Week 5-6
Cartographic Design
Spring 2017
OBJECTIVE

Create and defend a layout that helps high school or early college students understand how a cartographic projection works by illustrating an interesting geographic question that requires a projection to answer. To do this, your poster should focus on a geographic question that deals with either a global extent (or something that at least occurs across a good portion of the globe) or that deals with a large region on the globe that doesn't often get paid attention to on maps for general audiences. Your layout should convey both an answer to the question and how a cartographic projection is necessary for answering it.

TASKS

(1) Pose a specific question that is representative of a general class of cartographic projection problems. Here are some examples:

(a) if a wall gets built along the US - Mexico border, how long would it be?
(b) what countries are at risk from North Korea's missile program?
(c) what happened to MH370?
(d) how much ice is on Antarctica?
(e) how long is the shoreline of Maine, or Chile for that matter?
(f) if I flew from NYC to Tokyo, what would I see out the window?

(2) Sketch a layout with pen or pencil and make a preliminary plan for the design by identifying patterns and principles that you think you will implement. Please refer directly to:

(a) any of the patterns in the handout from 3/7 lecture,
(b) any of the principles that you identified in the first three weeks of the course for graphic variables, perceptual color theory and positioning names on maps.

(3) Implement your plan by creating a layout. Please design your layout for tabloid size paper (11”x17”), or a figure that could appear as a two-page spread in a small atlas.

(4) An annotated list (1-2 pages) that describes the patterns and principles that you implemented. Please refer directly to the patterns from the handout and the principles from the first three weeks as described above.

SCHEDULE

March 16 lab: Review projection videos from GG120 and work through the new playlist on projection patterns for cartographic design. Develop a specific question that requires a cartographic projection to answer. Find datasets that you need to illustrate the case.

March 21 lecture: Bring (1) copies of existing maps that either illustrate the specific case you will develop or will inspire your design, (2) a sketch of your layout that reflects how you are thinking about the layout’s composition (the things that you will need to show) and configuration (how you will arrange these things on the layout itself), and (3) a list of the patterns and principles that you plan to implement.

The sketch should be sketchy (don’t worry about a lot of detail on coastlines, etc). Your goal is to just think visually and spatially about the basic composition and configuration. Your goal is not to create a detailed, hand-drawn version of the map that you will eventually make with AI.

The list of patterns should include a brief statement for each item that describes how you will implement the pattern. For example, your “How will you know you’re done” pattern should present a list of the questions that you want your map to help your audience answer. Your “Simplify the World” pattern should identify the list of features you’ll need to show. Your “Visual Hierarchy” should convey the intellectual hierarchy of these features. And so on.

March 23 lecture: Bring (1) your layout for the crit, (2) your original sketch, and (3) a final list of all the relevant patterns and principles with brief statements for each item that describes how you implemented them, and (4) copies of the existing maps that either illustrate the specific case you developed or that inspired your layout design.

EVALUATION

The main components for evaluation are:

(1) Did you choose to develop a good case? Is the scale or extent appropriate for the assignment: is the story at either a global scale or involving a portion of the world that your audience may not be accustomed to looking at on a map? Does it require a projection to answer well and did you identify a good projection strategy?

(2) Did you develop a thoughtful sketch and plan that prepares you to work efficiently when compiling necessary data and creating the design?

(3) Does the layout work? Is the purpose, audience and context clear? Are the geographic frameworks appropriate? Does it deliver an elegant visual argument? Does the lettering, line work, color and graphic variables follow patterns and principles?

(4) Do you clearly, thoughtfully and thoroughly articulate the decisions that you made during the process of making your layout? Do you thoroughly identify patterns from the handout that are found in your work? Do you clearly identify principles from the first three weeks that can be found in your work?
REFERENCES

Maps and layouts I showed in lecture on 3/16:

USGS map projection poster
Frank Gray 1878 map of USA
National Geographic reference map of Alaska
National Geographic thematic map of Chile
Ribbon map of the Father (sic) of Waters
Antarctic Glaciers
What your favorite map projection says about you
National Geographic World Map
Fortune Gnomonic Map