

Hunter College - CUNY
Department of Geography
Nature of New York

Optional Exercise 6:

Maps of New York State and their Interpretation

Check One: For grading For extra credit

Due no later than the day of the Midterm Exam

PURPOSE: This exercise will introduce you to web sites where you may view historic maps and experience interactive mapping resources.

INTRODUCTION: Public and university libraries house a treasure of old and modern maps. Historic maps have been photographed, scanned and made available to the public via the Internet. Digital maps that can be queried are available at governmental and commercial websites. You will start by looking at historic maps of the New York region. Then you will go the depositories of modern maps and navigate through their offerings. You will see changes in presentation, detail and accuracy over the 400 years of mapping New York. These sites will be useful in completing other assignments during the semester.

ASSIGNMENT: This exercise has **THREE PARTS**, each with several subsections.

Be sure to address **all gray boxed bold-faced** questions and comments embedded in the text. USE YOUR THREE COUNTIES. If mapped areas are not available for your counties, use maps from counties/areas closest to yours. Be sure to annotate the maps to label county or area shown.

Please number your answers. Type the answers on separate sheets of paper. Print and **attach a copy of each map** discussed in your answers. When copying the maps, do not use thumbnail-size portrayals. The maps need to be clear and readable; usually 3 in. x 6 in. or 2.5 in. x 5 in. maps are good sizes. Include **the title and source citation** for each map you print as a footnote.

PART I. Map Collection Websites.

- The SUNY-Stony Brook Library Map Pathfinder site for New York region maps: www.sunysb.edu/libmap/nypath1.htm.
- The Library of Congress Map Library (www.loc.gov/index.html) and its specialized pages:
 - Maps and Geography: <http://www.loc.gov/topics/maps.php>.
 - Geography and Map Reading Room: <http://www.loc.gov/rr/geogmap/guides.html>
 - American Memory Map Collections: <http://memory.loc.gov/ammem/gmdhtml/gmdhome.html>
- The New York Public Library (<http://digitalgallery.nypl.org>) Map Division Collection is at http://digitalgallery.nypl.org/nypldigital/dqdivisionbrowseresult.cfm?div_id=hm.
- The New York State Library <http://www.nysl.nysed.gov/reference/maps.htm> has an extensive list of map resource sites.
- The David Rumsey Collection (<https://www.davidrumsey.com/>) of Stanford University has a very extensive collection of scanned images. Create a free account to use its resources.

1. Go to the NYS Map Pathfinder site at www.sunysb.edu/libmap/nypath1.htm.
2. Click on **Early Maps** (prior to 1800).
3. Select and **print** one map drawn before 1800. Be sure to include the date of the map.

QI-A: Briefly describe the map's style and portrayal of information.

4. Return to the NYS Map Pathfinder site and click on **Panoramic Maps**.
5. Using a NYS road map or atlas, look for maps of towns/cities of interest to you.

**QI-B: a) How does a panoramic map portray reality?
b) Comment on its helpfulness to you when studying the area shown.**

6. Go back to the *NYS Map Pathfinder* site and click on **Nineteenth Century Maps**.
7. Select and **print** an interesting map drawn in the **mid-1800s**.

QI-C: Comment on the map's style and portrayal of information in comparison to the maps created prior to 1800.

8. Return again to the *NYS Map Pathfinder* site and click on **Twentieth Century Maps**.
9. Look through the maps. Select and **print** a map that was **created after 1980**.

QI-D: How does it differ in appearance from the maps of the other time periods?

PART II. Historic USGS Topographic Maps of New York State

A: READING TOPOGRAPHIC MAPS.

The following USGS and NYS web sites have pertinent map reading and acquisition information.

- USGS Mapping: <http://nationalmap.gov/ustopo/history.html>
- Map Scale: <http://pubs.usgs.gov/fs/2002/0015/report.pdf>
- Map Symbols: <http://pubs.usgs.gov/gip/TopographicMapSymbols/topomapsymbols.pdf>
- UTM Grid: <http://pubs.usgs.gov/fs/2001/0077/report.pdf>
- Latitude & Longitude: https://maptools.com/tutorials/lat_lon
- Topographic Maps: <http://nationalmap.gov/ustopo/index.html>
- National Map Guide: <https://nationalmap.gov/ustopo/quickstart.pdf>
- Free USGS Downloads: <https://www.usgs.gov/faqs/how-do-i-find-and-download-us-topo-and-historical-topographic-htmc-maps>
- NYS GIS and Maps: <https://gis.ny.gov/>
- NYS Topo Quads: <http://gis.ny.gov/gisdata/quads/>

B: FINDING TOPOGRAPHIC MAPS.

1. To get to the NYS index map of topographic maps by county go to:
<http://docs.unh.edu/nhtopos/NewYork.htm> for NYS outside of Long Island,
<http://docs.unh.edu/nhtopos/Connecticut.htm> for Long Island, or
<http://gis.ny.gov/gisdata/quads/> for the entire state at different scales.
2. Click on the boxes within your counties to bring up the map names. As the cursor arrow is moved over the grid, the name of the topographic map will appear. (*Write down names of the ones you want to visit.*)
3. Select **one** interesting map from any of the 3 counties and **print it**. Use the **southeast corner option** as this will allow pertinent map information to show. Click the **+** magnifier to enlarge the image. You may want to compare maps of different years to see change. You can also use the **USGS free download** site to get the entire map.

FOR PART II: Describe the area covered by the map by including the following:

- QII-A. Indicate the map's name and date** (including reprint or revision dates).
- QII-B. Describe the area's topography as represented by the contour lines** (lines of equal elevation; the closer the lines the steeper the slope).
- QII-C. Describe the land cover/land use as represented by colors and symbols.** Is it a forested, agricultural, marshy, urbanized, etc. area? See Map Symbols links above.
- QII-D. Describe the system of roads.** Is it a grid system superimposed on the landscape or do the roads generally follow the lay of the landscape or does it vary?
- QII-E. Describe one feature** (physical or cultural) **on the map that caught your attention.** Circle it on the map, identify it if you can and tell why you noticed it.

PART III: MODERN GEOGRAPHIC DATA.

A. **USGS MAPS SITE:** Matching a topographic map with a satellite image or an aerial photograph.

1. Go to the USGS Earth Explorer web site at <https://earthexplorer.usgs.gov/> .
2. **TO FIND A SITE:** Enter a place name from one of your counties in the **upper left part of window using the City and State (NY) boxes**. *You can also add the name of a specific feature.* Then click on **“GO.”**
3. **SEARCH RESULTS:** A current mapped image will appear. Zoom in to see detail.
4. Choose the **MAP** option first. **Pan the map using the arrows** so the map is center over an interesting area. Zoom in and out to find an interesting area. **PRINT THE MAP using the print button on the map border.**
5. Now click on **SATELLITE tab for this same area**. **PRINT THE SATELLITE IMAGE.**
6. Now go back and select a date at least 50 years in the past. Search for topographic maps and aerial photographs dating from that time. **Print one of each** that corresponds to the area searched in IIIA2 above.

B. Go to Google Maps (www.google.com/maps) to get a current GPS image of the area. **PRINT THE IMAGE** using the print button or the **“print screen”** button to copy it to your write-up. Click on **the tabs** at the upper left to see different views of the area.

FOR PART III: Describe the area covered by the electronic mapping techniques:

QIII-1. Dates (*Be sure to write the name of the city or town next to the date.*)

- a) What is **the date** of your **Topographic Map found in IIIA6?**
- b) What is **the date** of your **Aerial Photograph found in IIIA6?**

QIII-2. Topographic Map vs. Aerial Photograph or Standard Satellite Image:

- a) Describe the information you get from each area portrayal.
- b) What are the advantages of each portrayal?
- c) What are the disadvantages of each portrayal?

QIII-3. Google Images

- a) Describe any changes in land use when comparing the topographic map and aerial photograph with the Bing GPS image of the area you selected.
- b) What advantages does a GPS image have over the standard aerial photograph?

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