Layer Mania

Russell Brown,
Senior Creative
Director at
Adobe Systems,
performs layers
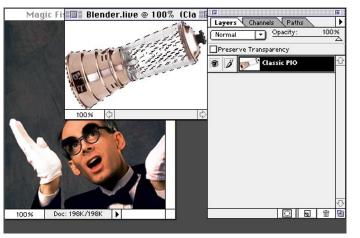magic with
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In this demo, we will bring an object that has flat lighting (the blender) into another image (Russ the magician) and light it so that it appears to be in the scene. We will do all of this without the aid of the Lighting Effects filter, or the Levels or Curves dialog boxes. We will do this with layers!

BLENDER DEMO PART 1 - LIGHTING EFFECTS

1. With both your background and your object image open in Photoshop, create or load the selection of the object. Here we loaded the selection of the blender, which we already made and saved as a channel.

Loading selections
A shortcut to loading an existing selection is to press Option/Alt+ Command/Ctrl+4 (4 corresponds to the number of the channel). To load the selection of an object that is on a transparent background, the shortcut is Command/ Ctrl+click the layer in the Layers palette.

2. Using the move tool, drag the selected image into the background image. Move the object into position. Double-click the new layer and name it.

Shortcuts
Throughout this document, "Command/ Ctrl", means Command on the Macintosh and Ctrl on Windows. "Option/Alt" means Option on the Mac and Alt on Windows.

3. The original blender image is too light, in relation to the background image. So we need to increase the density of the blender. Here's how we can do that without using levels or curves. Duplicate the Blender layer by dragging it onto the New Layer icon at the bottom of the Layers palette. Set the mode of this new layer to Multiply by using the Mode pop-up menu in the Layers palette.

Multiply mode
The Multiply mode is the equivalent of placing two transparencies over each other and viewing them on a light table. Multiply mode combines the densities of the two layers and darkens the images, just as it is doing here.

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4. To increase density even more, duplicate the copied layer two more times. Notice how the blender darkens with each layer duplicated.

5. The top portion of the blender is still not lit correctly. We need to erase some of each of the layers, and we can do this using layer masks. With the topmost layer selected, choose Layer > Add Layer Mask > Reveal All. Add a layer mask to the next two layers also.

6. Target the topmost layer mask. Then select the gradient tool, make sure your default colors are white and black, and click and drag at the same diagonal as the blender to create a smooth transition. Repeat this step for each layer that has a layer mask. Notice how the highlights start to form along the top edge. BINGO!
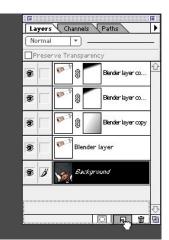
Default Colors
Pressing the D key on the keyboard when a layer mask is selected gives you the default white and black as your foreground and background colors.If on a Layer image, the default colors would be black and white as your foreground and background.

BLENDER DEMO PART 1 - LIGHTING EFFECTS

7. Next, a reflection of my nice shiny head and white gloves needs to appear on the blender so that it looks like it's really part of the scene. Duplicate the Background layer by dragging it onto the New Layer icon in the Layers palette.
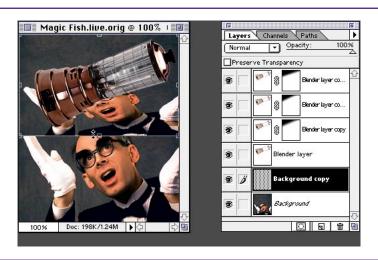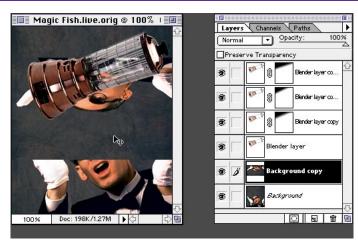
Finetuning
If the image needs more adjustments, use the dodge and burn tools or select the paintbrush tool and paint black on the layer mask to add more highlight effects.

8. Choose Layer > Transform > Scale, and drag the lower middle point up to compress and distort the image. Don't double-click yet.
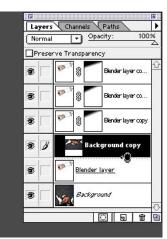
9. The reflection should be an exact mirrored image, so with the transform points still active, choose Layer > Transform > Flip Vertical. Double-click inside the image. Then, using the move tool, move the image into position.

BLENDER DEMO PART 1 - LIGHTING EFFECTS

10. The image should appear inside the blender. Move the Background copy layer up between the Blender layers. Hold down Option/Alt, and move the pointer over the line between the Background copy layer and the Blender layer below it. When the pointer changes to the clipping group icon, click to define the two layers as a clipping group.
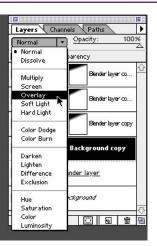

Clipping groups
A clipping group is somewhat like using the Paste Into command with two layers. In this case, think of the blender layer as the masking shape and the background copy as the image that will be pasted into the mask.
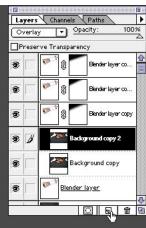
11. With the Background copy layer still selected in the Layers palette, choose Overlay from the Mode pop-up menu.

Overlay mode
Colors are overlaid on the existing pixels while the highlights and shadows of the base color are preserved. The base color is not replaced but is mixed with the blend color to reflect the lightness and darkness of the original image.
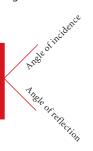
12. Using the move tool, move the image into place so you can see the reflection in the surface. If the image is too light, duplicate the Background copy layer by dragging it onto the New Layer icon at the bottom of the palette.
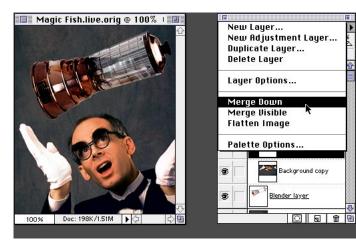

Reflections 101
Don't forget your basic physics when making realistic reflections. The angle of incidence always equals the angle of reflection.

BLENDER DEMO PART 1 - LIGHTING EFFECTS

13. Merge the layers that create the reflection for further finetuning. With Background copy 2 selected, choose Merge Down from the Layers palette pop-up menu.

14. With the Background copy layer targeted, select the eraser tool with a medium size, soft edge. Clean up the hard edge of the reflection in the blender by erasing the image. Also, because the reflection would not appear that high on the blender, take out some of the reflection appearing higher up on the surface. And there you have it, the fantastic blender trick!

Flexibility
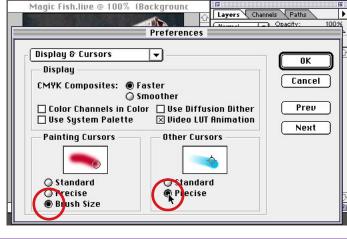By creating the reflection on a layer of its own, you can easily edit and reposition it at any time.

In this next portion of the demo, we'll experiment with more advanced capabilities to enhance the blender. Yes, it's a little more tricky, because more layers will be added. First, we'll tone down the bright highlights on the blender with some great brush tricks, and then we'll add a fish so that it looks as if it's inside the blender.

BLENDER DEMO PART 2 - WORKING WITH SMALL ANIMALS

1. Continuing to work with the blender image from the previous demo, choose Preferences > Display & Cursors. Select Brush Size and Precise. Click OK. Select the paintbrush tool with a medium size, soft-edge brush.

Brush size tip
To change your brush size without going to the Brushes palette, press the Open Bracket and Close Bracket ([and]) keys to reduce and enlarge the brush size.

2. Target the original Blender layer. While holding down the Option/Alt key (which toggles you from the paint-brush to the eyedropper tool), select a light copper color from the blender to tone back the highlight areas. Then check Preserve Trans-parency in the Layers palette.

Preserve Transparency
Preserve Transparency will protect the transparent areas in the image and allow you to paint only where there are pixels. Preserve Transparency creates something like an invisible mask.

3. Double-click the paint-brush tool to bring up the paintbrush options. Choose an opacity of 50% and select Darken mode in the pop-up menu.
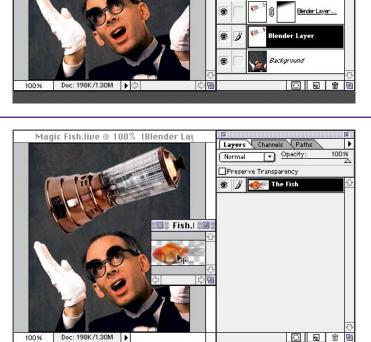

Darken mode
With Darken mode, the paintbrush will paint only where the chosen foreground color is darker then the highlight color. It will not paint in the dark shadow areas.

BLENDER DEMO PART 2 - WORKING WITH SMALL ANIMALS

4. Paint over the highlight areas. Notice that you don't have to worry about going beyond the boundaries of the blender—Preserve Transparency is at work! Continue painting over all the highlight areas to tone them back. Feather the highlight at the top of the blender to keep the curvature of the lid.
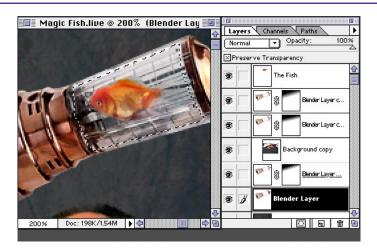
Opacity tip
When a selection tool is active, pressing any of the numeric keys changes the opacity to a corresponding percentage. Press 1 for 10% and 0 (zero) for 100%, and so on.

5. Now, as a challenge for you super users, we're going to put a fish inside the blender. With the move tool, drag the fish into the blender image and position it in the blender. Move the fish to the topmost layer.
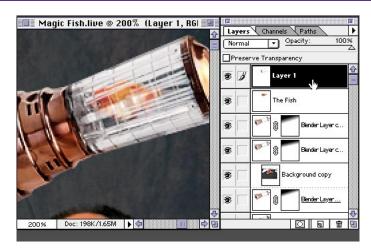
Note: No small animals were harmed in the creation of this demo.

6. Select the lasso tool, and then target the original Blender layer. Holding down the Option/Alt key, click the blender area around the fish, selecting the area that will be sandwiched over the fish.
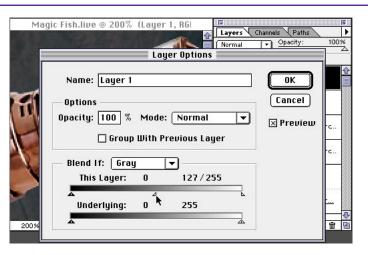
7. From the menu bar, choose Layer > New > Layer Via Copy. In the Layers palette, move the new layer above the Fish layer.

8. Double-click this new layer to bring up the Layer Options dialog box. Option/ Alt+click the This Layer high-value range slider (white triangle) and move half of the triangle to the left.

Blending layers
The sliders here let you define which pixels are blended by indicating a range of brightness values for the replacement pixels. In our example, the highlight range was split to soften the layer, giving it a semi-transparent and fogged look. The further apart the triangles, the softer the appearance of the layer.

9. You can see the goldfish, semi-transparent inside the blender. There you have— super advanced—the next steps for working with layers and lighting a particular scene.