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# Built Works Registry (BWR):

collaborating to document the world's built environment

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# BWR partnership



New partnerships will result from collaboration and coordination among a wide array of stakeholders. 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)*

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# Addressing expressed needs:

For artworks and architectural structures, there is no equivalent to ISBN or ISSN.

Architectural structures have no such identifying system... An international and coordinated **object identifier registry**, could provide an **efficient method** of identifying objects and built works.

Searching, record matching, clustering, and retrieval would be expedited and improved with a **unique identifier system**.

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# 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
-

# 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:Artist--United States--20th 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

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 institutional 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 any legal objection to the use of this image, please notify ARTstor's Contact for Legal Notices.

# 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, Frank Lloyd (American, 1867-1959)
Source	Title	Falling Water (Kaufmann House)
Rights	Work Type	Architecture
	Date	1936-
	Location	Bear Run (Pa.)
	Style Period	Modernism
	Description	Image View
	Collection	Columbia Un
	ID Number	Pub-0074
	Source	Image and d Saskia, Ltd.
	Rights	Restricted to University. This image user of the A ARTstor has disclaims an legal objecti Contact for L

Field	Data
Creator	Wright, Frank Lloyd (1867-1959), American
Title	Fallingwater View Description: exterior
Work Type	House
Date	Creation date: 1935-1936
Location	Mill Run, Pennsylvania, United States
Material	construction: stone, metal, concrete
Style Period	Modernist
Subject	Architecture, Modern --20th century Dwellings Cantilevers Waterfalls Architecture --United 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: <a href="http://libraries.mit.edu/rvc/index.html">http://libraries.mit.edu/rvc/index.html</a> Wright: © 2008 Frank Lloyd Wright Foundation / Artists Rights Society (ARS), New York



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# Three major work efforts

- **Policies** about how works will be defined, how intellectual property concerns will be addressed, what policies and procedures are needed for community engagement in contributing and supporting development of BWR during and after the grant period.
  - **Tools and infrastructure** to enable the work to happen, tools to manage access (both in building and utilizing the files), screens for record building and maintenance, data exchange protocols and utilities for interaction with other cataloging and authority systems.
  - **Content:** A data schema and the actual registry of buildings and sites, bringing together source records, de-duplicating, enhancing, and providing a structure for the addition of more records.
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# 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*
-

# Tools & Infrastructure

The screenshot shows the ARTstor Digital Library homepage. At the top left is the ARTSTOR logo. Navigation links include 'Collections & services', 'Subscribe', 'Using ARTstor', and 'News'. A 'HELP' link is in the top right. A prominent green box contains the text 'ARTstor Digital Library' and a red 'ENTER HERE' button. Below this, a large banner features a portrait of a man with white lines overlaid, a cubist painting, and a green book titled 'LA MANNE ÉLISE AND EARL'S CLEARANCE'. Text on the banner reads 'ARTstor A NONPROFIT DIGITAL IMAGE LIBRARY FOR EDUCATION AND SCHOLARSHIP'. A row of social media icons (WordPress, Facebook, Twitter, YouTube, Google+) is at the bottom of the banner. Below the banner, a section titled 'Featuring: The San Francisco Museum of Modern Art' is visible. The main content area is divided into two columns. The left column has two boxes: 'Collections The year in numbers' with a 'LEARN MORE' button, and 'Shared Shelf Image management system' with a 'LEARN MORE' button. The right column is titled 'What's New' and contains three items: 'ARTstor Is... Women's Studies' with a paragraph about Women's History Month; 'Unfettered personal expression in the 1950s: the Beat Generation and the Abstract Expressionists' with a paragraph about the postwar era; and 'Now available: Nearly 10,000 additional images from Contemporary Art (Larry Qualls Archive)' with a paragraph about the archive's release.

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**What's New**

**ARTstor Is... Women's Studies**  
March is Women's History Month! The ARTstor Digital Library offers a variety of excellent resources to support Women's Studies, from historical photographs to the history of fashion, and from ca...

**Unfettered personal expression in the 1950s: the Beat Generation and the Abstract Expressionists**  
While the 1950s are popularly remembered as a decade of "button down" conformity, the postwar era saw the rise of two groups of American writers and artists who broke with tradition and so...

**Now available: Nearly 10,000 additional images from Contemporary Art (Larry Qualls Archive)**  
Nearly 10,000 additional images from Larry Qualls' archive of contemporary art are now available in the ARTstor Digital Library. This release includes art exhibited in New York City galleries du...

# Content

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Estate Brochure  
Collection](#)

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# BWR 'seed' content

- Identify, extract, & verify data from five sources systems:
    - Harvard's Olivia work records ~2.5 M
    - Cornell's Pictor work records ~24,000
    - Avery Index subject term strings ~675,000
    - Avery's Aviador subject term strings ~40,000
    - ARTstor image records ~1.4 M
  - Aggregate & disambiguate
  - Normalize & enhance ~100,000
-

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)			

# Authority

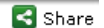


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- Getty Vocabularies**
  - Art & Architecture Thesaurus (AAT) ®
  - Cultural Objects Name Authority (CONA) ™
  - Getty Thesaurus of Geographic Names (TGN) ®
  - Union List of Artist Names (ULAN) ®
  - Contribute
  - Editorial Guidelines
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  - 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 Question?

- Contact the Vocabulary Program
- Subscribe to GRI e-News

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# 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
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# Shared responsibility



Engage the community

Build good data

Set it free

Sustain

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ARTSTOR

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### 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 [IMLS](#) website.

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#### NEWS & PUBLICATIONS

- [BWR Year-One Progress Report](#)

<http://builtworksregistry.wordpress.com/>