

The 3D Experience

If you ponied up for Photoshop CS5 Extended, you'll notice a couple of new items in the 3D menu such as Repousse (for easily creating 3D versions of 2D items, like text), the Ground Plane Shadow Catcher, and so on. What's up with all that?

With each new version of Photoshop, Adobe dives a little deeper into the 3D waters, and for good reason: 3D technologies are developing at warp speed, and soon you'll be able to snap a camera's shutter twice (hopefully once at some point!) and the camera will create a 3D model for you on the fly.

But if you don't know anything about 3D, do all these new features mean anything to you? They could. If you've ever dreamt of dabbling in 3D modeling, Photoshop is a great place to start. Just as you can buy stock images, video clips, and audio clips, you can also buy 3D objects. Do a quick Google search and you'll find oceans of 3D models for sale. If those objects are already painted and lit (some aren't), you can bring all that info into Photoshop. You've also got a fair amount of control over the object's textures and lighting. If the object comes with a separate texture file, you can edit it in Photoshop and see the updated model when you save it. You can also add and adjust lighting to make the model blend into your scene better.

If you're feeling particularly brave, you can paint directly on the surface of a 3D model in real time (meaning you see your brushstrokes as you make them). It's *really* nice to be able to do this kind of painting in Photoshop, especially if you don't have a dedicated 3D painting program. Adobe also added a *reparameterize* command (try saying that 10 times fast!) that can quickly rebuild the surface geometry of your 3D object—called a *mesh*—for smoother painting. So if you come upon a seam while you're painting or your

brush isn't behaving like you'd expect, give this command a spin. In CS5 you can even *render* (apply lighting using a technology called Ray Tracing) a portion of your object and even pause the process, which is a great time-saver.

Learning to do a little 3D work can be both fun and beneficial. For example, you can build your own props. Let's say you forgot to include a stick of butter in the croissant shop shoot last week in France. Do you fly back and redo the lighting, hire talent, and so on? Heck, no! You can churn a stick of butter right in Photoshop and then toss it into your shot. Adobe has made it fairly easy, too, since Photoshop treats 3D objects like souped-up layers—you can run filters on them, add Layer styles, and so on (they're similar to Smart Objects). And new in Photoshop CS5 is *Repouseé*, derived from the French word "to push up" (as in "extrude"). Its name comes from an ancient metalworking technique for embossing artwork on the surface of metals such as gold, silver, copper, tin, and bronze, and it can help you create eye-catching 3D artwork.

That said, 3D requires some heavy lifting on the part of your computer's processor, so don't go looking for instant gratification. If you're dipping your first tentative toe into the realm of 3D, start with something simple. For example, create a new document, grab the Type tool and enter your name in a big bold font, and then use Repouseé to explore extruding the letters, adding textures, turning shadows on and off, and so on. Building your 3D expertise one tool at a time can help keep you from getting super frustrated while you're waiting on your computer to process commands.

The bottom line: Photoshop CS5 Extended can't do everything a traditional 3D-modeling program can, but it's a good place to start!