INTRODUCTION (by Alex Tait)

In this issue of *Cartographic Perspectives*, I am happy to hand over the mantle of practical cartographer to NACIS member Kevin McManigal. Adobe Illustrator is a favored tool for many cartographers, and Kevin has provided a detailed review of methods for applying styles to artwork and modifying them quickly and easily.

If you are not using Illustrator’s Graphic Styles and Appearance palettes on a regular basis, you will be after reading this! These tools make quick work of tasks that can be laborious, and time-saving tips like Kevin’s allow cartographers to spend more time thinking about design and less time fussing with software.

I would like to extend an invitation to NACIS members and *Cartographic Perspectives* readers to contribute to the Practical Cartographer’s Corner. If you have any tips, tricks or techniques that focus on the “how to” in mapping that you would like to share, please send me an email at alex@internationalmapping.com.

- Alex

STEP-BY-STEP GUIDE

Graphic Styles are powerful tools that allow cartographers to quickly style raw data exported from a GIS or other source. In a production workflow, where 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 the project. They also form a solid basis for alteration and experimentation in one-off maps.

The added functionality of the Appearance palette in CS5 makes it easy to stack strokes and fills or to change color and line weight from one convenient set of menus. This facilitates quick creation and alteration of Graphic Styles, leaving the cartographer more time to design aesthetically pleasing maps.

The following tutorial explains, step by step, how to set up Graphic Styles within Illustrator CS5, and offers notes about their use.
1. **OPEN THE GRAPHIC STYLES AND APPEARANCE PALETTES:**

   Menu Bar > Window > Graphic Styles
   Menu Bar > Window > Appearance

2. **DRAW A LINE OR POLYGON ON THE ARTBOARD:**

   a. Add multiple strokes and fills using the icons at the bottom of the Appearance palette or the drop-down menu in the upper right corner of the palette.

   b. From within the Appearance palette, access the Stroke palette by clicking the blue highlighted word “Stroke.” The full palette will appear, allowing control of the stroke styling parameters.

   c. The color swatches are available by clicking the color drop-down menu to the right of the word “Stroke.” (To access the color sliders instead, use Shift-Click.)

   d. The transparency of each stroke or fill also can be adjusted under the blue highlighted word “Opacity.” The “Opacity” link at the bottom of the stack is for the transparency of the entire object.

   Once the object has been styled to the appropriate look for the map, it can be saved as a New Graphic Style for use on other vector objects.

3. **CREATE NEW GRAPHIC STYLE (WITH THE OBJECT SELECTED):**

   Graphic Style palette dropdown menu > New Graphic Style
   Graphic Style options > Name Style > OK

   Alternatively, drag the selected object into the Graphic Style palette, and then double-click on it to provide a name.

4. **TO USE A GRAPHIC STYLE:**

   Simply select an object or group of objects on the artboard and click on the desired style in the Graphic Style palette. All selected objects will adopt the stroke and fill settings of that style.

   Other Options:

   1. **Break Link to Graphic Style** (with the object selected):
Graphic Styles and the Appearance Palette – McManigal

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2. Redefine Graphic Style (with the object selected):
   a. Change the object in the Appearance palette.
   b. Appearance palette dropdown menu > Redefine Graphic Style

   • Useful when an existing style needs a modification.

3. Change Appearance (with the object selected):
   a. Appearance palette dropdown menu > Clear Appearance (no stroke and no fill)
   b. Appearance palette dropdown menu > Reduce to Basic Appearance (one stroke and one fill)

   • Useful when starting a completely new style.

Usage Notes:

Graphic Styles allow global changes; that is, all objects with the style applied will reflect any change made in the Appearance palette and then redefined. This can be very powerful. For example, if hundreds of line segments styled as streets need to be modified, one segment with the “streets” Graphic Style applied can be selected and modified in the Appearance palette. The change will then be reflected throughout the map once the Redefine Graphic Style function is applied.

Graphic Styles should be applied to objects, not to the top level layers that contain them. To apply a style to all the objects in a layer, lock all others layers and drag a selection box over the artboard. Then apply the style from the palette. Problems arise when an entire layer is selected by clicking on the small circle in the Layers palette, with subsequent application of a style. This style on the top level layer is like a blanket that will cover any changes made to objects within that layer. Use Clear Appearance to reset a layer that has an unwanted Graphic Style applied.

A word of warning; cartographers who use the same Graphic Styles to begin each map tend to always produce maps that look the same. Therefore, 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 adjusting settings.

Happy Mapping!

To watch a video of this tutorial, see the Map Practical blog:

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