# How to Create a Transparency Gradient using Gimp?

(Dated: September 10, 2016)

A transparency gradient is useful to smoothly transitioning multiple photos or other pictures into each other. When I first tried to do this, I played around with a few programs and tried to find the solution online, but it turned out that a proper solution was not so easy to find. In fact, I found many websites suggesting to overlay the picture with a rectangle that has the same color as your background and then apply a transparency gradient to the filling of that rectangle. This apparent fix indeed gives the illusion that your figure is half transparent, but that is not actually the case. Furthermore, such a solution only works for a plain background, but not when your have any pattern, color gradient, or another photo in the background. Luckily, there is a more elegant way of doing this.

Applying a transparency gradient directly to a photo (as opposed to applying it for the filling of an overlaying rectangle) is unfortunately not possible in presentation software such as Powerpoint or Keynote. However, don't fear, it is very easy to do this in Gimp, which is a free photo editing program. In the following I will describe the few steps needed to smoothly combine photos using a transparency gradient. The instructions that give work for Gimp 2.8.16 and have not been tested on other versions.

First, simply drag the figures that you want to use into the canvas of Gimp. Gimp will automatically recognize the multiple pictures are different 'layers'. When you only want to transition one photo into another you will only need two layer. However, in this example I also have a third layer, representing a background that I can give a color to my liking. Without this background layer, my final picture would remain see-through, which could be very useful when adding the picture to a presentation or website with a colored background. The example pictures I use here are two representations of an amorphous carbon, for which I want a radial transparency, rather than a linear one. If your pictures are not the same size, or if you won't want them to be completely overlapping, you might want to change the canvas size by selecting **Image → Canvas Size** and then move the picture to the desired position within the canvas.
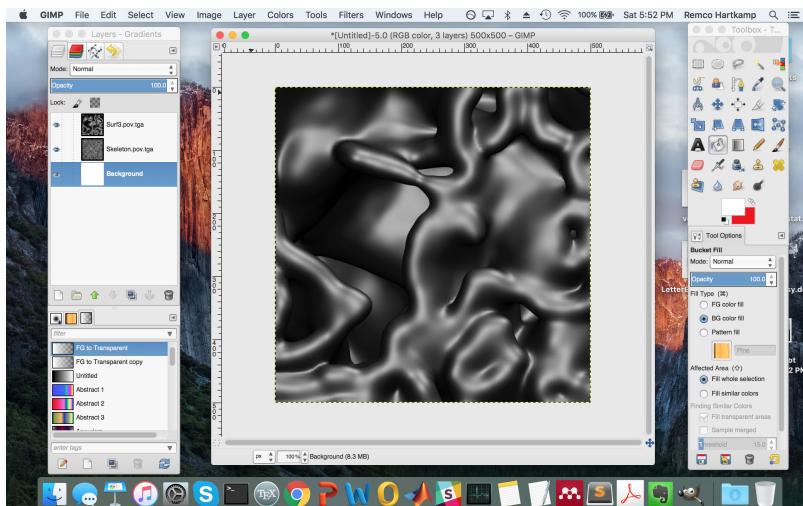
Make sure that the layer that you want to make partially transparent is listed on top in the 'layers menu'. You can change their order simply by dragging layers up and down in the list. Now, right-click on top layer in the menu and select **Add Layer Mask**. In the menu screen that appears, select **Layer's alpha channel** and then **Add**.

You will see that the top layer in the menu now contains a while rectangle right of the small picture of the layer. This layer mask is by default selected as is needed when applying the gradient to it in the next step. I mention this because when you do other things in the meantime and accidentally unselect the layer mask, the transparency gradient will not show up how you expect it.
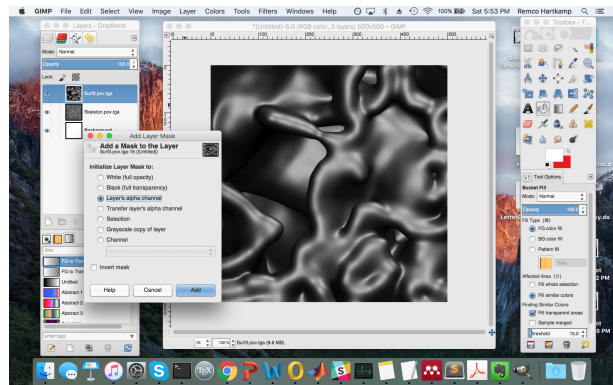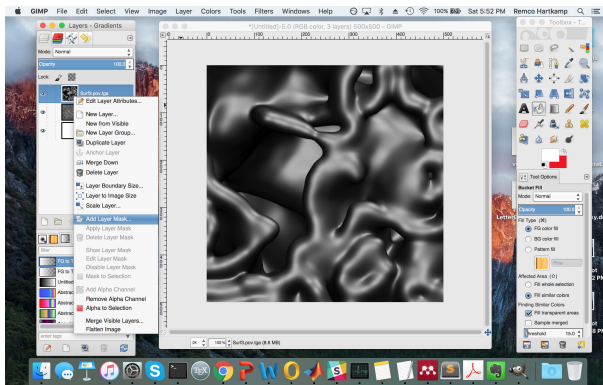
Now we will apply the gradient by selecting the **Blend tool** in the Toolbox. The lower in the toolbox you can then select the shape, which is by default linear. I choose **radial**. You then click and drag your mouse pointer over the canvas, indicating over which range your want the gradient to appear. The longer the line, the smoother the gradient will be. You will now see the second layer 'through' the first.
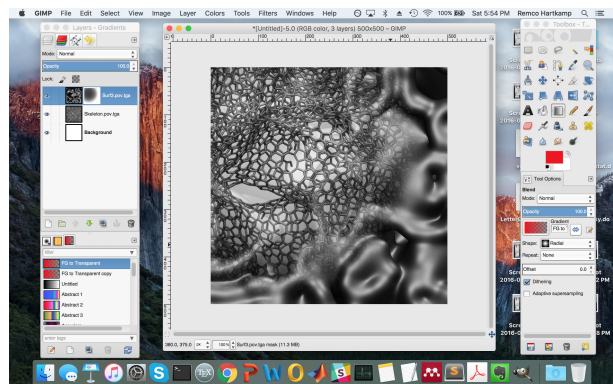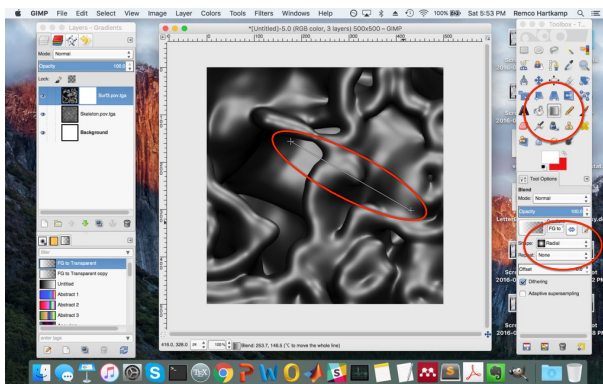
My second layer was already see-through, meaning that my picture is completely see-through at some locations. In a final optional step, I select the third layer (being the background) and with the **Bucket Fill Tool** I give it a red color to give my picture a finishing touch.
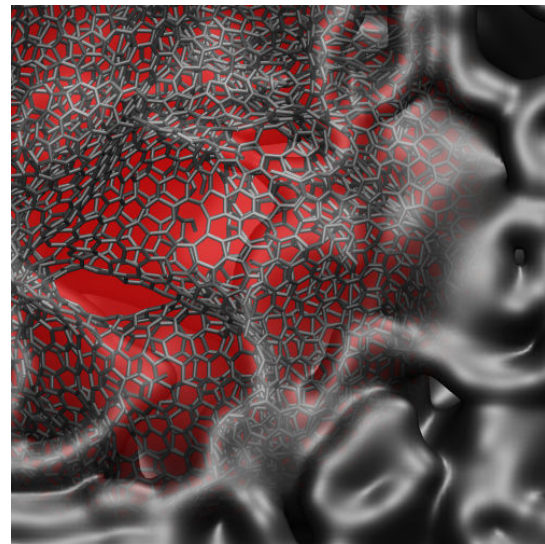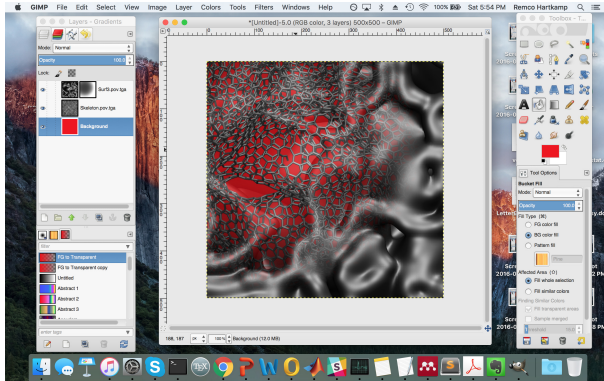
That's all there is to it! You can now export the final result via **File** → **Export**.

Here a couple other examples illustrating the use of transparency gradients.