

Perspective Transformations

Simple tips to correct perspectival distortion and straighten skewed edges

Most buildings have vertical walls that extend at a 90-degree angle from the ground. However, in some architectural photos the walls appear wider apart at the ground, but tilt inwards towards the top. These converging vertical lines are created by perspectival distortion. As you get closer to a building, you need to tilt your camera to get the top of the structure in shot. This increases perspectival distortion.

Fortunately, Photoshop's Perspective "Transform" command enables you to counteract perspectival distortion. However, by distorting the shot you can end up creating transparent areas in lower corners. You can crop out most of these transparent edges or use the "Distort" command to stretch the edge pixels over them.

Vertical Verticals

1. Extend the Canvas

Open the "Perspective Building.jpg" image. Before we straighten the converging verticals, we will need to make some space at the top of the frame. From the menu bar go to "Image > Canvas Size" and increase the size of the canvas. Set the canvas extension color to white. Click OK.



2. Correct Perspective

Duplicate the Background Layer (Command J). Turn off the Background Layer. From the menu bar go to "Edit > Transform > Perspective. "



Drag the top left control handle left to straighten the top of the building. Drag the bottom left control handle right until the walls run parallel to the frame edge.



3. Crop and Rotate

Crop the transparent areas at the bottom of the corrected image. Drag outside the box to rotate and straighten the wonky horizontal lines. Hit Enter. Finally, from the menu bar use "Edit >Transform Distort" to fine-tune the edges of the frame.



