Digital History: Tools for Research and Teaching

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Digital Media Center, Rice U
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Doing Digital History: William Kindig’s Letters in Valley of the Shadow

Franklin County - 1860 Population

Please cite results as coming from: Franklin County, Pennsylvania, 1860 Population Census, Valley of the Shadow: Two Communities in the American Civil War, Virginia Center for Digital History, University of Virginia (http://valley.lib.virginia.edu/census_search_results/?qdb=pop_f,60 AND family_num:288 AND dwelling_num:283).

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<th>Order in House</th>
<th>Last Name</th>
<th>First Name</th>
<th>Age</th>
<th>Sex</th>
<th>Color</th>
<th>Occupation</th>
<th>Township</th>
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<td>White</td>
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<td>White</td>
<td>Teacher</td>
<td>Borough of Orrstown, Southampton Twp.</td>
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Name: William A. Kindig
Birth Place: 
Date of Birth: 
Physical Description: 
Prewar Life: 

Service Information

Rank: Pvt.
Company: B
Transfer Company: 
Regiment: 107th Pa.

Military Service Record

Promotions: 
Transfers and Other Service: temporarily assigned to Battery C 06-00-1862; 07-00-1862; returned to regiment 07-04-1864 
Muster Sheet: present for duty 04-00-1862, 07-00-1862 - 09-00-1862 
Captured: 
Missing In Action: 
Prison: 
AWOL: 
Deserted: 
Discharge: 
Paroled: 
Notes: 

Military Records

Wounded/Killed Information

Died of Disease: 
Killed in Action: 
Wounded in Action: Antietam, Md. 9/17/1862

Other Information

Personal Life: 
Postwar Life: 
Death Place: 
Valley: Animated Maps (107th Pennsylvania)

http://valley.lib.virginia.edu/VoS/MAPDEMO/Theater/TheTheater.html
What is digital history?

- “an approach to examining and representing the past that works with the new communication technologies of the computer, the internet network, and software systems” (Thomas & Seefeldt)
- Two main aspects of digital history
  - Methodical approach, e.g.
    - GIS mapping
    - Text mining
    - Data visualization
  - Mode of communication
    - Blogs
    - Hypermedia
    - Wikis
Outline of Presentation

- Analyzing Texts
- Visualizing Data
- Organizing Information
- Presenting Research
- Teaching
What Is Text Analysis?

- Text analysis: using the computer to study patterns in texts
- Examples of text analysis operations:
  - Concordances
  - Keyword in context
  - Word use frequency
  - Sentiment analysis (what is the mood of this passage?)
  - Detecting plagiarism or intertextuality
Example: Presidential Speeches Tag Cloud

1933-03-04: First Inaugural Address
Franklin D. Roosevelt (1933-45)

abandonment administrative advancement agreements agriculture aims appropriations armed army assert associations assurance banking build changers convert cooperation corporation currency curtailment dedicate democratic devotion distress drastically economic education endeavor endure europe evils expenditure fact false families frankly frankness freedom fulfillment fundamental god guides honesty honesty industries insistence interdependence investments july june languishes mandate march minister mobilized monetary necessities opinion opponents permanently pledging prosperous railways readjustment realities recognition reconstruction resolutely resorted restore revive risen rounded safeguards securities selfish speculation stimulate strength stricken strife submit taxes temple territory toil treasury treating true uneconomical unemployment unjustified unprecedented values utilities vigor war wealth welfare wisely

http://chir.ag/projects/preztags/
Tools for Text Analysis: Voyeur

- Obama vs. Bush’s (2\textsuperscript{nd}) inaugural addresses
  
  http://voyeur.hermeneuti.ca/
Tools for Text Analysis

- TAPOR
- Juxta
- ManyEyes
- MONK
- PhiloLogic
What Is Data Visualization?

- Data into pictures
- “An external representation that makes it easy to see certain patterns in data.” (Palo Alto Research Center)
- “historical weather maps” illustrating dynamic changes (Ed Ayers at Educause 2006)
  - Social cold and warm fronts
  - Interplay of different forces
  - Simultaneity: different things happening at different places at the same time
  - Social networks
Seeing & Insight: John Snow’s Cholera Map (1854)

- Cholera epidemic in 1854 London was attributed to miasma (air)
- Snow mapped cholera cases & demonstrated that origin was a Soho water pump
- See Steven Johnson’s TED Talk on the map
Many Eyes Chart: Survival on the Titanic

http://services.alphaworks.ibm.com/manyeyes/view/SWUK0lsOtha6R4k196G1I2~
Spatial Visualization: The Emancipation Project

http://www.vcdh.virginia.edu/emancipation/index.html
Network Graphs: Stanford Spatial History Lab

Patterns of Change in Railroad Company Board Membership, 1872-1894

An Interactive Spatiotemporal Network Visualization

http://www.stanford.edu/group/spatialhistory/cgi-bin/site/viz.php?id=129&project_id=997
Common Tools for Creating Your Own Visualizations

- Many Eyes
- Swivel
- Excel
- Google Maps
- For more sophisticated mapping, consult with Fondren’s GIS Data Center, http://library.rice.edu/services/gdc
Other Cool Geographic Visualizations

- Imago Urbis: Giuseppe Vasi’s Grand Tour of Rome: [http://vasi.uoregon.edu/index.htm](http://vasi.uoregon.edu/index.htm)
- Gilded Age Plains City: The Great Sheedy Murder Trial and the Booster Ethos of Lincoln, Nebraska: [http://gildedage.unl.edu/](http://gildedage.unl.edu/)
How Can Researchers Manage Information?
Getting a Glimpse of the Field Using NetVibes

http://www.netvibes.com
Managing Research with Zotero


• “a free, easy-to-use Firefox extension to help you collect, manage, and cite your research sources. It lives right where you do your work — in the web browser itself.”

• Developed at George Mason’s [Center for History & New Media](http://www.lib.msu.edu/CHNM)
Collaborating Using Zotero

http://www.zotero.org/groups/digital_history

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Other Tools for Organizing Information

- Bibliographic tools:
  - CiteULike
  - Connotea
  - Papers
  - Mendeley

- Information portals
  - iGoogle
  - PageFlakes
  - EverNote
How Can Scholars Communicate Information?

- Multimodal scholarship
- Blogs
- Wikis
- Open access archives
Social Texts: Kathleen Fitzpatrick’s *Planned Obsolescence* in Comment Press

http://mediacommmons.futureofthebook.org/mcpress/plannedobsolescence/
Hypertextual Scholarship: The Differences Slavery Made (Ayers & Thomas)

The Differences Slavery Made: A Close Analysis of Two American Communities
William G. Thomas III and Edward L. Ayers

INTRODUCTION
SUMMARY OF ARGUMENT
POINTS OF ANALYSIS
METHODS

POINTS OF ANALYSIS

Property

In Franklin black residents lived clustered in towns from whites, their position in the county secure only by defined communities.

In Augusta, almost every group of white people and homes worth more than their counterparts in Franklin is bound inextricably to slavery.

Free blacks of Augusta County lived in tenement cities surrounded by slavery, but they managed to find ways to acquire significant property in the community.

http://www2.vcdh.virginia.edu/AHR/
Multimodal Scholarship: Southern Spaces

http://www.southernspaces.org/contents/2008/toton/la.htm
Other Multimedia Publications

- Vectors: http://www.vectorsjournal.org/
- Gutenberg-e: http://www.gutenberg-e.org/
Why Blog?

- Impetus to write and think
- Receive feedback
- Participate in a community
- Create a repository of your own writing
- Raise your visibility

See:
- Dan Cohen, [http://www.dancohen.org/blog/posts/professors_start_your_blogs](http://www.dancohen.org/blog/posts/professors_start_your_blogs)
The keyword revolution

Over the last couple of weeks I've been learning how to play with Google Print. Although the Print database is certainly not exhaustive, I've been blown away by how many books that interest me—from both trade and academic publishers—are available for full-text searching. And I've been even more impressed by the interface: you can see full-page images of published material, with your keywords highlighted on the page.

Of course, to have access to this resource, you have to be somewhat savvy, because there is not yet a portal page on Google's site for searching books. If you don't already know it, you can tap the vast resources of Google Print in one of at least two ways:

1) When searching at Google, begin your search string with the word 'book' or 'books' and then enter your query as usual. If Google Print has book pages that match your query, you should see about two or three 'book results' listed above your search. (Example.) You can either click on the individual results or on the headline that sends you to all of your book results. (Example.)

From there you can search within particular books (check the sidebar of an individual result page), look at the index and table of contents for a book, and even scroll through about two or three pages around your result page. Once you are within Google Print, you can also 'search all books' by using the form entry box located either at the top of the page or at the bottom. (Hat-tip: Search Engine Watch.)
How can we use digital technologies to improve learning?

- Access to primary source materials
- Using tools for analysis & visualization
- Observing historians at work
- Sharing their own historical research
Teaching Historical Research: dohistory.org

http://dohistory.org/
Students as Historians: History Engine

The History Engine is an educational tool that gives students the opportunity to learn history by doing the work—researching, writing, and publishing—of a historian. The result is an ever-growing collection of historical articles or "episodes" that paints a wide-ranging portrait of life in the United States throughout its history and that is available to scholars, teachers, and the general public in our online database.

http://historyengine.richmond.edu/
Discussion
Discover Other Useful Tools via the Digital Research Tools (DiRT) Wiki

Digital Research Tools (DiRT)

This wiki collects information about tools and resources that can help scholars (particularly in the humanities and social sciences) conduct research more efficiently or creatively. Whether you need software to help you manage citations, author a multimedia work, or analyze texts, Digital Research Tools will help you find what you're looking for. We provide a directory of tools organized by research activity, as well as reviews of select tools in which we not only describe the tool's features, but also explore how it might be employed most effectively by researchers.

This wiki is just being launched, so expect to see more reviews soon. Check back regularly.

Please provide feedback on DiRT and recommend tools not included here (yet).

If you're interested in contributing to this wiki, please email Lisa Spiro at lspiro@rice.edu.

If you are unfamiliar with some of the jargon, please see our Glossary page.

Types of Tools

I want to...
- Analyze texts
- Analyze statistics
- Author an interactive work
- Blog
- Brainstorm/generate ideas
- Build and share collections
- Collaborate
- Collect data
- Communicate with colleagues
- Compare resources
- Conduct linguistic research
- Convert/manipulate files

http://digitalresearchtools.pbwiki.com/
Useful Resources

- Lisa’s digital history bookmarks: http://www.diigo.com/user/lspiro/digitalhistory