Conserving a Giant: Digitally Documenting a Painting Restoration Project

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Digitally Documenting a Painting Restoration Project

- Painting Background
- Modern Restoration Details
- Conservation Exhibit / Archive
  - Software Used
  - GIS techniques
- VuFind usage
Painting Background

- Old Painting with weird provenance
- Donated to Villanova around 1950
- Underwent restoration in 1956
1956 Restoration
Modern Restoration Details

- The effort is a collaboration between professional painting conservators and Villanova faculty from the Art History and Chemistry departments
- Undo everything done in 1956
- Fix any damage
- Repaint
Conservation Exhibit / Archive

- Lots of content was generated during the conservation
  - Thousands of hi-res pictures
  - Chemical analysis of pigments
  - X-rays and other imagery
How do we tell the story of the Restoration?

With Neatline and Omeka

http://hotchkiss.neatline.org/neatline-exhibits/show/battle-of-chancellorsville/fullscreen
Conservation Exhibit / Archive: Software

- Wordpress
- Neatline / Omeka
- Open Geoserver
- QGIS
- VuFind
Conservation Exhibit / Archive: Software

1. Wordpress  
   a. used by the conservators and faculty to publicize progress

2. Neatline / Omeka  
   a. A timeline and interactive map generator based on OpenSeadragon

3. Open Geoserver  
   a. An image server that provides access to vector and rasterized GIS items
Conservation Exhibit / Archive: Software

Problem, we don’t have any GIS or map data!
Turn our painting into a map with GIS coordinates

GDAL - Geospatial Data Abstraction Library

gdal_translate

-of GTiff
-a_srs EPSG:3857
-a_ullr -2865750 1715250

2865750 -1715250

in.tif

out.tif
Geo Rectification

The process by which a remotely sensed raster image (e.g. an aerial photograph, a satellite image, geophysics results, or even a scanned map) is linked in to a coordinate system so that it can be accurately located onto a map.
QGIS
Where does VuFind fit in?

To facilitate Search and Browse!

A custom module was written

- Data ingest from Omeka/Neatline and Wordpress
- Custom Record view to display events “statically”