



# International Image Interoperability Framework

## Building an ecosystem for cultural heritage content

ACOR Archival Methods Workshop  
Amman, Jordan - July 2, 2019

Jack Reed  
Stanford Libraries  
@mejackreed



Stanford | LIBRARIES

# Agenda

- What is IIIF?
- Why do we need IIIF?
- What does IIIF do?
- How does IIIF work?
- Case-study examples
- Interdisciplinary use cases



# What is IIIF?

International  
Image  
Interoperability  
Framework

(triple-eye-eff)



**A model for presenting and  
annotating digital  
representations of objects**

**(with lots of other benefits)**



**A Community**  
that develops **shared APIs**,  
implements them in **software**,  
and exposes interoperable  
**content**



# International Leaders

## Museums / Galleries

British Museum  
National Gallery of Art  
The J. Paul Getty Trust  
The Walters Art Museum  
Yale Center for British Art  
Et al.

## Aggregators

ARTstor  
CONTENTdm  
DPLA  
Europeana  
Internet Archive  
Wikimedia Foundation

## State / National Libraries

Austria  
Bavarian State  
British Library  
Denmark  
Egypt  
France  
Israel  
Japan  
Moravian Library  
New Zealand  
Norway  
Poland  
Scotland  
Serbia  
Wales  
Qatar  
United States (LoC)  
Vatican

## Universities and Research Institutions

Cambridge  
Cornell  
Ghent  
Gottingen  
Harvard  
Oxford  
Princeton  
Stanford  
Edinburgh  
Toronto  
Wellcome Trust  
Yale

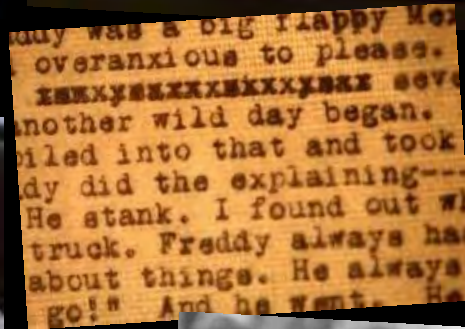
*And many more!*



Why do we need IIIF?



# Images are fundamental information carriers for cultural heritage



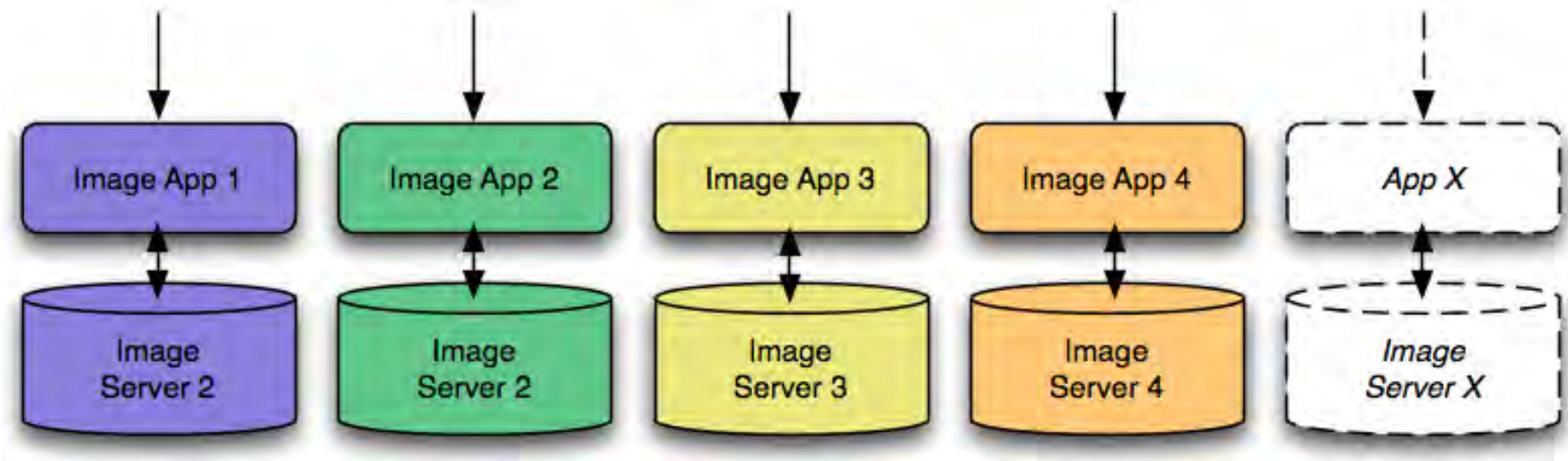
# But image delivery on the Web is...

<http://www.loc.gov/pictures/resource/fsac.1a3>  
4206/



- hard
- slow
- expensive
- disjointed
- locked up
- *siloed*

# A world of silos & duplication



- Every site a silo (→ no interoperability)
- Every app a one-off (→ overhead to code and keep)
- Every user forced to cope (→ many UIs, little integration)



What does IIIF do?



# Deep zoom with large images

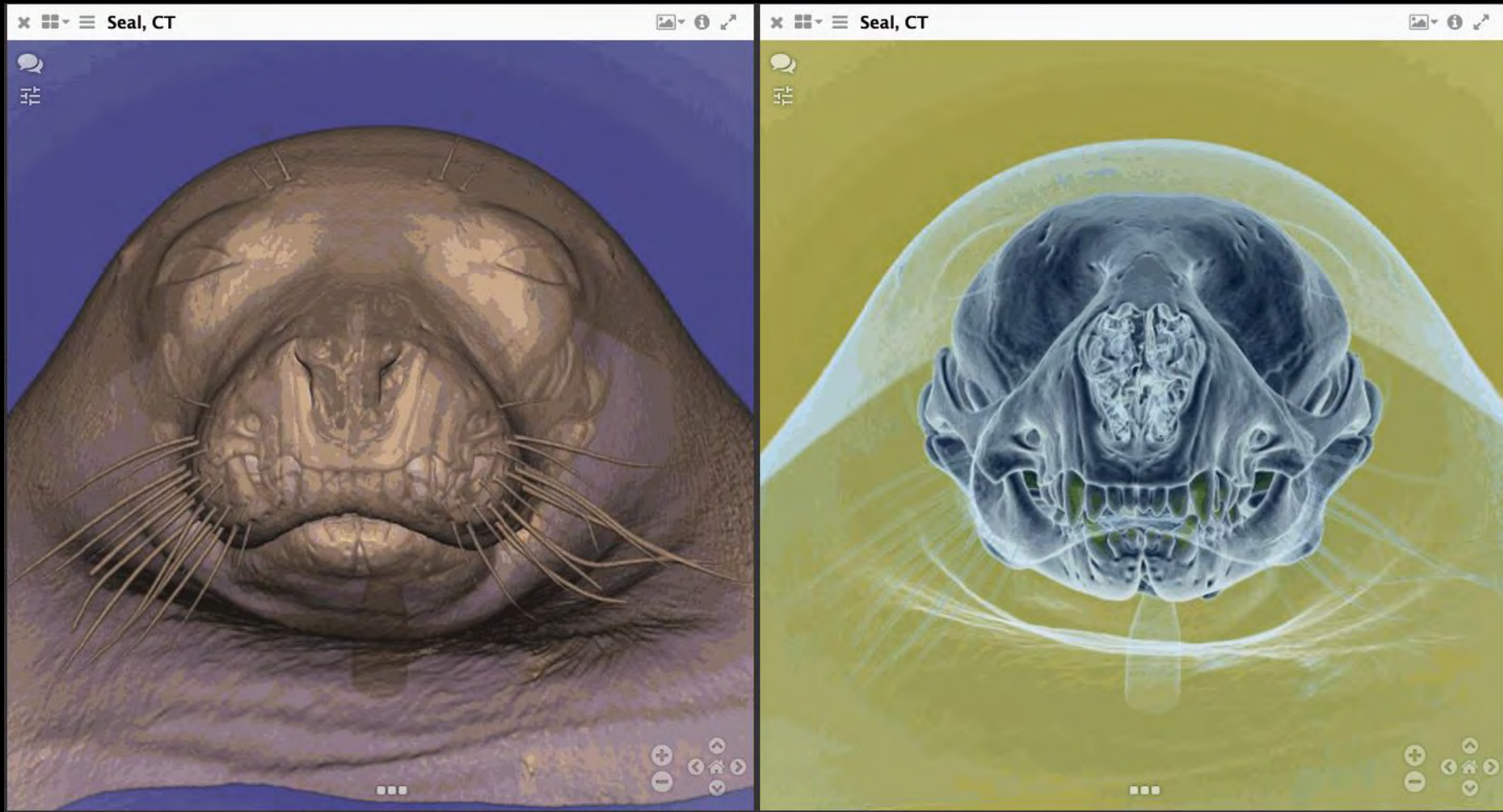


# Cite and share (including regions of interest)





# Compare images



Computed Tomography (CT) scans of the head of a seal from the Wellcome Library

<https://wellcomelibrary.org/item/b20433141> | <https://wellcomelibrary.org/item/b2043313x>

# Across sites

Historical pastime or a new ga x

Digital.Bodleian Mirador x

Tom


← → ↻ https://digital.bodleian.ox.ac.uk/inquire/Discover/Search/#/?p=c+0,t+,rsrs+0,rsps+10,fa+,so+ox%3Asort%5Eas... ☆ 📄 📄 📄 📄 📄

[ Log On ]

DIGITAL BODLEIAN

GO CLEAR

Back Historical pastime or a new game of the... 1



METADATA

ID: 32bb9aa4-43ce-4bf7-b0fb-c9452ca8e40c

Title: Historical pastime or a new game of the history of England from the Conquest to the Accession of George the Third

Creator: Harris, J. [author] | Wallis, J. [author]

Format/extent: single sheet, 556 x 493 mm

Date: 1803-12-01

Language: English

Alternative title: New game of the history of England from the Conquest to the Accession of George the Third | Hastings | W.I. 1066 | Briton | Norman | Dooms-day book | New Forest | Holy Land | W.I. 1087 | Robert D. of Normandy | Royal Forest | Death of Wm. | H.I. 1100 | Henry seizing his brother's treasures | Anselm | Will | S. 1135 | War | Matilda | H.I. 1154 | Becket assassinated by four barons


Collection: Ephemera

Description: Game of 1803 entitled Historical pastime or a new game of the history of England from the Conquest to the Accession of George the Third | has 158 circles, each depicting an aspect or event of history. The first twenty are indexed, as examples

Source: bodjp001-aay-0001-0

Rights: http://creativecommons.org/licenses/by-nc-sa/3.0/

Permalink: https://digital.bodleian.ox.ac.uk/inquire/p/43ce-4bf7-b0fb-c9452ca8e40c



PRIVATE NOTES

TAGS

Shakespeare, William in Search x

Falstaff at Herne's Oak, from x

Tom

Secure https://searchworks.stanford.edu/view/zj784pt2430 🔍 ☆ 📄 📄 📄 📄 📄

Stanford LIBRARIES

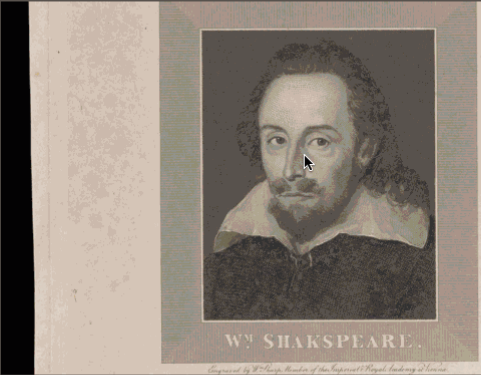
Login My Account Feedback

SearchWorks catalog

All fields books & media 🔍

Menu

Shakespeare, William



W. SHAKESPEARE.

More information

Shakespeare-related resources from Oxford, Stanford & Yale

<https://digital.bodleian.ox.ac.uk/inquire/p/32bb9aa4-43ce-4bf7-b0fb-c9452ca8e40c>

<https://searchworks.stanford.edu/view/zj784pt2430> | <http://collections.britishart.yale.edu/vufind/Record/1667254>



# Collect items that belong together

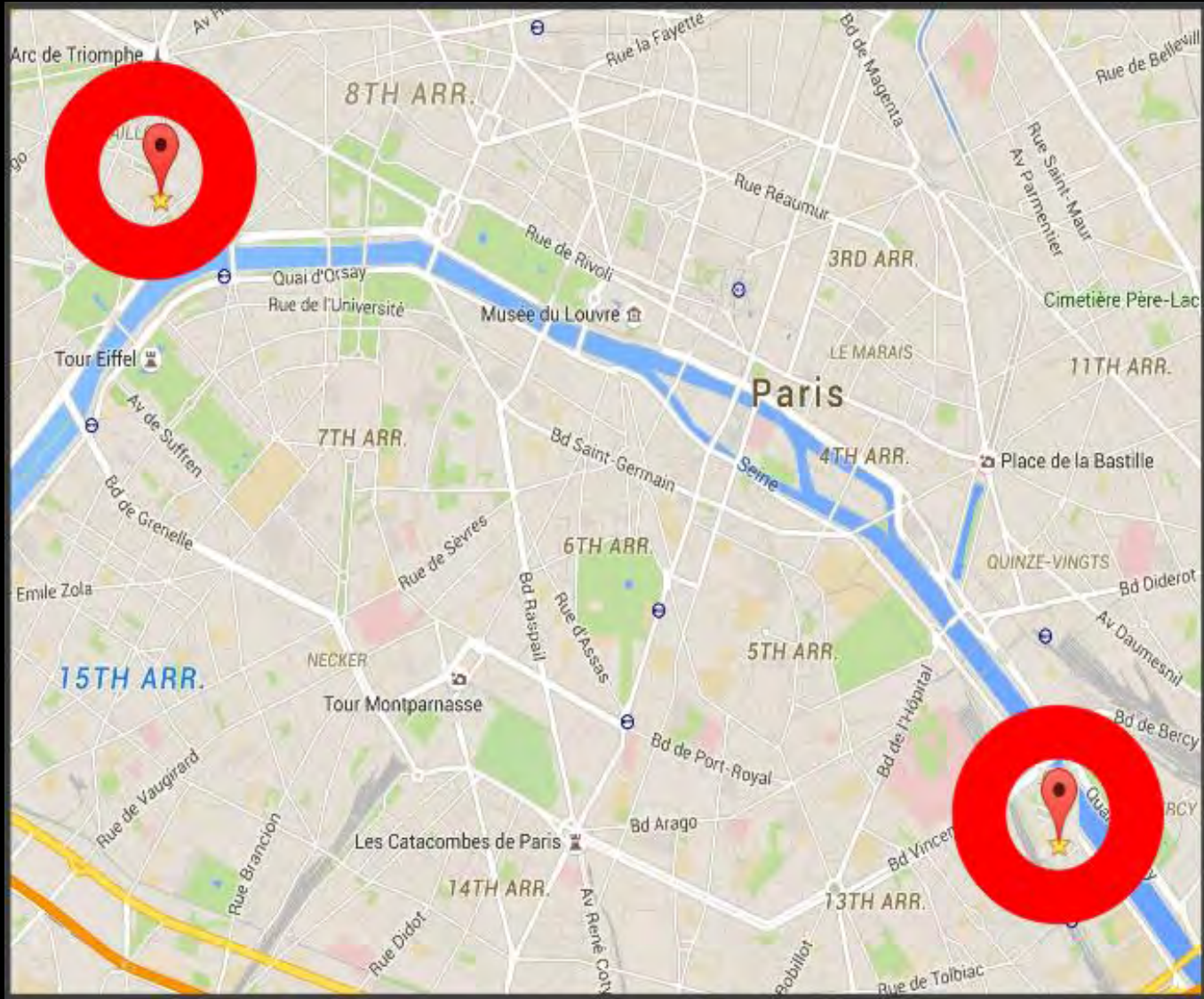


Le manuscrit 5 de la  
Bibliothèque municipale  
de Châteauroux, c. 1460

Folio in BVM  
Miniature in the BNF



# Collect items that belong together








# Reunify


Biblissima <sup>li</sup>    PROJET    ↓ OUTILS    DÉMOS    DOC

Demos <sup>li</sup>    f    t    u    o

Proto-BBMN 1713    Prototype    Bibliothèque de Florus    *Grandes Chroniques de France*    Mirador    Atelier RDF/SPARQL 2014

[i A propos](#)    ☐ Afficher les miniatures ?            

[Mort de Gondoald. Entretien entre Gontran et Childebert]



<http://demos.biblissima-condorcet.fr/chateauroux/demo/>

# Search within

Bookmark

Change Layout

El Paso herald. (1915-04-14)



IS CONFIDENT

Higher Officials Feel No Misgivings, Despite the Army's Great Setbacks.

Vienna, Austria, April 14.—Not the slightest doubt concerning the final victory in the war is in the minds of Austria-Hungary's statesmen. The correspondent of the Associated Press, in more than a month's stay here, has interviewed many of the leaders of the dual monarchy. All seem supremely confident, despite the enormous setbacks which the empire's armies have received.

"Eight months of war also have proved that all know how to fight and the soldiers of all nationalities have

AGAIN

Three Alamogordo Juries Refuse To Indict Talley For Murder

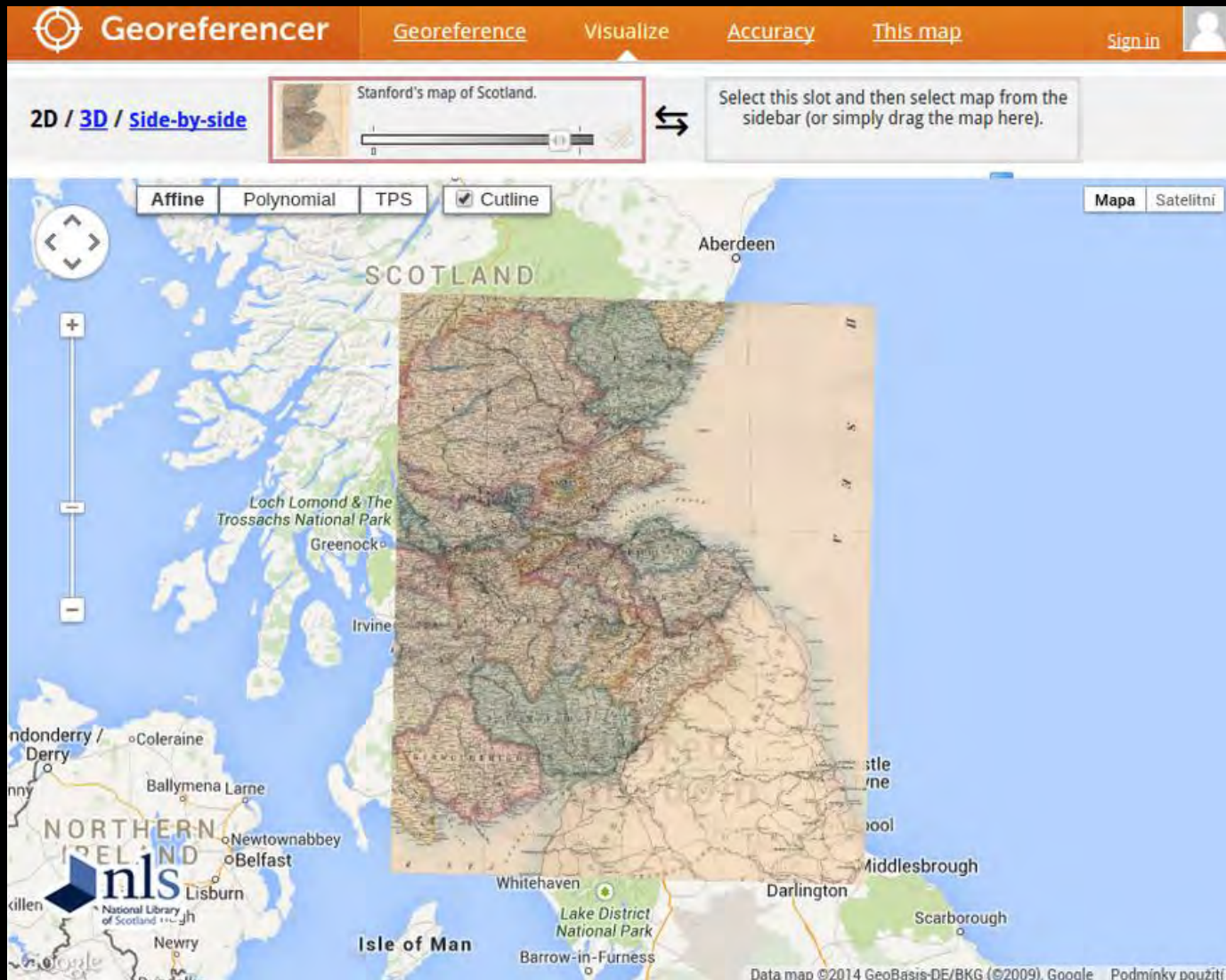
TWO JURIES GIVE PORTER CLEAR

Third Grand Jury

Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7 Page 8 Page 9 Page 10 Page 11 Page 12



# Analyze

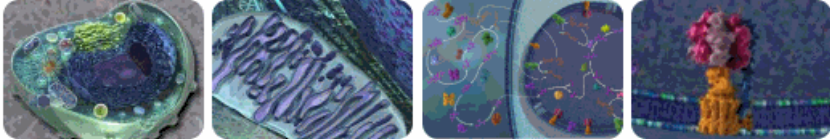


# Annotate

Course CellXplorer Syllabus and FAQs

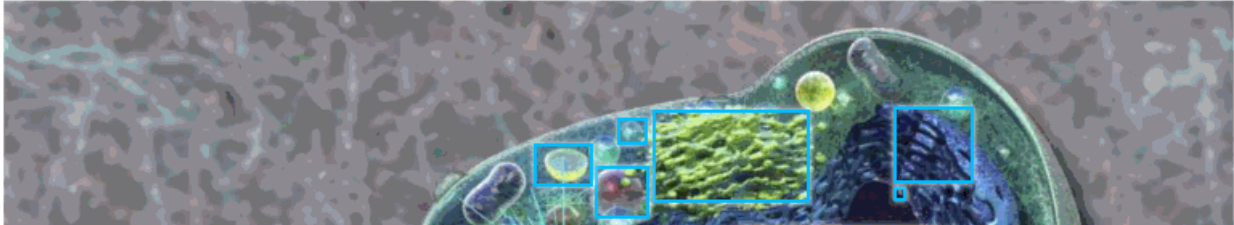
CellXplorer is an interactive and annotated graphic that you can navigate. You can click on the buttons below to zoom in. As each week's content becomes available, you can also navigate to the lesson associated with that part of the cell! The graphic below can sometimes take some time to load.

Support

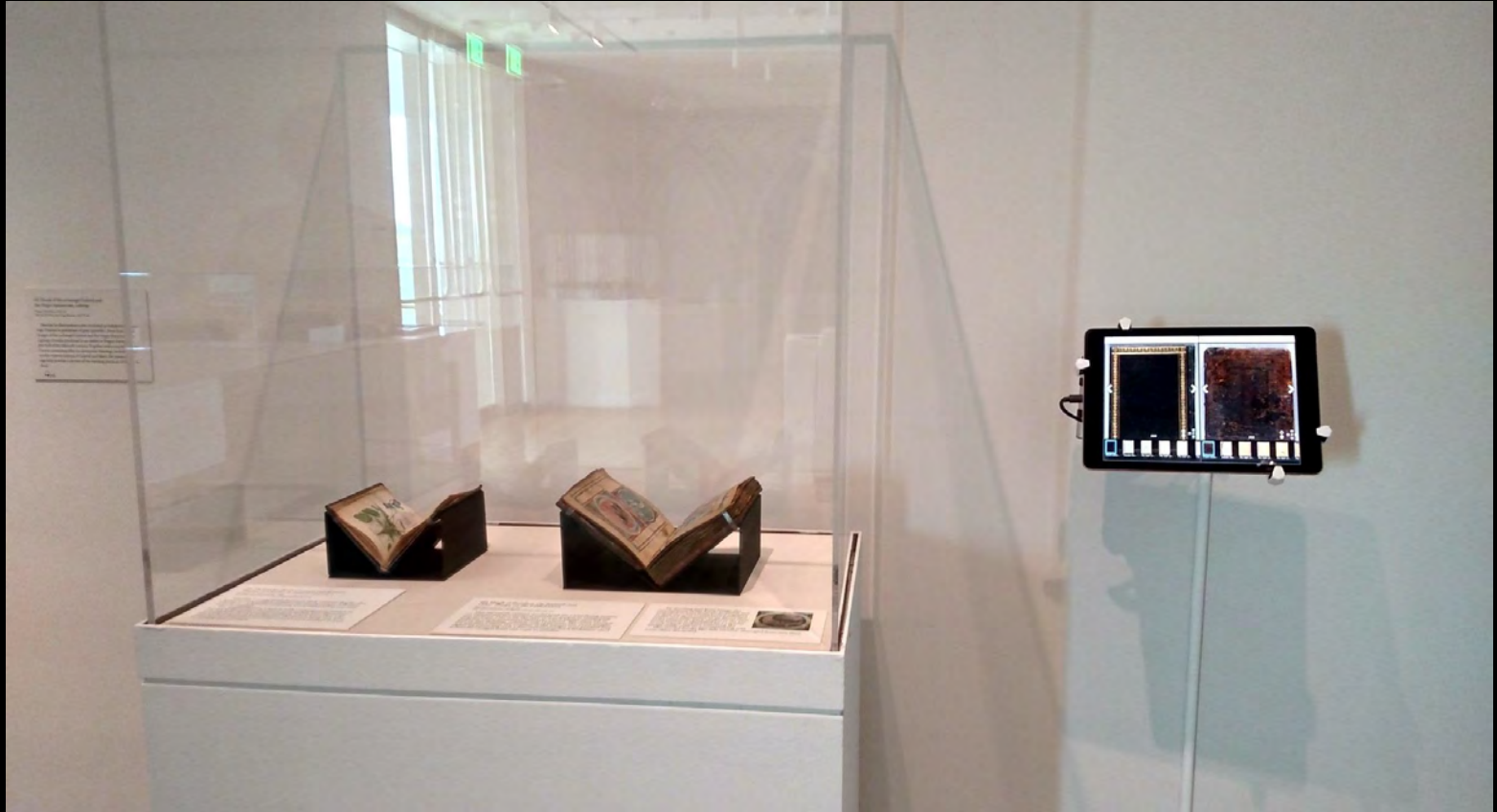


Show Annotation List

**CellXplorer (eukaryotic and prokaryotic cells)**

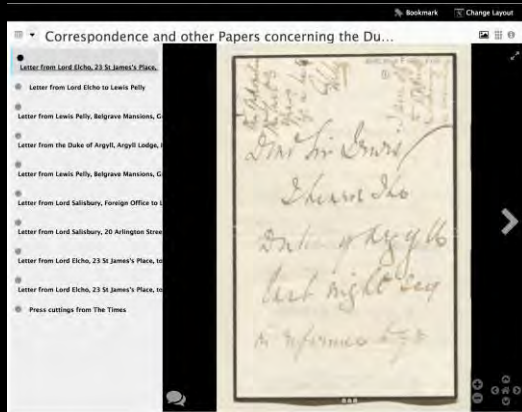


# Enrich

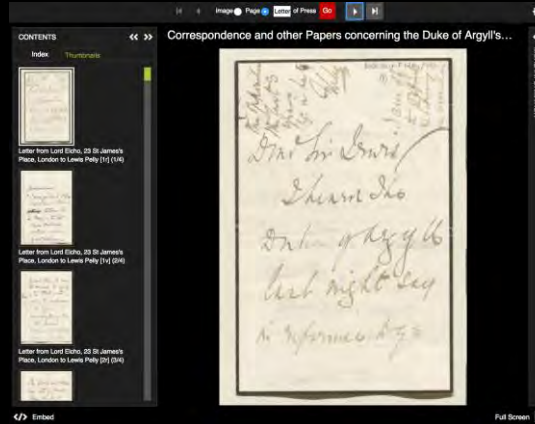


Mirador instances on display at McMullen Museum, Boston College.

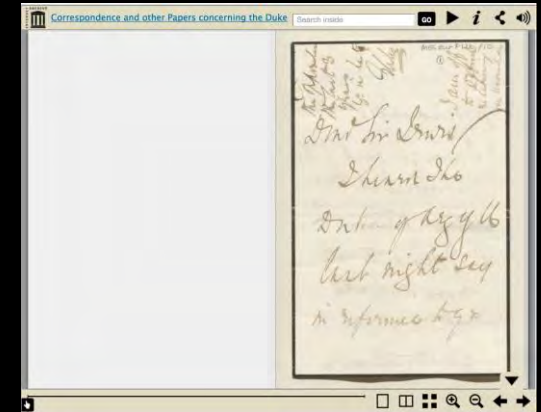
# All with the application of your choice



Mirador



Universal Viewer



IA Book Reader



Qatar Digital Library  
Archival papers shown in 4  
different viewers.

<http://labs.cogapp.com/iiif>





How does IIIF work?

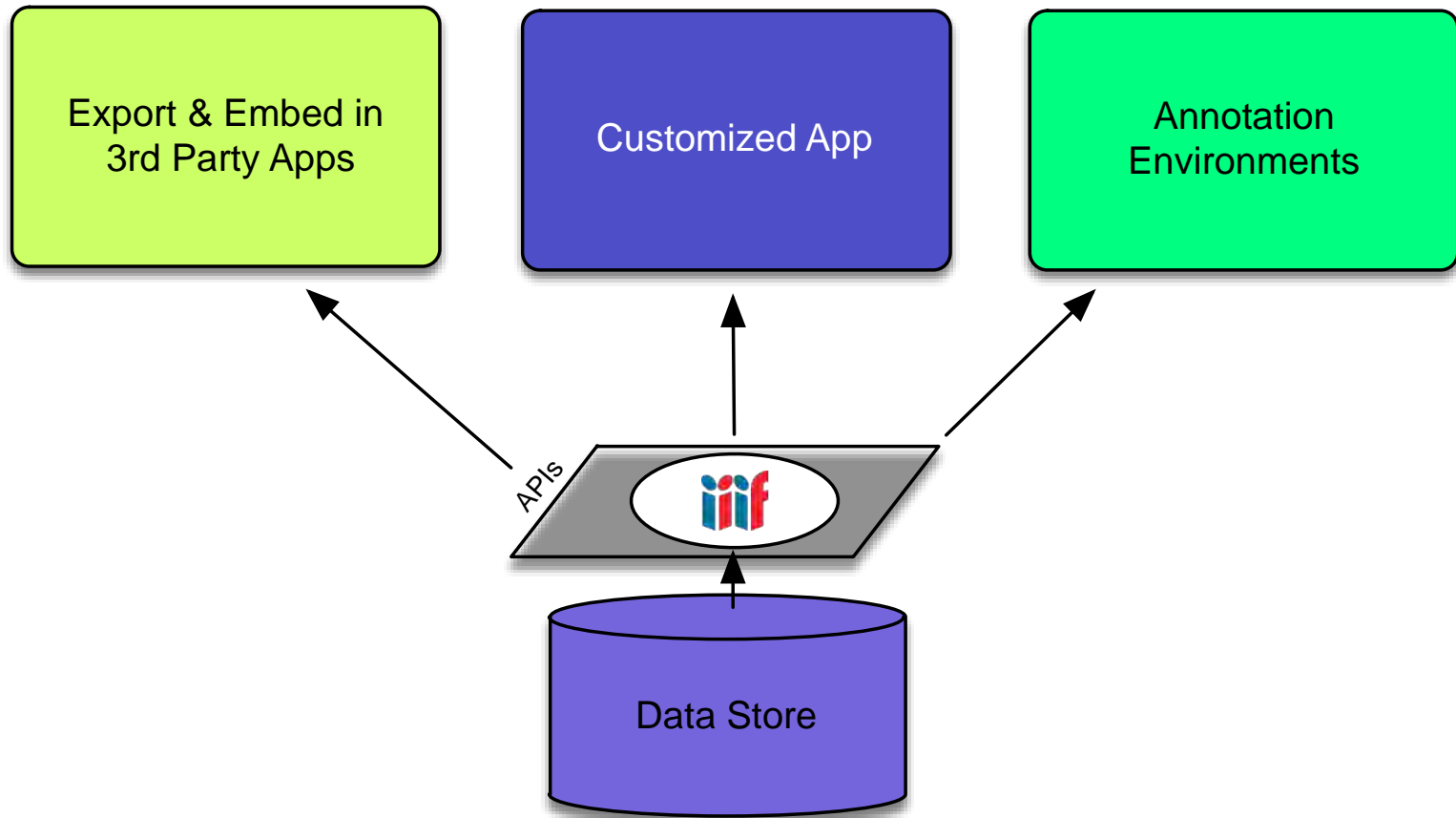
IIIF uses Application Programming  
Interfaces

APIs provide a structured way for  
connecting systems

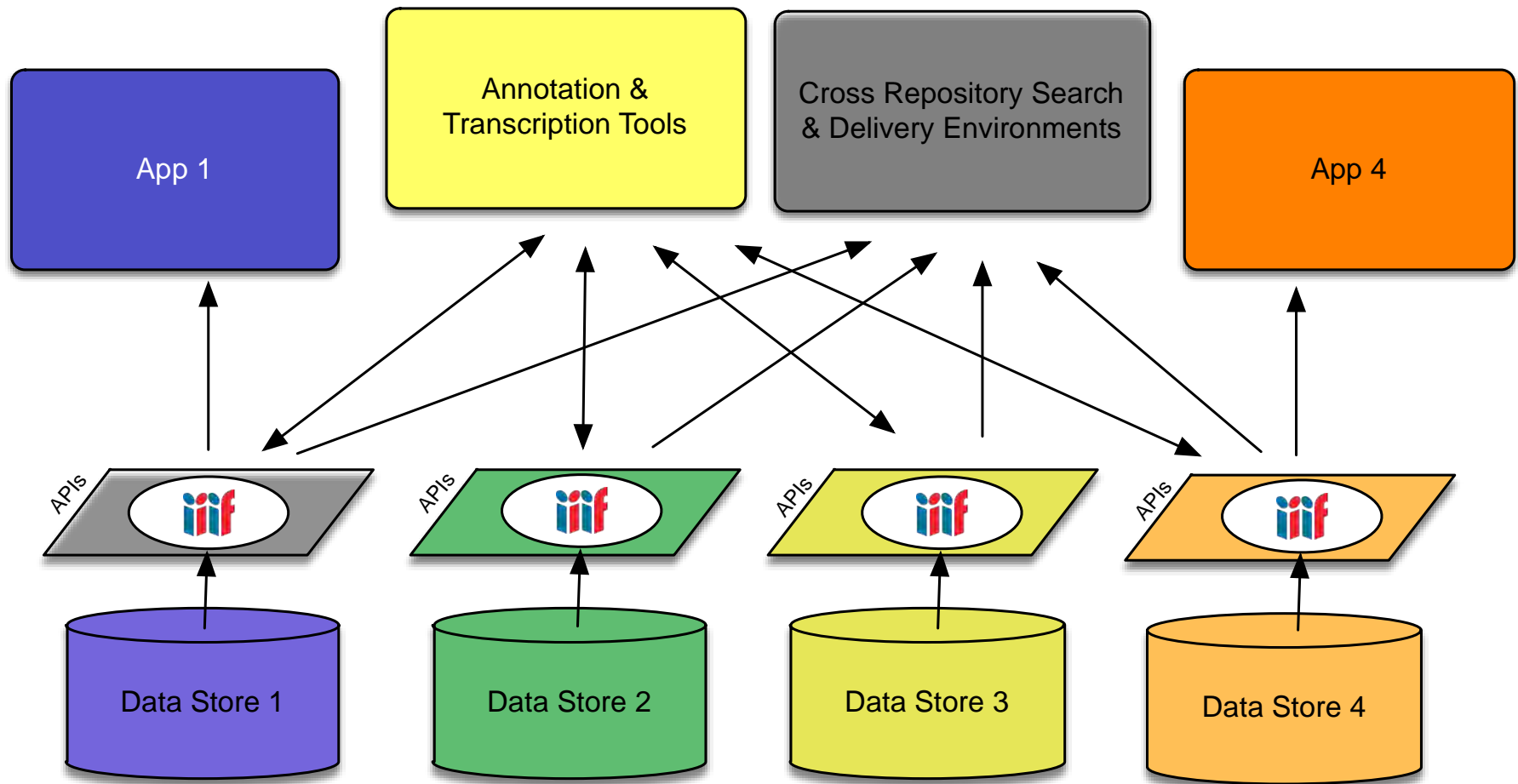


*"City02 Park\_05" by bluesstilllife is licensed under [CC BY 2.0](#)*

# APIs enable reuse



# APIs -> Framework -> Ecosystem



# IIIF Vision

Create a global framework by which image-based resources (images, books, maps, scrolls, manuscripts, musical scores, videos, etc.)

...from **any** participating institution can be delivered in a standard way

...via **any** compatible image server

...for display, manipulation and annotation in **any** application,

...to **any** user on the Web.

# IIIF: Two Core APIs



## **Image API**

“get pixels” via a simple, RESTful, web service

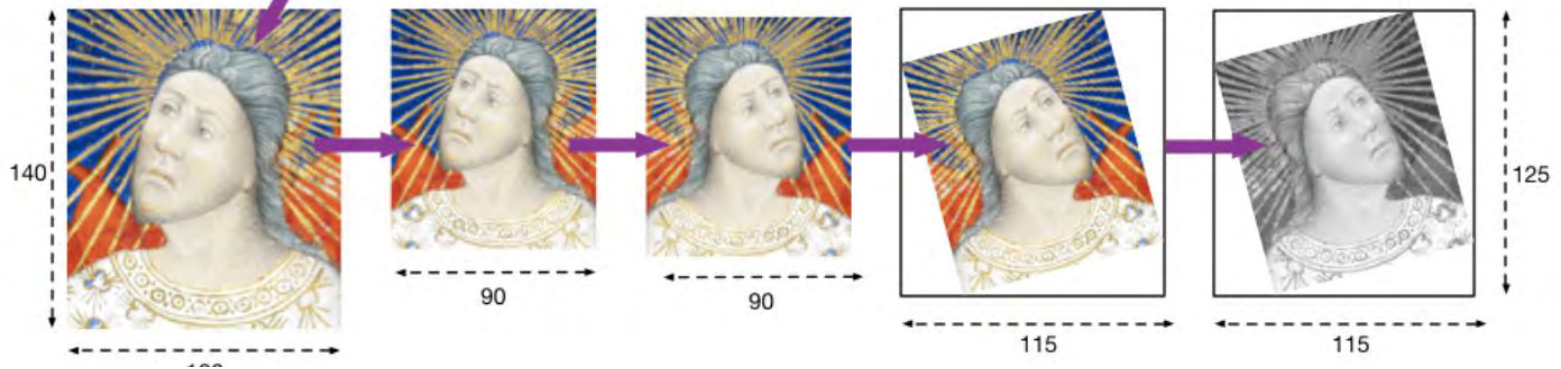
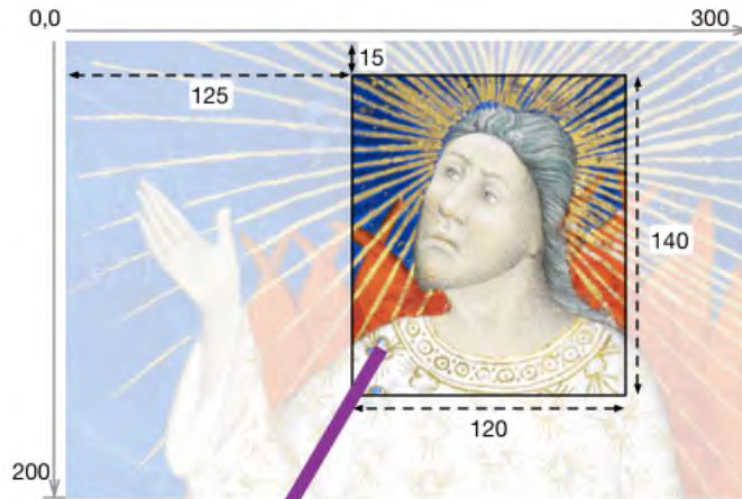


## **Presentation API**

Just enough metadata to drive a remote viewing experience



# Image Delivery API



`{scheme}://{server}/{prefix}/{identifier}/{region}/{size}/{rotation}/{quality}.{format}`

<http://iiif.io/api/image/2.1/>



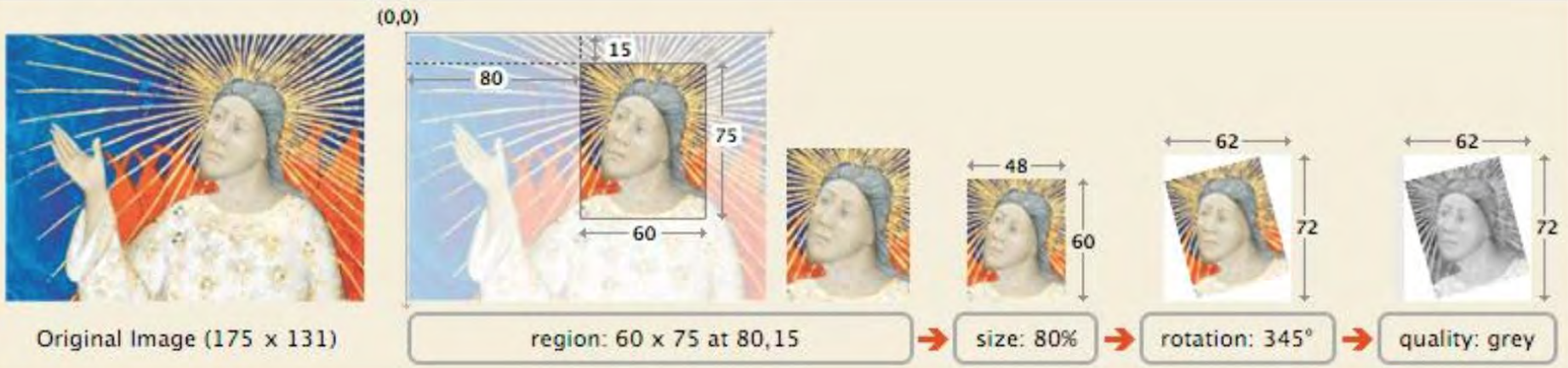


# Image Delivery API

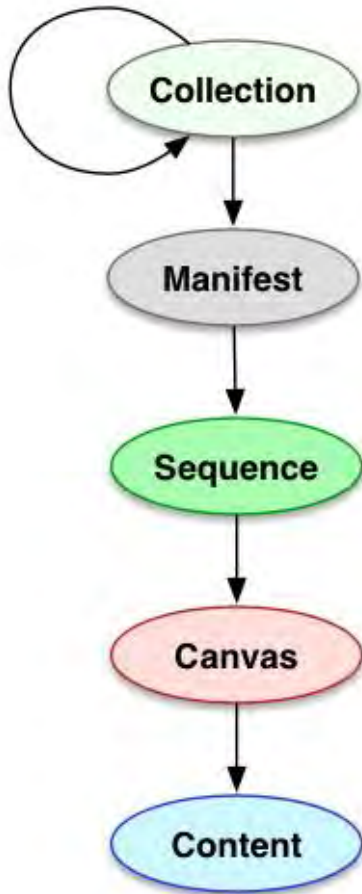
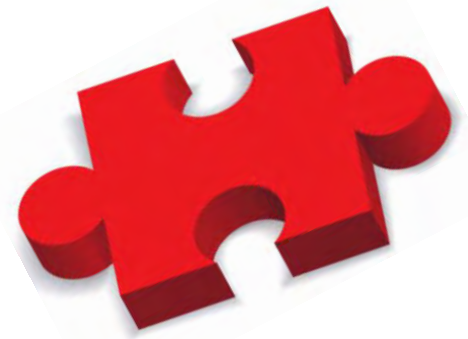
## Order of Implementation

<http://www.example.org/image-service/abcd1234/80,15,60,75/pct:80/345/grey.jpg>

region size quality rotation format



# Presentation API



- Structure
  - Collection, Item, Sequence, Parts
- Properties
  - Labels, description, license, attribution, links

<http://iiif.io/api/presentation/2.1/>



# Image + Presentation = Object

Bookmark Options Switch Workspace

MS Richardson 7. Houghton Library, Harvard University. Heures d...

Hours of the Cross (ff. 21-35)

- Matins (ff. 21-23v)
- Prime (ff. 23-24v)
- Terce (ff. 25-26v)
  - f. 25: Flagellation
  - f. 25v.
  - f. 26.**
  - f. 26v.
- Sext (ff. 27-28v)
- None (ff. 29-30v)
- Vespers (ff. 31-32v)
- Compline (ff. 33-35)
- Passion (ff. 35v-36v)
- Hours of the Holy Spirit (ff. 37-46v)

Image of a manuscript page (f. 26) showing text in French and Latin, with a large illuminated initial 'D' and a decorative border featuring a bird and floral motifs.

f. 24v. f. 25: Flag... f. 25v. f. 26. f. 26v. f. 27





# Image + Presentation = Object

Bookmark Options Switch Workspace

MS Richardson 7. Houghton Library, Harvard University. Heures d...

Hours of the Cross (ff. 21-35)

- Matins (ff. 21-23v)

**Presentation API**

- Title Label
- Structure (TOC)
- Sequence

Image API

- Image Data

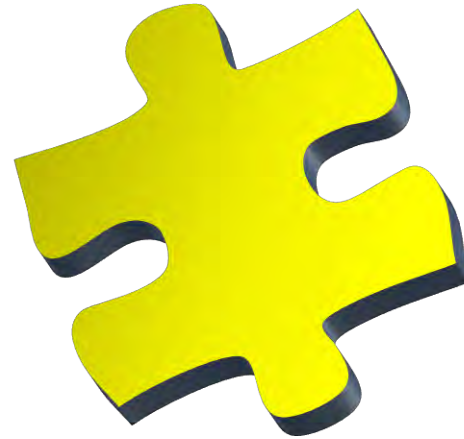
f. 24v. f. 25: Flag... f. 25v. f. 26. f. 26v. f. 27

# IIIF: Two More APIs



## **Content Search API**

Search within an object, such as the full text of a book or newspaper



## **Authentication API**

To support login, and differential access to resources.

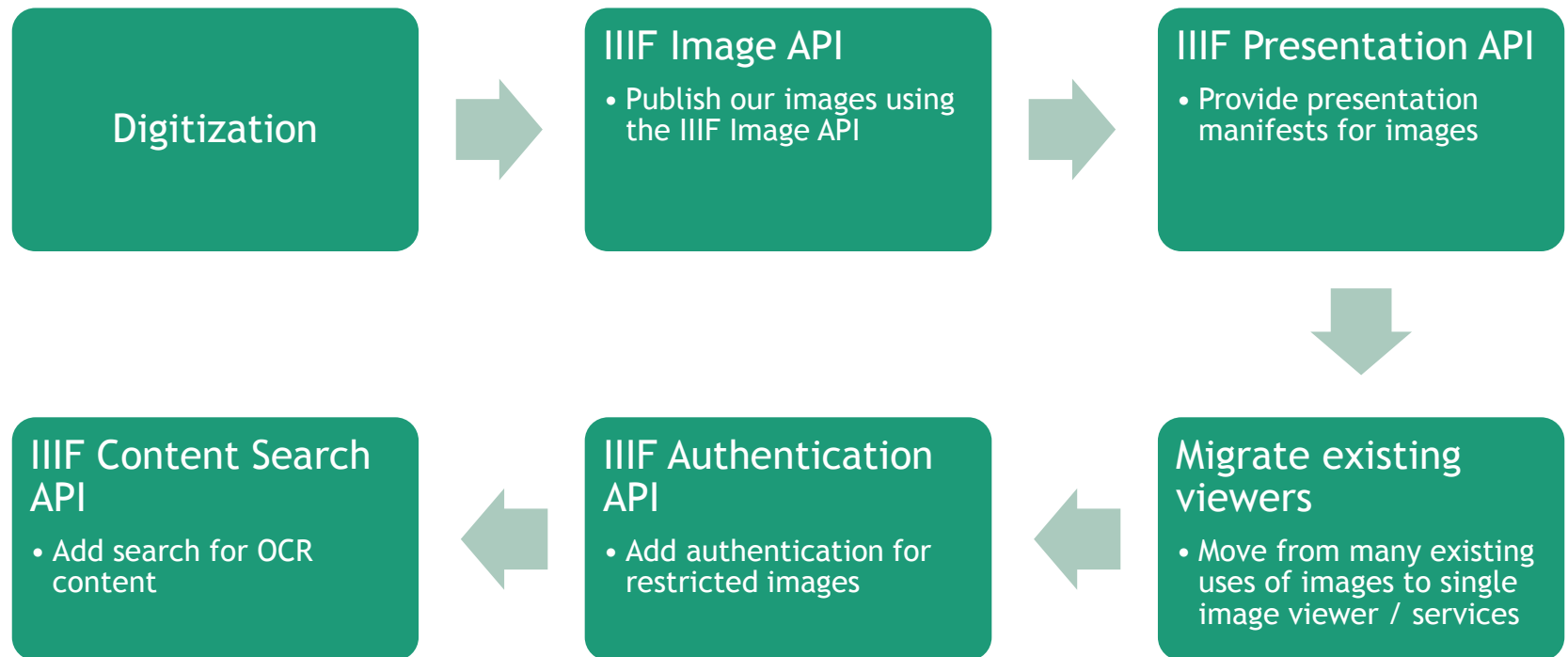


How do you get started  
with IIIF?

# IIIF Compatible Software

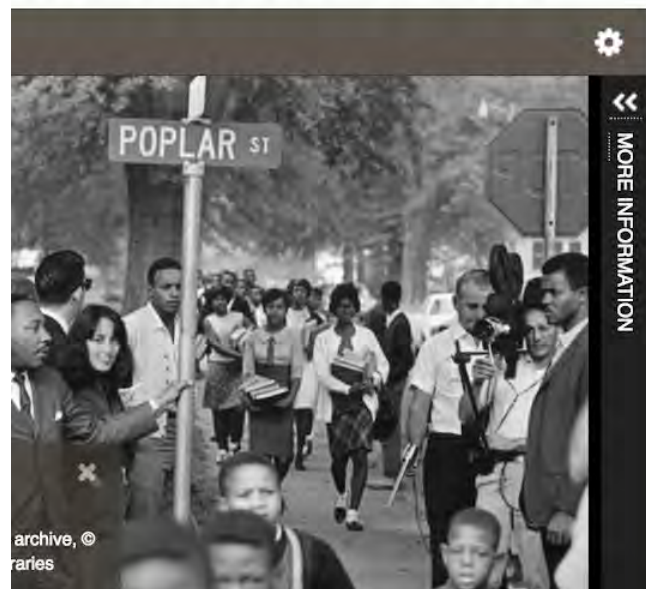


# Adoption at Stanford Libraries





# r) Martin Luther King Jr. & Joan Baez march to i ls, Grenada, MS, 1966



TYPE OF RESOURCE Still image

PLACE OF CREATION Grenada (Miss.)

DIGITAL ORIGIN 1966

EXTENT reformatted digit  
1 photograph

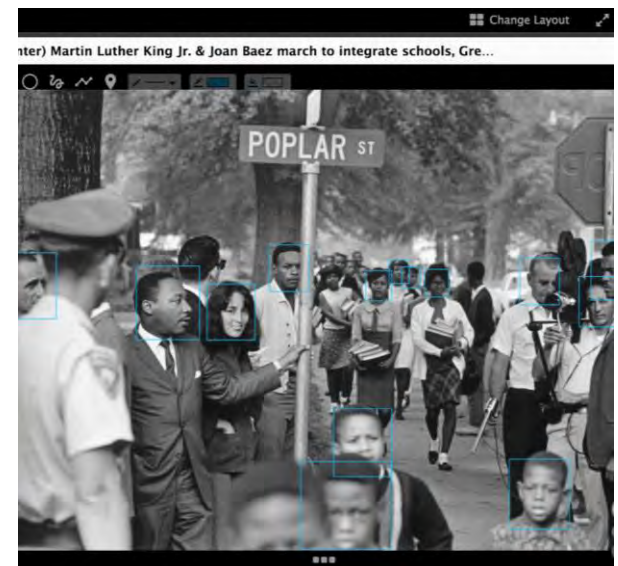
Results

search You searched for: Topic > King, Martin Luther, Jr., 1929-1968

Previous | 1 - 20 of 112 | Next

Save this search 20 per page

Luther, Jr.,	112
ations	23
ew, 1932-	17
ricans-Civil	11
story-20th	
Stokely	11
Stokely,	10



IIIF content available through many platforms from Stanford Libraries

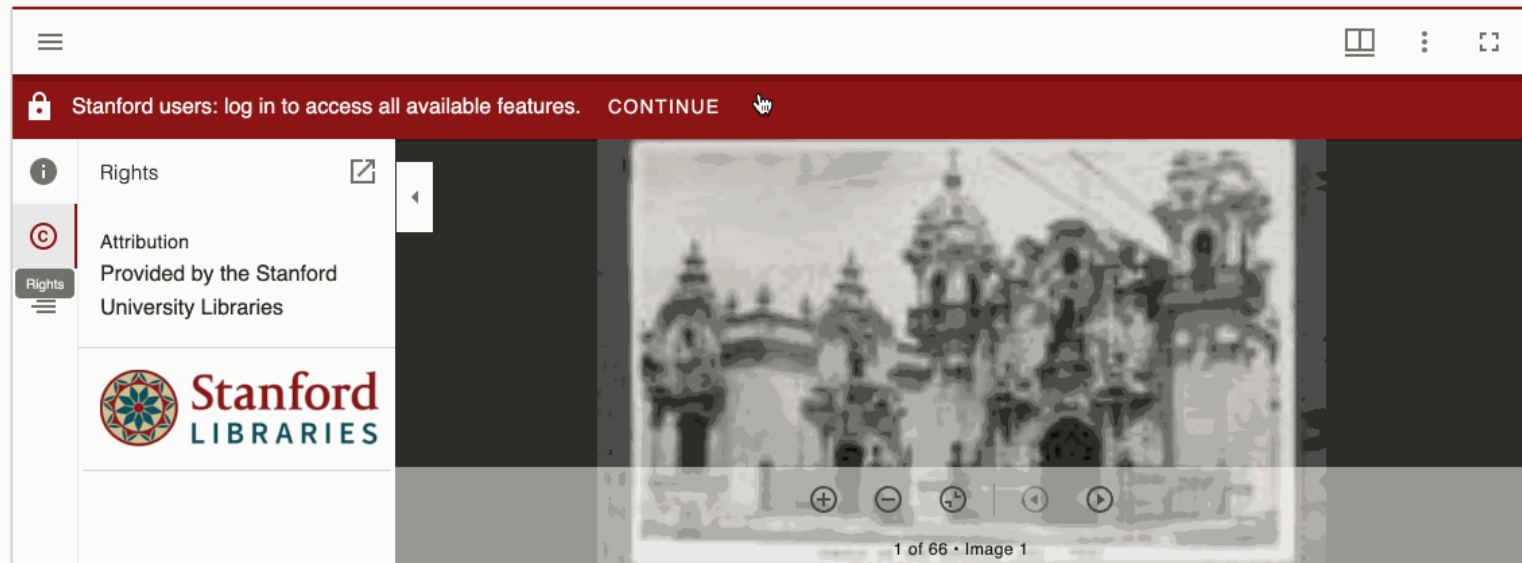
# IIF Authentication API

## Stanford Digital Repository

Malcolm B [ ] correspondence, to Miriam Kropp, 1948-1950

COLLECTION

Pedro Beltrán and Miriam Kropp Beltrán papers, circa 1914-1979

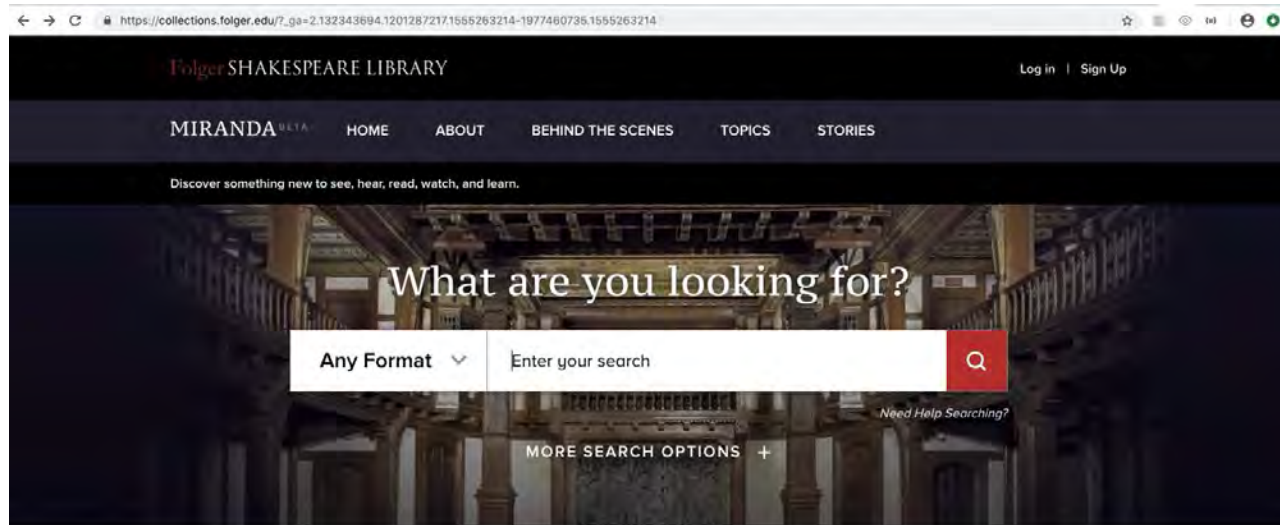


[Access conditions](#)



How others use IIIF

# Embedded in Catalog (Folger Library)



## What is Miranda?

Miranda helps you discover something new to see, hear, and learn from the world of the Folger Shakespeare Library.

Whether you're doing research or searching for something fun, Miranda can help you find what you're looking for.

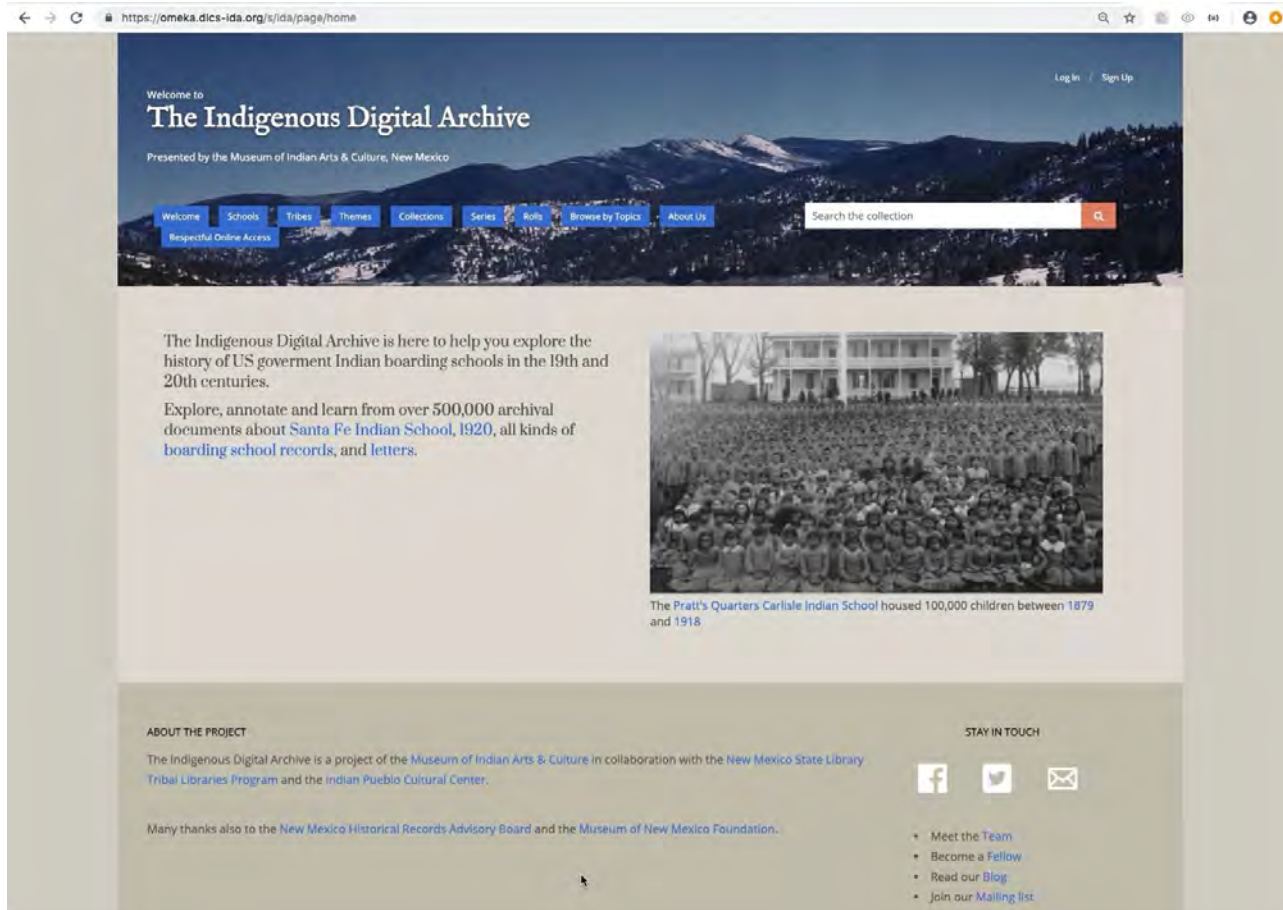
Miranda holds images, videos, podcasts, and datasets for you to explore. Miranda also holds library records for the thousands of objects in the Folger's collections that are not yet digitized, giving you rich and detailed information about

## Explore what's on Miranda:



collections.folger.edu/detail/.../e60fe7b8-de3a-4092-895c-ff3d0c4e3db2?type=detail

# Small Collection Presentation: Indigenous Digital Archive



The screenshot shows the homepage of the Indigenous Digital Archive. The browser address bar displays <https://omeka.dics-ida.org/s/ida/page/home>. The page features a header with a mountain landscape background. The main title is "The Indigenous Digital Archive", presented by the Museum of Indian Arts & Culture, New Mexico. A navigation menu includes links for Welcome, Schools, Tribes, Themes, Collections, Series, Rolls, Browse by Topics, and About Us. A search bar is located on the right. The main content area includes a paragraph about the archive's purpose, a list of archival documents, and a photograph of a large group of children. The footer contains information about the project, social media links, and a list of links to meet the team, become a fellow, read the blog, and join the mailing list.


Welcome to  
**The Indigenous Digital Archive**  
Presented by the Museum of Indian Arts & Culture, New Mexico

Welcome Schools Tribes Themes Collections Series Rolls Browse by Topics About Us  
Respectful Online Access

Search the collection

The Indigenous Digital Archive is here to help you explore the history of US government Indian boarding schools in the 19th and 20th centuries.

Explore, annotate and learn from over 500,000 archival documents about [Santa Fe Indian School, 1920](#), all kinds of [boarding school records](#), and [letters](#).



The Pratt's Quarters Carlisle Indian School housed 100,000 children between 1879 and 1918

**ABOUT THE PROJECT**

The Indigenous Digital Archive is a project of the [Museum of Indian Arts & Culture](#) in collaboration with the [New Mexico State Library Tribal Libraries Program](#) and the [Indian Pueblo Cultural Center](#).

Many thanks also to the [New Mexico Historical Records Advisory Board](#) and the [Museum of New Mexico Foundation](#).

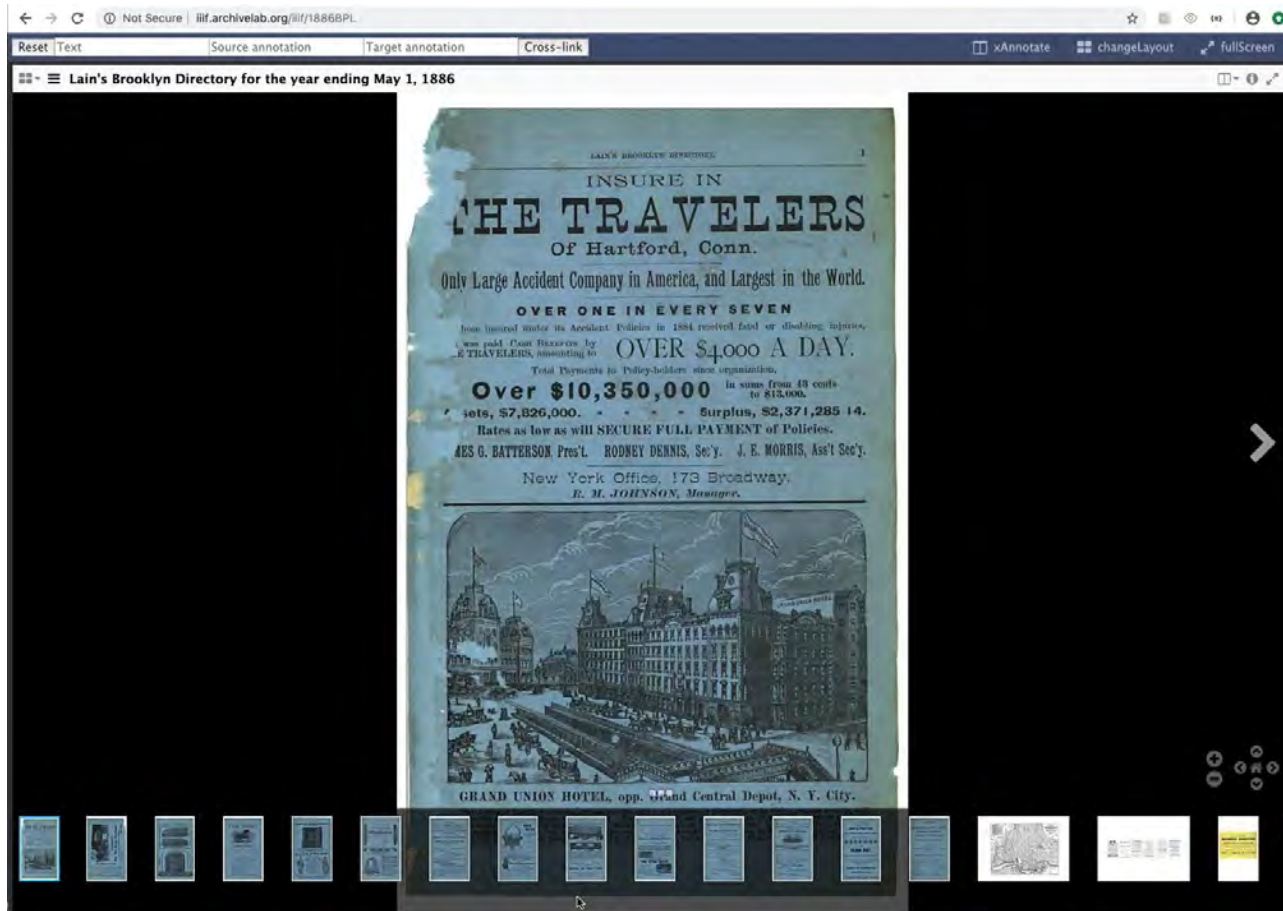
**STAY IN TOUCH**

[f](#) [t](#) [✉](#)

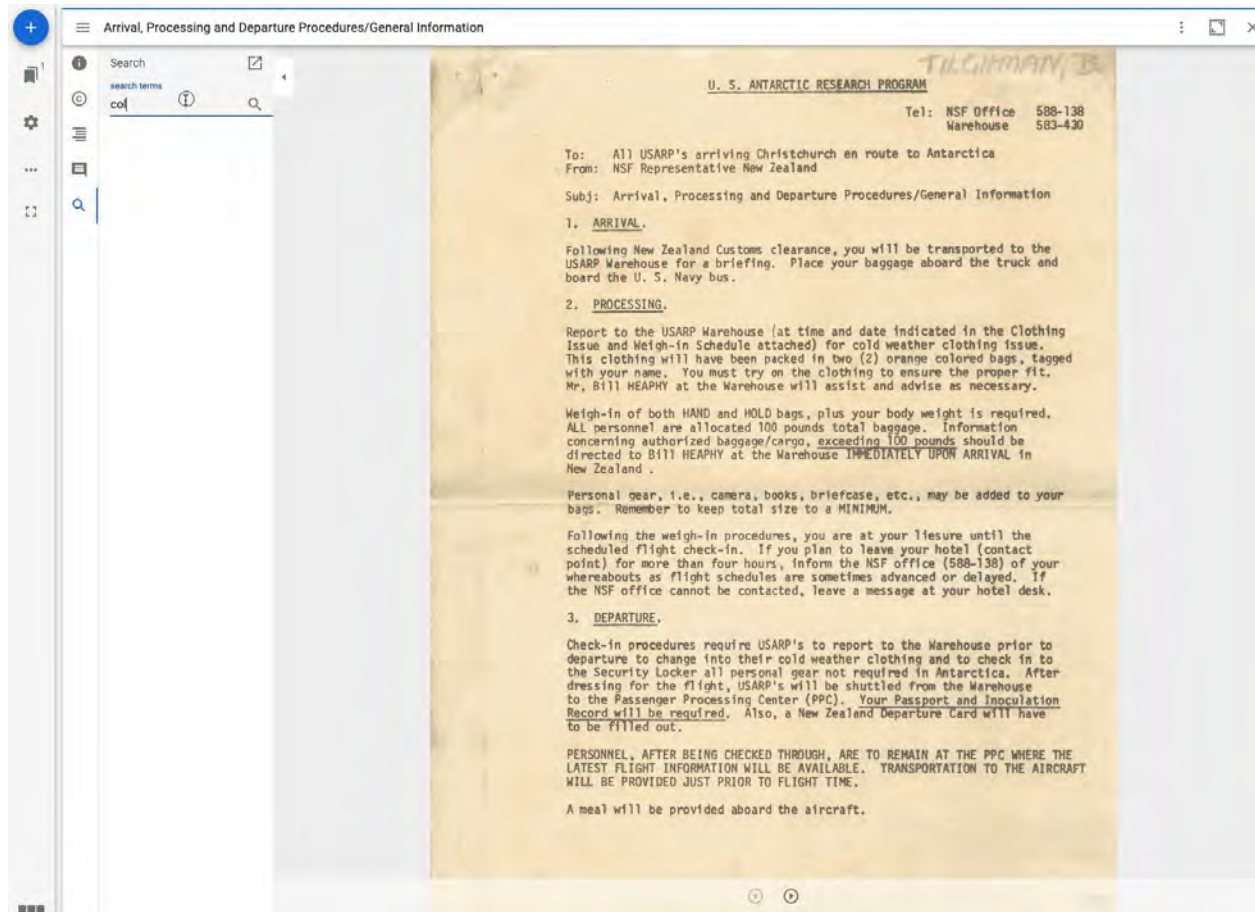
- [Meet the Team](#)
- [Become a Fellow](#)
- [Read our Blog](#)
- [Join our Mailing list](#)



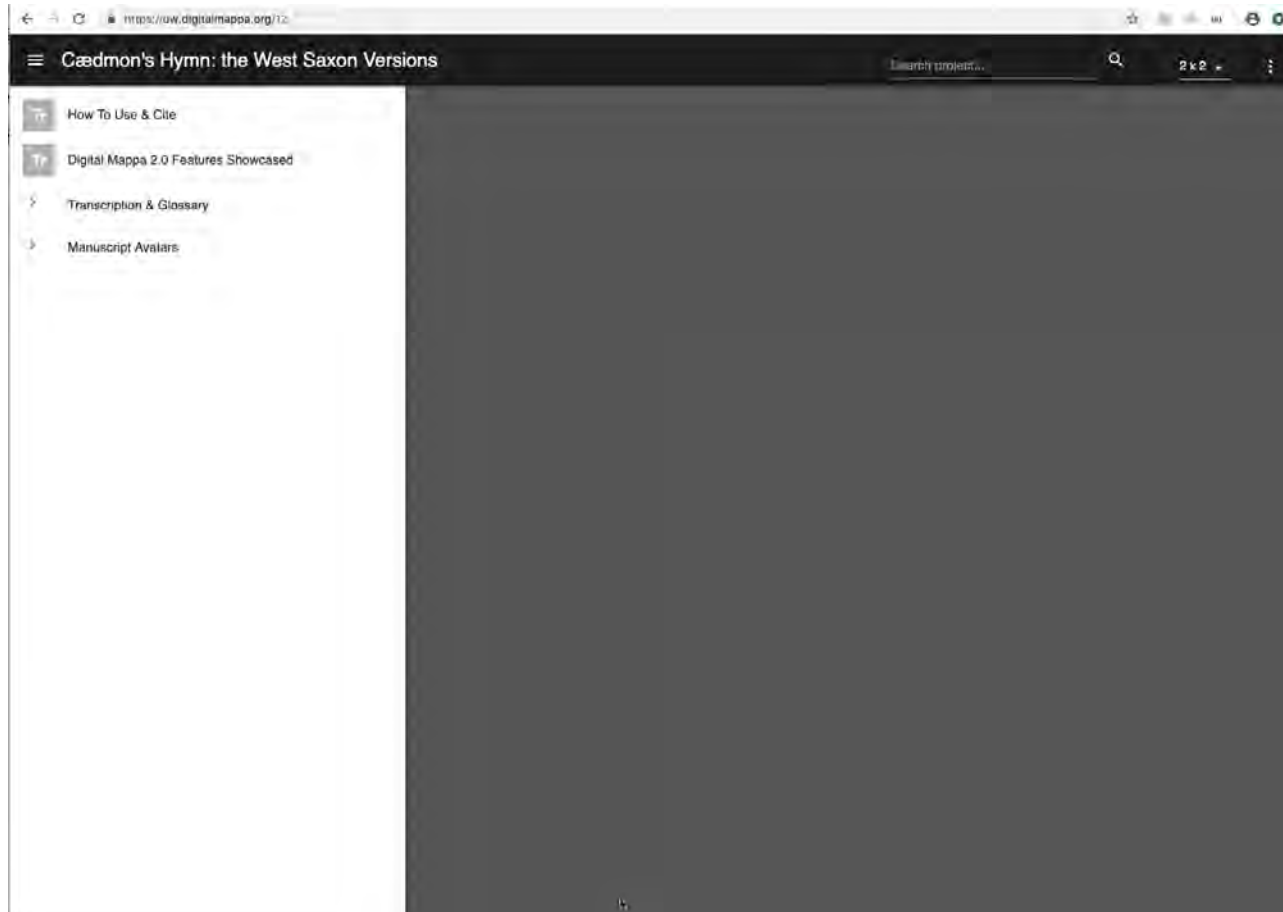
# Book Viewer (Internet Archive)



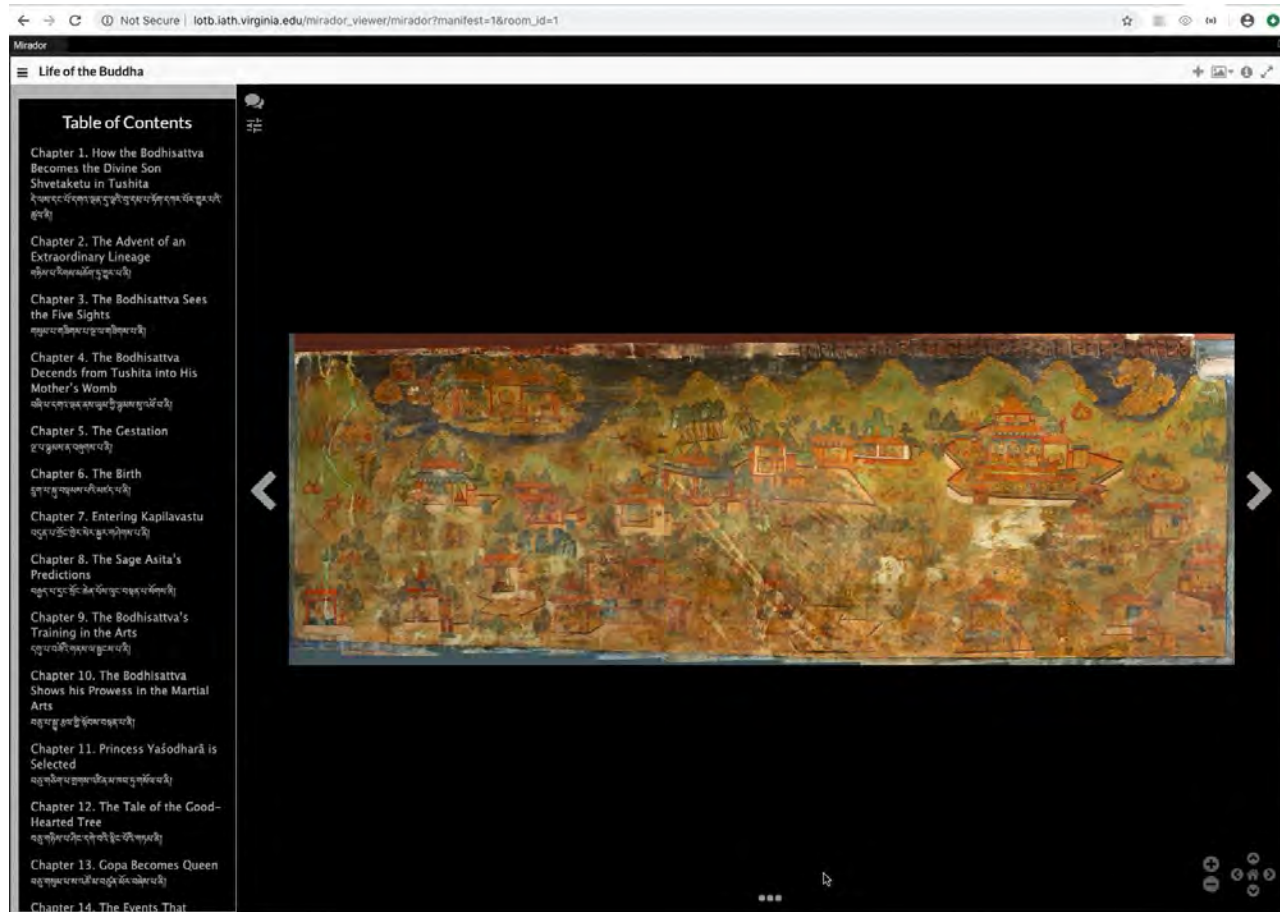
# Content search documents



# Digital Scholarship (Digital Mappa)

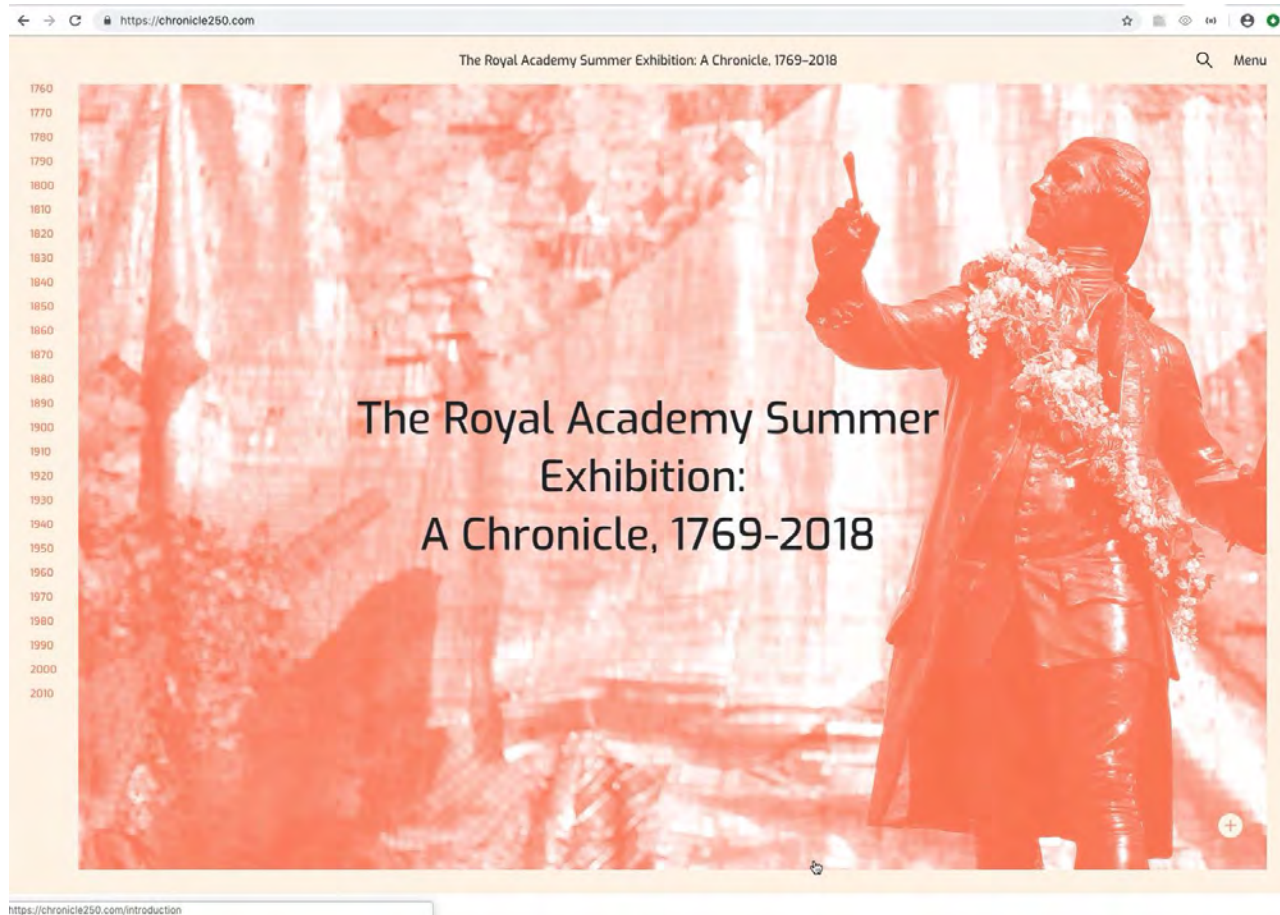


# Collaborative Annotation (Life of Buddha)





# Name-Entity Recognition (Royal Academy)



# Crowdsourcing (National Library of Wales)

https://crowd.library.wales/en/s/livingstone2/iiif/manifest/1059/5beacb4b0021f

**LGC NLW** LLYFRGELL GENEDLAETHOL CYMRU  
THE NATIONAL LIBRARY OF WALES


hadro Logout

Ffotograffiaeth Livingstone Evans Photography 2

Home View all collections About the project Help & Tutorials Contact Current Projects Cymraeg

Gwilym Livingstone Evans 2 · R. Jones c/o Manor Divy; Wedding 7 · Mairwyn Jones - Music Society - Savings at Queens Hotel - Dr Daynes - Nov-69 · 26N/6

26N/6



Choose what you want to tag

Please select which of the types of information you would want to capture about this photograph

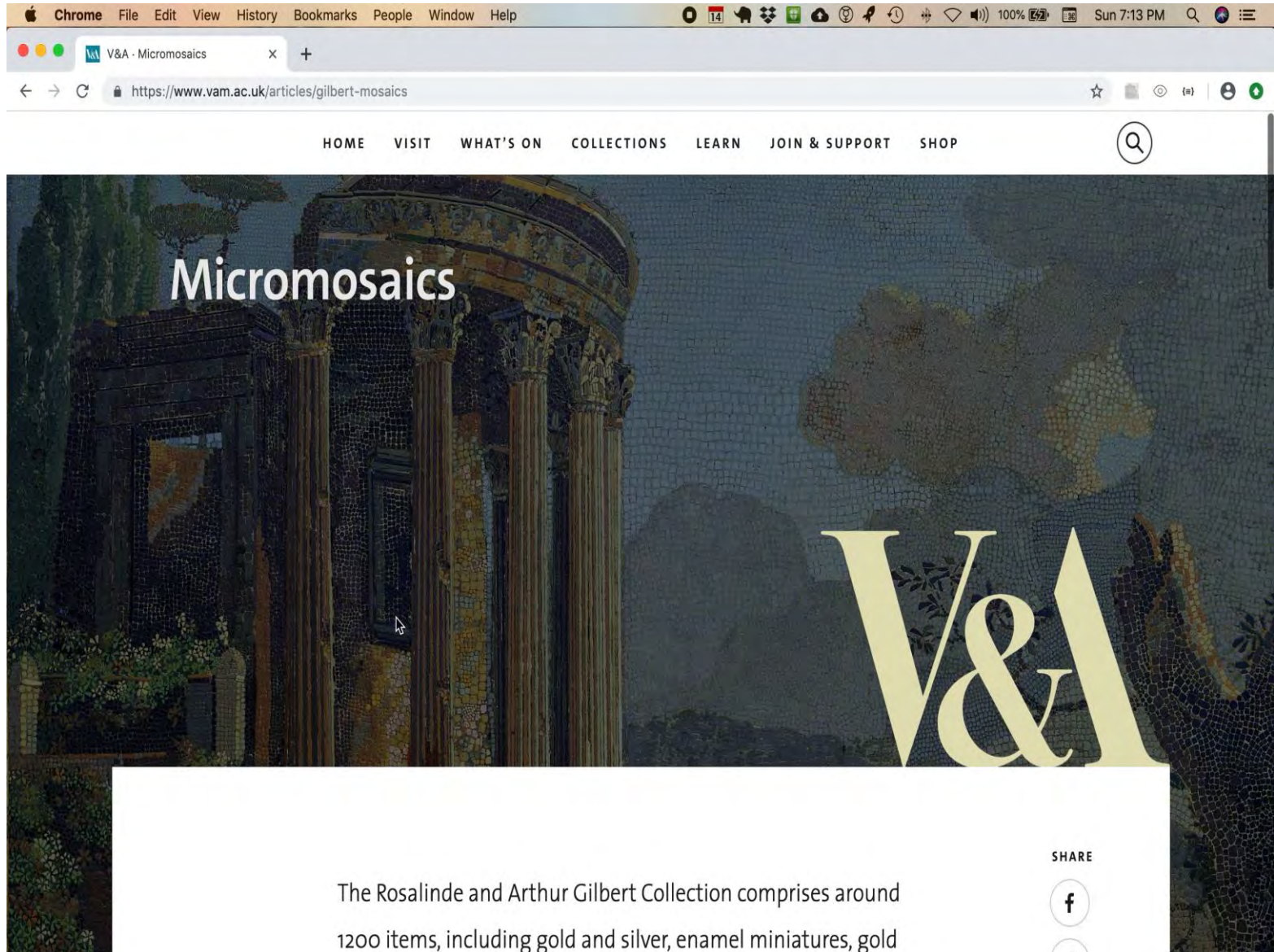
Whole photograph ?

Person ?

Tags ?

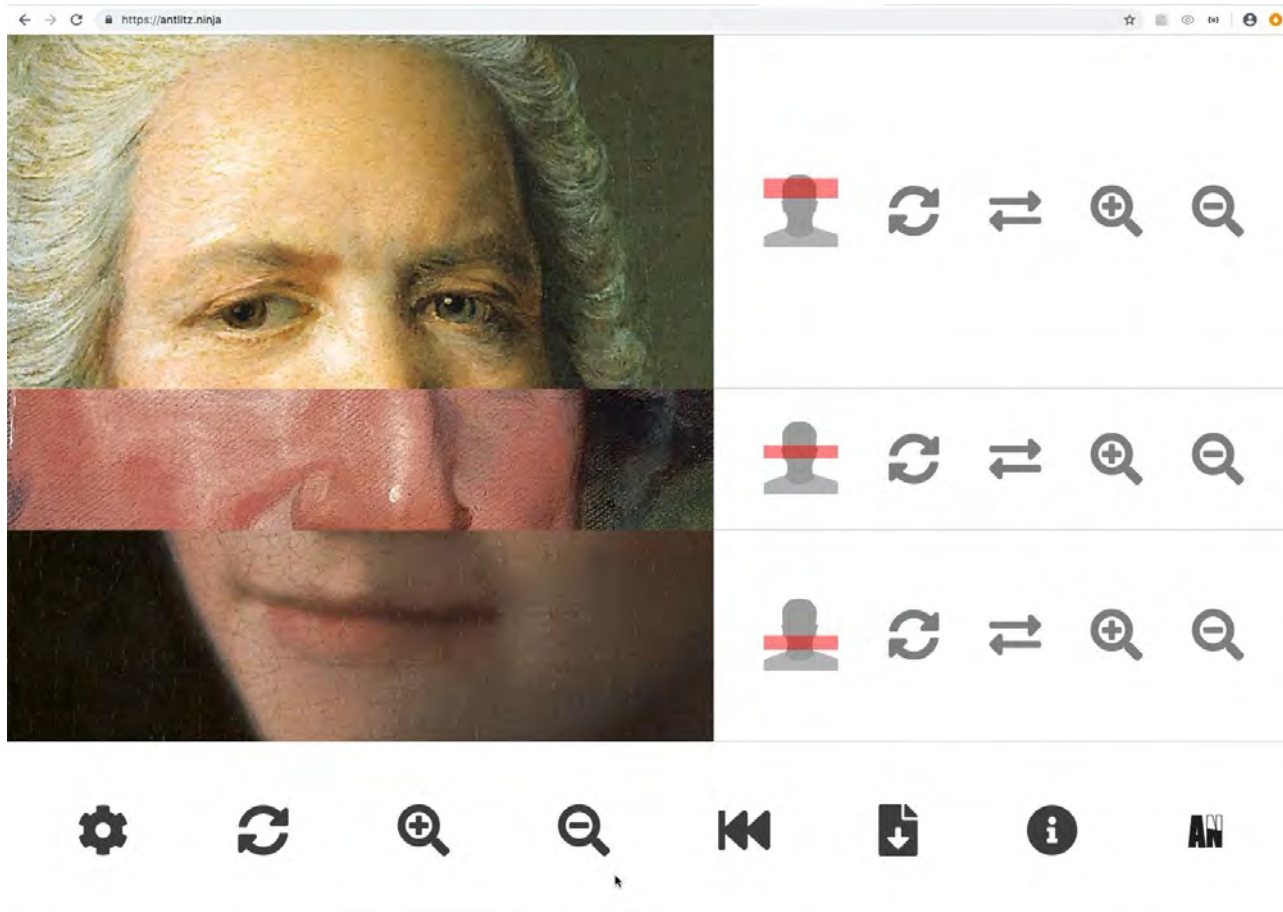
Memories ?

# Guided Viewing and Stories (V&A)





# Exquisite Corpse with Portraits









Nueva Hispania tabula nova



The North part of America conteyning Newfoundla...



AMERICA with those known parts in that unknown...



AUDIENCIA DE GUADALAJARA, NOVA MEXICO CALI...



Paskaerte van NOVA GRANADA, en t'Eylandt CALI...



New MEXICO



Carte generale du monde, ou description du mond...



[Americas]



Mapemonde planisphere ou carte generale du mon...



CARTE DE LA CALIFORNIE suivant I. la Carte man...



Kaart van de geheele wereld na de alderlaatste on...



[Oranda shinyaku chikyu zenzu : The complete ma...





# Old Map Room



<https://www.jack-reed.com/old-map-room/>





<https://www.jack-reed.com/old-map-room/>

1812 - Asia. (Boston: Published by Thomas & Andrews. 1812)

Property rights reside with the repository, Copyright © Stanford University. Images may be reproduced or transmitted, but not for commercial use. For commercial use, please contact [rumseymapcenter@stanford.edu](mailto:rumseymapcenter@stanford.edu). This work is licensed under a Creative Commons License. By downloading any images from this site, you agree to the terms of





# State of the Art with IIIF



Audio and Moving Image

# Interactive Transcripts

https://openhypervideo.github.io/iiif-interactive-transcript/

## Simple IIIF Interactive Transcript - BBC TextAV

Get Random Manifest  
<https://tomcrane.github.io/bbctextav/iiif/ID193614200.json>  
Parse Manifest View Manifest

### 07.06.2018: Europäische Zukunftsstrategie für Afrika



Deutscher Bundestag  
live  
Eva-Maria Elisabeth Schreiber, Die Linke  
0:32 / 5:11  
23:23

00:16 - 00:22  
Ich kann die Kolleginnen und Kollegen der AfD-Fraktion und der FDP-Fraktion verstehen,

00:22 - 00:25  
dass der Abend launige Auseinandersetzungen befördert;

00:25 - 00:26  
aber es wäre schön,

00:26 - 00:34  
**Sie würden der Rednerin zuhören.**

00:34 - 00:35  
Danke. –

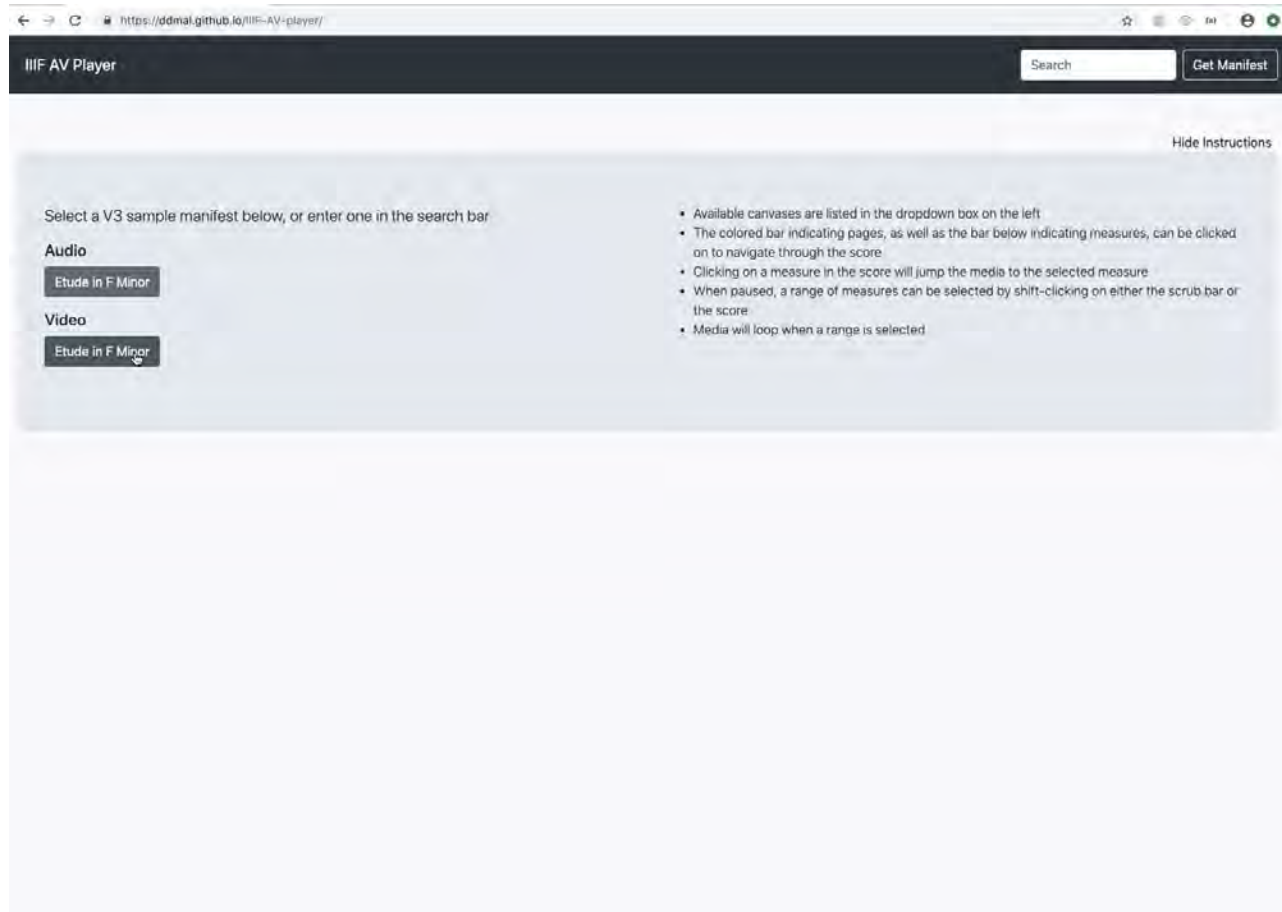
00:35 - 00:40  
Der afrikanische Kontinent leidet bis heute unter den Folgen von Kolonialismus,

# Timeliner by Digirati/Indiana Univ.

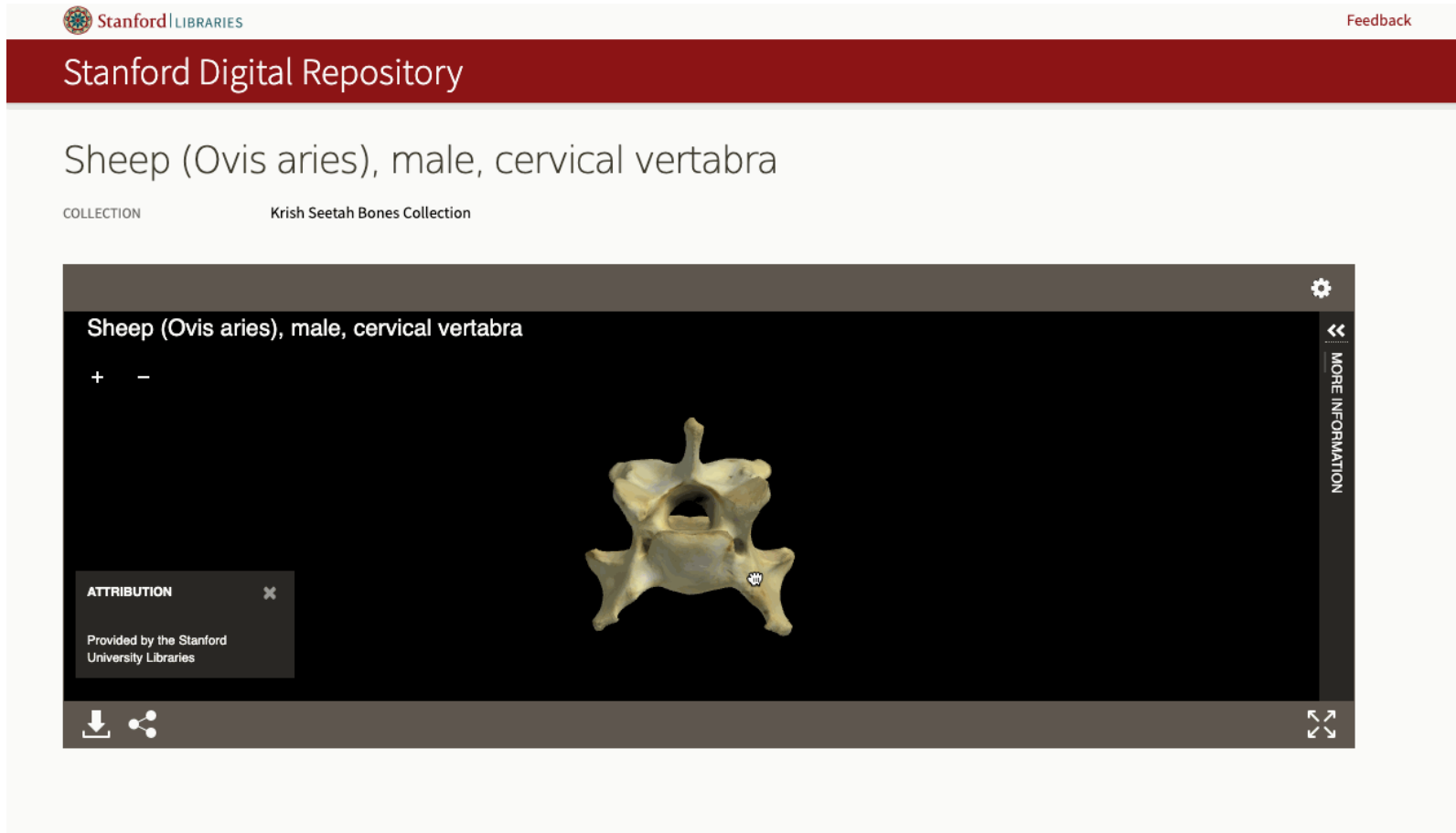
The screenshot displays the Timeliner web application interface. At the top, a browser window shows the URL <https://iitl-timeliner.netlify.com>. The main area features a horizontal timeline with colored segments representing musical sections: A (blue), b1 (green), b2 (green), A' (blue), b1' (green), b3 (green), A'' (blue), b1'' (green), b4 (green), and Coda (green). Below the timeline is a playback control bar with a progress indicator at 00:00 / 05:30 and buttons for play, pause, and other controls. The bottom section is divided into two panels. The left panel, titled 'Annotations', contains a text box for section 'A' with the description: 'The severely simple violinistic A theme of this Nocturne hovers gently over a D♭ pedal and wide left-hand arpeggiations.' The right panel, titled 'Project', displays the title 'Chopin, Nocturne in D-Flat Major' and a detailed description of the piece, including its composition date (1835), dedication (Mme. la Comtesse d'Agouy), and structural analysis (alternating between two main ideas, A and B, with various modifications and keys). The source is cited as [http://www.dlib.indiana.edu/~iitl/Chopin\\_nocturne.mp3](http://www.dlib.indiana.edu/~iitl/Chopin_nocturne.mp3). The footer indicates '© Indiana University, 2018' and provides links for 'About | Timeliner | Help | Contact'.



# Music Annotation by McGill DDMAL



# IIIF 3D Community Group



<https://purl.stanford.edu/hc941fm6529>



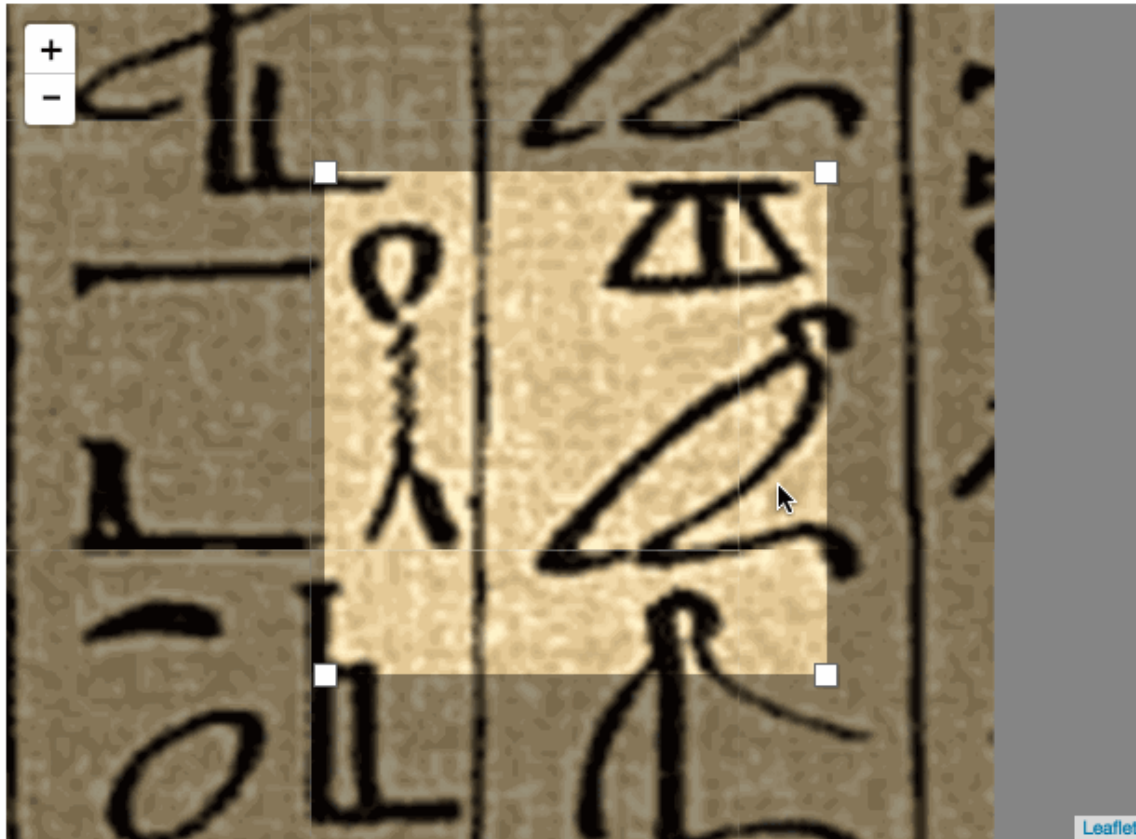
# Machine Learning/AI

- Web native APIs provide a consistent way to access images (and parts of images)
- IIIF speaks annotations out of the box, perfect for classification and shape detection

# Pattern Recognition (Proof of Concept)

## Create Image Templates

Move around the image to find templates to use for intersection finding.

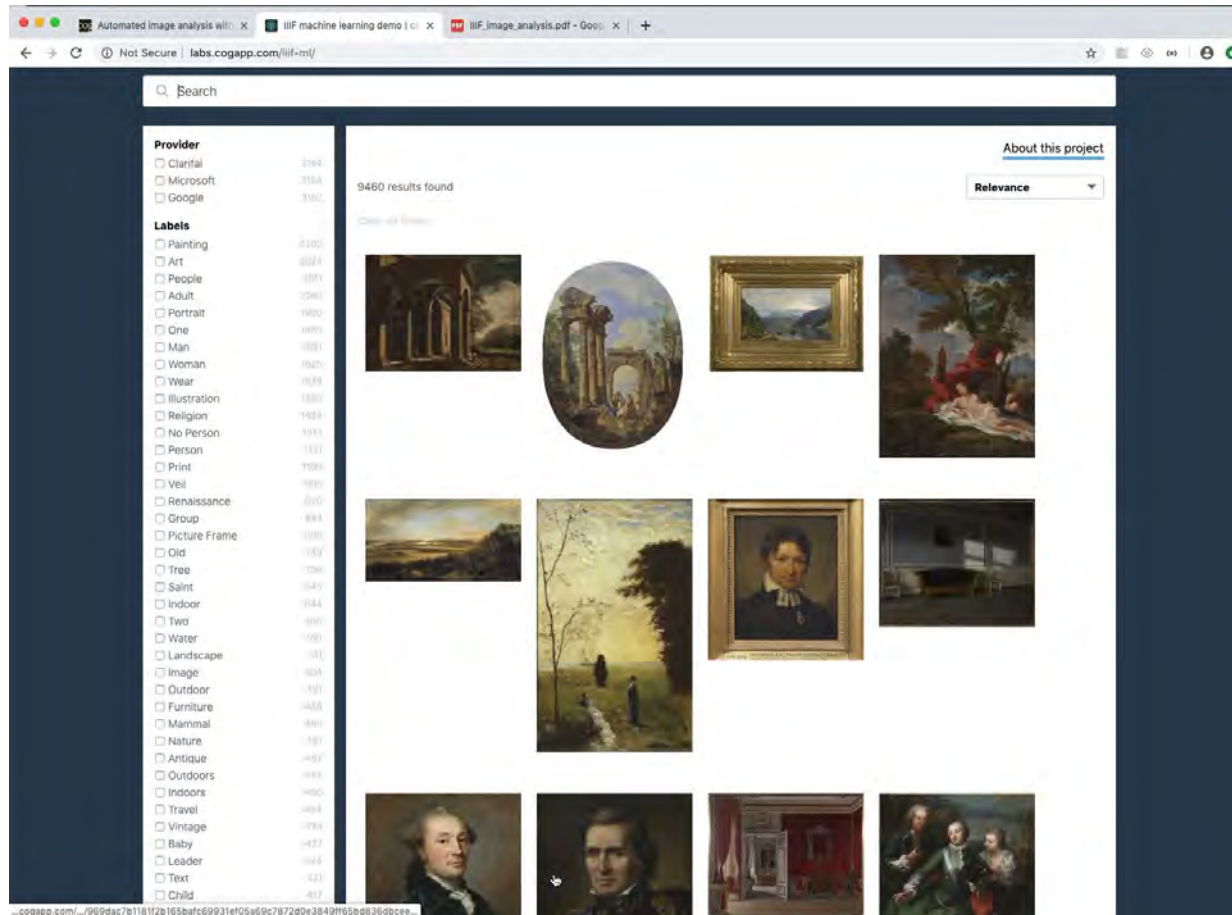


Add template of cropped area

Next Step



# Feature Extraction (Proof of Concept)



# Feature Extraction for Scholarship

## Japanese Center for Open Data in the Humanities: IIF-based “Collection of Facial Expressions”

Collection of Facial Expressions

日本語 / English / Login / Help / List

tag


Art (5775) / Drawing (5503) / Sketch (5317) / Illustration (4893) / Cartoon (4459) / Person (42) / Clothing (2238) / Modern art (1777) / Comics (1081) / Mural (996) / Figure drawing (850) / H. Carving (488) / Portrait (459) / Organ (442) / Ancient history (404) / Sculpture (381) / Iron (36) / Hand (236) / Relief (225) / Man (224) / Calligraphy (217) / Textile (209) / Font (204) / Arm Mammal (169) / Food (162) / Text (155) / Wood (149) / Wing (127) / Vehicle (122) / Greer Invertebrate (92) / Footwear (92) / Statue (89) / Money (89) / Currency (86) / Insect (84) / Stone carving (71) / Flower (69) / Glass (68) / Hair (68) / Dog (67) / Number (59) / Fashion Design (49) / Leaf (48) / Sports (36) / Hairstyle (35) / Monument (33) / Dessert (32) / Prot Acrylic paint (26) / Mythology (24) / Glasses (24) / Advertising (23) / Window (23) / Tapestry ( Automotive exterior (19) / Writing (19) / Fiction (19) / Label (19) / Cat (18) / Facial hair (18) / Shoe (17) / Red (17) / Wheel (17) / Yellow (16) / Drink (16) / Coin (16) / Monochrome photo Circle (14) / Close-up (13) / Play (13) / Leg (13) / Lighting (13) / Anime (13) / Picture frame Arthropod (10) / Cuisine (9) / Furniture (9) / Macro photography (9) / Paper (9) / Floor (9) / Sports equipment (8) / Fish (8) / Land vehicle (8) / Musical instrument (8) / Branch (8) / Moti Jewellery (7) / Boat (7) / Chest (7) / Document (7) / Pink (7) / Guitar (6) / Line (6) / Peo Bike (5) / Transport (5) / Award (5) / Eye (4) / Still life (4) / Dress (4) / Brand (4) / White String instrument (4) / Moth (4) / Stuffed toy (3) / Bottle (3) / Ceramic (3) / Watercraft (3) / Costume (3) / Alcoholic beverage (3) / Temple (3) / Line art (3) / Watercolor paint (3) / Soldie Surfing Equipment (2) / Ducks, geese and swans (2) / Waterfowl (2) / Recreation (2) / Asphalt (2) / Geology (2) / Breakfast (2) / Marine biology (2) / Butterfly (2) / Pollinator (2) / Musician (2) / Road surface (2) / Horse (2) / Archaeological site (1) / Licence plate (1) / Commemorative plaque

Collection of Facial Expressions

Search

Curation Canvas

1081 results tag : Comics



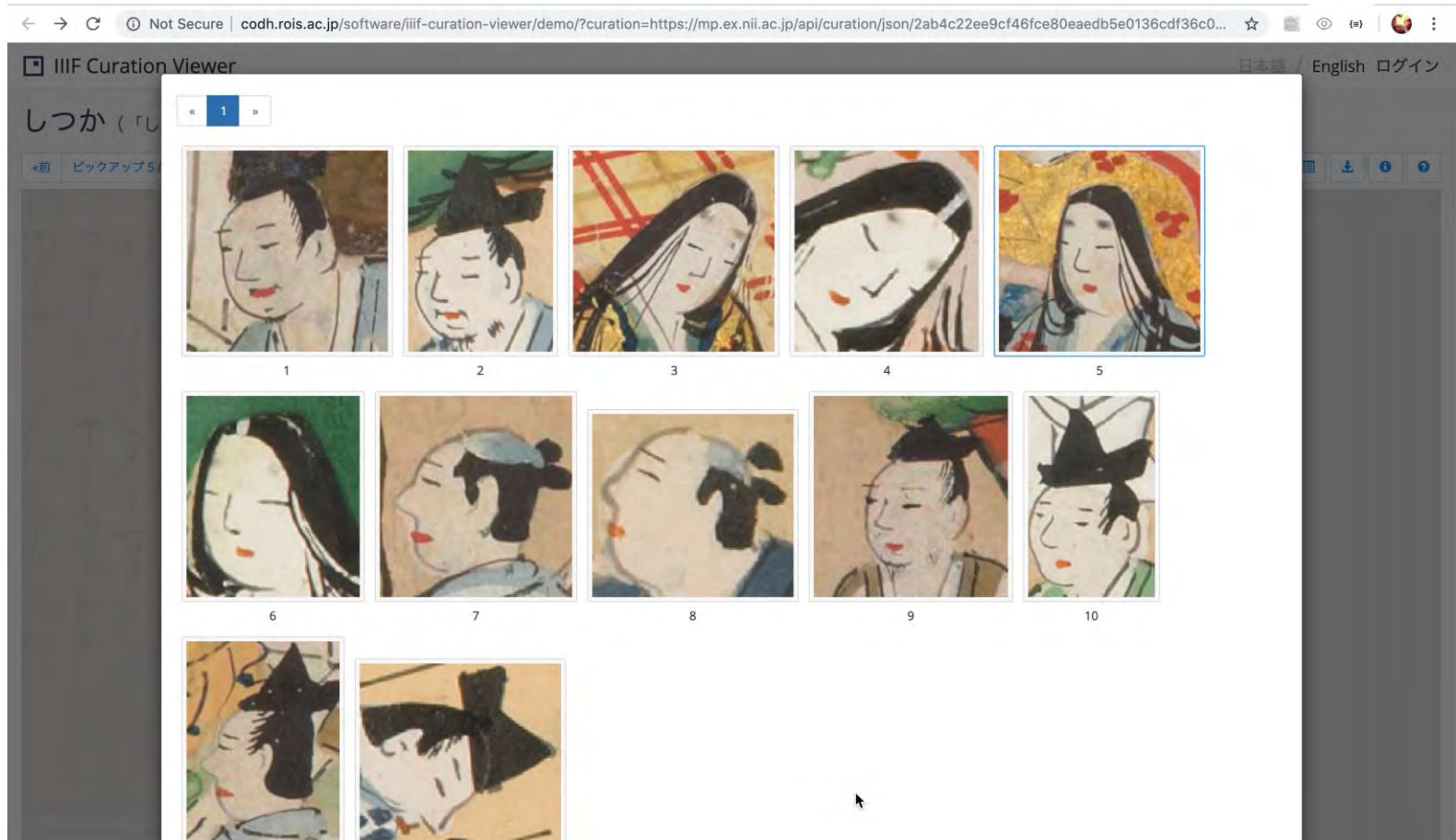
iiif.lib.keio.ac.jp iiif.lib.keio.ac.jp iiif.lib.keio.ac.jp iiif.lib.keio.ac.jp iiif.lib.keio.ac.jp iiif.lib.keio.ac.jp  
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人文学オープンデータ共同利用センター  
Center for Open Data in the Humanities

<http://codh.rois.ac.jp/face/iiif-curation-finder/?lang=en>

# Feature Extraction for Scholarship



# Interdisciplinary Use Cases

- High resolution viewing
- Comparison
- Interoperability across platforms / institutions
- Annotation
- Integration with geospatial data



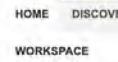
# Existing archaeological content

- Digital Repository of Ireland
- Salmon Pueblo Archaeological Research Collection


<https://repository.dri.ie/catalog/8910z856b>

<https://salmonpueblo.org/>

# Comparison



**dri**  
Digital Repository of Ireland  
Irish Academic Research in Motion



All Fields :


[More options](#)

HOME DISCOVER ORGANISATIONS MEMBERSHIP ABOUT TEAM

WORKSPACE

Exposition et Musée / Ancient and modern archaeology / Digital Monuments / Knowth, Tomb 1C mound, Cuttings F-8

**Knowth, Tomb 1C mound, Cuttings 7-8**



**Title**  
Knowth, Tomb 1C mound, Cuttings 7-8

**Description**  
Site workers excavating Cuttings 7-8 of Knowth Tomb 1C mound.

**Creators**  

- National Monuments Service, Department of Culture, Heritage and the Gaeltacht

**Published Date**  
17 August 2018

**Subjects**  

- Passage tomb
- Excavation
- Archaeology

**Subjects (Places)**  

- Knowth

**Formats**  

- Image

**Types**  

- Photograph

**Sources**  

- Photograph

**Rights**  
Copyright National Monuments Service, Department of Culture, Heritage and the Gaeltacht.

**Licence**  

- CC-BY-NC-ND


**Depositing Organisation**  

- Royal Irish Academy

**Back to Search**

**Browse** 2 of 19

**Object Tools**

- Full Metadata
- Print Metadata
- Export to EndNote
- Cite
- 



## 004B Documents [\[See data about unit\]](#)

### Extended Strat Info

Image 1 of 2 [Go](#)

#### CONTENTS



#### Room 004B Extended Strat Info



Page 1



Page 2

Room 4B  
Strata

1	<sup>1972</sup> A <del>tot</del>	Surface	4.22 - 5.00	M8D
2	B <del>tot</del>	Rubble Fill	5.00 - 5.30	
3	C	Rubble Fill	5.30 - 5.63	
4	D	Floor Surface	5.63 - 5.64	
5	E	Rubble or Occupational Fill ?	5.70 - 6.16	
6	F	Zonal Roof	6.16 - 6.48	
7	G	Fill <del>Ab</del> - Occupational	6.48 - 6.68	
8	H	2nd story Floor surface	6.68 - 6.69	
9	H	2nd story Floor	6.69 - 6.80	
10	I	1st story Floor	6.75 - 6.88	
11	J	Charcoal house	6.88 - 6.92	
12	K	Sub Floor <sup>Foundation</sup> - stamle	6.92 - 7.02	

MORE INFORMATION





Hundreds of adopters

Scores of applications

Millions of digital objects

**Revolutionary promise**



# Why embrace IIIF?

1. State of the art functionality
2. Cheaper, faster and more efficient
3. Benefits of an international standard
4. Maximize impact, use and value of your content  
...without giving it away
5. Be at the forefront of digital innovation  
...with a global community of leaders

# How to Participate

1. Expose your collections via IIIF
2. Use IIIF-compatible software
3. Ask your software suppliers to become IIIF-compatible
4. Participate in the IIIF community
5. Join the IIIF Consortium

# IIIF Communication Channels

- IIIF Website: <http://iiif.io>
- [iiif-discuss@googlegroups.com](mailto:iiif-discuss@googlegroups.com)
- IIIF Slack Team - Join at <http://bit.ly/iiif-slack>
- Twitter: [@iiif\\_io](https://twitter.com/iiif_io) and [#IIIF](https://twitter.com/iiif)
- Awesome-IIIF on [GitHub](#)
- IIIF [YouTube Channel](#)
- IIIF Events

Thank you!

Jack Reed  
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@mejackreed



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