Advanced Masking Tutorial

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In this tutorial, we're going to look at some more advanced masking concepts. This particular example is not a technique you'll use every day, but it can still be handy, and you'll learn a lot more about masking as a result of following along.

Photoshop has some great analysis tools that let you quickly identify particular tones and colors within an image, and we've used those already for several different tasks. If the goal of masking is to select particular parts of an image, and Photoshop already knows how to identify particular colors, you should be able to use the image data that's in the image to create masks.

Consider the image in Figure 1.

**FIGURE 1:** Because we metered to ensure the sky wouldn't blow out, the building in this picture ended up a little dark and dull. We want to apply a Levels Adjustment to the building, without editing the sky at all.

The building is underexposed, but the sky looks okay. None of the highlights are blown, and the blue color is nice. We need to perform a midtone adjustment on the building, but if we open a Curves dialog box and click around with the Eyedropper tool, we'll find that the sky and the building share many midtone values. Therefore, if we start adjusting the building, there's a good chance we'll ruin the sky. A better choice is to build a mask for the building. The shape of the building is simple enough that it easily masks with the QuickMask tool.

However, because we want to achieve a slightly different effect, we're going to take a different approach. The texture of the building contains a wide variety of midtones of slight variation. To achieve better contrast on the building, we don't want to adjust all of those midtones uniformly. This means we need to create a very complex mask[md]one that will allow us to apply varying degrees of adjustment to different midtones. We're going to create this mask using the image data within the image itself.

We know that we want to target the midtones. What's more, we know that alpha channel masks are simply 8-bit grayscale pictures. Photoshop, of course, is a great tool for creating 8-bit pictures, so we're going to create a modified version of our image that we will use to mask our original image.

Note that this tutorial is not possible using Photoshop Elements.
**Step 1: Open and Prepare Your Image**

Download and open the file `Initial building.jpg` located in the Chapter 18 of the companion Web site. This is the file we will ultimately edit. Right now, we want to make a copy of this file, and then we’ll manipulate the copy into our mask. In Photoshop, click Image > Duplicate to create a new document containing the exact same image data.

**Step 2: Isolate a Grayscale Channel**

Again, our goal here is to use the copy of the image as a mask. But as you’ve already learned, masks are grayscale images. So the first thing we need to do is concoct a grayscale version of the image. We’ll use this gray version as the starting point for our mask.

As you’ll see in the next chapter, there are many ways to convert an image to grayscale. For this example, we’re going to isolate the luminance information in the image because we’re interested in working with the subtle changes in brightness on the surface of the building. Click Image > Mode > Lab to convert the image to L*a*b color mode. Rather than representing an image using separate red, green, and blue channels, L*a*b images are represented by a lightness channel and two separate color channels.

**Step 3: View the Lightness Channel**

In the Channels palette, click the Lightness channel to view it. The image will change to a grayscale image. Of course, we haven’t actually converted to grayscale, we’re simply looking at the lightness values of each pixel.

**Step 3: Create Your Mask**

This Lightness channel will serve as a starting point for our mask, but to use it, we need to move it to our original image. With the Lightness channel selected, open the pop-up menu in the top-right corner of the Channels palette and select Duplicate Channel (see Figure 2).
FIGURE 2: Open the Channels palette menu to access the Duplicate Channel command.

In the resulting dialog box, select initial building.jpg from the Document pop-up menu in the Destination box. Click OK. Now close the copy. Don’t bother saving, because we won’t need it for anything else. Instead, return to your original document.

Selected in the Channels palette should be the new alpha channel we just copied. Because it’s selected, your image will appear in grayscale. This channel already functions as a mask, but before we start using it, we want to make some modifications to it.

**Step 4: Adjust the Mask**

As previously discussed, we want this mask to exclude the sky completely because we’re pleased with the sky exposure. We want to create a mask that focuses on the midtones. As you’ve learned, in a mask, black areas are completely protected, so we know that if we can get the sky reduced to absolute black, it will be completely masked.

We’ve already learned about several tools that can be used to adjust tones within an image, and this grayscale mask is no different from any other image, so let’s put our toolset to work. With the Alpha 1 channel selected, click Image > Adjustment > Curves to open the Curves dialog box. (We can’t use a Curves Adjustment Layer because there’s no way to limit an Adjustment Layer to a particular channel.)

We know that for the time being, we don’t want to alter our midtones, so click the midpoint to lock it down with a control point. We also know that the tones we want to darken are the brightest tones in the image, so bring the white point all the way to the bottom (see Figure 3).
We’re using a Curves adjustment to edit our mask. We begin by trying to reduce the sky to complete black, a process that begins by lowering the white point.

**Step Five: Refine the Mask**

This is a good starting point. Our building has not been masked at all, and the sky is much darker. However, it’s not completely masked out. To eliminate it completely, we want to clip all its tones out of the curve, which we can do by moving our white point directly to the left. Don’t be timid[md]slide it almost until it collides with the midpoint. The sky will turn completely black, but the building will turn a light gray.

If you used this mask as it is now, you would have a partially selected building with the sky completely masked.

**Step Six: Finish the Mask**

As it is right now, the building is not sufficiently selected. Remember, the whiter the building is, the more selected it is. Right now, with its predominantly middle-gray tones, the mask is fairly uniform. We want a higher-contrast mask, and so we should adjust our curve accordingly (see Figure 4).
**FIGURE 4**: Our final curve results in a mask that isolates only certain midtones in the image.

**STEP 7: LOAD AND USE THE MASK**

In the Channels palette, click RGB to return to viewing and editing the full image. Now load the new mask by dragging it to the Load Channel as Selection button at the bottom of the Channels palette (see Figure 5).

**FIGURE 5**: You can load the new mask as a selection by dragging it to the Load Channel as Selection button at the bottom of the Channels palette.

Press Ctrl/Cmd+H to hide the selection, so it’s easier to see our upcoming edits. If we’ve built our mask properly, we should have a selection that is grabbing only certain midtones in our image. At the beginning, we said that the building midtones needed to be brighter, so now that we’ve selected them, we’re going to lighten them up.

In the Layers palette, create a new Levels Adjustment Layer. When you create a Layers Adjustment Layer with something already selected, Photoshop automatically uses that selection to create a Layer Mask for the new Adjustment Layer, so our new Adjustment Layer will affect only the areas defined by our mask.
In the Levels Adjustment Layer, shift the white point to the left. As you move the sliders, you should see the midtones in the building brighten and change without altering the shadow tones or the sky (see Figure 6).

**FIGURE 6:** After loading our final mask, we can apply a Levels adjustment that is constrained to a specific range of midtones.

**STEP 8: EDIT THE SKY**

After editing the building, you might decide that the sky could be a little more dramatic. Using the same technique, you can easily create a mask that protects the sky but knocks out the building. Create a new luminance channel from a duplicate of the image, copy that channel into your document, and then use a Curves adjustment to increase the contrast of the mask drastically, until the building is black and the sky is white. You probably won’t be able to increase the contrast to the point where all the windows and details will go black, but you’ll get a good edge on the building. You can quickly paint out the windows by hand. Then load the new mask and alter the sky to taste. The image in Figure 6 has had the contrast in the sky beefed up, using the mask shown in Figure 7.

**FIGURE 7:** With an additional mask, we can edit only the sky to boost the contrast and make the clouds slightly more dramatic.

This technique of using adjusted, altered channels to create masks for editing is
one we will return to for other operations. Although it may seem complex at first, as you gain more experience with masks, it will be easier to envision ways you can use your image itself to create usable masks.