Applied Styles in Illustrator

For this lab, we are going to create a master template of styles, symbols, and swatches. These presets allow the cartographer to quickly style raw data exported from a GIS or other source. In production workflow, were each map has a related theme, or all maps for a project need to have a consistent look, styles function as a continuity template that ensures symmetry throughout a project. They also form a solid basis for alteration and experimentation of one-off maps. A word of warning needs to be inserted; cartographers that use the same master template to begin each map, tend to always produce maps that look the same. Therefore, you must force yourself to constantly create new styles, modify existing ones, and combine various styles from different projects. The benefit of styles is that you can recreate the look of a map quickly, and then move beyond the original without having to spend countless hours relearning techniques.

Some cartographers create multiple master templates based on different themes, such as historic, black & white, modern, classic, etc. Here, you will create one template that has at least two different sets of styles. Then you will paste in some raw data and style it to your liking, creating a map of an imaginary purpose and audience. Add all the usual elements that adorn maps and give it a title that reflects what you are trying to show. This should go quite fast once the template is set up. Let’s get started!

Demonstration Tutorials

I have created an example of a Graphic Styles Tutorial that is the model I would like you to follow this semester. A longer version of it was published [here](http://cartographicperspectives.org/index.php/journal/article/view/22/48) in Cartographic Perspectives. In class, I will have you take notes while I perform an onscreen demonstration of one technique that you will need for the lab. I may repeat parts of demonstration several times until everyone is satisfied with their notes. I will then move on to the next technique and repeat the process. I will try to keep the new material to a minimum, say four per lab.

Then you will practice the techniques using your notes, editing where needed, and asking questions. You can ask cohorts or the instructor for help, consult videos posted on the [Map Practical](http://mappractical.blogspot.com/) blog, or utilize other tutorial sources, such as [Adobe TV.](http://tv.adobe.com/show/learn-illustrator-cs6/) It is highly recommended that you consult the Help file within Illustrator and the read the sections on the Pallets used in this lab. Once you have finished a Demonstration Tutorial, print it and turn it in for credit. When returned, put it in your Resource Notebook.

Lab 1 Requirements:

1. Create a LastName\_Lab1 folder in the Workspace folder on the C:\ drive. Always work from this directory and never from a portable storage device! However, always back up work to your device and take it with you when leaving the lab.

There are no guarantees that files left on the lab computers will not be erased! Create a new Illustrator document and name it with this convention which should be followed all semester: LastName\_Lab\_1.ai

1. As demonstrated in class, open the Swatch Library and populate the Swatch pallet with a dozen or so Strips. Swatches are simply preset colors or pattern fills, and Strips are themed collections of Swatches. You can also make your own Swatches based on custom combinations of the Color sliders.

\*\*\* Color Brewer and Kuler

1. As demonstrated in class, open the Symbols Library and populate the Symbol pallet with a dozen or so symbols. Try the Map library. Symbols are simply premade vector objects you can use over again by dragging them out of the pallet and onto the artboard. In cartography, they usually represent point symbols. You can turn any drawn object into a Symbol by dragging it into the Symbol Pallet.

Also open an [NPS symbol](http://www.nps.gov/hfc/carto/map-symbols.cfm) set and add the ones you prefer to your Master Map Template.

1. As demonstrated in the tutorials, open the Graphic Styles Pallet and create these styles:
   * Hwy
   * Secondary Rd
   * Unpaved Rd
   * Trail
   * Contour Line
   * River
   * Stream
   * Lake
   * Building
   * Park Border
   * Wilderness Border  Land Border

Graphic Styles allow you to set stroke and fill properties of an object and save them for later use. You can build up complex styles in the Appearance Pallet, and apply them to multiple objects. When a Graphic style is redefined, all objects with that style are updated automatically.

1. As demonstrated in class, open the Character Styles Pallet and create these styles:
   * Title
   * Sub-Title
   * Shield Number
   * Road
   * River
   * Lake
   * Human Feature
   * Geographic Feature
   * Peak
   * Contour

Character Styles allow you to set font family, size, and color of type labels and save them for later use. You can change many parameters; such as kerning, letting, all caps, etc., in the Character Pallet, and apply them to multiple pieces of type. When a Character style is redefined, all labels with that style are updated automatically.

1. Once the Master Map Template is complete, save it to your portable storage and make another copy in your Lab 1 folder. Change the name to

LastName\_Lab1\_V1 and open it in Illustrator. Go to the Layer Pallet dropdown and make sure Paste Remembers Layers is checked. Copy the Lab1\_RawData.ai file from the class folder on Ptolemy, open it, and hit Ctrl+A to select all, Ctrl+C to copy all, Ctrl+Tab to switch Illustrator artboards, and finally Ctrl+V to paste it into the template containing all your styles. All the data should paste into layers named and ready to go.

1. Now style the objects using the presets you have just created. Don’t assign styles to the top level layers, but rather to each object within the layers by selecting them on the artboard, or using the selection circle within layers. Be aware of visual hierarchy, figure and ground, and the context you have invented. Feel free to draw new objects and manipulate the existing ones, but please don’t erase entire layers. Obviously, you will have to create a Labels layer. Have fun and play – make a nice map!

Deliverables:

Upload your map into the Lab 1 Drop-box on Ptolemy. It should be in Illustrator format (.ai). I will check them to see that your layers and styles are organized, labeled, and neat. The maps should be clean, well-executed, and aesthetically pleasing. We will critique a selection of them in class.

# Lab 1: Due by 1 PM on Monday 1/7