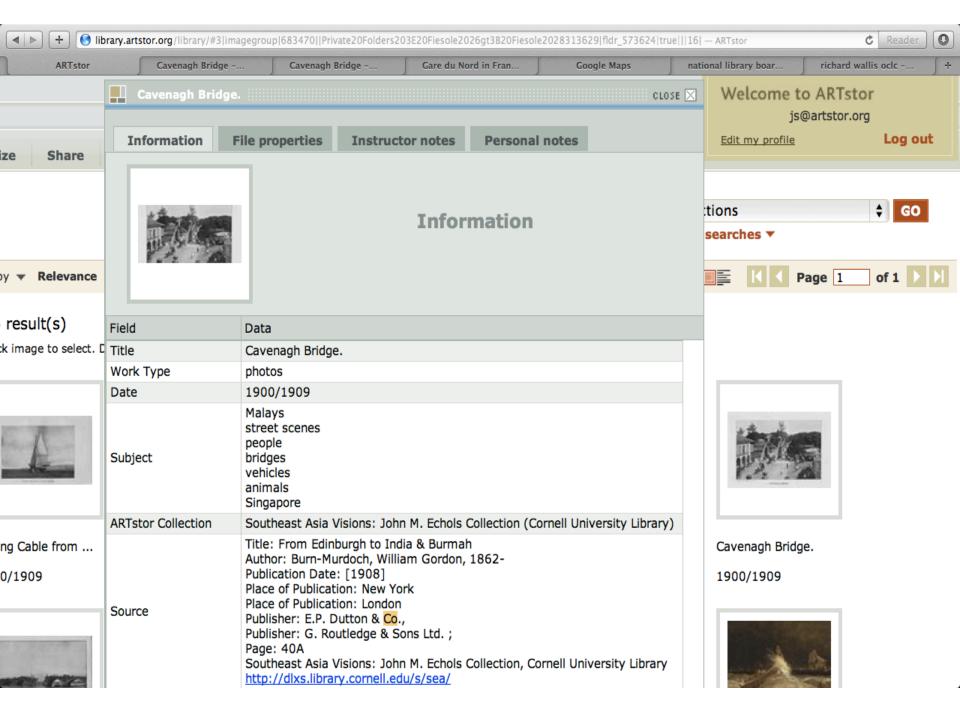
# The Built Works Registry and the Infrastructure to Support it James Shulman





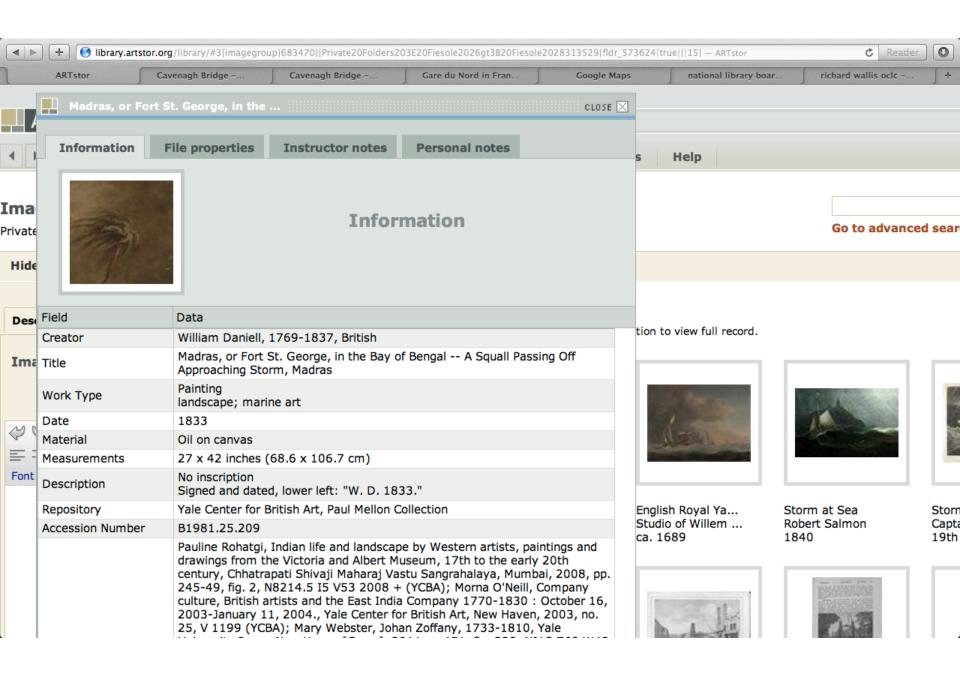












# Sample problem:

### Core data

- Falling Water or Fallingwater
- Kaufmann or Kauffman House
- Edgar J. Kaufmann Sr. Residence or Kaufmann Desert House
- Frank Lloyd Wright or Richard Neutra ?
- Mill Run or Bear Run?

### Enhanced data

- Geo-code
- Dates
- View
- Type



# Sample data

Field	Data
Creator	Wright, Frank Lloyd, 1867-1959
Title	Bear Run: Fallingwater: plan
Date	1935-38
Location	Bear Run (Pa.)
Subject	Bear Run (Pa.)Fallingwater Architecture:ArtistUnited States20th C. A.D
ARTstor Collection	ARTstor Slide Gallery
Source	Data from: University of California, San Diego
Rights	© 2007 Frank Lloyd Wright Foundation / Artists Rights Society (ARS), New York

# Sample data

Wright, Frank Lloyd, 1867-1959		
Bear Run: Fallingwater: plan		
1935-38		
Bear Run (Pa.)		
Bear Run (Pa.)Fallingwater Architecture:ArtistUnited States-	-20th C. A.D	
ARTstor Slide Gallery		
Data from: University of California	a, San Diego	
	ation / Artists Rights So	ciety (ARS),
New York	Field	Data
	Creator	Wright, Frank Lloyd (American, 1867-1959)
	Title	Falling Water (Kaufmann House)
	Work Type	Architecture
	Date	1936
	Location	Bear Run (Pa.)
	Style Period	Modernism
	Description	Image View Description: Detail of upper portion
	Collection	Columbia University Image Bank
·	ID Number	Pub-0074
	Source	Image and data provided by Columbia University. Saskia, Ltd.
	Rights	Restricted to current faculty, students and staff of Columbia University.  This image has been selected and made available by an institution user of the ARTstor Digital Library using ARTstor's software tools.  ARTstor has not pre-screened or selected this image, and therefore disclaims any liability for any use of this image. Should you have a legal objection to the use of this image, please notify ARTstor's Contact for Legal Notices.
	1935-38  Bear Run (Pa.)  Bear Run (Pa.)Fallingwater Architecture:ArtistUnited States- ARTstor Slide Gallery  Data from: University of California	Bear Run (Pa.)  Bear Run (Pa.)-Fallingwater Architecture:ArtistUnited States20th C. A.D  ARTstor Slide Gallery  Data from: University of California, San Diego  © 2007 Frank Lloyd Wright Foundation / Artists Rights Sonew York  Field  Creator  Title  Work Type  Date  Location  Style Period  Description  Collection  ID Number  Source

Sample data

Field	Data							
Creator	Wright, Frank Lloyd, 1867-1959							
Title	Bear Run: Fallingwater: plan							
Date	1935-38							
Location	Bear Run (Pa.)							
Subject	Field	Data						
ARTstor Collection	Creator	Wright, Fran	k Lloyd (American, 186	7-1959)				
Source	Title	Falling Wate	er (Kaufmann House)					
	Work Type	Architecture						
Rights	Date	1936-		·				
	Location	Bear Run (P	Field	Data				
	Style Period	Modernism	Creator	Wright, Frank Lloyd (1867-1959), American				
	Description	Image View	Title	Fallingwater				
	Collection	Columbia Ur		View Description: exterior				
	ID Number	Pub-0074	Work Type Date	Creation date: 1935-1936				
	Source	Image and	Location	Mill Run, Pennsylvania, United States				
		Saskia, Ltd.						
		Restricted to University. This image I		construction: stone, metal, concrete				
			Style Period	Modernist				
	Rights ART: discl	user of the A ARTstor has disclaims an legal objecti Contact for I	l	Architecture, Modern20th century Dwellings Cantilevers Waterfalls ArchitectureUnited States National Historic Landmarks Program (U.S.) Houses				
				Kaufmann, Edgar J., 1885-1955				
			ARTstor Collection	SAHARA				
			ID Number	Record: 117377				
			Source	Photographer: Smith, G. E. Kidder (George Everard Kidder) Massachusetts Institute of Technology				
			Rights	(c)Rotch Visual Collections; Kidder Smith Collection All rights reserved by copyright owner; consult Rotch Visual Collections: http://libraries.mit.edu/rvc/index.html Wright: © 2008 Frank Lloyd Wright Foundation / Artists Rights Society (ARS), New York				

### ARTstor and Avery Architectural & Fine Arts Library Awarded IMLS National Leadership Grant

May 13, 2011 by GiovanniGF

The Built Works Registry (BWR) is a joint endeavor of the Avery Architectural & Fine Arts Library at Columbia University, ARTstor and Getty Research Institute (GRI). BWR was awarded a three-year National Leadership Grant from the Institute of Museum and Library Services (IMLS).

The funds will be used to support the new Built Works Registry (BWR), a community-generated data resource for architectural works and the built environment. BWR will be available to scholars and catalogers from academic and cultural heritage organizations worldwide. BWR data will also be contributed to the Getty Research Institute's planned Cultural Objects Name Authority (CONA).

For more information about the 2010 National Leadership Grants, go to the  $\underline{\text{IMLS}}$  website.

Posted in Uncategorized | Leave a Comment »

#### BWR PEOPLE

BWR Project Directors & Advisory Council BWR Project Working Teams

## BWR PROJECT PARTNERS

ARTstor
Avery Architectural & Fine
Arts Library
Getty Research Institute
Institute of Museum and
Library Services

#### News & Publications

BWR Year-One Progress Report

## http://builtworksregistry.wordpress.com/

# BWR partnership







"New partnerships will result from collaboration and coordination among a <u>wide array of stakeholders</u>. This will realize workflow efficiencies and minimize redundancies between and among entities that create and use both authority and bibliographic data..."

Report of the LC Working Group on the Future of Bibliographic Control (2008)

# BWR project goals

- Construct a registry for architectural works and the built environment
- Develop unique IDs & trusted data records for registered works
- Reduce redundancy by providing a networked source of authoritative data
- Develop a collaborative community plan to seed, build upon and edit a shared record

## **Policies**

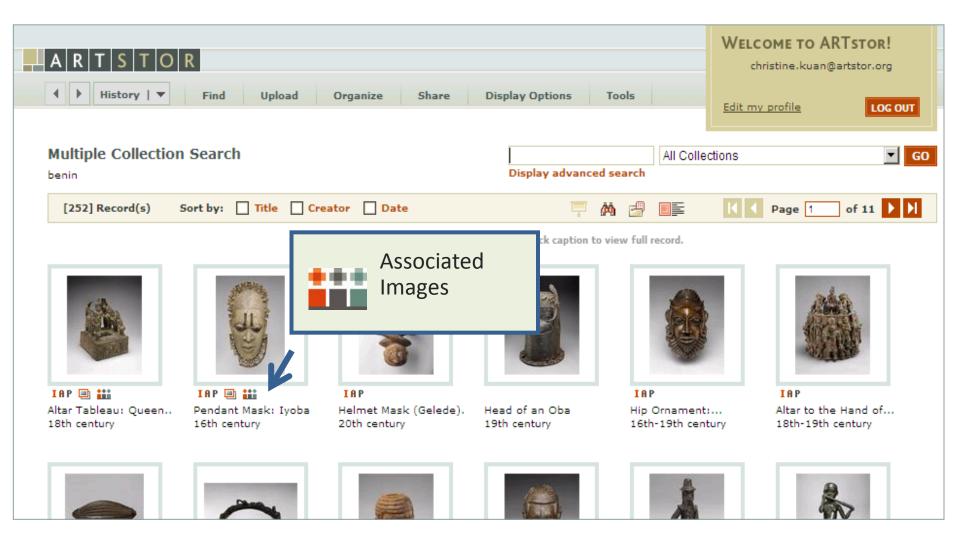
- Project partners +
- BWR Advisory Council
  - Canada, Germany, India, Italy, Japan, Taiwan, Turkey, UK, US
- 18 scholars, curators, librarians, & technologists representing diverse specializations in academic & cultural institutions:
  - Museums: MoMA, AIC, Smithsonian, National Palace Museum Taipei
  - Libraries: Columbia, Cornell, Harvard, Yale, NYU, Colby, UMiami, Illinois
  - Research institutes: Courtauld, Max Planck, Inst. For Museum Research
  - Organizations: RIBA, World Monuments Fund, SAH, IFLA

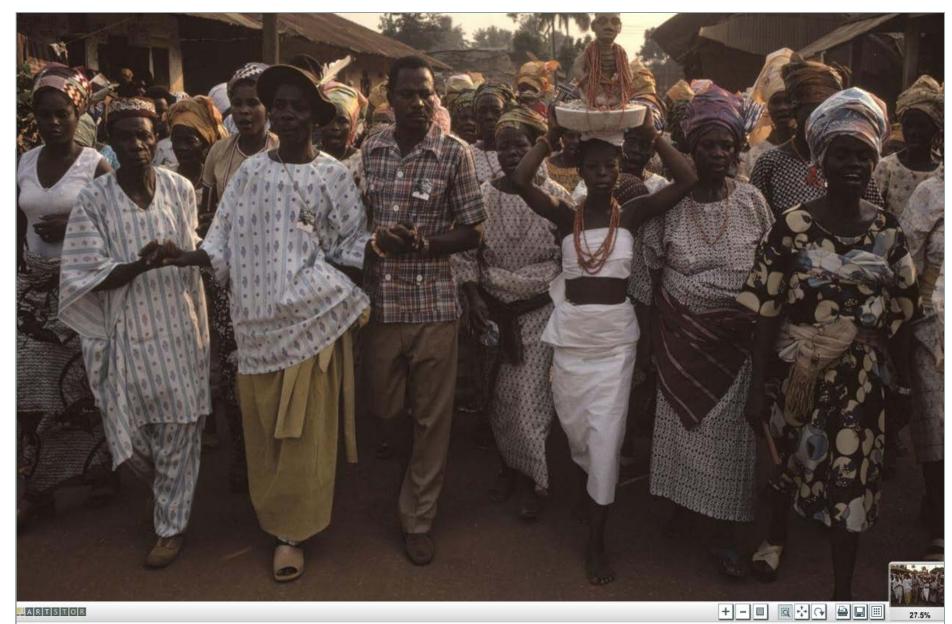


### **ARTstor Digital Library Today**

- Founded by The Andrew W. Mellon Foundation in 2001
- Independent nonprofit organization since 2003
- Launched in July 1, 2004
- 1.6 million images and growing
- 200+ museum & special collections
- Museums, archives, libraries, artists, artists' estates, scholars, photographers
- Password-protected database restricted to educational and scholarly users

### Associated images – What are instructors teaching?





NIGERIA. BENIN. Tribe ceremonies, evoking the ... Bruno Barbey 1978

i P I



| 4 4 36 of 37 | > |

HIDE CAPTIONSREPORT AN ERRORTERMS & CONDITIONS

### Filtered Search

All Collections: hagia sophia





### 294 result(s) for "hagia sophia"

Click image to select. Double click to enlarge. Click caption to view full record.



Madonna and Child, ...

12th c.



Constantinople, H...



Hagia Sophia: west ... Hagia Sophia Anthemius of Tra... Anthemius of Tra... 532-537 532-537





Hagia Sophia Anthemius of Tra... 532-537



Constantinople, H...

895-913



Hagia Sophia Anthemius of Tra... 532-537



Constantinople, H...

after 1264 (vari...



All Collections

Hagia Sophia Anthemius of Tra... 532-537



Constantinople, H...

1028-42 (c. 1030; ...



Hagia Sophia Anthemius of Tra... 532-537



Constantinople, H...

late 9th C



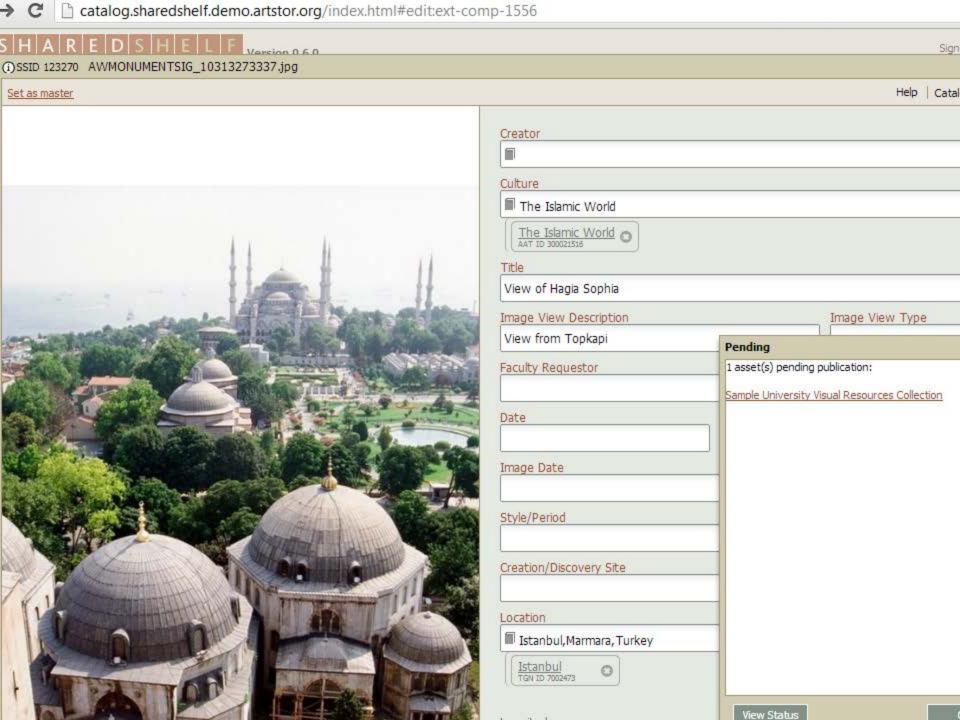






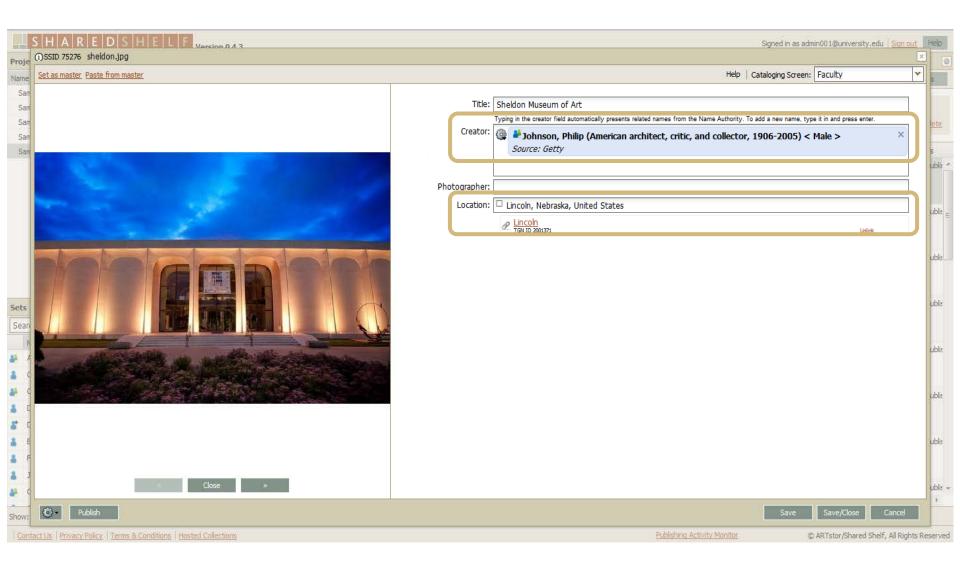




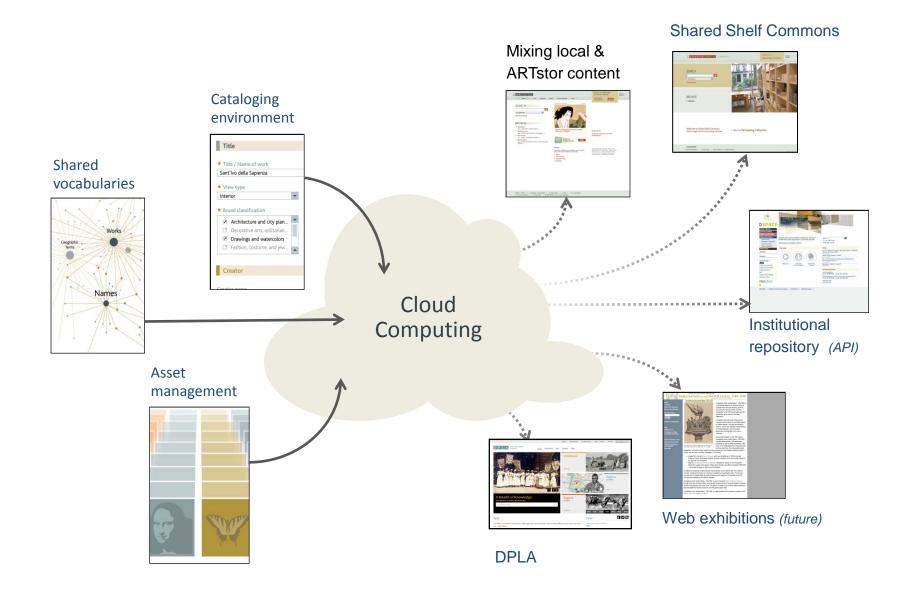


## **Simple Cataloging Screens**

## Featuring the Getty's ULAN & TGN vocabularies

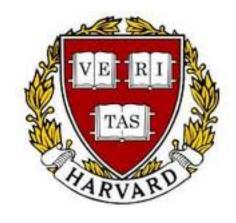


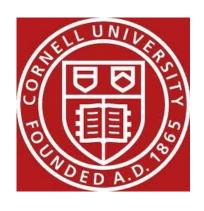
### **Local Content and Shared Shelf Infrastructure**



## Content











AVERY AVIADOR INDEX Videodisc Index

## BWR 'seed' content

☐ Goal: registry of ~100,000 unique identified built works

- ☐ Identify, extract, & verify data from five sources:
  - Harvard's Olivia 2.5M > 392,917 > 55,621
  - Cornell's Pictor 24K > 13,847 > 1,611
  - Avery's AVIADOR 40K > 4,878
  - Avery Index 650K records = subject term strings ~433,131
  - ARTstor 1.4M records = built work image records ~70,000

## Content development

- ■Aggregate
- ☐ Disambiguate
- Normalize
- **□**Enhance

- CONA merge tools: Loader & Processor
- ARTstor parsing tools
- Google Refine

Field Name	AVIADOR	Harvard	Cornell	Avery	ARTstor
Title/Name of Building	Fallingwater, Kaufmann House	Fallingwater, Edgar J. Kaufmann House, Kaufmann House	Falling Water, Edgar J. Kaufmann Residence	Fallingwater (Kaufmann house).	Fallingwater, Edgar J. Kaufmann House, Kaufmann House
Location	Bear Run, (Pa.)	Bear Run, Pennsylvania, United States	Bear Run, PA, United States, North and Central America	Bear Run (Pennsylvania), United States	Mill Run, Pennsylvania, United States
Creator	Wright, Frank Lloyd One record with Ferriss, Hugh	Wright, Frank Lloyd	Wright, Frank Lloyd	Wright, Frank Lloyd	Wright, Frank Lloyd
Date		1935-1939	1934-1938		1935-1936
Work Type	Vacation houses, Houses, Country Houses	houses	House		House
Style/Period			Modern		Modernist
Subject		Summer houses; vacation houses; terrace houses; hillside architecture	Houses		Dwellings, Houses, Cantilevers, Waterfalls, Architecture—United States, National Historic Landmarks Program (U.S.), Architecture, Modern—20 <sup>th</sup> century, Kaufmann, Edgar J., 1885-1955
Culture		American	American		
Description			Modern Architecture		
Other names		Kaufmann, Edgar J. (patron)			

# Disambiguate criteria

- We all know that if two records both have "Notre Dame" and "France" is not sufficient to deduplicate these two records.
- Is "Notre Dame" and "Paris, France" sufficient?
- The question is how "granular" do we need to go to gain confidence in "automatic" de-duplication.
- We hope to report on our results in the next CNI meeting.

# Authority



#### Search Tools & Databases

- Library Catalog
- Catalog Plus
- Collection Inventories & Finding Aids
- ▶ Research Guides & Bibliographies
- ▶ Digital Collections
- ▶ Article & Research Databases
- Collecting & Provenance Research
- ▶ Photo Study Collection
- BHA & RILA

#### **▼**Getty Vocabularies

- ► Art & Architecture Thesaurus (AAT) ®
- ► Cultural Objects Name Authority (CONA) ™
- ▶ Getty Thesaurus of Geographic Names (TGN) ®
- Union List of Artist Names (ULAN) ®
- Contribute
- Editorial Guidelines
- Frequently Asked Questions
- Obtain the Getty Vocabularies
- Training Materials

### Getty Vocabularies

What is cinnabar? What is a rhyton? The Getty vocabularies contain structured terminology for art, architecture, decorative arts and other material culture, archival materials, visual surrogates, and bibliographic materials. Compliant with international standards, they provide authoritative information for catalogers and researchers, and can be used to enhance access to databases and Web sites. The Getty Vocabularies grow through contributions. The vocabulary data is available for licensing and accessible free of charge below for more limited online use.



### The Art & Architecture Thesaurus (AAT)®

Catherine wheel or rose window?
AAT is a structured vocabulary,
including terms, descriptions,
and other information for
generic concepts related to art
and architecture.



### The Cultural Objects Name Authority (CONA) ™

Mona Lisa or La Gioconda? CONA, a new vocabulary now accepting contributions, includes titles, attributions, and other information for art and architecture.



## The Getty Thesaurus of Geographic Names (TGN)®

London or Londinium? TGN is a structured vocabulary, including names, descriptions, and other information for places important to art and architecture.



### The Union List of Artist Names (ULAN)®

Titian or Tiziano Vecellio? ULAN is a structured vocabulary, including names, biographies, and other information about artists and architects.

#### See What's New

 3,000+ Chinese terms added to the AAT

#### Recent Awards

2010 Visual Resources
 Association Nancy Delaurier
 Award

#### Have a Ouestion?

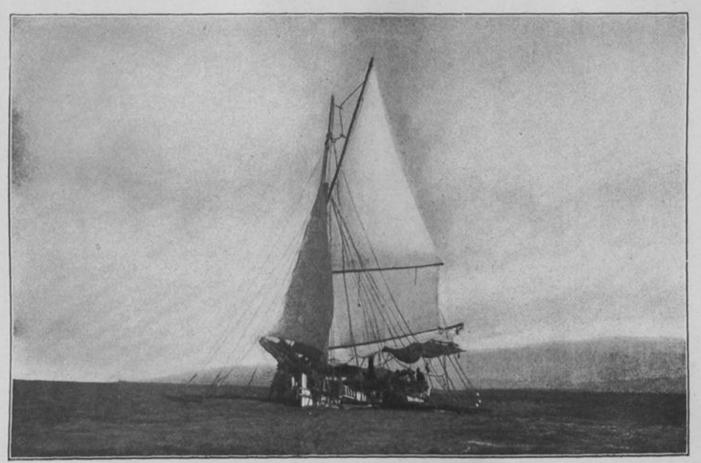
Contact the Vocabulary Program

Subscribe to GRI e-News

## How will BWR gain scale?

- Institutional contributory model
  - Governed by policy framework
  - Accessed through shared technical infrastructure
    - Web-based data entry environment
    - Ubiquitous network (Cloud)
  - Shared via open APIs
- Expert crowdsourcing experiment
  - Community-driven approach to shared solutions
  - Controlled by role-based access control system

# The Built Works Registry and the Infrastructure to Support it James Shulman

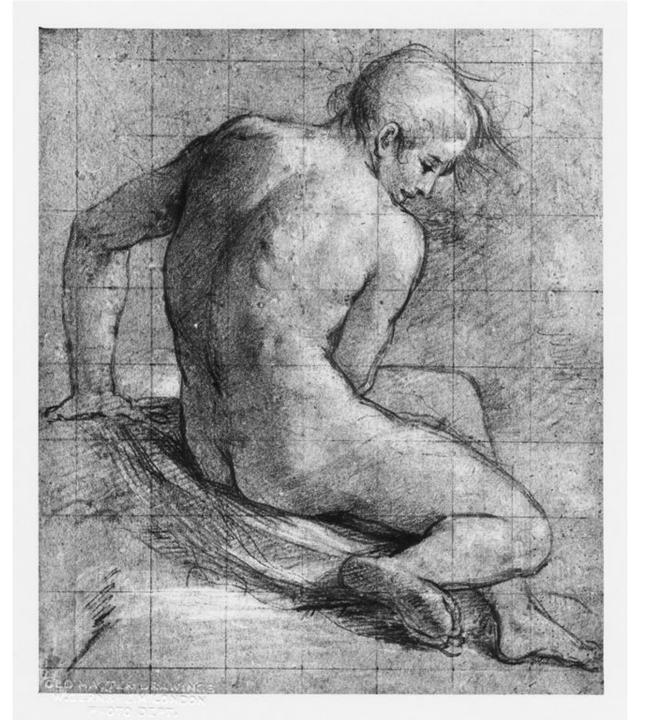


LAYING CABLE FROM A NATIVE SCHOONER.

From, Philippine life in town and country: 1905.

## Gernsheim Photographic Corpus of Drawings



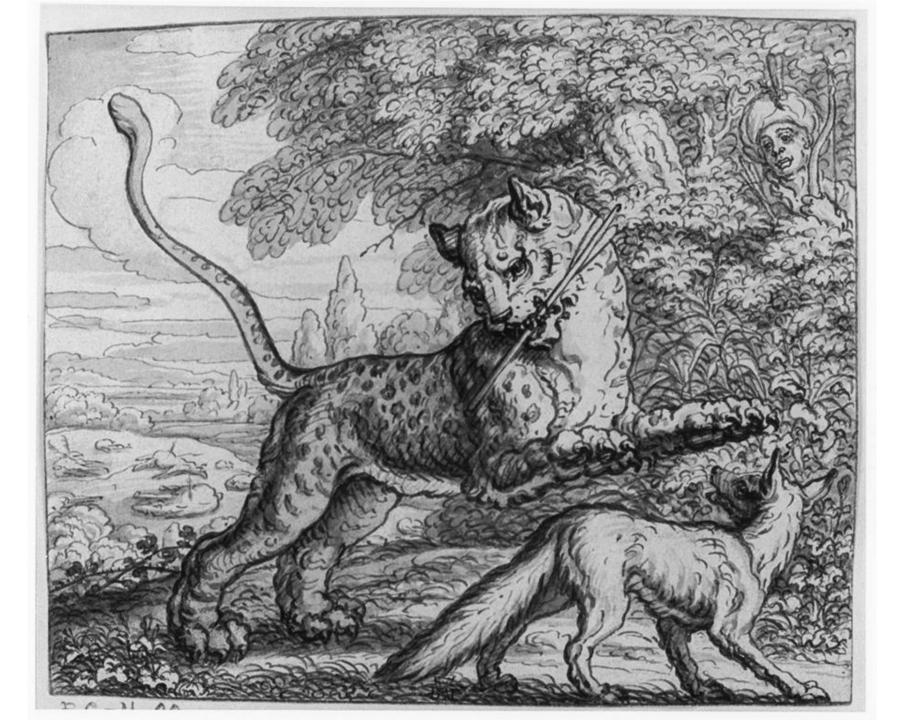


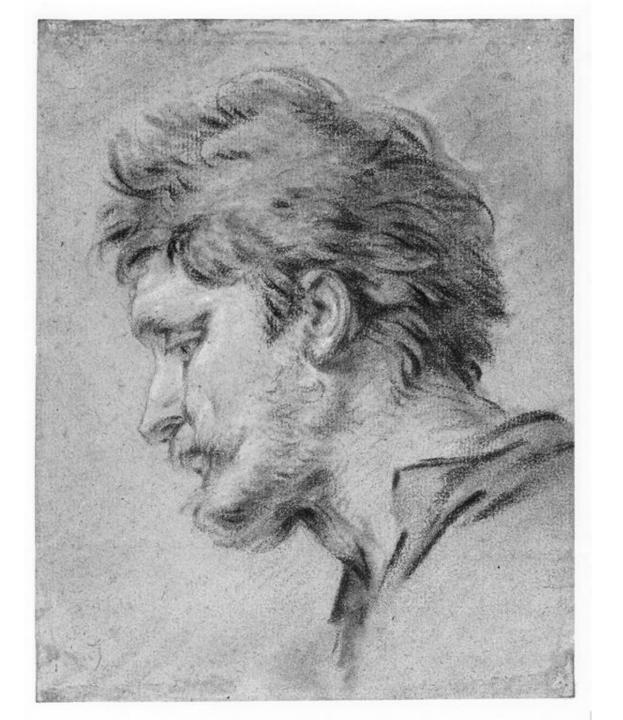


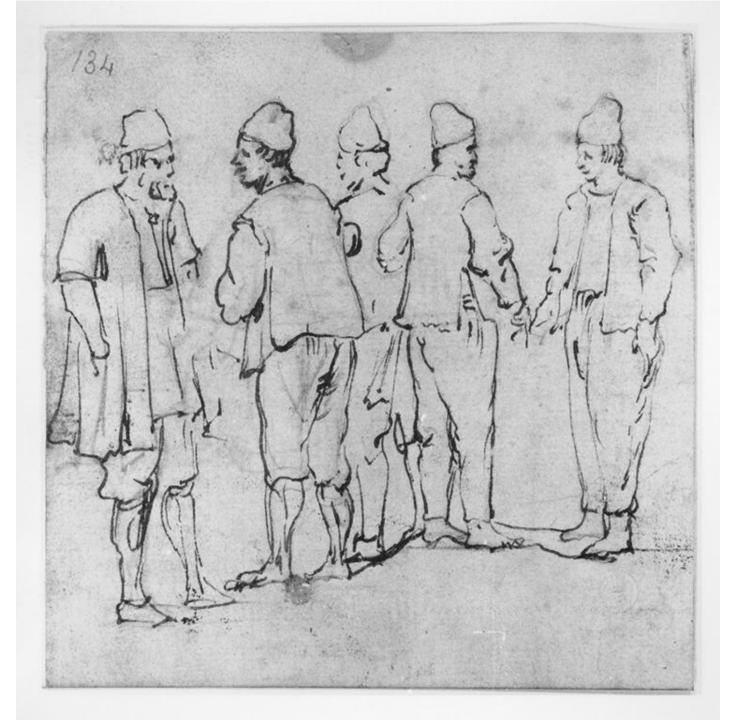
























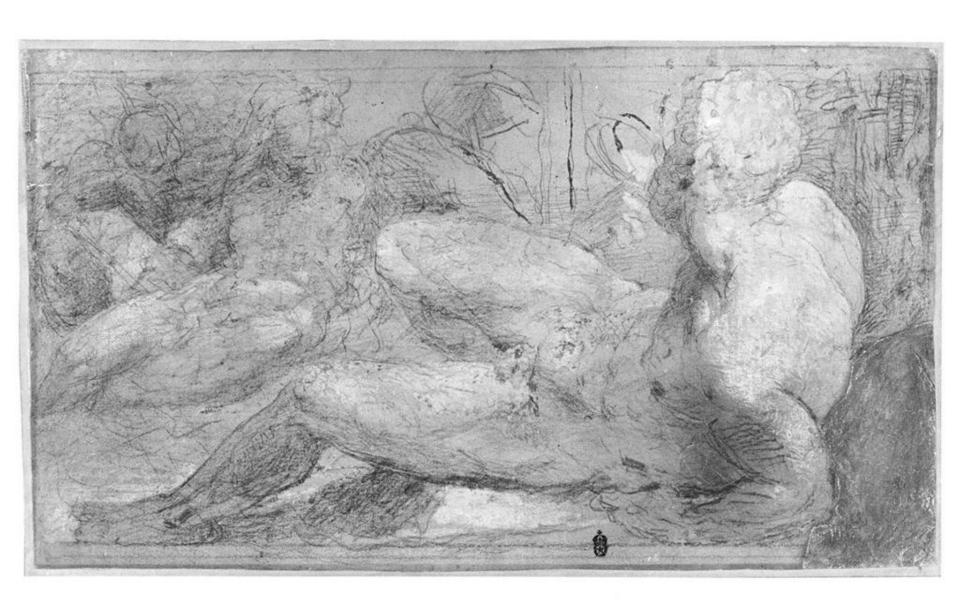


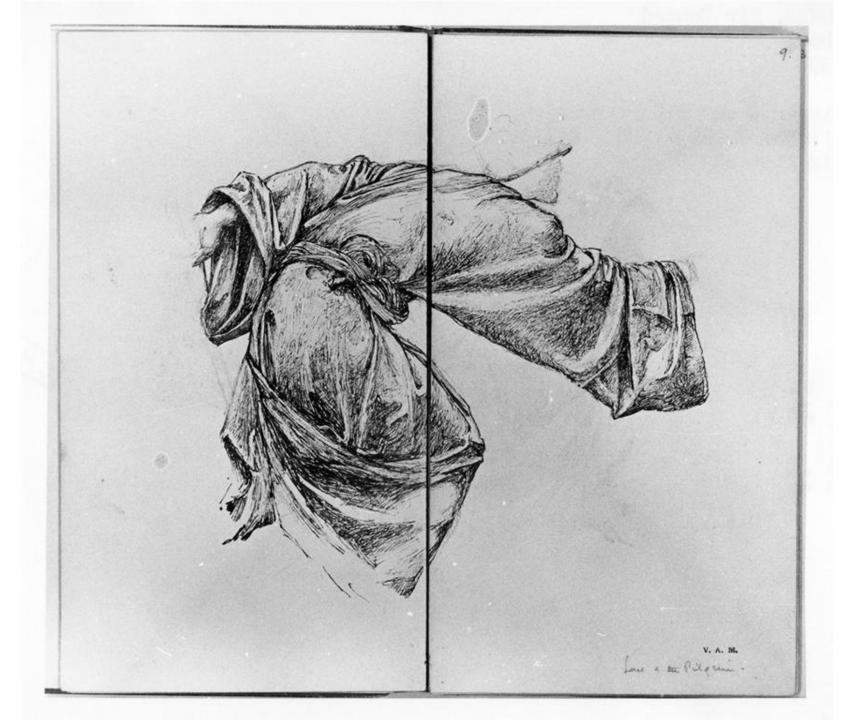


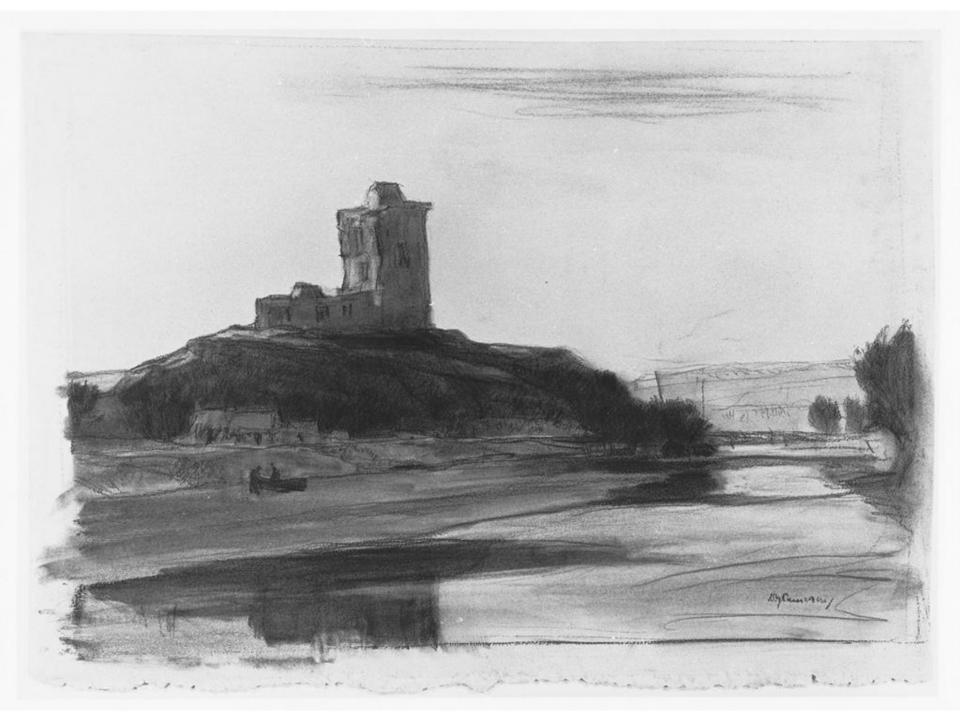












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of THE FRICK COLLECTION

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Cheat Sheet for initials: (partial) J6 = John Gere KO = Konrad Oberhuber WRR - William Roger Rearick A.EP = A.E. Popham PP = Philip Pouncey BD = Bernice Daviden AC = Alvin Clark VTP = V.T. Parker



Raphael (copy of)

74 905 GERNSHEIM

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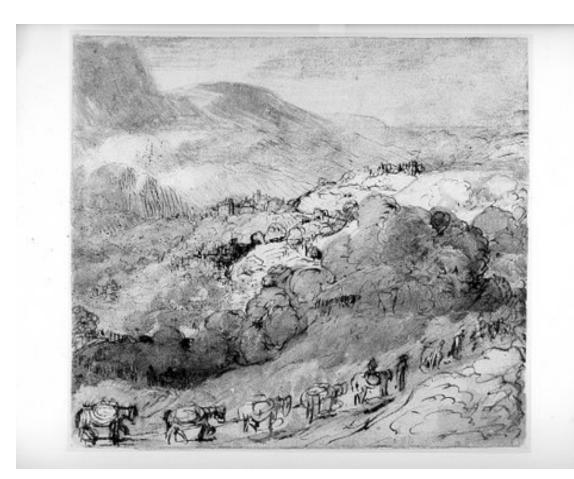
GROUP OF FEMALE FIGURES BY A WATER PEN&BISTRE OR INK WASH 148x184

BERLIN MUS PR. RM. REF NO. 5088

Mohle 22? A. Tasoi (IKA) (Hohl)

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Goudt, Herotik (KA, A 107)

LANDSCAPE WITH TREK
PEN&BISTRE OR INK WASH BUFF PAPER 133x159

BERLIN MUS PR. RM. REF NO. 12333

Pyrus, Jan (Hoh)

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Triumphal chariot

Tampina Citation

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155 x 262 mm.

Florence

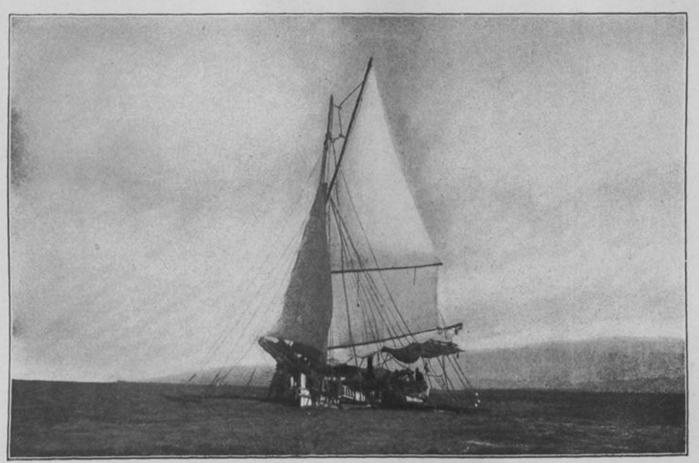
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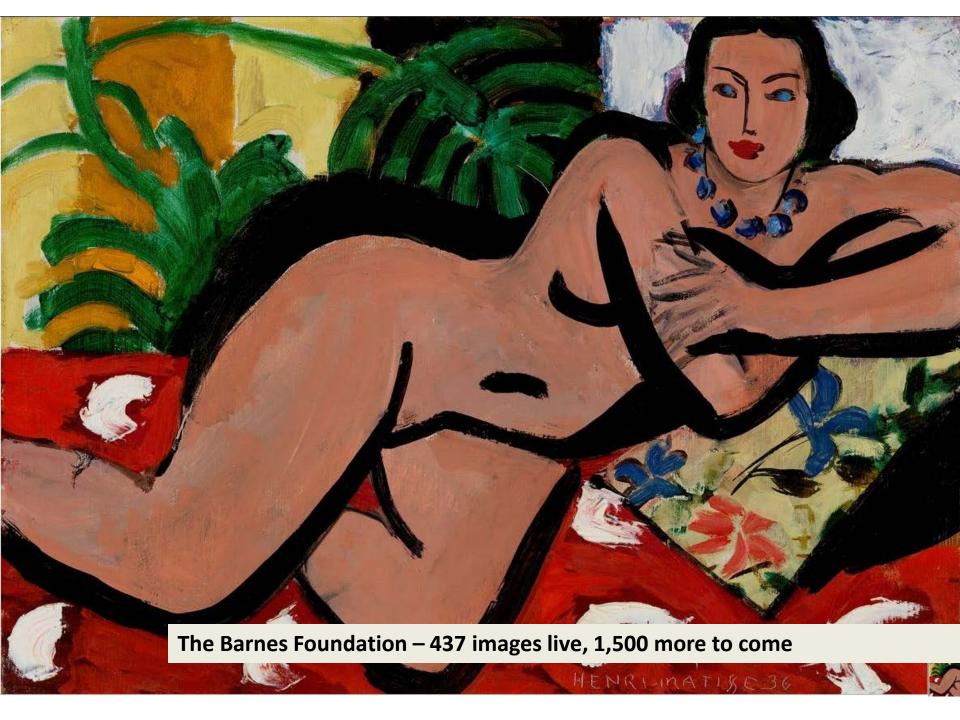
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# The Built Works Registry and the Infrastructure to Support it James Shulman



LAYING CABLE FROM A NATIVE SCHOONER.

From, Philippine life in town and country: 1905.





Winiama mask performance (masks greet guests in the village), 2006. Ouri, Burkina Faso.Photographed by Christopher Roy.

Senufo, Pelerova Masker, 1979. Tiasso, Côte d'Ivoire. Photographed by Herbert Cole.





## **ARTstor Digital Library Today**

- Founded by The Andrew W. Mellon Foundation in 2001
- Independent nonprofit organization since 2003
- Launched in July 1, 2004
- 1.5 million images and growing
- 200+ museum & special collections
- Museums, archives, libraries, artists, artists' estates, scholars, photographers
- Password-protected database restricted to educational and scholarly users