Photoshop 6-Layer Masks, Channels and Puppet Warp

Part One- Layer Masks A layer mask hides the unmasked area of a layer

I. Creating a mask from a selection

A. Using the appropriate selection tool, select the area you want to show

B. Make sure the correct layer is active

C. There are a number of ways to create a mask, the result is the same

1. In the Masks panel, click the "Add a Pixel Mask" button

2. At the bottom of the Layers panel, the third icon from the left is the "Create Layer Mask" button

3. There is a "Layer Mask" option in the output section of the Refine Edge tool

If you are working with an image that has fine detail that is difficult to select manually, such as hair or leaves, the Refine Edge tool will help clean up around these areas to avoid distracting artifacts that create an artificially cut-and-pasted look. To access the Refine Edge tool, you can right click within the selected area and choose "Refine Edge," or, while a selection tool is active, click the Refine Edge button in the Options panel above the image. The refine radius tool is a very easy way to clean up an edge with intermittent detail like hair or the top of tall grass.

At the top of the Refine Edge dialog box is the View Mode section containing the image view thumbnail and two check boxes: "Show Radius" and "Show Original." Beside the thumbnail is a drop-down to show the view menu in which you can select the viewing mode that best allows you to see the refinements to the selection as you make them. There are seven options to choose from, simply pick the one that gives you the best view of what you're doing. The "Show Radius" check box will show only the perimeter of the selection. This is useful for setting the amount of feather, smoothing or edge shift. The "Show Original" check box is similar to the "Preview" check box when working with filters. If the "Show Original" box is checked, the refinements you have made to your selection will be hidden so that you can make a comparison. It is easiest to toggle the refinements on and off using the "P" key on the keyboard.

The "Edge Detection" area is used to control the effect of the "Refine Radius" tool. The "Refine Radius" tool is a brush that automatically searches for fine edges by comparing the selected area to the un-selected area and automatically de-selects unwanted elements in a function similar to the "Quick Select" tool.

The “Erase Refinements” tool (hidden under the “Refine Radius” tool) allows you to selectively undo areas that the “Refine Radius” tool has de-selected. The radius slider in the “Edge Detection” area controls the size of the area analyzed by the “Refine Radius” brush. A small radius will pick up finer details. Checking the “Smart Radius” box will cause the tool to factor in color differences as well as edges.

The “Adjust Edge” area has four sliders:

1. SMOOTH-Flattens sharp kinks and bumps associated with the Quick Select tool and the Magnetic Lasso tool. Works like anti-aliasing.
2. FEATHER-Creates a soft, blended edge. The greater the feathering, the softer the edge will be.
3. CONTRAST-The opposite of feathering. Hardens the edge of the selection to create a crisp, defined edge.
4. SHIFT EDGE-Shrinks or enlarges the selected area like a balloon. A negative edge shift makes the selection smaller and a positive shift makes it bigger.

The “Output” area allows you to choose what you want to do with the newly modified selection. The “Decontaminate Colors” feature will eliminate color fringe in which similar, but not the same, colors were selected. Using the “Decontaminate Colors” feature will create a new rasterized layer, so use it with caution. The drop-down menu lets you choose the way your modified selection is applied.

If you find yourself using the same settings nearly every time you use the “Refine Edge” tool (as most people do) there is a check box at the bottom that will set it to remember the settings you typically use the next time you open the tool.

The “Refine Mask” tool (the “Mask Edge” button activates it) in the Masks panel is exactly the same as the “Refine Edge” tool, but is used to modify an already existing mask.

Masks are non-destructive so you can edit masks over and over without affecting the pixels they hide, or reveal. When editing a mask, remember: white reveals, black conceals; shades of gray are in between. If you need to temporarily turn off a mask to view a layer without the effect of the mask, just Shift Click the layer mask or, in the Menu bar, choose Layer>Layer Mask>Disable. This will place a red X over the layer mask to signify that the mask is disabled. To turn the mask back on, just Shift Click it again or in the Menu bar, choose Layer>Layer Mask>Enable and the red X goes away and the mask is turned back on. When a mask is created, it is by default "linked" to the layer it masks. This is signified by the chain link icon between the mask and the picture thumbnail in the Layers panel. As long as the layer and mask are linked you can move and Transform either the mask or the layer and both will be affected (Though you can edit them independently otherwise). Clicking on the chain link icon will disable the link and allow you to move or Transform either the layer or the mask independently. To reestablish the link, just click on the blank space between the mask and the image thumbnail. Using the "Density" slider in the Masks panel allows you to control the opacity of a mask.

At the bottom of the Tools panel is the "Quick Mask Mode" button. In Quick Mask Mode the area outside your selection renders as a red overlay. Any changes you apply will only affect the selected area, the red overlay is there to signify that the covered area is "protected." Whenever you are in Quick Mask Mode, the blue area in the Layers panel that depicts an active layer turns gray instead of blue. When in Quick Mask Mode, clicking on the Quick Mask Mode button returns you to normal editing mode and the red mask is replaced with marching ants.

Whenever a mask is selected in the Layers panel, pressing the back-slash key (\) near the bottom right of the keyboard (usually adjacent to the right Shift key) will place a red overlay on the area outside the mask. This is useful for making sure you have the mask arranged exactly the way you want it.

Part Two- The Joy of Channels

Just as the actual picture information of an image is stored in layers, alpha channels store selections (and masks) as grayscale images. Each color also has its own individual channel; any of which can be turned on and off as needed. Channels can be duplicated and deleted as well. In an RGB image you have Red, Green, and Blue channels. In a CMYK image you have Cyan, Magenta, Yellow, and Black channels. If you need to work with one of those specific colors, make sure your image is in that particular mode. In the Menu bar choose Image>Mode>…color mode. You can edit the Levels and Curves of a channel as well as a number of other aspects found under Image>Adjustments…

It is generally considered wise to duplicate a channel and make your adjustments on the duplicate channel.

Part Three-The Puppet Warp Command

The Puppet Warp command allows you to rotate a selected area surrounding an anchored area. One of the most important aspects of the Puppet Warp command is the placement of anchor points. Inactive, or un-selected anchors fix part of the selection in place; the active, or selected anchor is the point around which you rotate a part of the image. The placement of the rotating anchor is critically important. When using the Puppet Warp tool on a person you must take anatomical factors into account. Try to imagine where the joint is that will be the fulcrum, or hub of the rotation. This is a tool that tends to make frequent demands on your ability to Ctrl+Z. Just as with the Transform command, using the Puppet Warp command starts with a selection. It is necessary to select more area than just that which you intend to affect. If you plan to bend or straighten an arm at the elbow, it is helpful to select most of the arm up toward the shoulder. Part of the image must be anchored and nothing outside the selection can be anchored. It takes some practice to get all the necessary points anchored; sometimes it takes several tries.

I. **Anchor Points-**the area that is not to be moved must be thoroughly anchored
A. With the entire limb to be affected selected, in the Menu bar select Edit>Puppet Warp
B. Use the anchors to draw a rough outline of the area that will not be moved
C. Place one anchor point at the fulcrum or hub of where the joint should be
D. Clicking on an anchor point selects it, this is signified by a black dot in the middle of the anchor point. You can remove a selected anchor point by pressing the delete button on the keyboard.

II. Executing the Puppet Warp

A. Select the anchor point that you want to be the fulcrum

B. To directly rotate, hold the Alt key and click and drag around the circle that appears around the selected anchor point. The mesh will move first and the image will follow, eventually. You can also key in a degree of rotation in the Options panel in the rotate box.

C. When you're satisfied with the rotation click the check in the Options bar or press Enter to commit the Puppet Warp

The Puppet Warp command must have a pixel layer to work, so if you're working with a Smart Object, duplicate the layer then rasterize it. If you're working with a pixel layer, duplicate the layer anyway. You will have empty, blank pixels where the warped element isn't anymore. Sometimes part of the lower, un-warped layer can be used to fill in part of it, but usually, it is necessary to clone in fill from the background. When you are ready to execute the Puppet Warp, turn off the layer from which the warped one was copied so that it won't show through while you're trying to position the warped element.

Thomas Gartman
P.O. Box 351
Point Harbor, NC 27964
252-573-8648
info@gartmanbeachpix.com