

WHERE THIS TUTORIAL IS GOING...

Welcome to this Tutorial, guys!

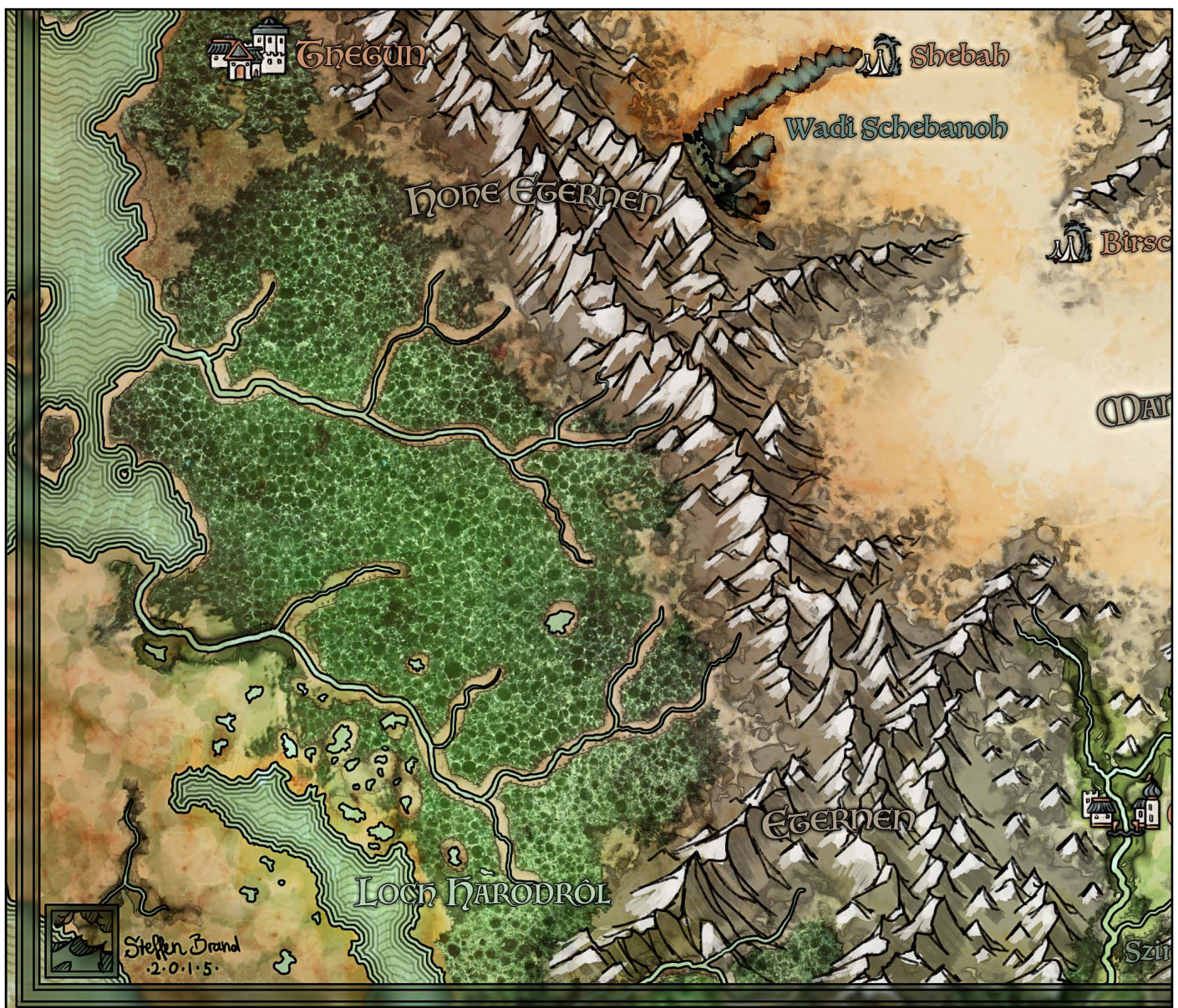
This is the first tutorial I ever made (not only for Cartographers Guild), so please forgive me any mistakes or description uncertainties I will probably make. Feel free to contact me if you find anything wrong or if you have any questions. Also - since I am German - my English won't be perfect. I guess you'll just have to deal with that ;)

Because I'm showing this at a commissioned image I've done for the German RPG 'The Dark Eye' (Das Schwarze Auge), please don't use or alter this tutorial or parts of it otherwise or in any form. The copyright is with Ulisses Spiele & Distribution GmbH, Germany (2015); Link: <http://www.ulisses-spiele.de>

In this tutorial I will show you parts of my process, especially how I make forests in this style of maps. It sounds like I do this a lot of times this way, but actually it is a way I developed in particular for this one map (and probably re-use this technique in the future). Below on this page you can see where we are going.

Technical details...

I use a MacBook Pro with OS X Yosemite Version 10.10 in combination with a large Wacom Intuos 4 graphics tablet. Also, this is made completely in Photoshop CS6 (but the used techniques should easily be adaptable to other versions or even other programs). I marked every function I used with this program in *Cursive Letters*.





BACKGROUND TEXTURING

Fear of the Dark

Or - in this case - the common fear of the white blank page. Iron Maiden sure didn't had some painters in the band, otherwise this song would sound very different...

Anyway, I don't like to work on a blank page for this style of the map. The risk of miscalculating colors, hue, saturation, etc. is too big. Having a good basic tone in the direction you aim for is probably a good starting point.

In this case I used some textures. You can get textures everywhere, but you really should watch out for textures you are allowed to use on the project you work on. I often love to ask people where they get their textures - you can never have enough links.

If possible, don't use them as provided. This is a little additional step, but it's worth your time. Clash some textures together, smoothen out the borders, get rid of spots that are too dark, have no texture on them or just add some new layers (either

with *Overlay*, *Soft Light*, etc., whatever works...) and splatter some brush strokes with high *Scattering* and set it to 10% - 30%. This is no exact science, whatever works works. Keep in mind, that this is the basis, so don't get overboard with too much focus on the texture. It should support your painting, don't be the focal point. Using textures which you worked on is also a good way for other professionals to see something new. No one likes to see the same texture used over and over again.

In this case below, I used everything I previously mentioned. The part on the top right is intentionally smooth - this is the area where the desert will be.





DEFINING COASTLINES

Land, ho!

Drawing realistic coastlines is a topic often disputed and shown on this site, you should check out some of the amazing work and guidelines especially designed to help others. Sadly, this is an existing world I hadn't much influence in the crating process, so I just have to deal with the facts I got.

Some things you should remember are:

- Rivers broaden when others flow into them
- Rivers use the easiest way
- Rivers flow together, they normally don't split up

For this map I used some outlines on the continent. It is 100% black on *Multiply*. On the coasts I used in this order 90% black, 70% black, 50% black, 30% black and 10% black. You can hardly see the last one. I usually click with the *Command Key* holded on the layer image, selecting the continent. Then I use 8px steps on *Selection > Modify Selection > Expand / Contract*. Also, I save one of the selections (this time the 30% selection) to use it later as a *Clipping Mask* for the drawn-in waves.

The waves I used here are easy to make. Just draw a simple wave, copy it to the right, collapse the two layers, repeat. Repeat it often enough to have the whole screen covered in one line from left to right. Then start copying and collapsing it from the top to the bottom. If you have all that, use the previously saved *Clipping Mask* (filled in with white on *Multiply*). You can fill this clipping layer easily with the *Lock Transparency* layer option.

If you don't know how to create a *Clipping Layer*, this is one of the fundamentals worth the time getting into. For fast use: Click with *Command Key* pressed on the space between the two layers. The lower layer will be its mask.

I also outlined the rivers with *Stroke-Option* on the *Layer Style Selection*. Don't use the waves here, it would be too busy. Also - and this is very important - don't use the same texture on the sea and the water you use on the land. You create a very boring coast and also you don't help the viewer destinguishing between land and sea on first sight. You should give the water a new color (most times blue-ish or turquoise), depending on the map.





Run to the Hills

Okay, this is the last time I use an Iron Maiden song name as a headline, I promise! ;)

I drew one crackled line (100% black, *Brush Size* on *Pen Pressure*; drawing the ridge of the mountain) and then smoothened out the lines on the left and right of it. After you define a source or direction of light (which you should then use on the whole map) you can fill in the darker and lighter areas of the mountain. I drew beneath the lining layer with both *Opacity and Size on Pen Pressure*. First I used a bright neutral color to get the side with the light. Then I drew on a new layer beneath it some rough darker spots on the far side of the light. I also scattered around a lot with a different brush near the mountains beneath that.

To get the rigged look on the border of the paint, use one or two layers of 1px outline. You should make this outline by holding the *Command Key* and clicking on the layer picture. With the selection active, use *Edit > Stroke* with 1px and 100% black.

There are a lot of different techniques how to paint mountains, some of them are mentioned in other tutorials on this very site. I just covered the one I used in this particular piece here. Technically, you should go with the style that fits you best with your map and the feeling you want to achieve. This method here really takes some time and - sadly - there is no shortcut.



DEFINING THE FORESTY PLACES

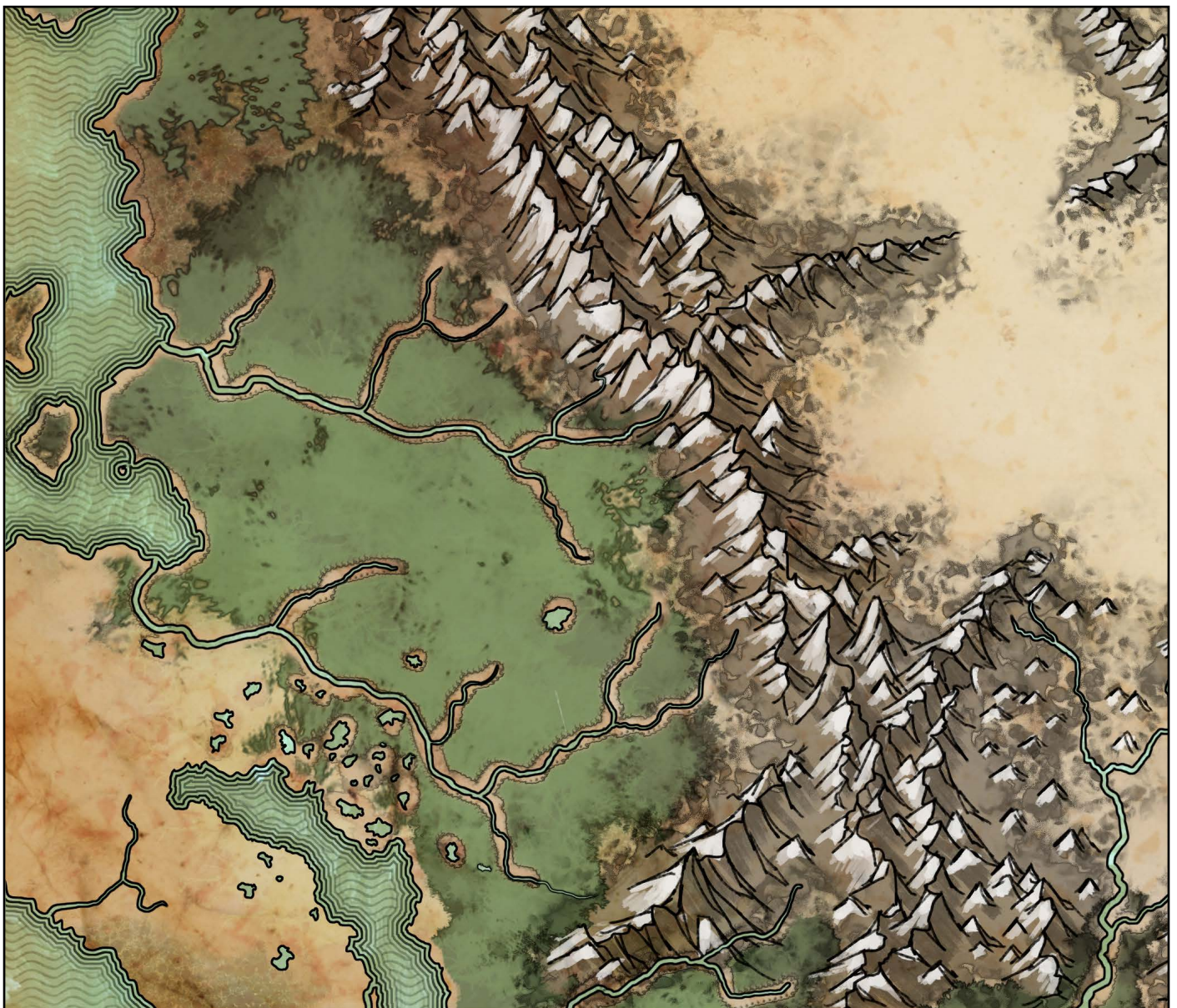
On the verge of the forest

I put some color in. A green-ish tone where the texture (say: the forest) will be. Be sure you largely use an opacity of 100% on *Pen Pressure* and try to use a brush with some natural edges. Foliage brushes or cloud shaped brushes worked well here, but don't restrict yourself to it. Just because it is forest it should not limit your choice of brushes to foliage brushes. Decide this based on the shape, not on the name of the brush - this is a general advice.

Try to avoid painting to close to rivers, seas, mountains or other landmarks. Also, if you got the shape you can *Lock Transparency* on the layer and paint just on what you just created with some different colors without risking to chance the form. After you have done that, follow up with the outline.

Again, don't use the layer style *Stroke*. To get this, use one or two layers of 1px outline as already mentioned on page 4. You should make this outline by holding the *Command Key* and clicking on the layer picture. With the selection active, use

Edit > Stroke with 1px and 100% black. The difference between this technique and just using *Stroke* on the layer is really big.



WORKING WITH STYROFOAM

Fun with Pebbles

This part also could easily be called ,how to deal with the horrors of styrofoam pebbles when uncarefully opening a package‘.

First step: Scan some styrofoam. You probably have parts of styrofoam lying around at home somewhere. If not, you can just use some textures of styrofoam. You find this anywhere, I used a texture provided by <http://www.cgtextures.com> (see below, just click on *Textures* > *Plastic* > *Styrofoam* there).

If you scan it yourself, you should try to get a smooth surface you can scan - otherwise you will have some darker spots you have to balance out manually. Try to get a good grid of pebbles - they are unregular, just as we need it. The texture below has been *Duplicated* and *Mirrored*. Sadly, the texture I used wasn't big enough for my purposes. Also, this has some dirty inclusions I'm happy to use, too.

,Do it yourself'-Method

If you scan yourself, you could try to get some watercolor with much water brushed on the styrofoam surface and just let it dry. It will naturally flow in the cracks and if it is dry you should be able to get a better scan with much more defined pebbles. I haven't tried this yet, but I imagine this could work. Let me know if you tried it and give me some feedback! ;)



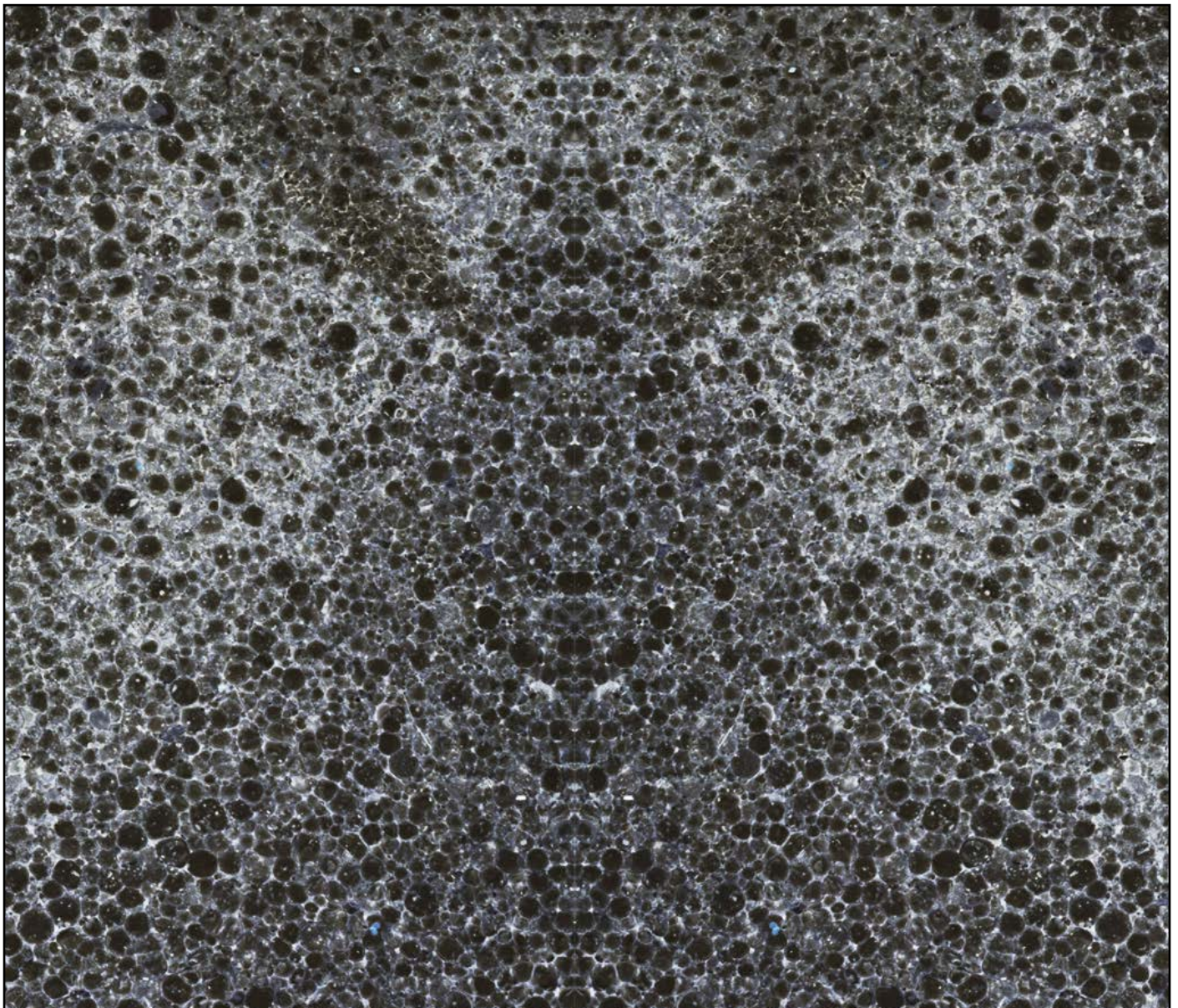
THE TOUCHING UP OF THE TEXTURE

It just got digital, b*tch! ;)

In this step I just inverted the colors. Black becomes white and vice versa. You can do this easily on the whole layer by clicking *Command + I* or by clicking *Adjustments > Invert*. Easy as that.

After this step I created an additional layer with all data on it (I guess its called *Collapse On New Layer*). You can do this by pressing *Command + Alt + Shift + E*. I set the layer on a lower *Opacity*, probably about 10% to 40%. Set the layer one on *Overlay*. Additionally you use a 3px to 5px *High Pass (Filters > Other Filters > High Pass)* on this layer to get it more sharpened and defined. Yes, the layer seems completely gray-ish, but that is absolutely what we want; 50% gray will work on this layer setting as neutral ;)

We will use this method later on page 13 again.

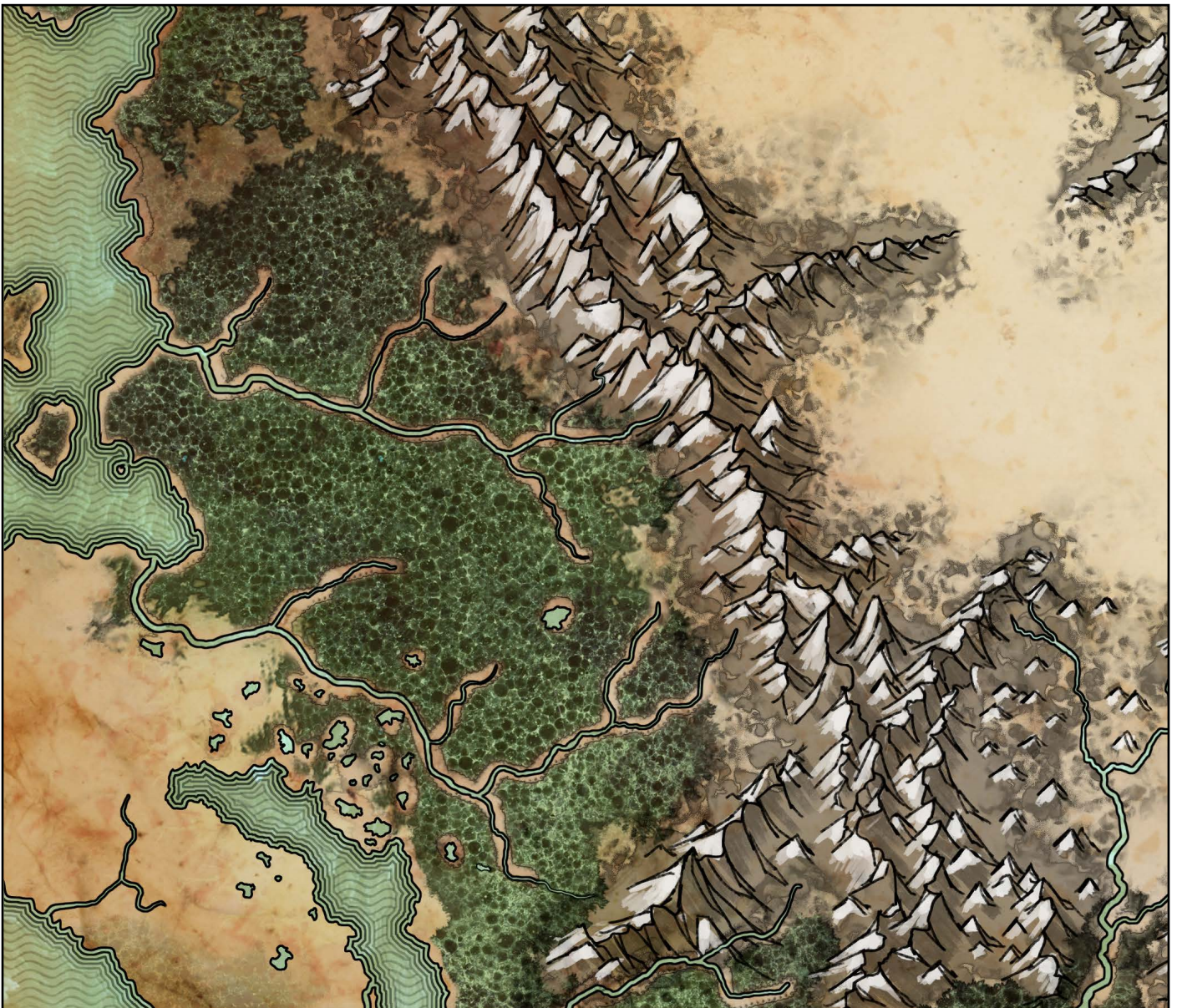


USING THE STYROFOAM-TEXTURE

Clash of the images

Not as exciting as other clashes, but at least more useful. I went with *Overlay* on this texture and try to get a decent *Opacity* that works - it should be about 80% to 100%, this layer is what we want!

I used the previously made layer mentioned on page 5 as a *Clipping Mask* (for *Clipping Layers* please refer to page 3). Voilà! You did it! It should look kind of similar to the picture below.

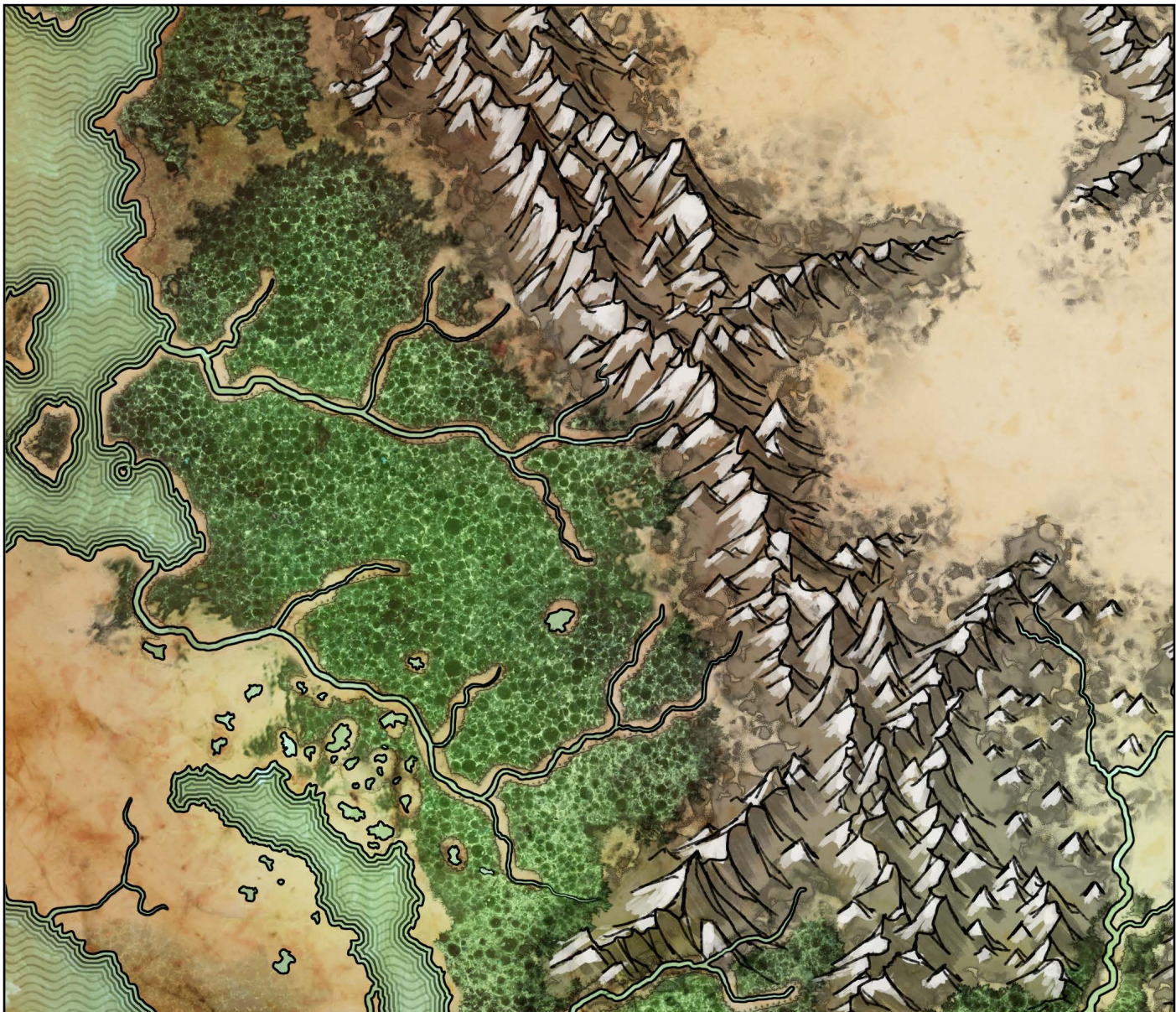




The Color Out of Space

Luckily it isn't that bad. The color your texture has can ruin what you have if you don't spend the time placing it correctly and touching it up to your needs should be an obvious step.

I use a very low opacity soft brush to paint over everything with a lighter green-ish tone on a Soft Light layer. You could highlight specific areas with this or just use it to brighten it a bit. This step should be done very carefully - not because it is difficult, but because people tend to overdo it. In my case, it may look strange at first glimpse, but this bright color works fine with the rest of the image in general.





From A to Z

There are many ways to do the lettering. Usually it is a good start to remember that this is usually one of the more important steps.

In this case I used a Font which fits the theme (Tales of the Thousand and One Nights / Arabian Nights), but familiar enough to the viewer that he can find everything he needs quickly. I used small icons on the cities - each one depicting some shape, building or fact which is important in this city - and an oasis with little settlements in the desert. I rounded the names of the mountains to give it a slight 'hilly' theme. Also you will notice that I used different colors to help the viewer understand what is named here.

I used a simple black 2px *Stroke* on the text layer and also used two *Outer Glows*. One with *Multiply* (black, 75%) and one with *Overlay* (black, 30%). You can use two styles when you put all the different text layers in a folder and use the second *Overlay*

on the folder itself in addition to the *Multiply* of the separate text layers. Place the text so the viewer can enjoy both the background and the text. Ideally, both support each other in color and style.



COLOR ADJUSTMENT & DETAILS

The devil is in the detail

Details often get overlooked, but they are important to give any map a distinct feeling. And you should go this extra mile, because maps are the probably most used illustrations in any book or game. In RPGs both the players and the game master will refer to the map and every description will reference your map. No pressure... ;)

There isn't that much what I did here and every map you make should at least have no point where something feels weird. In the picture below i painted in some green-ish spots, used a green tint in the lower bit and made some wadis (Arabic term traditionally referring to a dry (ephemeral) riverbed that contains water only during times of heavy rain or simply an intermittent stream), created river beds and a more orange / warm sand look on the desert side of the hills.



BORDER & GAUSSIAN BLUR

Don't know, everything went blurry...

Scaling is important, you probably should know where north is and often times it is good to have a border on your map. You could leave it out, but you should be careful why you do this. Since I'm showing you guys just a small portion of the map (I will upload the full-scale map as soon it is published or I'm allowed to) you don't see it in this part of the map. The boarder of the map might be more important than you would think - it's a place the eye can rest, it's catching the eye and helps you direct the viewer back to the map and it just seems more finished and overall ,closed'. It is hard to describe, just test both, step back and try to open yourself to it.

In this case I created an extra layer with all the data on it and used *Gaussian Blur* with about 5px (which you will find on *Filters > Blur > Gaussian Blur*). Then I just masked everything except for the border and other specific areas underneath my scaling and the compass (and in this case a little vignette down left).



SIGNATURE & A FINAL HIGHPASS

Finishing up

Be sure you finished the map. You have to do this step completely again if you change something below the two layers we are creating right here.

I always do two things in the end of every map. Creating two additional layers with all data on them (I guess its called *Collapse On New Layer*). You can do this by pressing *Command + Alt + Shift + E*. I set both layers on about 20% *Opacity*.

1st thing: Set the lower one on *Multiply*

2nd thing: Set the upper one on *Overlay*. In addition, use a 3px to 5px *High Pass (Filters > Other Filters > High Pass)* on this layer to get it more sharpened and defined. Quick reminder: The layer seems completely gray-ish, but that is absolutely what we want; 50% gray will work on this layer setting as neutral ;)

In this case I didn't use the 1st thing - this is kind of the option when you make b/w maps to get a more crisp look, but on this it

will ruin our color scheme.

Also, this is the best time to get your signature on the map. It's yours, you created it and no matter how you think about it (because there are always some places you just don't like or you aren't completely satisfied with) - you created it and you should be proud of your achievement.

The end of this Tutorial

I hope I can help you with this little tutorial, it actually was a lot of fun writing this down. Thank you guys for being the amazing community on the Cartographers Guild and all the best for more awe inspiring art. Keep up the good work!

Steffen Brand

20. January 2015, Hamburg
(Version 1.02)

