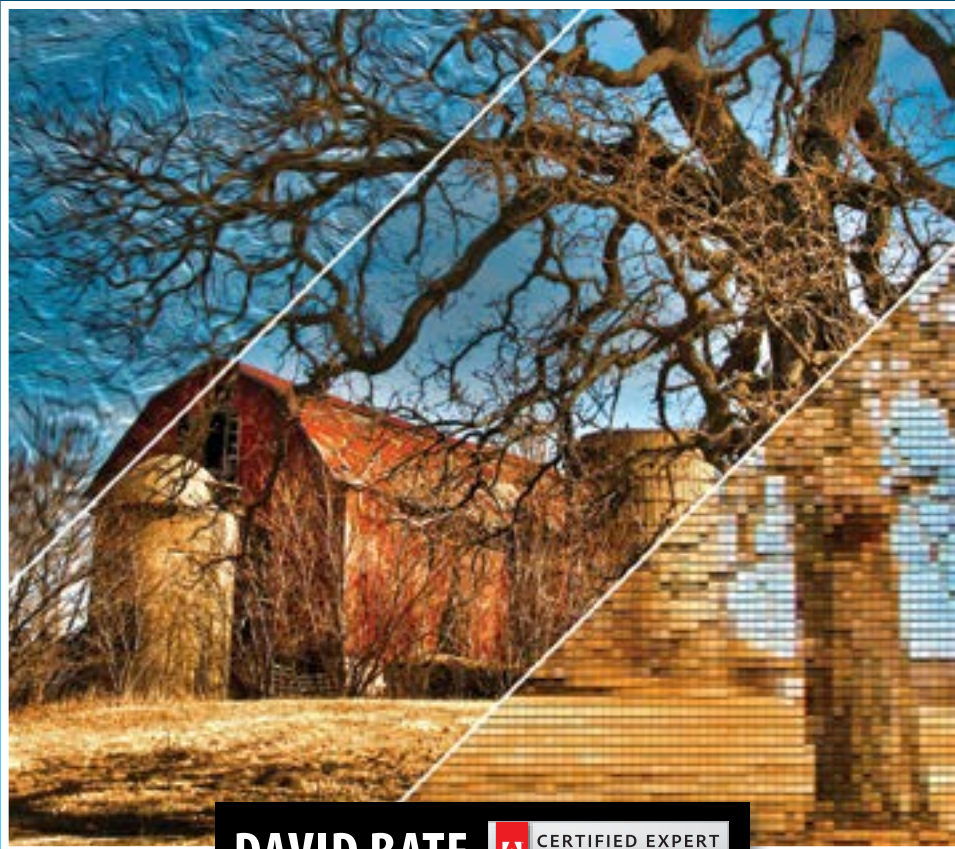


A PLAIN ENGLISH GUIDE TO THE COMPLEXITIES OF PHOTOSHOP

# SPEAKING PHOTOSHOP ◀ CS6 ▶



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CERTIFIED EXPERT  
Photoshop®

# Speaking Photoshop CS6

David Bate

Adobe Certified Expert, David Bate, demystifies the complexities of Photoshop by teaching you its language. The ability of Photoshop to enhance or transform images is virtually limitless, but how do you get the results you are looking for?

The key to success is learning how to *speak to Photoshop*, so it understands your vision. This book teaches you how to think like and communicate with Photoshop. You'll learn which tools work and which ones don't. More importantly you'll learn when and why. Armed with this knowledge, you'll be able to trouble-shoot your way through future image editing challenges.

David Bate has worked in the graphic design industry for over 30 years. He currently teaches Photoshop at Waukesha County Technical College, where he developed and maintains the Photoshop curriculum that is used in the Graphic Design, Web Design and Printing/Publishing programs.

With *Speaking Photoshop CS6*:

- ▶ Concepts are explained in easy-to-understand, plain English.
- ▶ Chapter files let you practice and improve your skills as you learn.
- ▶ The supplemental *Speaking Photoshop CS6 Workbook* provides additional exercises for classroom applications or for those who want added practice to perfect their skills.



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Excerpt from

# Speaking Photoshop CS6

David Bate

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The following excerpt from *Speaking Photoshop CS6* explains how to use Photoshop's Content Aware Scale and Content Aware Move.

*Speaking Photoshop CS6* (ISBN 978-0-9882405-0-6) and the optional *Speaking Photoshop CS6 Workbook* (ISBN 978-0-9882405-1-3) can be purchased online at the following locations:

## Amazon

[www.amazon.com](http://www.amazon.com)

Amazon's Look Inside the Book feature lets you preview interior pages of *Speaking Photoshop CS6*.

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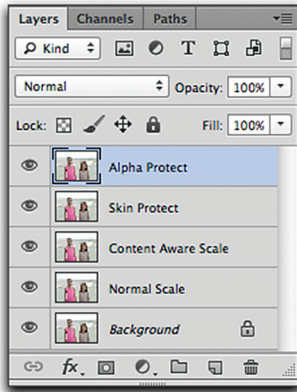
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## Content Aware Scale



Duplicate the Background four times, so we can compare different scaling methods.

Yet another in Adobe's Content Aware series, Content Aware Scale makes it possible for Photoshop to scale an image disproportionately without distorting the main subject. How could Photoshop possibly know which pixels represent the main subject and which ones represent the less important background area? You have to hand it to those Photoshop software engineers!

The way Content Aware Scale works, is that it tries to scale areas void of detail while protecting areas of detail. There are three different ways that you can apply Content Aware Scale. Let's test them out and compare them to normal scaling.

- ▶ **Duplicate the layers for comparison.** Open *Girls at Lake.jpg*—a photo of two pretty girls taken by Phyllis Bankier—and duplicate the Background layer four times by typing **Command+J/Control+J**. Name the first layer **Normal Scale**, the second **Content Aware Scale**, the third **Skin Protect**, and the fourth **Alpha Protect**.

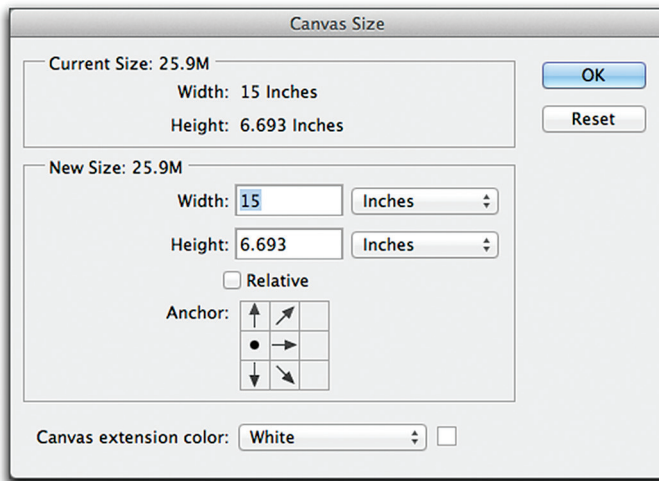


Phyllis Bankier

*Girls at Lake* is a nice photo, but we want it to be wider for our brochure layout.



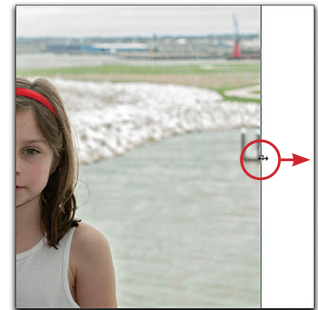
- **Add to the Canvas size.** We want this photo to be 15 inches wide to extend across a two-page spread for a brochure we're working on. The first thing we have to do is add to the canvas size. Choose **Image>Canvas Size** from the Main menu or type **Option+Command+C/Alt+Control+C** to access the Canvas Size dialog box. Click in the **left column** of the **Anchor** proxy, uncheck the **Relative** check box, and enter **15 Inches** in the **Width** field. Click **OK**, and we now have room to grow on the right side. At this point, we could go to work cloning more background, but that would be very time consuming. Let's see if scaling the image can save us some time.



Use Canvas Size to change the width to 15 inches.

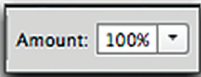
- **Scale using Free Transform.** Click the **Normal Scale** layer to select it, and turn off all the eyeballs above it, so we can see it. Type **Command+T/Control+T** to enter Free Transform mode and drag the right center handle to the edge of the canvas. Hit **Return/Enter** to accept the transform and look at the results.

Granted, those two girls are still really cute, but you could find yourself in trouble for scaling people like that. It's certainly not an acceptable solution. Turn off the eyeball.



Drag the right center handle to the edge of the canvas.

Enlarging the width without enlarging the height makes everything appear too wide.

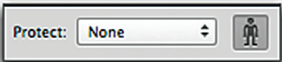


Reducing the *Amount* reduces the effectiveness of Content Aware. At 0%, it is identical to normal transform scaling.

Content Aware Scale helped the girls' faces but at the expense of other areas.

► **Scale using Content Aware Scale.** Click the **Content Aware** layer and choose **Edit>Content Aware Scale** from the Main menu. Drag the right center handle, as you did before, to the edge of the canvas.

That's better—in parts anyway—but it's still far from acceptable. Notice the improvement in the detail areas, such as the girls' faces and the breakwater. Unfortunately that pink blouse really took a hit. We could bring it into better proportion by reducing the *Amount* value in the Options bar. Amount controls the degree to which Content Aware technology is applied.



Click the human figure icon to protect skin tones from scaling.

► **Use Content Aware Scale with Skin Protect.** Click the **Skin Protect** layer and choose Content Aware Scale again. Towards the right of the Options bar is a pop-up menu labeled **Protect**. Click it...and you have no choices. Just to the right of that is a human figure. That's Content Aware's *Skin Protect* function, and it tells Content Aware to exempt skin tones from scaling. Click it, and scale the image as before.

Now that's pretty good. The girls look pretty much unchanged, because the scaling was applied almost entirely to the background. Skin Protect is ideal for a photo like this, because the girls are dressed for summer. If they had jackets on, this option would not have worked as well.



The Skin Protect option helped immensely for this photo.

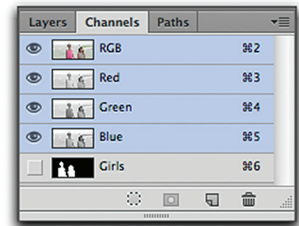
► **Use Content Aware Scale with Alpha Protect.** We want to use that *Protect* pop-up menu—the one that offered no choices before—but we need to create an Alpha channel first. What's that? An Alpha channel is a saved selection, like the Elephant channel that I saved for you for the Puppet Warp exercise.

Use the Quick Selection tool to select the girls, including the area between their arms and bodies. With the selection active, choose **Select>Save Selection** from the Main menu and name it **Girls**. Look in the Channels panel, and you'll see your *Girls* Alpha channel at the bottom. Alpha channels don't print or alter an image, they are only used to store selections. Now we're ready to proceed.

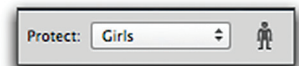
Deselect the marching ants, click the **Alpha Protect** layer and choose Content Aware Scale again. Make sure **Skin Protect** is turned **off**, select **Girls** from the **Protect** pop-up menu, then scale as before.

That worked great, even a little better than Skin Protect. Compare the two, and you'll see how Skin Protect enlarged the pink shirt just a little. Using the Alpha Protect option is your most powerful choice for Content Aware Scale, but there comes a point when even Alpha Protect falls short. There's a limit to how far you can disproportionately scale an image, even with Content Aware Scale.

Leave the *Girls at Lake* file open for the next exercise, or if you need to take a break, save it as *Girls at Lake Content Aware.psd*. If you save it as a JPEG, you will lose your *Girls* Alpha channel.



The *Girls* Alpha channel will help prevent Content Aware Scale from distorting the girls.



The *Girls* Alpha channel will prevent the girls from scaling.

The Alpha Protect option left the girls at their original size.

## Content Aware Move

Introduced with Photoshop CS6, the Content Aware Move tool is a combination of the Move tool followed by Content Aware Fill. As with other Content Aware applications, it's not always perfect, but it's worth a try.

- **Move a selection with the Move tool.** To provide a frame of reference, we're going to move a selection with the standard Move tool first. Duplicate the Alpha Protect layer of the *Girls at Lake* file and name it **Content Aware Move**. Turn off the eyeballs to all other layers, then use the Lasso tool to draw a loose selection around the girl on the left and drag her further to the left.

The problem we have should be immediately apparent. The area she used to occupy is now a gaping hole. If we were on the Background layer, that hole would have been filled with background color. Undo that move. We can do better with the Content Aware Move tool.

- **Move a selection with the Content Aware Move tool.** Select the Content Aware Move tool. It's hiding in the first slot of the retouching tools under the Spot Healing Brush. Take a quick look at the Options bar and make sure the settings are: **Mode: Move** and **Adaptation: Medium**.

If your selection is still active, you can use it. Otherwise draw a new selection using the Content Aware Move tool. It works just like the Lasso tool—drag it to make a freehand selection or **Option+Click/Alt+Click** to create a selection of straight line segments.

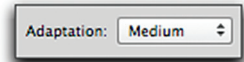


The Move tool (left) leaves a hole in its wake, but the Content Aware Move tool fills the hole.



With the selection active, drag the girl to the left and wait a second. Photoshop does some analyzing, then, presto, the hole fills with a manufactured background. In effect, the Content Aware Move tool did three things: move the girl, reselect the hole she vacated, and fill using Content Aware Fill.

Look at the Options bar and locate the feature called *Adaptation*. With the selection still active, try the various settings, from **Very Strict** to **Very Loose**. These are live settings, meaning that you can change and compare them as long as the selection remains active. If you don't like the results that you got with Medium, run through the others and choose the best.



Try different Adaptation settings and choose the best result.

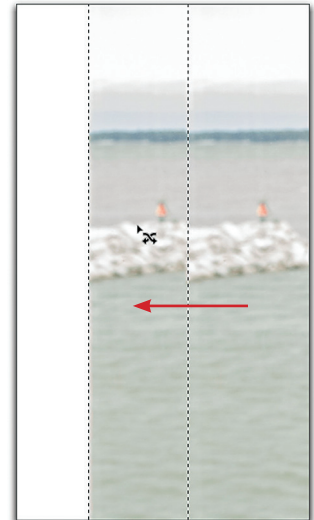
The final photo, expanded with Content Aware Scale and adjusted with Content Aware Move.

- **Copy a selection with the Content Aware Move tool.** Also in the Options bar is a feature called **Mode**, and it offers two choices: **Move** (which we just did) and **Extend**, which, in my opinion, could have been called *Copy*. If you were using the normal Move tool, you would **Option+Drag/Alt+Drag** to make a copy of the selection. But since the Content Aware Move tool starts out acting like the Lasso tool, an **Option+Drag/Alt+Drag** subtracts from the selection instead. In order to copy a selection, you have to be in Extend mode.

Open a fresh copy of *Girls at Lake.jpg*. Type **Command+J/Control+J** to copy the Background layer and name it **Extend**. Use Canvas Size to expand the width to 15 inches, except this time, add the extra width to both sides by leaving the Anchor point in the center. Use the Rectangular Marquee tool to select the background area to the left of the girl with the pink shirt. Switch to the Content Aware Move tool, specify **Extend** for the **Mode**, and drag the selection to the left. Repeat that until you have covered the left side of the canvas. Now do the same for the right side of the canvas.



Choose Extend mode to copy a selection.



In *Extend* mode, the Content Aware Move tool creates a copy of the selection and blends it with the surroundings.

This image gives you a good insight into where the tool excels and where it has problems. The water and the skyline extended beautifully because they were uniform, but the rocks in the breakwater didn't fare so well. Those would need to be hand-retouched to bring them up to acceptable standards. Still, the Content Aware Move tool did a lot of the busy work for us, so we have to consider it a success.

Content Aware Extend did well with the water and skyline. The repeating figures and the shape of the breakwater still need attention.



## Final Thoughts

Distorting, moving, and replacing pixels are all part of the Photoshop game. And true to Photoshop's modus operandum, there are several ways you can accomplish this. Distortion choices include simple transform commands, Liquify and Puppet Warp. Each has its own advantages and disadvantages.

Moving and replacing pixels can be accomplished using the standard Move tool, or the more sophisticated Content Aware commands. Become comfortable with all of these methods, so you will be able to choose the best solution for the task at hand.