

Gradient Mesh Workshop 2012

BELL PEPPER TUTORIAL © LIFEINVECTOR.COM

The gradient mesh tool is a complicated but gorgeous feature in Illustrator. Flat vectors transform & come alive with the illusion of depth simply by adding a grid of anchor points within a shape. The mesh can be intimidating since it's so complex & tedious compared to other tools in Illustrator, it most definitely requires time & patience, but it won't take long before you get the hang of it, I swear. Just practice & have fun.

A few starting tips:

Use a reference. The gradient mesh tool is an instrument for realism. Especially while learning, work from a good reference photo in order to achieve that realness & precision. If you plan to render over a drawing or sketch, I recommend you find additional photographic resources for texture & lighting.

Choose a mesh-worthy photo to render over. As I said, it requires lots of time, so choose an interesting & beautiful photo source – a face with striking lighting, a pair of reflective glasses, as examples.

There is no one way... to go about rendering with the mesh. There are several techniques to use, don't be afraid to experiment & find a method that's best & easiest for you.

Good luck & happy rendering!

MESH BASICS

There are only a few parts to the mesh tool that you should become familiar with. You already know what anchor points are, but within a mesh they work a bit differently. They aren't just to create an outer shape anymore. They are the basis of all the color. This is something that makes the mesh so interesting, the way the colors radiate from each anchor point & blend into one another perfectly. There are only a few ways to manipulate & control this blending illusion, and that is with the anchor "arms", with the in-between lines, and with the anchors themselves.

There are two ways to add a mesh to a shape. The first is by referring to Object » Create Gradient Mesh, which will create the most even solution to your mesh. The second is by simply using the mesh tool and clicking away at your shape, freehand, which will allow you to have more general control.

One final, but important tip – keep it as simple as possible. Let me tell you, it is much less effort adding points to a mesh than deleting them. Your mesh can quickly turn into a MESS if you're not careful.

ALRIGHTY

For this tutorial, I have chosen to render a red bell pepper. I find it to be an interesting subject with a bright, beautiful color palette, not to mention a smooth texture & rounded edges (good for beginners). I took the photo against a white background for an appealing contrast & then brightened it in PS.

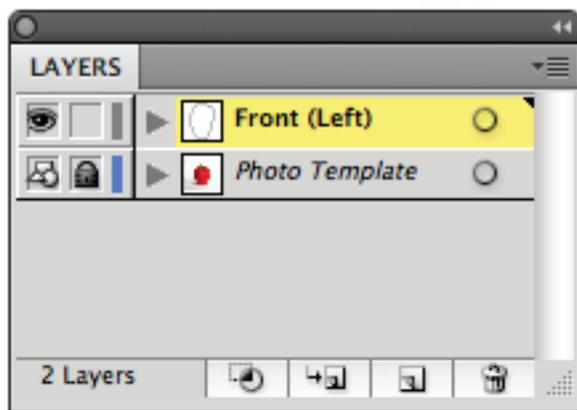
Once the JPEG is opened in Illustrator, immediately make it a template by double clicking the image in the Layers palette, and checking the Template box. Your image will dull to whatever percentage you choose & the layer itself will lock. This is a simple step to take, making it easier to render over.



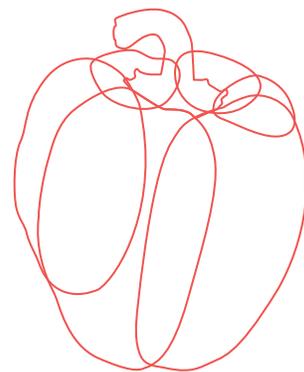
STEP 1

Want to know a secret? I never use just one mesh within a rendering. I like to work with smaller shapes that are layered, and then I simply “blend” those smaller meshes together (see step 5). Keep in mind that no one but you will ever see what goes on “behind the scenes”, so go right ahead & layer your heart away with shapes.

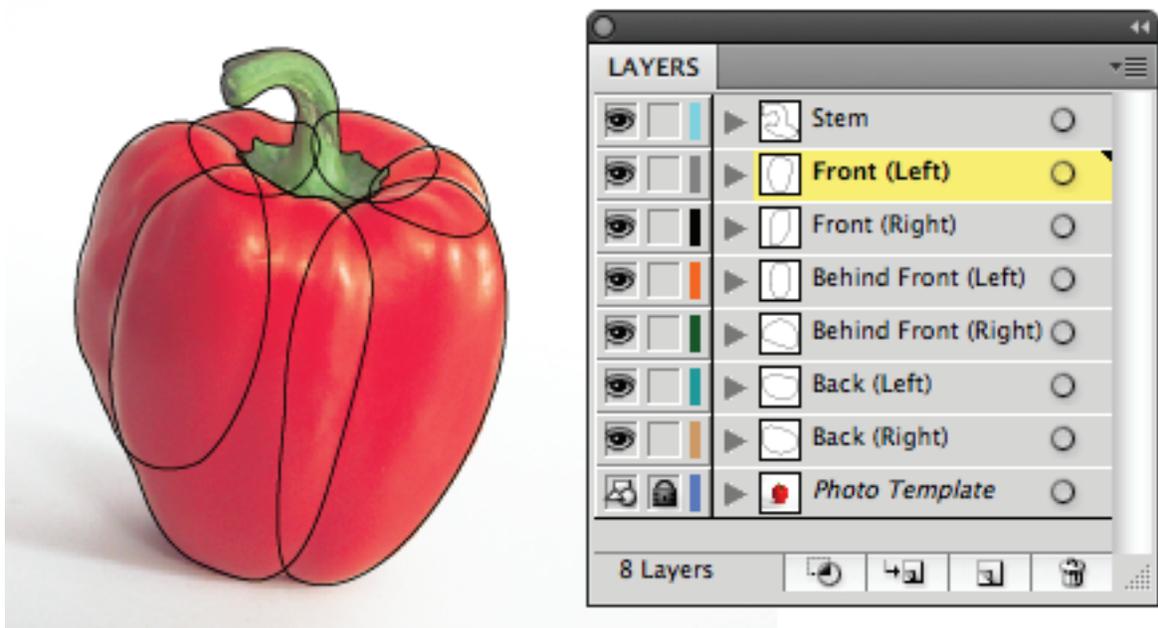
Using your pen tool, draw smoothly over the main red section of the pepper. The mesh will conform to whatever shape it’s created in, so no hard edges, the more rounded the merrier. When you’re done, place it on its own layer and label it “Front (left)”.



Go ahead & render the next main shape. When you’re done, place it on a layer below the first main shape. Label the remaining layers as follows: Front (right), Behind Front (Right), Behind Front (Left), Back (Left), and Back (Right). Continue drawing each section of the pepper, again moving them to their own labeled layer.



Also, draw the stem & put it on its own layer labeled "Stem". In this tutorial, we won't be putting a mesh on it. It's simple enough to recreate as flat vectors using simple gradients.



STEP 2

Time to add some color. The easiest way to go about this is to pick the most common color according to each section of the pepper (red, in this case). Use your eyedropper & take the color directly from the photo. (If your eyedropper won't let you, double click on the tool in the toolbar & uncheck "Appearance".) The common color will vary from shape to shape, so keep that in mind.



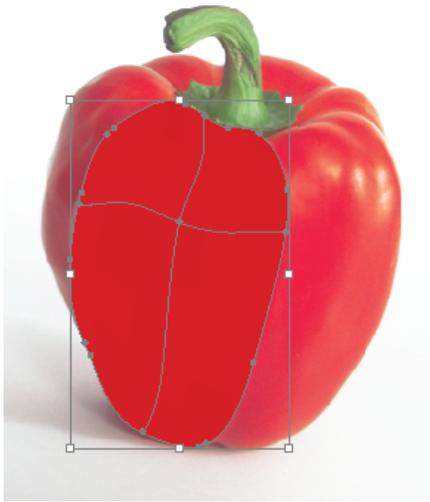
STEP 3

Hide all layers except for "Front (Right)". Using your gradient mesh tool, click once anywhere on the shape.* Oh yes... make sure you have your fill in front & **noooooo stroke**.

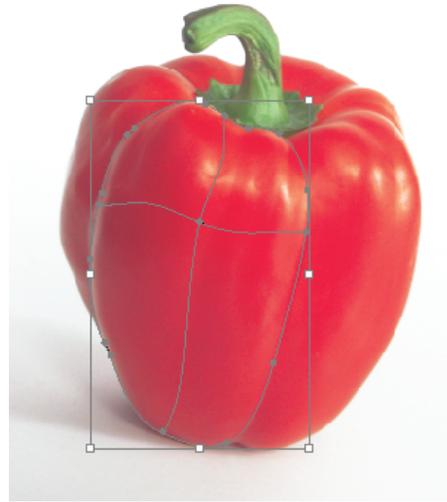
Now STOP. Here's where we switch to Outline Mode. (View » Outline, or command Y.) This feature is helpful in so many ways, and you'll be surprised what it can do for this particular mesh technique. Do it!

*You have to begin using the mesh BEFORE turning it to outline mode, otherwise it won't work.

You'll notice that you can now see the photo through your shape. This is how you will get your colors & mesh points as accurate as possible.



Start Your Mesh



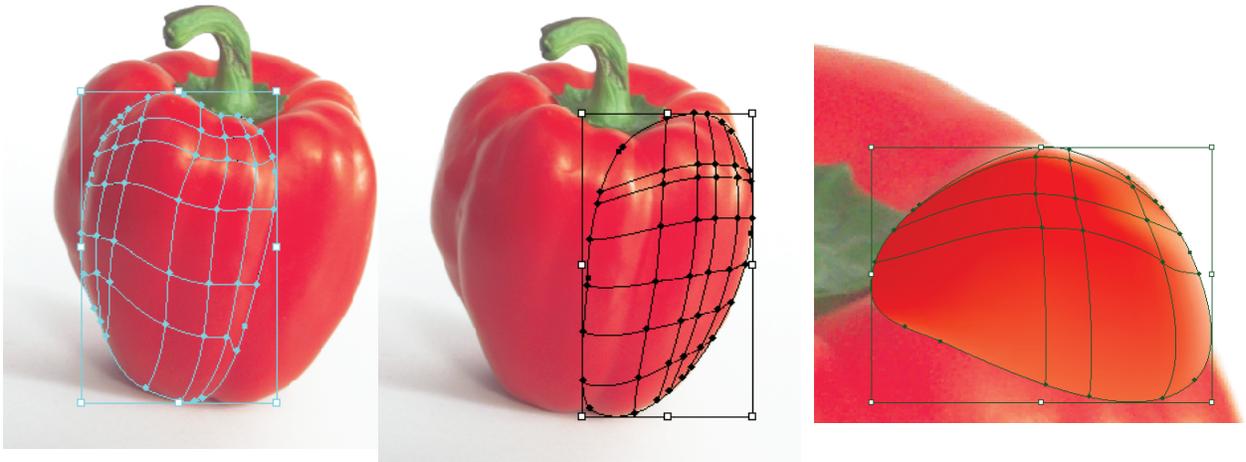
Outline Mode (Cmd Y)

Here's where we start adding points. A FEW TIPS:

1. You can only add mesh points to existing lines, when in outline mode. You can't just randomly click anywhere.
2. While adding mesh points, focus on the lights & darks. Don't add too many points for the in-between color values because usually the mesh will take care of those for you.
3. Use your eyedropper as you go along. Click to create your anchor point first, then select it (with either the Direct Selection tool or your Gradient Mesh tool), and use your eyedropper on the color that it overlays. ZOOM IN if you need to. Something to keep in mind, also, is that you have to trust the colors your eyedropper picks up. Sometimes they appear to be raw & just plain wrong, but you have to KEEP GOING. In real life, shadows can be practically any color.
4. Don't neglect the colors along the edges.
5. Adjust the anchor points to try to match the contours of the shape. Drag out the anchor handles to adjust the direction of the color.
6. There are a few major benefits to outline mode. One, you can work right on top of the picture, adding mesh points & picking your colors simultaneously. Two, you can flip back & forth with your shortcut keys (command Y) to see your progress as you go along. Also, this technique might be considered "cheating", but I think it's a great & easy method to learn how the mesh works.
7. DON'T ADD TOO MANY POINTS.

STEP 4

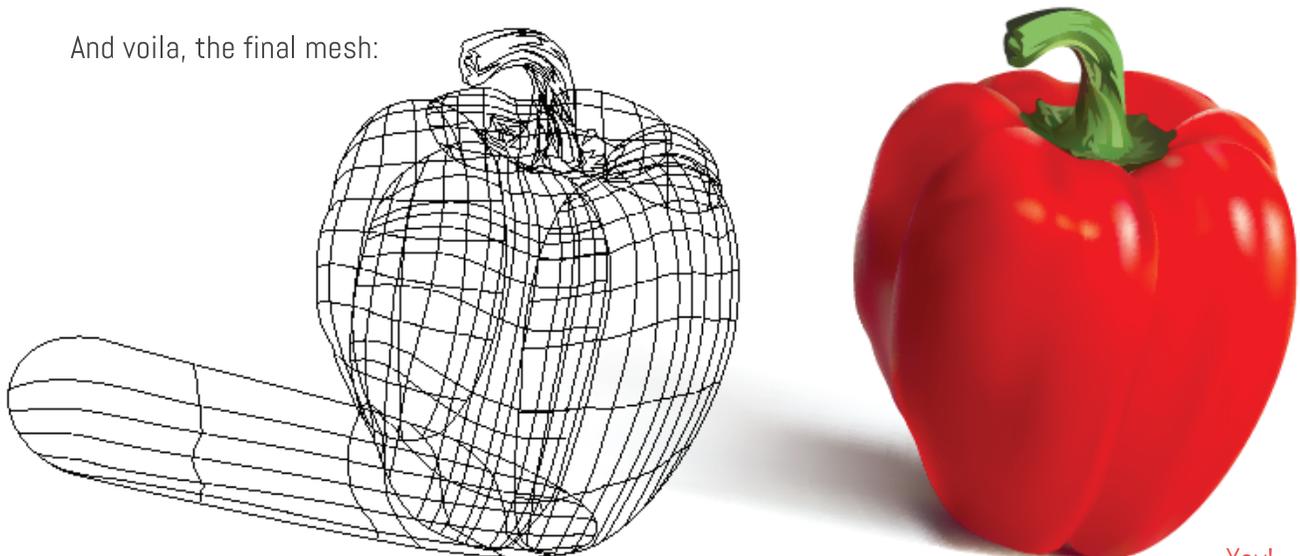
Once you've finished with your "Front (Left)" mesh, hide that layer & begin working on "Front (Right)" using the same technique. Remember to start your mesh before you turn it to outline mode. Repeat this process with all your layers, minus your "Stem" layer.



STEP 5

Once all your mesh shapes are completed, and you have your layers turned on, you may notice that the edges of each shape don't quite match up. An easy trick to get all your shapes to look more natural when they are all together is to once again take advantage of your eyedropper. Zoom in as close as you can & select the various points along the edges. One by one, grab the closest color to the shape next to it. This should "smooth out" your pepper tremendously.

And voila, the final mesh:



Yay!