



Adobe Photoshop's Displace Feature

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Photoshop's Displace filter moves around the pixels on one layer to make it look as if they're following the curves and texture of the layer below. Fortunately this effect is not near as complicated as it might appear.

In this simple example we are going to modify the Fanshawe logo so that it takes on the rolls and folds of the white fabric beneath it. The result will create the illusion that the logo is screen printed right on the fabric.

STEP ONE

Open the file called **WhiteFabric_Bkqd.psd**. This file contains two layers; the background fabric and the Fanshawe logo.

To make the logo look as though it is printed on the fabric we should see some of the folds through it.

We can achieve this effect by setting the logo's layer blending mode to Multiply or Hard Light.

That's better, yet something still doesn't quite look right because the logo does not wrap around the folds of the fabric...That's a problem.

To sell the illusion we need to distort the Fanshawe logo so it inherits the folds of the fabric. How do we do that? I'm glad that you asked!



STEP TWO

We need to create a separate file of our fabric background. We will later call on this file to distort our logo.

The first thing that we need to do is target the background layer, select all (Command - A) and then copy the entire contents of our fabric background to the clipboard (Command - C).

Next go to the File Menu and choose **New**. By default, Photoshop's new document dialogue settings take on the size, resolution and colour space of the contents of your clipboard, which in this case is the fabric image.

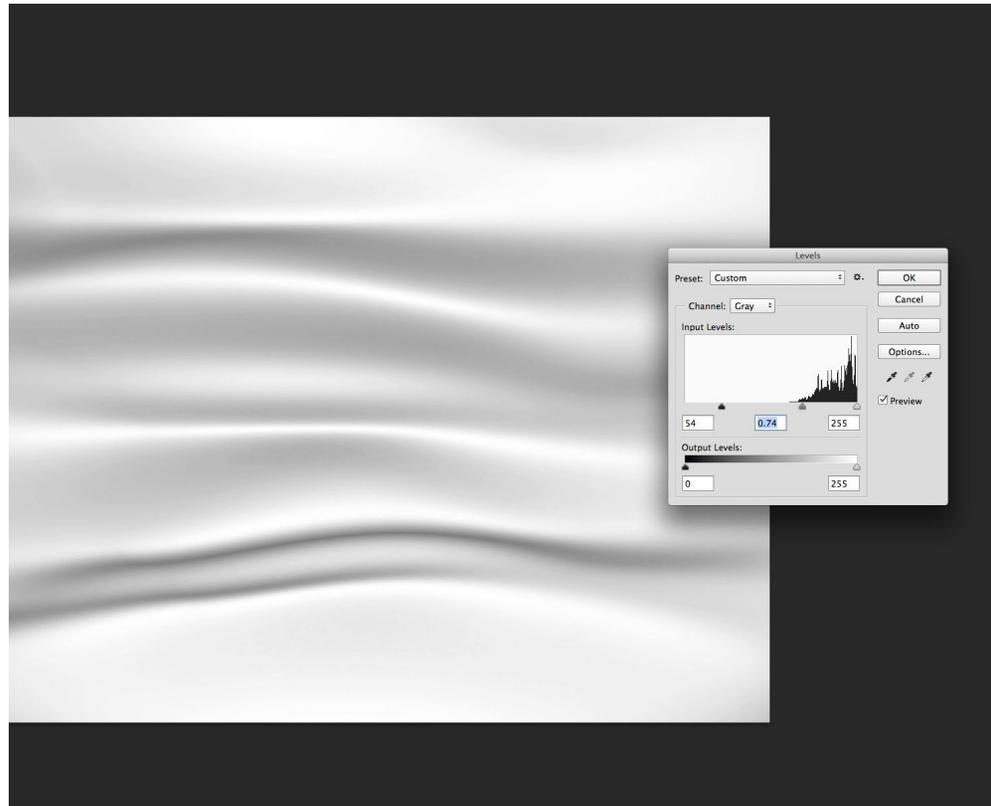
In the document name field, enter a document name of **Fabric_Displace** and then click okay.

In the blank document that appears, paste the fabric image from the clipboard (Command - V), then flatten the layers using the **Flatten Image** command in the Layers panel fly-out menu.

Tip 1: This process works better if the file is in grayscale mode so let's do that. (Image > Mode > Grayscale)

Tip 2: If your folds are not very pronounced, the displace effect may be too subtle. It often helps to exaggerate the folds by adding contrast using **Levels** (Command - L) to lighten the highlights and darken the shadows. (right)

Tip 3: If your fabric has a lot of texture you may want to apply a bit of Gaussian Blur to the image. (Filter > Blur > Gaussian Blur). Our image is already quite soft, so that's not necessary in this case.



Use a Levels adjustment on your Displacement image to exaggerate the folds. The more contrast of the folds, the better distortion of your logo.

STEP THREE

Now we are going to use the displacement map file that we just created to warp our logo so it takes on the folds of the white fabric.

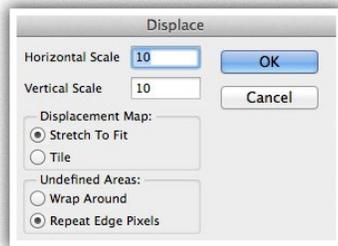
The light areas of the displacement map will push pixels of the logo one direction and the dark areas will push pixels in the other.

With the logo layer targeted, go to the **Filter** menu and choose **Distort > Displace....** In the Displace dialogue box, enter a value of **10** in the Vertical and a Horizontal Scale fields. Be sure that the radio button beside **Stretch To Fit** is selected.

Click **Okay**.

In the Open dialogue that appears, navigate to the displacement PSD file that you previously created and open it.

Photoshop will distort the logo based on the lights and darks of your displacement image.



Notice how the Fanshawe logo is now distorted to give the illusion that it twists and rolls with the folds of the white fabric. Now this looks much more realistic!



WORKSHOP 2

The best way to learn something is by repetition. Using the same techniques add, a London Knights logo to this child's jersey.

To sell the illusion, distort the logo so it takes on the folds, shading and texture of the jersey.

But there's a catch...First we need to change the jersey colour from blue to the official London Knights Green colour.

Name your file "lastname_Knights.psd".

ie) Bowman_Knights.psd

Keep the .psd file as your master. When you are finished, save a copy as a JPEG to hand in.

ie) Bowman_Knights.jpg

Upload a JPEG of this finished image along with the Fanshawe logo sample from the first workshop to the dropbox for this week on FOL.



OTHER EXAMPLES

If you thought that this technique is only for folds in fabric, you'd be wrong. Here are some other practical examples of where you could use this technique.



In this example notice how the Shell logo and text conform to the nooks and crannies of the old weathered brick.



Here the sign image subtly shifts as the art goes from board to board.