

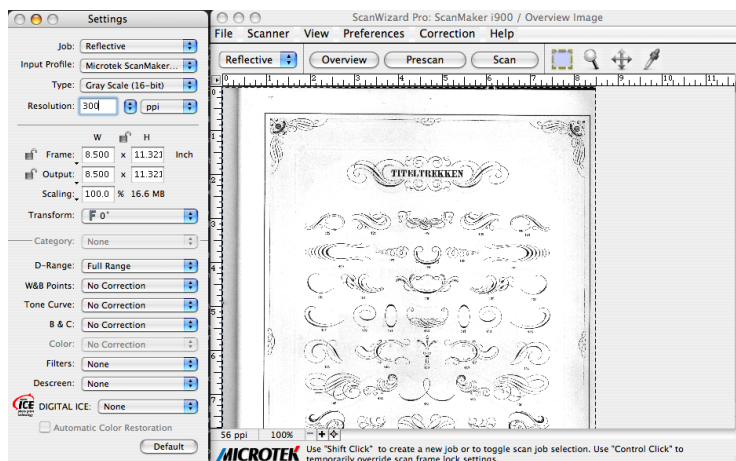
## Advanced Image Manipulation: Line Art and Blend Modes

Most scanners have a line art option, which scans in bitmap format. This creates an image with no grays and is difficult to edit, limiting your result. Scanning in black & white and converting in Photoshop gives you more control.

### Step One:

Scan your drawing or line art in grayscale mode at 300 dpi to use the scan at 100%. Increase resolution proportionately if you plan to enlarge.

In Photoshop, use the measure tool to straighten the image (Image>Image Rotation>Arbitrary) and crop out unwanted edges.



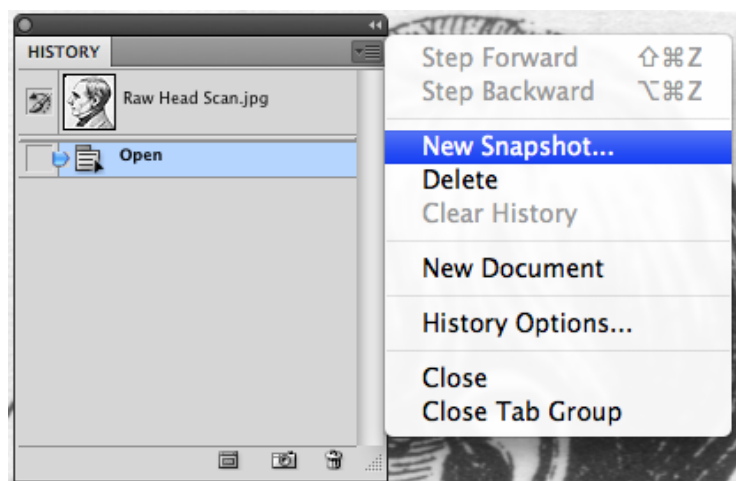
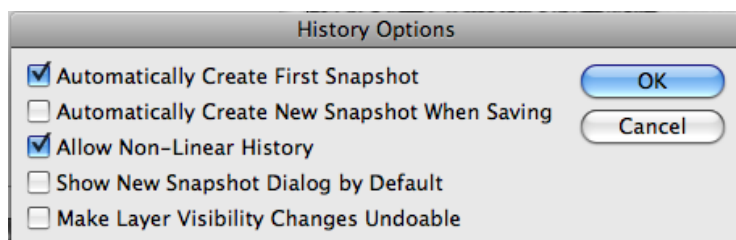
### Step Two:

Before enhancing the image more, take a snapshot in the History Palette.

This will allow you to use the history brush to return to this state at any point. Actions in the main list are removed and cannot be reselected, but snapshots remain as long as the image stays open.

Choose the fly-out menu and History Options to select "Allow Non-Linear History".

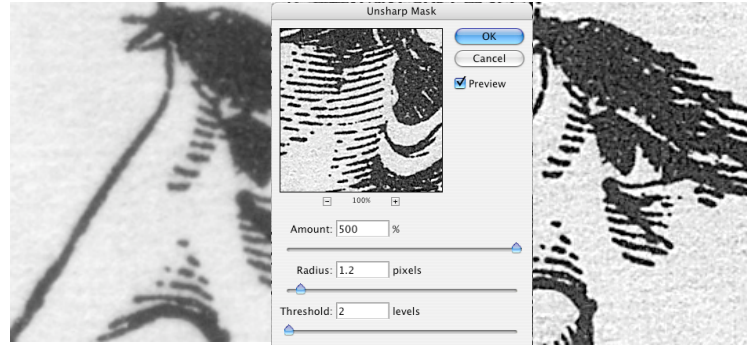
You can specify the number of history states remembered in Photoshop>Preferences>Performance.



# Advanced Image Manipulation: Line Art and Blend Modes

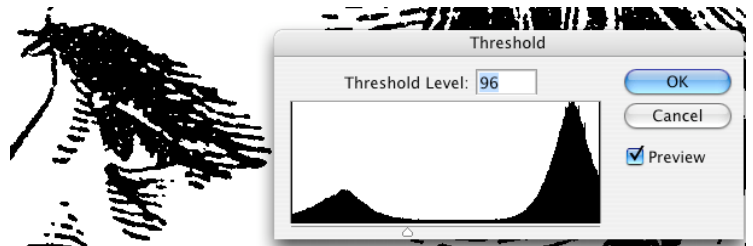
## Step Three:

View file at 100% and select Filter>Sharpen>Unsharp Mask with the Amount all the way to the right and the Radius and Threshold near the left. This will sharpen the lines but also make the paper texture visible.



## Step Four:

To remove the rest of the gray in the image, create a Threshold Adjustment Layer and adjust to get thick, clear lines (still viewing at 100%).



## Step Five:

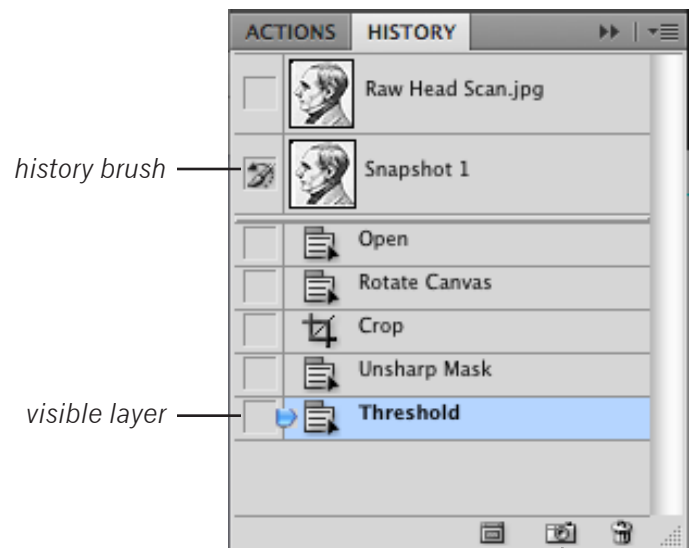
Use the History Brush (with the saved snapshot selected) to enhance the illustration. Set the brush blend mode to each of the following.

**Multiply:** darkens the lines.

**Lighten:** removes some of the dark areas between lines

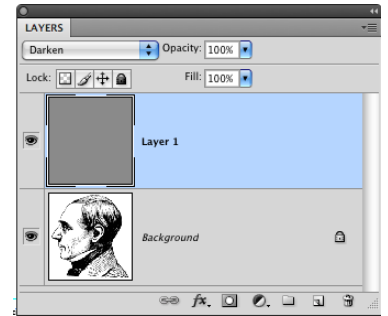
**Screen:** Erases the thickest part of the lines.

**Dodge and Burn:** increases or decreases the size of the lines.



## Advanced Image Manipulation: Line Art and Blending Modes

Blend modes change how layers interact with each other. Make a file with more than one layer and experiment to see how the blends look. Some modes also work to enhance an image- copy the layer and apply the blend mode to the copy on top.



### Darken, Multiply, Color Burn, Color Dodge

*Darken the underlying image.*

**Darken** multiplies pixels that are lighter than the foreground color.

**Multiply** makes white areas transparent while darkening the colored areas

**Color Burn** similar to Multiply but more intense and saturated.

**Color Dodge** similar to Screen but more intense and saturated.

### Lighten, Screen, Color Dodge, Linear Dodge

*Lighten the underlying image.*

**Lighten** multiplies pixels that are darker than the foreground color.

**Screen** makes white areas transparent while lightening the colored areas (like bleach)

### Overlay, Soft Light, Hard Light, Vivid Light, Linear Light, Hard Mix

*Add contrast to the underlying image.*

**Overlay** projects the layer onto the layer beneath like a slide.

**Soft Light** a low contrast version of hard light

**Hard Light** multiplies the dark pixels while screening the light pixels

### Difference, Exclusion

*Compare the active layer to the underlying image.*

**Difference** reads as black where layers match, otherwise inverts colors

**Exclusion** creates solarized effects.

### Hue, Saturation, Color, Luminosity

*Apply certain qualities of the active layer to the underlying image.*

**Hue** colorizes the underlying layer using the colors of the active layer.

**Saturation** applies the saturation values of the active layer to the underlying layer.

**Luminosity** tints the active layer using the hue and saturation of the underlying layer.

## Advanced Image Manipulation: Line Art and Blend Modes

Blend modes can also be used to add a watermark to your artwork.  
Photoshop can embed copyright information into your file.

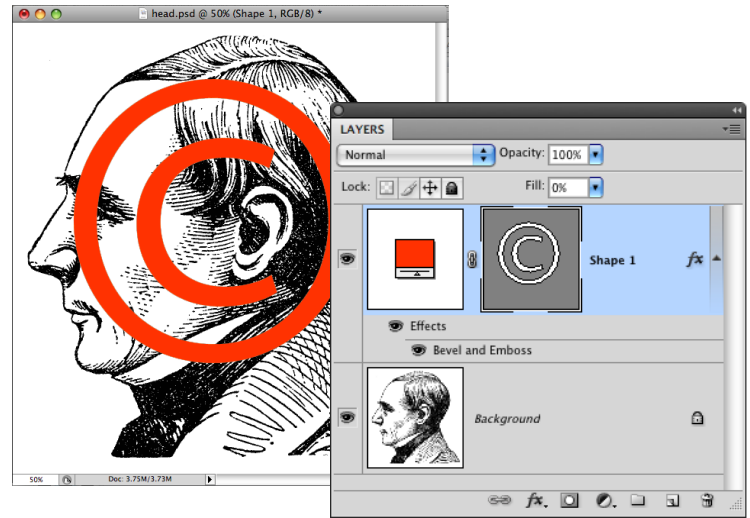
### Step One:

Choose the Custom Shape tool and select the copyright symbol from the shape options.

Draw the shape across the part of the file you would like to protect. Any color is fine.

Select Bevel and Emboss in Layer Styles and set a heavy bevel.

In the layers palette and reduce the Fill to 0%

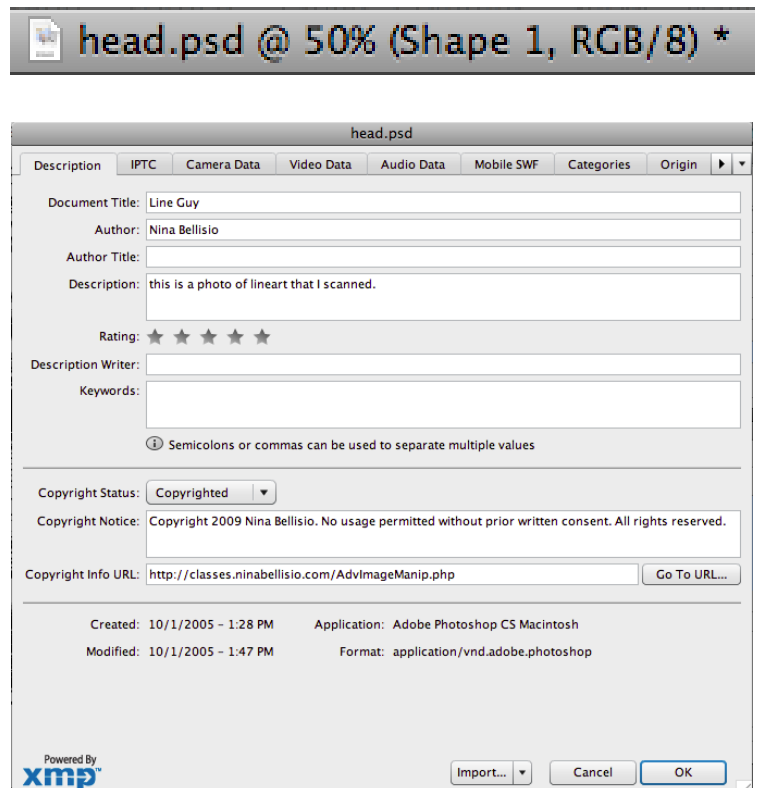


### Step Two:

Select File- File Info

Type in the metadata you want to attach to the file.

Check the Copyright box to add the symbol to the file name.



## Advanced Image Manipulation: Line Art and Blend Modes

### IN-CLASS PROJECT

2 points | due at the end of class

Use the skills and techniques presented in this tutorial to create an original illustration.

Scan at least one example of line art or an original drawing and optimize it using the steps in the tutorial.

Use the scanned line art, samples from the class folder, photos and type to create an illustration.

At least five Layer Blend Modes must be used.

On this handout, keep track of your steps, noting the blend modes used for future reference.

Save as *lastname\_scanning.psd*.



Illustrations by Alicia Buelow ([www.aliciabuelow.com](http://www.aliciabuelow.com))