

# The Western Name Authority File:

Improving Access for Digital Collections and Archives

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**J. Willard Marriott Library**

THE UNIVERSITY OF UTAH

# The many names of Charles Savage

Metadata problems when collections are aggregated:

- Savage, C. R. (Charles Roscoe), 1832-1909
- Savage, C. R.(Charles Roscoe),1832-1909
- Savage, C.R. (Charles Roscoe)
- Savage, Charles R.
- C. R. Savage (Charles Roscoe Savage and George Ottinger), Pioneer Art Gallery, East Temple Street, Salt Lake City, Utah
- Charles R. Savage
- Savage, Charles Roscoe
- C. R. (Charles Roscoe) Savage, photographer
- Savage, C. R.
- Charles R.



Charles R. Savage, perplexed by his many name variants.

Charles R. Savage  
Utah State Historical Society Classified Photograph Collection  
<https://collections.lib.utah.edu/details?id=432953>

# Our digital library => MWDL => DPLA

A screenshot of the University of Utah All U Need digital library search results for 'Charles savage'. The search bar contains 'Charles savage' and 'Advanced Search'. Below the search bar, there are filters for 'Limit your search' (1-25 of 963) and 'Type' (Image). The results table shows two items:

Title	Setname	Type
Charles R. Savage Family	CHA_CP	Image
Charles R. Savage	CHA_CP	Image

A screenshot of the Mountain West Digital Library (MWDL) search results for 'Charles savage'. The search bar contains 'Charles savage' and 'Advanced Search'. Below the search bar, there are filters for 'Refine My Results' (RESOURCE TYPE: Images (22,042), Collections (71), Text (5), Pending (3), More options) and 'SUBJECT' (photographs (1,826), portraits (260), Salt Lake City (Utah) (277), Stereographs (114)). The results list shows three items:

- George R. Dillinger and Charles Savage  
Utah State Historical Society Classified Photograph Collection  
Utah State Historical Society  
View Resource Details
- [Charles R. Savage]  
Charles R. Savage Photographs 2  
ca. 1920 Brigham Young University - Harold B. Lee Library  
View Resource Details
- Charles R. Savage  
Utah State Historical Society Classified Photograph Collection  
Utah State Historical Society  
View Resource Details

A screenshot of the Digital Public Library of America (DPLA) search results for 'charles r savage'. The search bar contains 'charles r savage'. Below the search bar, there are filters for 'Search Results' (Your search for charles r savage returned 2,365 results from 43 contributing institutions) and 'Refine search' (Subject: Photographs (1643), Portraits (592), Salt Lake City (Utah) (268), Stereographs (174)). The results list shows one item:

Subject	Count	Item
Photographs	1643	Charles R. Savage; 13485
Portraits	592	2005-06
Salt Lake City (Utah)	268	Charles R. Savage (1832-1909) was a pioneer photographer.
Stereographs	174	Get full image from Utah State Historical Society

# Librarians, names, and organization

## Value of name authority control:

- Easier searching for known names
- Make searching more predictable
- Consistency of records
- Organize and collocate information
- Efficiency for metadata creators
- Easier to maintain data over time
- Less errors in data
- Differentiate similar names
- Provide context for names



8. Navaho man and child. 1913 Dr. Elliott, photo  
Utah American Indian Digital Archive  
<https://collections.lib.utah.edu/details?id=390032>

# LC Name Authority File (LCNAF)

The Library of Congress

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



## LIBRARY OF CONGRESS AUTHORITIES



[Help](#) [New Search](#) [Search History](#) [Headings List](#) [Start Over](#)

SOURCE OF HEADINGS: Library of Congress Online Catalog

YOU SEARCHED: Name Authority Headings = savage, c. r.

SEARCH RESULTS: Displaying 1 through 100 of 100.

[◀ Previous](#)   [Next ▶](#)

#	Bib Records	<i>select icon in first column to...</i> View Authority Headings/References	Type of Heading
1	22	Savage, C. R. (Charles Roscoe), 1832-1909	personal name
2	0	Savage, C. V.	personal name
3	7	Savage, C. Wade	personal name
4	1	Savage, Calley Jarrell	personal name
5	0	Savage, Candace, 1949-	personal name
6	23	Savage, Candace Sherk, 1949-	personal name
7	0	Savage, Candida	personal name

# Getty's Union List of Artist Names (ULAN)



Research

[Research Home](#) ▶ [Tools](#) ▶ [Union List of Artist Names](#) ▶ Full Record Display




## Union List of Artist Names® Online Full Record Display

[New Search](#)

[← Previous Page](#)


[? Help](#)

Click the  icon to view the hierarchy.

[Semantic View \(JSON, JSONLD, RDF, N3/Turtle, N-Triples\)](#)

ID: 500005101

Record Type: **Person**

 **Savage, Charles Roscoe** (American photographer, 1832-1909)

**Note:** Born 16 August 1832; died 3 February 1909. Savage came to America in 1857 and began to photograph in Florence, Nebraska in 1859. Savage settled in Salt Lake City, Utah and set up a studio in 1861. In 1866, Savage photographed his 9000 mile tour of North America. Savage travelled extensively along the transcontinental railroad photographing its construction. He photographed the completion of the railroad at Promontory Point, Utah in 1869. Savage also produced scenic views of the West in cartes-de-visites form. In the 1880s, Savage formed a partnership with a Denver, Colorado publisher Frank S. Thayer, to produce a series of guidebooks to Utah.

### Names:

**Savage, Charles Roscoe** ([preferred](#),[V](#),[index](#))

**Charles Roscoe Savage** ([V](#),[display](#))

**Savage, Chas. R.** ([V](#))

**Savage, C. R.** ([U](#),[LC](#))

# Virtual International Authority File (VIAF)

VIAF

Virtual International Authority File

## Search

Select Field:

All Headings

Select Index:


All VIAF


Search Terms:


savage, charles

Search

Savage, C. R. (Charles Roscoe), 1832-1909 

Savage, Charles Roscoe (American photographer, 1832-1909) 

Charles Roscoe Savage 

Savage, C. R. 1832-1909 


Savage, Charles Roscoe 1832-1909 

VIAF ID: 15075395 (Personal)

Permalink: <http://viaf.org/viaf/15075395>


ISNI: [0000 0000 6660 6444](http://www.isni.org/0000-0000-6660-6444)

## Preferred Forms

 100 0 \_ [ta Charles Roscoe Savage](#)

 200 \_ | [ta Savage tb Charles Roscoe tf 1832-1909](#)

 100 1 \_ [ta Savage C. R. td 1832-1909](#)

 100 1 \_ [ta Savage C. R. tq \(Charles Roscoe\). td 1832-1909](#)

 100 1 \_ [ta Savage Charles Roscoe tq American photographer, 1832-1909](#)



# Western Name Authority File (WNAF)

How would a local/regional name authority file fit in with the national/international authority files?

- Provide new ways of visualizing local collections
  - Uncover connections and shared content areas
- Provide guidance to institutions who don't have staff capacity to do in depth authority work
- Pipeline of information to national authority files
- Highlight importance of local authority work



# Library systems - MARC authority records

000 00820cz a2200229n 450

001 2909791

005 20130830073801.0

008 841123n| azannaabn |a aaa c

010 \_\_ |a n 84131226

035 \_\_ |a (OCoLC)oca01219006

040 \_\_ |a CLU |b eng |e rda |c DLC |d DLC |d OCoLC |d UPB |d DLC |d UPB

046 \_\_ |f 1832 |g 1909

100 1\_ |a Savage, C. R. |q (Charles Roscoe), |d 1832-1909

370 \_\_ |f Utah

374 \_\_ |a Photographers |2 itoamc

375 \_\_ |a male

378 \_\_ |q Charles Roscoe

400 1\_ |a Savage, Charles Roscoe, |d 1832-1909

670 \_\_ |a His Views of Utah, 1883: |b t.p. (C. R. Savage)

670 \_\_ |a NUC pre-1956 |b (hdg.: Savage, Charles Roscoe, 1832-1909; usage: C. R. Savage; variant: Chas. R. Savage)

678 0\_ |a C.R. Savage (1832-1909) was a photographer of the American West in the late 1800s and early 1900s.

953 \_\_ |a bz70

# Library systems - digital library systems

No good way to do name authority in digital collections

Regionally, partners using a variety of shared systems for their digital libraries

No way to automatically look up against national authority files

Need a centralized list of names for reference

Last Name	Given Name	Maiden Name	Birth Date	Death Date
Allred	Ellen	Shepherd	12 May 1845	15 Dec 1928
Ashworth	Mary Elizabeth	Shepherd	24 Mar 1854	11 Apr 1932
Bailey	Charlotte	Shepherd	7 May 1848	7 Jul 1937
Barney	Priscilla Ann	Shepherd	4 May 1842	2 Nov 1916
Blackham	Priscille Ann	Shepherd	4 May 1842	20 Sep 1916
Davidson	Lydia	Shepherd	16 Sep 1836	
Derrick	Mary	Shepherd	12 Aug 1812	17 Feb 1886
Hartley	Ellen	Shepherd	9 Dec 1854	27 Oct 1918
Home	Mary Park	Shepherd	13 Nov 1836	28 Apr 1924
Justesen	Sarah Ann	Shepherd	4 Sep 1842	8 Aug 1933
Miller	Ann	Shepherd	8 May 1825	27 Mar 1910

Daughters of Utah Pioneers name index: [http://www.dupinternational.org/pioneer\\_index.php](http://www.dupinternational.org/pioneer_index.php)

# Authority control in digital collections

- Imported text files that need to be refreshed manually
- Can reconcile and improve metadata, but generally a manual process
- Digital collections work often distributed between many people in an organization, quality control always an issue



Van de Vanter, Billy's car  
<https://collections.lib.utah.edu/details?id=126695>

# Overview of IMLS grant

1. Investigation
  - a. May 2016 - October 2016
2. Evaluation and Testing
  - a. November 2016 - April 2017
3. Pilot Implementation
  - a. May 2017 - October 2017
4. Assessment and Future Planning
  - a. November 2017 - April 2018



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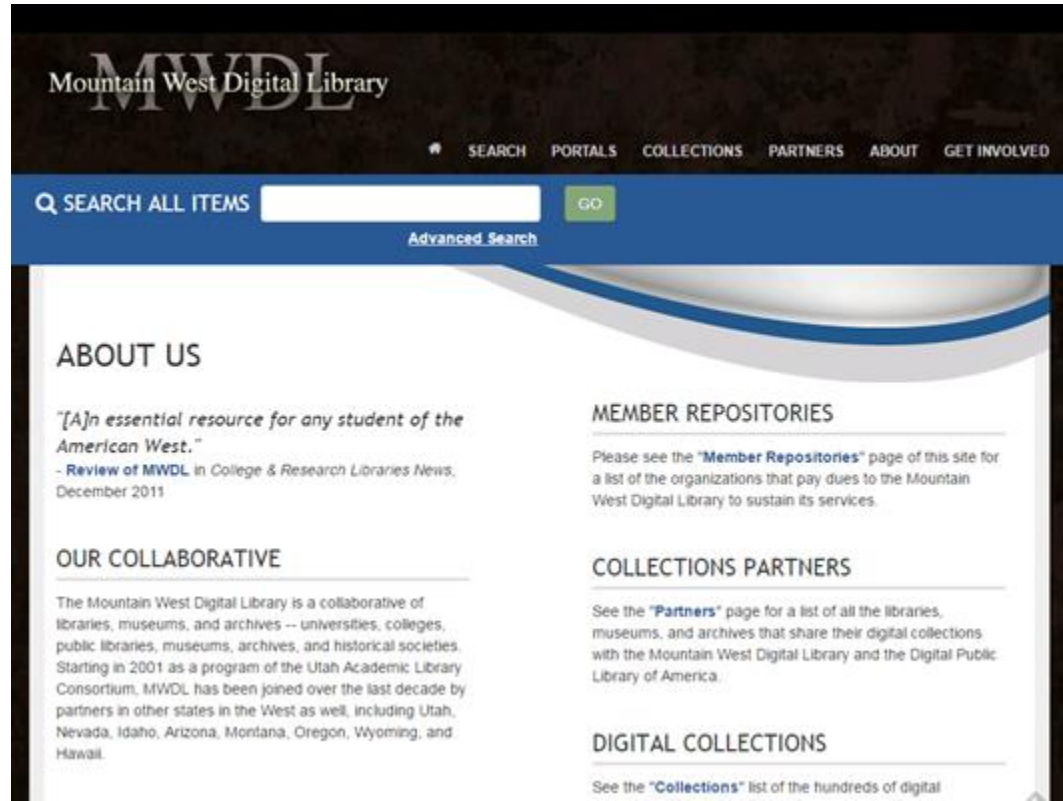
Christmas party at Lafabreques, Topaz Museum  
<https://collections.lib.utah.edu/details?id=341268>

# Collaboration with libraries in the west

## Project partners include:

- Utah State University
- Brigham Young University
- Utah State Archives
- University of Oregon
- University of Nevada, Reno
- University of Denver

Issues with externally hosting collections for multiple groups



The screenshot shows the Mountain West Digital Library (MWDL) website. The header features the MWDL logo and a navigation menu with links for SEARCH, PORTALS, COLLECTIONS, PARTNERS, ABOUT, and GET INVOLVED. Below the navigation is a search bar with the text "SEARCH ALL ITEMS" and a "GO" button. A link for "Advanced Search" is also visible. The main content area is divided into several sections: "ABOUT US" with a quote from a review, "MEMBER REPOSITORIES" with a link to the member repositories page, "OUR COLLABORATIVE" with a description of the library's collaborative nature, "COLLECTIONS PARTNERS" with a link to the partners page, and "DIGITAL COLLECTIONS" with a link to the digital collections list.

Mountain West Digital Library

SEARCH PORTALS COLLECTIONS PARTNERS ABOUT GET INVOLVED

Q SEARCH ALL ITEMS  GO

[Advanced Search](#)

### ABOUT US

*"[A]n essential resource for any student of the American West."*  
- Review of MWDL in *College & Research Libraries News*, December 2011

### MEMBER REPOSITORIES

Please see the **"Member Repositories"** page of this site for a list of the organizations that pay dues to the Mountain West Digital Library to sustain its services.

### OUR COLLABORATIVE

The Mountain West Digital Library is a collaborative of libraries, museums, and archives -- universities, colleges, public libraries, museums, archives, and historical societies. Starting in 2001 as a program of the Utah Academic Library Consortium, MWDL has been joined over the last decade by partners in other states in the West as well, including Utah, Nevada, Idaho, Arizona, Montana, Oregon, Wyoming, and Hawaii.

### COLLECTIONS PARTNERS

See the **"Partners"** page for a list of all the libraries, museums, and archives that share their digital collections with the Mountain West Digital Library and the Digital Public Library of America.

### DIGITAL COLLECTIONS

See the **"Collections"** list of the hundreds of digital


# SNAC

social networks and archival context    PROTOTYPE HOME    ABOUT PROTOTYPE    **snac**

## Savage, C. R. (Charles Roscoe), 1832-1909 Alternative names

<b>Dates:</b> birth 1832-08-16 death 1909-02-04	<b>Maybe same as:</b> <a href="#">Savage, Charles R., 1832-1909</a> <b>Authority Source:</b> LC, utsu, uut, byu, WorldCat, yale, nwda, rmoa
<b>Gender:</b>	<b>Nationality:</b> United States <b>Language:</b> English

### Biographical notes:



Reinhard Maeser was the son of Karl G. Maeser, a president of Brigham Young Academy. He was born in 1855 and died in 1926.




From the description of Reinhard Maeser photograph collection, 1855-1926. (Unknown). WorldCat record id: 367967066

Pioneer Utah photographer.




From the description of C.R. Savage diaries, 1855-1909. (Unknown). WorldCat record id: 365135505

C.R. Savage was a prominent photographer of Utah

### Links to collections

-  Archival Collections **110**
-  Related Resources **13**
-  Related External Links **6**

### Related names in SNAC

-  People **66**
-  Families **8**
-  Organizations **22**

### Visualize:

- List collection locations
- [Radial Graph Demo](#)
- View source EAC-CPF

### Subjects:

- Arts, Humanities, and Social Sciences
- Canyons
- Fine Arts
- Frontier and pioneer life
- Historic buildings--Photographs
- Home and Family
- Images
- Immigration and American Expansion
- Indians of North America
- Lakes--Photographs
- Landscapes--Photographs

# Library collections as research data

- Make info easier for people to reuse and repurpose
  - Bulk download of datasets, transcripts, images for researchers
  - API access to digital library collections
  - Visualize connections between holdings of different institutions



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Christmas party at Lafabreques, Topaz Museum  
<https://collections.lib.utah.edu/details?id=341268>



# Linked Open Data (LOD)

- Principles of LOD
- Easier to enhance, visualize
- For example, enhance our local names with info from dbpedia





# Library name authority data as LOD

```
[
  {
    "@id": "http://id.loc.gov/authorities/names/n84131226",
    "@type": ["http://www.w3.org/2004/02/skos/core#Concept"],
    "http://www.w3.org/2004/02/skos/core#prefLabel": [
      {"@language": "en",
        "@value": "Savage, C. R. (Charles Roscoe), 1832-1909"}],
    "http://www.w3.org/2008/05/skos-xl#altLabel": [
      {"@id": "_:b7authoritiesnamesn84131226"}],
    "http://www.w3.org/2004/02/skos/core#exactMatch": [
      {"@id": "http://viaf.org/viaf/sourceID/LC%7Cn+84131226#skos:Concept"}],
    "http://www.w3.org/2004/02/skos/core#note": [
      {"@value": "[C.R. Savage (1832-1909) was a photographer of the American West in the late 1800s and early 1900s.]"}],
    "http://www.w3.org/2004/02/skos/core#inScheme": [
      {"@id": "http://id.loc.gov/authorities/names"}],
    "http://www.w3.org/2004/02/skos/core#altLabel": [
      {"@language": "en",
        "@value": "Savage, Charles Roscoe, 1832-1909"}]
  }
]
```

# Metadata wrangling (data submitted)

Miller, John N.  
Miller, P. B.  
Mizpah  
Mogo, Margaret  
Monroe  
Montgomery, S. H.  
Moody, William  
Moore, Eri James  
Morgan, David D.  
Morgan, John  
Morley, Isaac  
Morris, R. M.  
Morriss, R. M.  
Mundock, John

National Ballet (Washington, D.C.)  
Fauth & Co  
Colorado Repertory Dance Company  
Colorado School of Mines  
Welgos Photos  
De Bellis Studios  
Colorado State College (Fort Collins, Colo.)

```
{
  "@id": "http://opaquenamespace.org/ns/people/AbdulBassitJalila",
  "@type": "skos:PersonalName",
  "dc:issued": {
    "@value": "2015-07-16",
    "@type": "xsd:date"
  },
  "dc:modified": {
    "@value": "2015-07-16",
    "@type": "xsd:date"
  },
  "rdfs:isDefinedBy": {
    "@id": "http://opaquenamespace.org/VOCAB_PLACEHOLDER.nt"
  },
  "rdfs:label": {
    "@value": "Abdul-Bassit, Jalil A.",
    "@language": "en"
  },
}
```

```
1 Title Description Photographer Image Date Subject
Location Collection Digital Publisher Contributing
Institution Ordering and Permissions Information
Date Digital Donor Image ID Digitization
Specifications Resource Type Format Language OCLC
number Date created Date modified Reference URL
CONTENTdm number CONTENTdm file name CONTENTdm file path
2 Quilici Barn, Reno Photograph of a barn built between
1900 and 1910; photograph taken August 31, 2002;
photographic print, 8 x 10 inches Barnes, Catana L.
2002 Barns -- Nevada Reno (Nev.); Washoe County;
Nevada Sagebrush Vernacular: Rural Architecture in
Nevada Special Collections Department, University of
Nevada, Reno Library University of Nevada, Reno Not to
be reproduced without permission. For permissions
information, please see:
http://knowledgecenter.unr.edu/speccoll/photos.aspx To
order a copy of this image, add it to your favorites, then
visit the shopping cart located here:
http://contentdm.library.unr.edu/shoppingcart/index.php
2003 UNRS-P2003-13-109 These images exist as
archived TIFF images and one or more JPEG versions for
general use. Image image/tiff eng 2003-04-23
2014-10-09
```

# Metadata wrangling (data compiled)

	A	B	C	D	E
1	<b>Name</b>	<b>Institution</b>	<b>Collection</b>	<b>type</b>	<b>field</b>
2	Savage, Charles R.	USHS	Classified Photos	personal name	Person
3	Savage, Charles R.	USHS	Classified Photos		Photographer
4	Savage, Charles R., 1832-1909 USE Savage, C. R. (Charles Roscoe), 1832-1909	BYU	Savage		photographer
5	Savage, Charles R.;	USHS	Classified Photos		Photographer
6	Savage, Charles R.; Savage, Lenny Louise; Savage, Annie Amelia; Savage, Ray T.	USHS	Classified Photos	personal name	Person
7	Savage, Charles Roscoe	BYU	mormon bib		author
8	Savage, Charles Roscoe, 1832-1909 USE Savage, C. R. (Charles Roscoe), 1832-1909	BYU	DUP	personal name	personal names
9	Savage, Chas. R.	USHS	Classified Photos		Photographer
10	Young, S. A.	Oregon		personal name	
11	Young, Seraph	USHS	Classified Photos	personal name	Person
12	Young, Seymour B.	USHS	Classified Photos	personal name	Person
13	Young, Seymour B. (Seymour Bicknell), 1837-1924; Young, Isaac Bray;	UU	John Mills Whitaker Papers		Creator
14	Young, Shirrel R.	USHS	Classified Photos		Photographer
15	Young, Stuart Michael;	UU	UAIDA		Creator
16	Young, Susan (Susannah) Snively	USHS	Classified Photos	personal name	Person
17	Young, Trevor	DU		personal name	
18	Young, Virginia; Young, Josephine; Lyon, Camilla; Compson, Lucine	USHS	Classified Photos	personal name	Person
19	Young, Whitney	Oregon		personal name	
20	Young, Whitney M.	DU		personal name	
21	Young, Willard	USHS	Classified Photos	personal name	Person

# Metadata wrangling (data deduplicated)

	A	B	C	D	E	F
	Name	Institution;Collection;field	type	# of collections	# of institutions	# of states
1	Young, Brigham, 1801-1877	UU;EAD;n/a -- BYU;DUP;personal names -- BYU;GEA;personal names -- BYU;DUP;personal names -- BYU;GEA;personal names -- BYU;19th Century Mormon	PN	29	3	1
2	Anderson, John	UU;EAD;n/a -- BYU;Diaries;personal names -- BYU;DUP;personal names -- DU;n/a;n/a -- USHS;Classified Photos;Person -- UU;John Mills	PN	6	4	2
3	Jackson, William Henry, 1843-1942	BYU;Jackson;personal names -- BYU;Jackson;photographer/artist -- BYU;OTImages;photographer/artist/creator --	PN	6	4	2
4	Savage, C. R. (Charles Roscoe), 1832-1909	BYU;DUP;personal names -- BYU;GEA;personal names -- BYU;Savage2.;personal names -- BYU;Savage;personal names -- BYU;DE1;author -- BYU;DE2;author --	PN	25	4	1
5	Utah Fuel Company	UU;EAD;n/a -- BYU;RSMag;company name -- USHS;Classified Photos;Corporate Body -- USU;Lee;creator	CB	4	4	1
6						

# Metadata wrangling (data reconciled)

	A	B	C	D
1	<b>Name</b>	<b>LCNAF Heading</b>	<b>Bad Match</b>	<b>Good Match</b>
2	A. C. C.	Pushkin, Aleksandr Sergeevich, 1799-1837	<a href="http://id.loc.gov/authorities/names/n80036579">http://id.loc.gov/authorities/names/n80036579</a>	
3	Aaldeman, Mike			
4	Aas, Morten			
5	Abbot, Edward	Parry, Edward Abbott, Sir, 1863-1943	<a href="http://id.loc.gov/authorities/names/n80080252">http://id.loc.gov/authorities/names/n80080252</a>	
6	Abbott, Edith, 1876-1957	Abbott, Edith, 1876-1957		<a href="http://id.loc.gov/authorities/names/n50034801">http://id.loc.gov/authorities/names/n50034801</a>
7	Abbott, Ernest Hamlin	Abbott, Lyman, 1835-1922	<a href="http://id.loc.gov/authorities/names/n50034805">http://id.loc.gov/authorities/names/n50034805</a>	
8	Abbott, James Smith, 1867-1944	Abbott, James Smith, 1867 or 1868-1944		<a href="http://id.loc.gov/authorities/names/no96022313">http://id.loc.gov/authorities/names/no96022313</a>
9	Abbott, John	McBain, Ed, 1926-2005	<a href="http://id.loc.gov/authorities/names/n79121690">http://id.loc.gov/authorities/names/n79121690</a>	
10	Abbott, John Austin, 1871-1954	Abbott, John Austin, 1871-1954		<a href="http://id.loc.gov/authorities/names/no2013051261">http://id.loc.gov/authorities/names/no2013051261</a>
11	Abbott, Mark	Stern, Mark Abbott, 1929-	<a href="http://id.loc.gov/authorities/names/n2009070199">http://id.loc.gov/authorities/names/n2009070199</a>	
12	Abbott, Myron Alma, 1862-1932	Abbott, Myron Alma, 1862-1932		<a href="http://id.loc.gov/authorities/names/no2014098724">http://id.loc.gov/authorities/names/no2014098724</a>
13	Abby, Jack	Neidik, Abbey Jack	<a href="http://id.loc.gov/authorities/names/no2008053570">http://id.loc.gov/authorities/names/no2008053570</a>	
14	Abegg, Isaura Bentley	Abegg, Isaura Bentley		<a href="http://id.loc.gov/authorities/names/no2015022649">http://id.loc.gov/authorities/names/no2015022649</a>
15	Abel, Albert	Jullien, Louis Antoine, 1812-1860	<a href="http://id.loc.gov/authorities/names/n79140958">http://id.loc.gov/authorities/names/n79140958</a>	
16	Abel, Georgie Lee	Abel, Georgie Lee		<a href="http://id.loc.gov/authorities/names/no96029282">http://id.loc.gov/authorities/names/no96029282</a>
17	Abel, Mary Hinman, b. 1850	Abel, Mary Hinman, 1850-		<a href="http://id.loc.gov/authorities/names/n90652276">http://id.loc.gov/authorities/names/n90652276</a>
18	Abel, Oscar	Ligaluppi, Oscar Abel	<a href="http://id.loc.gov/authorities/names/n82156348">http://id.loc.gov/authorities/names/n82156348</a>	
19	Abernathy, Ralph	Abernathy, Ralph, 1926-1990		<a href="http://id.loc.gov/authorities/names/n87870916">http://id.loc.gov/authorities/names/n87870916</a>
20	Abernathy, Ralph, 1926-	Abernathy, Ralph, 1926-1990		<a href="http://id.loc.gov/authorities/names/n87870916">http://id.loc.gov/authorities/names/n87870916</a>
21	Abernathy, Ralph, 1926-1990	Abernathy, Ralph, 1926-1990		<a href="http://id.loc.gov/authorities/names/n87870916">http://id.loc.gov/authorities/names/n87870916</a>
22	Abert, James William, 1820-1897	Abert, J. W. (James William), 1820-1897		<a href="http://id.loc.gov/authorities/names/no98079676">http://id.loc.gov/authorities/names/no98079676</a>
23	Abram, James	Garfield, James A. (James Abram), 1831-1881	<a href="http://id.loc.gov/authorities/names/n50015182">http://id.loc.gov/authorities/names/n50015182</a>	
24	Abrams, Milton C.	Abrams, Milton C. (Milton Charles), 1918-		<a href="http://id.loc.gov/authorities/names/no2008117252">http://id.loc.gov/authorities/names/no2008117252</a>

# Metadata wrangling (data metrics)

- Started with ~500,000 names
- Deduplicated to 76,360
- 7357 -- 2+ collections (9.6%)
- 1484 -- 2+ institutions (1.9%)
- 271 -- 2+ states (0.35%)
- 62,381 personal names
- 10,706 corporate bodies
- 3,273 unknown

- 1091 are single words
- 2400+ cross references
- 500+ PN are First Last

## Total names submitted

- Brigham Young University - 30,535
- University of Utah - 7533
- Utah State University - 2067
- Utah State Historical Society - 12,138
- Utah State Archives - 3657
- University of Nevada, Reno - 1277
- Oregon Digital - 4170
- University of Denver - 16,608

# Metadata wrangling (assessment)

Search results in December 2016	Creator		Subject	
	MWDL	DPLA	MWDL	DPLA
Savage, C. R.	2022	2226	44	50
Savage, C. R. (Charles Roscoe)	1830	2023	43	44
Savage, C. R. (Charles Roscoe), 1832-1909	1708	1901	43	43
Savage, C. R., 1832-1909	1708	1901	43	43
Savage, Charles	1936	2165	60	126
Savage, Charles R.	1932	2128	58	65
Savage, Charles R., 1832-1909	1708	1902	43	43
Savage, Charles Roscoe	1833	2034	44	53
Savage, Charles Roscoe, 1832-1909	1708	1904	43	43
Savage, Charles, 1832-1909	1708	1905	43	43
Savage, Chas. R.	1	1	0	1
Savage, Chas. R., 1832-1909	0	0	0	0



# Metadata wrangling (tools - JSON to CSV converter)

<http://www.convertcsv.com/json-to-csv.htm>

	A	B	C	D
1	@id	rdfs:label/@value	rdfs:label/@language	@type
2	<a href="http://opaquenamespace.org/ns/people">http://opaquenamespace.org/ns/people</a>	People	en	
3	<a href="http://opaquenamespace.org/ns/people/AbateDillonA">http://opaquenamespace.org/ns/people/AbateDillonA</a>	Abate, Dillon A.	en	skos:PersonalName
4	<a href="http://opaquenamespace.org/ns/people/AbbeyBill">http://opaquenamespace.org/ns/people/AbbeyBill</a>	Abbey, Bill	en	skos:PersonalName
5	<a href="http://opaquenamespace.org/ns/people/AbdulBassitJalilA">http://opaquenamespace.org/ns/people/AbdulBassitJalilA</a>	Abdul-Bassit, Jalil A.	en	skos:PersonalName
6	<a href="http://opaquenamespace.org/ns/people/AberlDavidF">http://opaquenamespace.org/ns/people/AberlDavidF</a>	Aberl, David F.	en	skos:Concept
7	<a href="http://opaquenamespace.org/ns/people/AbernathyRalph1926">http://opaquenamespace.org/ns/people/AbernathyRalph1926</a>	Abernathy, Ralph, 1926-	en	skos:PersonalName
8	<a href="http://opaquenamespace.org/ns/people/AbrahamsonEmmaJ">http://opaquenamespace.org/ns/people/AbrahamsonEmmaJ</a>	Abrahamson, Emma J.	en	skos:PersonalName
9	<a href="http://opaquenamespace.org/ns/people/AbrahamsonRichard">http://opaquenamespace.org/ns/people/AbrahamsonRichard</a>	Abrahamson, Richard	en	skos:PersonalName
10	<a href="http://opaquenamespace.org/ns/people/AbramMary">http://opaquenamespace.org/ns/people/AbramMary</a>	Abram, Mary	en	skos:PersonalName
11	<a href="http://opaquenamespace.org/ns/people/AbramTed">http://opaquenamespace.org/ns/people/AbramTed</a>	Abram, Ted	en	skos:PersonalName
12	<a href="http://opaquenamespace.org/ns/people/AbramsWH">http://opaquenamespace.org/ns/people/AbramsWH</a>	Abrams, W. H.	en	skos:Concept
13	<a href="http://opaquenamespace.org/ns/people/AckerMartinHerbert">http://opaquenamespace.org/ns/people/AckerMartinHerbert</a>	Acker, Martin Herbert	en	skos:Concept
14	<a href="http://opaquenamespace.org/ns/people/AckerPhil">http://opaquenamespace.org/ns/people/AckerPhil</a>	Acker, Phil	en	skos:PersonalName
15	<a href="http://opaquenamespace.org/ns/people/AckermanLois">http://opaquenamespace.org/ns/people/AckermanLois</a>	Ackerman, Lois	en	skos:Concept
16	<a href="http://opaquenamespace.org/ns/people/AckleyMarshallA">http://opaquenamespace.org/ns/people/AckleyMarshallA</a>	Ackley, Marshall A.	en	skos:PersonalName
17	<a href="http://opaquenamespace.org/ns/people/AckmanMatthewS">http://opaquenamespace.org/ns/people/AckmanMatthewS</a>	Ackman, Matthew S.	en	skos:PersonalName
18	<a href="http://opaquenamespace.org/ns/people/AcordesFabianA">http://opaquenamespace.org/ns/people/AcordesFabianA</a>	Acordes, Fabian A.	en	skos:PersonalName
19	<a href="http://opaquenamespace.org/ns/people/AcostaAndrewJ">http://opaquenamespace.org/ns/people/AcostaAndrewJ</a>	Acosta, Andrew J.	en	skos:PersonalName
20	<a href="http://opaquenamespace.org/ns/people/AcostaCameronJ">http://opaquenamespace.org/ns/people/AcostaCameronJ</a>	Acosta, Cameron J.	en	skos:PersonalName



# Metadata wrangling (tools - Excel formulas)

=CONCATENATE(C1,";",D1,";",E1)

concatenate institution, collection, and field info into one cell

=CONCATENATE(F1," -- ",F2)

concatenate multiple institution;collection;field into one cell to deduplicate

=IF(A3=A2,"",A3)

deduplicate exact matches in sorted list

=COUNTIF(A:A,B4)

count how many times a name occurs in the column

# Metadata wrangling (tools - OpenRefine)

The screenshot displays the OpenRefine web interface. At the top, it shows the Google Refine logo, the file name 'ToReconcile\_PN2.xlsx', and a 'Permalink' button. On the right, there are buttons for 'Open...', 'Export', and 'Help'. Below the header, there are controls for 'Facet / Filter' and 'Undo / Redo'. The main area shows a table with 10,000 rows. The table has columns for 'All', 'ID', and 'Name'. The rows contain data for various individuals with IDs and names, such as 'Campbell, Donald', 'Campbell, Doug', etc. On the left side, there is a panel titled 'Infinite undo history' with a blue diamond icon and text explaining that every change is shown and can be undone. Below this panel are 'Extract...' and 'Apply...' buttons. On the right side, there is a panel titled 'Apply Operation History' with a light blue header. It contains the text 'Paste an extracted JSON history of operations to perform:' followed by a JSON array of operations. The first operation is 'core/row-reorder' with a description 'Reorder rows', and the second is 'core/blank-down' with a description 'Blank down cells in column Name'. The third operation is partially visible as 'core/row-removal'.

Google refine ToReconcile\_PN2.xlsx Permalink Open... Export Help

Facet / Filter Undo / Redo 10000 rows Extensions: Named-entity recognition Freebase

Show as: rows records Show: 5 10 25 50 rows

All	ID	Name
1	PN000010001	Campbell, Donald
2	PN000010002	Campbell, Doug
3	PN000010003	Campbell, Douglas L.
4	PN000010004	Campbell, Emma Isabelle Halada
5	PN000010005	Campbell, Gary L.
6	PN000010006	Campbell, Glen
7	PN000010007	Campbell, Gordon
8	PN000010008	Campbell, Harold
9	PN000010009	Campbell, Harry
10	PN000010010	Campbell, Heather
11	PN000010011	Campbell, Heb (Harold)
12	PN000010012	Campbell, Hugh Thomas
13	PN000010013	Campbell, Hump
14	PN000010014	Campbell, I. C. (Ian C.), 1947-
15	PN000010015	Campbell, I. C. (Ian Christopher),
16	PN000010016	Campbell, Isabella W
17	PN000010017	Campbell, Jack
18	PN000010018	Campbell, James S.
19	PN000010019	Campbell, Jennie
20	PN000010020	Campbell, Joan, 1856-1940
21	PN000010021	Campbell, JoAnn Nielson
22	PN000010022	Campbell, JoAnn, Nielson
23	PN000010023	Campbell, John
24	PN000010024	Campbell, John C.

Infinite undo history  
Don't worry about making mistakes. Every change you make will be shown here, and you can undo your changes anytime.  
[Learn more >](#)

Extract... Apply...

### Apply Operation History

Paste an extracted JSON history of operations to perform:

```
{
  {
    "op": "core/row-reorder",
    "description": "Reorder rows",
    "mode": "record-based",
    "sorting": {
      "criteria": [
        {
          "reverse": false,
          "caseSensitive": false,
          "column": "Name",
          "valueType": "string",
          "blankPosition": 2,
          "errorPosition": 1
        }
      ]
    }
  },
  {
    "op": "core/blank-down",
    "description": "Blank down cells in column Name",
    "engineConfig": {
      "facets": [],
      "mode": "row-based"
    },
    "columnName": "Name"
  },
  {
    "op": "core/row-removal",
```

# Metadata wrangling (tools - Postman and DPLA API)

The screenshot shows the Postman interface with a REST client request configured. The URL is `http://api.dp.la/v2/items?api_key=457211469ae100a3ccd584&provider.@id=http://dp.la/api/contributor/mwdl&sourceResource.creator=Young,Brigham&page_size=0`. The request method is GET. The parameters are:

Key	Value
api_key	457211469ae100a3ccd584
provider.@id	http://dp.la/api/contributor/mwdl
sourceResource.creator	Savage, Charles
page_size	0

The response status is 200 OK and the response body is a JSON object:

```
1 {
2   "count": 1936,
3   "start": 0,
4   "limit": 0,
5   "docs": [],
6   "facets": []
7 }
```

# Investigating vocab maintenance tools

TemaTres



xEAC



ThManager



protégé

CA COLLECTIVE ACCESS

VocBench 2.0



RAMP

Opaque Namespace  
Controlled Vocabulary Manager

redis

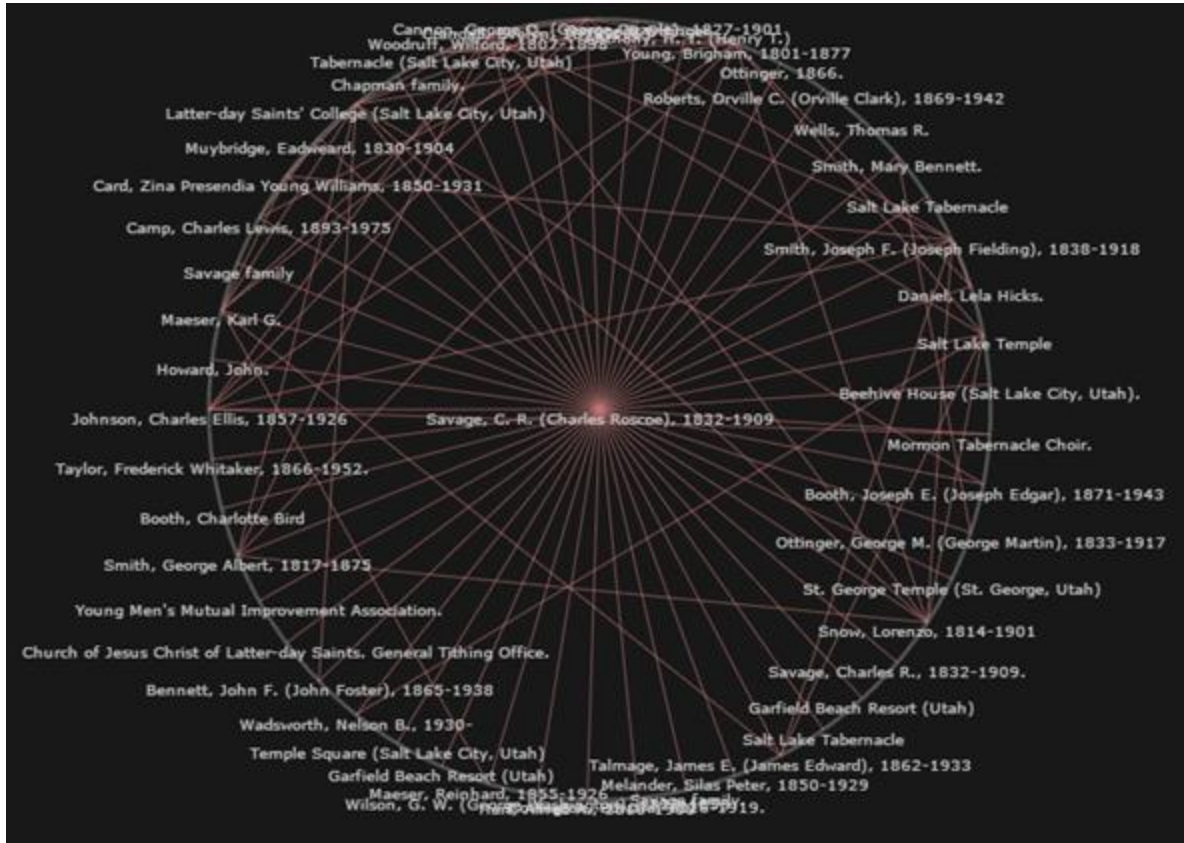


Skosmos

Vitro



# Visualizations with name data (from SNAC)



# Future phases of WNAF Project

- Pilot implementation of WNAF
- Assessment
  - Managing vocabulary
  - Reconciliation issues (system agnostic)
  - Explore impact on metadata creators and users
  - Training opportunities
  - Develop a plan for expanding WNAF to more institutions
  - How to move into full production for the project



Brigham Young portrait  
Utah State University

# Further reading and acknowledgements

Full Grant Narrative

<https://www.ims.gov/grants/awarded/LG-72-16-0002-16>

Project Webpage

<https://sites.google.com/site/westernnameauthorityfile/home>

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