Digital Restoration from Start to Finish

Ctein

Fig. 11-11 Photoshop's Duotone conversion starts off in Monotone mode, with one ink (black) activated. To add a predefined colored ink, click the Load button, which opens up the Duotones folder (Figure 11-12).
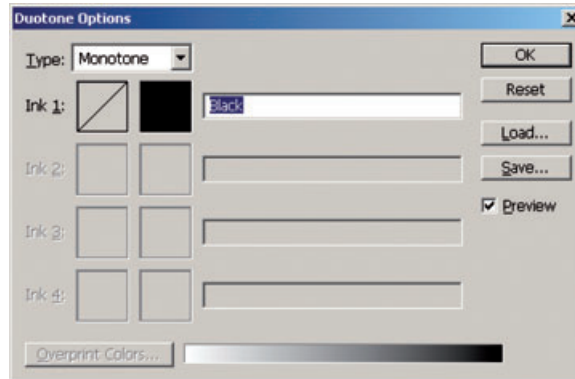
For really sophisticated monochrome hue control in Photoshop look to Duotone mode. In graphic arts, duotones are photographs printed with two printing plates and two inks. Commonly, one ink is black and the other tinted, to give the printed image a bit of color. There is also tritone and quadtone printing, involving three and four inks, respectively. Duotone mode in Photoshop creates those same effects on your computer printer.

Duotone mode, however, has a couple of disadvantages. The first is that you'll be throwing away your 16-bit data. You must convert the photograph to 8-bit grayscale mode before you'll be able to convert it to duotone. You should never convert your only copy of a restoration to duotone; instead, duplicate that fi le and use that to create a duotone for your output. The other disadvantage is that duotone printing is not something with which most photographers are familiar. One has to climb some-thing of a learning curve to get any good at it. Fortunately, Photoshop comes with a bunch of predefined duotone settings that you can load and manipulate until you get the hang of creating your own.

As soon as you click on Duotone mode, the duotone interface opens up. Initially it looks like Figure 11-11. This is just ordinary B&W printing with a single ink. The Type drop-down menu indicates monotone: Only Ink 1 is active. You'll also see what looks like an empty box with a diagonal line through it: that's actually a button that activates a Curves tool for that ink. It works just like the Curves tools you use for adjusting image values. Next to it is a solid black square button. This indicates the color of the ink—clicking on it opens up the Color Picker and gives you access to the color libraries, so you can select the color of ink you desire. Unless you're trying to print out a cyanotype, you're always going to want Ink 1 to be black.

To get to duotones (and tritones and quadtones), you could go to the Type drop-down menu and select the mode you want, but that's not what I recommend if you're new to duotones. Instead, click the Load button on the right. Open up the Duotones folder; inside it you'll find a folder named PANTONE(R), which contains many preset duotone settings (Figure 11-12).

Don't worry about all the numbers and percentages, just focus on the name of the color. Pick one that seems appropriate to the hue you want to apply to the print. For example, Burgundy is a good choice if you're trying to emulate strong selenium tone. Double-click your selection to load it, and the Preview window will show you how the photograph has changed (Figure 11-13). If you don't like the color you loaded, click Load and choose a different setting. Don't worry about how strong the tint is; you get to adjust that later.
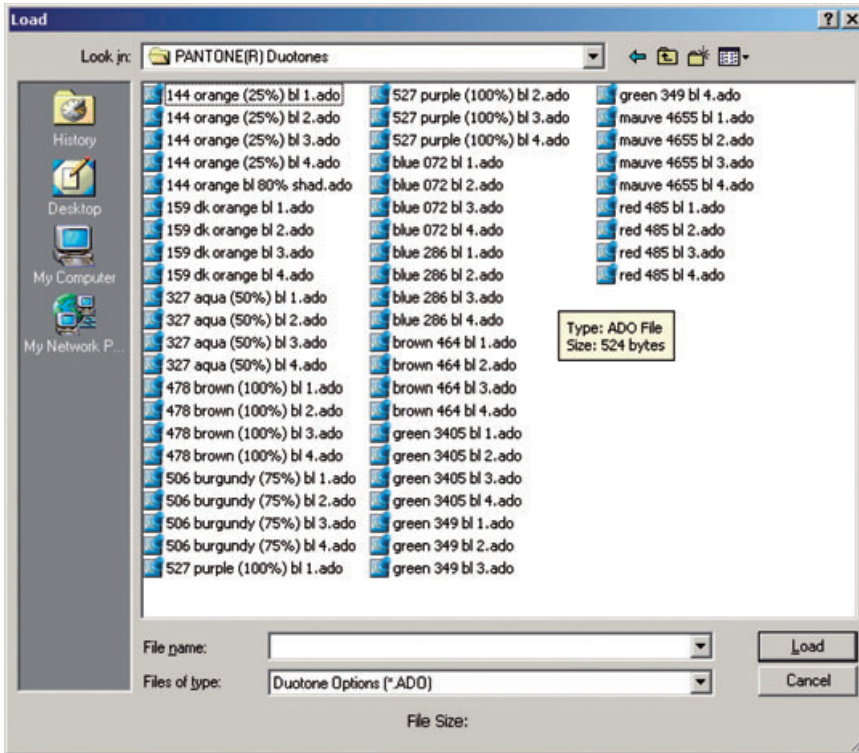
Fig. 11-12 You can find many colored-ink choices in the PANTONE(R) Duotones folder. Select a color name that sounds appropriate to the tint you want to give your photograph, and double-click it to load the ink into the Duotone Options control panel.
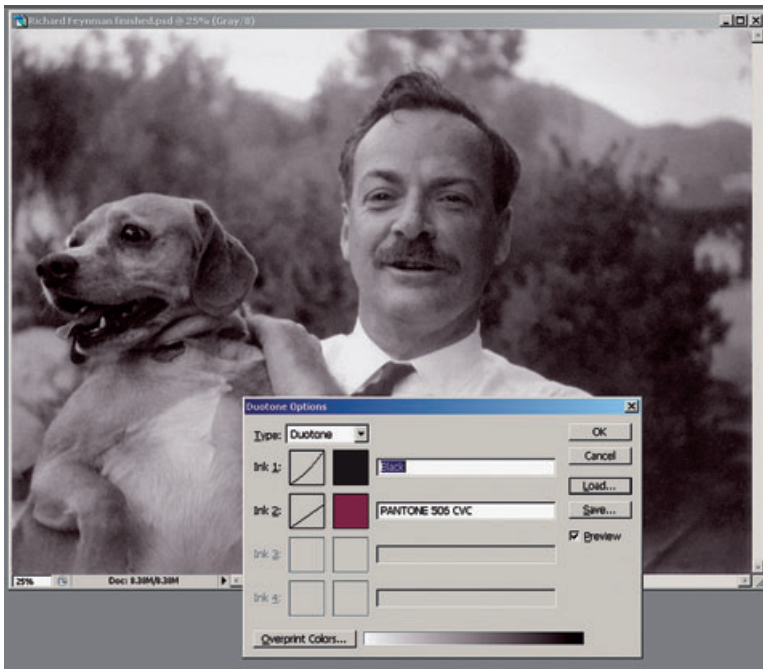

Fig. 11-13 The Duotone Options control panel shows which inks you've selected and previews what the final print color will look like. You can bring up controls to change the color or intensity of the hue by clicking the square buttons to the left of the ink's name.

Fig. 11-14 If you want to change or customize the color of the duotone ink, clicking the colored square next to the ink's name opens up the Color Libraries, which contain thousands of individual ink colors you can choose among. Move the slider up and down the rainbow-hued scale to pick a subset of inks to examine. A new ink choice is reflected in the Duotone Options control panel and in the preview image.
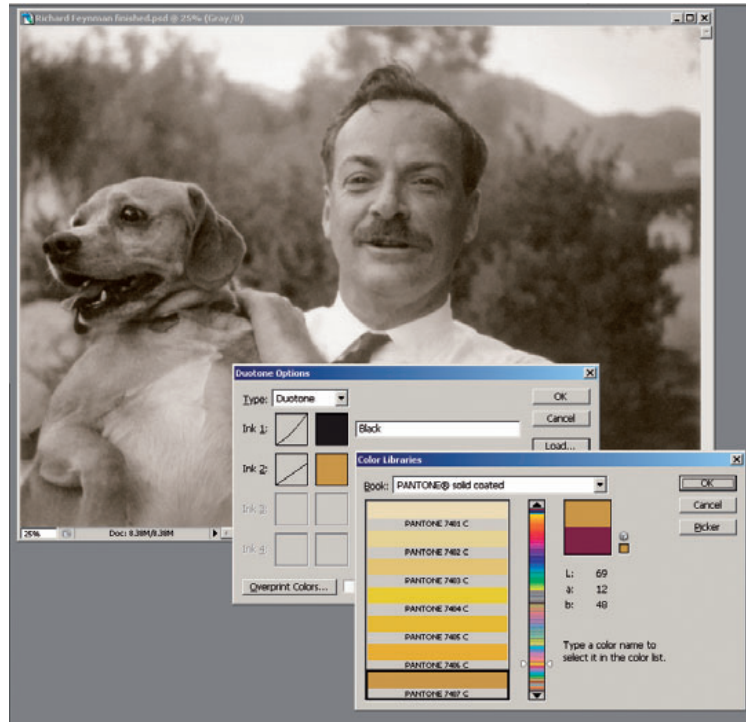
If you can't find exactly the hue you want among the preset offerings, click the square ink color button to the left of the ink's name to bring up a color library with all the other inks the Pantone set offers. Move the slider up and down the rainbow bar, and wherever you stop a selection of inks in that hue appears next to it. Single-click one of those inks, and the preview instantly changes (Figure 11-14). Double-click on it, and that selection gets applied back to the main duotone window. If you don't like any of the Pantone colors, click the Book drop-down menu to bring up a list of other color books from which to choose. If you don't want to use one of the books of prepackaged colors, click the Picker button to the right to open the traditional Photoshop color picker within which you can assign your color.

Once you've waded through all of the color choices and picked Ink 2, you'll be back in the Options window. The tinted effect will usually be too strong, looking less like you toned the photograph than hand-colored it, as in Figure 11-13. To fix that, turn to the Curve buttons next to the inks.

What a curve tells us here is how much of an ink will be applied to each value in the photograph. The higher the curve, the more ink that will be applied. So, for example, grabbing the midpoint of the Ink 2 curve and dragging it downward decreases the amount of colored ink that would be printed (Figure 11-15). That reduces the tint and also lightens the print. If you don't want to lighten the print, you need to add more black ink to compensate for the colored ink you removed. Close the curve for Ink 2, open the curve for Ink 1 (Figure 11-16), and drag the midpoint of the curve up until the brightness of the print looks appropriate (Figure 11-17).

If you're thinking to yourself that this is rather complicated, that's OK. It is complicated, which is why I've spent so much time explain-ing how to use this one tool in Photoshop. The duotone controls are much appreciated by B&W photographers who want to be able to have complete and precise control over the color and tonality of their prints. Honestly, it's overkill for our needs, but it's what
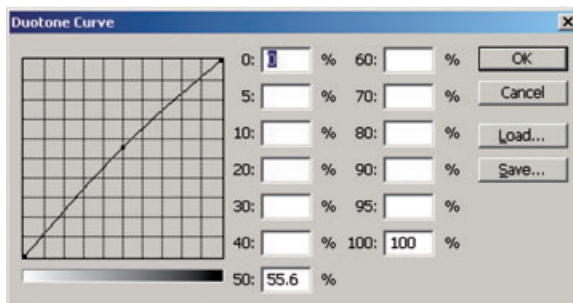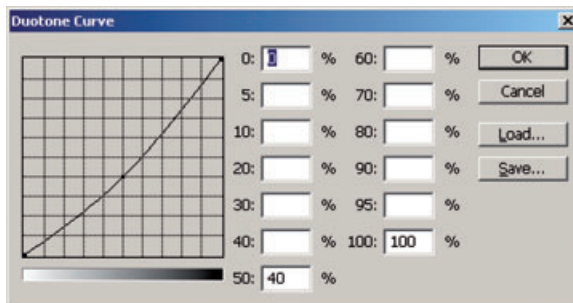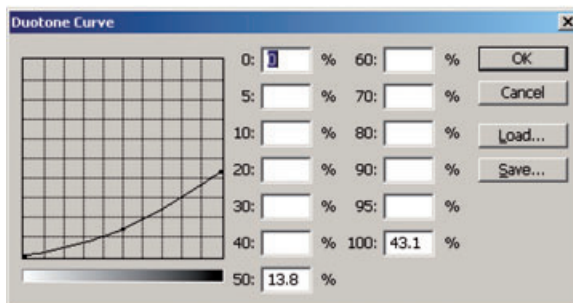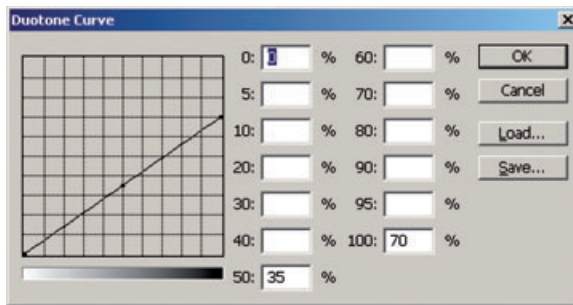
Fig. 11-15 The Curves button in the Duotone Options control panel lets you control how much of each ink is applied to each density. The top figure shows the default amount of burgundy ink being applied in Figure 11-13. To reduce the intensity of the color, I dragged the curve down, as shown in the lower figure. That decreases the amount of colored ink in the photograph, making the image lighter as well as more neutral. To keep the densities the same, I'll need to increase the amount of black ink (see Figure 11-16).

Fig. 11-16 Here are the changes I made to the black ink for Figure 11-13. The default curve is at the top. Raising the midpoint (bottom figure) increases the amount of black ink used to compensate for the reduction in burgundy ink. That keeps the photograph at its original density, as shown in Figure 11-17.

Fig. 11-17 This finished duotone is reminiscent of a strongly selenium-toned B&W darkroom print.

Photoshop offers us. If duotone is your cup of tea, you'll have to experiment with it for some time before you master it. Don't even think about tackling tritone or quadtone effects until you get the hang of duotone.

Probably the easiest way to do toning in Photoshop without messing up the original image is to use the PixelGenius PhotoKit plug-in that I described in Chapter 3 on page 81. PixelGenius PhotoKit has a B&W Toning Set (Figure 11-18) that includes scripts for a variety of standard tonings. The quality of the results is aesthetically excellent, fully as good as you'd expect from color adjustments created by some of the top gurus in the Photoshop world. I doubt that you could create better-looking toning than this yourself; I know that I certainly couldn't.

PixelGenius PhotoKit works just as well with 16-bit as 8-bit files. Its effects are applied as new layers on top of the original photograph (Figure 11-19), so the source photograph, whether it's B&W or color, remains unaltered at the bottom of the layer stack. Each toning is applied in a new layer, so you can create a whole bunch of toning variations through repeated applications of PixelGenius PhotoKit and decide which one you like best later (or keep them all, as I did in this case).

Fig. 11-18 The PixelGenius PhotoKit plug-in, accessed via Photoshop's Automate menu, is a great third-party solution to the problem of making beautifully toned B&W prints. PixelGenius PhotoKit works on 8- or 16-bit color or B&W originals.