Introduction to Digital Humanities

Jennifer Guiliano
April 30, 2014

MITH MARYLAND INSTITUTE FOR TECHNOLOGY IN THE HUMANITIES

“the future of the past”

-Andrew Prescott, King’s College London

“the hottest thing in the humanities”

-Stephen Ramsey, University of Nebraska

“an emerging, recession-proof, bubble-proof, bullet-proof field in academia”

-Mark Sample, Davidson College

The Digital Humanities is a capacious enterprise that includes, among other things, research using computational and algorithmic methods to study culture and history as well as efforts to use digital media to share humanities content beyond the academy and encourage active engagement with that content by a broad public.

—*Rob Nelson*, University of Richmond

Digital Humanities is any scholarly activity that makes extensive use of one or more of the new possibilities for teaching and research opened up by the unique affordances of digital media. These include, but are not limited to, new forms of collaboration, new forms of publication, and new methods for visualizing and analyzing data.

—*Diane Jakacki,* Bucknell University

I know it when I see it.

—*Glen Worthey,* Stanford University

Producing Humanistic Knowledge

zotero

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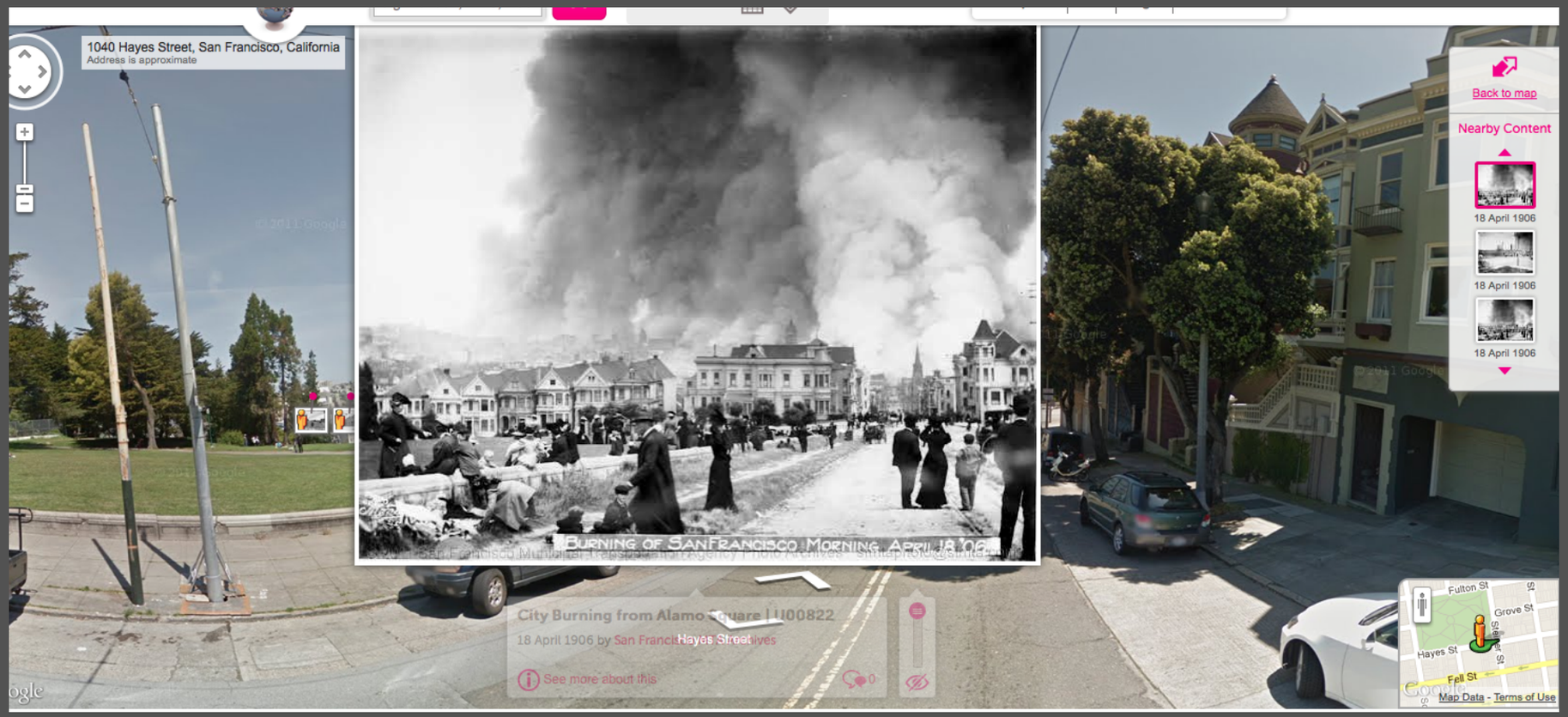
  - Florida State University
  - Gemstone POLITIC
  - Handheld Art
  - Native American Mascotry
  - Project Development
  - Reinventing Research: Information Practices Report
  - Stanford University
  - University of Illinois
  - University of North Dakota

Title	Creator	Year	Publication	Call Number
Macroanalysis: Digital Methods and Literary History	Jockers	2013		
The Native American identity in sports: creating and preserv...	Salamone	2013		
Taking sides. Clashing views in race and ethnicity	D'Angelo and Douglas	2013		
American multicultural studies: diversity of race, ethnicity...	Pinder	2013		
US and Russian Foreign Events	Guiliano	2012		
Imagining Russia: Making Feminist Sense of American National...	Williams	2012		
Native Americans	Zott	2012		
Negotiating American Indian Identity in the Land of Wahoo	Jacobs	2012		
Negotiating American Indian identity in the land of Wahoo	Jacobs and OhioLINK Electronic Theses and Dissertations Center	2012		

Zotero.org

http://braceroarchive.org/
developed using:
omeka.org

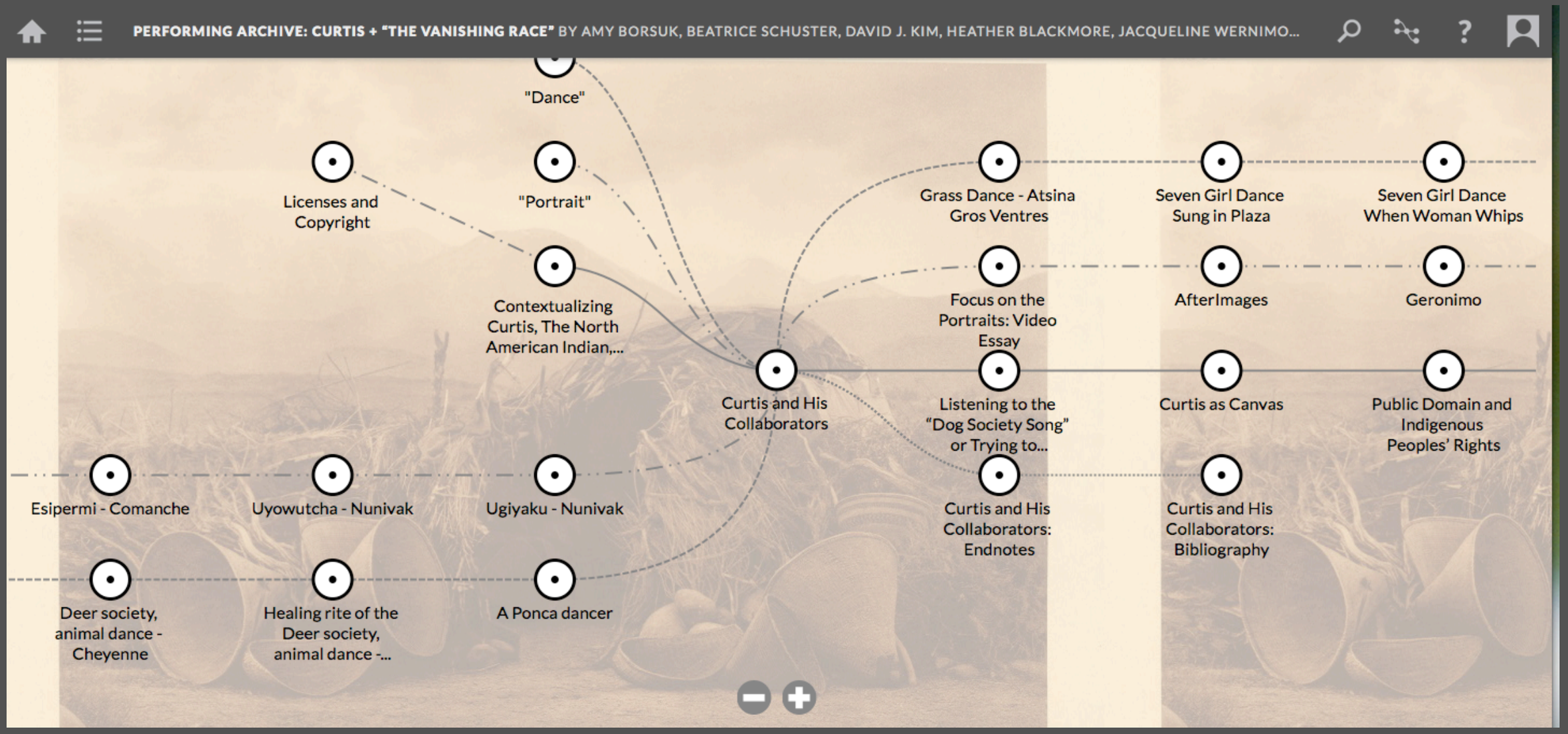
publicly hosted:
Omeka.net



HistoryPin.org

Performing Archive: Curtis and the "Vanishing Race"

Scalar



Performing Archive: Curtis and the "Vanishing Race"

Scalar

Standardizing Humanistic Knowledge

< Text Encoding Initiative >

file | 28 lines (27 sloc) | 1.438 kb

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        ?>
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  <zone type="main">
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    <line rend="center">A 11</line>
    <line rend="center"><unclear unit="chars" extent="1"/> Autograph</line>
    <line rend="center"><metamark function="separate">_____</metamark></line>
    <line rend="center">Part of the MS of</line>
    <line rend="center">Frankenstein</line>
    <line rend="center"><metamark function="separate">_____</metamark></line>
    <line rend="center">pp 64-172 (of vol I.?)</line>
    <line rend="center">ch. 6-17</line>
    <line rend="center">vol. II. pp 1-150</line>
    <line rend="center">ch I-XIV</line>
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    <line rend="center">hand</line>
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  </zone>
</surface>
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TEI-C.org

Open Annotation Collaboration

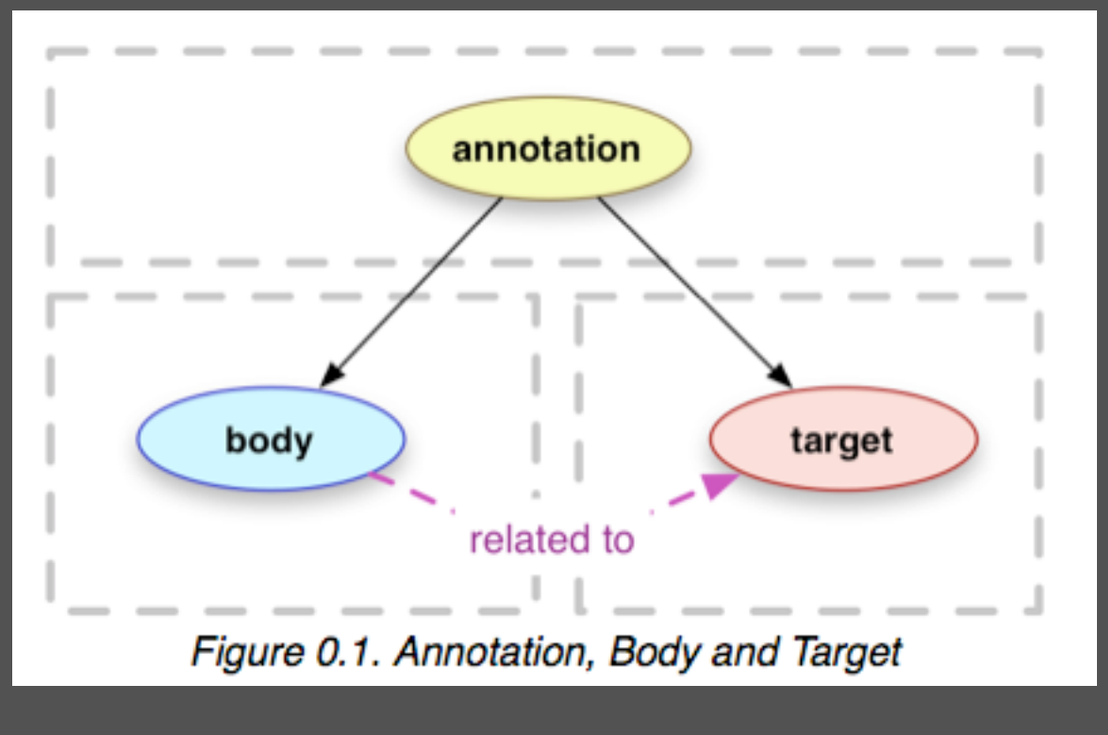
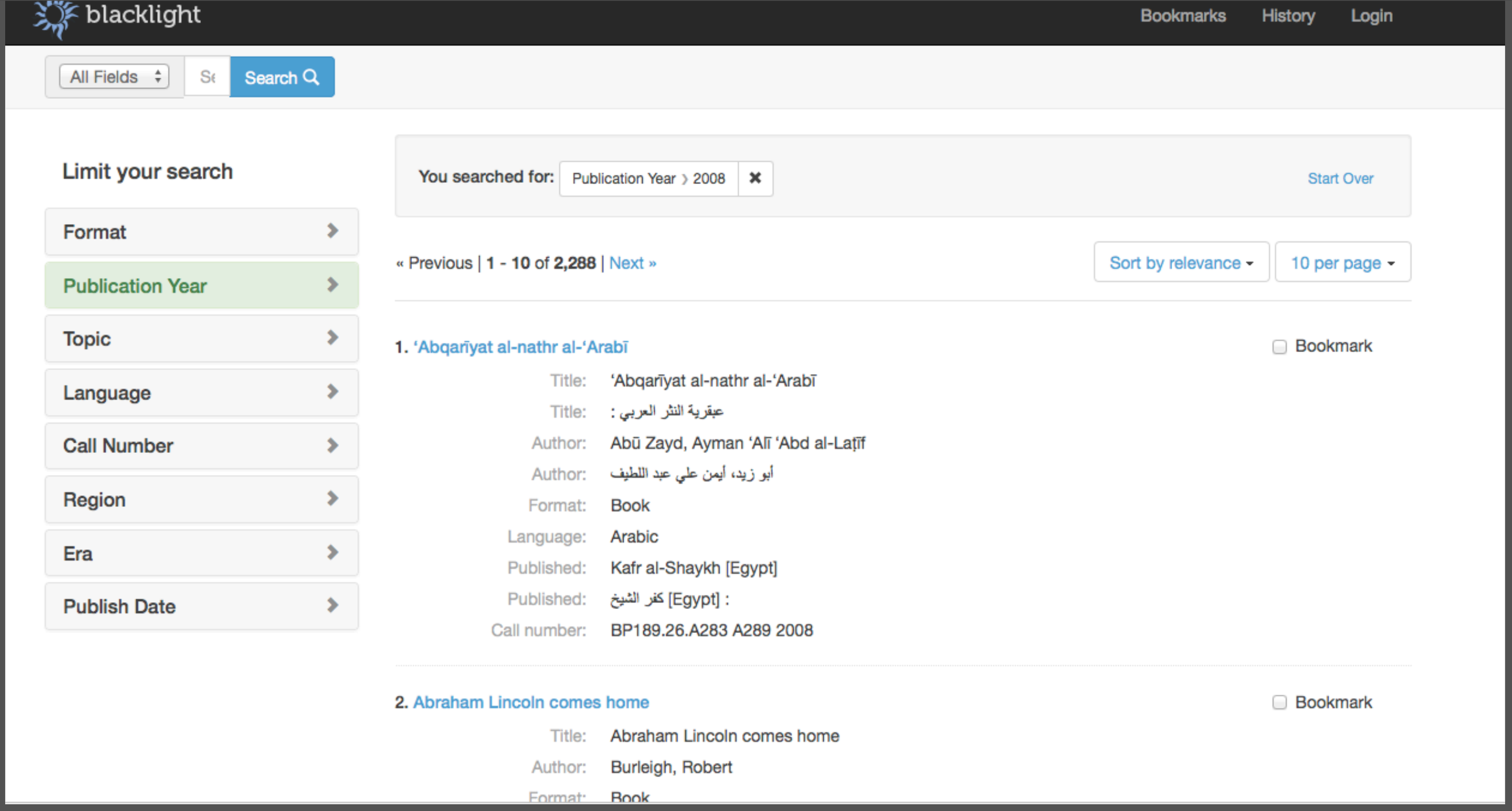


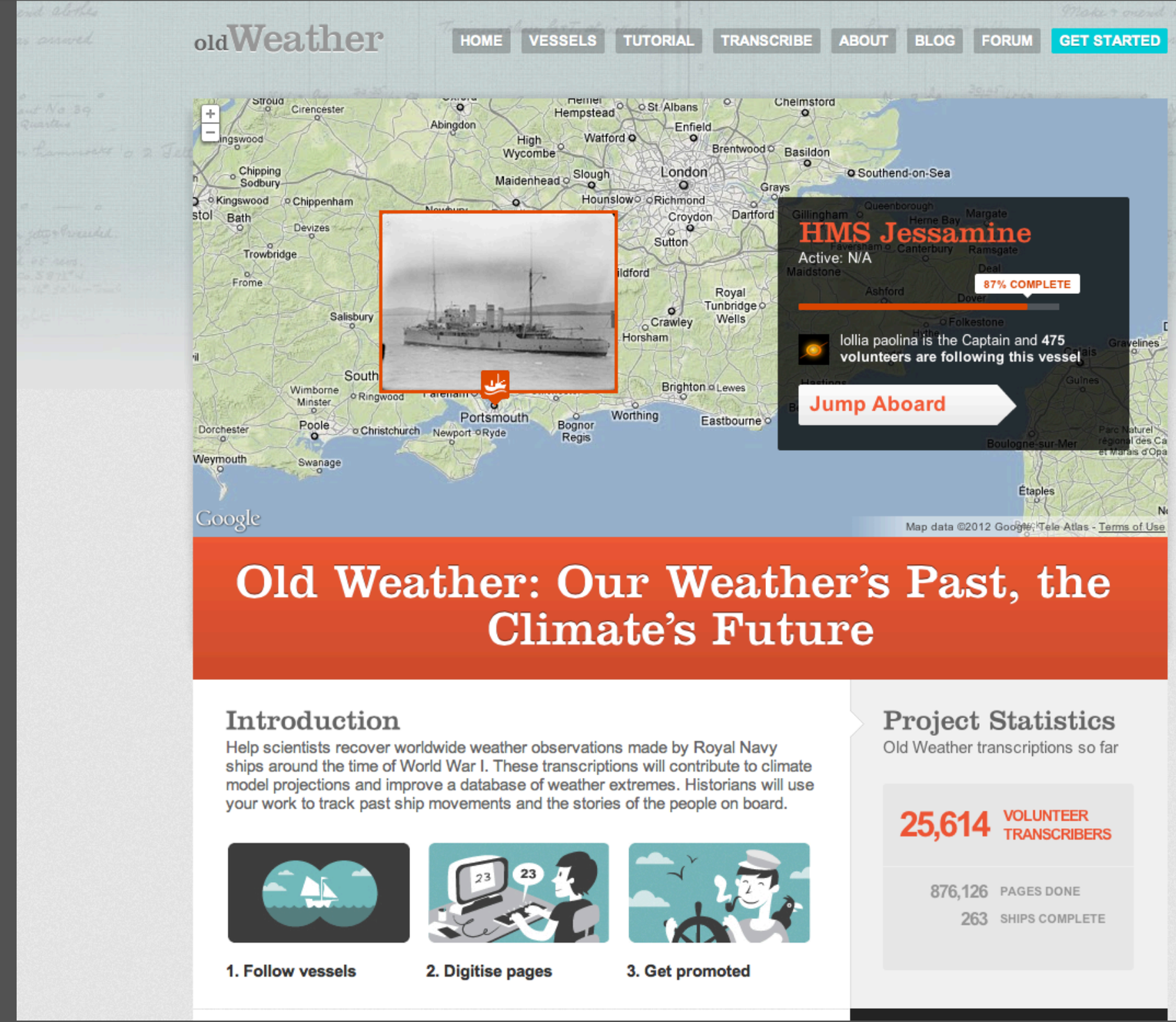
Figure 0.1. Annotation, Body and Target

openannotation.org



Project Blacklight

Discovering Existing Knowledge



Oldweather.org

powered using Scribe

Transforming the Afro-Caribbean World

1) digitization of a subset of the proposed records to evaluate potential costs and preservation issues;
2) exploration of structured data tools to reveal new insights about these records;
3) the creation of annotated bibliographies for use by teachers and the public as they begin to explore the centennial anniversary of the opening of the canal;
4) identification of other archives and repositories to be included in a larger project.

CUNY DOMINICAN STUDIES INSTITUTE

SPANISH PALEOGRAPHY
DIGITAL TEACHING & LEARNING TOOL

HOME | SELECT A DOCUMENT | CORTESANA SCRIPT, 1... | HOW TO USE THIS PALEOGRAPHY TOOL

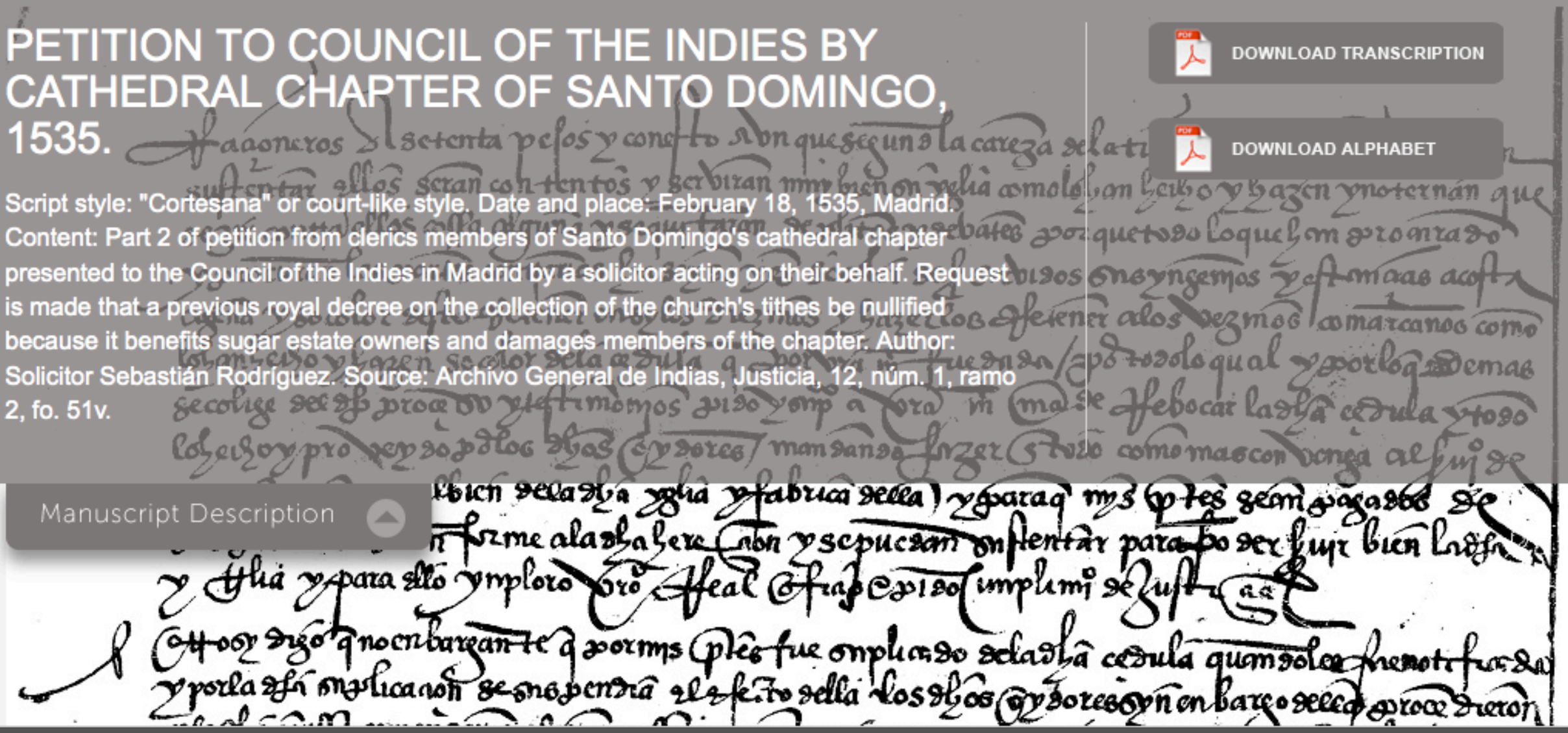
PETITION TO COUNCIL OF THE INDIES BY CATHEDRAL CHAPTER OF SANTO DOMINGO, 1535.

DOWNLOAD TRANSCRIPTION

DOWNLOAD ALPHABET

Script style: "Cortesana" or court-like style. Date and place: February 18, 1535, Madrid. Content: Part 2 of petition from clerics members of Santo Domingo's cathedral chapter presented to the Council of the Indies in Madrid by a solicitor acting on their behalf. Request is made that a previous royal decree on the collection of the church's tithes be nullified because it benefits sugar estate owners and damages members of the chapter. Author: Solicitor Sebastián Rodríguez. Source: Archivo General de Indias, Justicia, 12, núm. 1, ramo 2, fo. 51v.

Manuscript Description



http://spanishpaleographytool.org/

Draft Notebook A

Author(s) : Mary Shelley
Hand(s) : Mary Shelley and Percy Shelley
Date Written : [August or September]-[?December] 1816

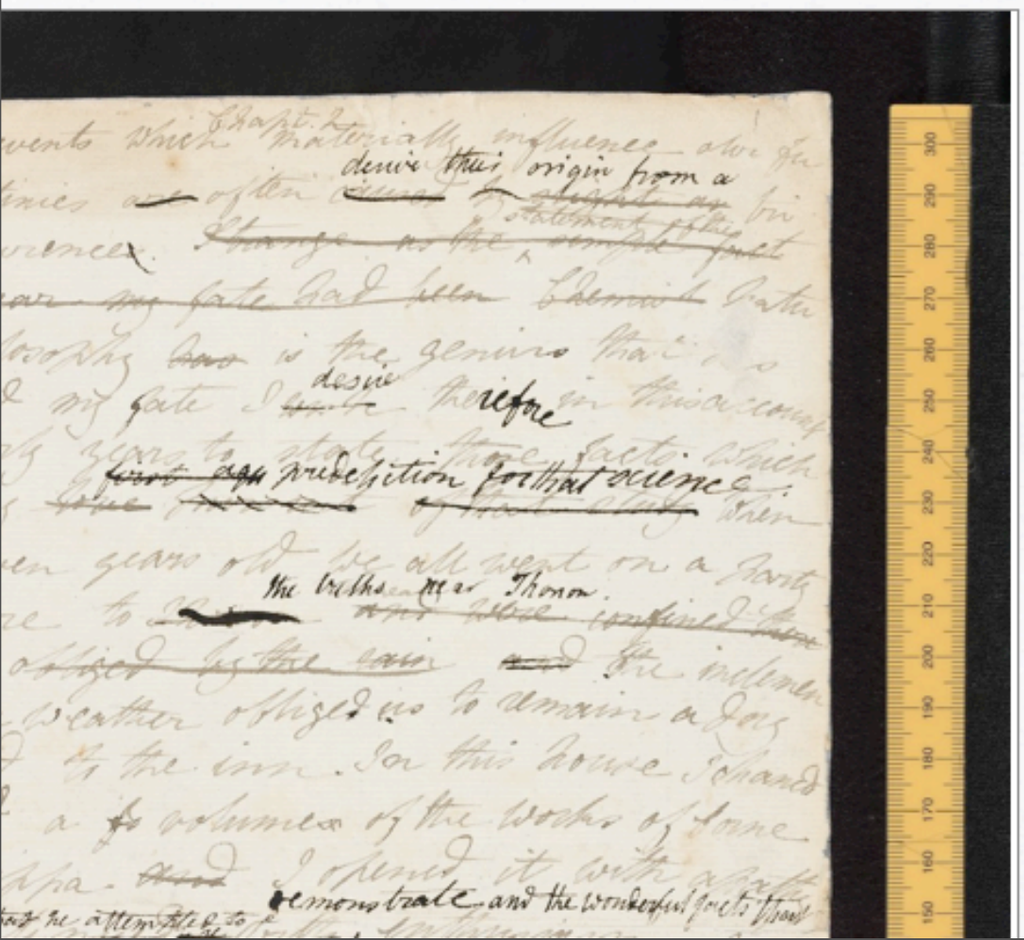
View : Draft Notebook A
Title/Literary Work : Frankenstein
Folio : c. 56, fol. 1r
State : Draft

Institution : Bodleian Library, University of Oxford
Shelfmark : MS. Abinger c. 56

Transcription Status:
Metadata Status:

Search

LIMIT VIEW:
All | Mary Shelley | Percy Shelley



1

Chapt. 2
Those events which materially influence our fu
derive thier origin from a
ture destinies ~~are~~ often ~~caused by slight or~~ tri
~~statement of the~~
vial occurence ~~s~~ . ~~Strange as the simple fact~~
^
~~may appear my fate had been Chemist~~ Natu
ral philosophy ~~has~~ is the genius that has
desire
regulated my fate I ~~wish~~ the ~~ir~~ *refore* in this account
of my early years to state those facts which
~~first aqu~~ predeliction for that science.
led to my ~~love pursuit of that study.~~ When
I was eleven years old we all went on a party
the baths near Thonon.
of pleasure to ~~Thonon and were confined there~~
~~b obil obliged by the rain and t~~ *T* he inclemen
cy of the weather obliged us to remain a day

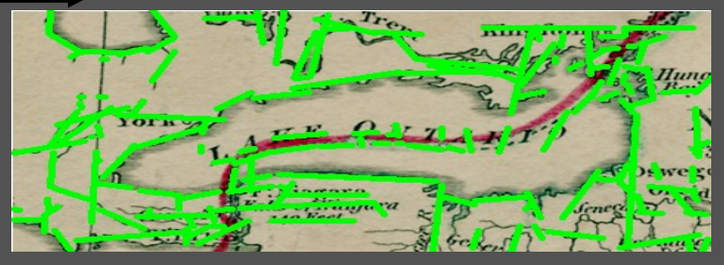
c. 56, fol. 1 recto

Shelley-Godwin Archive

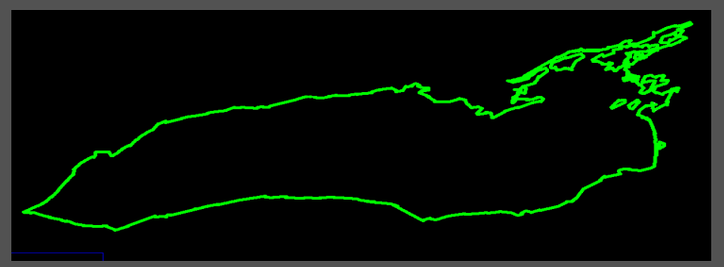
Invisible Australians

Digging into Image Data

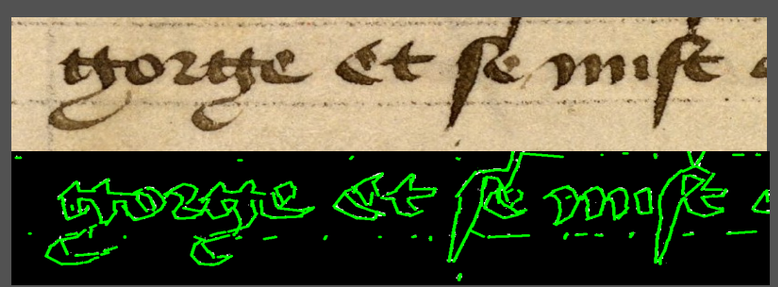
Sobel Edge detection and polygon fitting

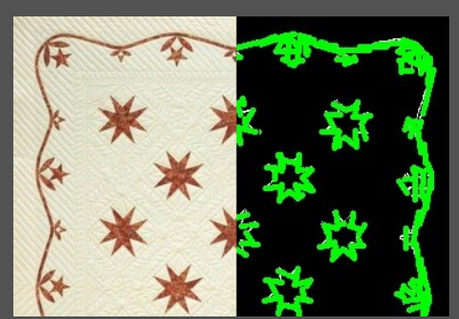


Ball-based segmentation



Polygon fitting





Visualizing Humanistic Knowledge

May 2, 1863 | May 3, 1863 | May 4, 1863

May 1 | May 2 | May 3 | May 4

April 27 - 30

Hooker splits his army and tries to "double envelop" Lee with two forces, one approaching from the north by way of Chancellorsville and the other from the east at Fredericksburg.

April 30

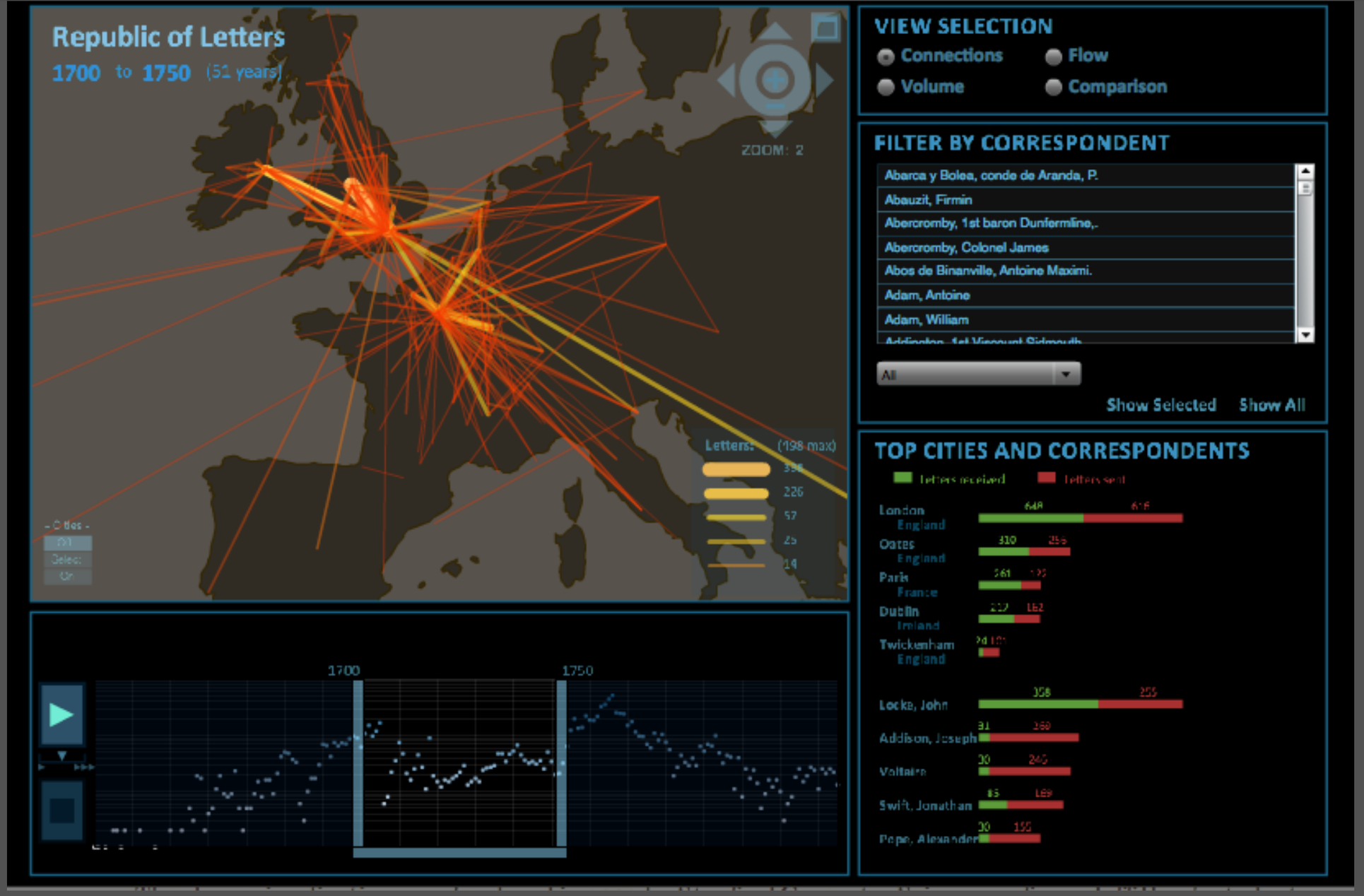
Lee splits his army, sending Jubal Early to hold off Sedgwick at Fredericksburg and moving the rest of his force west to engage Hooker at Chancellorsville.

May 2, 7:30 a.m.

Lee splits his army again, sending Jackson's Second Corps on a 12-mile, 10-hour flanking march around the Union positions around

The Battle of Chancellorsville

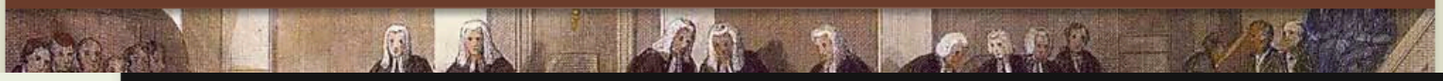
developed using Omeka + Neatline.org



Mapping the Republic of Letters

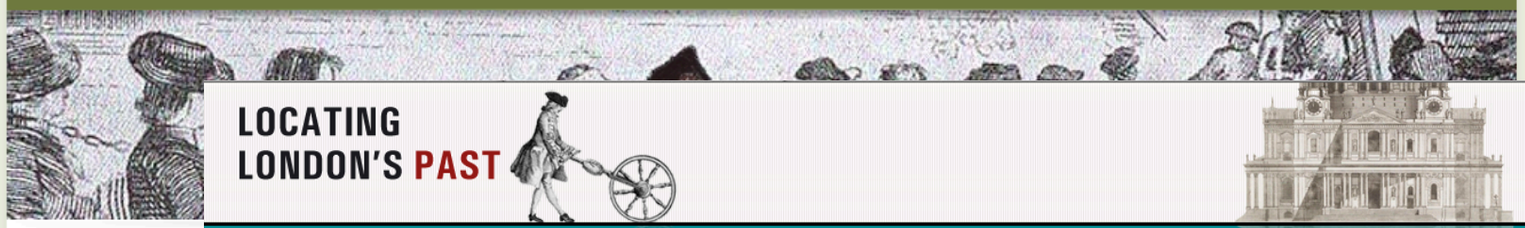
The Proceedings of the OLD BAILEY — London's Central Criminal Court, 1674 to 1913

Home | Search | About The Proceedings | Historical Background | The Project | Contact



London Lives 1690 to 1800 ~ Crime, Poverty and Social Policy in the Metropolis

Home | Search | Browse | Lives | Historical Background | Wiki | The Project



LOCATING LONDON'S PAST

Home | About the project | Historical background | Contact

Quick place search | Go

Maps | Data

- Home
- Search
- Browse Documents
- Lives
- Historical Backgrou
- Login / Register
- User Wiki
- About This Project
- Copyright & Citatio
- Contact Us

Featur

John Page

"Honest" Lab

Welcome to Locating London's Past

This website allows you to search a wide body of digital resources relating to early modern and eighteenth-century London, and to map the results on to a fully GIS compliant version of John Rocque's 1746 map.

Add some data

Video walkthrough

Historical background

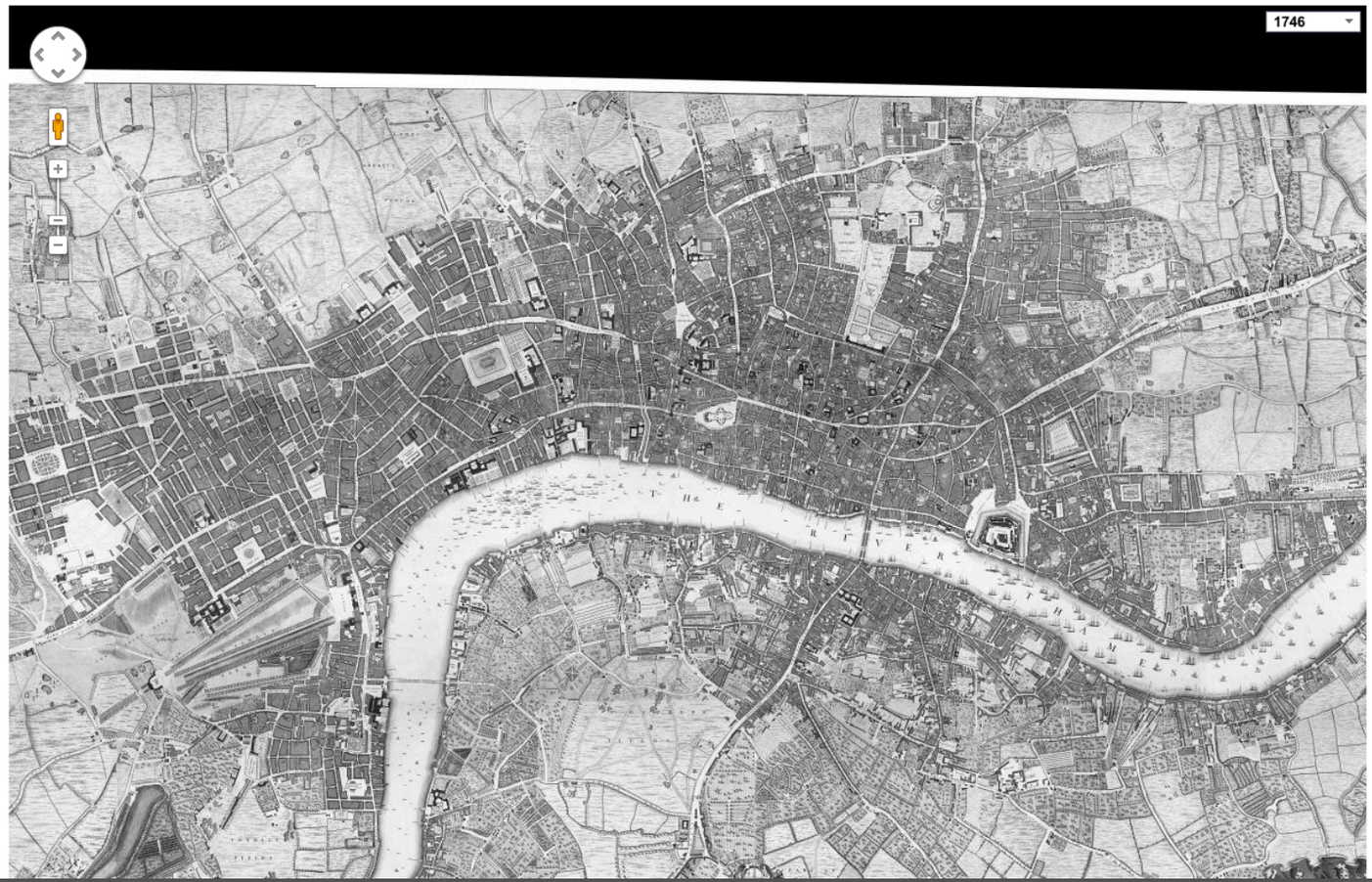
Records of crime, poor relief, taxation, elections, local administration, plague deaths and archaeological finds can all be searched and mapped on this site.

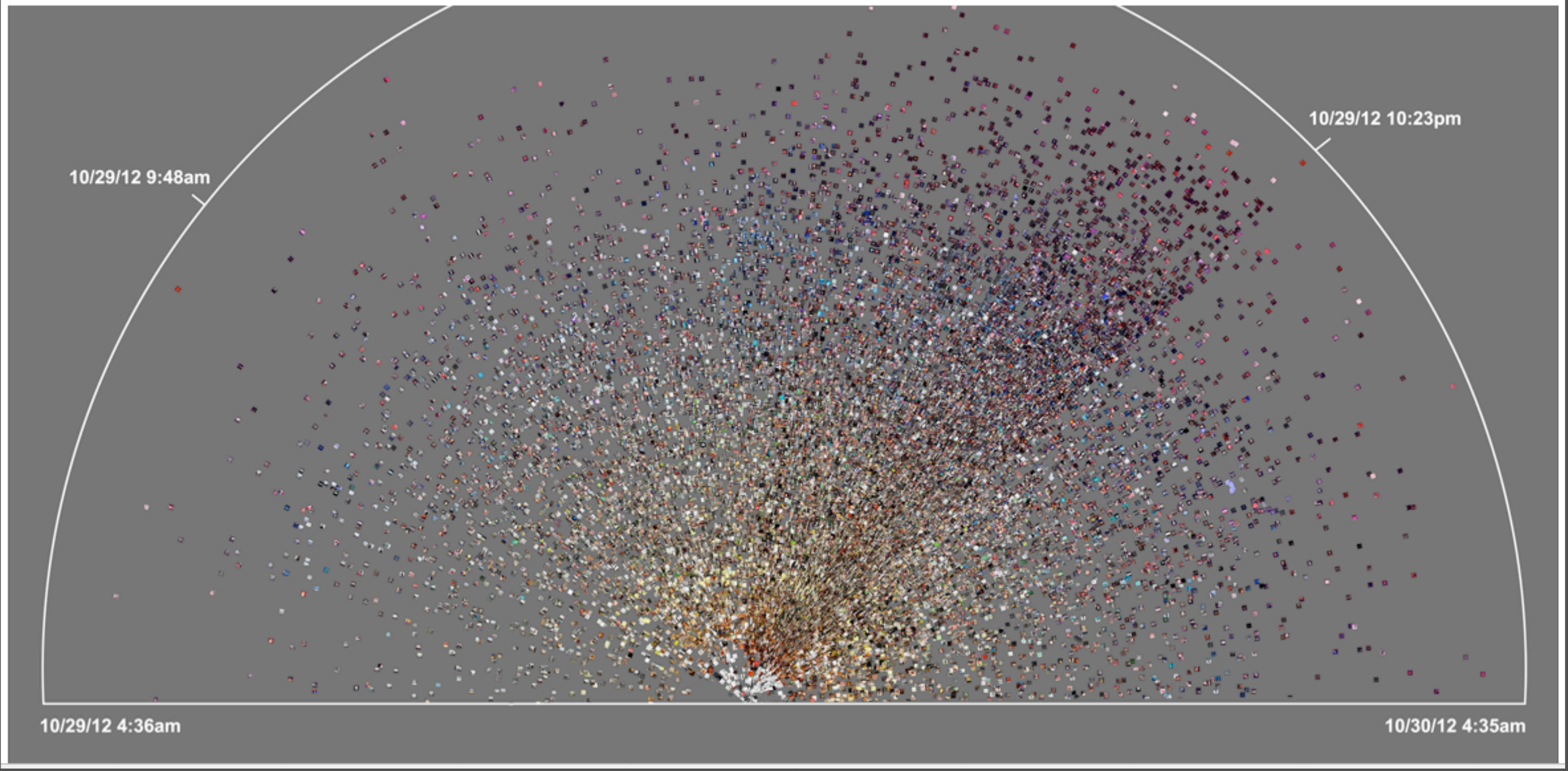
Historical background and datasets

The Map

Building on a fully GIS compliant version of John Rocque's 1746 map of London, this site allows you to relate an eighteenth-century representation of the metropolis to the first accurate OS map of London (1869-80), and to a modern Google Maps environment.

Mapping methodology



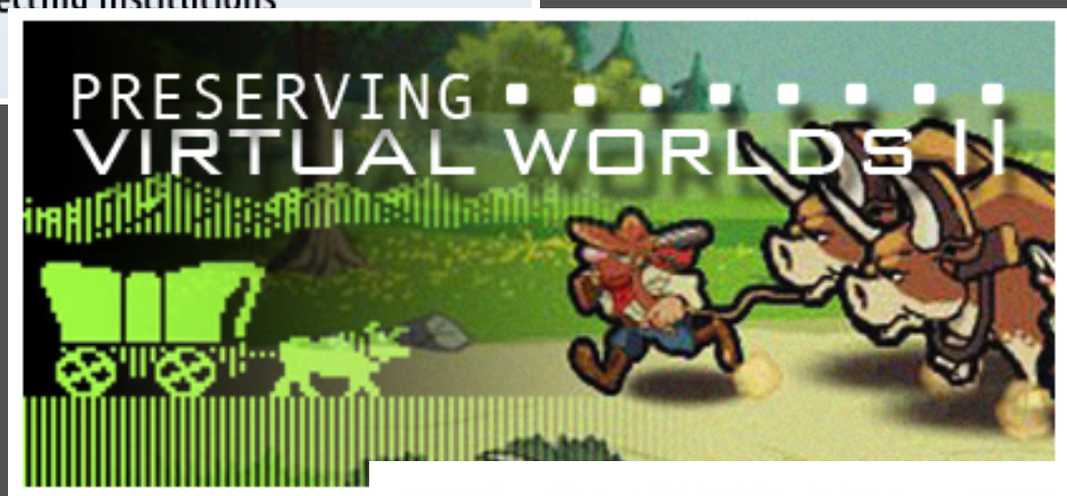


PhotoTrails

Preserving Humanistic Knowledge

BitCurator

Tools for Digital Forensics Methods and Workflows in Real-World Collecting Institutions



THE Deena Larsen collection

Evaluating Humanistic Knowledge

http://digitalhumanitiesnow.org/

http://dhcommons.org/journal

http://journalofdigitalhumanities.org/

Introduction to Digital Humanities II

Developing Digital Humanities Projects and Initiatives

developDH

MITH MARYLAND INSTITUTE FOR TECHNOLOGY IN THE HUMANITIES

Developing research ideas is more about communication than creativity

Exercise 1:

List your Name
List your Department
List your Email Address

What Knowledge do you Have?

What Skills do you have (tech or otherwise)?

What is a Research Project?

event
meeting
workshop
conference
symposium
article
dissertation
archive

research
analysis
investigation
experiment
development

telling a story, writing an argument,
answering a question, developing a theory

Five Parts:

a question, problem, or provocation

sources (primary or secondary)

an analytical activity

an audience

concrete products

Question:

Can computational image analyses algorithms be used across differing visual arts collections with a high degree of accuracy?

Provocation:

No studies of image analyses targeting
the problem of authorship have been applied
to very large collections of images and evaluated in
terms of accuracy over diverse datasets.

Problem:

where and by whom were the artifacts created?

what characteristics distinguish individual artists and groups of artists (e.g manuscripts illuminators, map makers and engravers, quilt-makers)?

How do the artifacts reflect artistic styles, the tastes of the particular region and historical moments to which they belong?

Exercise 2:

What is your question, problem, or provocation?

Sources:

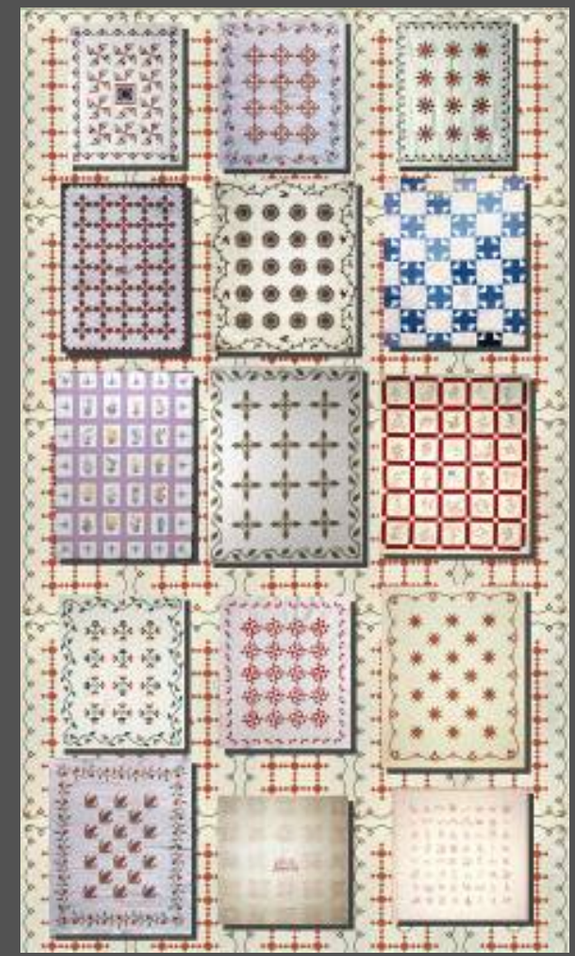
Analog

Books
Articles
Manuscripts
Artifacts
etc.

Sources:

15th-century Froissart manuscripts

17th- and 18th-century maps



19th- and 20th-century quilts

Discovering Digital Tools

Bamboo Dirt

CHNM ToolCenter Wiki

Stanford’s Tooling Up for Digital Humanities

The Europeana List

Discovering Digital Textual Data

Oxford Text Archive

BYU Time Magazine Corpus

JSTOR's Data for Research Services

Hathi Trust Research Center

Chronicling America

Smithsonian's Cooper Hewitt Museum Data

Discovering Digital Image Data

US Census Bureau Map Data

Flickr (by Creative Commons License)

The Life Magazine Dataset by Google

The Library of Congress Image Data

Wikimedia Commons

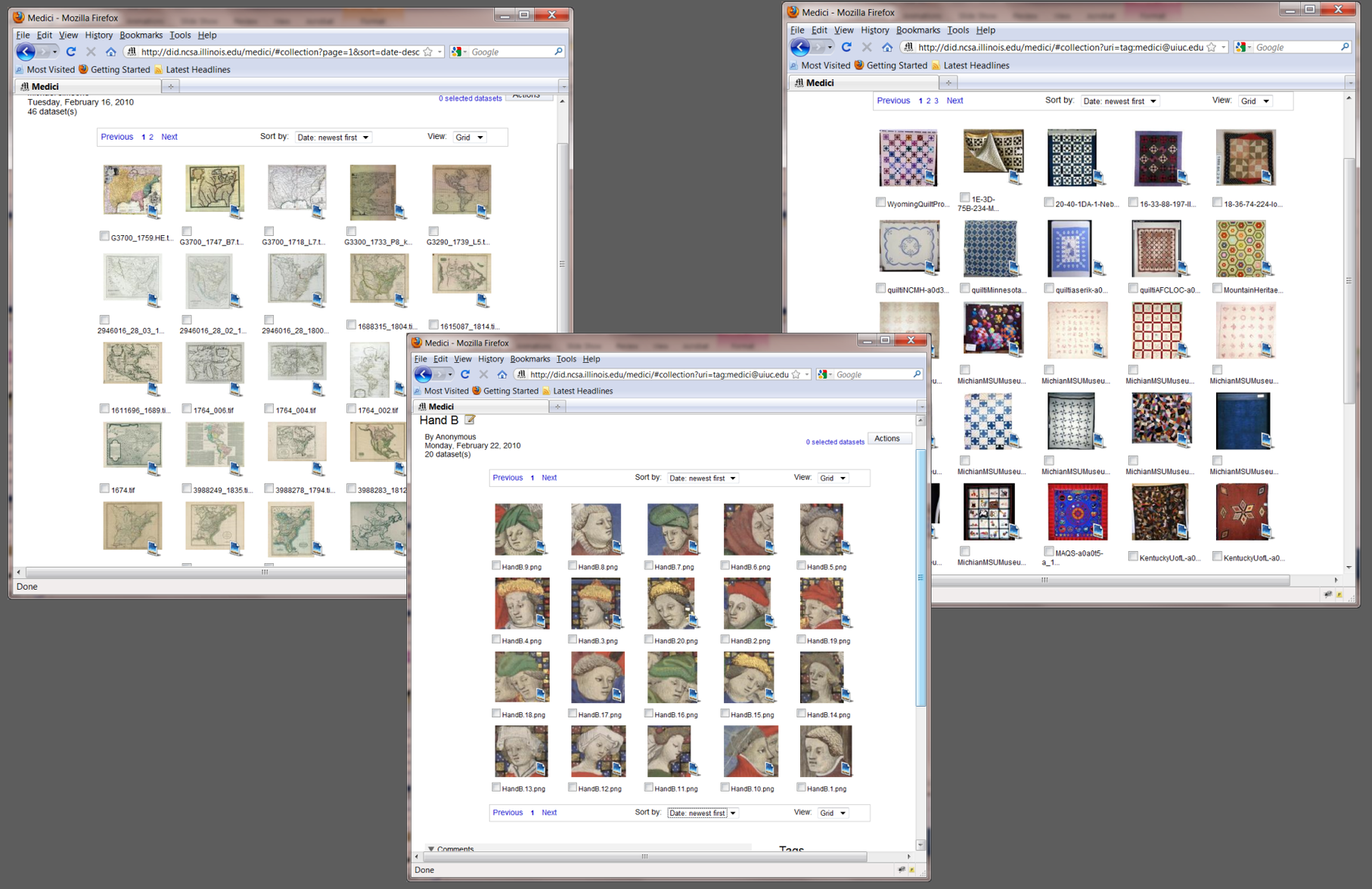
The NYPL Digital Gallery

Exercise 3:

What is your data?

Analytical Activity:

writing
analyzing
building
creating
digitizing
narrating
curating


Medici - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://did.ncsa.illinois.edu/medici/#collection?page=1&sort=date-desc
Most Visited Getting Started Latest Headlines
Medici
Tuesday, February 16, 2010
46 dataset(s)
0 selected datasets
Actions
Previous 1 2 Next
Sort by: Date: newest first
View: Grid
G3700_1759.HE.t...
G3700_1747_B7.t...
G3700_1718_L7.t...
G3300_1733_P8_k...
G3290_1739_L5.t...
2946016_28_03_1...
2946016_28_02_1...
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1615087_1814.ti...
1611696_1689.ti...
1764_006.tif
1764_004.tif
1764_002.tif
1674.tif
3988249_1835.ti...
3988278_1794.ti...
3988283_1812
Done
Medici - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://did.ncsa.illinois.edu/medici/#collection?uri=tag:medici@uiuc.edu
Most Visited Getting Started Latest Headlines
Medici
Previous 1 2 3 Next
Sort by: Date: newest first
View: Grid
WyomingQuiltPro...
1E-3D-75B-234-M...
20-40-1DA-1-Neb...
16-33-88-197-ll...
18-36-74-224-lo...
quiltiNCMH-a0d3...
quiltiMinnesota...
quiltiaserik-a0...
quiltiAFCLOC-a0...
MountainHeritae...
MichianMSUMuseu...
MAQS-a0a0t5-a_1...
KentuckyUofL-a0...
Medici - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://did.ncsa.illinois.edu/medici/#collection?uri=tag:medici@uiuc.edu
Most Visited Getting Started Latest Headlines
Medici
Hand B
By Anonymous
Monday, February 22, 2010
20 dataset(s)
0 selected datasets
Actions
Previous 1 Next
Sort by: Date: newest first
View: Grid
HandB.9.png
HandB.8.png
HandB.7.png
HandB.6.png
HandB.5.png
HandB.4.png
HandB.3.png
HandB.20.png
HandB.2.png
HandB.19.png
HandB.18.png
HandB.17.png
HandB.16.png
HandB.15.png
HandB.14.png
HandB.13.png
HandB.12.png
HandB.11.png
HandB.10.png
HandB.1.png
Previous 1 Next
Sort by: Date: newest first
View: Grid
Comments
Tags
Done

Historical Maps

- Selection of common objects in maps (currently, the five Great Lakes)
- Segmentation of these objects from map images
- Calibration to identify scale
- Shape comparison metric (currently, area)

Quilts

Segment the image into regions.
The regions are not squares; below is for illustration only

Compare regions and merge if similar

vs

Feed signatures into Trained SVM Classifier

< 1, 3.4, -10, 15, 4… >

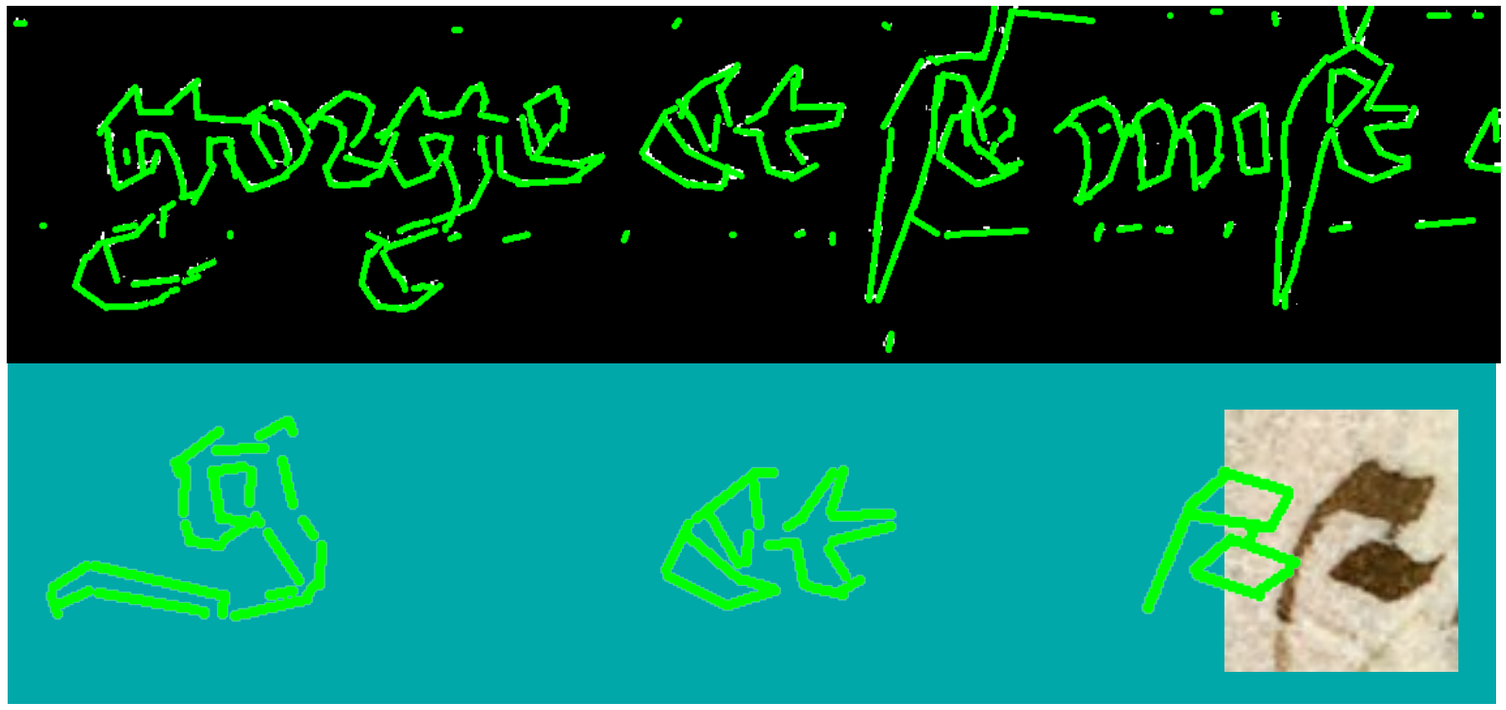
Compute signature for quilt using regions as metrics. Assign this signature to the quilt.

SVM Classifier

YES

Get Yes/No result from SVM

Medieval Manuscripts



Apply shape recognition algorithms to polygonal models to identify similar letters, words, symbols and patterns

Audience

Subject Scholars

Art Historians
Cartographers
Quilt Scholars

Public

Archives
Museums
Libraries

Methodological Researchers

Image Analysis
Authorship
Authenticity

Exercise 4:

Who is your audience?

Products

Digging into Image Data Grant (DID1)
Memorandum of Understanding
3 websites (UIUC, MSU, Sheffield)
3 repositories (Froissart, Quilt Index, Medici)
4 algorithms
3 papers
4 conference posters
7 conference presentation
4 presentations

Digging into Image Data Grant (DID2)
90+ hours of video conference footage
listserv logs and email chains
press releases

Exercise 5:

What are your potential products?

But Wait:

I don’t think I know enough to do my project

I don’t have this skill

I have no ideas

Strategies:

Join an Existing Project (DHCommons.org)
Get Educated (www.dhtraining.org/hilt or dhsi.org)
Ask a question (digitalhumanities.org/answers/)
Follow #dh and DH folk on twitter

Strategies:

EXPERIMENT

Wordpress and wordpress.com
Omeka and omeka.net

Visit
DevDH.org

Jennifer Guiliano
@jenguiliano
jenguiliano@gmail.com

develop DH