

# How to Paint Stylized Wood Texture

(Using 3D Coat and Photoshop)

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# Thesis

- The goal of this tutorial is to show my design process in creating stylized woodgrain texture using 3D Coat and Photoshop.

# Required Materials:

- Photoshop 2015
- 3DCoat
- Kyle Webster's Watercolor Brush Tpl
- Prior Knowledge of Photoshop

# Before Stepping into 3D Coat

- The first step in creating stylized wood grain is to collect references.
- Cuddlefish's style is graphic with hints of watercolor.
- I painted swatches of stylized woodgrain in Photoshop to give me a better sense of how I wanted the woodgrain to look before going into 3D coat.

Internet References

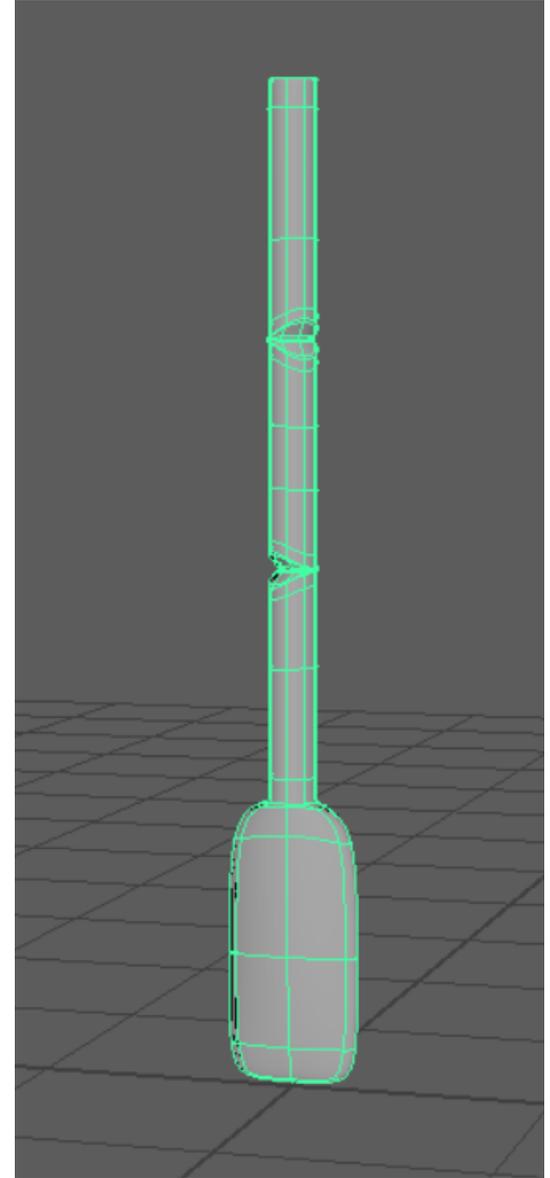


Quick-ish Photoshop Samples



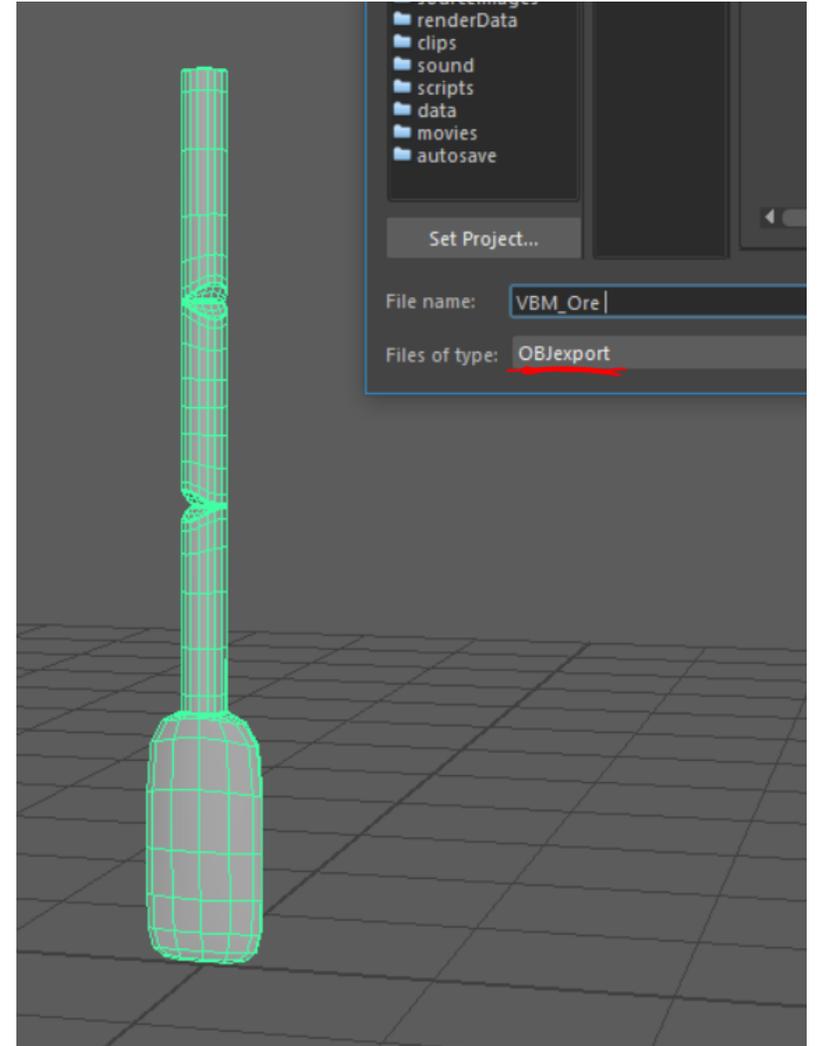
# Exporting Objs from Maya

- After getting a feel of the stylized look I wanted to create, I open the maya scene containing the mesh I want to paint.
- I will use an oar mesh in my example of painting stylized woodgrain.

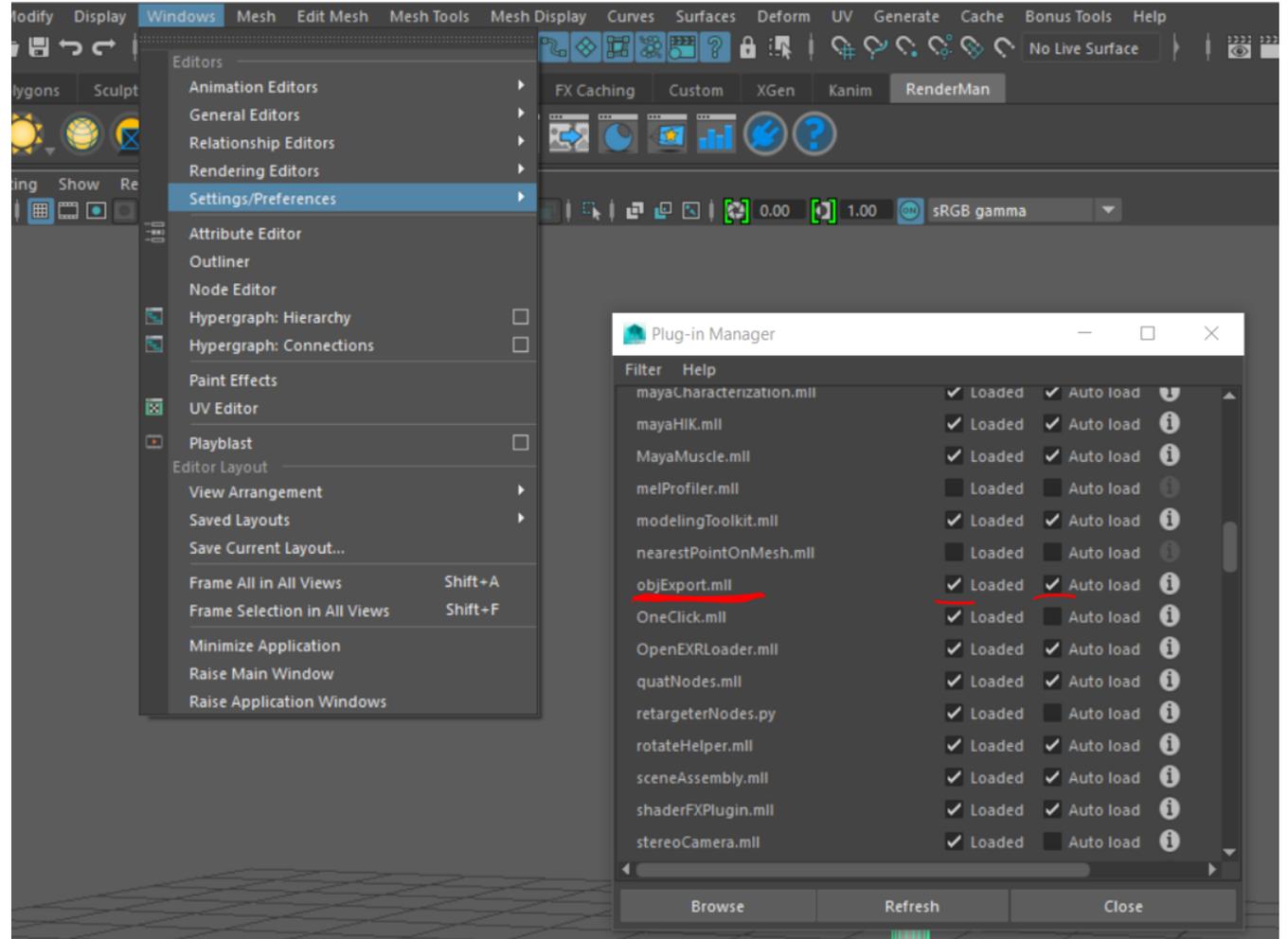


# Open Maya to Export Mesh as .OBJ

- In order to paint on a mesh in 3D coat, the mesh must be saved as an .obj file.
- Make sure the mesh is UV'd and smoothed before exporting as an .obj.
- To export a mesh as an obj, go to File> Export Selection
- You will get a dialogue box. Scroll Through “Files of Type” to select OBJExport.

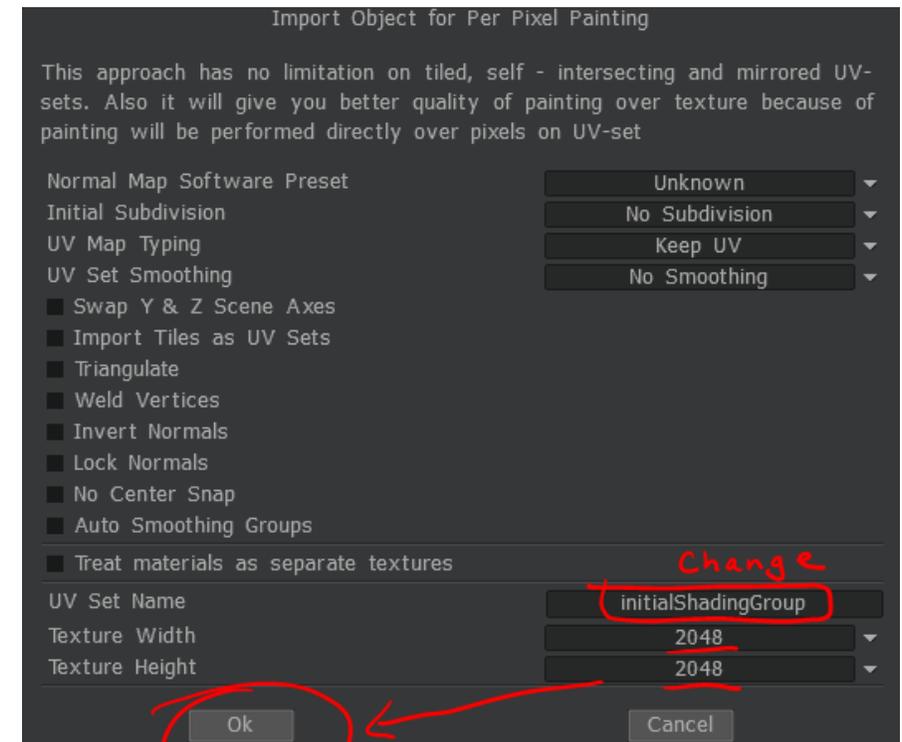


**\*\*If OBJExport is not an option, go to Windows>Settings/Prefs> Plug-In Manager, and check to see that objExport.mll is loaded.**



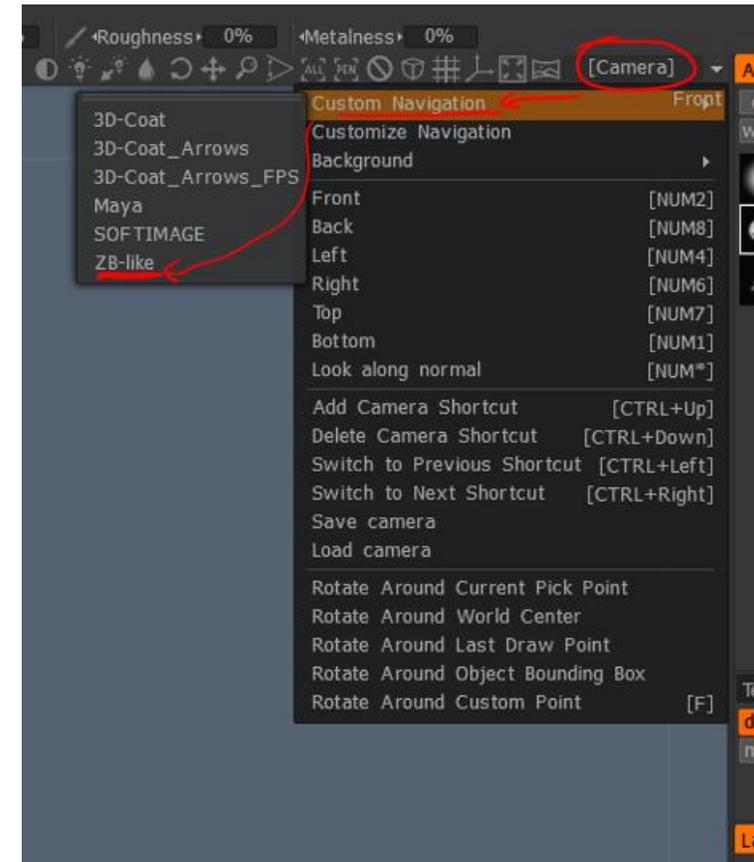
# Open 3D Coat...

- Opening 3D Coat will lead you to the main menu. Click Paint UV Mapped Mesh, then click on the folder icon to open the obj you just saved.
- After opening the obj, you will be directed to another menu set.
- Change UV Set Name to something appropriate (i.e: VBM\_Oar\_UV) And change the Texture width and height to 2048. (The rest of the options on this menu can remain untouched).



# Setting Up Your WorkSpace

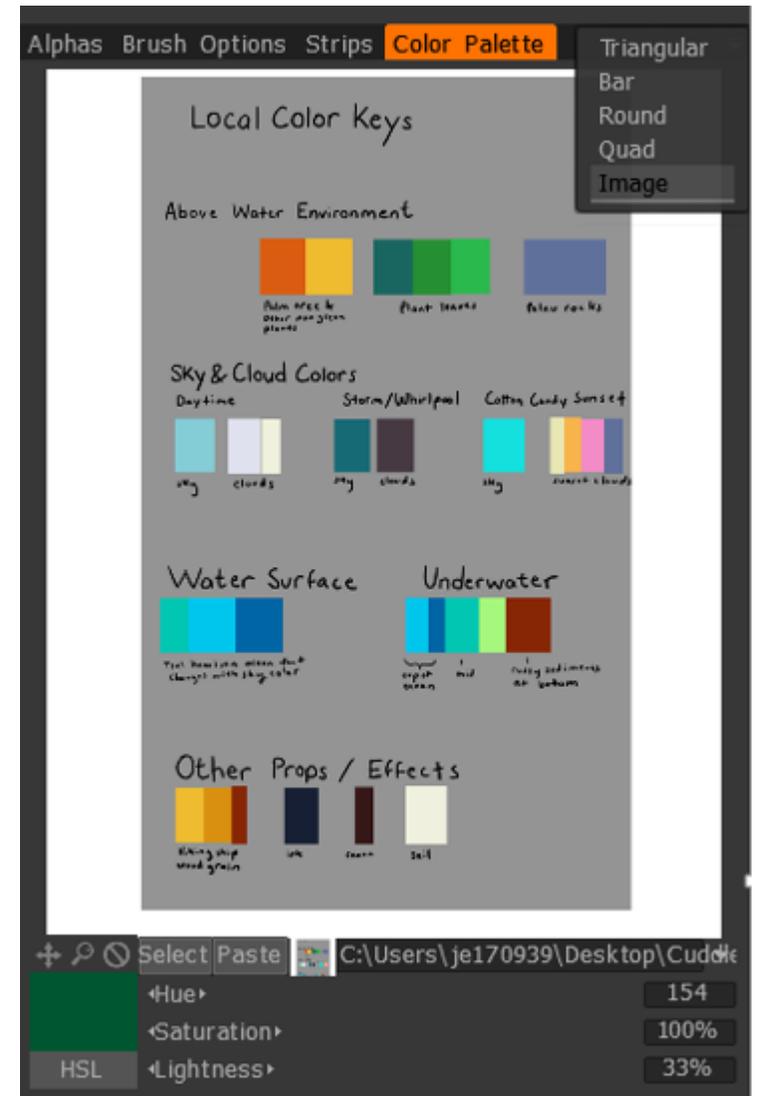
- Before working on the oar, I must set up my workspace in order to achieve the flat/ graphic look of the woodgrain
- At the top menu bar, there are three colored balls. X out the left and right ball. NOT Xing out these buttons will cause you to paint additional normals (purple ball) and gloss (silver ball) onto your model (do not want).
- I also set my camera navigation (top right corner) to ZB-like.



# Using Color Palette

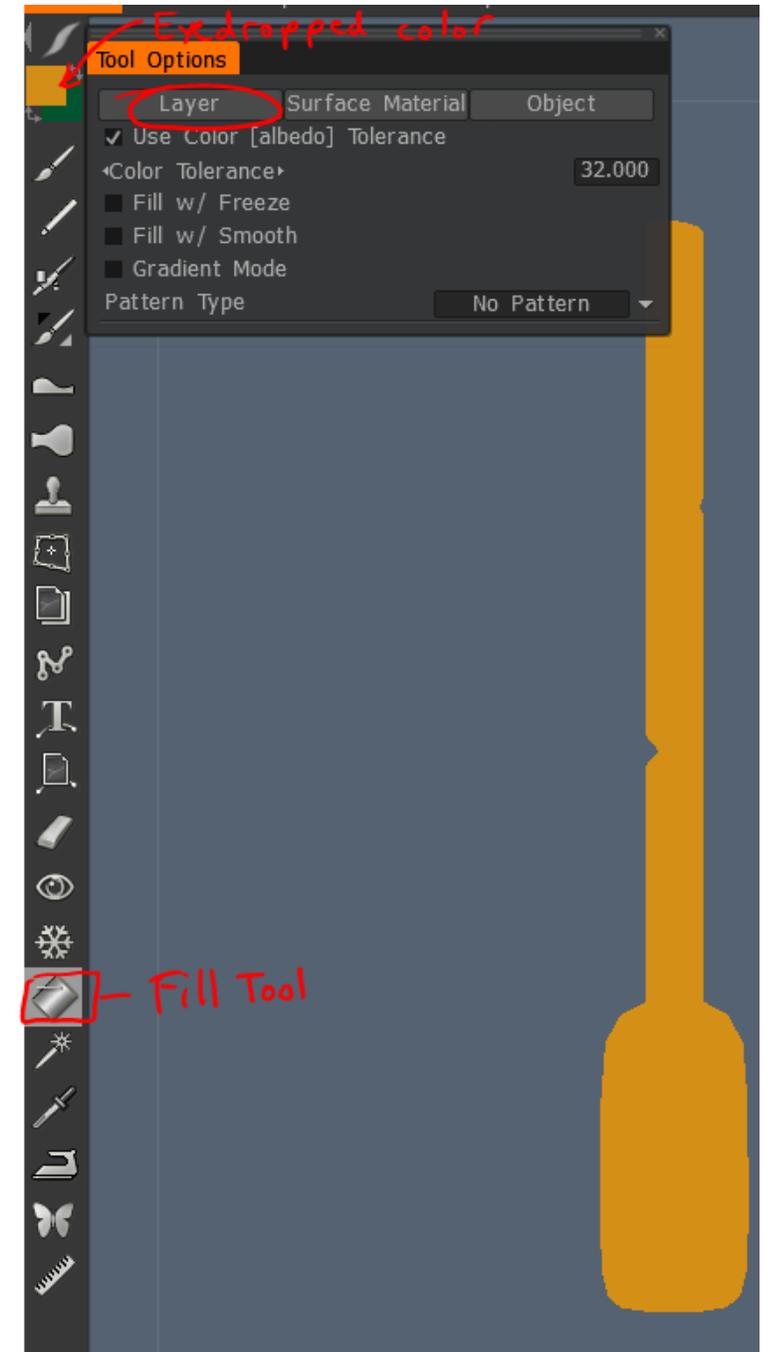
- Now that I have my workspace set up, I want to fill my object with my base color.
- I have already created a color palette sheet for the objects I want to paint. I can load this into 3D Coat by going to the upper right of the screen, click the Color Palette tab, click the triangle symbol, and select “Image” from the drop down menu
- Hit “Select” at the bottom of the color Palette tab to browse for the image you want to use for your color palette.
- Click anywhere on the image to fill your brush with the selected color

\*\*If you can't find any of the tabs I list, you can pull them up by going to Windows > Restore This Page to Default, or Windows > Pop-Ups



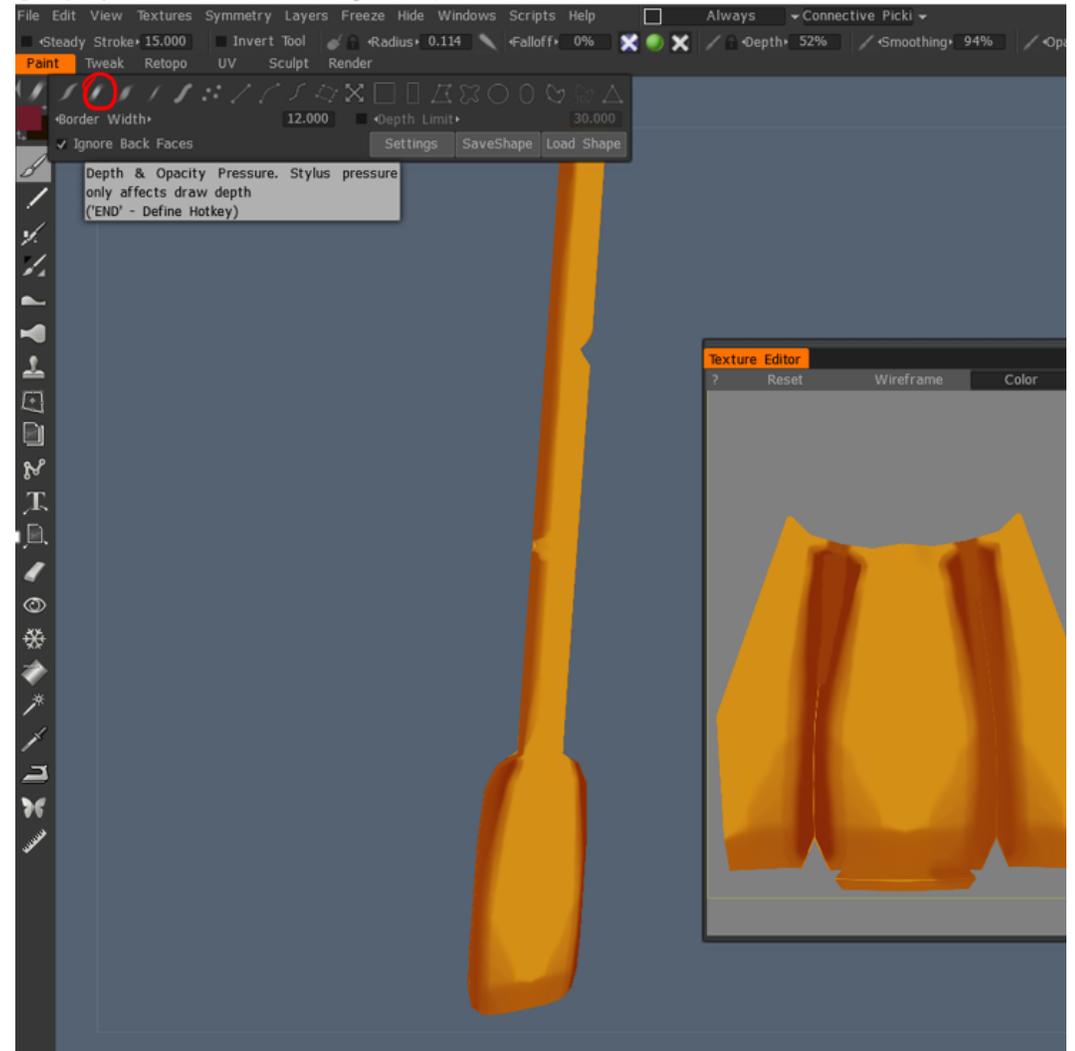
# Fill Color

- On the right of your screen, at the bottom of the layers tab, click on the paper icon to create a new layer, and name it accordingly.
- Click the fill Tool on the left menu.
- The fill Menu will show up. Click “Layer” and the mesh should fill with the eyedropped color (much like photoshop).



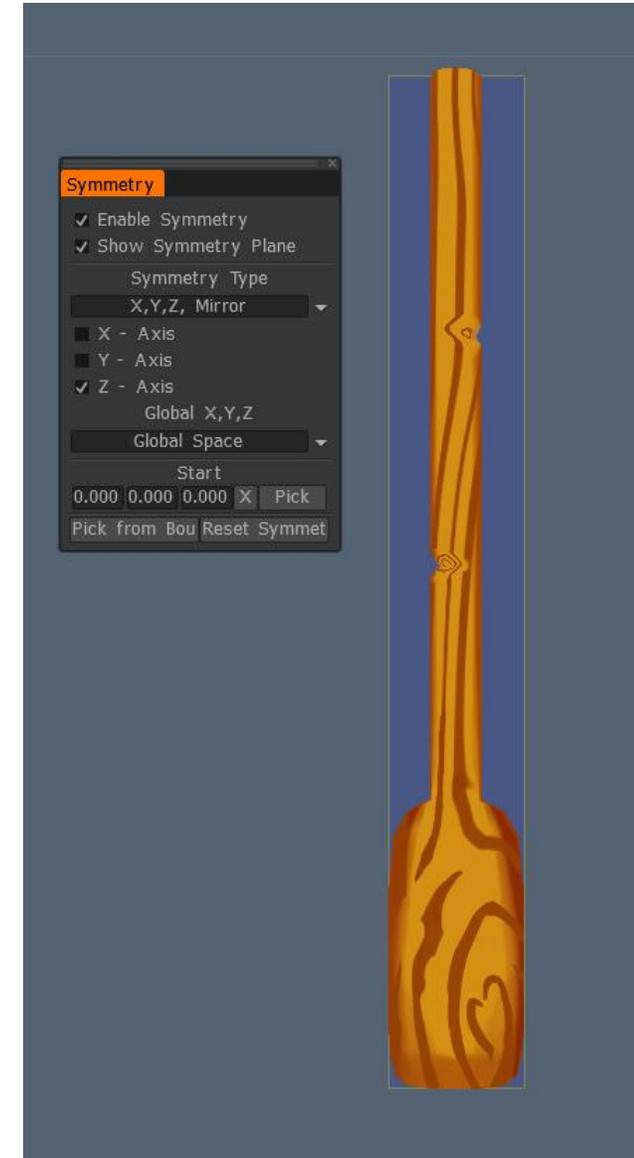
# Blending

- After filling in my oar, I want to give it some tonal variation to give it some dimension. In order to do that, I create a new layer, eye drop a darker color, click the brush icon, and set my Stroke Mode to “Depth and Opacity Pressure”
- This stroke mode will allow you to paint using pen pressure, creating a blended effect.
- For further blending, hold down shift as you paint. Holding down shift while painting is like using Kyle Webster’s smudge tool in photoshop.



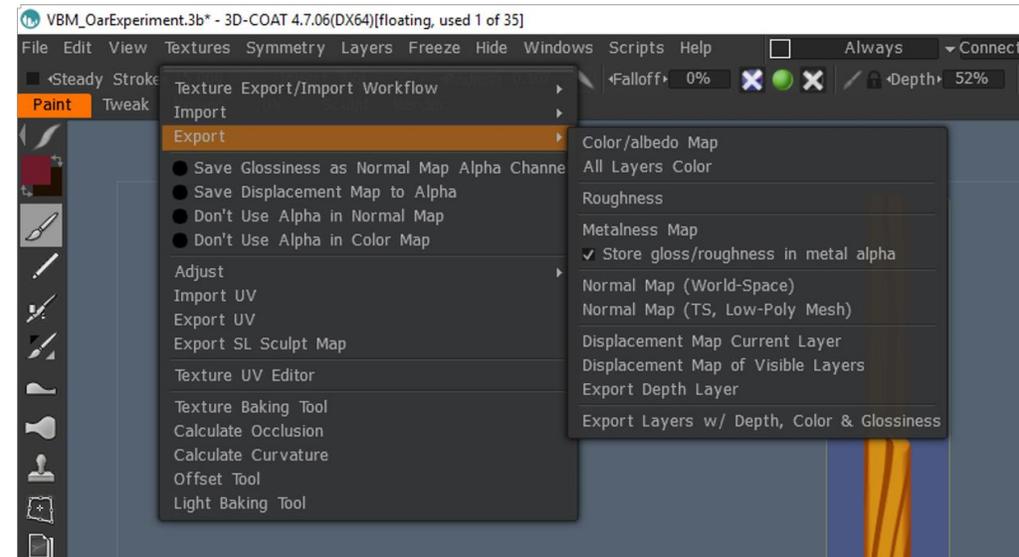
# Drawing Woodgrain

- You can interactively draw/ paint on objects in 3D Coat.
- Create a new layer for your woodgrain.
- Make sure the brush tool is selected, that its opacity is set to 100%, and change the Stroke Mode to “Radius and Depth Pressure” (the utmost left icon in the Stroke Mode set).
- Woodgrain has a certain rhythm to it. Study a few examples of woodgrain on planks, and simplify your line work as you paint on your object. Line work should flow with the object’s form.
- If your object is symmetrical, you can hit S to bring up the symmetry tool. The symmetry allows you to interactively mirror your drawing to the other side
- Click “Enable Symmetry” and Show Symmetry Plane, and click the axis that bisects the obj, and draw a simplified woodgrain pattern on your object.



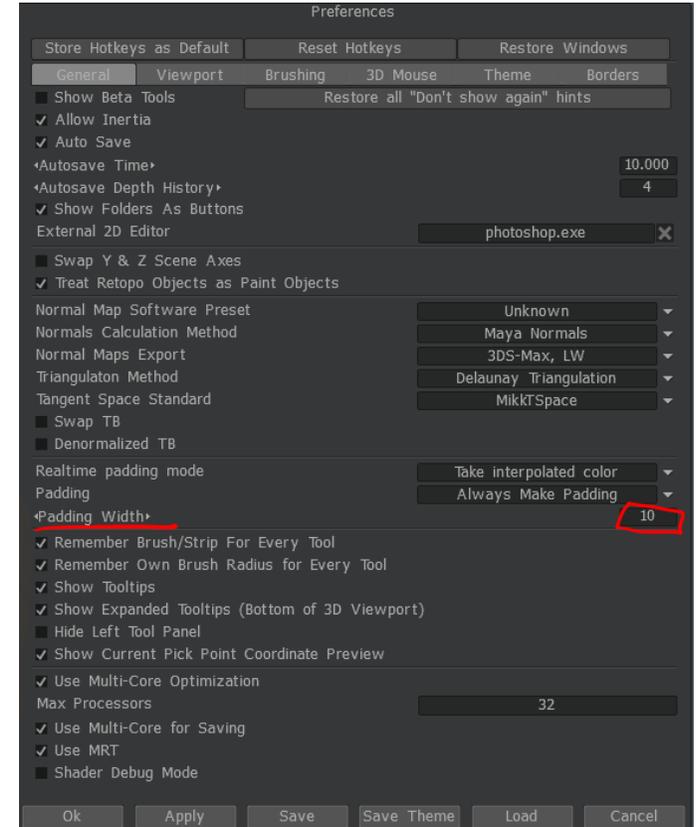
# Exporting to Photoshop

- After you have completed drawing your woodgrain, you can export your work to photoshop.
- To export your work, go to Textures > Export > All Layers Color.
- Selecting All Layers Color will save your Painting as a PSD.
- Selecting Color/ Albedo Map will compress all layers (do not want).
- After saving your work as a psd, open up Photoshop to further work on your texture.



# 3D Coat Padding Adjustment

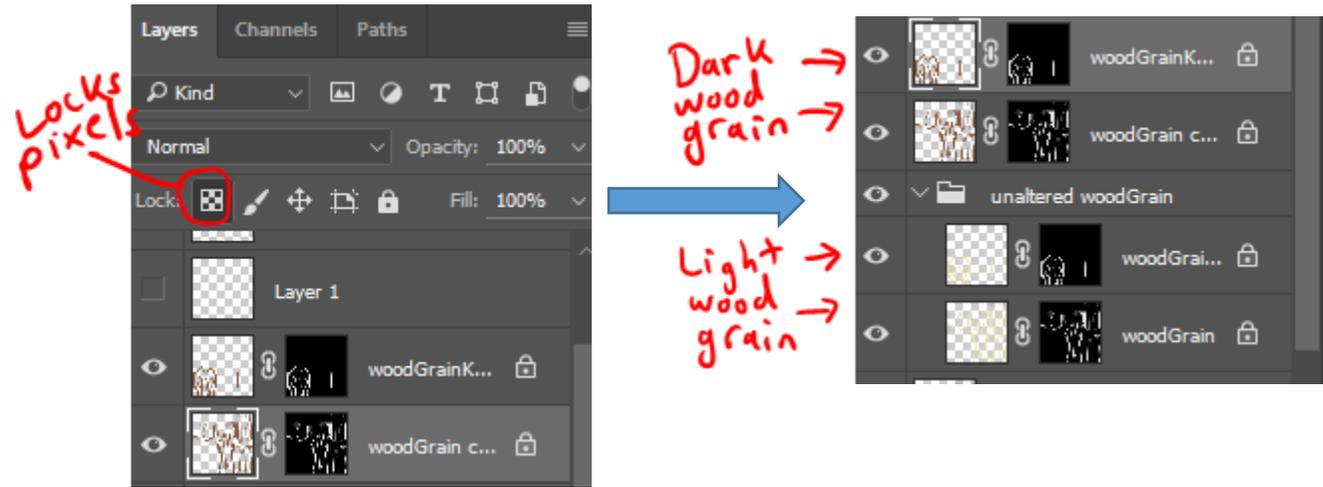
- If you open up your psd, you may notice that the fill color extends far beyond the the mesh's UV shell.
- If you find this to be a hindrance, you may adjust the padding width by going to Edit> Preferences> Padding Width (I like to set mine to 10).
- After saving your work as a psd, open up Photoshop to further work on your texture.



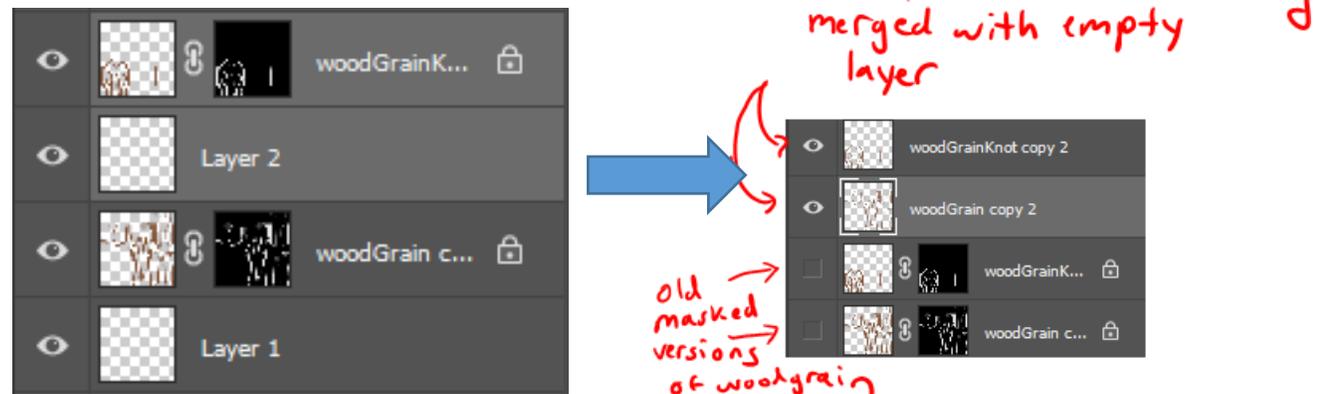
# Photoshop Philter

- Now to add a bit of dimension to your woodgrain:
- Ctrl Click on the layer containing your woodgrain (this should lasso the pixels on your layer), then hit the mask button.)
- With the woodgrain layer's mask selected, go to Filter > Brushstrokes> Spatter, and adjust the spatter accordingly. The goal of this part is to create a textured edge to the woodgrain in a nondestructive way. (If you disable your layer mask, you will see that original woodgrain that you painted in 3D coat has remained intact).

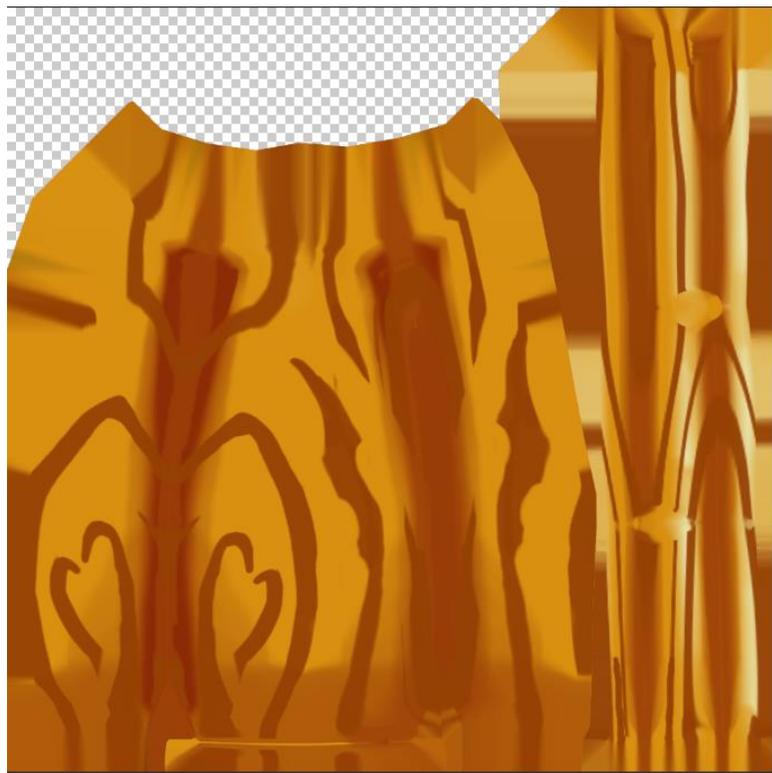
- Duplicate the woodgrain layer. Lock the pixels of the duplicated woodgrain, fill with lighter color (I usually fill with eggshell white), then unlock the woodgrain.
- Move the duplicated lighter woodgrain layer below the darker woodgrain layer to enhance the textured look.
- Because 3D coat cannot read Photoshop masks, you must duplicate your masked Photoshop layers (individually), then merge them with an empty layer to retain the effects of the brushstrokes filter.



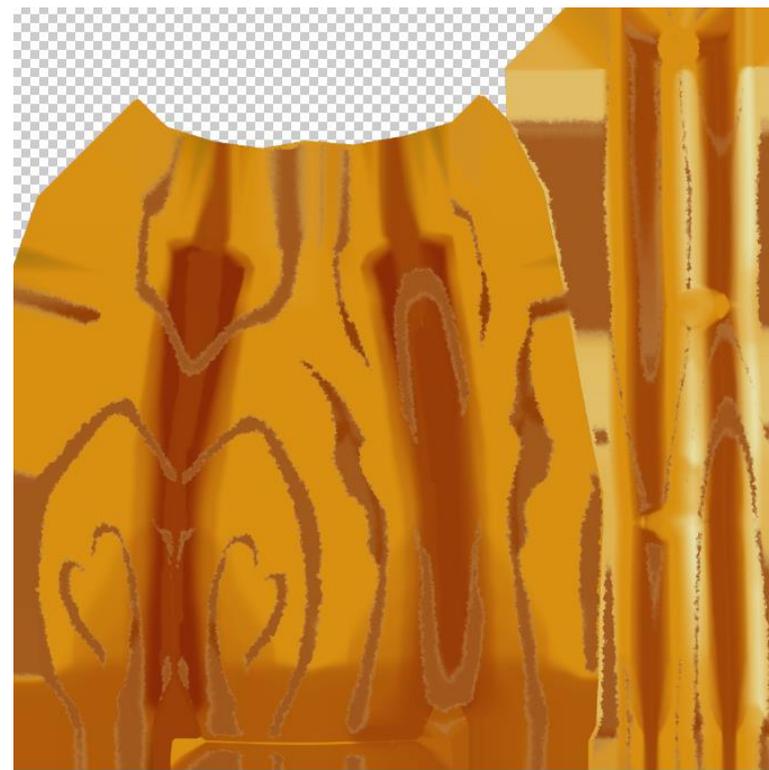
Empty Layers Beneath Masked Woodgrain Layers



# Photoshop Philter



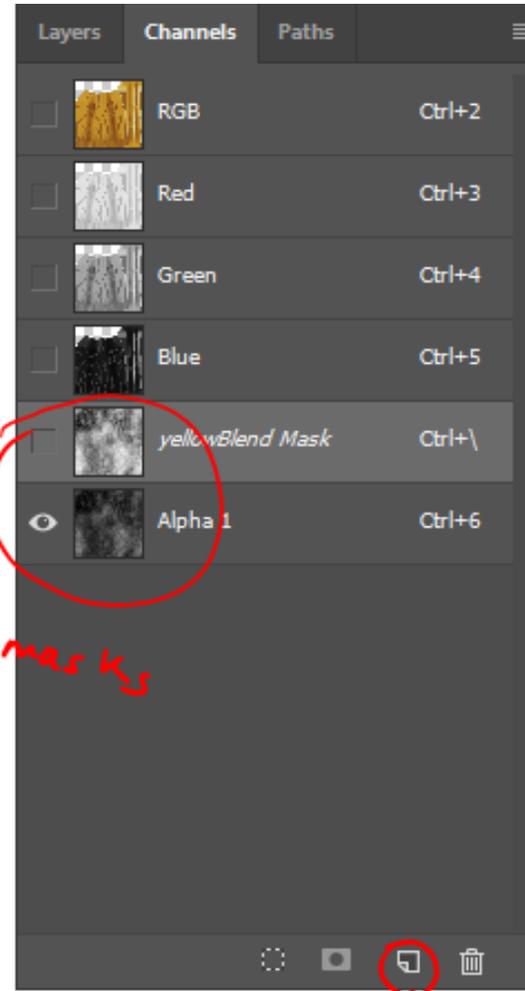
Before



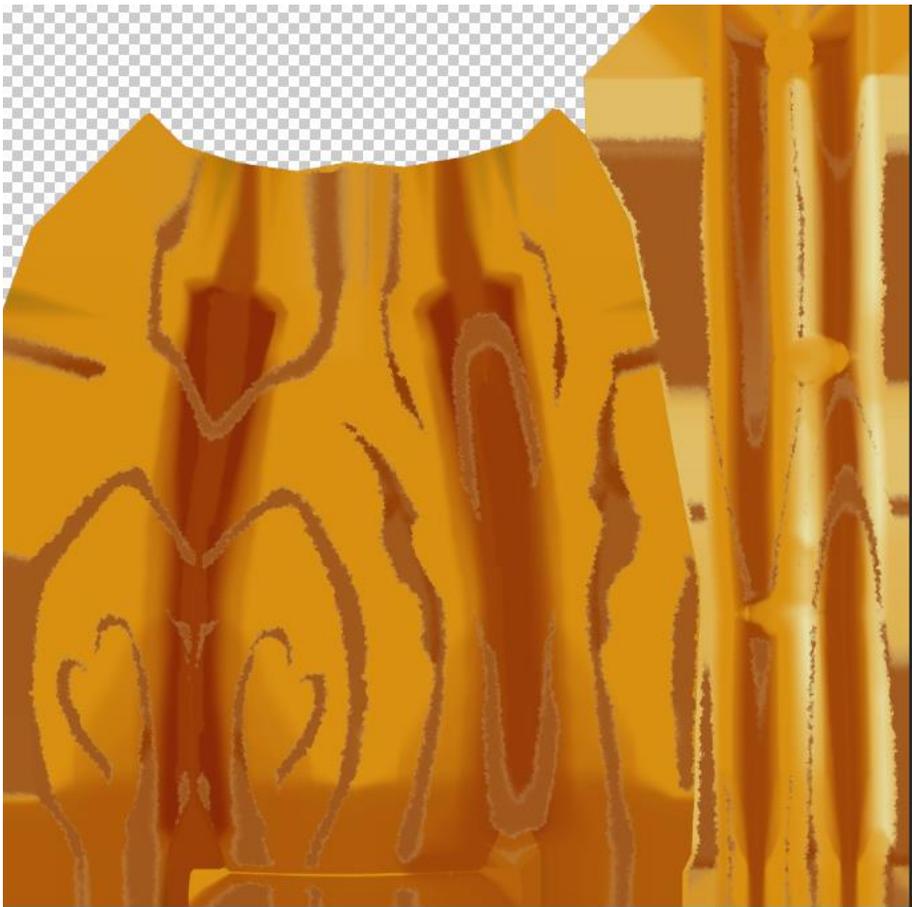
After Brush Strokes  
Filter

# Photoshop Watercolor Texture Instructions

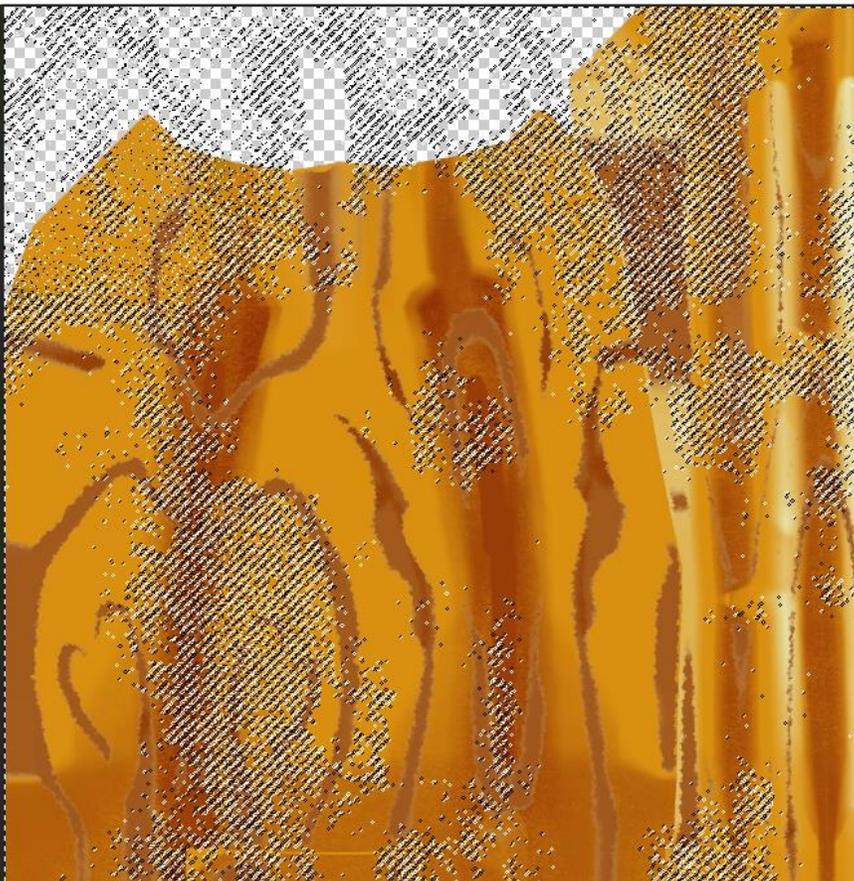
- Remember that layer we blended on Slide 12? We're going to add some texture to it!
- Make a new layer, and make sure it is the top layer. Fill it completely with white. Using the AddPaperTexture Brush from Kyle Webster's Watercolor MegaPack Tpl, set your color to black and paint on the layer.
- Next, duplicate this layer and invert it (Ctrl+I). While still on the duplicated inverted layer, select all (Ctrl+A), Copy, then paste in your Channels tab.
- Ctrl-Click the new alpha channel you have just made. This will basically lasso the detailed brush texture you made. Go back to your layers tab and select your blend layer we made on Slide 12 and hit the mask button.
- This will add a slight textured look/ perforations to the wood.
- You may delete the layer addPaperTexture Brush layer, since a stencil of it has been saved in your alpha channel.



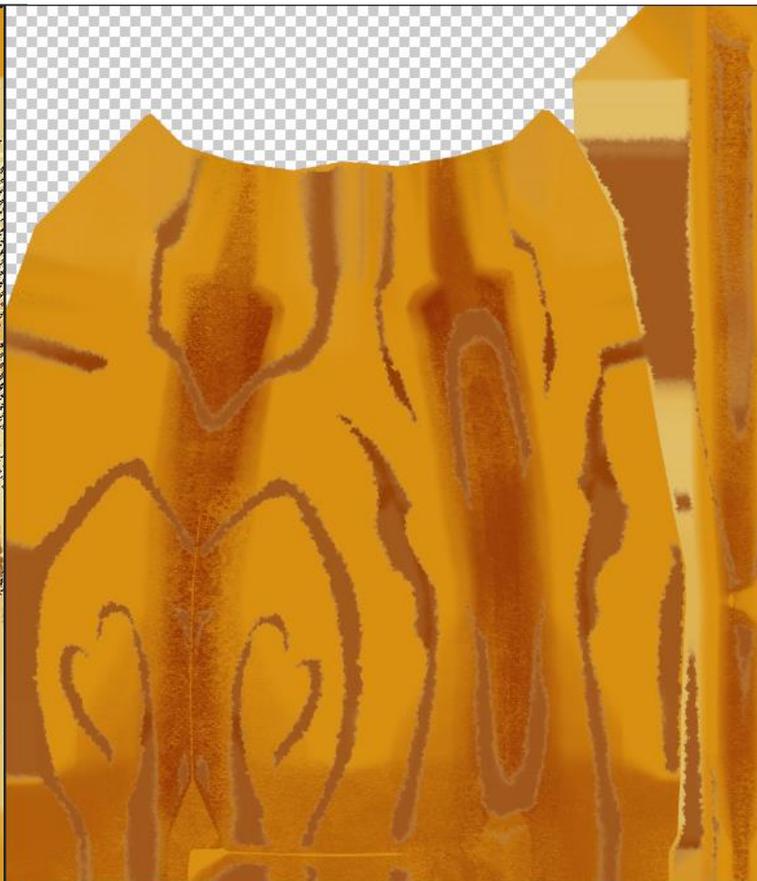
Inverted Paper Texture



Before



Ctrl Click Alpha

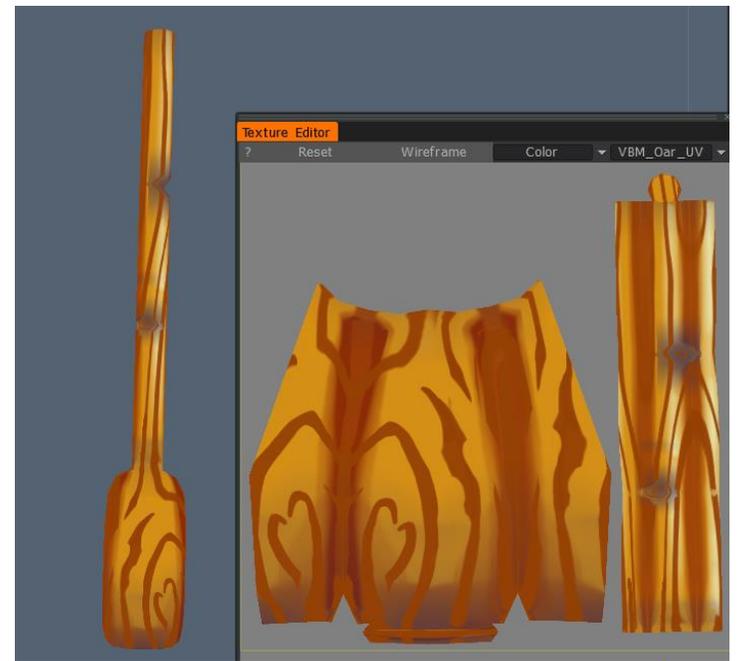


Hit mask button on blended layer

# Toning

- One of the key differences in creating cartoony wood and creating a stick of bacon is toning. Believable wood stripes are more analogous in value and closer in hue.
- Gradients should help with evening out the tone of the wood pattern.
- Create layer for light/ whitish gradients and a another layer for darker gradients. Move it below the woodgrain layers.
- Ctrl+ click one of your woodgrain layer masks. This will lasso all of the woodgrain, creating a stencil for you to add gradients to. Make a new layer to add light/ dark gradients to woodgrain that will vary the tone.
- Use the Levels adjustment layer to tone down the brights and darks of your texture. Making the values more analogous, and the hues closer to brown will make the texture look more woodlike.
- 3D coat does not read adjustment layers. In order to preserve the work you have done when bringing the psd back into 3D Coat, duplicate all layers, then merge onto one layer.

Bacon=



Wood After  
Gradients and  
Levels  
Adjustment  
Layer =



# Bring Back Into 3D Coat

- Open up the 3b file you had been originally painting on in 3D coat. Go to Textures > Import > Layers Color, and select the psd you just painted.
- Cover up any Seams you see in 3D Coat with your brush's stroke mode set to Depth and Opacity.
- Add any additional details to your wooden object.
- And we're done 😊.

# Works Cited

- “Basics of 3D coat” <https://www.youtube.com/watch?v=2FsNBJaseNI>
- Marchand Venter <3