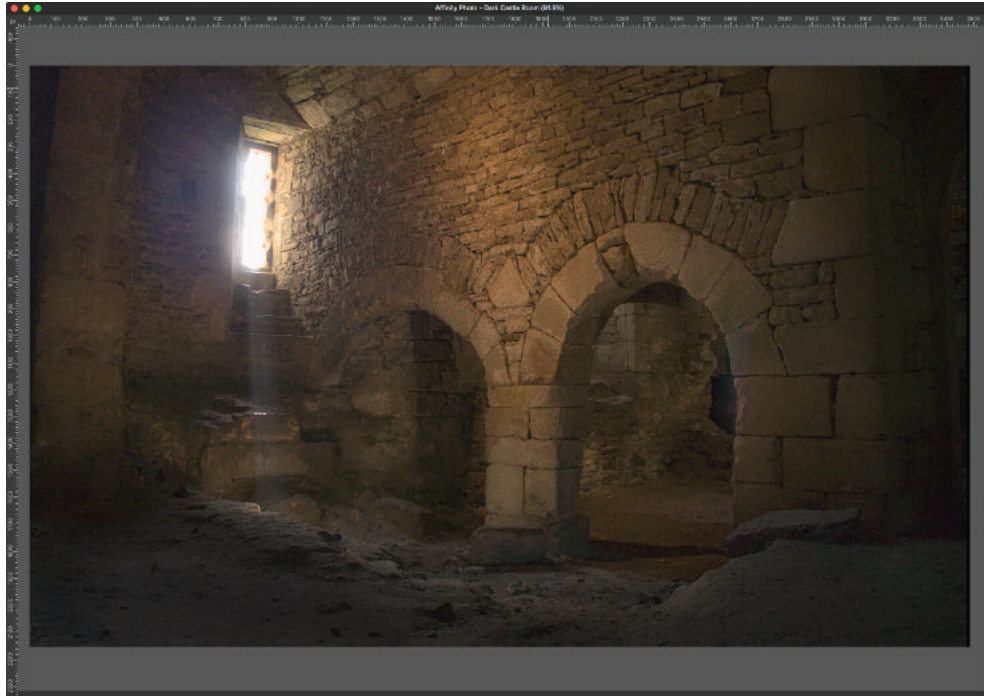


Adding Light Beams to a Photo

Creating Light Beams (so-called “God Rays” if you are so inclined) is pretty easy. It requires the use of software that can composite layers. So, Lightroom won't work but Photoshop will. Affinity Photo, On1 Raw 2018, Luminar, Capture One, Pixelmator, ACDSee, and Photoshop Elements (and others) will allow the use of Layers. Some photo editing software will not support the creation of layers, but these are becoming less common. All of the images in this document were made using Affinity Photo.

Let's start with a photo to which we'll add a Light Beam.



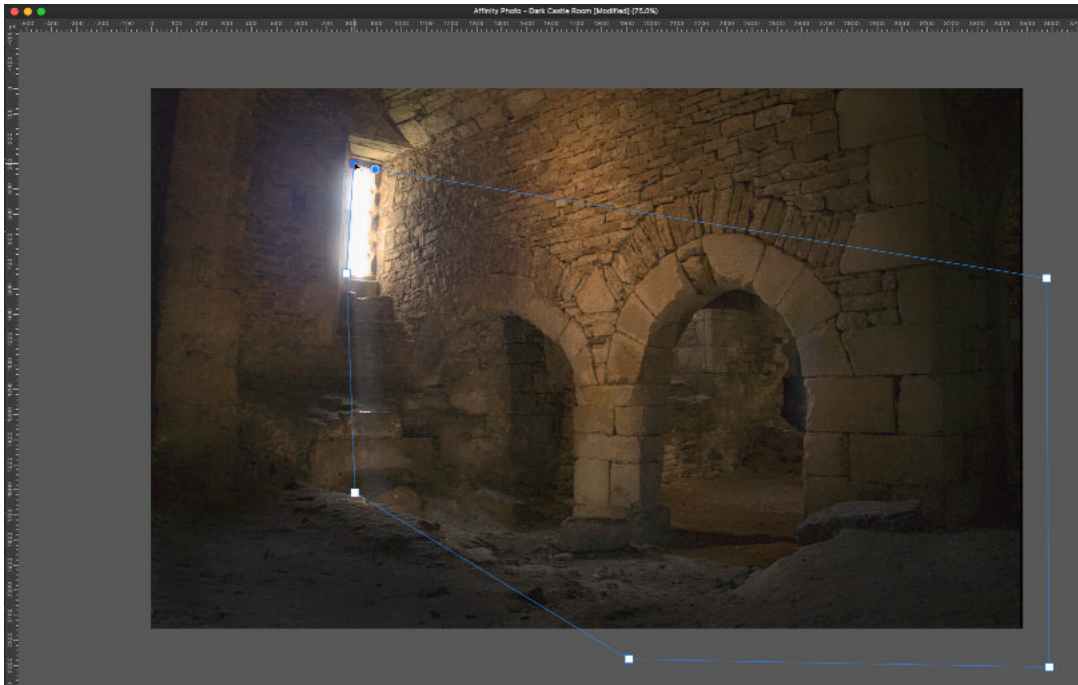
Define the Shape of the Light Beam

We need to identify the source of the light. In the case of this picture, the light is clearly entering the picture from the window. We also need to decide what parts of the image the light beam will involve. In our case, let's put in a light beam starting at the window and extending to the lower right portion of the photo.

Start by drawing a shape on top of the image. Use the Pen tool to place a series of points that will outline the source of the light and the shape of the light beam.

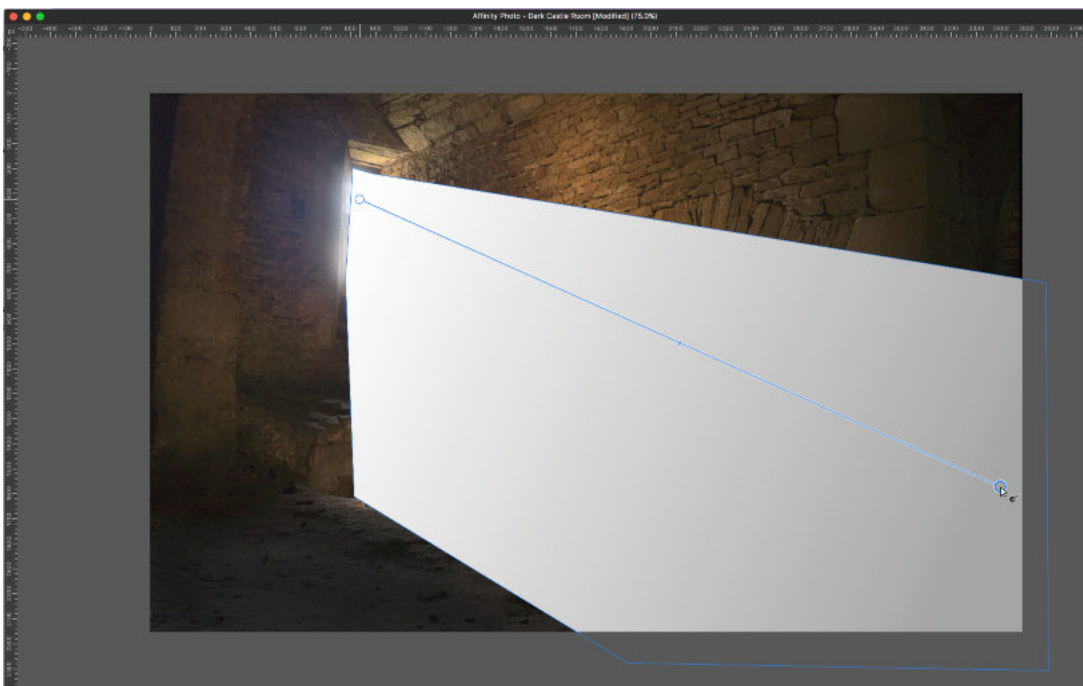


Once you have created the shape, make sure that it has NO Fill and NO Stroke. That is, the shape should have no visible color inside it, and should not have any outline. We will fill the shape with a Gradient.

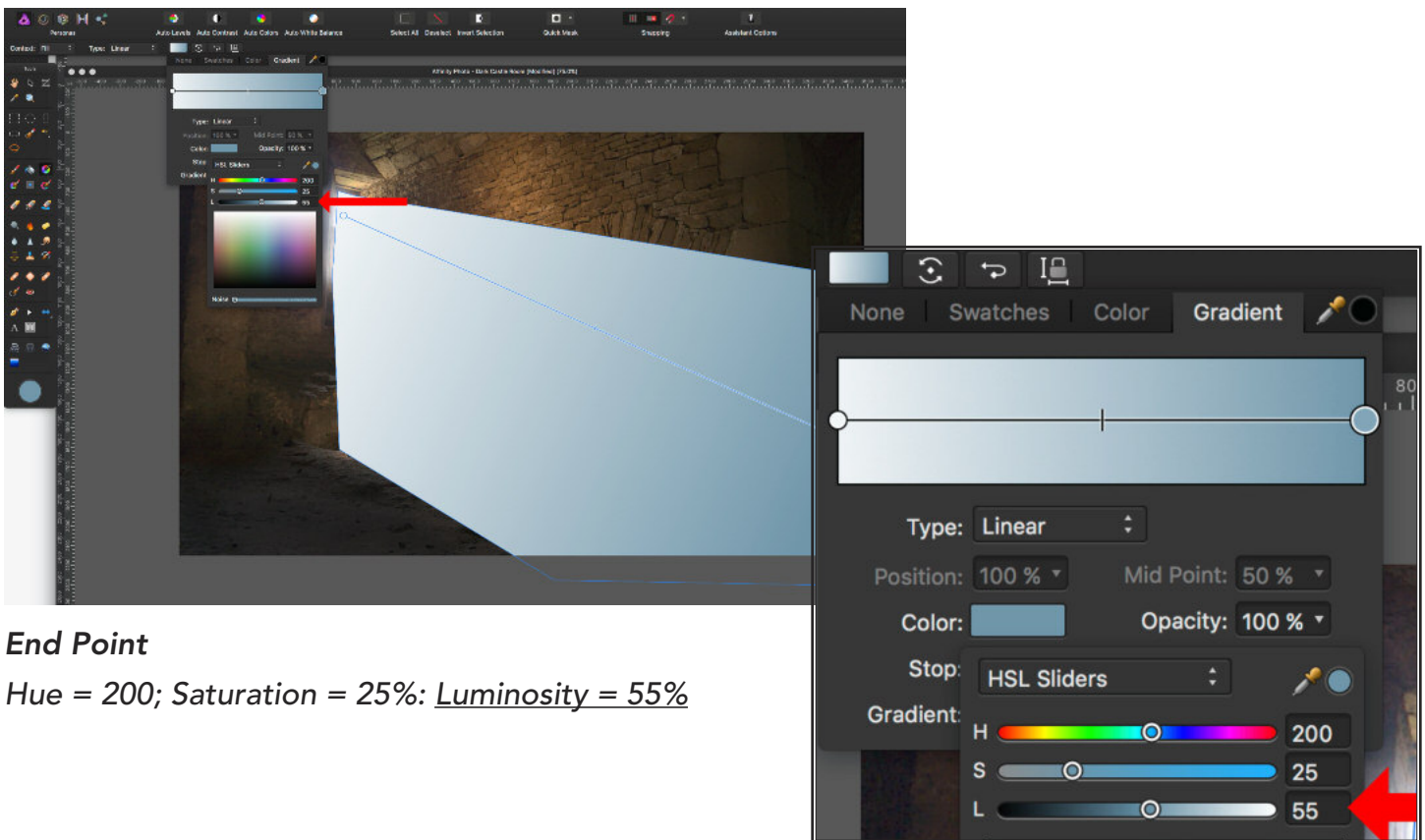
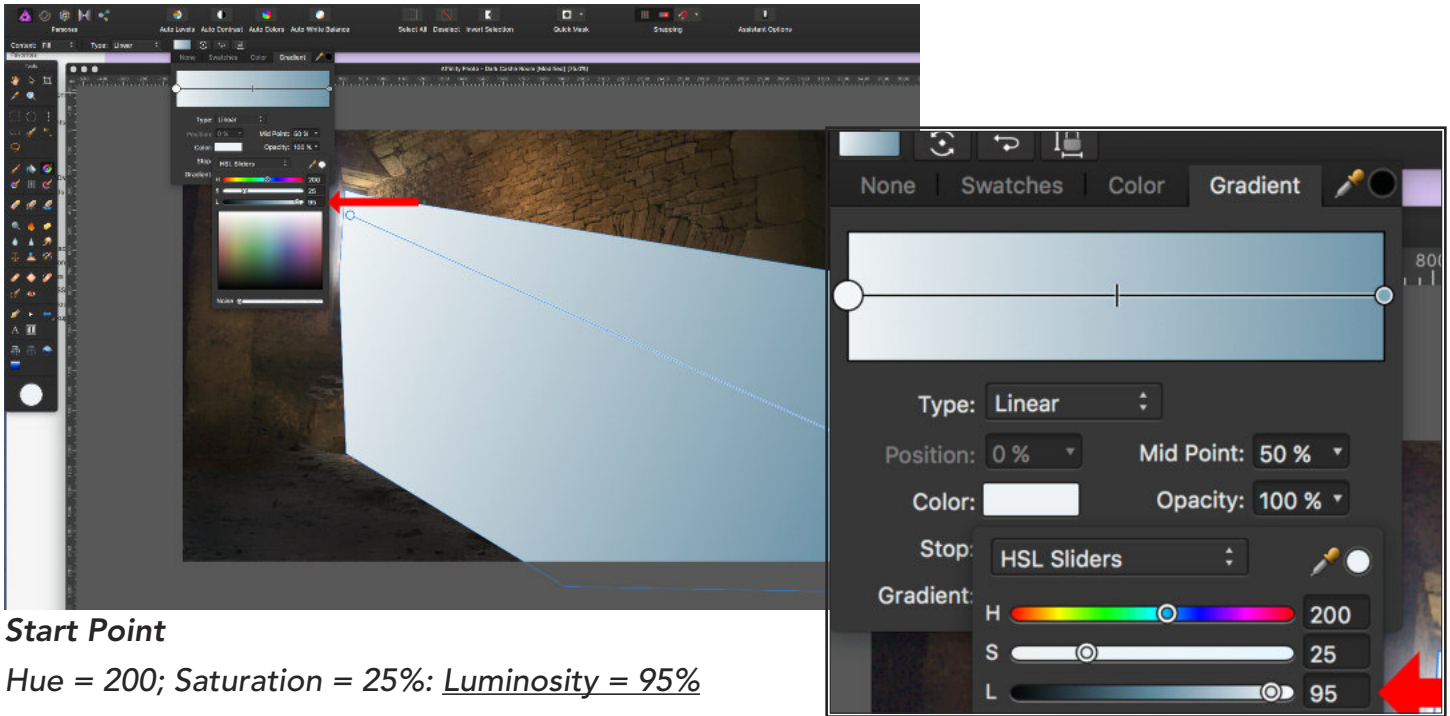


Add the Light with the Gradient Tool

Choose the Gradient tool and put a gradient inside the shape. Start at the light source (the window) and extend the gradient to the opposite end of the shape. Why use a Gradient? Why not just fill the shape with White or some other pale color? Simply put, a gradient will make your Light Beam more believable. In the real world, the brightness of a light falls off geometrically by distance. An object close to a light is brighter than the same object placed farther from the light.

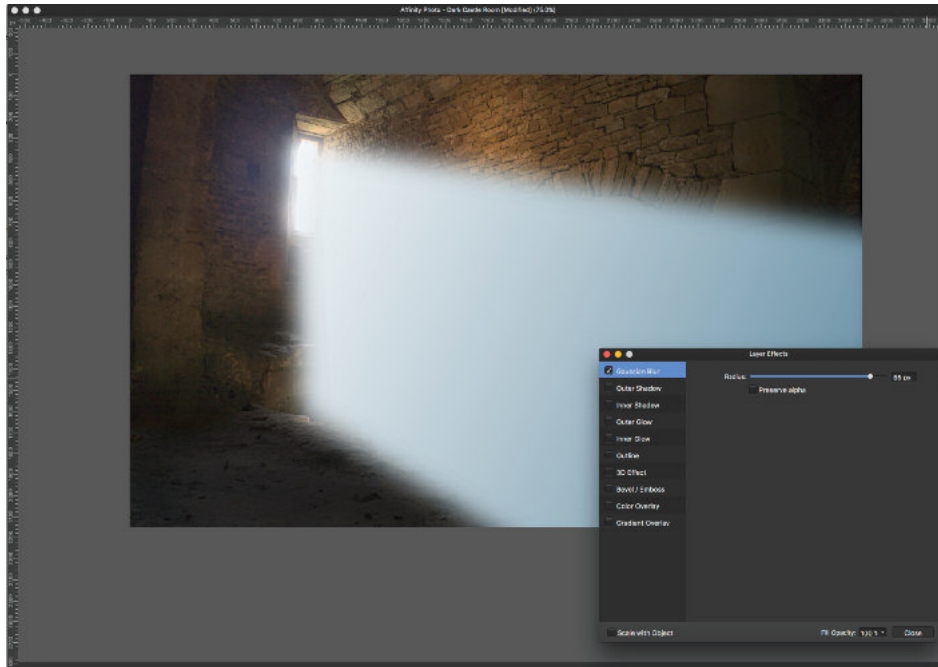


Once you've placed the gradient inside the shape, set the color of the start and finish points. In this example, I've set the color using the HSL sliders. Doing this lets me set BOTH points to the same Hue (the color of the light) and the same Saturation. But, I can set the Lightness (or Luminosity) of the Start point reasonably high and allow it to fall off to a very low degree of Lightness at the End point. This is the way that Nature works.



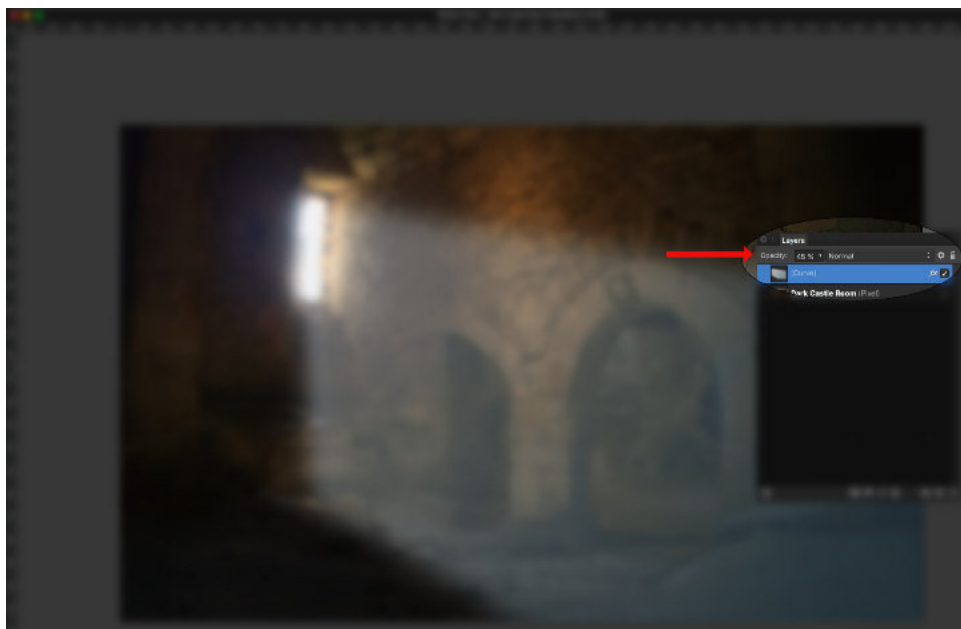
Blur the Edge of the Light Beam

Now it's time to Blur the Light Beam. In the real world, light does not stream through a window with a hard edge. It is diffused and diffracted by the atmosphere it is streaming through (in this case, the air in the room). Place a Gaussian Blur on the Shape (NOT on the entire picture) and set the blur level to at least 50 pixels (more or less might work, depending on the overall size of the image). If your software allows you to attach Layer Effects, this is an easy and straightforward way to blur the Light Beam without blurring the underlying image.



Make the Light Beam Partially Transparent

Lower the Opacity of the Light Beam layer. Again, in the real world, light beams are still mostly transparent. Lower the opacity of the Light Beam layer to 40-60%, depending on your taste.

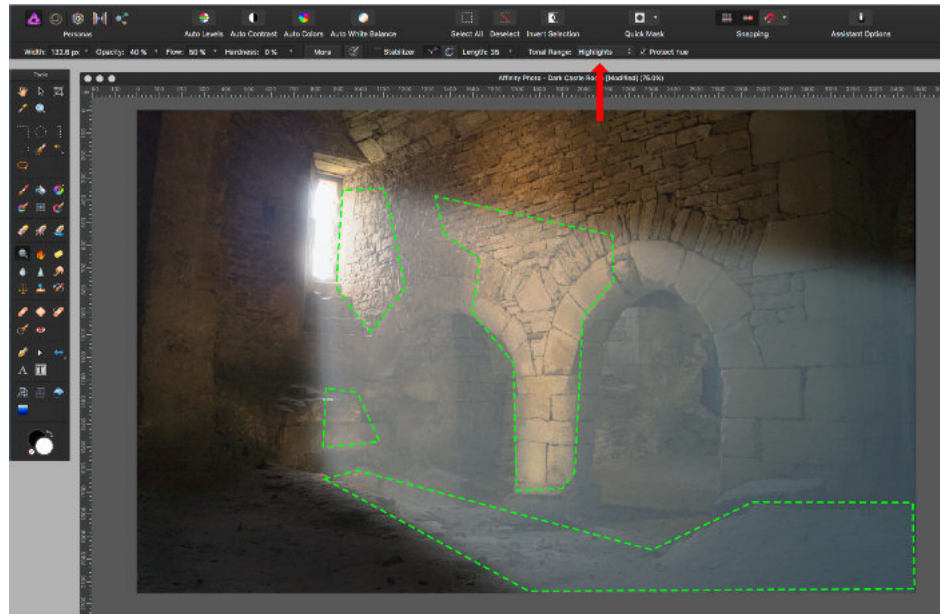


Add Some Highlights

Last (and certainly optionally) we can make the portions of the image that are being lit by the light beam more prominent. After all, the light makes the things it shines on brighter. There are numerous ways to do this, but the easiest is to use the Dodge tool.

Make a copy of the Background layer, so you're working on a copy (since, in this case, Dodging will be destructive). Make sure that the copy sits above the background, but below the Light Beam. In other words, it should occupy the middle of the three layers.

Choose the Dodge tool, set the tool to a mid-level opacity and flow, and set the hardness of the edge of the tool very low. If your software allows it, set the Dodge Tool to affect the Highlights. (see arrow) Now, brush over the brighter areas of the photo that your Light Beam would be shining on. (green outlines) This will have the effect of making these areas lighter (as they would be if a light was shining on them).

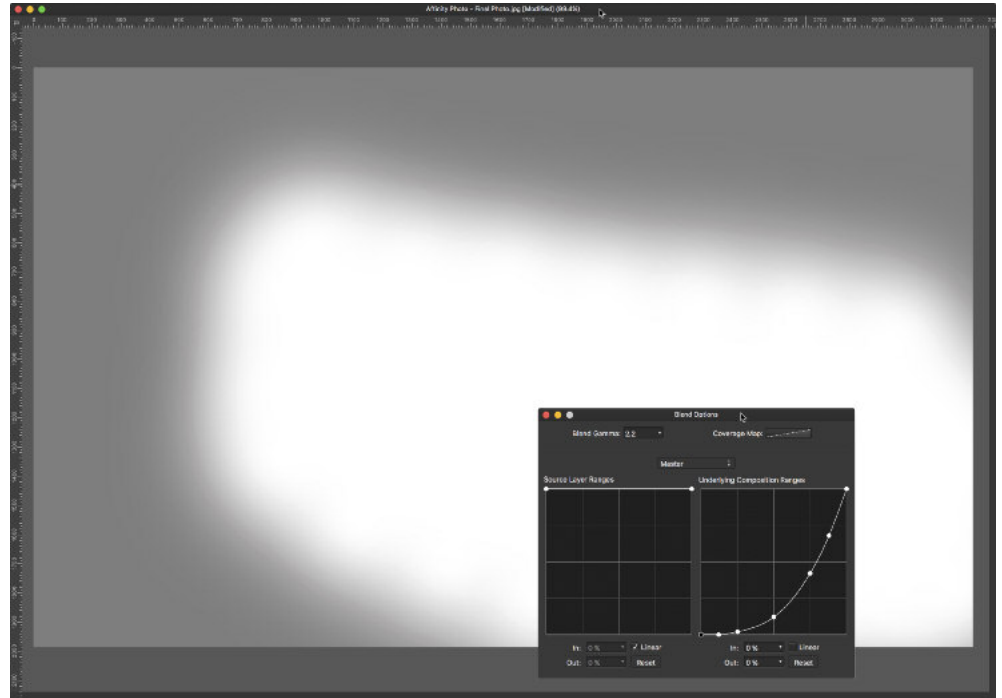


Another way to lighten up the Highlights of the photo (a way that is somewhat more elegant, and completely non-destructive) is to use “Blend If” in Photoshop, or “Blend Options” in Affinity Photo. This allows us to add a Pixel Layer and restrict its visibility to the Highlight areas of the underlying photo.

Start by adding a pixel layer. Fill it with 50% grey, and set the Blend Mode to “Overlay.” This is the same technique used to create a Dodge and Burn layer (and is shown in a different PDF file). Use a wide brush with 100% opacity, 100% flow, and 0% hardness (to keep the edges soft). Paint over the area of the light beam.

Now, using Photoshop’s Blend If or Affinity’s Blend Options, adjust the settings so that the layer is visible only when the Underlying Layer(s) are lighter in tonality. This technique allows us to “dodge” the highlights of the photo, in a completely non-destructive way.

Here is the Dodge and Burn Layer with the Affinity Photo Blend Options dialog set to allow visibility only when the Underlying Layers are composed of lighter tones.



The Final Result ...

