and then Spanish (common language in USA)



EXERCISE 2: HOW TO BUILD A HIERARCHY

Exercise 2: Organize the following terms into a hierarchical structure

botanical gardens	<gardens by product>	private gardens
children's gardens	giardini segreti	public gardens
Chinese gardens	hanging gardens	rock gardens
cloister gardens	healing gardens	roof gardens
community gardens	herb gardens	sculpture gardens
Dutch gardens	historic gardens	sunken gardens
flower gardens	Japanese gardens	vegetable gardens
formal gardens	jardines en miniature	walled gardens
gardener	kitchen gardens	water gardens
gardens	landscape gardens	
<gardens by form>	market gardens	
<gardens by function>	miniature gardens	
<gardens by location>	peat gardens	
<gardens by owners>	pleasure gardens	



Key to Answers for Exercise 2

gardens

.... <gardens by form>

- Chinese gardens
 - Dutch gardens
 - formal gardens
 - hanging gardens
 - Japanese gardens
 - landscape gardens
 - miniature gardens
 - peat gardens
 - rock gardens
 - walled gardens
 - water gardens
- ### <gardens by function>
- botanical gardens
 - children's gardens
 - healing gardens
 - historic gardens
 - kitchen gardens
 - market gardens
 - pleasure gardens
 - sculpture gardens

.... <gardens by location or context>

- cloister gardens
- giardini segreti
- roof gardens
- sunken gardens

.... <gardens by product>

- flower gardens
- herb gardens
- vegetable gardens

.... <gardens by ownership>

- community gardens
- private gardens
- public gardens

gardens

.... <gardens by form>

- Chinese gardens
 - Dutch gardens
 - formal gardens
 - hanging gardens
 - Japanese gardens
 - landscape gardens
 - miniature gardens
 - peat gardens
 - rock gardens
 - walled gardens
 - water gardens
- ### <gardens by function>
- botanical gardens
 - children's gardens
 - healing gardens
 - historic gardens
 - kitchen gardens
 - market gardens
 - pleasure gardens
 - sculpture gardens

.... <gardens by location or context>

- cloister gardens
- giardini segreti
- roof gardens
- sunken gardens

.... <gardens by product>

- flower gardens
- herb gardens
- vegetable gardens

.... <gardens by ownership>

- community gardens
- private gardens
- public gardens

jardines en miniatura is a Spanish
descriptor for *miniature gardens*

gardener goes in another hierarchy



THE GETTY

Patricia Harpring
Managing Editor
Getty Vocabulary Program

1200 Getty Center Drive
Los Angeles, CA 90049

310/440-6353
pharpring@getty.edu