Comic book style

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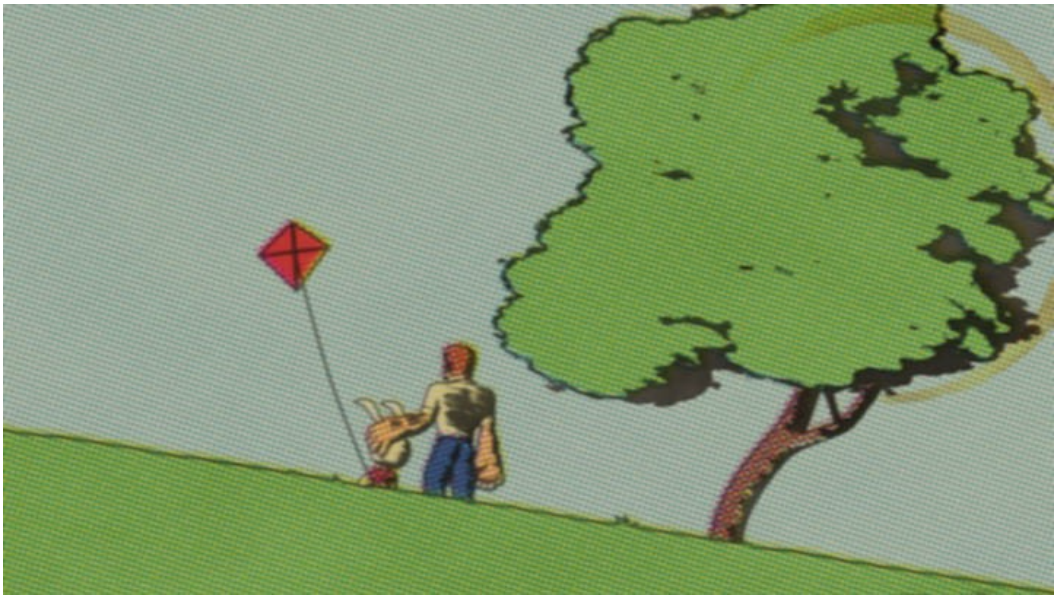
Software:
Light Wave 3D
Photoshop

Introduction

For the dream sequences in *Lukas' Dad is not a Rabbit* I wanted to evoke the feeling of those old comic books you could, as a child, sometimes find at a flea market or in a cottage on a fishing trip. Usually just the final episode of a twoparter, faded, yellow and torn, and more often than not about cowboys instead of the preferred superheroes. Great memories... Anyway, this is how the dream looks in Lukas' dad...



Like those old comic books in the attic.

Animation: http://www.youtube.com/watch?v=mfXo75_GgzY

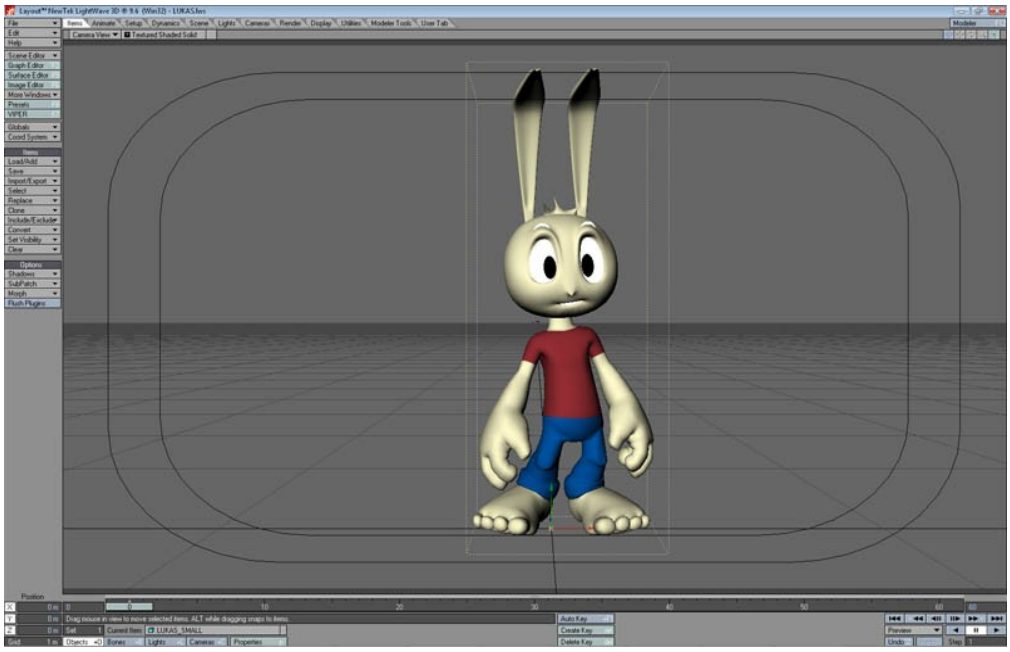
For this tutorial we will use a scene with Lukas as a child. The scenes and objects for this tutorial can be downloaded here:

http://www.bortbyting.com/tutorials/Lukas_dream.zip

We will also use the *BESM* shader that is included with *Light Wave*.

Part one, inks

Let's start by loading the scene LUKAS.lws from the scenes folder.

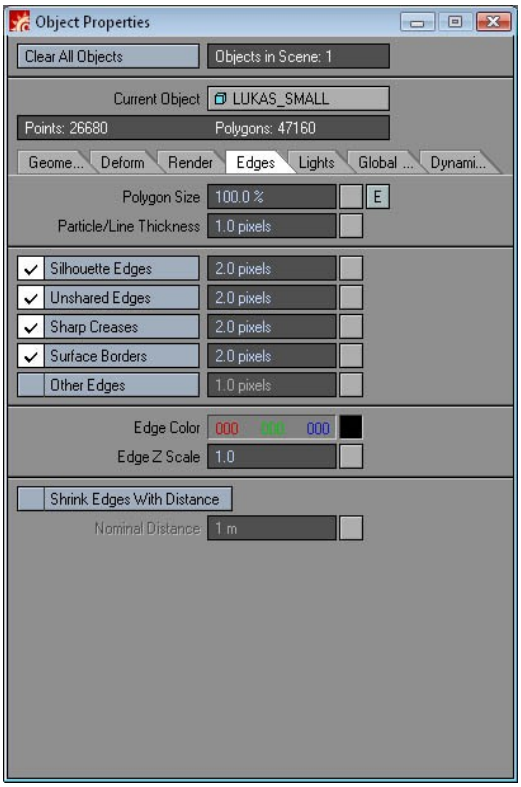


Lukas is ready to be comic booked.

We will need two versions of the scene. One for the color and one for the “inks”.

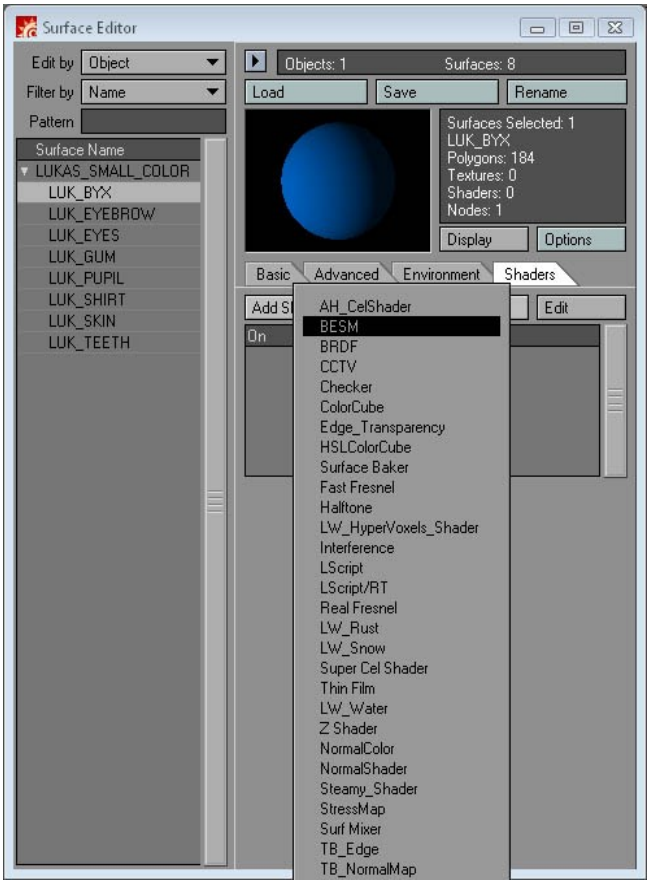
We’ll start with working on the black and white ink-version. Save the LUKAS_SMALL.lwo object as LUKAS_SMALL_BW.lwo and save a copy of the scene as LUKAS_BW.lws. Then, add a Null to the scene, this will come in handy later.

First, lets give Lukas an outline. Select Lukas (if he is not selected). Go to the *Objects Properties* (p) and click on the *Edges* tab. A value of 2.0 in *Silhouette Edges, Unshared Edges, Sharp Creases* and *Surface Borders* will do.



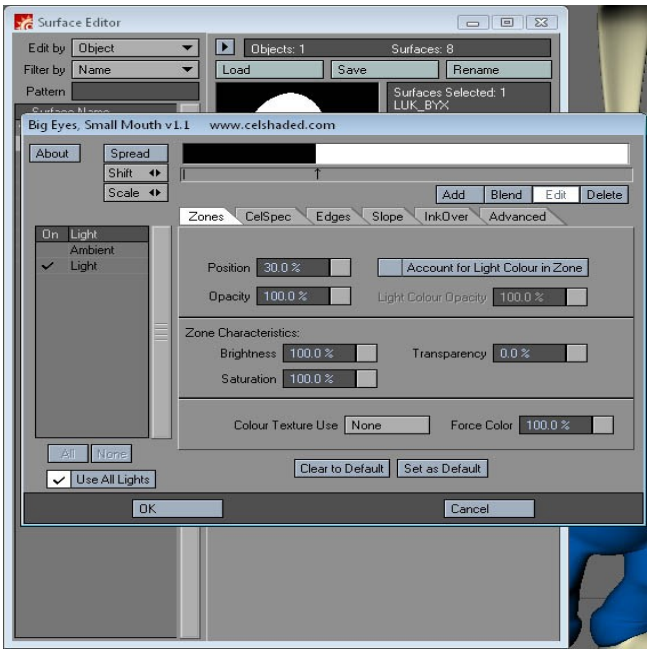
Edges are checked!

Next we will use the *BESM shader* to make an ink surface. Open the surface editor, go to the *Shaders* tab and add *BESM*.



BESM or Big Eyes Small Mouth.

Double click on the *BESM shader* to bring up it's panel and add a gradient looking something like this:

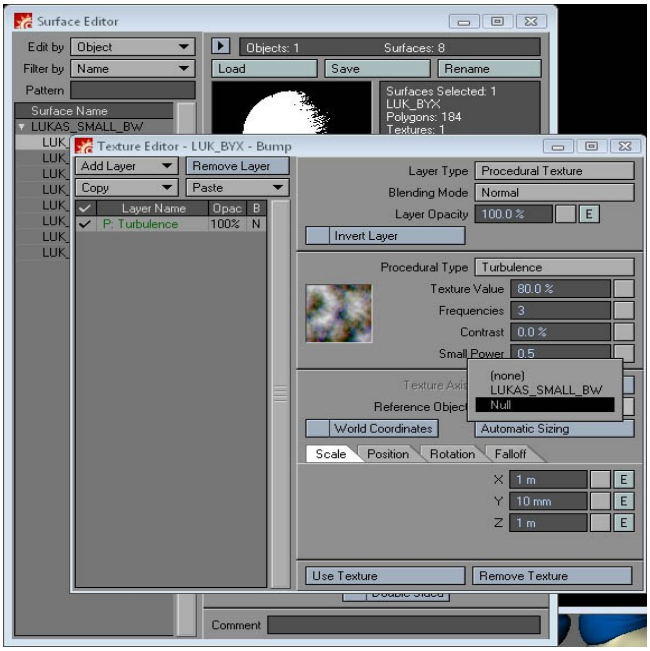


30% black and the rest is white.

Go back to the *Shader* tab and copy the *BESM shader*. Paste it onto the LUK_GUM, LUK_SKIN and LUK_SHIRT surfaces.

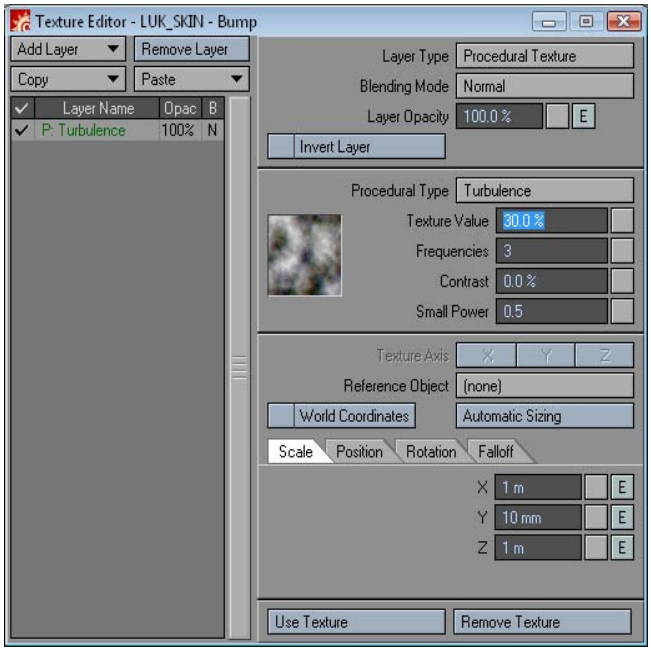
On the LUK_SHIRT surface. Go back to the *Basic* tab, and add a *Bump* texture. I use *Turbulence* with the size X 1m, Y 10mm and Z 1m.

This bump texture will create the hatching. By varying the percentage in the *Texture Value* you can change the length of the hatching. The default 80% will do for now.



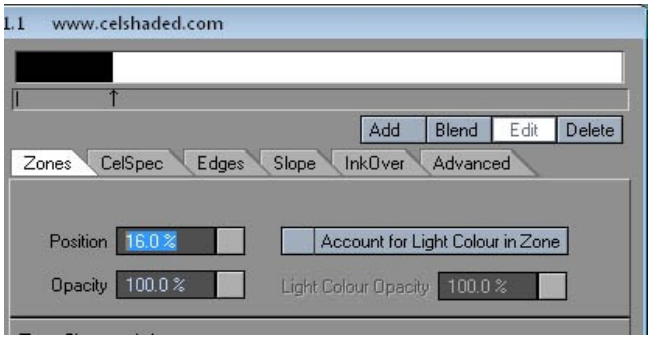
Choose the Null we added to the scene earlier as Reference Object.

Copy this bump texture to the LUK_BYX and LUK_SKIN surfaces, but on the LUK_SKIN surface, go back to the *Bump Texture Editor* and lower the *Texture Value* to 30%.



A lower Texture Value gives shorter hatching.

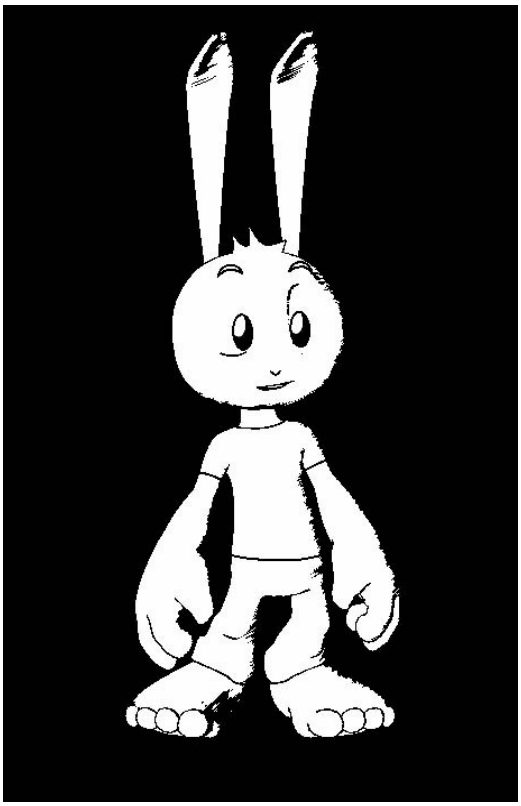
Copy LUK_SKIN surface to the LUK_FACE surface and click on the *Shaders* tab. Lower the *Position* of the black region to 16%.



Since we want less black in Lukas' face we set a smaller black region.

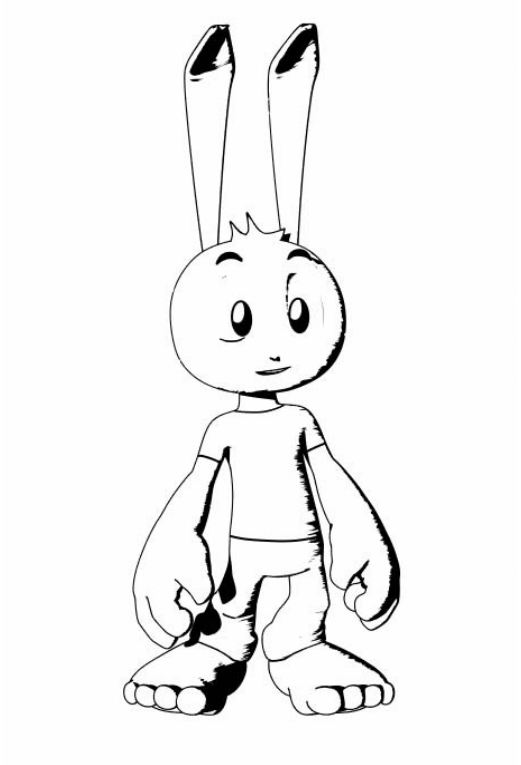
On the *Basic* tab, change the color of the LUK_EYEBROW surface to black, set *Luminosity* and *Diffuse* to 0% to make Lukas' eyebrows totally black.

On the LUKAS_EYES and LUKAS_TEETH surfaces, set the *Luminosity* to 100%and make sure their colors are white.



Press F9 and you should get something like this

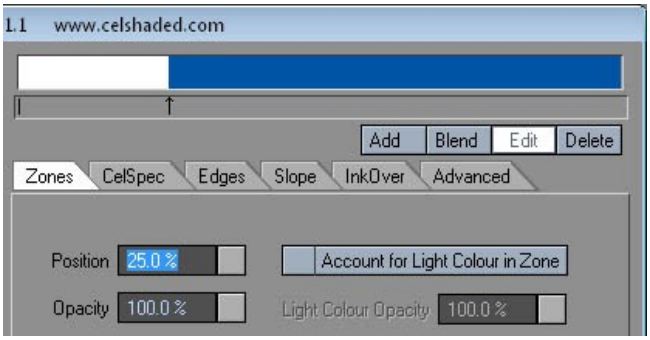
Rotate the Null to change the direction of the hatching to your liking. When you are done, change the background to white, turn on shadows and some antialiasing. Save everything and press F9 to render and save the image.



Part two, color

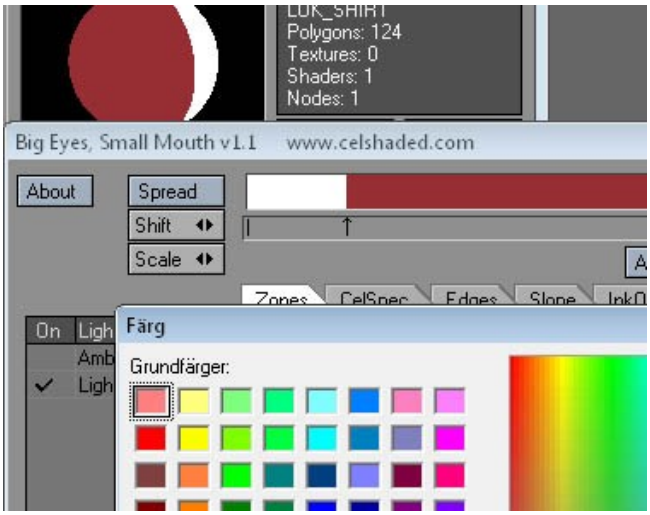
Now, Let's make the color version. Load the LUKAS_SMALL.lws scene. Save the Lukas object as LUKAS_SMALL_COL.lwo and save a copy of the scene file as LUKAS_COLOR.lws.

Lets start with the pants surface, LUK_BYX. Click on the *Shaders* tab and add *BESM* again. Open the panel and add a white region up to 25% and then a blue region.



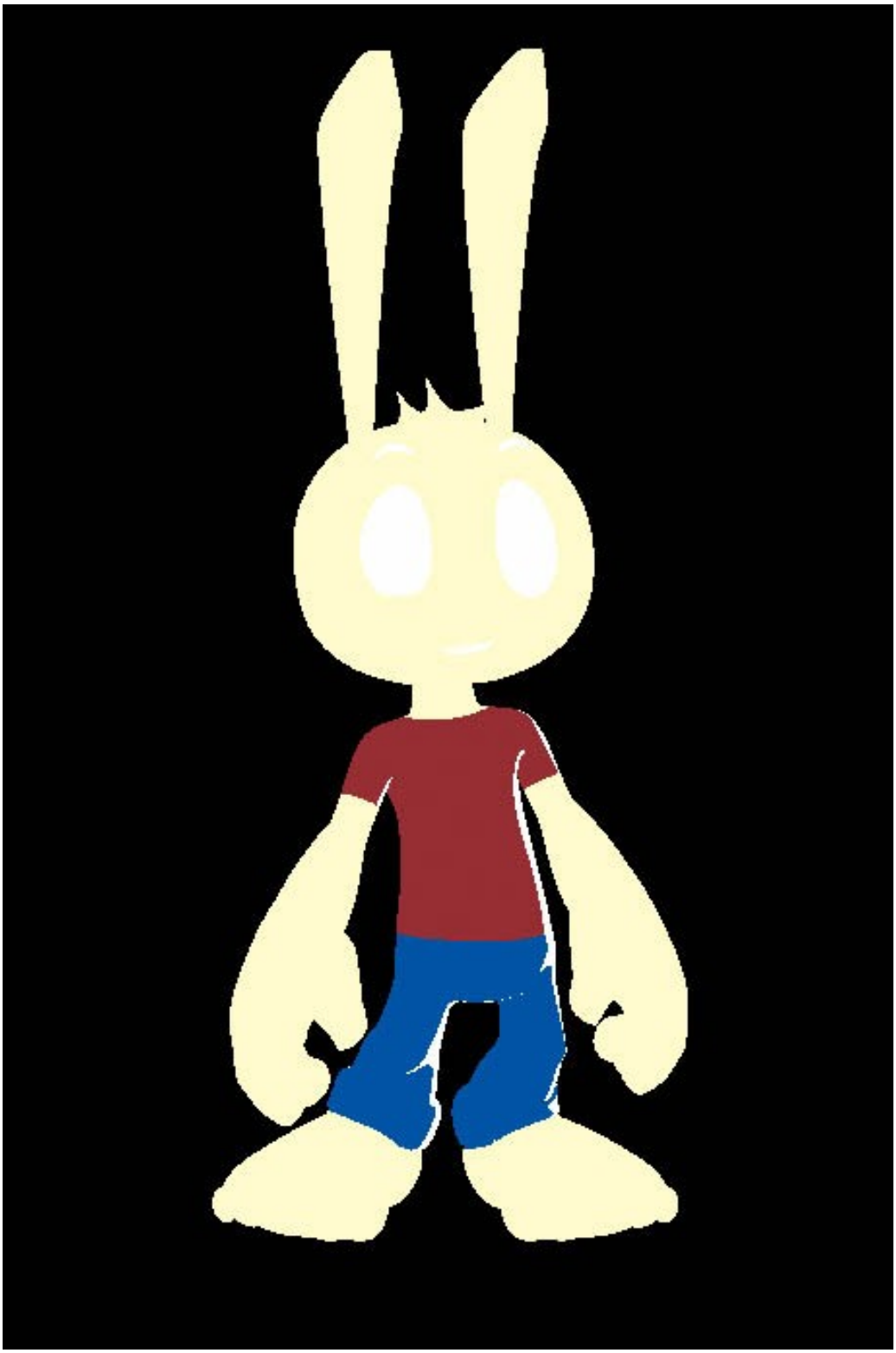
The white region will make sure the inks aren't colored over.

Copy the *BESM* shader and paste it to the LUK_SHIRT. Double click the *BESM* shader to bring up it's panel and change the blue area to red.



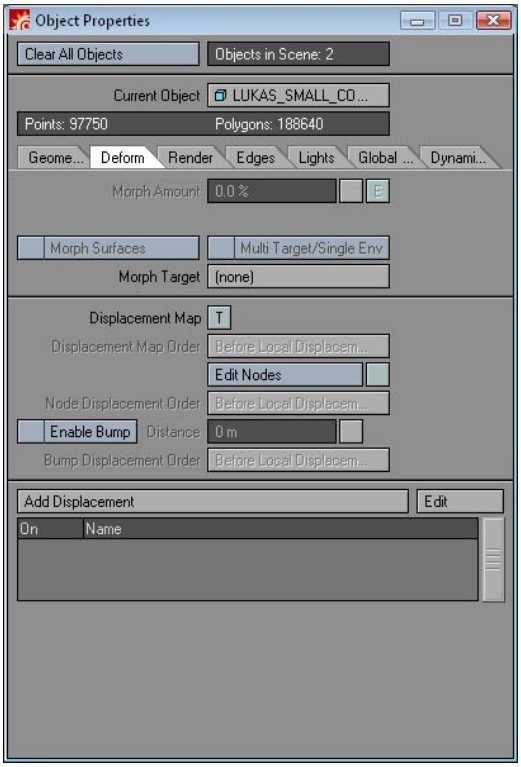
A pale red for Lukas's T-shirt.

Select the LUK_PUPIL surface. Shift-click the T next to *Color* to lose the texture map. Change the color to white and set *Luminosity* to 100%. We don't want any black surfaces in our color version of the image.



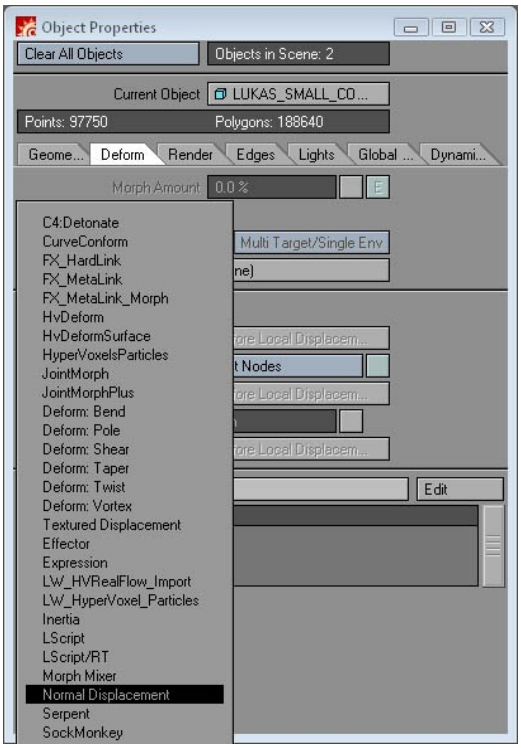
This is what you should get if you press F9 right now.

Quite good, but before we are done, we want to imitate the slipshod coloring of old comic books. Since it was done with a brush and in a hurry, color was often painted outside the lines. We will simulate this by applying a *Normal Displacement* texture to the object.



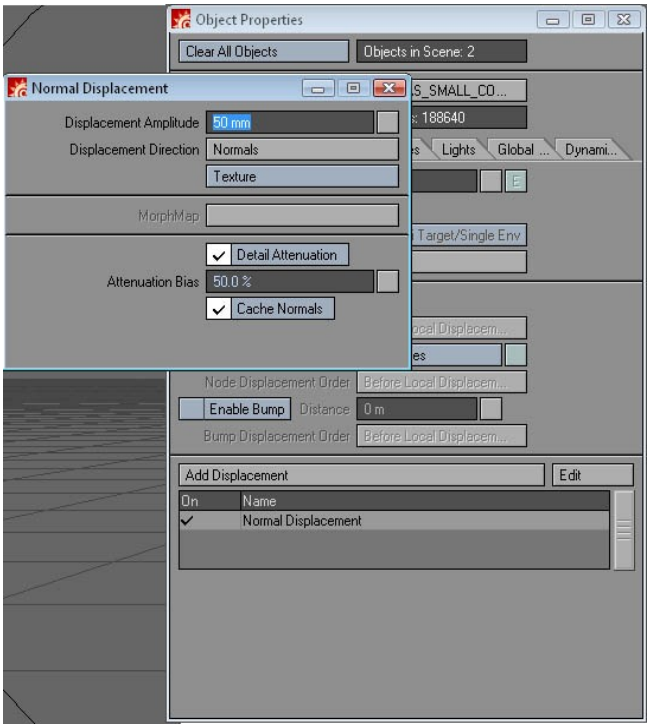
Go to Object Properties and the click the Deform tab.

At the bottom of the panel you can find *Add Displacement*. Click *Add Displacement* and choose *Normal Displacement* from the list.



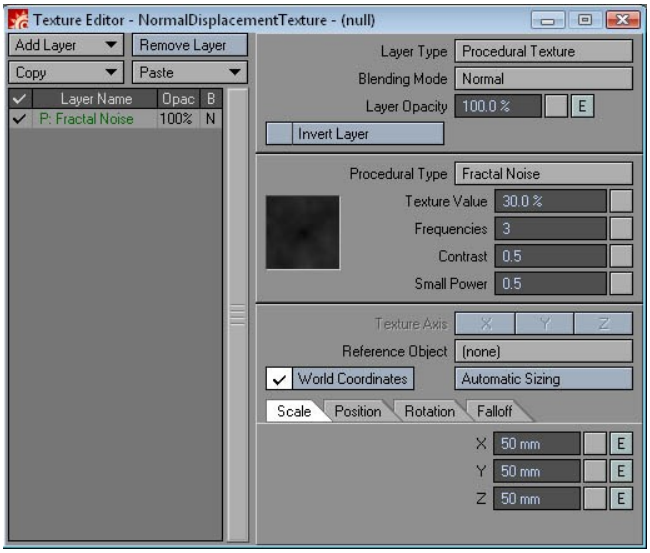
Choose Normal Displacement from the list.

Then double click the on the *Normal Displacement* text to open up the *Normal Displacement* panel.



Set the Displacement Amplitude to 50mm.

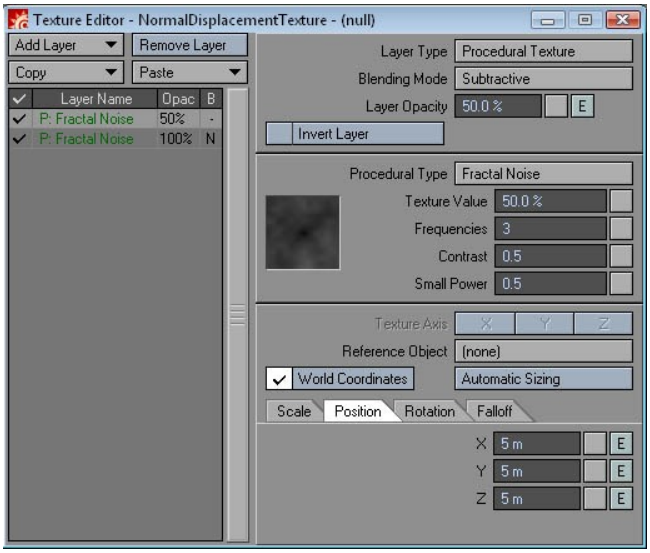
Then click the *Texture* button. We will start by adding a *Procedural Texture*, a *Fractal Noise*.



Texture Value of 30% and a scale of 50mm on all axis.

Check the *World Coordinates* checkbox.

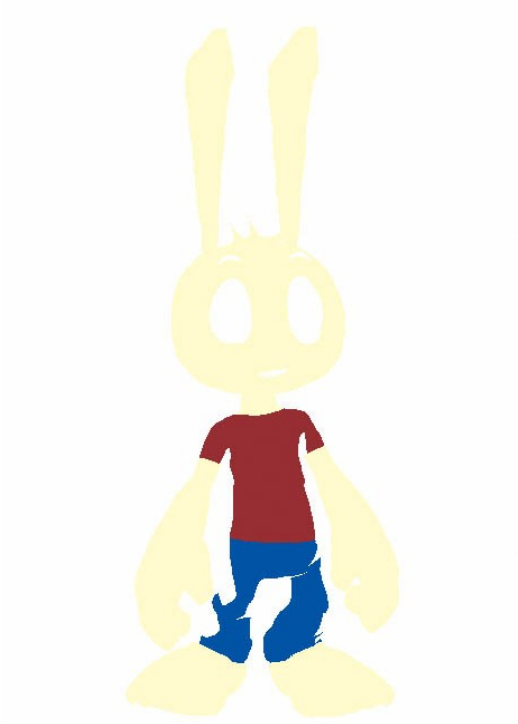
To make things more varied, we will add a second *Fractal Noise* with the same values as the last one. We set the *Blending Mode* to *Subtractive* and the *Layer Opacity* 50%.



Change the Position for this texture to 5 m on each axis.

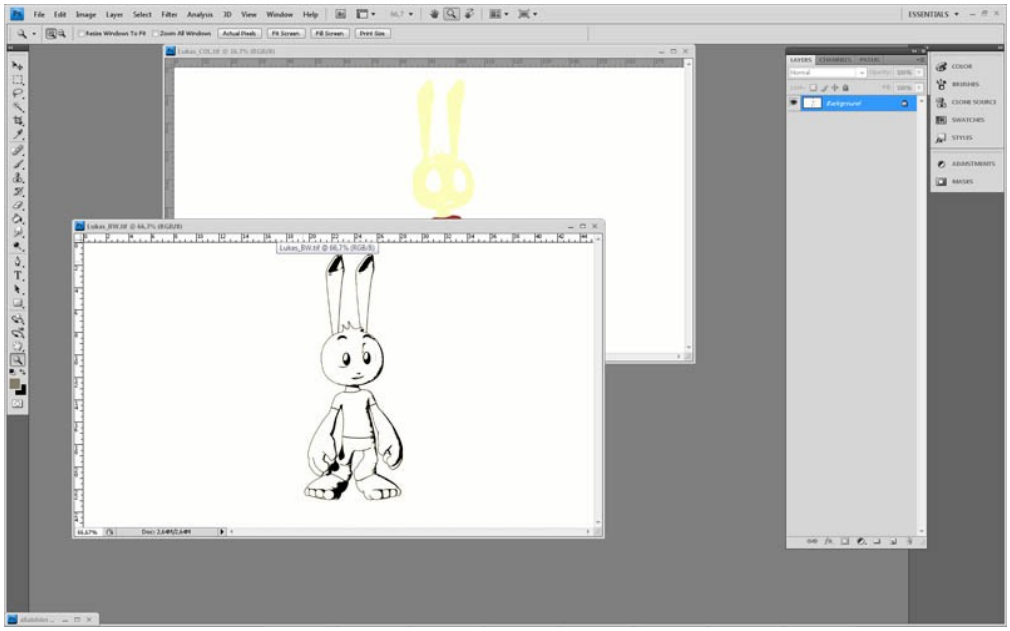
Because we don't want the two textures to overlap, we change the *Position* of the second texture 5 meters on each axis.

Now change the background color to white. In *Camera Properties* change the *Multiplier* to 400%, no antialiasing is necessary. Make sure shadows are turned on. Save the scene and the object and press F9. Save the rendered image.



Part three, Photoshop

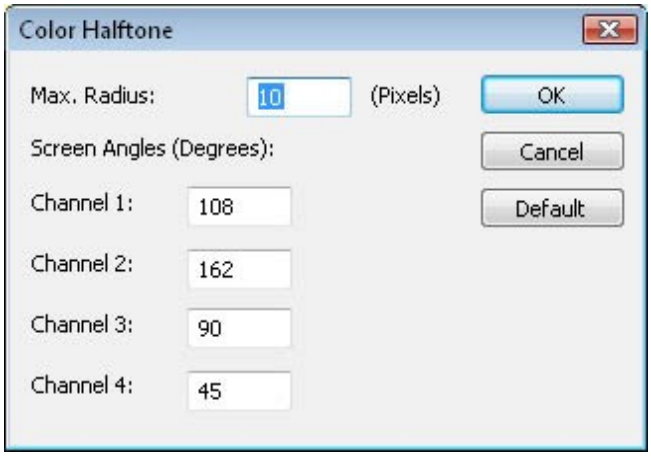
Now we are going to combine the two images in Photoshop. Open both images.



We want to emulate the printing process of comic books, and printing is done in CMYK, with a plate each for Cyan, Magenta, Yellow and blacK. Every color is made up from a combination of these CMYK colors, printed on top of each other in something called a halftone pattern.

Choose the color image and change Color Mode to CMYK. *Image>Mode>CMYK Color.*

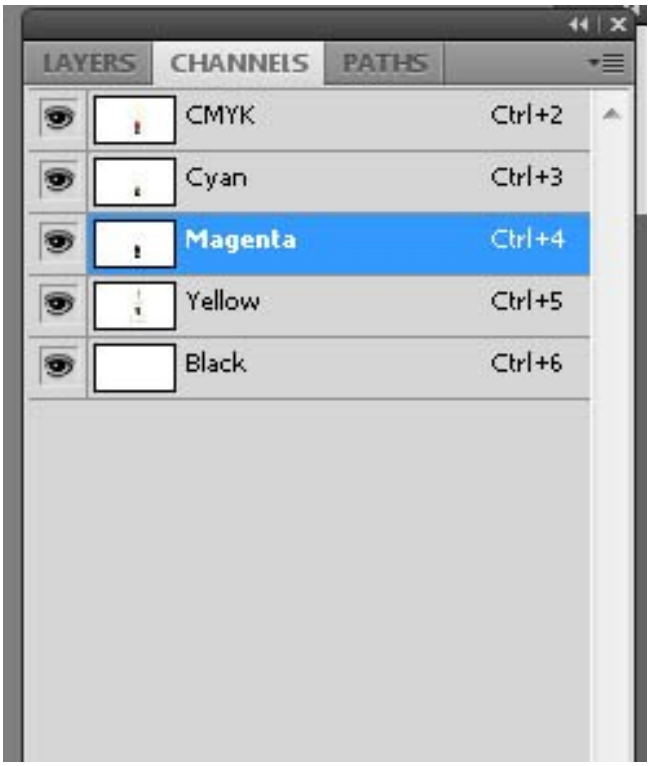
Next choose *Filter>Pixelate>Color Halftone*.



Set Max Radius to 10 pixels and leave the rest as they are.

The *Color Halftone* filter in Photoshop doesn't work well with small resolution images, that is the reason we rendered our color image with a 400% multiplier. If you are not able to render your images in a higher resolution, just render as large as you can and scale it up in Photoshop before adding the *Color Halftone* filter. The scaling will probably not be visible in the final image.

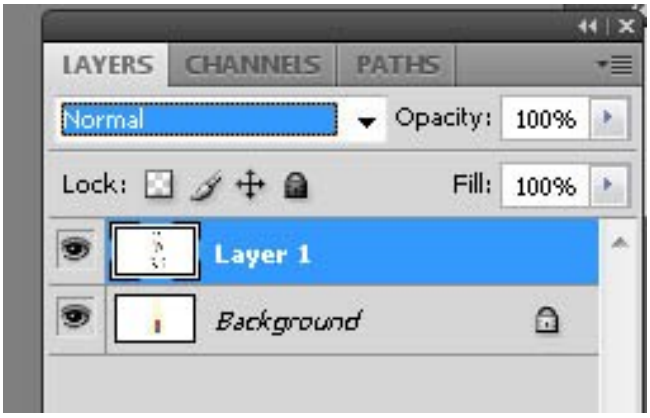
Now let's simulate the misalignment of CMYK plates that were common in old printing presses. Select *Channels* and nudge the individual *Cyan, Magenta* and *Yellow* channels slightly.



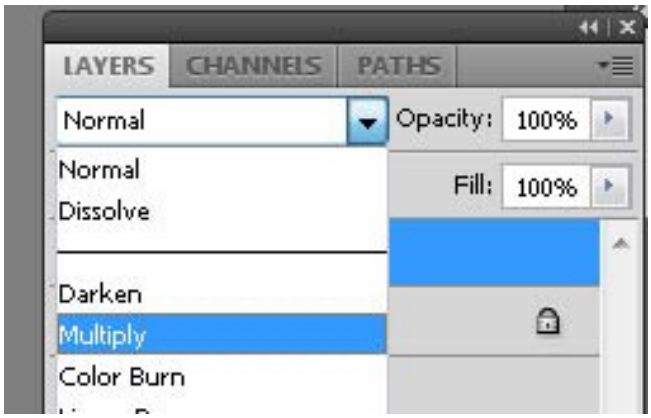
Nudge each channel a little bit.

Until you have an image resembling this.

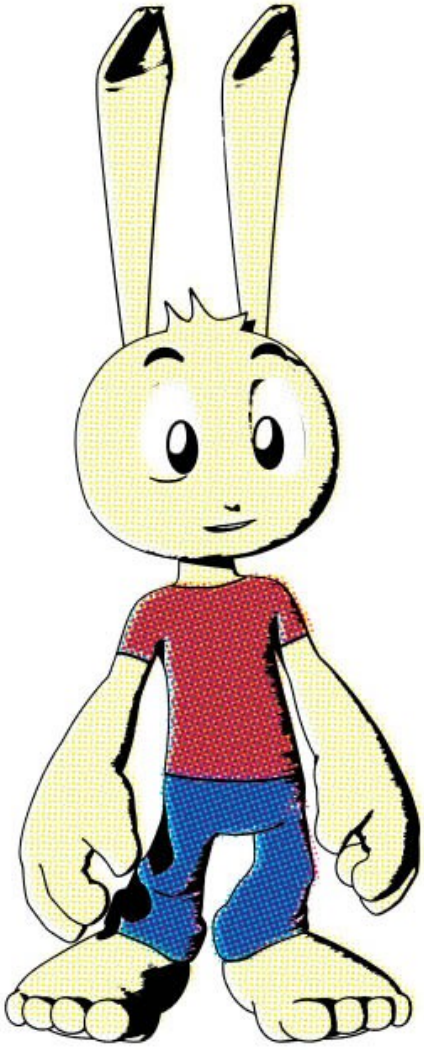
Now scale the image down to 25%.



Copy the black and white Ink image to a new layer.



Change Blending Mode to Multiply and play with the Opacity.



Done!

Conclusion

Play around with the *Opacity* of the ink layer and the color layer to make your comic page look more or less faded. You could also use some layers of paper textures to get an even more authentic look.

For animation, you could easily create an action in Photoshop that handles the CMYK conversion and the nudging of the channels, just remember to go back to RGB afterward.

If you have any comments or think something is unclear (English is not my first language), please send me an email and I will do my best to answer: magnus@bortbyting.com

For more tutorials visit http://www.bortbyting.com