CHAPTER

6

Creating the Elements

A Rainy Day

Rain, snow, fire, smoke, water, fog—sounds like the inventory list for a meteorologist. Each of these elements can easily take center stage in an image. Rain is used to set a mood. Many sad scenes use rain as a focal point. What is the Christmas holiday without snow? Smoke and fire can identify a cozy camping scene or a horrific disaster. They can also signify the exhaust from a rocket to Mars.

Regardless of the situation, these elements set mood. The Layer Styles tool makes creating these effects a relatively simple procedure. The Liquify feature takes care of some of the other effects, and a few filters and layer tricks take care of the rest.

This chapter starts by discussing rain, which is depicted in many forms. It can represent a torrential downpour or a light sun shower. The overall lighting of a scene should correspond to the amount of rainfall depicted.

Figure 1 shows the lake in Central Park that I took on a recent trip back to my old hometown. It is a clear, cold February afternoon. In this chapter, we are going to change the weather and make it a gloomy, rainy day. As noted previously, the lighting is crucial for setting the mood.

First, I separated the buildings from the sky. This is necessary to apply effects to the sky area while leaving the rest of the image unaffected. The Color Range selection method is not as practical in this instance because there is an overall blue cast to the image. In this case, selecting the sky takes in too much of the rest of the image. I made an alpha channel mask to do the trick.

NOTE Using an alpha channel was the best method for this particular image. Other images may require a different form for selection. For example, if the color of the sky is different or separated sufficiently from the rest of the image, the Magic Wand tool might be the only tool you need to use.

1 This image of Central Park in New York City was taken with a Nikon CoolPix 995.

I determined which of the three color channels gave me the best contrast. Figure 2 is the red channel, Figure 3 is the green channel, and Figure 4 is the blue channel. The blue channel is the best choice in this case. In Figure 4, you can see how well delineated the sky is from the rest of the image. Next, I duplicated the blue channel into an alpha channel by dragging it over the New Channel icon at the bottom of the Channel's palette.

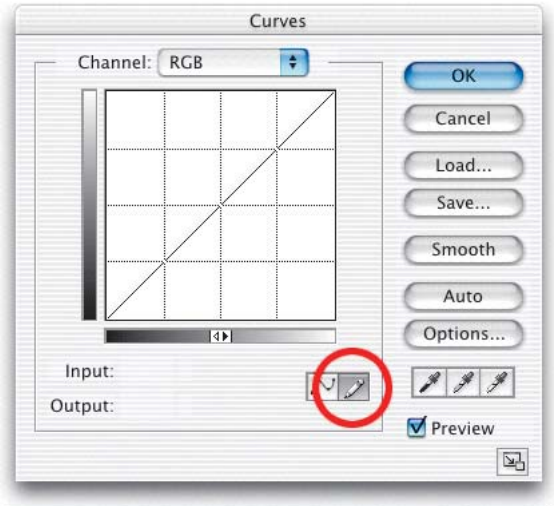
In the alpha channel, I used the Invert command (Image>Adjustments>Invert) to turn the channel into a negative (Figure 5). This creates an effective visual separation of the tones that need to be modified. I used the Curves command in Arbitrary mode (Figure 6) to set the gray values that force the foreground to white, as shown in Figure 7.

2 The red channel.

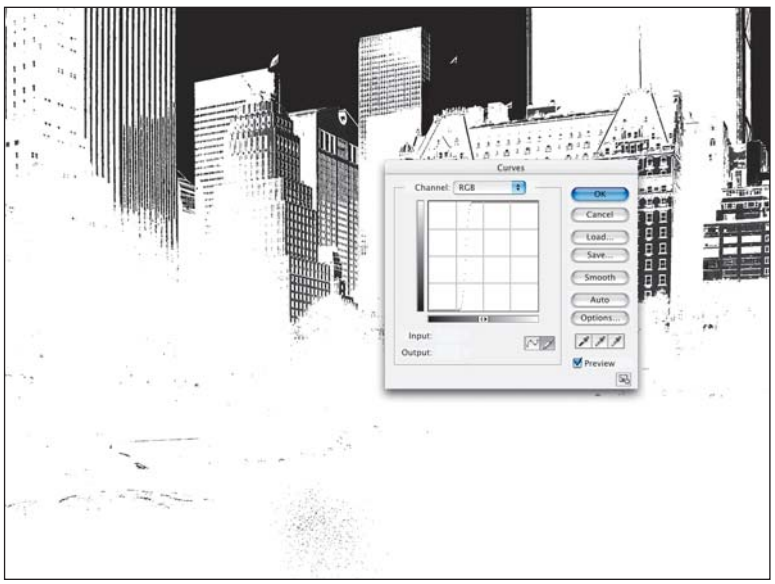
3 The green channel.

4 The blue channel.

5 The alpha channel is inverted to a negative, so that you can clearly see the tones in the buildings.



6 The Curves command in Arbitrary mode.



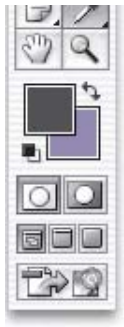
7 The Curves command forces the tones of the buildings to turn white.

With a white Paintbrush, any unwanted artifacts left behind are removed, such as windows, and so on. The alpha channel is then inverted again. This leaves a mask for the sky area, as seen in Figure 8.

Now begins the alteration of the scene to set the mood for a stormy day—with clouds. You can't have rain without clouds. The alpha channel is turned into a selection by Command-clicking (Control-clicking on a PC) on it in the channel's palette. I chose Inverse (Select>Inverse) to select the buildings. I then sent the buildings to their own layer (Layer>New>Layer Via Copy).

Next, I created a new layer behind the layer of the buildings to house the clouds. I chose a foreground color that simulates dark storm clouds. I also chose a color for the background to simulate the sky (Figure 9). I applied the Clouds filter (Filter>Render>Clouds), creating a cloudbank that is visible behind the buildings, as shown in Figure 10.

8 The alpha channel is inverted to create a mask for the sky.



9 Colors are chosen to simulate a stormy sky.

10 Stormy clouds replace the sky.

The clouds actually extend over the entire image area, although you can't see all of them because the Building layer blocks them. I produced smaller, concentrated, and more believable clouds by scaling this layer down (Edit>Transform>Scale) until it barely fit the area that was going to be visible (Figure 11).

With a large, soft-edged paintbrush, I modified the clouds using the two colors they were created with to add and subtract clouds (Figure 12).

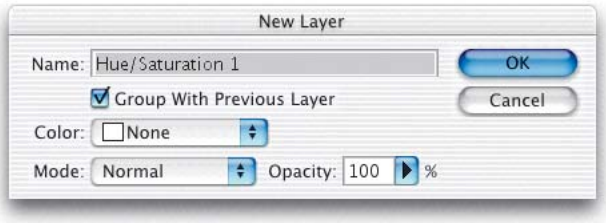
11 The layer with the clouds is scaled down to concentrate it into the visible sky area.

12 Using a large, soft-edged brush, the clouds are modified.

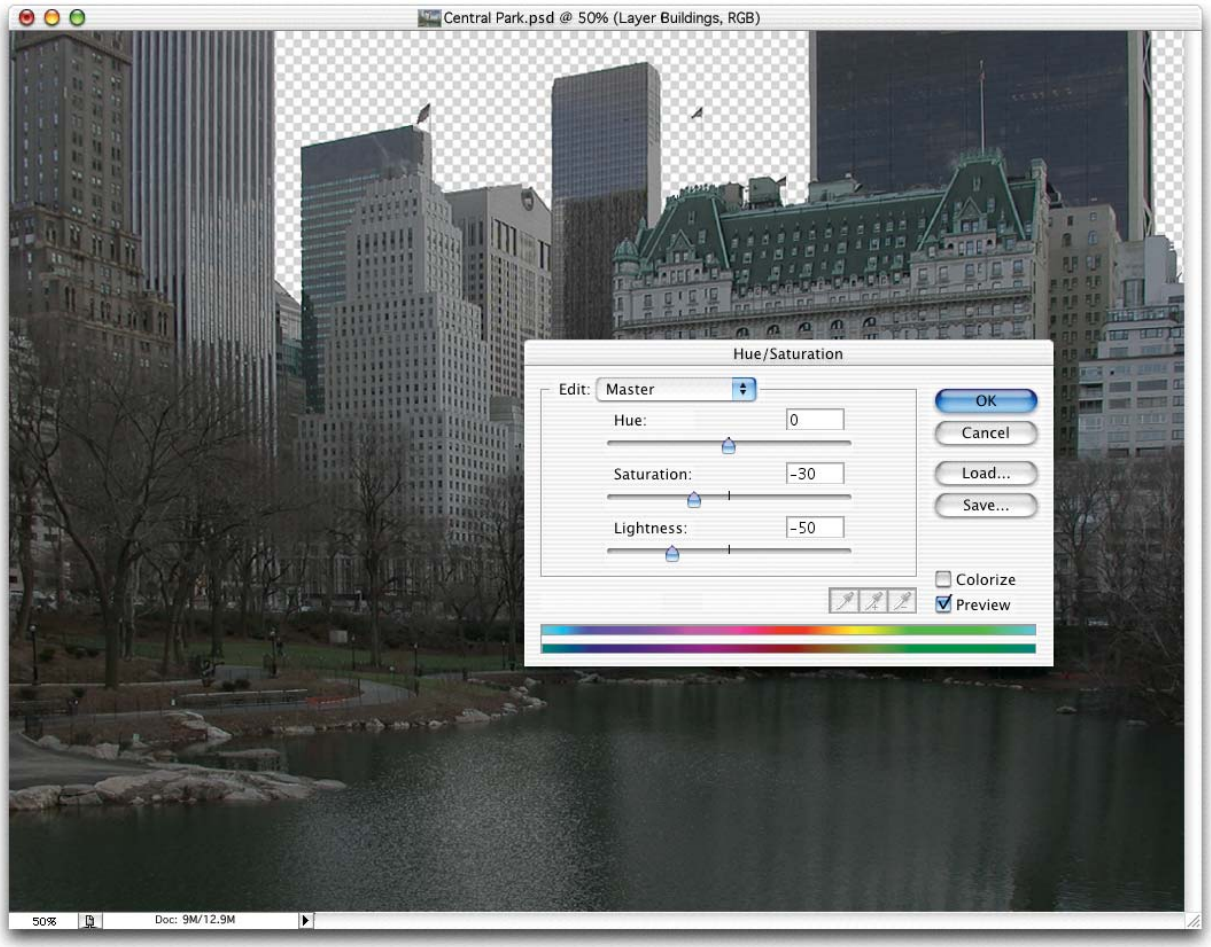
Next, I needed to change the overall lighting to set the mood. After the storm clouds are added, it makes no visual sense for the buildings to appear as sunny as they are in the original. Therefore, the layer with the buildings is selected as the active layer. A New Adjustment layer is created and set to Hue/Saturation. I selected the Group With Previous Layer option (Figure 13). Adjustments now only affect the layer with the buildings.

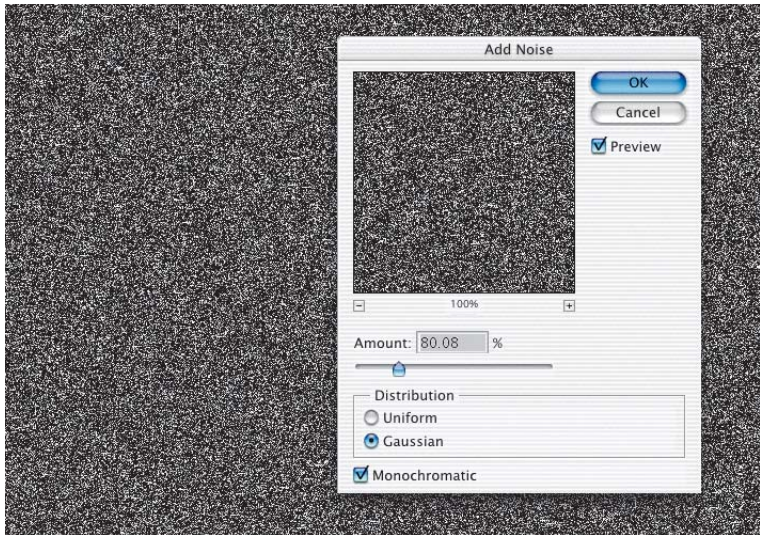
The Saturation and the Lightness settings are lowered to a level that best simulates the look the city would have under rainy conditions, as shown in Figure 14.

13 The Group With Previous Layer option is selected in the Adjustment Layer dialog box.

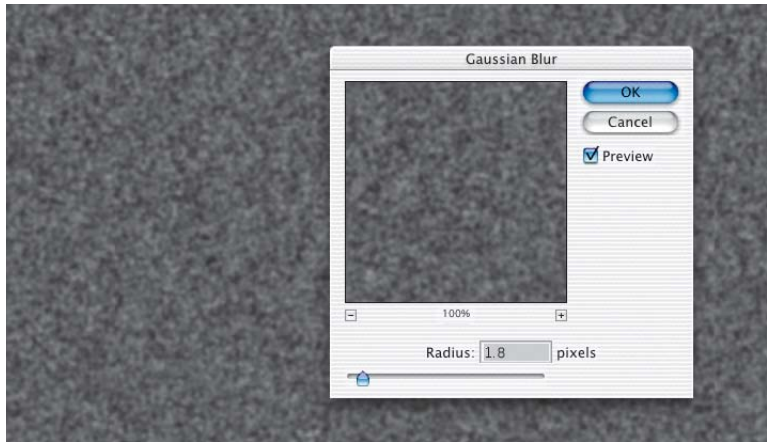


14 The layer of the buildings is adjusted to simulate stormy conditions.

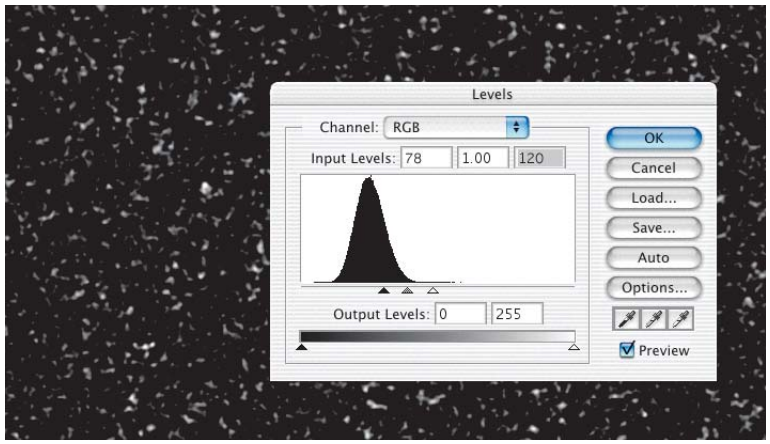




15 Noise is added to the black-filled layer.



16 A Gaussian Blur is applied to the noise.



17 The Levels command is used to increase the contrast for the blurred noise.

Now, it's time to create the downpour! The mood is created. The image just needs some falling rain. A new layer is created above the other layers, and it's filled with black. The Add Noise filter is applied at a high percentage (Filter>Noise>Add Noise). The Distribution option is set to Gaussian. The Monochromatic option is also selected to ensure that no other colors are introduced (Figure 15).

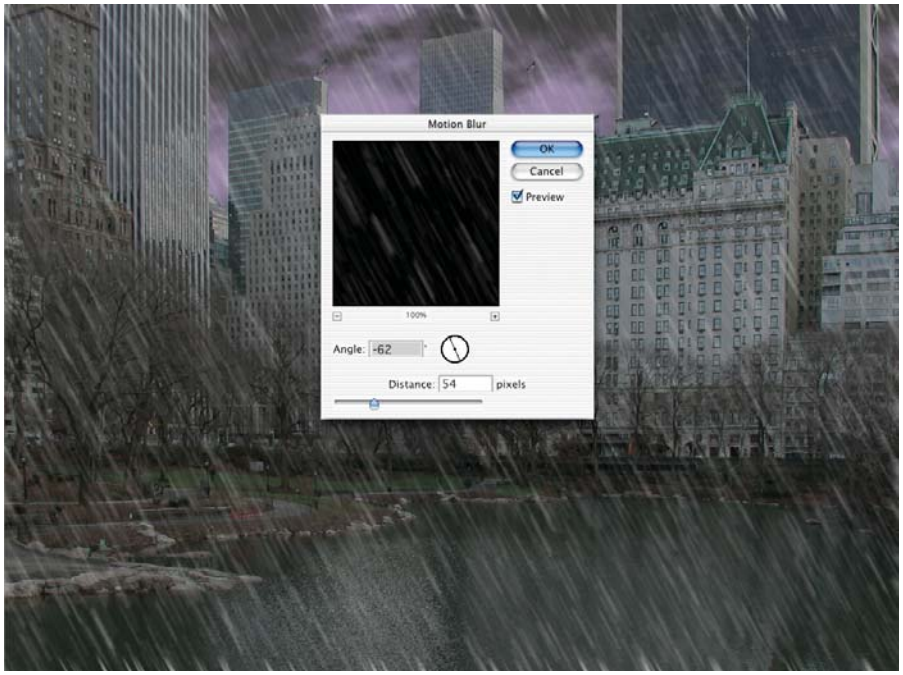
NOTE Uniform noise gets its name because the pixels it throws into the picture are distributed uniformly over the range of lightness that the Amount setting governs. In the settings shown in Figure 15, before the noise is added, the pixels are at 100%. After the filter is applied, most of the pixels are still at 100%; however, the ones that have changed can be as light as approximately 40%. These changed pixels are as likely to be 40% as they are to be 52%, or 73%, or 87%. Gaussian noise, on the other hand, tapers the distribution of the changed pixels. The same amount of pixels change, but with Gaussian noise, they are more likely to be 95% versus 90%, and far more likely to be 95% versus 40%. In addition, the taper continues well beyond the range of Uniform noise. A significant number of pixels might reach 10%, or they might even become pure white.

The Gaussian blur filter is used (Filter>Blur>Gaussian Blur) to soften the layer of the noise (Figure 16).

The Levels command (Image>Adjustments>Levels) gives the noise more contrast and separation (Figure 17).

The layer with the blurred noise is then put in Screen mode. In Screen mode, areas that are black in the top layer don't change the bottom layer. Lighter areas, however, lighten the underlying image and can create the streaks of rain that I wanted to produce for this image.

The Final touch is to make the rain appear as if it is falling down. This is accomplished with the Motion Blur filter (Filter>Blur>Motion Blur). The angle is set to the direction the rain will be falling. The Distance option is set high enough to stretch the white shapes long enough to simulate rain (Figure 18). The final result is visible in Figure 19.



18 The noise is streaked with the Motion Blur filter.

19 The result is a believable, rainy scene.