How to…
CREATE REALISTIC SHADOWS BEHIND PLACED OBJECTS

Using the technique described below, you will be able to create realistic shadows behind photographic objects. The need for such a shadow typically occurs when you copy an object from one photo and paste it into another background photo. Without a shadow behind the newly-pasted object, the result looks phony. This technique makes use of Photoshop’s Chops—short for Channel Operations.

STEP 1: Getting Started
Open the document that contains the object you want. Select it using the usual selection techniques. Pull down the Edit menu to Copy (Command-C) to place a copy of the object on the Clipboard. Close the document.
STEP 2: Creating the Object Channel

A: Open the document that contains the background you want to paste the object into.

B: Pull down the File menu to Paste (Command-V). Reposition the object as necessary.

C: Pull down the Select menu to Load Selection. In the dialog box that follows, select Layer 1 Transparency from the pulldown Channel menu.

D: Pull down the Select menu again to Save Selection this time. Accept the default settings in the dialog box that follows. Click OK.

E: If the Channels window is not already open, pull down the Window menu to Show Channels. Double click on the Alpha 1 channel. In the dialog box that follows, name the channel Object, and select Color Indicates Selected Area. Click OK.

F: Pull down the Select menu to Deselect (Cmd-D).

STEP 3: Creating the Shadow Channel

A: Pull down the Image menu to Calculations. In the dialog box that follows, make the following choices (a few will already have been made for you as defaults):

- The background document as Source 1 and Source 2, with Background as the Layer for both and Object as the Channel for both;
- The Invert box checked for Source 2;
- Overlay for the Blending method; and
- Set the Result to New Channel.

Click OK.

B: Double click on the last channel (Alpha 1) in the Channels window. In the dialog box that follows, name the channel Shadow. Click OK.

C: Pull down the Edit menu to Transform and select Skew from the Transform submenu. After determining what angle you want the light to cast a shadow, click and drag the top center “handle” in that direction. When you have dragged it far enough, move the cursor inside the parallelogram and double-click to “nail down” the skewing.

D: Before proceeding, we have to fill the rest of the channel with black. Use the Magic Wand to select the extra white area that resulted from the skewing. Make sure the Foreground Color is black, hold down the Option key and press Delete. Deselect.
**STEP 3: Creating the Shadow Channel, continued**

D: Once again, pull down the Layers menu to Transform and this time choose Scale from the Transform submenu. Click and drag the top center handle in a downward direction until the shadow is the size you want. Move the cursor inside the parallelogram and double-click to “nail” down the scaling. Fill the extra white area with black as before. Deselect.

**STEP 4: Creating the Shadow Itself**

A: Pull down the Filter menu to Blur and select Gaussian Blur from the Blur submenu. In the dialog box that follows, enter a number. The larger the number, the softer and more diffused your final shadow will be; the smaller the number, the more defined and harsher it will be (we used 6 for our radius). Click OK.

B: Pull down the Image menu to Calculations. In the dialog box that follows, make the following choices (most will already have been made for you as defaults):

- The background document as Source 1 and Source 2, with Background as the Layer for both and Object as the Source 1 Channel and Shadow as the Source 2 Channel;
- Multiply for the Blending method; and
- New Channel for the Result.

Click OK.

The result should be a white, soft-edge shadow behind the object.
STEP 5: Putting It All Together

A: Click on RGB in the Channels window.

B: Pull down the Select menu to Load Selection and select Alpha 1 from the pop-up Channel menu in the dialog box that follows. Check the Invert checkbox. You should see a flashing marquee around the shadow, but at this point the shadow is transparent.

C: Pull down the Edit menu to Fill. In the dialog box that follows, select Black for the Contents in the pulldown Use menu. Set the Opacity to 60%, the Mode to Normal, and make sure Preserve Transparency is unchecked. Click OK.

D: Pull down the Select menu to Deselect (Cmd-D) and admire your work.