

warping the text grid

Create a warping bloated grid. A pretty neat effect that will also teach you about displacement maps.



a tutorial for : [text grid](#) : from text anarchy

Text Anarchy



cool tools for text in motion.

[from Digital Anarchy]

f/x tools for revolutionaries.



Like most filters, the Text Anarchy filters play really well with other filters. They're easy going, happy to be on a team, and don't mind playing in the background.

But these plugins can certainly take center stage when necessary. With that in mind, let's take a stab at warping the Text Grid filter. [figure 1]



[figure 1]

00- download & install

Before you start this tutorial, you will want to download the [text_warp-tute.zip](#) file from our website. This ZIP file contains an After Effects .aep file and QuickTime example movies.

You also need to install our Text Anarchy plugins into your After Effects/Plugins folder. The set will appear in the 'Effect' dropdown menu, in a 'Digital Anarchy' submenu, as eight separate plugins. [figure 2]

If you are working with the demo version of Text Anarchy, a red 'X' will watermark your footage.



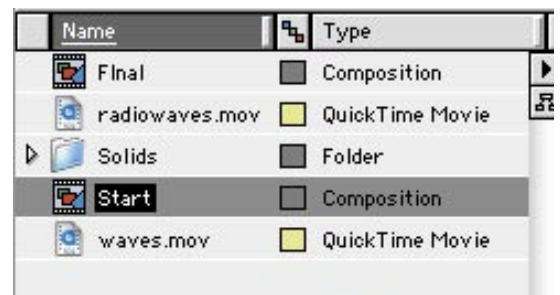
[figure 2]

01- project setup

From your download folder, open up the [text_warp.aep](#) project file in After Effects. The 'Final' comp shows your finished piece.

You can also play the QuickTime movie called [text_warp-final.mov](#) to see the final composition that you will create.

The 'Start' comp is a 320x240 project with a new Solid layer and some QuickTime movies already laid in, ready to be used. [figure 3]



[figure 3]



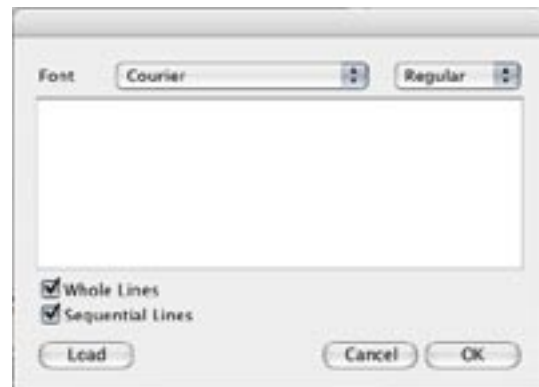
02- apply text grid

From the Effects> Digital Anarchy menu, apply Grid Text to the layer named 'Grid'.

As with most of the Text Anarchy filters, a text dialog box pops up, asking for some input. We're just going to use random text, so you don't need to enter anything in the custom text field. [figure 4]

Let's change the font to Courier, though. You can actually use any font that floats your boat; just realize that your comp will look a bit different from our screen shots.

Click 'OK' to apply the filter.



[figure 4]

03- click random characters

Click on the 'Random Characters' checkbox. [figure 5] This will stick all sorts of text characters into the grid.



[figure 5]

IMPORTANT

If 'Random Characters' is not turned on, and there's is nothing entered in the text dialog, NOTHING will appear.

Ok, so we've got Random Characters turned on, and a grid filled to the brim with random characters has appeared.

04- character size

We like this grid, but the letters are a little big for this size of comp (320x240). Click the twirly next to 'Character Attributes' and change 'Font Size' to 12. This shrinks the letters, but it also adjusts the spacing between the grid.



[figure 6]

Doh! Now the grid doesn't fill the entire comp. [figure 6] Well, we can fix that in a second, but let's take care of the characters first.



05- rate of change

Change 'Rate of Change of Characters' (ROC) to 6. This parameter controls how often (measured in frames) the text characters change. [figure 7]

If you set ROC to 0, the characters will never change. If you set it to 1, they will change every frame. And if you set it to 6, they will change every 6 frames.

Set the 'ROC Randomness' to 40%. Without some Randomness added, all the characters would change at the same time. Since we want them to change at different times, a little Randomness goes a long way.



[figure 7]

06- random settings

Let's vary our randomness a little. Set the 'Color' to medium green, 'Random Color' to black, and the 'Frequency of Randomness' to 3%. [figure 8]

This setting will randomly turn some characters black. Against a black background they effectively disappear. This creates an interesting pattern, especially when mixed with the ROC we just set.



[figure 8]

These changes create a nice pattern with characters changing around and some turning black. And we've done this without setting a keyframe.

07- expand the grid

Let's get that grid to cover the whole comp. Close the twirly for the 'Character Attributes', and twirl down 'Grid Setup'. Set 'Rows' to 20, and set 'Columns' to 28.

As you might have guessed, this extends the grid out to the edges of the comp. [figure 9]



[figure 9]



It's time for pixel pushin'! Smudging and smearing and shoving them all around. We're going to use the Displacement Map filter (in the After Effects Production Bundle) and the PS+ Lens Flare.

For those of you without the Production Bundle, bear with me here. You'll learn a little about displacement through these filters, and we'll show you how to fake it afterwards. Read along, or skip to Part III to get your info quicker-faster-better.

08- displacement 101

The practice of 'displacement' is using the pixels of one image to move the pixels of another image. After Effect's Displacement Map filter works this way, and we'll be putting it to work.

Let's say you apply Image 1 as a displacement map (dismap for short) to Image 2, and set displacement to 5. Here's what happens:

- Anywhere Image 2 is white, Image 1 pixels get pushed one way 5 pixels.
- Anywhere Image 2 is black, Image 1 gets pushed 5 pixels in the other direction.
- Shades of gray push the pixels somewhere between -5 and 5.
- Neutral gray does nothing at all, as it is right in the middle, and gets the value of 0.

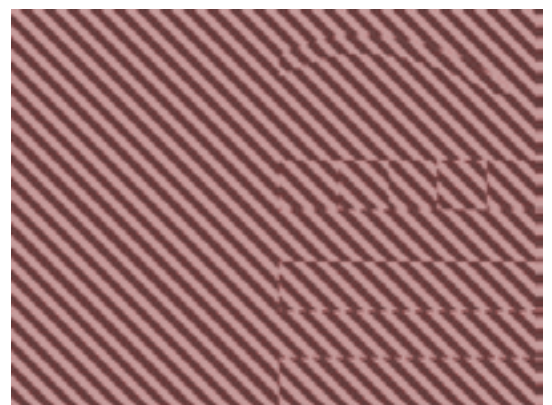
Check out figures 6 and 7 at right for some visual examples of dismaps in action.

And so ends our little discussion on displacement. We hope you enjoyed it and come back next week when we will further explore how staring at a bunch of lines can produce a hallucinogenic experience. Thank you.



[figure 6]

dis map example #1- To explain dismaps further, take a look at this example. Note how the top image pushes around the lines in the bottom image. White pushes one way, black pushes the other. Dark gray pushes in the same direction as black, but not as much. The same goes for light grays and white.



[figure 7]

dis map example #2- Here's a second example. An image with the left side normal, and the right half with a dismap applied to it. Notice that on the right side, white pushes the pixels toward the right and black towards the left.



09- the dis map

How does this dismap info relate to what we're doing? Turn on the 'waves.mov' layer that is above the 'Grid' layer by clicking its Eye icon. Then shuttle the Time Marker to 01:00. The movie should look like our image at right. [figure 8]



[figure 8]

We have white lines against a neutral gray background. It's neutral gray because we only want displacement where the rings are. If this image had a black background, we'd get everything that wasn't covered by a ring going in the opposite direction. Not what we want.

10- use the dis map

Turn the 'waves.mov' layer off. Apply the Displacement Map filter (Effects> Distort) to the 'Grid' layer. Set the Dis Map filter with the following parameters. [figure 9]



[figure 9]

- Layer = waves.mov
- Use for Hor Dis = Red
- Max Hor Dis = 8.0
- Use for Vert Dis = Green
- Max Vert Dis = 8.0
- Dis Map Behavior = Stretch Map to Fit
- Edge Behavior = Wrap Pixels Around

You should see the grid start to distort. [figure 10]

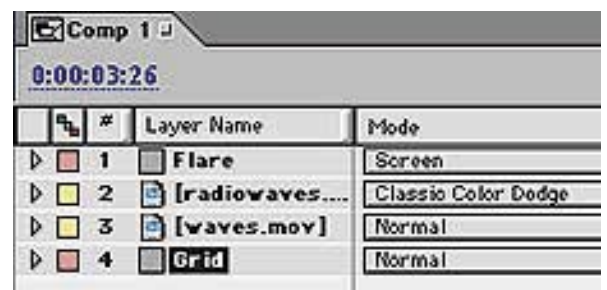


[figure 10]

11- use a transfer mode

Now turn on the 'radiowaves.mov' that is above the 'waves.mov' layer. Notice that this image is the same as the 'waves.mov', except it has a black background and is less blurred. We're going to use this image to accent our distortions and add some punch to them.

In your Timeline, switch to your Layer Modes. Change the transfer mode for 'radiowaves.mov' to 'Classic Color Dodge'. [figure 11]



[figure 11]



This movie dismap will brighten the colors up, and make the warp more obvious. Since it's essentially the same animation as 'waves.mov' these waves move along with the distortion. You should get the result we did at right. [figure 12]

12- no production bundle?

For those of you who weren't able to do steps 9-11 without the Production Bundle, read on. Now I'll show you how to do a fake displacement effect with the emboss filter. It's not perfect, but it's not bad either.

The rest of you can skip the following step, and thank you for playing. :-)

13- fake dismap

To fake a dismap, duplicate the 'radiowaves.mov'. Now apply the Emboss filter from the Effects> Stylize menu. [figure 13]

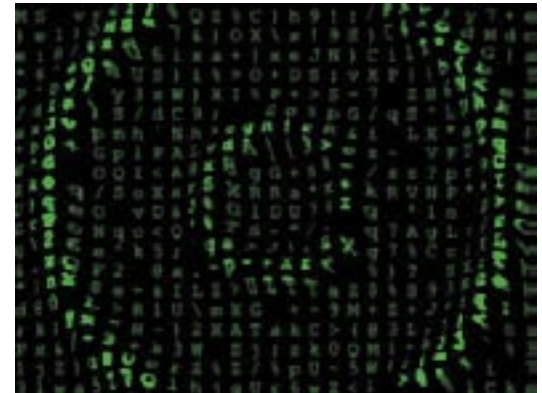
Set the 'Relief' setting to 3. Then in your Timeline, set the transfer mode for that layer to 'Multiply'.

You now have a fake bump map on your layer. While this doesn't actually displace the image, it does give the illusion of depth. [figure 14]

conclusion

And there you have it. Turn on the Lens Flare layer and you've got a little punch to your Warp. We've used Shine from Trapcode; if you don't have that filter, you'll want to find a different Lens Flare... it's pretty basic.

You can watch our QuickTime movie [text_warp-final.mov](#) to compare your results. Enjoy!



[figure 12]



[figure 13]



[figure 14]