

Intermediate Photoshop

Channels and Masks

Editing with Layer Masks

One of the most powerful features of Photoshop in editing images is found in the layer mask feature built into the adjustment layers. Using masks is a highly flexible way to provide selective controls to your image: advanced burning and dodging, color corrections and enhancements, etc.

Black = conceals changes

White = reveals changes

When you create a mask on an adjustment layer, where the mask is black, you are protecting that portion of the image from any changes. Where the mask is white, you are affecting changes on the image according to the adjustment layer you have selected, i.e. levels, or color balance, curves,

or hue/saturation.

In the left image, we see one of the limitations of photography. The buildings are correctly exposed, but the sky is too light, lacking dimension. To create a layer mask, make an adjustment layer for levels and do not adjust the levels. Simply press OK and create the adjustment level with no changes to the

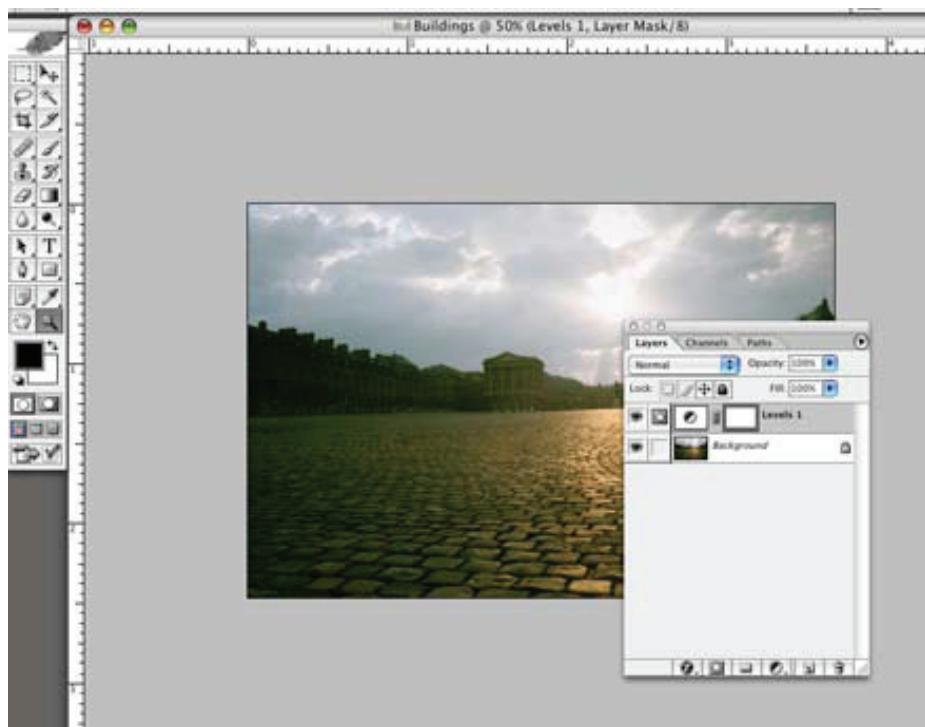
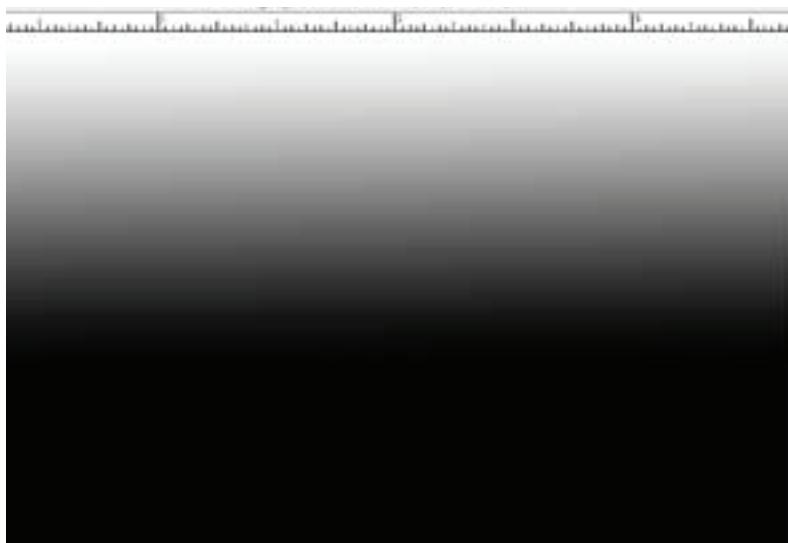
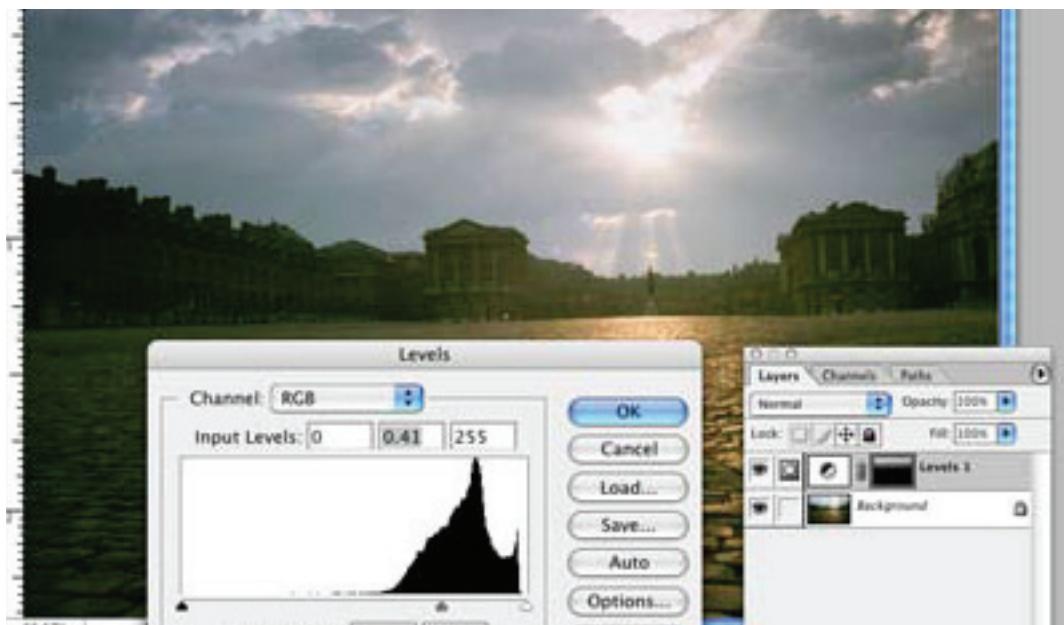


image. Examine the adjustment layer. The icon on the left is the levels control; the blank box on the right is a layer mask. Option-click the mask itself and you will have a window with a white box on your screen. This is your mask. Where there is white, your level control will affect the image. Right now, the entire box is white. The entire image would be affected if we run the levels control.

To affect the sky only, we need to create a black and white mask, where the building areas are black (protected) and the sky area is white (revealed). Use the linear gradient tool and draw a black to white gradient where the bottom 2/3 of the image is black and upper 1/3 of the image (where the sky is located) is white. Now, click back on the background layer and bring your image back into the window.



Notice that the layer mask now shows the black to white gradient. Double-click on the levels icon on the adjustment layer and move the center slider. You will see that the sky alone is affected due to the levels control being filtered through the layer mask. Any method of applying black and white to the layer mask will work: the linear or radial gradient tool, the paintbrush, or using individual channels. This represents a highly flexible method of burning and dodging your images.



Use of Quick Mask Mode

Along with the pen tool, the quick mask mode allows for flexible selections of complex features and objects, and is often used in conjunction with other selection tools to mask an object for selective image editing or compositing. The two principles that guide the use of the quick mask tool are:

- 1.) Painting with white adds to a selection; painting with black subtracts from a selection.
- 2.) The quick mask tool can only be activated on a partial selection made with other selection tools, i.e the magic wand or quick selection tool. In the example below, we want to select the McDonalds sign in its entirety to use in a composite.



Step one: Select a portion of the sign using magic wand or quick selection tool. After you see "marching ants", select the quick mask tool from the toolbar (last tool on bottom.)

You will see a red rubylith mask. Where is fully red, that area is not selected. Where you see the image color, that area IS selected. See example below for mask. Most, but not all of the sign is selected, and areas to the left outside the sign, that we do not want to keep, are also within the selection boundaries.

Step Two: In quick mask mode, select the brush tool and return your foreground and background color in the PS toolbar to their defaults, black and white. Painting with white removes the mask (adds to the selection boundaries.) Painting with black replaces the red mask (subtracts from the selection boundaries.)

Toggle back and forth between quick mask mode and standard view mode to view your selection.

Continue painting with B&W by varying your brush size as needed for details of the selection until the entire sign, and only the sign, is selected. Exit quick mask mode and save selection. Selection>save selection from PS main menu. It will be saved as an alpha channel, visible from the channels palette in PS.



Step Three: Open Natural Bridges file from PS Class files. Return to Macdonalds sign, go to Select>Load Selection and use the move tool to move your sign selection on top of the natural bridges image.



Step Four: Use Edit >Transform >Skew, Distort and Scale tools to position the MacDonalds sign on the rocks. Adjust for natural perspective.

Step Five: To create a shadow for natural perspective, create a new layer. Load Macdonald's sign selection on new blank layer. Feather selection by 15 -25 %. Edit>Fill Selection with black at a 50-70% opacity. Edit>Transform>Flip Vertical and Edit>Transform Skew or Distort for natural placement of shadow.

Step Six: Create a Levels adjustment layer and link to Macdonald's sign layer. Adjust levels for the illusion of sunlight on sign. Use layer mask and gradient tool to adjust levels for the illusion of light and shadow on sign.. Using a linear gradient on the levels adjustment layer, make the right and bottom right portion of the sign darker, as if in shadow to approximate correct lighting to match the rest of the landscape image. See example below for finished version.

Photograph courtesy of Ted Orland. Note: We will NOT be placing the second sign into the image.



Use of Layer Blending Modes

Multiply = Make image darker. 38% opacity is one full f stop

Screen = Make image lighter. 38% opacity of layer is one full fstop.

To use multiply and screen on a single image, duplicate the background layer and apply blending mode to copy (top) layer. Adjust opacity as needed.

Luminosity: Affects tonal range and contrast, not color. Use for adjustment layers for tonal correction without changing color. Use for sharpening on a duplicate image layer to avoid color noise.

Color: Use for hand coloring B&W images, saved in RGB mode. Affects selective color change by painting color on image without losing details and lighting of the original.

Overlay: Make new layer and apply Overlay mode, with "Fill with Overlay neutral 50% gray". Paint with low opacity (8-10%) black or white to burn or dodge image. Painting with white lightens image selectively, painting with black darkens image selectively.

Hard Light = Used with High Pass filter for aggressive sharpening.

Duplicate background layer. Use Filter>Other>High Pass. Choose radius, usually less than 1.0. Apply hard light blending mode on copy layer.

High Dynamic Range

1. Adjust camera RAW version of same image, one for shadows, one for highlights. Save as two PSD files.
2. Use move tool, drag the underexposed image on top of the overexposed image. Darker photo will be on top. Make layer mask>Reveal All on top layer.
3. Select>all on lighter image (Background) and copy to clipboard. Open layer mask on upper layer (option double-click). Paste clipboard into layer mask.
4. Adjust contrast and brightness of mask with curves as needed.
5. View image by clicking on the Background.