

# Adding a Beam of Light

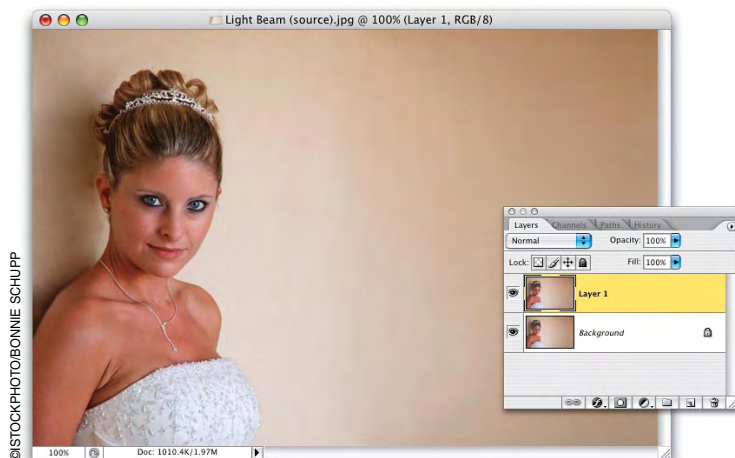
USING CHANNELS TO CAST A RAY OF SUNSHINE INTO YOUR OTHERWISE DARK AND MURKY WORLD

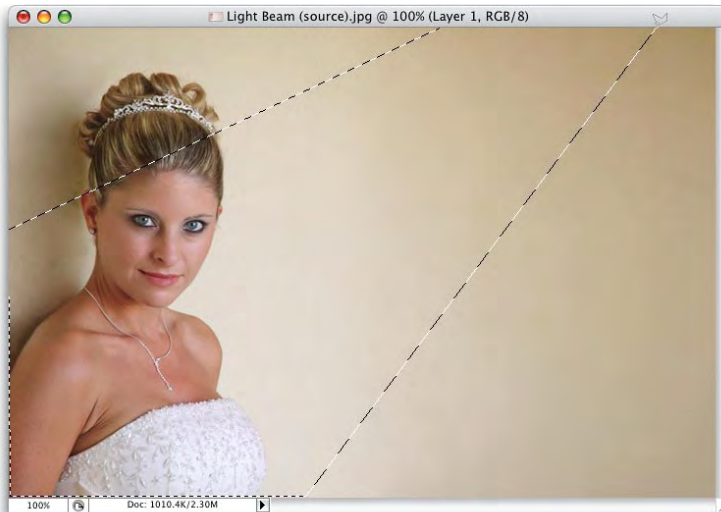
This is one I've been using for years, and with the right photo (meaning a photo where seeing a ray of light coming in through a window would make sense) it works wonders.

What you're basically going to do is draw your light beam using the Polygonal Lasso tool. That selection then becomes an Alpha channel that you will blur to make the edges nice and soft. Then you darken the photo and lighten the beam. Now, you get to decide (near the end of the tutorial) if the beam will cover your subjects (and that can often really make it look realistic), or if the beam will simply cast behind them onto a wall. The great thing is—the choice is yours.

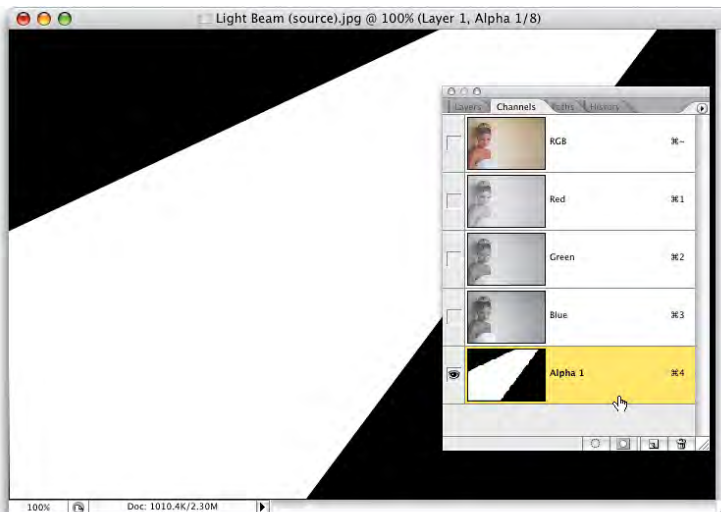
## STEP 1 OPEN YOUR PHOTO AND DUPLICATE THE BACKGROUND LAYER

Open the photo you want to add a light beam effect to (in this case, a bride leaning against a wall). Press Command-J (PC: Control-J) to duplicate the layer (as shown here).



**STEP 2****GET THE POLYGONAL LASSO TOOL AND DRAW YOUR BEAM OF LIGHT**

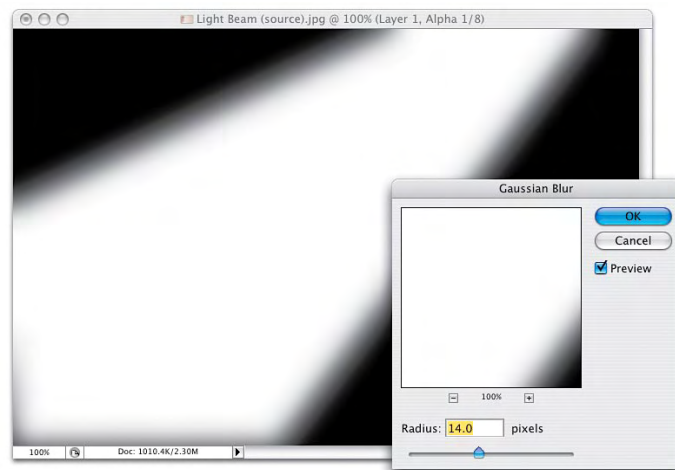
Press Shift-L until you get the Polygonal Lasso tool (which draws straight line selections), and draw a “beam of light” shape similar to the one shown here. Make sure you go right to the edges of your image with your selection, because you don’t want a gap between your beam and the edge of your photo.

**STEP 3****SAVE YOUR SELECTION AS AN ALPHA CHANNEL**

While your selection is in place, go to the Channels palette and click on the Save Selection as Channel icon at the bottom of the palette. Now, click on Alpha 1 (as shown here) and press Command-D (PC: Control-D) to Deselect.

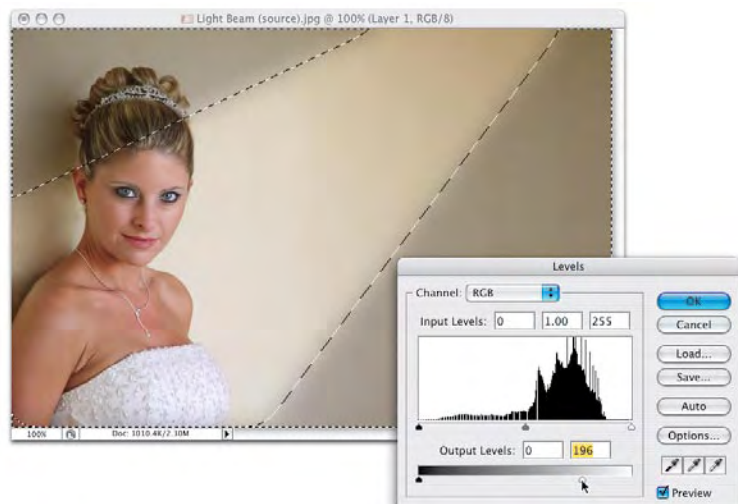
#### STEP 4 ADD A GAUSSIAN BLUR TO THIS CHANNEL TO SOFTEN THE EDGES, THEN LOAD IT AS A SELECTION

To make the edges of our beam soft, go under the Filter menu, under Blur, and choose Gaussian Blur. When the dialog appears, enter 14 pixels for low-res images (as shown here) or 30 pixels for high-res, 300 ppi images to blur the channel. Now, you'll need to load the Alpha channel as a selection, so click on the Load Channel as Selection button at the bottom of the palette. Once it's loaded, return to the RGB Composite channel by pressing Command-~ (PC: Control-~).



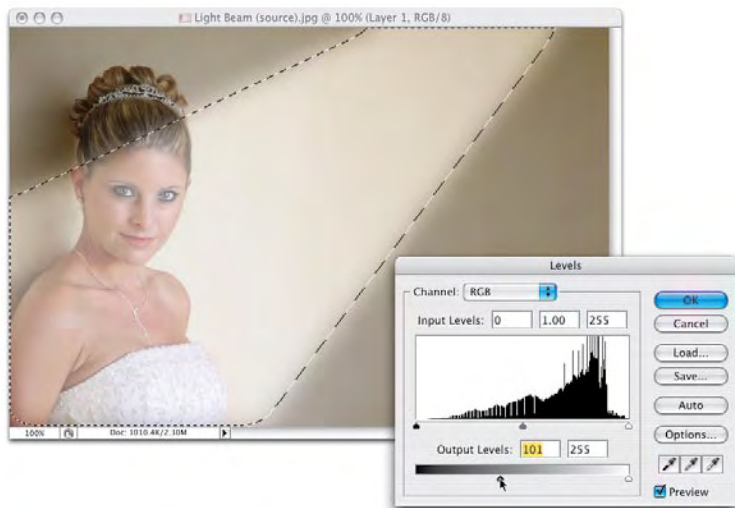
#### STEP 5 INVERSE THE SELECTION, THEN USE LEVELS' RIGHT OUTPUT SLIDER TO DARKEN THE BACKGROUND

Now that your soft-edged light beam selection is in place, you're going to do two things: (1) darken the areas surrounding the beam, and (2) lighten the area inside the beam. Let's start on the surrounding areas first, so you'll need to Inverse your selection by pressing Command-Shift-I (PC: Control-Shift-I). Then press Command-L (PC: Control-L) to open Levels, and drag the bottom-right Output Levels slider to the left (as shown) to darken the surrounding areas. Drag it farther than you think you need to, because you'll be able to adjust it later on. Click OK to apply the darkening.



## STEP 6

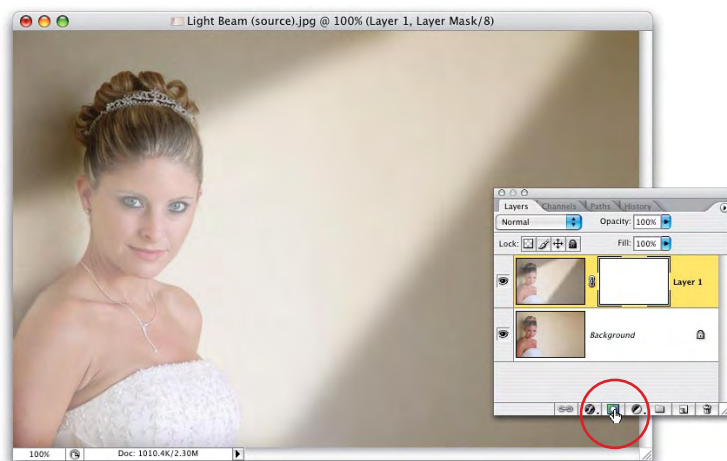
## INVERSE THE SELECTION AGAIN, THEN USE LEVELS' LEFT OUTPUT SLIDER TO BRIGHTEN THE BEAM



Now, let's do the beam itself. You'll have to Inverse the selection again, so press Command-Shift-I (PC: Control-Shift-I) again. By the way, the reason we do the darkening first is just because it's easier to see the effect that way, because of the contrast it creates. Now that you've inverted the selection, bring up Levels again, but this time drag the bottom-left Output Levels slider to the right to lighten up the beam. Again, lighten it up more than you think you need to, and then click OK. Press Command-D (PC: Control-D) to Deselect your beam.

## STEP 7

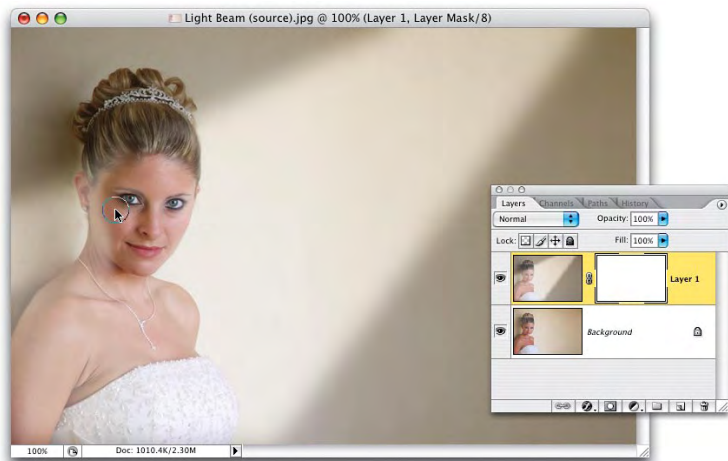
## ADD A LAYER MASK TO YOUR BEAM LAYER



You could now just call it "done" at this point with the beam going directly over your subject, and depending on the photo, you might want to do just that. However, if you'd prefer to have the light beam just fall on the wall behind her, then we can put that duplicate layer to use now. Click on the Add Layer Mask icon at the bottom of the Layers palette (as shown here). The mask is completely white, so nothing changes on the layer, right? (I know—you know.)

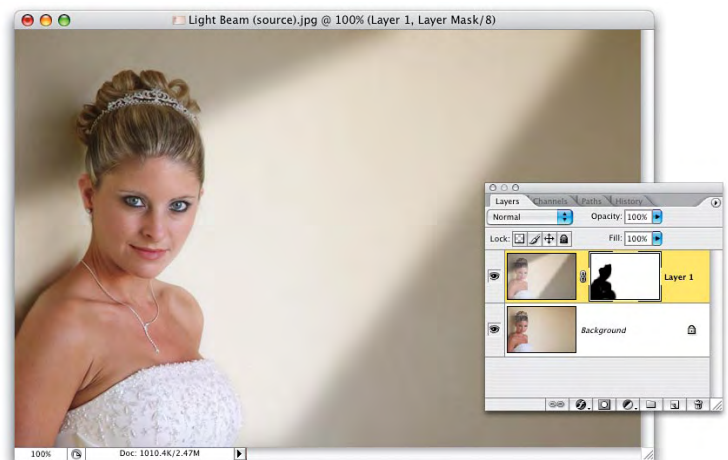
## STEP 8 SET YOUR FOREGROUND TO BLACK, GET A SOFT-EDGED BRUSH

Press X to set your Foreground color to black, press B to get the Brush tool, and then choose a small soft-edged brush from the Brush Picker. Now you can start painting over your subject (in this case, the bride), but only paint over the areas that fall inside the beam of light.

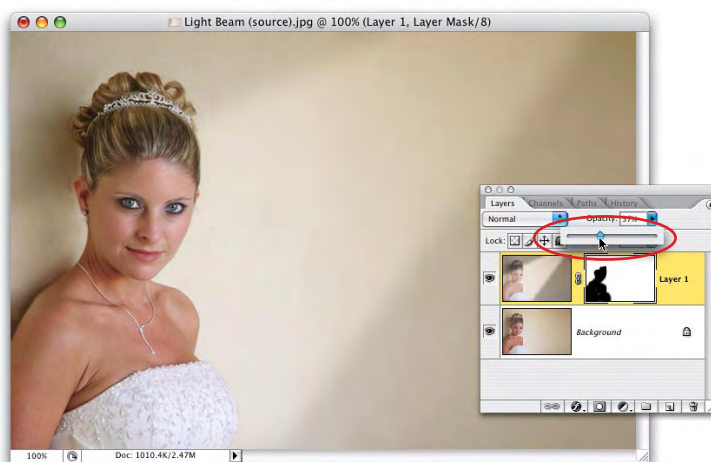


## STEP 9 PAINT OVER THE PARTS OF HER THAT APPEAR WITHIN THE BEAM TO CONCEAL THE BEAM

Continue painting until all the areas of the bride that fall inside the beam are painted in (as shown here). Since you're painting in black, those areas will be concealed.

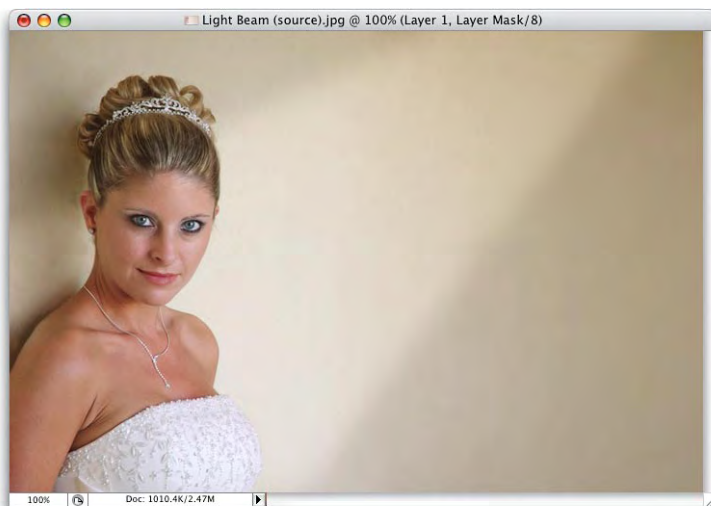


## STEP 10 LOWER THE OPACITY SO THE BEAM ISN'T SO INTENSE



Remember how earlier I told you to push those Output Levels sliders farther than you thought you needed to? That's because you can control the amount of the effect after the fact, because you applied it to a duplicate of the Background layer. That's right my friend, to lessen the effect, you can just lower the Opacity of the layer (as shown here) and dial in just the right amount of light.

## STEP 11 HERE'S THE FINAL IMAGE WITH THE BEAM MASKED BEHIND HER



Here's the final image, with the Opacity lowered to 37% for a more subtle effect.

# Infrared Effect

THANKS TO THE CHANNEL MIXER, YOU CAN CREATE THESE EFFECTS RIGHT WITHIN PHOTOSHOP

Infrared photography (also referred to as just IR) has been around for many years, but now with digital photography and Photoshop, creating the effect digitally is on the top of a lot of people's photography effects wish lists. There are some third-party plug-ins you can buy that will give you pretty decent IR effects, but you don't have to go that route. You can create some amazing infrared effects, both black and white and color, from right within Photoshop using the Channel Mixer (which is what we're going to do in this tutorial).

Before digital, you'd have to use special infrared film (Kodak made a popular brand of black-and-white infrared slide film) which had extended sensitivity to red colors that fall beyond what the naked eye (or traditional color film) could see. This IR film made blue skies look almost black, but it would keep the clouds looking white. It made green trees and grass look almost white, and if you used it on portraits, skin tones (eyes and teeth) took on an otherworldly feel, as well.

So, here are two different ways to achieve IR effects in Photoshop that people would swear were done with real IR film (which, by the way, is still made by a number of classic film manufacturers, including Kodak, who makes a High-Speed Infrared Black-and-White film, along with Ilford's SFX 200 IR film, and Maco's IR 820c film).

## STEP 1 OPEN THE PHOTO, THEN ADD A CHANNEL MIXER ADJUSTMENT LAYER

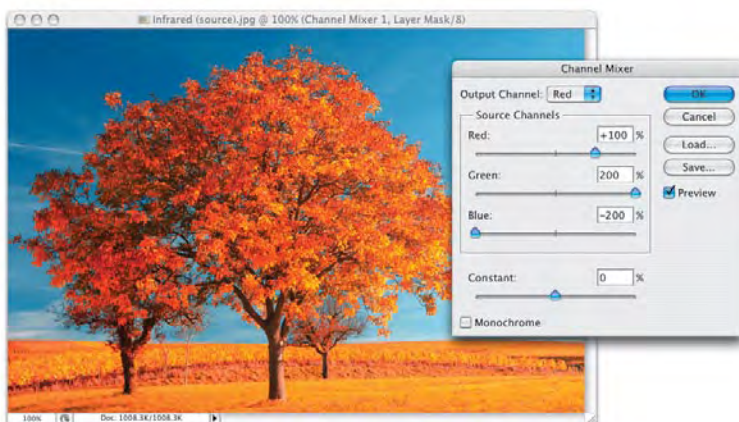
Open the photo you want to convert into an infrared image. The infrared look is often used with landscape photography (although you see it on portraits in some cases), so we're using a landscape photo here, with plenty of green grass, and some wisps of clouds in the sky. You'll use the Channel Mixer to create your infrared effect, so choose it from the Create New Adjustment Layer pop-up menu at the bottom of the Layers palette—the Channel Mixer dialog is shown in the next step.



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## STEP 2

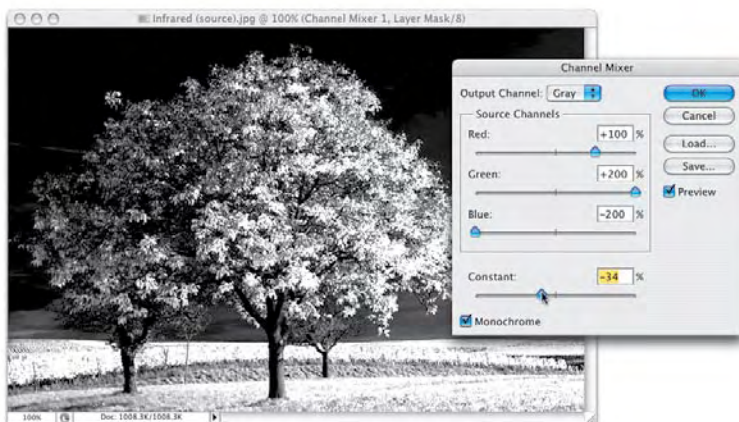
LEAVE THE RED AT +100%, INCREASE THE GREEN TO +200%, LOWER THE BLUE TO -200%



Generally, in landscape photos (like this one), we're trying to maximize the amount of green in the image, so we're going to pump up the green. Then we'll balance things out to where the values add up to 100% by subtracting from the Red and Blue channels. (*Note:* When we did our black-and-white conversions earlier, we weren't worried about adding up to 100%, but in infrared, if they don't add up to 100%, you'll have a color tint when you're done.) So, leave the Red at +100, for Green enter +200, and for Blue enter -200, but don't click OK yet.

## STEP 3

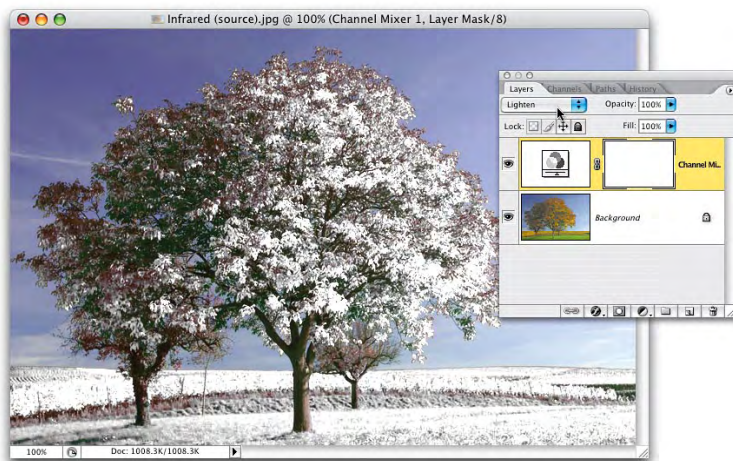
TURN ON THE MONOCHROME CHECKBOX, THEN LOWER THE CONSTANT TO PRESERVE HIGHLIGHTS



Now, click the Monochrome checkbox at the lower-left corner of the dialog (as shown here) to convert the photo to black and white. If the whites in your image are blown out (they were in this image), lower the Constant slider until the whites aren't so blown out (I had to lower it to -34%). You can now click OK, and you've got a black-and-white infrared effect. You can stop at this point, or if you want a color infrared effect, go on to the next step (you'll want to continue on anyway, because we do a slightly different infrared technique after that).

#### STEP 4 FOR A COLOR INFRARED EFFECT, CHANGE THE ADJUSTMENT LAYER'S BLEND MODE TO LIGHTEN

To bring the color effect into your black-and-white infrared, just change the blend mode of your Channel Mixer adjustment layer to either Lighten (as shown here) or Screen (if you choose Screen, lower the opacity until it looks right). As an optional step, you can add the white “glow” of classic film infrared photography by pressing X to set your Foreground color to white, flattening the image, then going under the Filter menu, under Distort, and choosing Diffuse Glow. Try setting the Graininess at 3, the Clear Amount to 15, then slowly drag the Glow Amount slider to the right until you get a slight glow without blowing out the highlights. Now, on to an alternate method.



#### STEP 5 OPEN ANOTHER IMAGE

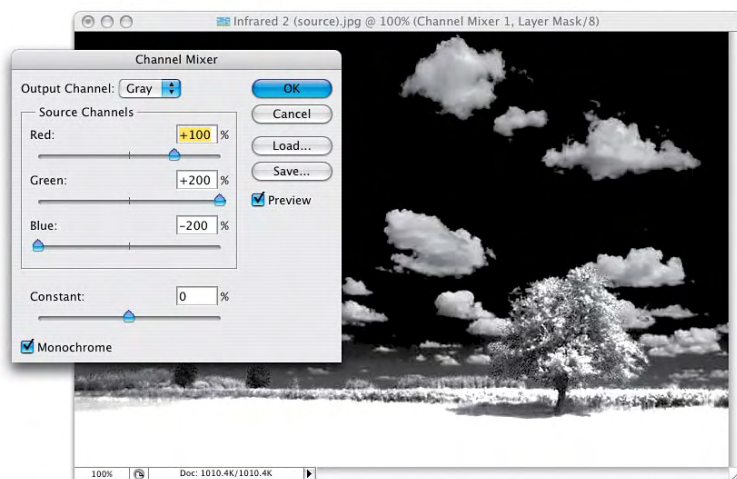
This next method works well when there's a nice rich sky with lots of blue, and with lots of clouds (like the photo shown here). This time we're going to use a couple of masks to get the traditional infrared effect, where the sky turns almost black but the clouds just pop out at you in stark white, and the tree leaves turn really white. It sounds bad, but it's a beautiful thing when done right.



©ISTOCKPHOTO/ANDRZEJ TOKARSKI

## STEP 6

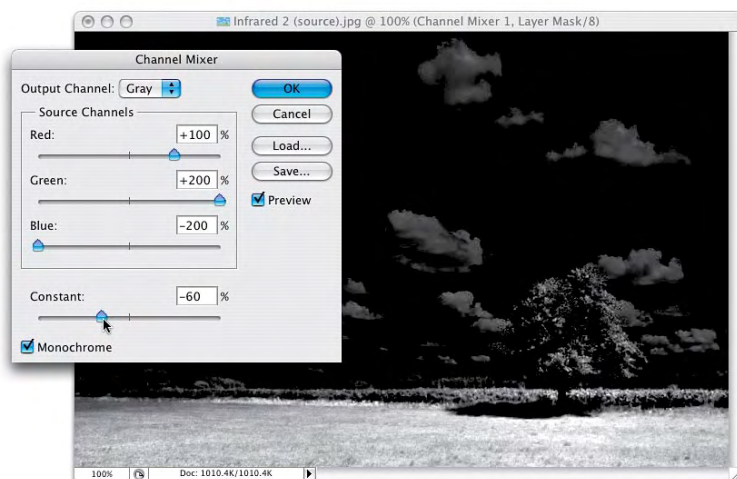
## USE THE CHANNEL MIXER USING THE SAME VALUES AS BEFORE, BUT THIS BLOWS OUT THE HIGHLIGHTS



Create a Channel Mixer adjustment layer again, turn on the Monochrome checkbox, and enter these values: leave the Red at +100, increase the Green to +200, then decrease the Blue to -200 to create that black sky and white trees and ground, but don't click OK yet. Now, although the sky, clouds, and trees look great, the ground is completely and totally blown out. So, we're going to have to do a little layer masking to create the perfect infrared photo. This is the ideal photo to do this on because you'll run across plenty of images where you'll need to do the sky separately from the ground to keep detail in both areas.

## STEP 7

## LOWER THE CONSTANT UNTIL THE GROUND DETAIL REAPPEARS, EVEN THOUGH THE SKY IS NOW TOO DARK



We're now going to temporarily sacrifice the sky to get the ground back, so drag the Constant slider to the left until the detail in the ground reappears (as shown here, where I had to lower the Constant to -60% to get the ground back), then click OK.

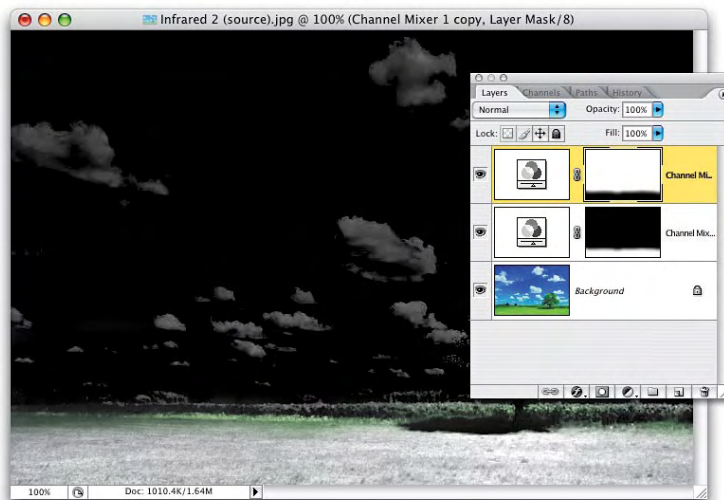
## STEP 8 WITH BLACK AS YOUR FOREGROUND COLOR, PAINT OVER THE SKY TO CONCEAL JUST THE SKY

Press X to set black as your Foreground color, then get the Brush tool (B), choose a large soft-edged brush, and start painting over the sky (don't worry—you're painting on the mask, not the photo itself). Paint over the entire sky, and as you paint in black, those infrared areas become hidden (concealed) from view, leaving just the ground still having the infrared effect applied. Your mask's thumbnail (in the Layers palette) will look like the one shown here—with black over the sky, and white revealing the Channel Mixer edits you made in the previous step.

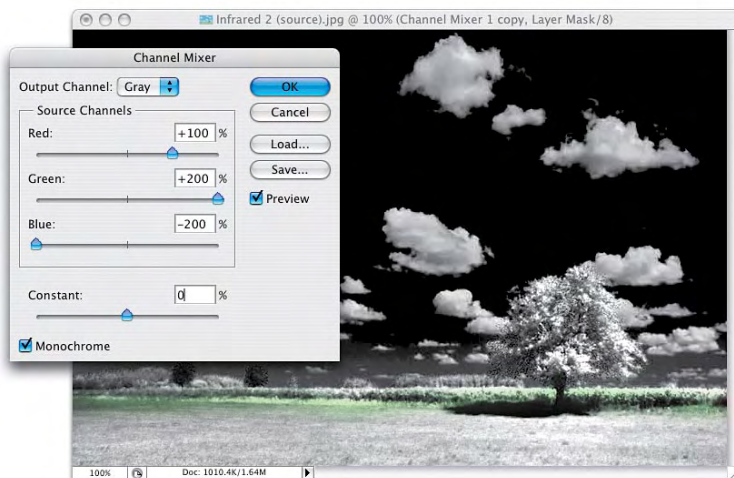


## STEP 9 DUPLICATE THE ADJUSTMENT LAYER, THEN INVERT THE MASK BY PRESSING COMMAND-I (PC: CONTROL-I)

Now, duplicate the Channel Mixer adjustment layer (the quickest way is to just press Command-J [PC: Control-J]). Press Command-I (PC: Control-I) to Invert the mask, so now the black part (the concealed part) is at the bottom, and the white area (the part of the area to be revealed) is on top. Of course, at this point, all it looks like is that we brought the really dark sky from two steps ago right back, but we're about to fix that.

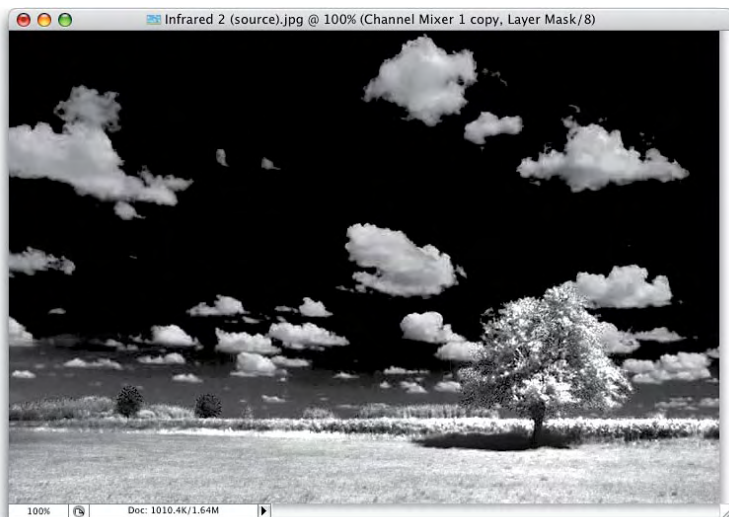


## STEP 10 REOPEN THE CHANNEL MIXER AND RAISE THE CONSTANT BACK UP TO 0%



In the Layers palette, double-click directly on the Channel Mixer adjustment layer's thumbnail to bring up the Channel Mixer dialog with the settings you last input. The Constant slider will still be set at -60%, so all you have to do (to bring back the nice sky again) is raise that back up to 0% to get the effect you see here, which combines the nice sky with the good detail ground. We used two different masks: (1) to create the good ground and cover the sky, and (2) to hide the ground and reveal the good sky. If you see any green along the ground where the two masks meet (like you do here), press X to set your Foreground color to white and just paint it away.

## STEP 11 IF ANY COLOR AREAS SHOW, PAINT OVER THEM IN WHITE TO COMPLETE THE EFFECT (AS SHOWN HERE)



Here's the final image, with that green painted away by painting on the mask in white. It combines the good sky and the good ground, which together create one heck of a realistic infrared black-and-white effect.

# Mapping One Image to Another

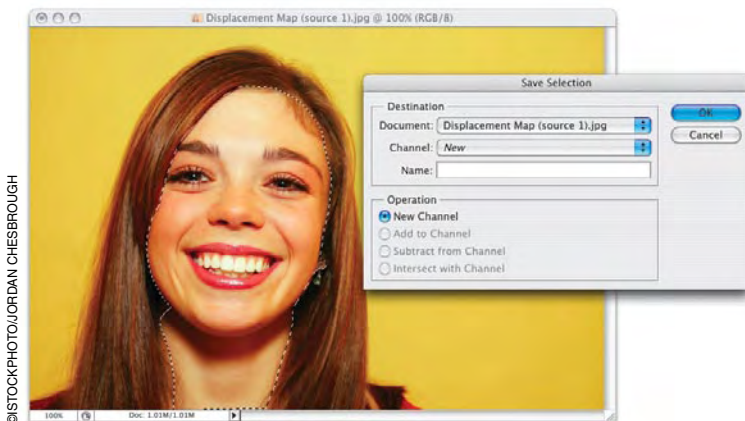
THE AD AGENCY'S TRICK FOR MAKING ONE IMAGE MAP TO THE CONTOURS OF ANOTHER. YA KNOW, TO SELL STUFF

This is another one of those popular effects that you can only create using channels, because it makes use of the Displace filter in Photoshop, and the Displace filter requires you to load an image map, and that map is (you guessed it) made from a channel. The great thing is this Displacement Map technique does an amazing job of mapping one image onto another, while maintaining all the detail and contours of the original image.

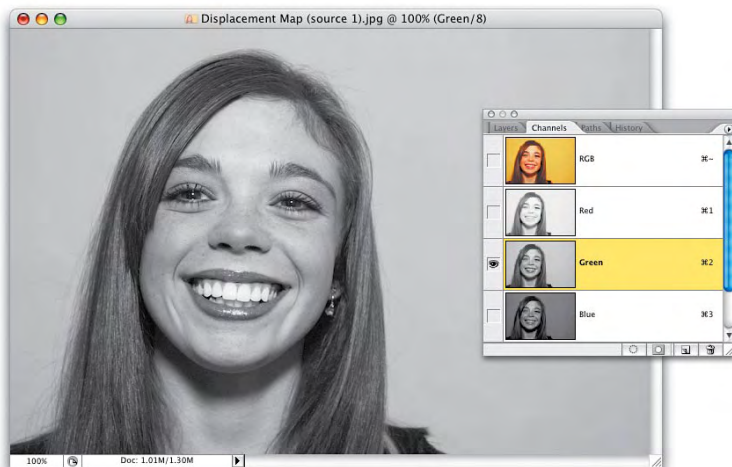
One of the places you see this technique used most is in advertising, where I've seen everything from company logos to U.S. and U.K. flags mapped onto people like they were tattoos. Here we're going to do a similar tutorial, where we're mapping flat images onto a subject's face and the key is making the flat image warp to perfectly fit the contours and features of the face.

## STEP 1 OPEN A PORTRAIT, PUT A SELECTION AROUND THE FACE, AND SAVE THE SELECTION

Open the photo you want to map another image onto (in this case, it's a portrait of a woman, and we're going to map two different images onto her face like a tattoo). Start by making a selection of her face (I used the Pen tool [P] and turned the path into a selection in the Paths palette, but you can use the Lasso tool [L] or whichever selection tool you're most comfortable with). Once your selection is in place, go under the Select menu and choose Save Selection. When the dialog appears (shown here), just click OK. Now that the selection has been saved, you can press Command-D (PC: Control-D) to Deselect.

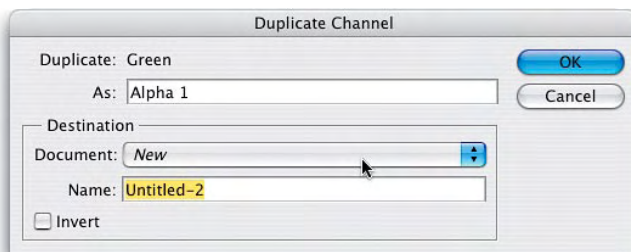


## STEP 2 FIND THE CONTRAST CHANNEL (IT'S THE GREEN CHANNEL IN THIS PHOTO)



Now to make the best map, we need to find the Contrast channel, so go to the Channels palette (or use the keyboard shortcuts) to find which channel has the most contrast between the subject and the background. In this case, it's the Green channel, so click on the Green channel in the Channels palette (as shown here).

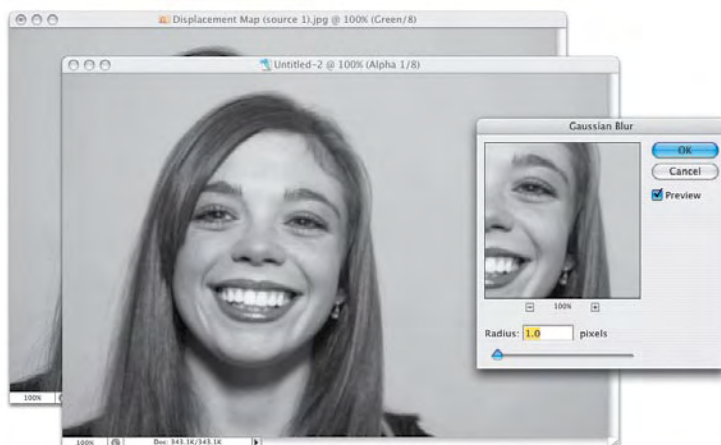
## STEP 3 DUPLICATE THE CHANNEL INTO ITS OWN SEPARATE DOCUMENT



From the Channels palette's flyout menu, choose Duplicate Channel. When the Duplicate Channel dialog appears, in the Destination section, in the Document pop-up menu, choose New (as shown here), then click OK. By choosing New, instead of just duplicating the channel and adding another Alpha channel to your portrait, it creates an entirely new document with a duplicate of your Green channel. This new document will be used to make the map that will be used to define the contours of your subject's face. That will make more sense in just a minute.

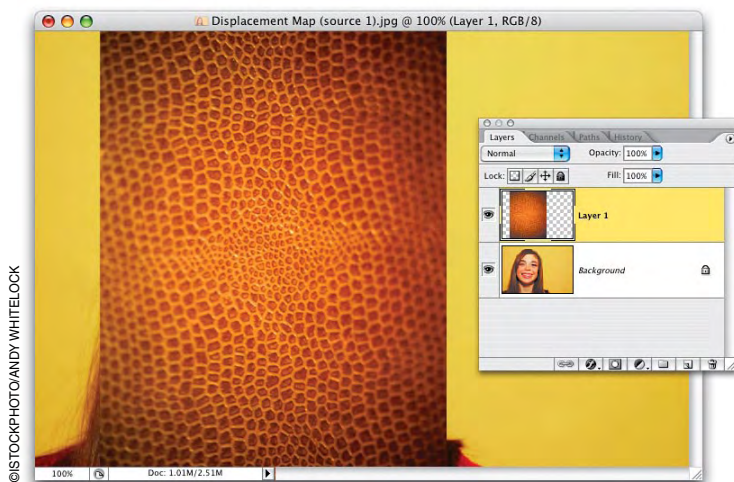
#### STEP 4 ADD A SLIGHT BLUR TO THIS NEW DOCUMENT, THEN SAVE AS A PHOTOSHOP PSD FILE NAMED “MAP”

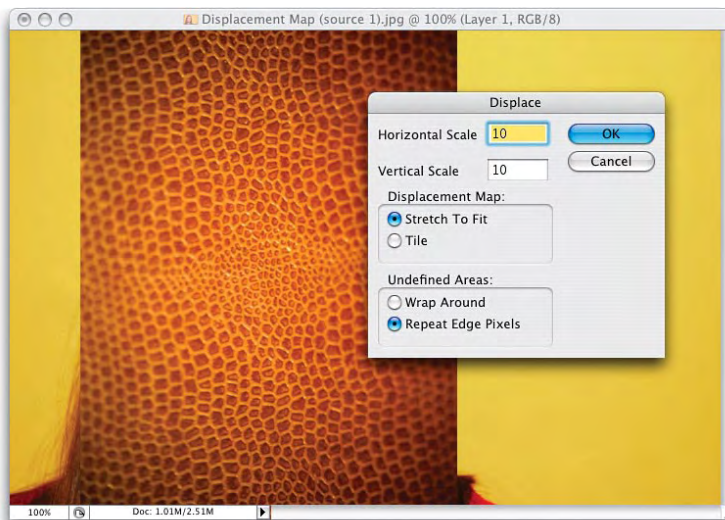
Switch to that new document (the one with your duplicate Green channel), and apply a slight blur to the image using the Gaussian Blur filter (found under the Filter menu, under Blur). In this case, on a low-res image, it takes only a 1-pixel Gaussian blur, but on a high-res, 300 ppi image, try a 3- or 4-pixel blur, then click OK. Once you’ve blurred this duplicate document, you need to save the file (so go under the File menu and choose Save As). Name it “Map” and save it in Photoshop’s native PSD format. You can close this document for now.



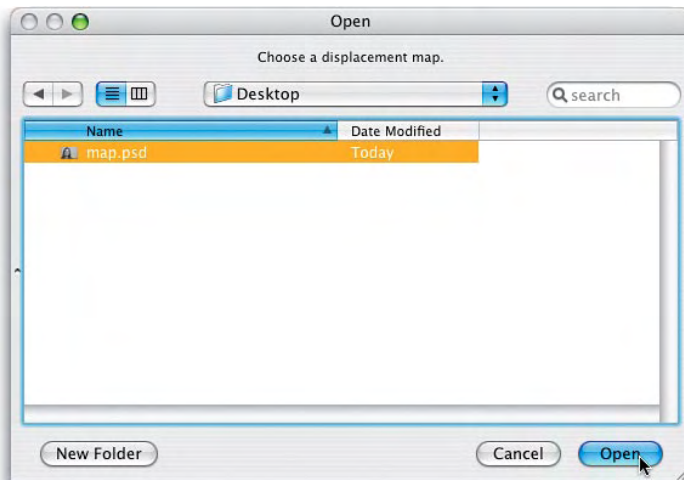
#### STEP 5 RETURN TO THE RGB CHANNEL, THEN OPEN A TEXTURE PHOTO AND DRAG IT ON TOP

Now return to your original photo, and press Command-~ (PC: Control-~) to return to the RGB Composite channel. Open the texture photo you want to map to your subject’s face. In this case, I was able to find a reptile skin texture (I know—gross!). So, get the Move tool (V) and click-and-drag that reptile skin texture photo over onto your portrait. Position the reptile skin directly over the face (as shown here).



**STEP 6****OPEN THE DISPLACE FILTER AND LEAVE THE DEFAULT SETTINGS IN PLACE. CLICK OK**

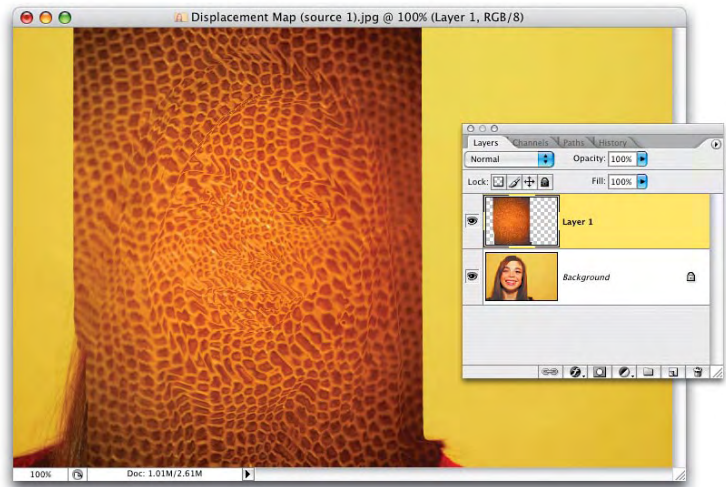
Go under the Filter menu, under Distort, and choose Displace. This brings up the Displace filter dialog (shown here). You can leave the default settings in place (both the Horizontal and Vertical Scale at 10), leave the Displacement Map setting at Stretch To Fit, and the Undefined Areas set to Repeat Edge Pixels, and just click OK.

**STEP 7****WHEN THE DISPLACEMENT MAP OPEN DIALOG APPEARS, FIND YOUR MAP PSD FILE AND OPEN IT**

When you click OK, an Open dialog will appear, and if you look at the dialog, you'll see it's asking you to "Choose a displacement map." So, go and locate the Map.psd file you saved a few steps earlier (I always save mine to the Desktop so it's easy to find), and once you locate the file, click the Open button (as shown here).

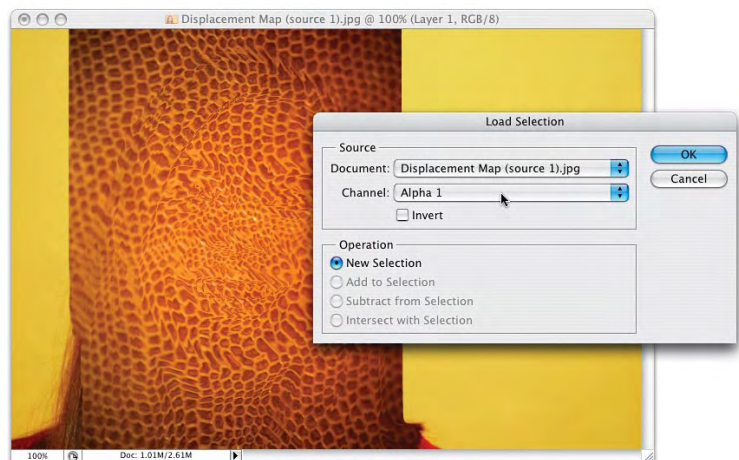
## STEP 8 THE CONTOUR MAP IS APPLIED TO YOUR TEXTURE IMAGE LAYER

Once you click OK, you'll see the reptile skin texture now seems distorted or warped. That's because a map of the face has been applied to the center of the texture. It doesn't look like anything at this point, because we've still got some work to do, including removing all the extra texture around the face, and blending the image in, and...well...you'll see.

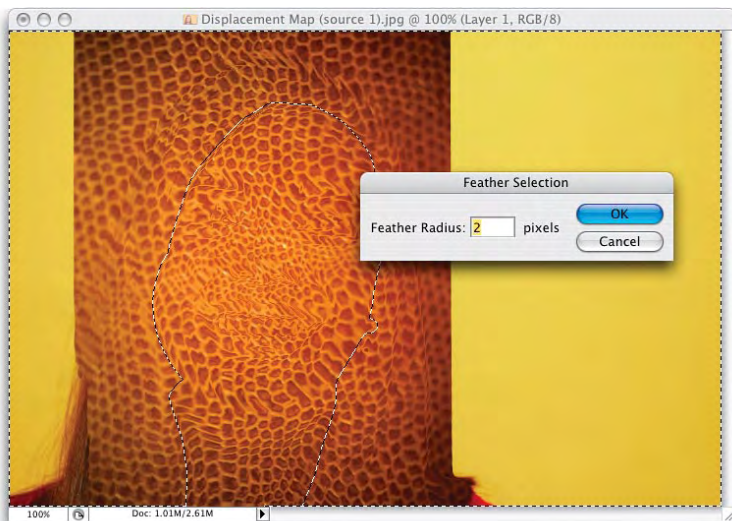


## STEP 9 RELOAD YOUR SAVED SELECTION

Okay, remember that selection we saved in the first step? Our Alpha channel selection of her face? Well, now it's time to bring it back, so go under the Select menu and choose Load Selection. When the dialog appears, under Channel, choose Alpha 1 (as shown here) and click OK to load the channel as a selection.



## STEP 10 INVERSE THE SELECTION, THEN ADD A SMALL FEATHER TO SOFTEN THE EDGES



Once the selection is loaded, you'll first need to inverse the selection (go under the Select menu and choose Inverse), so everything but her face is selected (of course, you could have done that right within the Load Selection dialog by clicking on the Invert checkbox, but since we didn't do that then, you have to do it now). Next, to make sure the edges of your selection are soft, go under the Select menu, and choose Feather. Add a few pixels of feathering, then click OK, so the edges blend without a hard edge. (Note: On low-res images, 2 pixels will do. On high-res, 300 ppi images, try 5 or 6 pixels.)

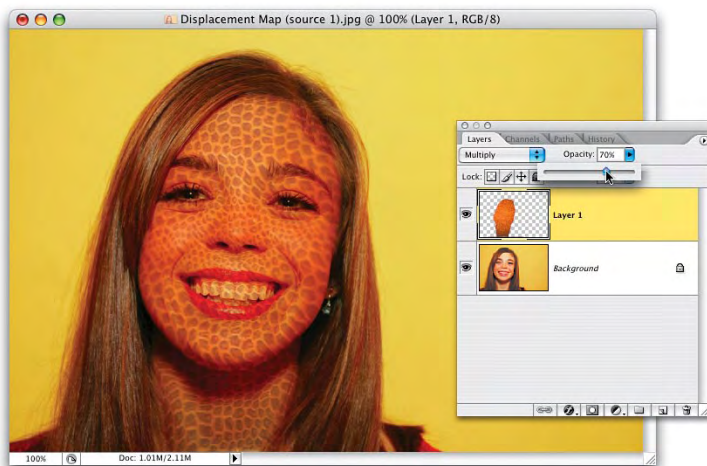
## STEP 11 HIT DELETE TO TRIM AWAY THE AREAS SURROUNDING THE FACE SELECTION, THEN DESELECT



Press the Delete (PC: Backspace) key and the area surrounding her face will be deleted (as shown here). You can now press Command-D (PC: Control-D) to Deselect. Now, even though you've mapped her facial features to this texture, and you've just trimmed away the excess areas, it's still a solid texture covering her face—it's not blending in with it—so that's what you'll do next.

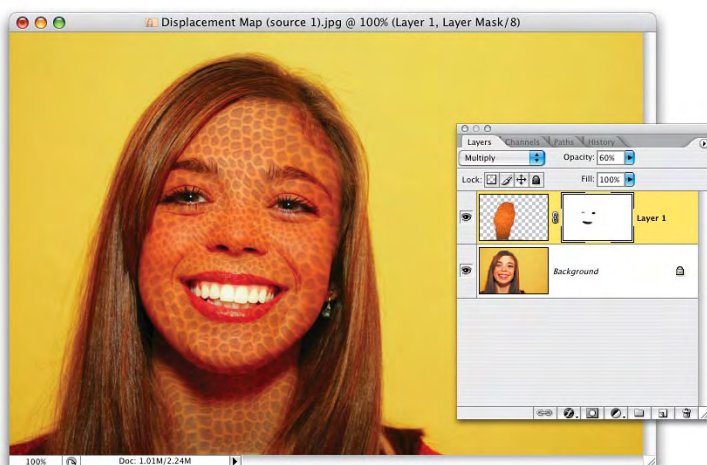
## STEP 12 CHANGE THE BLEND MODE TO MULTIPLY TO BLEND THE TEXTURE WITH THE FACE. LOWER THE OPACITY

Go to the Layers palette and change the blend mode of this layer to Multiply. Now the texture blends in with her face, and most importantly, it follows the contours of her face, wrapping around her nose, cheeks, neck, etc. But, the Multiply mode gives it a very dark look, so you'll probably want to lower the Opacity to around 70% (as shown here), so the skin texture isn't so dark. However, there's still something wrong. If she really had a skin texture like this, that texture wouldn't be on her teeth or on her eyes, right? We'll fix that quickly in the next step.



## STEP 13 ADD A LAYER MASK, AND PAINT IN BLACK OVER TEETH AND EYES TO CONCEAL TEXTURE THERE

Click on the Add Layer Mask icon at the bottom of the Layers palette. Set your Foreground color to black, choose a small soft-edged brush, and paint over her eyes and teeth. As you paint, the skin texture is concealed behind the black. Once you're done, take a look at the Opacity setting and see if it needs to be lowered a bit (here, it's lowered to 60% for the final effect). Now, what if you get the final texture in place, and you don't like it? (After all, it is a bit creepy.) Luckily, trying a different texture is easy because the map is already made, and your face selection is still saved as an Alpha channel. In fact, you can even use the same layer mask, so let's try it.

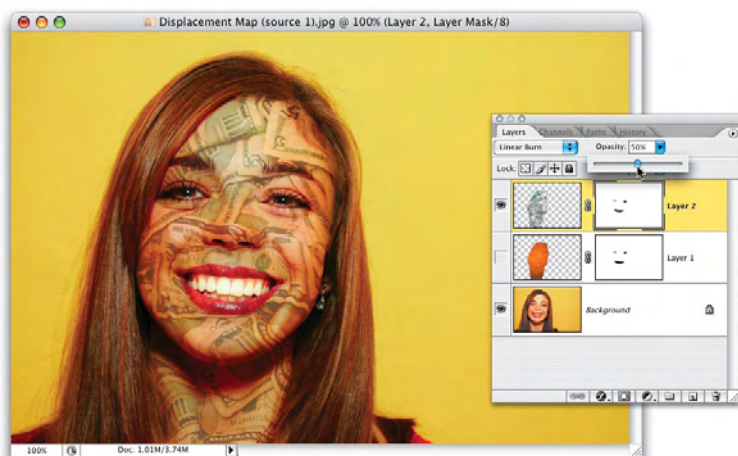


## STEP 14 ONCE YOUR MAP AND SELECTION ARE SAVED, TRYING OTHER TEXTURE IMAGES IS EASY



Open a second photo (in this case, an image of U.S. \$5 bills) and drag it on top of the portrait document. You can hide the original reptile texture layer (don't delete it—just hide it from view by clicking on the Eye icon beside the layer). Now, back on our money layer, you are ready to apply the same displacement map you did before, so just press Command-F (PC: Control-F) to apply the same map file you did earlier. Once the map is applied, load your saved Alpha channel (this time, remember to click the Invert checkbox in the Load Selection dialog) and click OK to load the selection. Now add a 2-pixel feather to soften the edges.

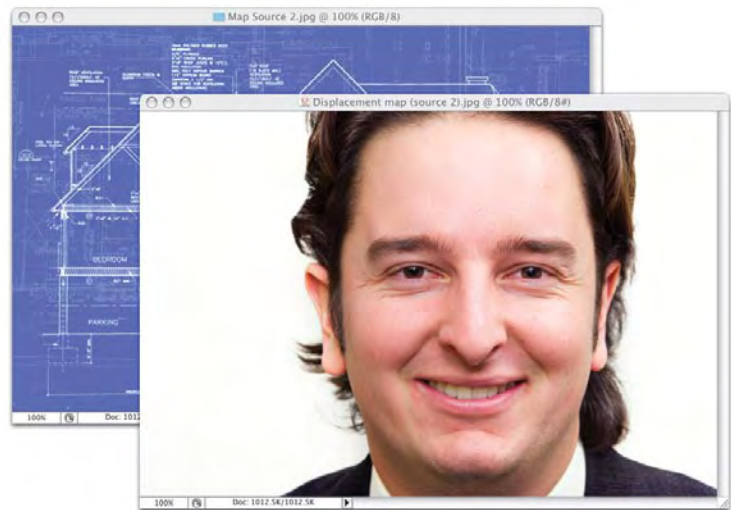
## STEP 15 PRESS DELETE TO TRIM AWAY, CHANGE THE BLEND MODE, THEN DESELECT



Press Delete and then change the layer's blend mode to Linear Burn. Why Linear Burn? I tried Multiply, and it looked okay, but I tried a few other blend modes (like Color Burn, Linear Burn, Overlay, and Soft Light), and I thought the one that looked best was Linear Burn. Now, just lower the Opacity (I went down to 50% this time, simply because it seemed to look the best), and Deselect. Lastly, you can use the same layer mask you used on the reptile texture layer—in CS2 just hold the Option key (PC: Alt key), click on the reptile texture layer mask thumbnail, and drag-and-drop it on the top layer (as shown here). Let's try this technique on a new image.

## STEP 16 ONE MORE QUICKIE JUST FOR PRACTICE. OPEN THE FACE PHOTO AND THE BLUEPRINT TEXTURE FILE

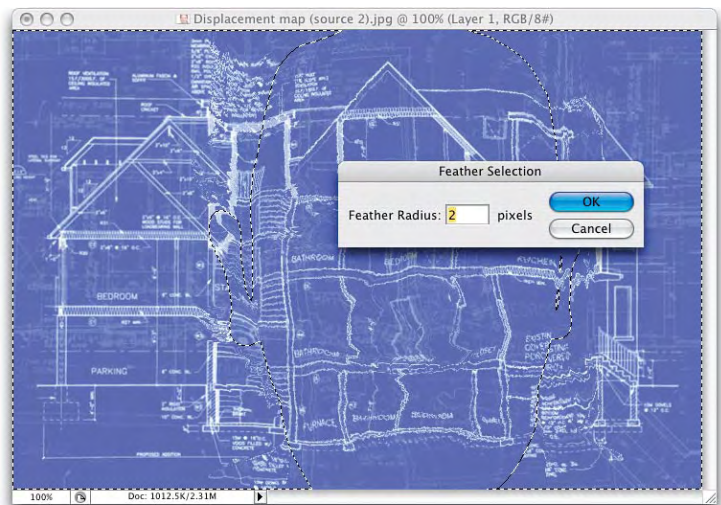
Here's a photo of a face (by the way, you don't always have to use a face—I just chose faces because it's so easy to see how the texture image wraps around the contours of a face—you can use this technique to map to most any non-flat surface). The other photo is a blueprint of a house, and we're going to map that onto this face using the same technique as before.



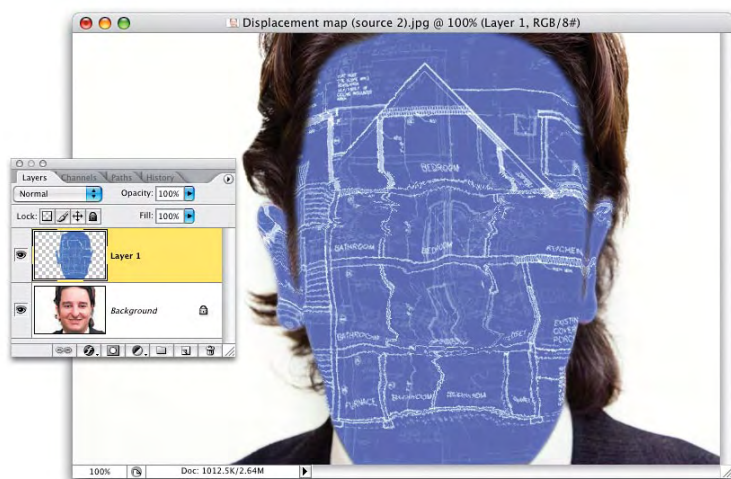
©STOCKPHOTO/NICHOLAS MONU & VASKO MIKOVIC

## STEP 17 SELECT THE FACE, SAVE AS SELECTION, FIND THE TEXTURE CHANNEL, DUPLICATE INTO SEPARATE DOC

You'll do the same steps, but now that you've done it once, it should go much faster this time: Start by making a selection of his face and saving it as an Alpha channel. Then find the Contrast channel and duplicate that into its own document. Blur that document just a little, then save it as a Photoshop PSD file. Now go back to your face photo, drag the blueprint image into your face document, then apply the Displace filter, using the map file you just saved (by the way, you don't have to name it Map.psd, it just makes it easier to find it when you do). Once the map is applied to your blueprint layer, load your face selection, invert, and then add a Feather to your selection (as shown here).

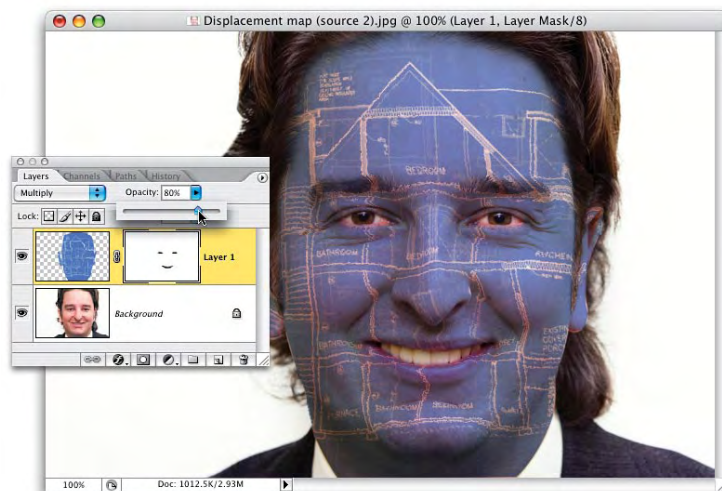


## STEP 18 ONCE YOU'VE RUN THE DISPLACE FILTER AND LOADED YOUR SELECTION, DELETE THE EXCESS



Now, press Delete to trim away the excess blueprint areas outside the face and then Deselect (as shown here).

## STEP 19 CHANGE THE BLEND MODE TO MULTIPLY AND LOWER THE OPACITY



Change the blueprint layer's blend mode to Multiply, then lower the Opacity until the effect looks right. Lastly, add a layer mask, take the Brush tool (with the Foreground color set to black), and paint over the eyes and teeth to complete the effect (as shown here).

# Lighting Effects Texture Channel

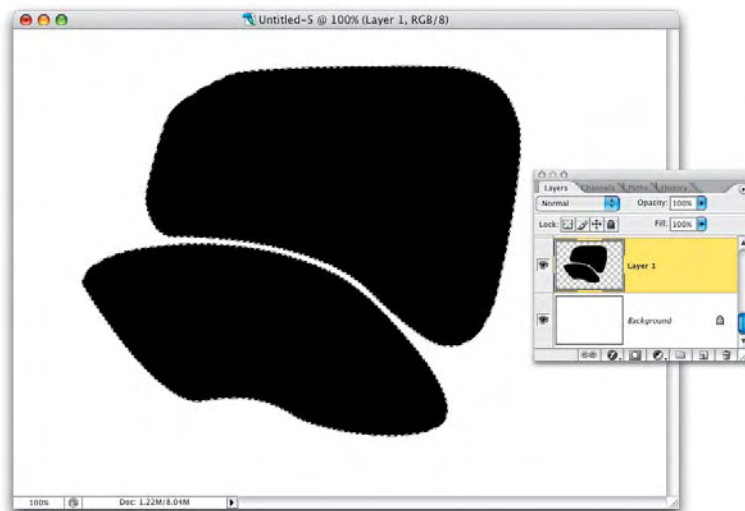
HOW TO USE A CHANNEL AND THE LIGHTING EFFECT FILTER TO CREATE A UNIQUE STYLE OF BEVELING

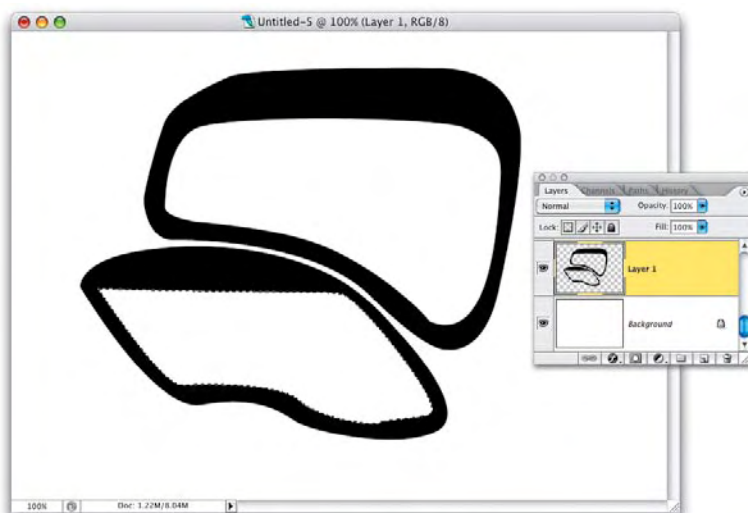
Okay, this is going to look like a tutorial on creating high-tech interfaces, and I guess on some level it is, but this is really about how the Texture channel in Photoshop's Lighting Effects filter works. Now, this Texture channel technique is particularly popular in creating high-tech interfaces for the Web, so that's what we're using as our example, but don't let it throw you off—this is about the Lighting Effects. However, I can't just have you open a pre-made interface base—nope, that's cheating (well, it's not really cheating, I just hate tutorials that start with all the hard work already done for you. I think it's a good learning tool for you to have to build it all from scratch). So, that's exactly what we're going to do—build an interface from scratch.

Now, if after looking at the first three steps of this tutorial, you start to think “Ya know, there's no possible way I could draw those two kidney shapes, and knock a few holes out of them,” I will make a layered version available of the first three steps on the photo downloads page for this book ([www.scottkelbybooks.com/channelsphotos](http://www.scottkelbybooks.com/channelsphotos)). So, you can cheat and do that, but you will definitely feel some level of guilt knowing you “wussed out” on building the base.

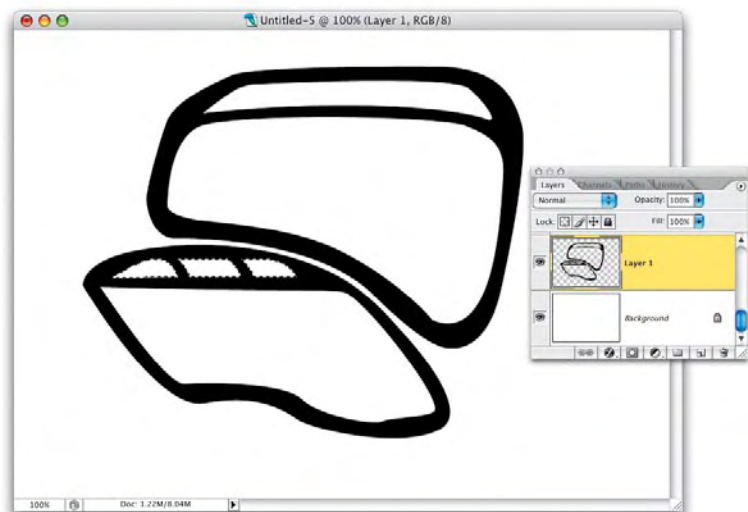
## STEP 1 ADD A BLANK LAYER, DRAW TWO KIDNEY SHAPES LIKE THE ONES SHOWN HERE, FILL WITH BLACK

We're going to build the base of a high-tech interface to illustrate how the Texture channel in the Lighting Effects filter works. This really isn't a full-fledged interface tutorial (that would take a chapter by itself), but we have to start somewhere. So, start by creating a new layer. Next, use whichever selection tool you're comfortable with to create two kidney shapes similar to the ones shown here, which were created with the Pen tool and converted into selections by pressing Command-Return (PC: Control-Enter). Once your selections are in place, set your Foreground color to black and press Option-Delete (PC: Alt-Backspace) to fill your shapes with black. Now you can Deselect.



**STEP 2****DRAW SELECTIONS INSIDE THE BLACK SHAPES, PRESS DELETE TO KNOCK OUT HOLES**

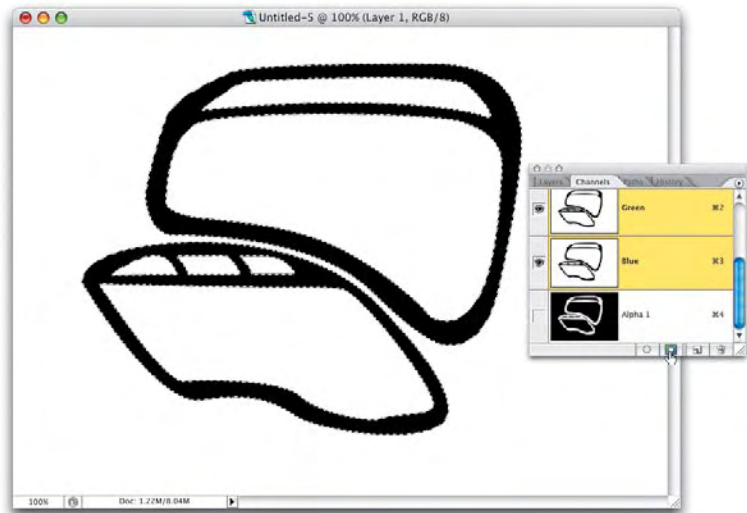
Now, you're going to cut holes out of your interface, so again, use the selection tool of your choice to make selections inside your black kidney shapes. Then press the Delete (PC: Backspace) key on your keyboard to knock holes out of your shapes, like the ones shown here. Once your holes are knocked out, you can Deselect.

**STEP 3****MAKE SELECTIONS FOR BUTTONS (LIKE THE ONES SHOWN HERE) AND DELETE THOSE, TOO**

To finish off the base of our interface, you'll need to add a knocked-out area near the top of the top kidney shape (again, I did that one with the Pen tool). Then add three buttons on the bottom shape, as if we were going to use them for navigating an MP3 player (so, one button for rewind, one for play/pause, and one for fast forward, all added with the Pen tool. They're just for looks—they're not really going to do anything, but when you think about it, this whole interface is just for looks, so it's worth knocking those little button-shaped selections right outta there).

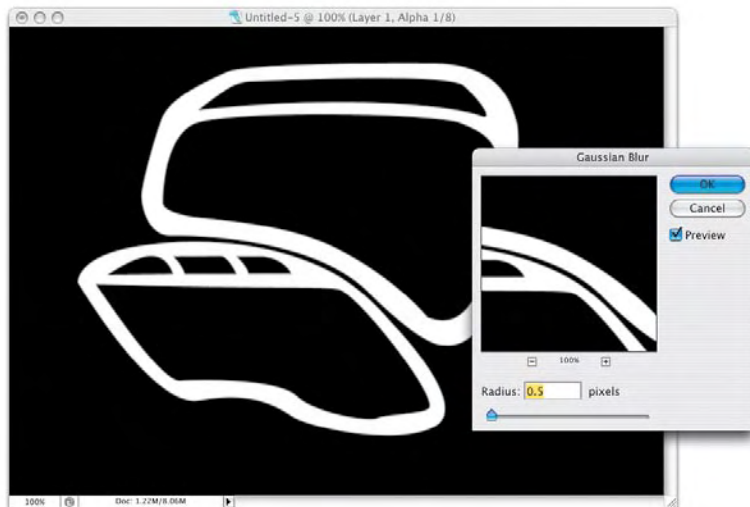
#### STEP 4 COMMAND-CLICK (PC: CONTROL-CLICK) ON LAYER TO LOAD AS A SELECTION, THEN SAVE AS ALPHA CHANNEL

Now that the basic shape for our interface is done, we need to turn this shape into an Alpha channel. You do that by pressing-and-holding the Command key (PC: Control key) and clicking once directly on the interface layer's thumbnail in the Layers palette. This puts a selection around your entire interface. Next, go to the Channels palette and click the Save Selection as Channel icon (as shown here) to save your selection as an Alpha channel. Once that's done, you can first Deselect, then go back to the Layers palette and drag your layer (Layer 1) into the trash because you don't need it anymore.



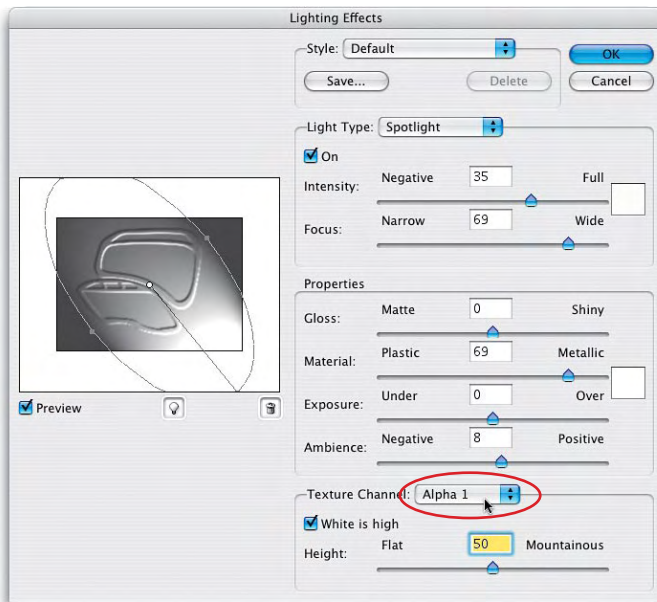
#### STEP 5 GO TO ALPHA 1 IN CHANNELS PALETTE AND ADD BLUR, THEN RETURN TO RGB COMPOSITE CHANNEL

Go back to the Channels palette and click on the channel named Alpha 1 (your saved selection of the interface shape). This is where you're going to add a slight blur to your interface. So, go under Filter, under Blur, choose Gaussian Blur, and apply just a 0.5 (half a pixel) blur. Interfaces are usually made for use on Web pages, which means they only need to be low-res, 72 ppi files, so we can get away with a 0.5-pixel blur. If, for some reason, you were creating a high-resolution version of this interface (hey, it could happen), then try applying a 2-pixel blur. Click OK.



## STEP 6

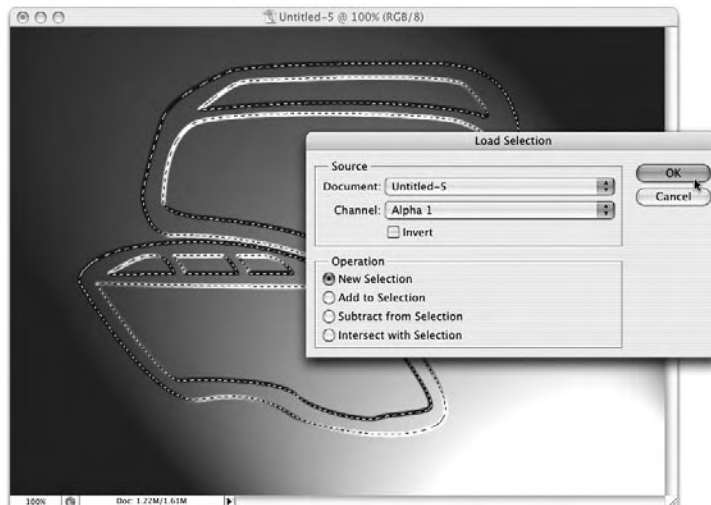
## OPEN LIGHTING EFFECT FILTER, FOR TEXTURE CHANNEL CHOOSE ALPHA 1, AND CLICK OK



Once the blur is applied, press Command-~ (PC: Control-~) to return to your RGB Composite channel. Now, go to the Layers palette and all you should see is the Background layer. Next, go under the Filter menu, under Render, and choose Lighting Effects. When the dialog comes up, you only have to do one thing—at the bottom of the dialog, where it says Texture Channel, choose Alpha 1 from the pop-up menu, and you'll see your interface appear in the Lighting Effects preview window on the left side of the dialog. Click OK to apply the effect. By loading your Alpha channel, it uses the Lighting Effect to create a unique beveling to the edges of your interface.

## STEP 7

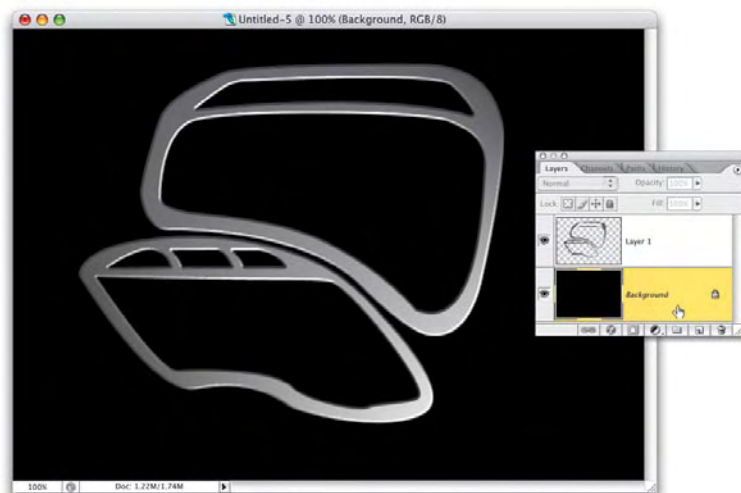
## THE FILTER IS APPLIED TO THE BACKGROUND LAYER. LOAD YOUR ORIGINAL ALPHA 1 SELECTION



Now that you've clicked OK, you'll see that the Lighting Effect filter has been applied to your Background layer, and you can see the beveling it added. However, we need to have your interface up on its own layer, so you're going to load the Alpha 1 channel as a selection on your Background layer. Go under the Select menu, choose Load Selection, then from the Channel pop-up menu choose Alpha 1, and click OK to load your selection. Of course, if you know the keyboard shortcut to load Alpha 1, do that instead. If you forgot, it's Command-Option-4 (PC: Control-Alt-4).

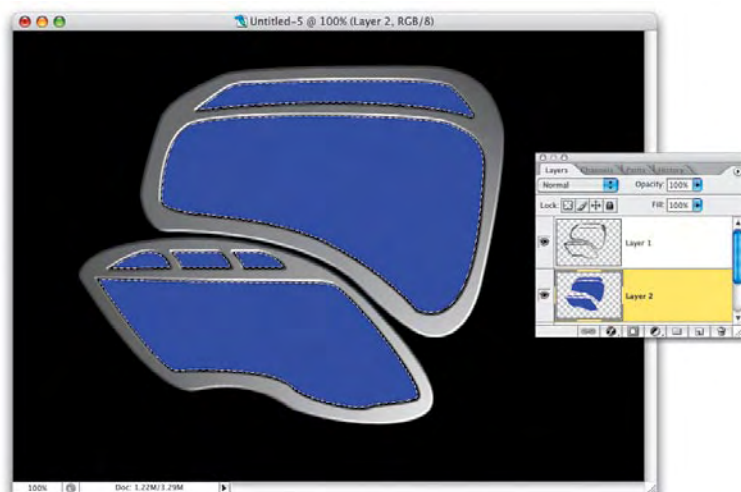
## STEP 8 PRESS COMMAND-J (PC: CONTROL-J) TO PUT INTERFACE ON SEPARATE LAYER. FILL BACKGROUND WITH BLACK

Press Command-J (PC: Control-J) to copy your beveled interface up on its own layer. In the Layers palette, click on the Background layer, make sure your Foreground is set to black, then press Option-Delete (PC: Alt-Backspace) to fill the Background layer with black (as shown here). Well, there you have it—the base of your interface is complete, and now you can add text, wires, buttons, and all that other cool interface stuff that usually winds up on interfaces. Oh, I get it. You want to take things a little further here. Okay, we'll go a little further, but you understand that the channels part of this tutorial is already over, right? Okay, just checkin'.

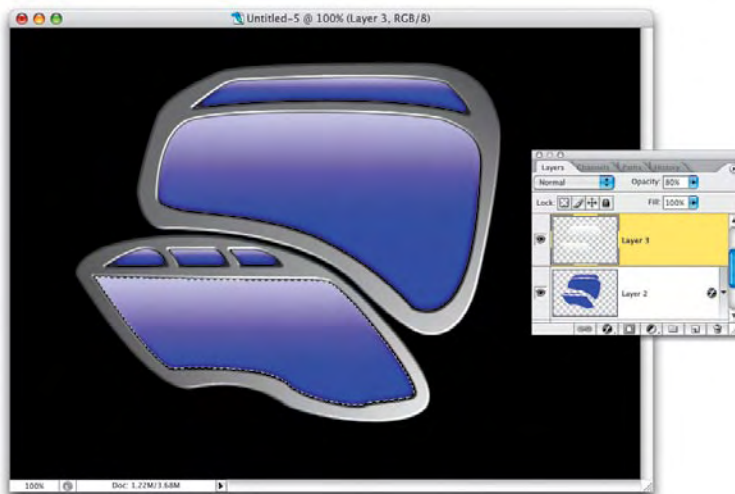


## STEP 9 SELECT CELLS WITH MAGIC WAND, ADD LAYER BENEATH INTERFACE, FILL WITH BLUE, ADD LAYER STYLE

To add the insides of your interface, on Layer 1, first get the Magic Wand tool (W), then click it once inside in the main kidney's large knocked out (black) area to select it. Press-and-hold the Shift key, then click in all the other black areas inside your interface. Now, add a new blank layer and drag it below your interface layer. Choose a medium blue for your Foreground color, and then fill those selected areas with blue (as shown here). Next, choose Inner Glow from the Add a Layer Style pop-up menu at the bottom of the Layers palette. This will put a soft-edged shadow inside all those blue areas, and that will help add some depth to the inside shapes.

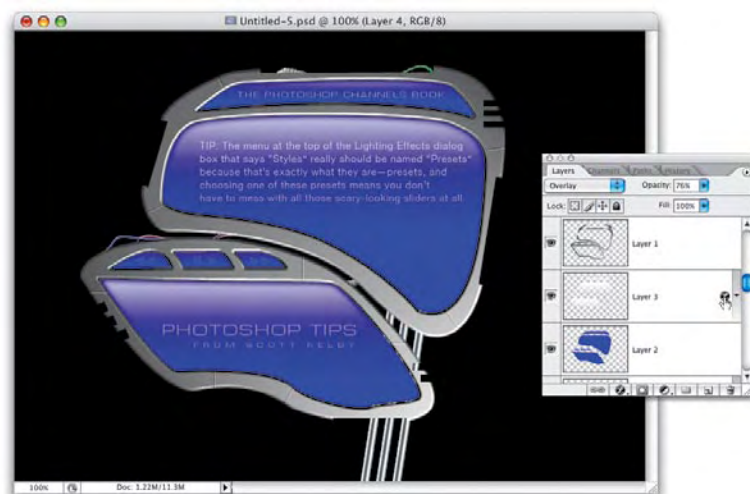


## STEP 10 SET INNER GLOW, ADD LAYER, THEN ADD WHITE-TO-TRANSPARENT GRADIENT ON EACH CELL



When the Inner Glow dialog appears, you have to do just three things: (1) set the Color of Glow to black, (2) change the Blend mode to Normal, and (3) increase the Size setting to 9, then click OK to add the inner glow you see here. Well, there is one more thing going on here—and that's the white-to-transparent gradient that's been added to each blue section. So, create another new layer, set white as your Foreground color, get the Gradient tool (G), and choose the second gradient in the Gradient Picker (white to transparent). Use the Magic Wand to select a section, switch back to the Gradient tool, and drag it from the top to about halfway down that section, then do the next section.

## STEP 11 ADD INNER GLOW IN BLACK, SET TO NORMAL, TO WHITE GRADIENT CHANNEL, ADD FINAL ELEMENTS



Once your gradients are in place, drag the Inner Glow effect from the blue layer right up onto the white gradient layer to get the glassy effect you see here (this works in CS2, but in earlier versions, you'll have to use the flyout menu to move the effect). The final part is adding all the final touches and text. The text up top is in Eurostyle Extended, as is the main text on the bottom. The center text is in Helvetica Regular. I added tubes, inset lines, and wires using techniques from back in the Photoshop 7 version of my *Down & Dirty Tricks* book, but you can find tutorials on wires and tubes on the Web in about 30 seconds—just do a search on Google.

# Keeping the Real Shadows

HOW TO MAINTAIN THE ORIGINAL SHADOWS, AND KEEP THEM TRANSPARENT WHILE COMPOSITING

This is a trick I learned a few years back from Photoshop genius guy, Ben Willmore. He's been teaching a great class at the Photoshop World Conference & Expo ([www.photoshopworld.com](http://www.photoshopworld.com)) on channels, and his technique for not only maintaining the original shadows in your photo, but making them transparent while you composite your object onto another background, is just pretty darn cool.

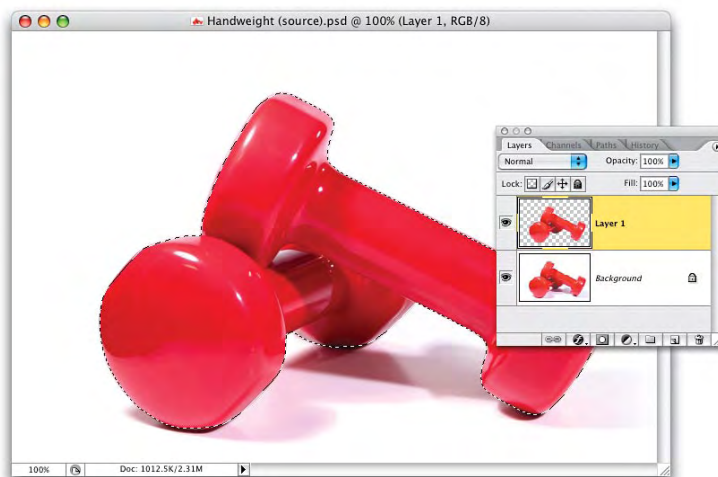
The trick is based on loading a selection of just the luminosity of your photo, then inverting it so you get just the shadows selected. Of course, there's a keyboard shortcut for loading the Luminosity channel, and it uses so many fingers that this move has its own nickname—The Claw (I think the term was originally coined by the Photoshop Diva herself, Katrin Eismann). So, kudos to Ben for coming up with the technique, and hats off to Katrin for giving the keyboard shortcut that makes it happen such a cool Photoshopesque name.

## STEP 1 PUT A SELECTION AROUND JUST YOUR OBJECT, NOT THE SHADOWS

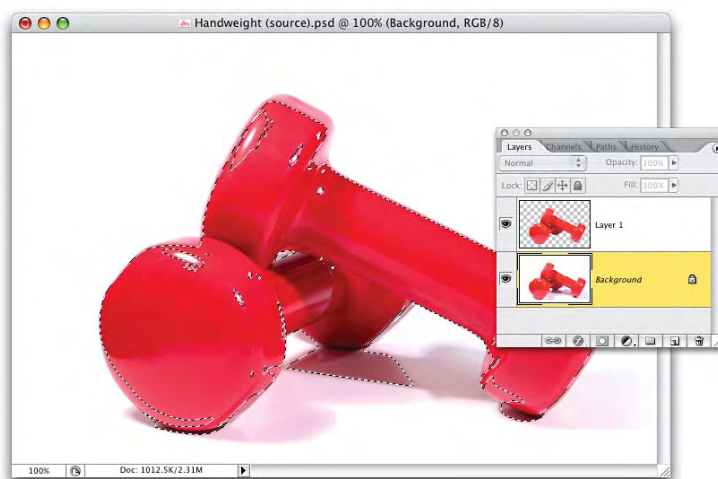
Open a photo of an object whose shadows you want to keep intact and transparent when you put the image over a different background. In this case, we want to put this set of red hand weights onto a totally different background while maintaining the interesting shadows that are already in the image. Start by making a selection of just the weights themselves, using whichever selection tool you're most comfortable with (the Magnetic Lasso tool might do most of the work for you on this one, but of course, you can always use the Pen tool—the Cadillac of selection tools—ask for it by name wherever fine selection tools are sold).



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**STEP 2****PUT THE SELECTED AREA UP ON ITS OWN LAYER (COMMAND-J [PC: CONTROL-J])**

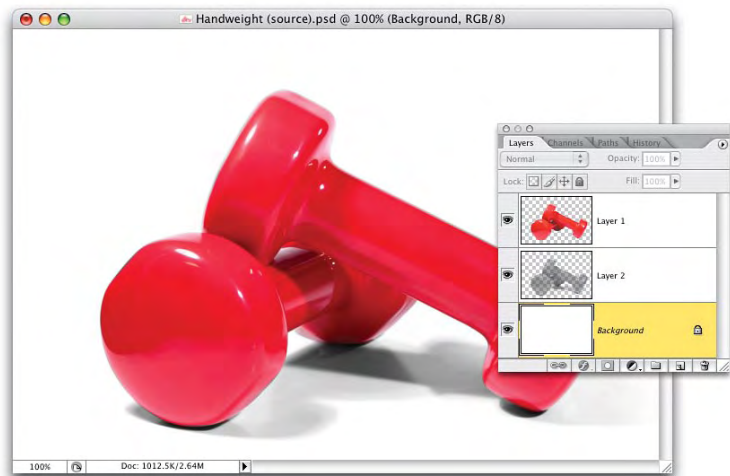
Once your selection is in place, press Command-J (PC: Control-J) to place the hand weights up on their own layer (as shown here).

**STEP 3****GO TO BACKGROUND LAYER, LOAD IMAGE LUMINOSITY, AND INVERSE YOUR SELECTION**

Next, in the Layers palette click on the Background layer. Now, we're going to use a keyboard shortcut that will load just the luminosity of the image. To load the luminosity, press Command-Option-~ (PC: Control-Alt-~). (Note: If you are running Mac OS X Tiger, you will first need to turn off the keyboard shortcut for Move Focus to the Window Drawer, as it uses the same shortcut.) Once the luminosity is loaded, what you're really looking for here is the opposite of that—just the shadows. Simply choose Command-Shift-I (PC: Control-Shift-I) to Inverse the selection, so instead of the highlights, you now have just the shadows selected (as shown here).

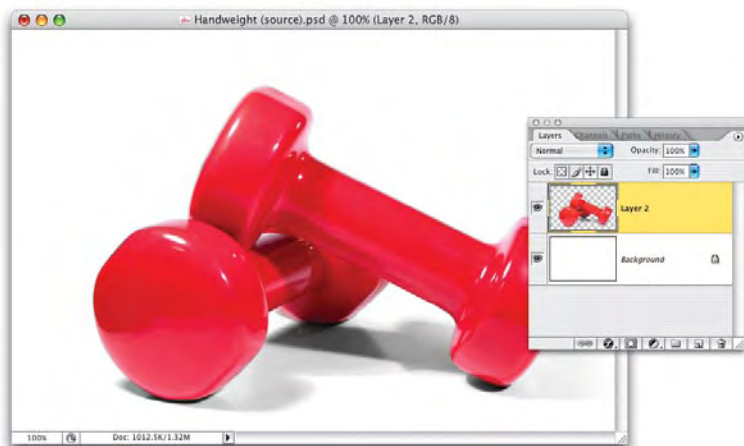
#### STEP 4 WHILE THE SELECTION IS IN PLACE, ADD A NEW BLANK LAYER, FILL WITH BLACK, AND DESELECT

While this shadows selection is still in place, go to the Layers palette and add a new blank layer. Press D to set your Foreground color to black, then press Option-Delete (PC: Alt-Backspace) to fill these shadows with black, then Deselect. Now, if you look at this layer by itself, it looks almost like a ghost of the shadow, with lots of transparency showing visibility in the layer, but that's okay. This is exactly what we're trying to achieve—transparency in the shadows. Now click on the Background layer, Select All, and hit Delete to erase the old contents of the Background layer, leaving you a blank Background layer, your shadows on the next layer up, then the weights on top. You can now Deselect.



#### STEP 5 AFTER ERASING THE BACKGROUND LAYER, CLICK ON THE TOP LAYER AND MERGE DOWN

In the Layers palette, click back on the hand weights layer, then press Command-E (PC: Control-E) to merge your hand weights layer with the transparent shadow layer beneath it. Well, you've pretty much completed your task—you've got just one layer with the object and its transparent shadow all ready to go (as shown here).



## STEP 6

## OPEN NEW BACKGROUND IMAGE



©ISTOCKPHOTO/FLAVIA BOTTAZINI

Now, open the background image on which you want the hand weights to appear. In this case, I thought it would be totally appropriate to have the hand weights appear on the floor of this IBM-esque data room. Okay, although it's probably not the most appropriate surroundings, it does have a nice, clean, wide-open floor beckoning us to put something, anything, right upon it, and who knows—pop a set of red hand weights on the floor, and it'll look so cool that those old machines might just make a comeback. Come to think of it...nah!

## STEP 7

## DRAG GIANT HAND WEIGHTS ONTO BACKGROUND: NOTICE SHADOWS ARE INTACT AND TRANSPARENT



Go back to your hand weights document, get the Move tool (V) and drag your layer onto the IBM-like data room. Now, if there's anything more stunning than red hand weights in a data room, it's really, really huge hand weights that dominate the entire photo. Okay, so they're a bit big—but we're going to leave them at this grotesque size because it just so wonderfully illustrates how transparent the shadows are, which underscores our modern day miracle by keeping those shadows transparent while the weights, though gargantuan in size, remain totally solid. This, my friends, is just another example of why channels rock.