

Amherst, Hampshire, Mt. Holyoke, Smith, & the University of Massachusetts

THE SPATIAL HUMANITIES IN THE FIVE COLLEGES

John Caris
Smith College

Andy Anderson
Amherst College

Digital Humanities

- A plethora of new tools and methods for transforming and studying the materials of traditional humanities research, e.g.
 - OCR and text encoding
 - Digital photography, now with GPS
 - 2D and 3D scanning

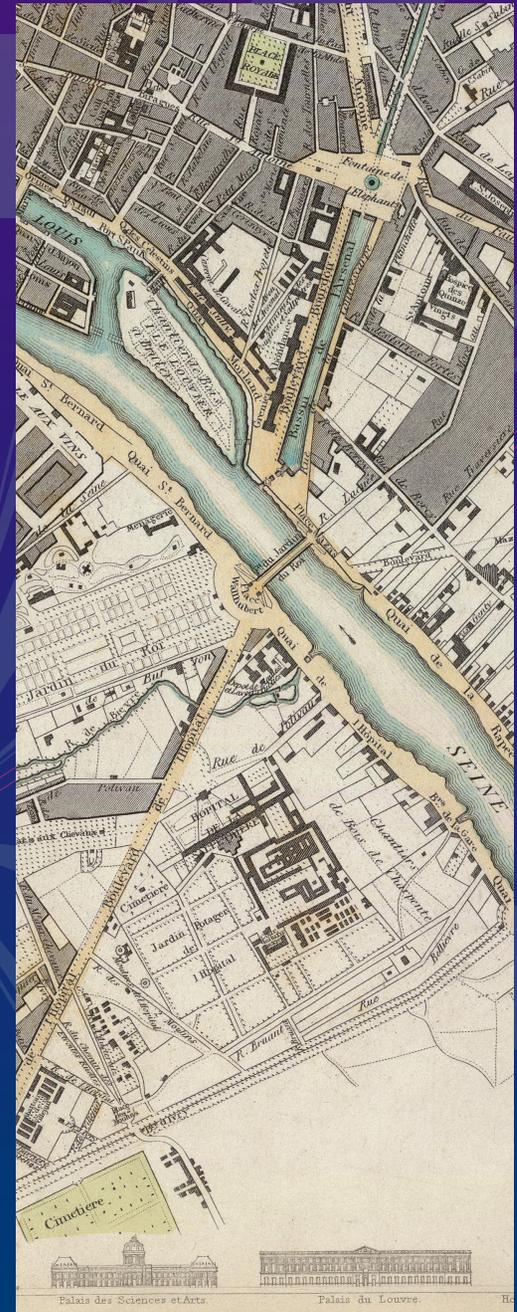


Holyoke, Massachusetts
1877 Perspective Map

Spatial Humanities

- Geospatial relationships are consequential in many aspects of the humanities.
- Many of these new tools, such as Geographic Information Systems (GIS), make it significantly easier to collect, analyze, and understand spatial data embedded in digital materials.

Paris in 1834, *Maps of the Society for the Diffusion of Useful Knowledge. Vol. 1.*



Amherst College Projects 1

- Digital humanities work began several years ago, by building a mapping platform for urban and cultural studies called Cityscapes.
 - Navigation through streets and terrain;
 - Overlaying historical maps;
 - Creating place marks linking photos, sound clips, videos, and textual commentary;
 - A type of collaborative presentation.
- Tokyo, Paris, Berlin ...

Asakusa, Tokyo, Japan in 1680, 1799, 1858, 1892, 2009



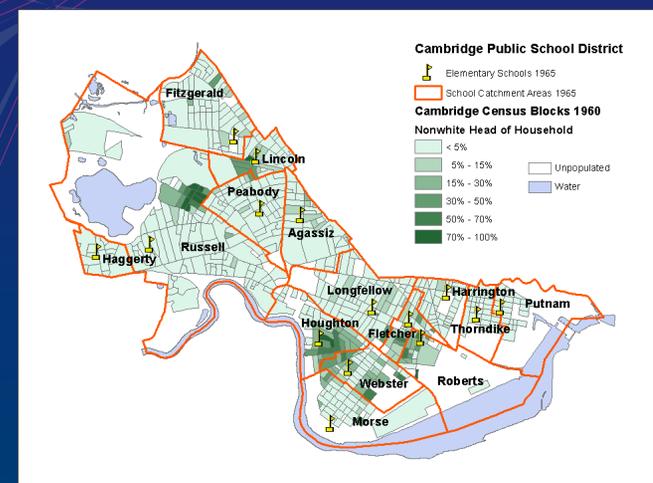
Amherst College Projects 2

- Online maps for various projects:
 - [Pioneer Valley Soundscapes](#): a project exploring the connection between sound and place by documenting the musical communities and acoustic terrain of the Pioneer Valley in Western Massachusetts. [Google Maps & Fusion Tables]
 - [Beyond Shangri-La](#): an oral history project combining the history and culture of Tibet, past and present, with the personal stories of Tibetans residing in Western Massachusetts. [ArcGIS Online]



Amherst College Projects 3

- A semester course, *Cities, Schools, and Space*:
 - Urban studies and educational history, designed to
 - visualize the spatial evolution of inequality in urban communities (in particular Cambridge, Massachusetts);
 - analyze past, present, and future strategies to equalize educational opportunity in American cities.
 - A research “tutorial” exposing students to:
 - archival analysis;
 - oral interviews;
 - GIS.



Smith College Projects 1



Smith College Projects 2

earth
View Tools Add Help

Find Businesses Directions

37 25' 19.1"N, 122 05' 06"W

Add Content

Places

Temporary Places

Chichen Itza

- [Chichen Itza](#)
- [PHYS 151: Making Sense of the Maya-Cholulmhuun](#)
- [Stephens and Catherwood Map](#)
Stephens and Catherwood Map, 1840s
[Source Map](#)
- [Modern Academic Map](#)
Modern Academic Map
[Source Map](#)
- [Ruppert 1952](#)
Map of the site of Chichen Itza (in Ruppert, 1952). Carnegie Institution of Washington.
- [Chichen Itza Archaeological Zone](#)
Standard Tourist Map/Image
[Source Map](#)

Maya Database

Geographic Web

Roads

3D Buildings

Street View

Borders and Labels

Traffic

Weather

Galley

Ocean

Global Awareness

Places of Interest

More

in

Image © 2009 TerraMetrics
Image IBCAO
Image © 2009 DigitalGlobe
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

© 2009 Google

Eye alt: 9643

UCI Undergraduat... 456923886_61f4... Holy Wells in Wales... SmartBargains: Sh... Category:Chichen ... Breaking News: Go... Google Earth Image_Searches.d... Draft of Chichen It...

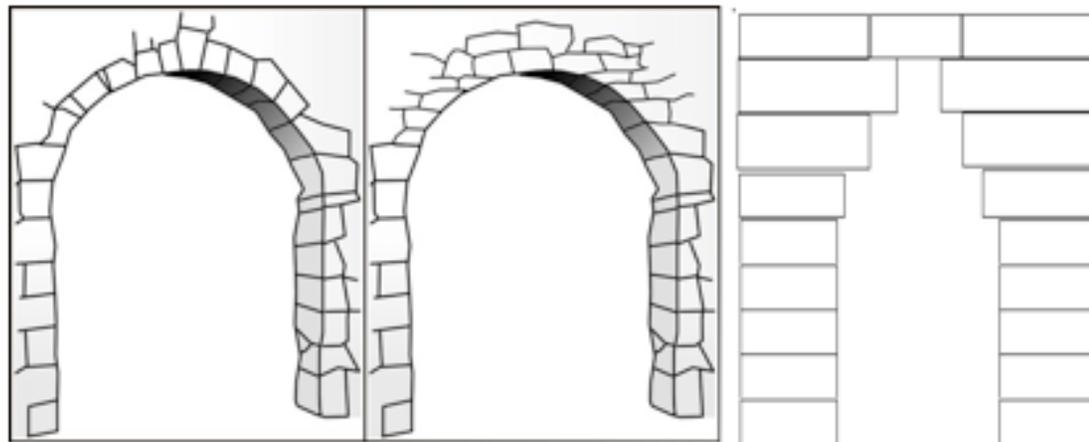
Smith College Projects 3

SCRIPT: [fi
key ruins of
peninsula an
structures fro
and ancient e
American art
significance.

DIRECTIO
Itzá
DIRECTIO
countries nov

SCRIPT: Di

DRAW SIMILAR DIAGRAM:



- **1 Site: The Red house (corbel vaults?)**
 - Named because of red border along the portico
 - Small temple set on a raised platform with stairway
 - Private rear chamber
 - Heavy stone blocks (like the traditional block masonry of the Peten)
 - Missing the fine cut masonry of the Puuc
 - the specialized boot-shaped stones are not used for vaulting and the arched doorway is not present at Chichén like it is at Uxmals
- **Global Pair #1:** Corbeled gallery in the walls of the citadel, Tiryns, Greece ca. 1400-1200 BCE

Foundation Support for DH

- The National Endowment for the Humanities has established an Office of Digital Humanities, supporting Institutes for Advanced Topics in DH such as Spatial Narrative and Deep Maps: Explorations in the Spatial Humanities.
- The Five College Consortium in 2011 began a Digital Humanities Initiative with support from the Mellon Foundation.



From John Corrigan, *Words in Space: GIS, Data Mining, and the Visual Display of Religion*

Five College DH Grants

- The Five Colleges: 2,200 faculty members and 30,000 students in western Massachusetts.
- Received three grants from the Five Colleges:
 - Expanding *Cityscapes* to Other Institutions and Usages
 - Digitizing Historic Maps
 - [Workshop on Spatial Techniques for the Digital Humanities](#)



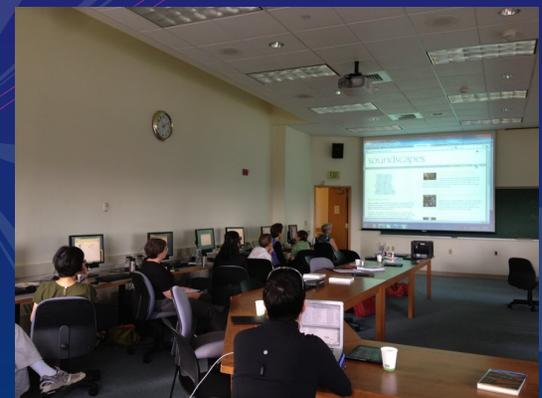
Spatial Techniques for the DH

- We (together with Cory Keeler) developed a faculty workshop focusing on the activities, content, and media of interest to humanists.
- Goals:
 - Demonstrate local examples;
 - Inspire with expert presentation;
 - Provide hands-on learning;
 - Promote networking, discussion, and discovery.
- Grant helped pay for our own education!

Survey of Five College Humanists

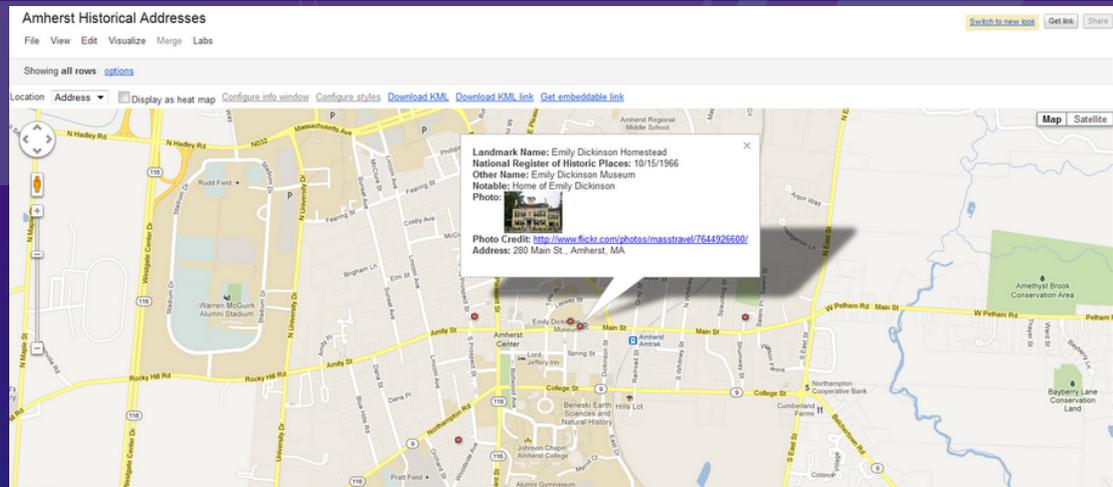
■ To determine content of workshop:

□ Georeferencing (Positioning scanned maps)	66%	*****
□ Cartography (Preparing maps for publication)	49%	*****
□ Collaborative Mapping (Multi-user mapping)	49%	*****
□ Mash-ups (Combining data with a web map)	46%	*****
□ 3D visualization	43%	*****
□ Geotagging (Assigning coordinates to photos)	40%	*****
□ Data Publishing (Attaching metadata)	29%	
□ Other visualizations of data	29%	
□ Animation of geotemporal data	26%	
□ Social Network Mapping & Analysis	26%	
□ Spatial Statistics	23%	
□ Cartograms (Distorting spatial regions)	20%	
□ Crowd Sourcing	17%	
□ Data Conversion (Between different formats)	17%	
□ Geocoding (Street-addressed data)	17%	*****
□ GPS - Global Positioning System	14%	*****
□ Geoparsing (identifying place names in text)	3%	*****



DH Workshop

- Two days in August 2012



- Eight themed sessions:
 - Relatively simple approaches on the first day: Google Docs+Maps, Cityscapes, Hypercities, Google Earth
 - More complex techniques on the second day: ArcGIS
- 20 faculty from four of the Five Colleges
- Keynote presentation...

Exploring the Spatial Humanities



Spatial Techniques for the Digital Humanities
13 Aug 2012

Merrick Lex Berman

China Historical GIS Project [CHGIS]
Center for Geographical Analysis
Harvard University

DH Post-Workshop Survey Response

- The workshop design, duration, and venue were appropriate.
- All found the sessions somewhat or very useful/interesting for their teaching or research.
- Some participants found the computer exercises rather tedious, but acknowledged the benefit in knowing details of the techniques.
- Several planned to incorporate what they learned in their research or teaching, and expressed interest in additional assistance.



The Future

- We expect to see more projects coming our way.
- Faculty at the other colleges besides Amherst and Smith don't have the same type of support!
- New grants available: perhaps a workshop for support people?



Digital Humanities Resources

- Many examples of digital humanities are discussed and catalogued at sites like:
 - <http://chronicle.com/blogs/profhacker/checking-in-with-digital-humanities-questions-answers/>
 - <http://dhcommons.org/projects>
 - <http://www.digitalhumanities.org/>
- A cascade of new books address the subject, in particular the spatial humanities.