Introduction to Digital Humanities

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“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
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<tr>
<th>Title</th>
<th>Creator</th>
<th>Year</th>
</tr>
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<tr>
<td>Macroanalysis: Digital Methods and Literary History</td>
<td>Jockers</td>
<td>2013</td>
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<td>The Native American identity in sports: creating and preserving...</td>
<td>Salamone</td>
<td>2013</td>
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<td>Taking sides: Clashing views in race and ethnicity</td>
<td>D'Angelo and Douglas</td>
<td>2013</td>
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<td>Pinder</td>
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<td>Imagining Russia: Making Feminist Sense of American National...</td>
<td>Williams</td>
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<td>Native Americans</td>
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<td>Negotiating American Indian Identity in the Land of Wahoo</td>
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<td>Jacobs and OhioLINK Electronic Theses and Dissertations Center</td>
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http://braceroarchive.org/
developed using: 
omeka.org
publicly hosted:
Omeka.net
HistoryPin.org
Curtis and His Collaborators

Bill Anthes, Pitzer College

The iconic photographs Edward S. Curtis published in his massive twenty-volume series, *The North American Indian* between 1907 and 1927, are some of the most familiar and enduring images of Native Americans ever created. Curtis produced photographs of Native Americans in several genres, including figures in landscapes, ethnographic scenes, and staged tableaux. He also produced a feature-length silent film in 1914, *In the Land of Head Hunters* – a melodramatic romance featuring an all-native cast from a Kwakwaka'wakw village in British Columbia. However, he is best known for his iconic portraits, in which sitters are identified by tribe, and posed in traditional regalia.

Many viewers assume they are documentary images, although they are not. For his part, Curtis described his project as one of documenting “the old time Indian, his dress, his ceremonies, his life and manners.” But in his romantic pursuit of the “old time Indian,” Curtis worked carefully with his models to stage an image of a past that many believed was disappearing, and was at that moment being transformed by government policies and the increasing urbanization and industrialization of Indian country. We know that Curtis traveled with an extensive collection of costumes and props and we see these recycled from time to time in multiple images. Moreover, Curtis was careful to remove from the frame any item that might reveal his subjects’ modernity. If, say, a stray alarm clock escaped his notice, he eliminated it by retouching the final print. Indeed, Curtis was very much a man of his time. His obsessive project of posing Native American cultures was part and parcel of...
Performing Archive: Curtis and the “Vanishing Race”

Scalar
Standardizing Humanistic Knowledge
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  <line rend="center">Vol. II, pp 1-158</line>
  <line rend="center">ch I-XIV</line>
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Open Annotation Collaboration

Figure 0.1. Annotation, Body and Target

openannotation.org
Discovering Existing Knowledge
Old Weather: Our Weather’s Past, the Climate’s Future

Introduction
Help scientists recover worldwide weather observations made by Royal Navy ships around the time of World War I. These transcriptions will contribute to climate model projections and improve a database of weather extremes. Historians will use your work to track past ship movements and the stories of the people on board.


Project Statistics
Old Weather transcriptions so far

25,614 VOLUNTEER TRANSCRIBERS
876,126 PAGES DONE
263 SHIPS COMPLETE

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

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.

http://spanishpaleographytool.org/
Chapt. 2

Those events which materially influence our future destinies are often caused by slight or trifling occurrence. Strange as the simple fact may appear, my fate had been Chemist Natural philosophy has is the genius that has regulated my fate. I wish the refore in this account of my early years to state those facts which first aqu predestination 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 by obil obliged by the rain. The inclemency of the weather obliged us to remain a day.
Invisible Australians
Digging into Image Data

Ball-based segmentation → Sobel Edge detection and polygon fitting → Polygon fitting
Visualizing Humanistic Knowledge
The Battle of Chancellorsville

developed using Omeka + Neatline.org
Mapping the Republic of Letters
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 (1860s), and to a modern Google Maps environment.

Mapping methodology
PhotoTrails
Preserving Humanistic Knowledge
Evaluating Humanistic Knowledge
Introduction to Digital Humanities II

Developing Digital Humanities Projects and Initiatives
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
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.

< 1, 3.4, -10, 15, 4... >
Compute signature for quilt using regions as metrics. Assign this signature to the quilt.

Feed signatures into Trained SVM Classifier

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

Methodological Researchers
Image Analysis
Authorship
Authenticity

Public Archives
Museums
Libraries
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

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