# **3D** painting methods

Different painting methods are appropriate for different use cases. Photoshop provides the following 3D painting methods:

**Live 3D Painting:** (Default in Photoshop) Brush strokes made in the 3D model view or the texture view are reflected in real time in the other view. This 3D painting method offers high performance and minimum distortion.

**Layer Projection Painting:** The Gradient tool and filters use this painting method. The Layer Projection Painting method involves merging a painted layer with the underlying 3D layer. During the merge operation, Photoshop automatically projects the paint onto the appropriate target textures.

**Projection Painting:** (Default in Photoshop Extended CS6) Projection Painting is suitable for painting multiple textures simultaneously or for painting the seam between two textures. However, in general, it is a lower-performance painting method and may result in cracks when you're painting complex 3D objects.

Texture Painting: You can open the 2D texture and paint it directly.



# Paint an object in the Live 3D Painting mode

1. Open the 3D model in the 3D model view.

2. Open the texture document that you want to paint. To do so, double-click the name of the texture in the Layers panel.

3. Select Window > Arrange > Tile to view the 3D model view and the texture document side by side.

4. Using the Brush tool, paint the 3D model or the texture document. Your brush stokes reflect automatically in the other view.

## Unwrap UVs of a 3D model

Photoshop provides an option to automatically unwrap UV maps for your 3D model.

1. Open the 3D model.

2. Select 3D > Generate UVs.

3. The warning When using Generate UVs, all of the meshes' materials' textures will be flattened is displayed. Click OK to continue.

4. In the Generate UVs dialog box that appears, choose the following material and unwrapping options:

### **Merge Materials**

If multiple maps—for example, Diffuse and Bump maps—exist on a single mesh, combine them into one map. Example: Combine two different Diffuse maps into one Diffuse map. If you have multiple meshes, each of them will still have their own map. For example, if you have three separate meshes with three Diffuse maps, you'll still have three separate Diffuse maps for each mesh.

### **Preserve Appearance**

On a best-effort basis, maintains the look of the 3D model and its textures when new UVs are generated. If you choose to not enable this option, the current textures are not preserved.

### UV Map Size

Select the required size for the generated UV maps (pixels x pixels). You have the option choose 128, 256, 512, 1024, 2048, or 4096.

#### **Low Distortion**

Keeps the texture pattern more intact, but can create more seams on the model surface.

#### **Fewer Seams**

Minimizes the number of seams that appear on the model. This can produce more stretching or pinching of the texture, depending on the model.

#### 5. Click OK.

6. You can view the generated UVs under the Diffuse section in the Layers panel.

