

Wrapping a texture around an object



This tutorial proposes a method for giving the illusion that a texture has been wrapped around an object ; of course it is not perfect and only works in some cases, I remain open to any suggestions...

Still, I find it gives interesting results ! (see examples on the right of this page)

The trick is simple : create a good grayscale channel, apply the **Displace** and the **Lighting Effects** filters, and tweak the result a little bit...

You will need two images : the texture, preferably tileable, and an object to wrap it around (possibly much smaller than the texture).

Step 1 : Creating the grayscale image

The best way to do this is to get a picture, change its *mode* to *grayscale*, clean it up by removing all unnecessary details, then apply the **Gaussian Blur** filter to soften the edges (here with a *radius* of 7 for a 500*500 pixels image).

One thing to take care of : check that the white and black zones are pure white and black, without too much noise.

Also remember that it is possible to add a channel to another by using the *Image>Calculations* command or the *Copy / Paste* commands (used here to add one hand after another to the original channel with the face).

When you are done, use the *Image>Adjust>Levels* command to have whiter and blacker areas, call your channel "Alpha 1", and *copy / paste* its contents to a new image. *Flatten*, *save* and *close* that image, it will be used as the displacement map. Also add Alpha 1 to your texture image's channels - you can do this simply by drag-and-dropping it from one image to another.



Step 2: Using the filters

The filters are to be used on your texture image, which should have the same size as your grayscale channel.

The first filter to use is the **Displace** filter found under your *Distort submenu*, using the following settings : about 20 % both for *horizontal* and *vertical scales*, *Undefined Areas* set to "wrap around" (that is why it is best to use a tileable texture) ; whether it is set to "stretch to fit" or "tiled" does not matter since both the texture and the displacement maps have the same size. When asked for the displacement map to use, load the one you have created at the end of Step 1. You should only see a slight distortion in your image by now ; with your texture layer still selected, fire up the **Lighting Effects** filter found under your *Render submenu*, and use the following settings (but other settings can give great results too): *Light Type Omni*, *Intensity* 100, *Gloss* 100, *Material* -50, *Exposure* -80, *Ambience* 100, "White is High" checked, *Height* 100, both colors set to white, the circle larger than the image, with its centre at the centre of the image, and as *alpha channel*, load the one you created in Step 1.

You now have something looking quite good...



The result after Step 2

Step 3: Enhancing the Result

There are a number of tricks to make your image look more impressive :

- using the original image as an *overlay*, with *opacity* around 50% ;
- duplicating the textured layer, with the top one set to *Soft Light* and the bottom one slightly scaled up ;
- this method works best with detailed textures, especially ones with horizontal and / or vertical lines ;
- the use of the **Displace** filter adds more realism than with just the **Lighting Effects** ;
- take care of the preview window in the **Lighting Effects** filter, it has a tendency to be misleading ;
- you can vary the effect of the **Lighting Effects** filter by applying it several times instead of once, and by using the *Filter>Fade Lighting Effects* command just after applying it.

As usual, this tutorial is not perfect, so do not hesitate to mail me some comments, whether good or bad, or suggest improvements : gpl@club-internet.fr.