

The Share Family Technology

*concrete benefits to increase discovery experience
and linked data curation in the art domain*

August 22, 2023

Jackie Shieh



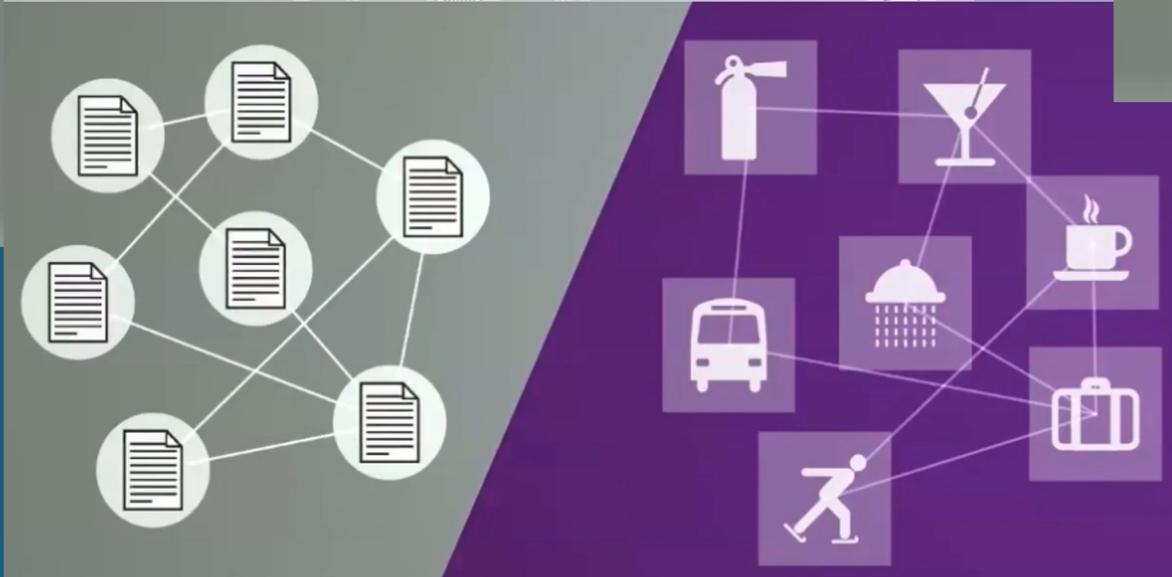
Smithsonian
Libraries and Archives



Topics

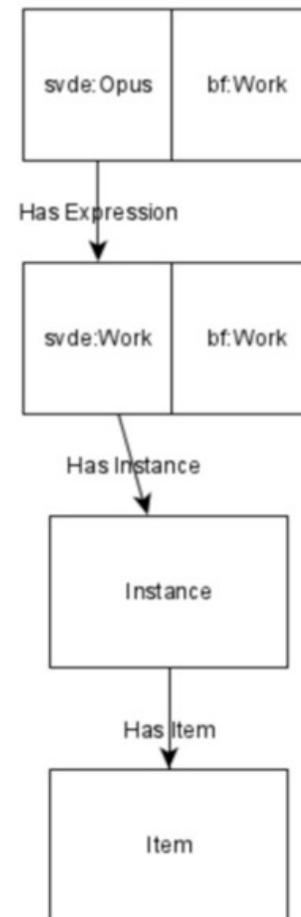
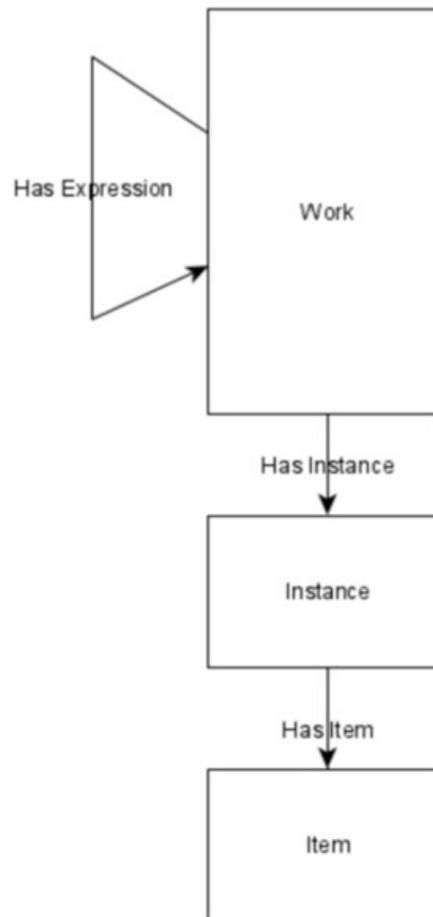
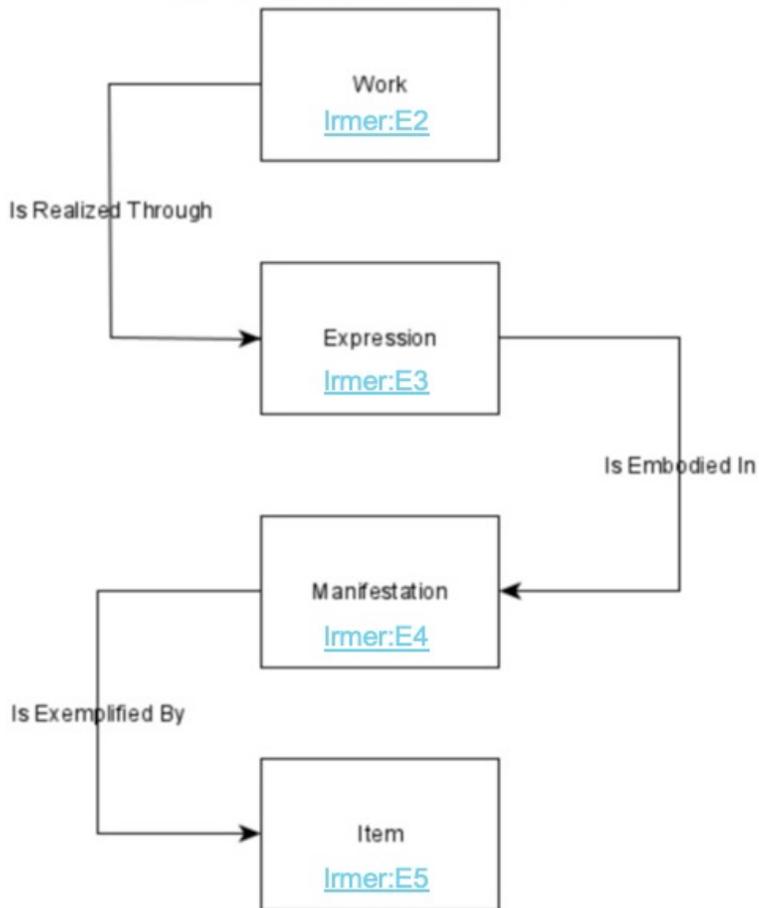
- Data types and models
 - Smithsonian Libraries and Archives data
- Data transformation journey
- Entity curation and management
- Entity discovery portal

First things first

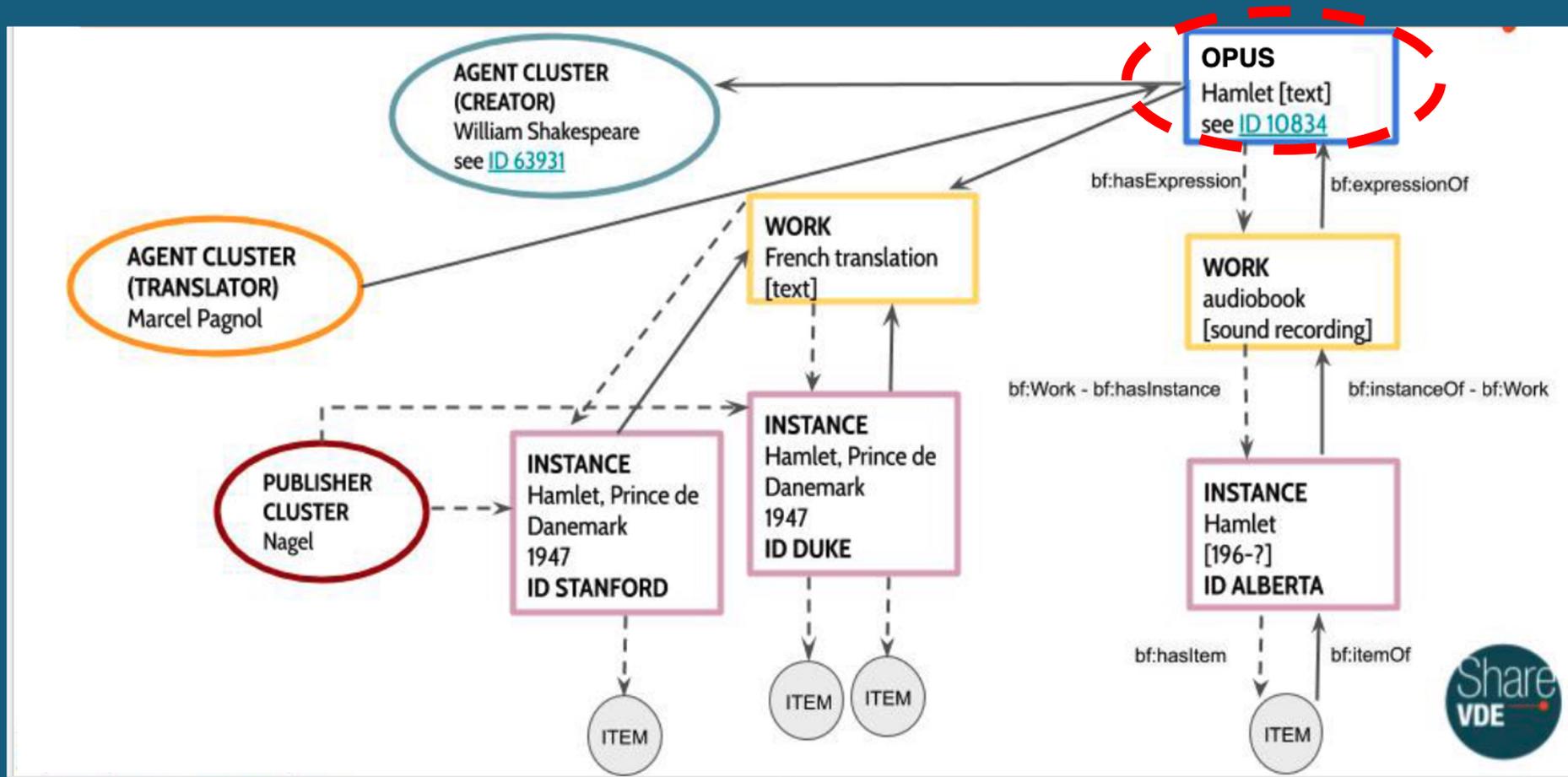




Library Reference Model



Extension to BIBFRAME



Last update 2019-11-20:
http://bit.ly/SVDE_model_simplified

SVDE Ontology

```
<!-- https://svde.org/ontology -->

<Ontology rdf:about="https://svde.org/ontology/">
  <versionIRI rdf:resource="https://svde.org/ontology/svde-1-0-0"/>
  <imports rdf:resource="https://id.loc.gov/ontologies/bibframe.rdf"/>
  <cc:license
rdf:resource="https://creativecommons.org/publicdomain/zero/1.0/" />
  <terms:publisher
rdf:resource="http://id.loc.gov/vocabulary/organizations/itfic"/>
  <skos:comment rdf:datatype="http://www.w3.org/2000/01/rdf-schema#Literal">
Share-VDE (SVDE) is a library-driven initiative which brings together the
bibliographic catalogues and authority files of a community of libraries in a shared
discovery environment based on linked data.</skos:comment>
  <skos:definition rdf:datatype="http://www.w3.org/2000/01/rdf-
schema#Literal">The Share-VDE ontology is an extension of the Library of Congress
BIBFRAME vocabulary.</skos:definition>
</Ontology>
```

Relationship of Work/Opus entity

```
<!-- https://svde.org/ontology/Work -->
```

```
<Class rdf:about="https://svde.org/ontology/Work">
```

```
  <rdfs:subClassOf
```

```
    rdf:resource="http://id.loc.gov/ontologies/bibframe/Work"/>
```

```
  <rdfs:label>Work</rdfs:label>
```

```
  <skos:definition>The svde:Work is defined by a constellation of elements representing the specific intellectual or artistic form that an Opus takes each time it is "realised." Individuals of the class svde:Work hold an Opus entity identity.</skos:definition>
```

```
  <svde:closeMatch
```

```
    rdf:resource="http://iflaststandards.info/ns/lrm/lrmer/E3"/>
```

```
  <svde:closeMatch
```

```
    rdf:resource="http://rdaregistry.info/Elements/c/C10006"/>
```

```
</Class>
```



Smithsonian collections



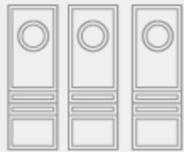
Museums



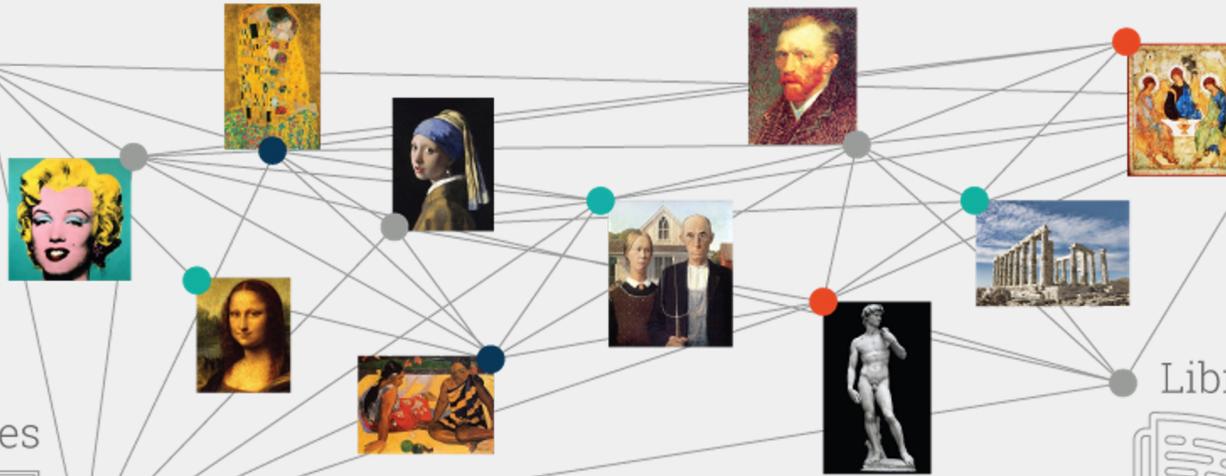
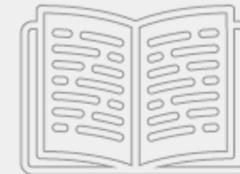
Galleries



Archives



Libraries



Smithsonian Libraries & Archives

- Library Linked open data efforts

- BIBFRAME in Share-VDE

- <https://blog.library.si.edu/blog/tag/bibframe/>

- Authority_identity data in Wikidata/Wikibase

- <https://blog.library.si.edu/blog/tag/wikidata-series/>

SLA catalog data and linked data effort

2019



2021

- Enhance AACR2 to RDA records
- Embed URIs in name and LCSH headings
- Convert LCSH to FAST Headings
- Embed URIs for <relator> codes
(e.g., author, illustrator, photographer, voice actor, woodcutter, etc.)

Smithsonian 2027



*Avail collections through
digital solutions
for the
increase and diffusion of
knowledge among men*





Slide courtesy of SVDE Team

The Share Family Linked Data Ecosystem



The Share Family is a global community built on collaborations. Brings together cultural heritage institutions, consortia, and Library Service Platforms (LSP). Joins their knowledge in an ever-widening network of interconnected bibliographic data.

For more, please visit the [Share Family](#) and the [Share-VDE wiki](#) sites

Slide courtesy of SVDE Team

Data transformation

Becoming Linked open data

PROCESSES

DATA INPUT FROM INSTITUTIONS

MARC21 bib. and holding
MARC21 aut.
UNIMARC
RDF/BIBFRAME
Other formats (eg. IIF Manifest)



LOD PLATFORM SERVICES

Mapping
URI Enrichment
Reconciliation
Creation of
Linked Data Entities
Conversion to
RDF/BIBFRAME



RESULTS

[Data Publication]
+
[Data Distribution]
+
[Shared Data Management]
+
[Additional Services]

Cluster: the Prism

UNIVERSITY OF ALBERTA LIBRARY	
title	Alice in wonderland
titleAlternative	Alice's adventures under ground
author	https://svde.org/people/201

Stanford	
title	Alice in wonderland
titleAlternative	Alice's adventures under ground
author	https://svde.org/people/201



LIBRARY LIBRARY OF CONGRESS	
title	Alice in wonderland

National Library of Norway	
title	Alice's adventures under ground
titleAlternative	Journeys in Wonderland
author	https://svde.org/people/201

Share VDE (links)		
sameAs	http://dbpedia.org/resource/Alice&#39;s_Adventures_in_Wonderland	Dbpedia
sameAs	https://www.wikidata.org/wiki/Q189875	Wikidata
sameAs	https://data.bnf.fr/ark:/12148/cb358500385#about	bnf

External Connectors Architecture

Data flows from libraries, institutions and third-party authority sources (e.g. VIAF, ISNI, FAST)

The SVDE knowledge base (**Sapientia**) of integrated/clustered/enriched entities.

Data edited through JCricket, the entity editor.



Users



Apps



Data



{ REST }

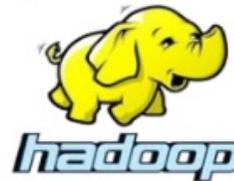
Search API

StructQL

SVDEQL

TermsQL

Data management



PostgreSQL



STARDOG



Entity curation and management



Connecting to JCricket Editor from Discovery Portal

ShareVDE BETA Explore Pietro Aretino Simple search aretino Advanced search Editor



Person ⓘ

Pietro Aretino

Italian author, playwright, poet, satirist, and blackmailer (1492-1556). Born in Arezzo. Died in...

fluence on contemporary an
to his communications a

Editor options

- Edit CTRL+ALT+T
- Add to my merge list ALT+SHIFT+M

Copy URI for this page

https://svde.org/agents/254 Copy

Download the page in these formats

- .json

More information related to this person on other websites

- wikidata record
- viaf record
- isni record

Wikimedia Commons

Original works by

Filter original works...

4 results

No.	Title
1	Edizione nazio

Pietro Aretino (author)

Overview

Pietro Aretino

Basic info

Agent type
Name
Birth year
Death year
Birth place
Death place

Other

Alternative names
Local IDs
Occupation
First name
Last name

⊕ Add property

Pietro Aretino

Metadata External IDs

Basic info

Agent type ⓘ

Undefined

👁️ ● [Person](http://sit3-base-svde.atcult.it/agentTypes/Person) (http://sit3-base-svde.atcult.it/agentTypes/Person) +

Name ⓘ +

Undefined

👁️ Aretino, Pietro +

English

○ +

Birth year ⓘ

Undefined

👁️ 1492 +

English

Find it via search

To view an entity here, open it through [explore](#) or [search](#) screens.

Open via ID

Entity URI

Open

Create new...

Agent

[Person](#)

[Family](#)

[Organization](#)

[Conference](#)

Opus

[Original work](#)

Bibliographic

[Work](#)

[Instance](#)

[Item](#)

Concept

[Form](#)

[Format](#)

[Genre](#)

[Language](#)

[Place](#)



Discovery Portal

Search for people, original works and publications

e.g. Jules Verne or Around the world in 80 days



Advanced search

<https://smithsonian.svde.org>

Explore the library's linked open data entities created in BIBFRAME by Share-VDE

[← Back to Smithsonian Libraries](#) [Learn more](#) [Options](#) 



Search for people, original works and publications

Publications Original works People and organizations

e.g. "le vite vasari"



Language

Year

Type

Library

Electronic / print

[Advanced search](#)

<https://kubikat-lod.org>

Explore the library data of the four Kubikat libraries

[Learn more](#) [Options](#) ▾



BRITISH NATIONAL BIBLIOGRAPHY

BETA

Search for people, original works and publications

Publications Original works People and organizations

e.g. the hitchhiker's guide to the galaxy adams



Language

Year

Type

[Advanced search](#)

<https://bl.natbib-lod.org/>

Explore linked open data for books and journals published or distributed in the United Kingdom and Ireland since 1950, and electronic publications since 2013

[← Back to British Library](#) [Learn more](#) [Options](#) ▾

Catalog data as linked data

Smithsonian Catalog [ukiyo e search](#) Search all content... Options

Person

Mary Vaux Walcott

American artist, photographer, botanist and naturalist (1860-1940).

Mary Morris Vaux Walcott was an American artist and naturalist known for her watercolor paintings of wildflowers. She has been called the "Audubon of Botany." – Wikipedia

More options

Wikimedia Commons

Original works by

Filter original works...

3 results

No.	Title
1	Legacy in time
2	Wild flowers c

Copy URI for this page

<https://svde.org/agents/1001654266760763> Copy

Download the page in these formats

.json

More information related to this person on other websites

- [isni record](#)
- [wikidata record](#)
- [lcnaf record](#)
- [viaf record](#)

[Mary Vaux \(photographer\)](#)

Person

Harold William Rickett

American botanist and library scientist (1896–1989).
Born in Birmingham (England). Died in Monterey (Calif.).

Smithsonian SVDE.org/harold-william-rickett-a791654263858549

representation options

English

Mary Vaux Walcott

American artist, photographer, botanist and naturalist (1860-1940)

Mrs. Charles Doolittle Walcott | Mary Morris Vaux | Mary Morris Vaux Walcott | Mary M. Vaux | Mary Vaux | M.Walcott | M. Walcott | Marry Vaux Walcott | M.V. Walcott | Mary Morris Vaux-Walcott | Mary Walcott | Mrs. Charles Walcott | Audubon of Botany

In more languages

Spanish	Mary Vaux Walcott	No description defined
Traditional Chinese	瑪麗·沃克斯·沃爾科特	美國藝術家、攝影師、植物學家 (1860-1940)
Chinese	瑪莉·沃克斯·沃考特	No description defined

All entered languages

Statements

instance of	human	0 references
image	 Mary-vaux-walcott.jpg 612 × 768; 71 KB 0 references	
sex or gender	female	
place of birth	Philadelphia 2 references imported from Wikimedia project Wikimedia Commons stated in Directory of Southern Women Ar	
date of death	22 August 1940 1 reference stated in SNAC SNAC ARK ID w6611hrg subject named as Mary Vaux Walcott retrieved 9 October 2017	
	1940 15 references stated in International Plant Names Index IPNI author ID 11328-1 stated in CLARA CLARA-ID 13617 subject named as Mary Vaux Walcott retrieved 9 October 2017 stated in The Shuttleworth Database of Scientific	

Mary Vaux Walcott, 1860-1940

Works Created/Published

North American wild flowers
Creator [Mary Vaux Walcott](#)
Work Types [visual works](#), [texts](#)
Imprint [Washington, D.C. : The Smithsonian institution, 1925.](#)
Languages [English](#)
Identifiers [ils.yul:3435271...](#)

Wild flowers of America : 400 flowers in full color based on paintings by Mary Vaux Walcott, with additional paintings by Dorothy Falcon Platt
Creator [Mary Vaux Walcott](#)
Work Types [visual works](#), [texts](#)
Imprint [New York : Crown Publishers \[1953\]](#)
Languages [English](#)
Identifiers [ils.yul:705708...](#)

Illustrations of North American pitcherplants
Creator [Smithsonian Institution](#)
Work Types [texts](#)
Imprint [Washington, D.C. : The Smithsonian Institution, 1935.](#)
Languages [English](#)
Identifiers [ils.yul:5673613...](#)

[Show all 3 results](#)

Timeline of Related Objects/Works

1935
Works Published

Total: 1
[Show all 1 result](#)

[Illustrations of North American pitcherplants](#)



Name
Mary Vaux Walcott
瑪莉·沃克斯·沃考特
メアリー・ヴォー・ウォルコット
ماری فوکس والکوت
Walcott, Mary Vaux, 1860-1940

Walcott, Mary Morris Vaux, 1860-1940
Mary Morris Vaux Walcott
Mary M. Walcott
Mary V. Walcott

Additional Names
Vaux, Miss Mary
Vaux, Mary
Walcott, Mary Morris Vaux
Vaux, Mary Morris
Walcott, Mary Vaux

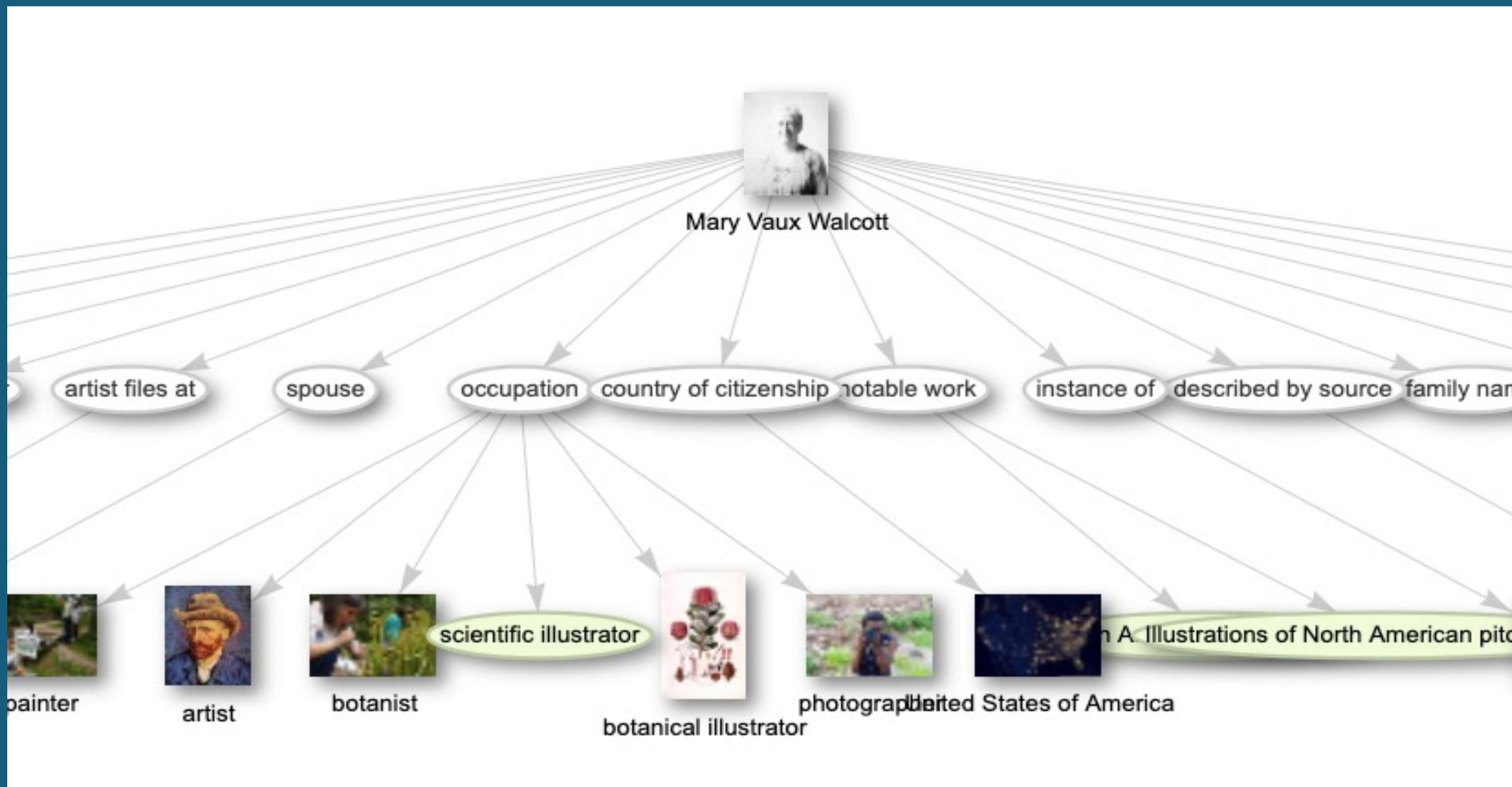
[Show All](#)

Type
Person

Birth
7/31/1860

Birth Place
Philadelphia

graph
data
view



w.wiki/6yhg

Connect to
external
resources

← → ↻ 🏠 <https://art.wikidata.link/browse?P170=Q6780882>

Wikidata Art Depiction Explorer Browse Recent changes Random

artist: Mary Vaux Walcott

Current filter – artist: Mary Vaux Walcott [\[remove filter\]](#)

[browse index](#) | [browse artist list](#)

479 artworks found

[toggle filters](#)

1 2 3 4 5 6 ... 10 11 [Next >](#)



Ragwort
(*Senecio burkei*)

painting
by Mary Vaux Walcott (1917)

[flower](#) [yellow](#)



Rabbitbean
(*Cracca virginiana*)

painting
by Mary Vaux Walcott (1918)



American Vetch
(*Vicia americana*)

painting
by Mary Vaux Walcott (1922)

[plant](#) [flower](#)

art.wikidata.link/browse?P170=Q6780882

← → ↻ 🏠 zone47.com/crotos/?s=mary+vaux+walcott

Language English

mary vaux walcott [Search](#)

785 Results

Everything

-40000

1 2 3 4 5 ... 40 [Random](#)



Woolly Agoseris (*Agoseris villosa*)
Mary Vaux Walcott - Smithsonian American Art Museum



Beaked Hazelnut (*Corylus rostrata*)
Mary Vaux Walcott - Smithsonian American Art Museum



Aleutian Fleabane (*Erigeron unalaschensis*)
Mary Vaux Walcott - Smithsonian American Art Museum



Spotted Bee Balm (*Monarda punctata*)
Mary Vaux Walcott - Smithsonian American Art Museum



[flower](#)



[plant](#)



[plant](#)



[flower](#)

zone47.com/crotos/?s=mary+vaux+walcott

Smithsonian Image Credits

Castle 298

si.edu/sites/default/files/styles/main_image/public/page_banner/castle-298.jpg

Landsdowne Portrait by Gilbert Stuart (1796) National Portrait Gallery, Washington D.C.
commons.wikimedia.org/entity/M33579

The Hope Diamond

Photo courtesy of the Smithsonian Institution
www.si.edu/newsdesk/photos/hope-diamond-0

Dorothy's Ruby Slippers

americanhistory.si.edu/press/fact-sheets/ruby-slippers

Mei Xiang (Meghan Murphy photos)
insider.si.edu/mei-xiang-2/

1909 Wright Military Flyer

airandspace.si.edu/collection-objects/1909-wright-military-flyer/nasm_A19120001000

Natural History Stacks

blog.library.si.edu/wp-content/uploads/2013/03/SIL_2012_01_NatHist_prelimEdits_DSC_4202.jpg

Smithsonian Institution Building (aka the Castle)

commons.wikimedia.org/entity/M96312914



Smithsonian
Libraries and Archives

Resources

- BIBFRAME

<https://bibframe.org/>

- Share Family web site

<https://share-family.org/>

- Smithsonian LOD discovery portal

<https://smithsonian.svde.org/>

- BIBFRAME Workshop Europe 2023

(free: in person and online)

Join us at the KBR Royal Library of Belgium, Brussels, Belgium

<https://bfwe.eu>



Smithsonian
Libraries and Archives

Thank you!

IFLA WLIC 2023
August 22, 2023
Jackie Shieh
<shiehj at si.edu>



Smithsonian
Libraries and Archives



Let's work together, let's library

World Library and Information Congress
88th IFLA General Conference and Assembly
21-25 August 2023, the Netherlands