

Movie 9 (Chapter 10 extract)

Liquify Filter

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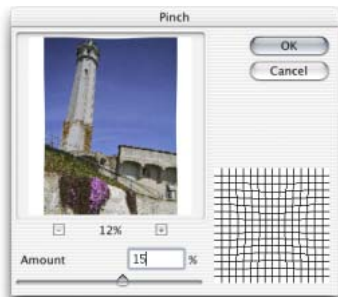
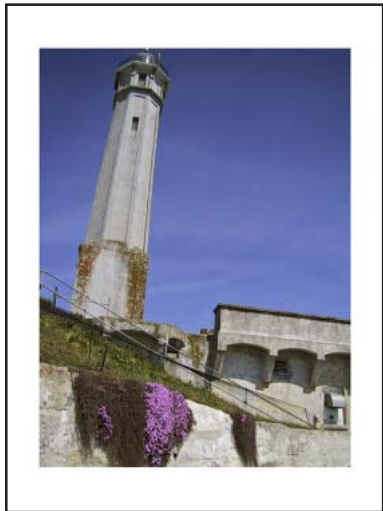
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Liquify

While the outcome of the Displacement filter is determined by a prepared alpha mask, Liquify is in effect an interactive version of the Displacement filter. Liquify enables you to magnify, melt, smear and generally make all manner of distortions to an image and preview the outcome of the distortion in the preview window as you apply the various distorting tools. The distortion is then post-rendered at full resolution. The Liquify tool controls have been improved in Photoshop CS. You can also save and load the liquify mesh. It is possible to zoom in on the image within the modal Liquify dialog and you can also preview the liquify effect against selected views of the undistorted image in various ways.

The underlying mesh can be made visible in the Liquify Tool Options. The grid will give you an indication of how the warp is being applied or reconstructed and readily help you pinpoint the areas where a distortion has been applied. Liquify is a perfect tool for many types of subtle retouching such as the occasions when you might wish to gently alter the shape of someone's facial features. The View options allow you to preview the distorted version with a variable overlay of the undistorted image – this can be an overlay of all merged layers or a specific target layer.

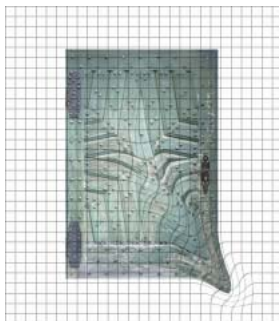
Having the ability to zoom in on the image area within the Liquify dialog is very useful. However, the Liquify command is a very processor intensive plug-in. If you are working on a large image then it may take a long time to carry out a liquify distortion. This is where the save and load mesh options can help. If you carry out your liquify distortions on a scaled-down version of the master image, you can save the mesh as a separate file. Open up the master file later, load the mesh you saved and apply.

Figure 10.9 If you want to correct lens barrel distortion, you can try doing so by using the Pinch filter. As a first step you should go to the Image menu and choose Add Canvas to add a border around the photograph, because adding a border beforehand will produce a more even pinch effect. Now go to the Filter menu and choose Distort ⇨ Pinch and apply a lowish value. In this example, I added 15%. Once the filter has been applied, crop the photograph to trim the edges.

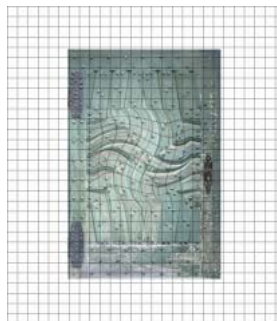
The Liquify tools explained



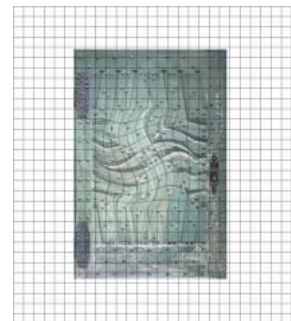
The Warp tool (W) provides a basic warp distortion with which you can stretch the pixels in any direction you wish. The new Turbulence tool (A) produces random turbulent distortions. The Twirl Clockwise tool (R), as the name suggests, will twist the pixels in a clockwise direction, while the Twirl Counter Clockwise tool (L) twists the pixels in the opposite direction. A larger brush works best with these tools. The Pucker tool (P) shrinks pixels and produces an effect which is similar to the 'Pinch' filter. Warp and Reflection distortions can sometimes benefit from 'taming'. The pucker tool is therefore ideal for correcting over-distorted areas. The Bloat tool (B) magnifies pixels and is similar to the 'Bloat' filter. The Shift Pixels tool (S) shifts the pixels at 90 degrees to the left of the direction in which you are dragging. When you *alt* drag, the tool will shift pixels 90 degrees to the right. When you understand how the shift tool works, you can introduce some nice rippled distortions. The Reflection tool (M) is perhaps the most unwieldy of all, copying pixels from 90 degrees to the direction you are dragging and therefore acting as an inverting lens (which if you are not careful will easily rip an image apart). Fortunately, the Reconstruct tool (E) will enable you to restore the undistorted image. If you want, you can protect areas of the image using the Freeze tool (F). Frozen portions of the image are indicated by a Quick mask type overlay. These areas will be protected from any further liquify distortion tool actions. The Freeze mask can be selectively or wholly erased using the Thaw tool (T). Use the Zoom tool (Z) to magnify or zoom out and the Hand tool (H) to scroll the preview image.



Warp tool



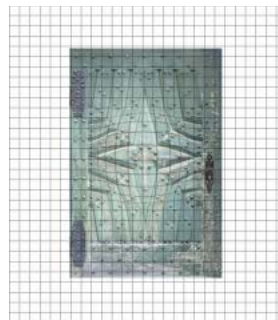
Twirl Clockwise tool



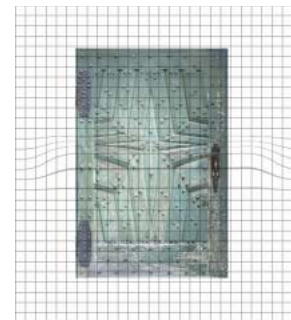
Twirl Counter Clockwise tool



Pucker tool



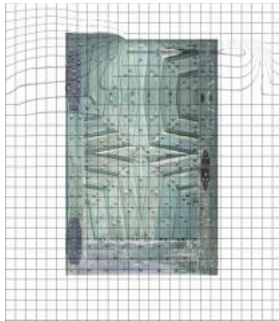
Bloat tool



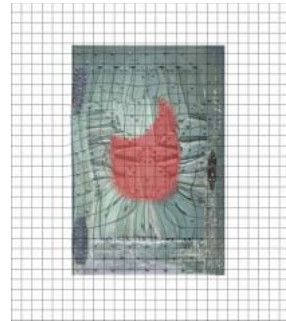
Shift Pixels tool



Reflection tool



Reconstruct tool



Freeze tool



Thaw tool

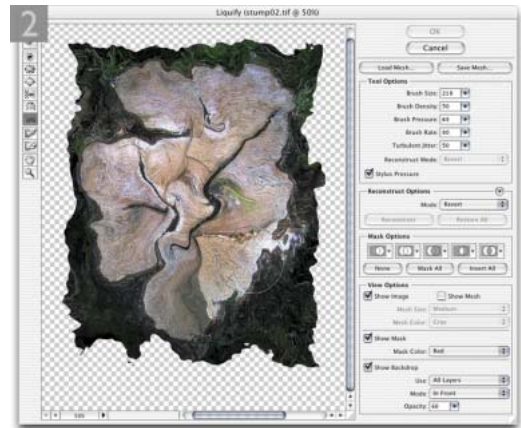


Figure 10.10 Set the brush size and pressure settings in the Tool Options section. In View options you can display the underlying mesh grid (shown in the above illustrations). When freezing an area, you can load an alpha channel as a mask with which to protect the exact areas of the picture you don't want to distort. The reconstruction options provide different modes for reversing any distortions made. The Rigid mode provides one-click reconstruction. Stiff, Smooth and Loose provide varying speeds of continual reconstruction – the image mesh continues to unravel as you mouse down. Click on the Reconstruct button to observe the distortions undoing progressively. Use *esc* or **⌘ + ctrl** to halt the reconstruction at an intermediate stage. Avoid applying a second click, as this will exit the modal dialog and you will lose all your work!



2 I activated the tree stump image layer and chose Liquify from the Filter menu. I mainly used the Turbulence tool plus the clockwise and counterclockwise twirl tools to create the distortions that you see here. I then clicked on the Save Mesh button to save this distortion so that it could be reused.

1 In the earlier editions of this book, I used to feature a technique showing how to imitate a Polaroid film emulsion transfer. It is now easier to accomplish with the Liquify filter. The image shown here has a background layer, a tree stump image layer (with an associated adjustment layer), and above this, an independent Polaroid emulsion border layer set to Multiply blend mode.



3 I then selected Layer 2 (which was the border image in Multiply mode) and opened Liquify again. This time I clicked on the Load Mesh button and loaded the recently saved mesh, applying an identical distortion, to produce the result shown here.

