

Methods for search and retrieval of large multimedia collections

ECDL2004 Tutorial A

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IT Innovation Centre

Themes of Sculpteur



- Create new 3D digital content
- Search and navigate collections by concepts, metadata and content
- Cluster and classify content
- Find missing or extra information
- Access, repurpose and use digital content

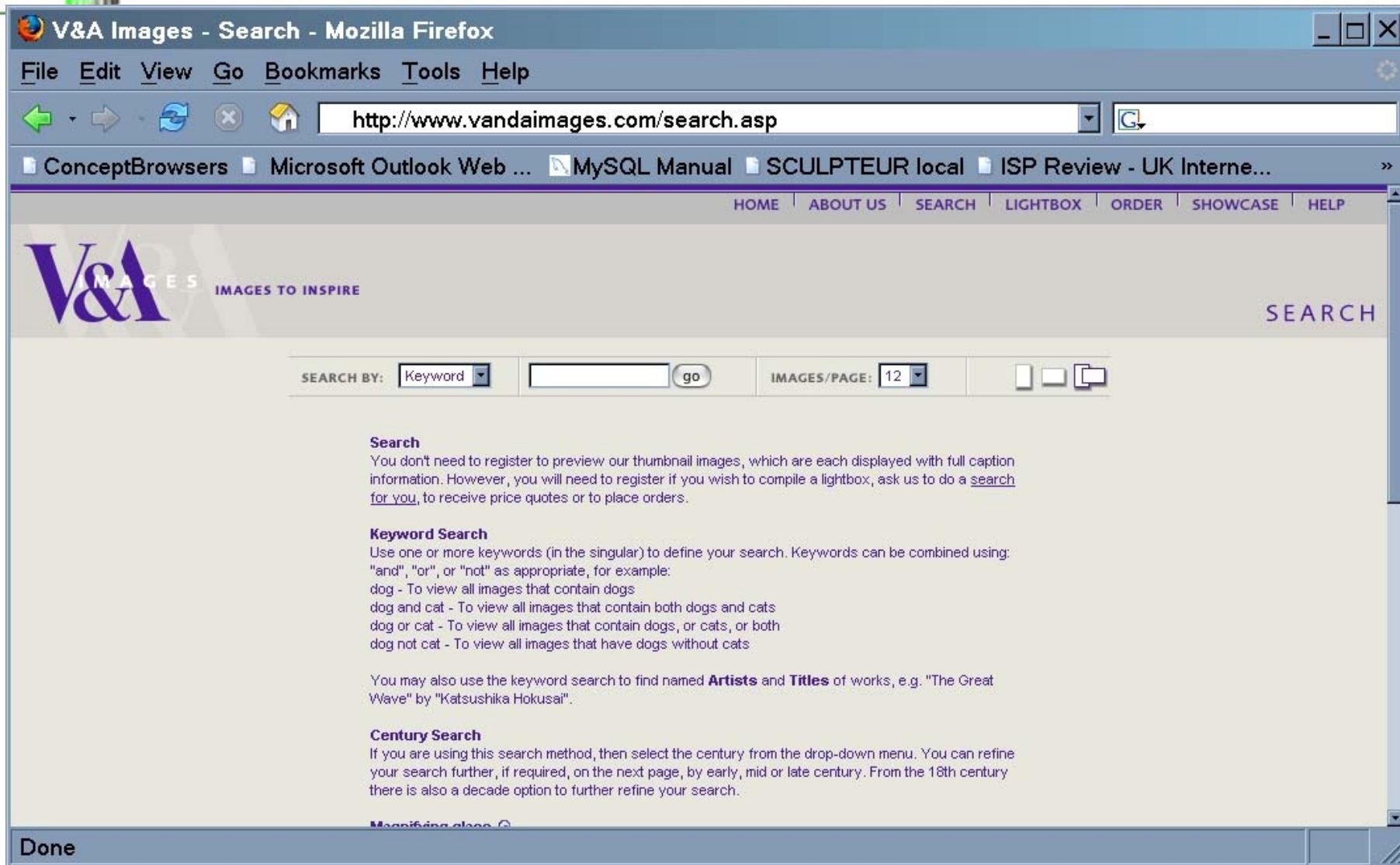


Caption	<input type="text"/>
Detail of Object	<input type="text"/>
Keywords	<input type="text"/>
Photograph Dimension	<input type="text" value="Please select"/>
Photograph Type	<input type="text" value="Please select"/>
Photographer's Name	<input type="text" value="Please select"/>
Picture Date	<input type="text"/>
Picture Reference	<input type="text"/>
Short Caption	<input type="text" value="Please select"/>
Subject Number	<input type="text"/>
View of Object	<input type="text" value="Please select"/>



Traditional search and retrieval

- Simple keyword or 'google' type searching
- Logical operators (AND, OR, NOT)
- Controlled vocabularies
- Works well if you are familiar with the terminology and structure of a collection
- Problems come from inconsistent use of terms, incomplete information, multiple sources, unfamiliar user interfaces
- Not easy to expand, refine or do similar searches




V&A Images - Search - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.vandaimages.com/results.asp

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IMAGES TO INSPIRE

SEARCH


SEARCH BY: Keyword

IMAGES/PAGE: 12


☐ SEARCH WITHIN THESE RESULTS

SUBJECT: VASE FOUND: 78 Images DISPLAYING IMAGES: 1 to 12 (Page 1 of 7)


[1] 2 3 4 5 6 7 NEXT END




PC056260-01
Tin-Glazed Earthenware Flower Vase Londonca. 1725-50




PC058297-01
Columbine in ornament, by Eugene Grasset. London, 1897





PC009296-01
Wishing You an Utterly Charming Time, greeting card by Albert Ludovici II. London, England, 1882




PC009298-01
May You Have a Quite Too Happy Time, greeting card by Albert Ludovici II. London, England, 1881









Done


NG London/Collection Explorer: 1250-1500 - Mozilla Firefox

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 Trafalgar Square London

Search: [Site Map](#)

Collection Explorer

1250-1500 1500-1600 1600-1700 1700-1800 1800-1900





The Wilton Diptych

Full title: Richard II presented to the Virgin and Child by his Patron Saint John the Baptist and Saints Edward and Edmund ('The Wilton Diptych')

about 1395-9

ENGLISH or FRENCH (?)

NG4451. Bought with a special grant and contributions from Samuel Courtauld, Viscount Rothermere, C.T. Stoop, and the National Art Collections Fund, 1929.

The Wilton Diptych was painted as a portable altarpiece for the private devotion of King Richard II, who ruled England from






Online Shop


-  Buy a Print of this Painting
-  Books & Catalogues


See Also...

- Selected Altarpieces
- 1260-1450
- Works acquired with the support of the National Art Collections Fund
- Zoomable Pictures
- Painting Flowers


EYCK, Jan van - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.nationalgallery.org.uk/cgi-bin/WebObjects.dll/CollectionPul



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Collection

Search: Go Site Map

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Jan Van Eyck, 'Portrait of a Man (Self Portrait?)', 1433.
London, National Gallery.

EYCK, Jan van

worked: 1422 died: 1441
Netherlandish

Jan van Eyck is credited with originating a style of painting characterised by minutely realistic depictions of surface effects and natural light. This was made possible by using an oil medium, which allowed the building up of paint in translucent layers, or glazes.

Little is known of van Eyck's origins, but he probably came from Maaseik, near Maastricht, and was of the gentry class. He is first heard of in 1422 working in The Hague for John of Bavaria, ruler of Holland. From 1425 he was at Bruges and Lille as painter to Philip the Good, Duke of Burgundy. In 1428 van Eyck was sent to Portugal to paint Philip the Good's future wife, Isabella of Portugal.

Van Eyck appears to have painted many religious commissions and portraits of Burgundian courtiers, local nobles, churchmen and merchants. A small group of his paintings survive with dates from 1432 onwards. One of his most famous works is the 'Arnolfini Portrait', signed and dated 1434. It is thought that his 'Portrait of a Man' may be a self portrait.

Online Shop

Books & Catalogues

See Also...

Works by this artist...

The Arnolfini Portrait
Portrait of a Man (Self Portrait?)
Portrait of a Man ('Léal Souvenir')

Done



Image Search Advanced Search

Quick
SearchAdvanced
Search

Inspiration

Expert
HelpPrevious
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Lightbox

Enter any combination of the criteria listed below, using View Index to see full list of choices available, and using words of three letters or more.

Lightbox

0 images

Artist

or view index

e.g. Monet or Claude or Monet, Claude

Nationality

or view index

Title

Century

or view index

Select Century ▼

Location

or view index

Keywords

Image ID

e.g. 3179 not GIR 3179

Prefix

or view index

Category

or view index / voir classification alphabetique / Themenverzeichnis

Medium

Search

Clear

Image Search Search Results



Previous Page	Next Page	New Search	Inspiration	View Lightbox
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Results

782

[New Advanced Search](#)

Sort by

Artist

View by

Image and Text

Page

1 of 16

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Image ID

RGS 62680

Title

'Tu Kaitote, the Pah of Te Whero Whero', from the 'New Zealand Illustrated', c.1845, (litho)

Artist

Angas, George French (1822-86)

Lightbox contains 0 images.

[Add Search to Lightbox](#)

[More Information](#) | [Add to Lightbox](#)



Image ID

NLA 70529

Title

Tukupoto at Kaitote, Tewherowhero's pah, 1844 (w/c)

Artist

Angas, George French (1822-86)

[More Information](#) | [Add to Lightbox](#)



Image ID

NLA 73932

Title

Gold washing, Fitzroy Bar, Ophir diggings, plate 4 from 'Views of the gold regions of Australia, drawn on the spot', 1851 (litho)

Artist

Angas, George French (1822-86)

[More Information](#) | [Add to Lightbox](#)



Image ID

NLA 76240

Title

Gold Washing, Summer Hill Creek, below Lewis'

advanced image search

Enter search criteria

Select a category:

Photos and Illustrations ▼

Match all words ▼

Search using [keywords](#), [concepts](#), [image numbers](#), etc:

Girl

Begin search

Need help searching?

Check out our [search tips](#).

Still stumped?

Search for [CDs](#) and [catalogs](#).

[Request research assistance](#).

Want to save these settings?

[Set search preferences](#)

Optional filters

[Rights-managed images \(RM\)](#)

- ☒ All rights-managed (RM)
- ☐ 3DClinic
- ☐ Allsport Concepts
- ☐ Altrendo
- ☐ Beateworks
- ☐ Botanica
- ☐ FoodPix
- ☐ Hulton Archive
- ☐ Illustration Works
- ☐ Lonely Planet Images
- ☐ National Geographic
- ☐ Photographer's Choice
- ☐ Reportage
- ☐ Robert Harding World Imagery
- ☐ Stone

[Royalty-free images \(RF\)](#)

- ☒ All royalty-free (RF)
- ☐ Brand X Pictures
- ☐ Comstock Images
- ☐ Dex Image
- ☐ Digital Vision
- ☐ Photodisc Blue
- ☐ Photodisc Green
- ☐ Photodisc Red
- ☐ Queerstock
- ☐ Rubberball Productions
- ☐ Thinkstock

Orientation:

- ☒ Horizontal
- ☒ Panoramic
- ☒ Square
- ☒ Vertical

image search results

Please clarify your search

Which 'Girl' do you mean?

- ☒ "Girls (Females)"
- ☐ "One Girl Only (Only Girls)"
- ☐ "Girl Ray"

Or try another keyword:

Search using [keywords](#), [concepts](#), [image numbers](#), etc:

Turn this clarification feature:

☒ On ☐ Off



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Stone+
 (Rights-managed)



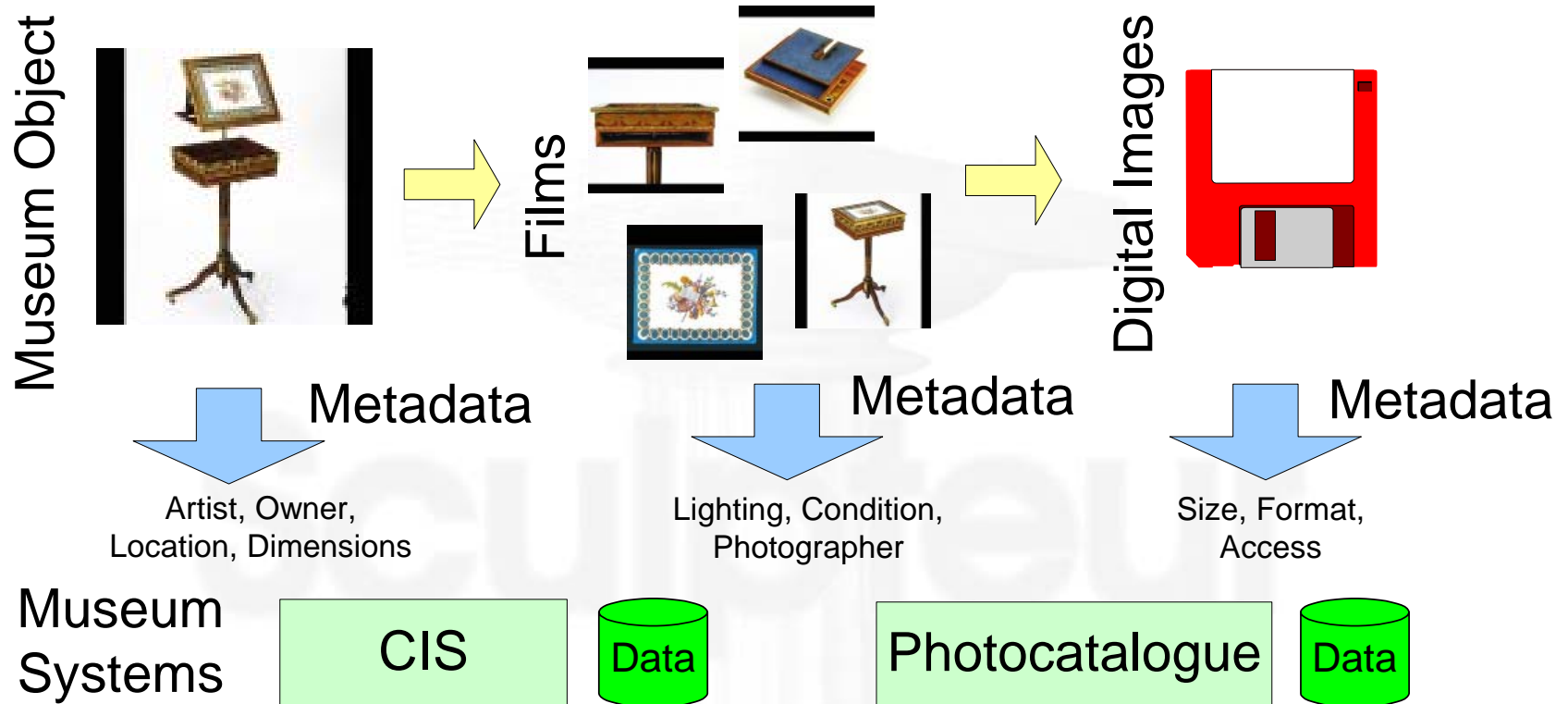
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Challenges: dealing with museum systems



Object Name: Combined music-stand and writing-table

Subject Depicted Concepts: pastoral

Artist/Maker: Carlin, Martin;Pafrat, Jean-Jacq

Attribution Date Text ca. 1777-1785

Dimensions Dimension Height;Width;Depth

Dimension Value 78;41;34

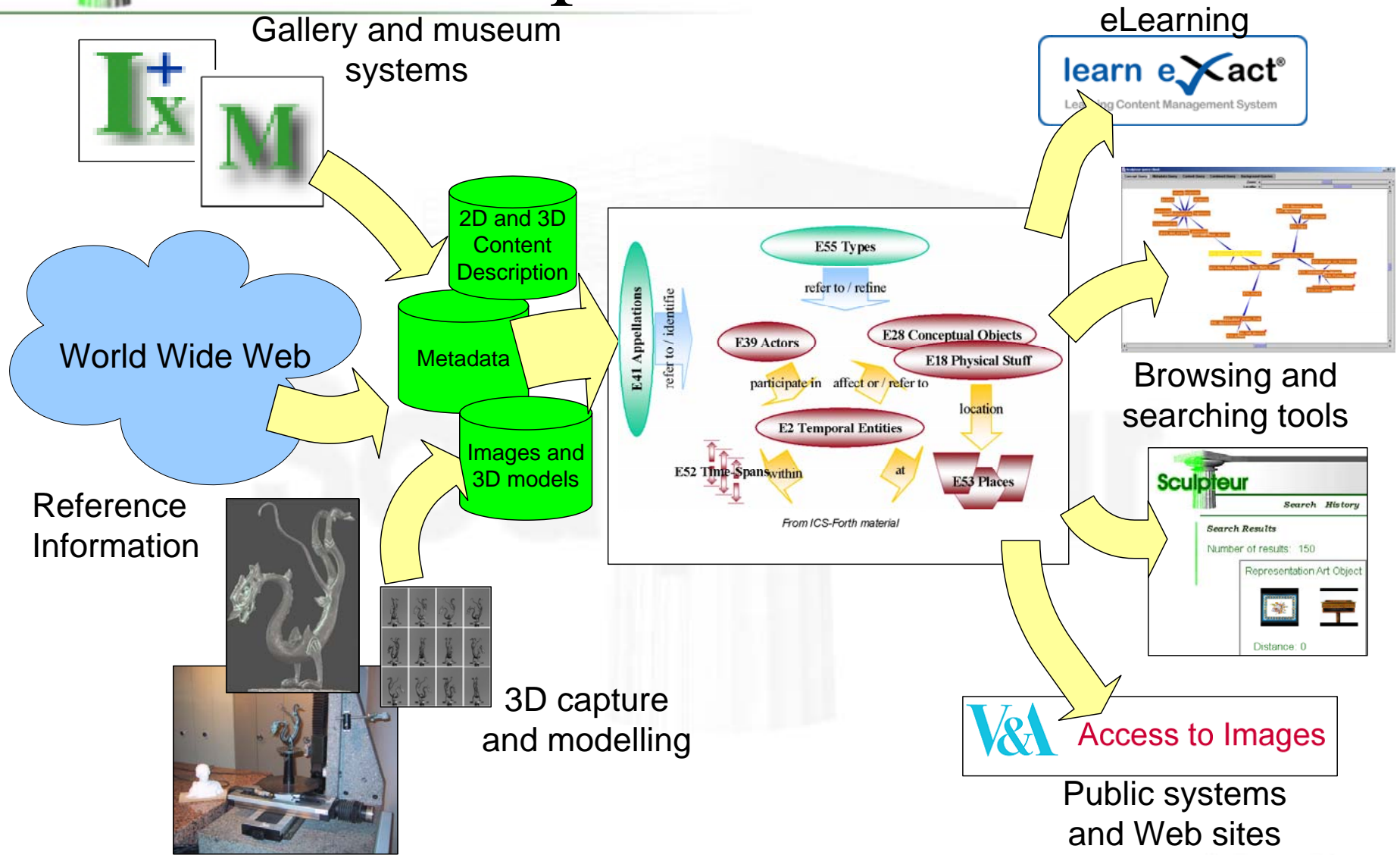
Short caption: TABLE & STAND

Keywords: table;tulipwood;musical instrument;feminine;portable

Associated place Paris, France

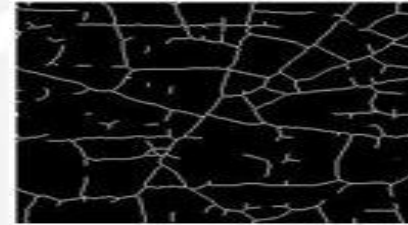
Associated people Martin Carlin (1730 - 85);Jean-Jacques Pafrat (master 1785 - 93)

Sculpteur Architecture



Searching by **content**

- Find **objects** that have a **pattern / colour** similar to this image
- Find **vases** that are a similar **shape** to this one
- Find **paintings** with **cracks** like this
- Which **mould** was used to make this **figurine**?



CONCEPT	CONTENT
Find	Please select
Like	Please select
Upload	Similar colour images
	Similar colour sub-images
	Similar black and white images
	Similar black and white sub-images
	Similar images with texture
	Similar 3D models (CordHist)
	Similar 3D models (ShapeD2)

2-D Content-Based Retrieval

- Developed during ARTISTE
- Colour, Texture and Shape based descriptors
- Sub-Image matching also possible

Sub-image matching



Query



Best Match





















CONCEPT	CONTENT
Find	Please select
Like	Please select
Upload	Similar colour images
	Similar colour sub-images
	Similar black and white images
	Similar black and white sub-images
	Similar images with texture
	Similar 3D models (CordHist)
	Similar 3D models (ShapeD2)

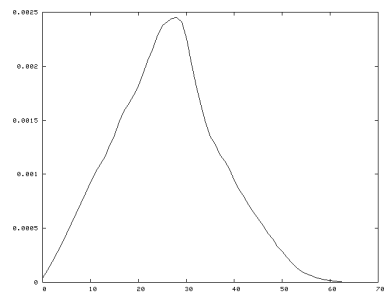
3-D Content-Based Retrieval



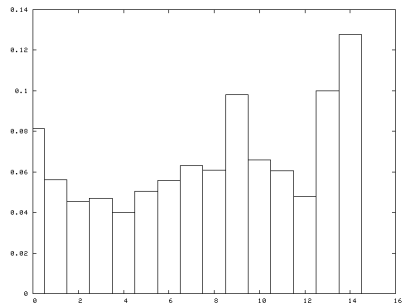
[Home](#) [Search](#) [Project](#)

CONCEPT		CONTENT		FORM		RESULTS
Art Object	Representation	Art Object	Representation	Art Object	Representation	
						
Score : 0		Score : 0.05		Score : 0.08		
Art Object	Representation	Art Object	Representation	Art Object	Representation	
						
Score : 0.09		Score : 0.09		Score : 0.11		
Art Object	Representation	Art Object	Representation	Art Object	Representation	
						
Score : 0.17		Score : 0.18				

Shape
Distribution



“Cord” Histogram



[Home](#) [Search](#) [Project](#)

[CONCEPT](#) [CONTENT](#)

Find

Like

Upload

- Similar colour images
- Similar colour sub-images
- Similar images with texture
- Similar 3D models (CordHist)**
- Similar 3D models (ShapeD2)

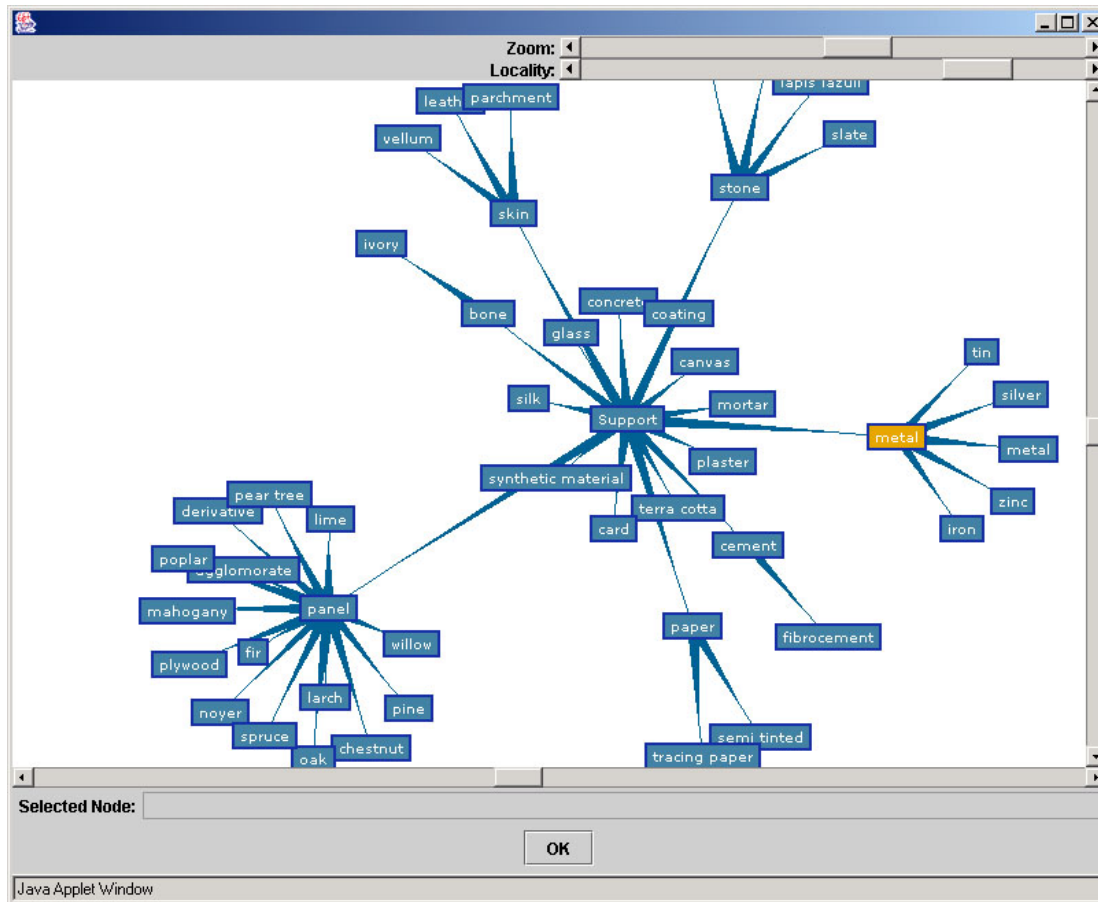
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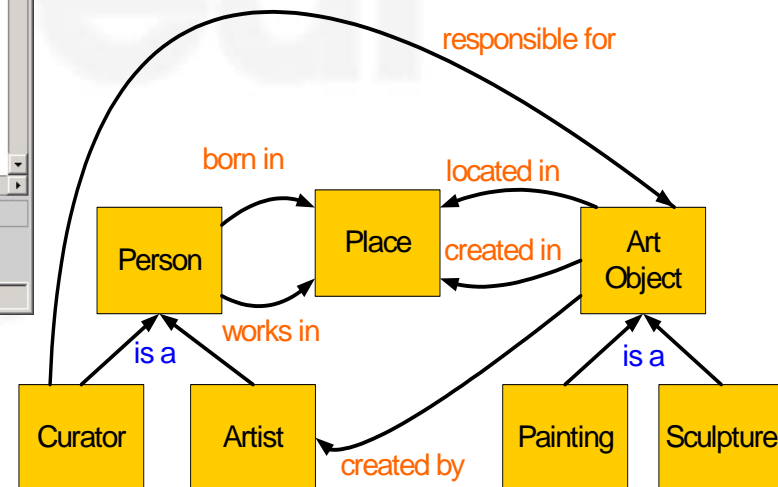
Concepts

- **People (who)**
 - Artist, curator, owner, restorer
- **Art objects and representations (what)**
 - Painting, sculpture, paving stones, coins, Polynesian artefacts, films, digital representations
- **Events and activities (when)**
 - Creation, acquisition, restoration, loan, birth, death, period
- **Places (where)**
 - Gallery, archive, conservation centre, private collection, country, city, town, studio
- **Methods and techniques (how)**
 - Oil, watercolour, carving, x-ray, restoration technique

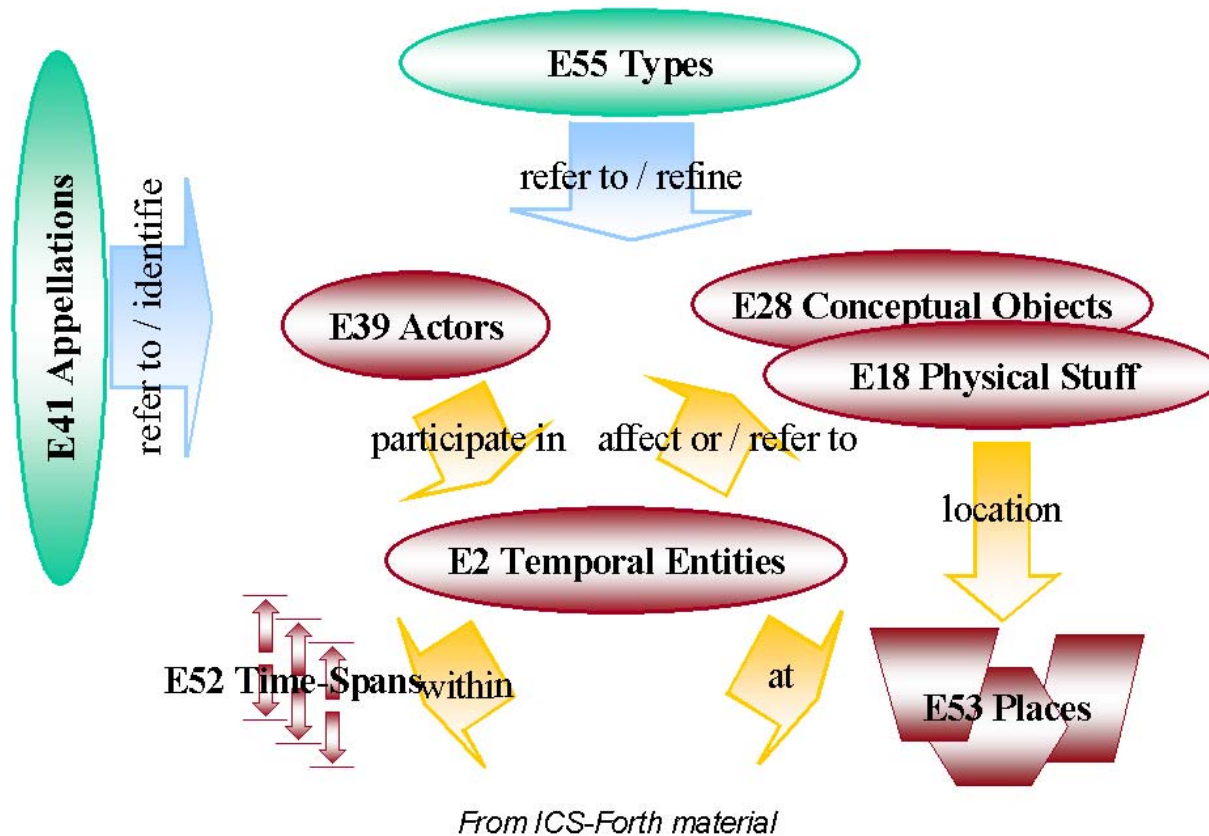
Searching by **concept**



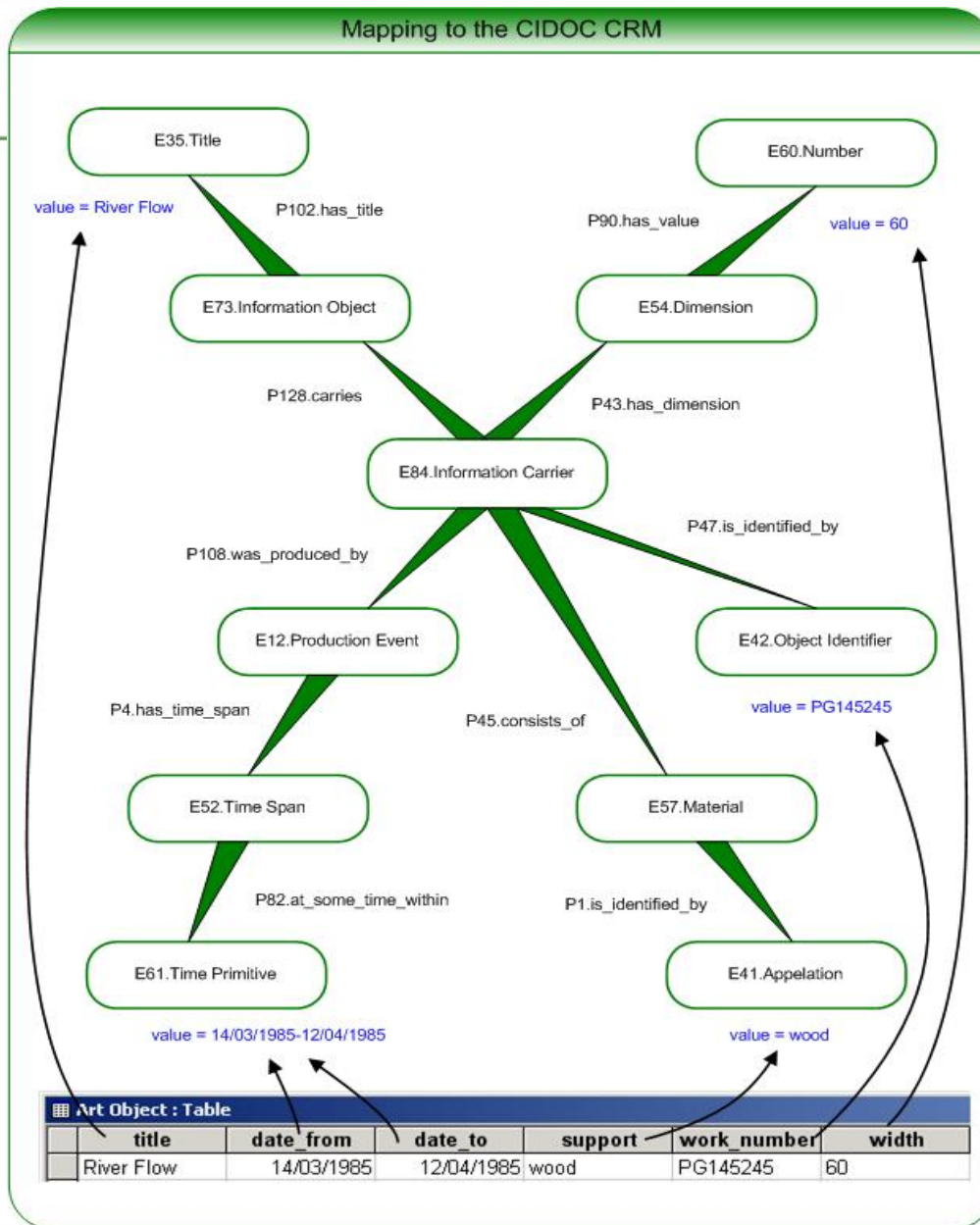
- Which **artists** lived, worked, born or died in England?
- For which **countries** do I have 18thC paintings?



- Find **images** of painting backs with a **wooden panel** support

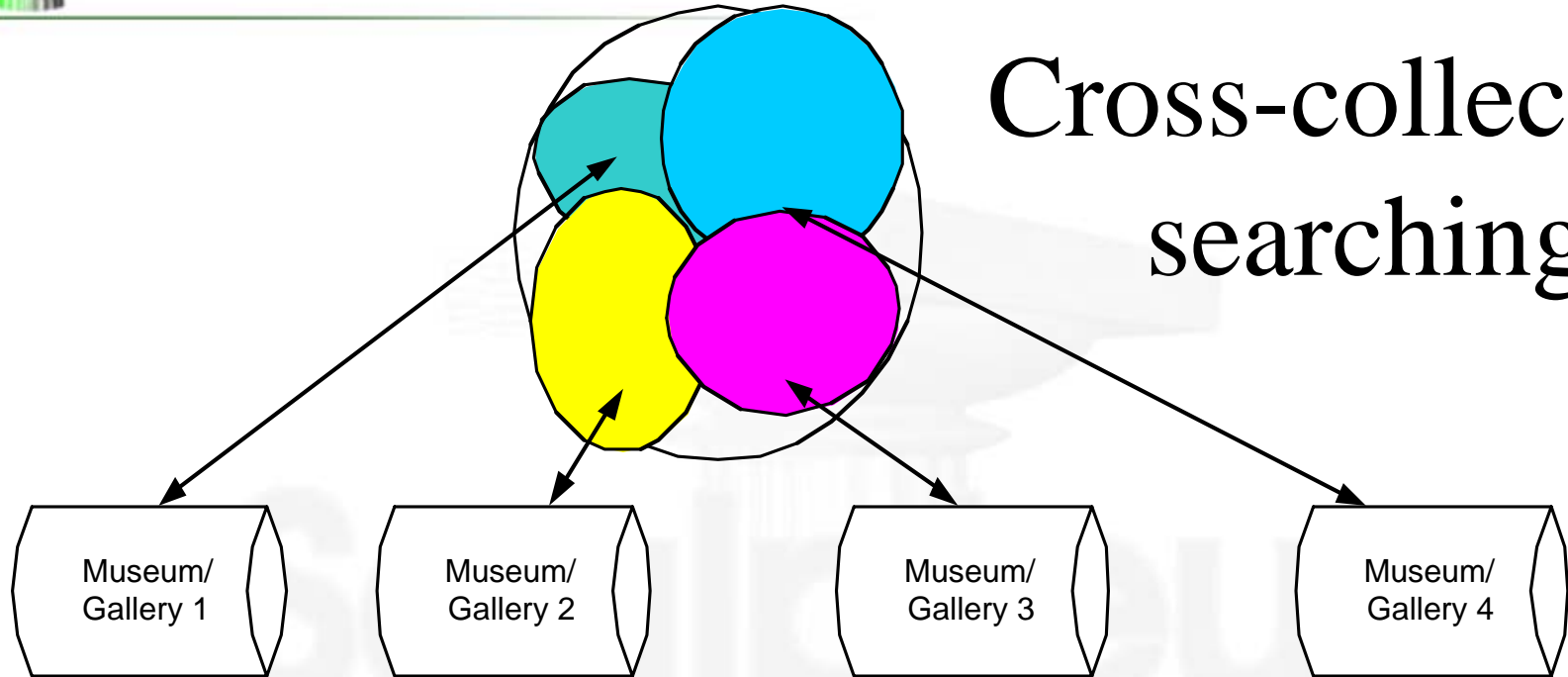


- Ontology for artefacts within the museum/gallery domain
- 81 classes and 139 properties, draft ISO standard



Each
museum
maps their
information
to the CRM

Cross-collection searching



E84 Information Carrier	P108B was produced by	E12 Production Event
E12 Production Event	P14 carried out by	E21 Person
E21 Person	P107B is current or former member of	E74 Group
E74 Group	P2 has type	E55 Type (value = "school")
E74 Group	P131 is identified by	E82 Actor Appellation