

Let me start out on this long journey by saying this.

“Please do not consider this a Tutorial on color mapping. I consider it a walkthrough of how I made 1 color map. Everyone does things differently and Photoshop is a program that is very broad. You can do the same things many different ways & get similar results. My way is much different than Soma’s way, which is much different than other colormapper’s processes. This is just MY WAY of doing it. Many people have asked me to produce something like this since I first made Morte Della Luna. I have always hesitated because I personally do not feel there’s anything very spectacular about my process. However I see new mapmakers release stuff every week that could have been so much better if they just would have spent a little more time or known a few simple “tricks” as I call them. So, as you read this keep in mind that I am not saying you should do things exactly like this. Use this as a guide. A “The Making Of” mapmaking special so to speak. Enjoy.

TOOLS

Morte Della Luna was color mapped on a Mac 7100 80mhz with a small amount of ram. Currently I work on a Mac Firewire Powerbook 500mhz with 300+mb of ram. I’m saying this to point out that you do not have to have a professional setup to make maps. Yes, you can have more layers to your files or you can produce different things, but most machines CAN make color maps if you really want to. Don’t use your specific machine as a crutch, excuse or a limitation to your creativity. I’ve done it and you can also.

Next, Do yourself a favor. Get Photoshop.

You can do a lot of the things I will be talking about with other programs. However I am not even going to attempt to translate what I’m about to explain for other programs. Why? Because this is the tool I use. This is the most mapmakers use. It’s also the industry standard tool and I’ve been working in it now for about 11 years. If you choose to use other tools you’ll need to find your way around that program on your own.

For this I will be using Photoshop 6. Only PS6. No fancy filters. No Bryce. Just one fantastic program and my personal archive of over 150mb of textures I have acquired over the years of image editing.

- I will make every attempt to provide the textures I use on this project for download in the original form I used them in. From there it’s up to you.

THE START

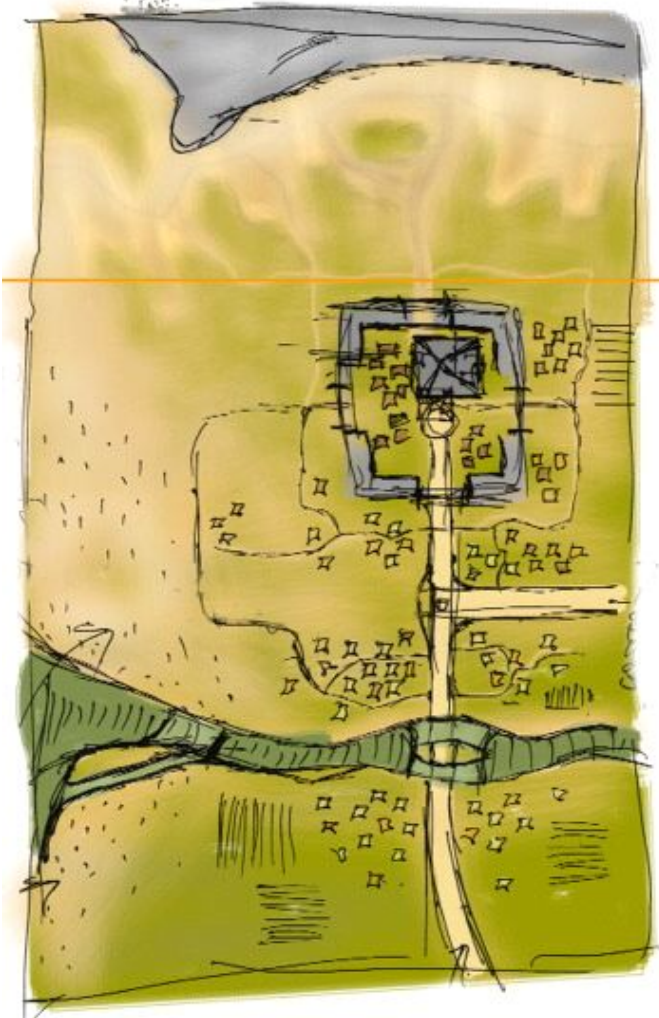
First, for me it always starts out as a sketch.

This sketch can be as detailed or as simple as you personally need it to be. However I urge you to really think about whether your idea meets two stipulations. 1. Is it relatively unique? 2. Is this something that other people will most likely enjoy playing? (Yes, we make maps for ourselves, but the end result is to play with others so don’t give me that OMG, I DID 4 ME crap).

My sketches usually start out as ideas in my head. Some may be there for months. Some may be spawned for specific purposes or needs. Ideas come very easy to me. Too easy sometimes. This is reflected by how many maps I’ve produced, but I’ve enjoyed producing each of them for their specific traits.

So on to the topic of this walkthrough. I will be making Level 8 from The Seventh God named “Fall of Markon”. Why? Because its only 1 of 4 remaining levels to produce, but mainly because it features a lot of different issues within one map.

If you look at the sketch you see a normal clem CrapMap as we call them in Creation. This color map/mesh will actually be used for 2 different levels so we will be producing a large color map compared to most. You see a few things. Grass to the right, a greenish river, desert starting at the top & a body of larger water on the left with dunes & such leading to the left of the custom model castle.



I see this level as perfect for this walkthrough because it has these different things. As with any large project like TSG it could change dramatically before release, but this will be the first implementation of it.

Lets start!!!

First I decide what the size of this map needs to be. You can see by the small cottages around castle that this sucker could easily be a monster. I've purposely made it a rectangular map so that the two uses of the level can progress vertically across it. I feel this is best use of space for this level as opposed to a more standard square map. To each his own.

So... lets open Photoshop. If you're not using PS6 you may not find the exact buttons or tools I reference to, but I assure you that PS5 also has everything you need to do this.

I'm going to assume that the people interested in this walk-thru have had some basic mapmaking attempts & knowledge. I'm not going to go through the extreme basics and am going to use some mapmakers terms and such as I progress. Most likely with little explanation.

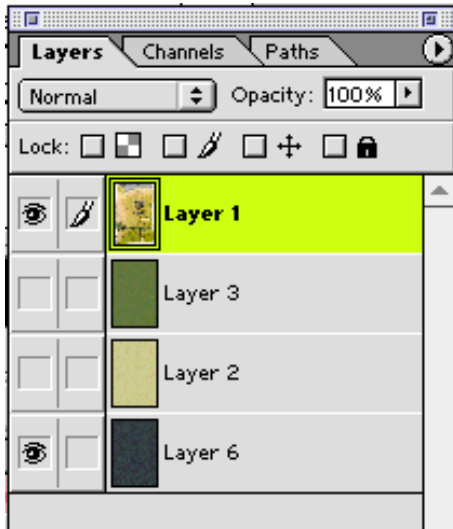
I've decided that this map needs to be a 6 x 9 map (take each x's 256), which is 1536 x 2304 pixels. Take your sketch & paste it into this new document. Now command-T to transform and resize your sketch to the size of map. Yes, it's somewhat fuzzy, but that's fine. This is only to guide you as needed as we progress.

Now we need some textures. As I stated I'm going to provide the original textures that I am using for this map. I will not however be providing the revised textures as they appear in the final product. Why? As a mapmaker you need to learn to deal with textures & make them adapt to your vision of what you want for each project. I personally do not feel that using pre-done textures constantly helps the identity of your map. It is only easier to do it that way and I can already see the slews of maps that have been released where it's obvious they are using Soma's Mapmaker Food texture sets. The textures are fantastic, but maps are all starting to look the same by using the same texture sets. Just personal choice on my part.

Start by making a new layer. Then open the file WaterTexture.jpg. I will be basing my water on this texture, however I'll be messing with it quit a bit. This is just the base. Now... select all of the water texture and then choose Edit from menu bar, then Define Pattern. This puts the Pattern you just selected into memory for later use. Now close the water file and go back to your map file that has the blank layer. Select that layer & now say Edit-Fill and from the Popup choose Use: Pattern then say OK. Now your layer is filled with that Water Texture. You'll notice that there is some repeating of the pattern that is noticeable. You can work with that however you see fit. Personally I make all my textures Tile able

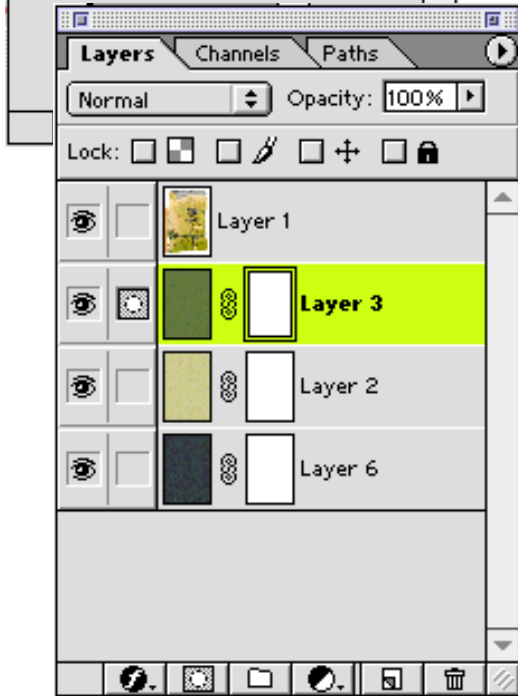
before using them, but that is process is talked of by other mapmakers already. I'll possibly address that in another tutorial.

So, you have an expanse of water the same size as your entire color map. Good. Now we're going to hid that layer by clicking on the eyeball in the layers palette. Ignore that layer for now. Make a new layer and we're going to do the same process for the provided textures GreenTexture.jpg on a layer and also for Sand.jpg on a layer. Follow the same process as we used for the Water layer.



Done? Ok. So now we have a Photoshop file that has a Sketch on a layer and three other layers filled with solid textures. Doesn't look like anything yet does it? That's because all these decisions & preparations will make the actual process move along quite quickly once we start on the actual mapping process. You'll also find out some things that will most likely go against what many others have told you is the best way to make OMG, MAPZ DAT ROX.

Now, if you look in this screenshot you see Photoshop layers and layer tools at the bottom. I want you to click on the water layer and then click on the second bottom at bottom which Adds a Mask. A Mask? What is a Mask? A Mask is what will make your mapmaking process sooooo much easier & also allow you an extreme amount of control. As well as the ability to add & remove parts of each texture type without actually altering the texture at all. If you already use Layer masks you're sitting there grinning your ass off. If you haven't you're about to have a religious experience regarding mapmaking. J



Just for efficiency's sake add a Layer Mask to each of the other 2 layers. We'll use them here in a bit. Your layers palette should now look similar to this.

Notice that when you click on the texture you get a paintbrush icon, but when you click on the mask you get a mask icon. It's important to keep those icons in mind. It tells you what you are working on. Remember that.

Why this is important is as follows.

Click on the grass texture on the layer palette so that you see the Paintbrush icon. Now click on the Mask on that same layer so that you get the mask icon. Now I want you to hide the Sketch layer by clicking on the eyeball so that you see the entire grass texture filling



your window. Now select the Paintbrush Tool from the Tools palette and set your Foreground color to Black as is shown here. Now for a religious experience if you haven't used masks before. Take your airbrush tool and paint squiggly lines around on your screen. OMG, I DELETZ MY TEXTURE!!!!

No... you didn't. You MASKED your texture. If you look at the layer palette you'll see that your mask now has black squiggles on it that

matches what is MISSING from your texture. AHAAA you might say!!!! Now change your Foreground color to White & paint again over the same area that's missing. OMG, IT IZ BACKzor!!! See??? The glory of Layer masks is that you can effectively add and delete textures to parts of your maps without EVER effecting the layer texture itself. If you fuxor up you merely switch colors and paint back in what you deleted. VooDoo Clem Magic maybe... or possible just learning some of what Photoshop is actually capable of beyond painting grass green & blurring water. I Quote: " RTFM-Read the farging manual ".

So... now that we have this new knowledge lets make some rough parts of this map shall we? K!

I'm going to move the Sand layer to the bottom of the list & leave it as is. Nothing masked on it. Then I'm going to make all of the water layer visually disappear by simply changing my background color to black, clicking on the layer mask of the water layer, selecting all and then pressing the ever dangerous Delete key. Poof.. all the waters gone. Not really gone, but just masked out entirely so it doesn't show. So now you see Sand. Lots & Lots of sand. Now I click on my Top layer, which is the sketch & set its Opacity slider at the top of the Layers palette to about ooooooooh 20% or so. Just to let you see where you roughly need to be painting in water to match your sketch. Then select your water layer again which is now the 2nd from bottom later... select the Paintbrush tool... set your Foreground color to White... click on the water layers Layer mask and then start painting onto the Big window with your paintbrush. Anything you paint should be appearing as water. Wow.. is it really this easy? Yup, the basics are. Already you can see the possibilities. What you now have on your screen probably looks better than some maps you've been suckered into downloading because someone says it is OMG, IZ SEXY CMAP!!!! J

Here's what I have at this point. Notice I am already taking liberties with the original design sketch -⚡

With this the initial blocking in of water is done. We'll deal with Reflection Maps & such later. Now we'll block in the basic grass texture on a layer above the Water. Use the same thinking as with the water, but with the grass you can get into issues of Opacity in your brushes & even custom brushes if you've ever wondered how people get some of the effects they do on their maps.

Custom Brushes? Yup. Basically in Photoshop you have the ability to use small images as individual brushes. Cobblestone, Vines, random textures & many effects can be gotten by simply making & using the right Photoshop brush. There's many sets of PS Brushes out there on the web if you know where to look & track them down. Note though: Morte & many, many of my early maps were produced with nothing but the standard shipping Photoshop brushes. If from the brushes palette if you click on the little arrow & say import then track down your Photoshop Goodies folder you'll find that there's some initial different ones there. Those are the ones used on Morte & others of my early maps. Enjoy.

Ok, back to mapping.

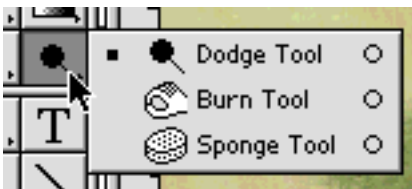
I've blocked in the basic grass areas using the same process as I did for the water. However for this I used a custom brush & an Opacity of about 50-70% which allows me to start getting some different visual levels of grass & starting to build some depth into the map even though we're still just blocking in color. You can see the result to the right of the grass being blocked in.



I would like to say that writing this Walkthrough greatly interrupts my normal process. Normally I do many of these steps concurrently & do not necessarily stop to think about what comes next or how do I talk about this. I'm going to lead through these early steps then I'm going to spend some "quality time" with the map doing things that I personally do that are impossible to document. It varies greatly from map to map & often just kind of "happens".

Now things will start jumping around somewhat. I'm going to attempt to document as much of this as it happens as possible. Hopefully by seeing in progress snapshots & such you can start to see how I build, layer & detail different layers of the textures we've already blocked in.

The water always drives me nuts until it looks good, so I'm going to get that out of the way to a certain extent right now. If you select the Water layer & then click onto the Texture on the layer itself you will not be working with the Mask any longer. You will now be working on the texture itself. If you remember you can tell what part of the layer you're working on by the Paintbrush icon or Mask icon that shows to the right of the Layer in the layer palette. Now that you have the Layer texture it self activated we will start making the water look more like OMG, CLEM WATER J. Now listen here sissies... I'm not going to walk you through how to do My water. OH NO YOU MAY SAY! OH YES I SAY! It's not my intention to teach every mapmaker exactly how I do things. It's my intention to give you the knowledge you need to develop your own processes better. A mapmakers personal processes is what makes each mapmakers work unique. It's called Personal Style & a big part of that is how you personal make the map. Anyhow... now that you're working on the texture itself you need to be careful. Remember that Undo is your friend & also get acquainted with the History Palette which allows you to jump backwards a large number of strokes or things done which is more powerful than Undo.



I'll first select the Dodge tool. These tools function very similarly to processes used by photographers in dark rooms. Yes, it even helps to have photography classes when working in Photoshop. A majority of thing you do in Photoshop all have ties to real world practices by Artists. These tools & abilities didn't just come about when computers were developed. Photoshop is merely a great tool to do on a computer what

people always used to do manually via photography, Airbrush &/or hand painting. Yes, that would really suck, and it was a major pain. Anyhow, select the dodge tool. Use settings for the dodge tool of MidTones & an Exposure of about 25% depending on how greatly you want to lighten the midtones. Select a fairly large feathered or custom brush & run the brush around the edges of your water. You should see it start to lighten before your eyes. This gives the effect of shallower water. We haven't given any transparency effect to the water yet, but that will follow shortly. I usually either start with a darker colored water & lighten the shallow parts or start with a lighter water & darken the deep parts via the Burn Tool. Yup, it works the opposite of the Dodge. Dodge lightens and Burn Darkens. You have choices if each tool effects Shadows, Midtones or Highlights, but that is fairly logical what they do. Just play around till your happy with the effect.

Often I will use a custom brush that looks like reflections on water to add ripples & such around the edges, but that can be done a lot of different ways. Again... experiment & don't rush it.

If you've ever been around the ocean & paid attention you'd notice that the further in water comes the lighter it becomes & the very slight edge is usually quite light if there's any waves at all. That is what I'm reproducing here. Also if you paid attention you'd notice that Sand becomes darker at the waters edges the closer it gets to the water. So what you have at the edges of water is a fairly high contrast edge between darker sand & brighter water. This edge defines where the water stops & sand starts. One BIG problem I have with most maps is that the mapmakers simply plo down some water & run a blur filter on it in Photoshop & poof... call it water. That's fine. Works for most people. However I don't feel that's very realistic at all. Usually what you end up with is No Clue where the waterline really is & later when you try to make a reflection map your life is hell because even you aren't sure where the water ends. Another big problem with doing it this way is the issue of Indexing. When your map is finished you have to take this beautiful 32-bit image & cram it down to a measly 8-bit 240 colors. Blech. However... that's the only

way. So, lets work WITH the process rather than being a stubborn S.O.B. & expecting some kind of miracle come indexing time.

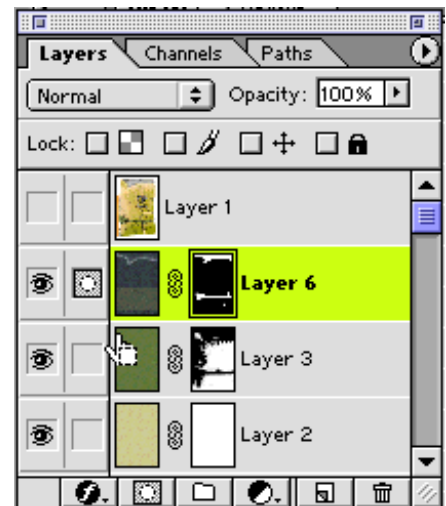
When you blur edges you're essentially creating hundreds if not thousands of new colors into your color palette. When you try indexing your map those thousands of new colors all get slammed relentlessly down into 240 colors. Something has to go & it's usually those light, pale, pastel colors as well as deep dark moody colors. Why? There's less colors in the spectrum in those ranges. Photoshop has to make decisions as to what to keep & what to toss. THAT is where you get all that Nasty Assed banding and blocks of ugly flat color that shows up in so many color maps. However, there are ways around this. If you work smartly & creatively you can save some colors here & make room for a better Index later.

I've worked on the water some & here is what I've got at this point. I haven't worked on the sand at all, so ignore that the sand does not get darker as it comes to the water. This works for me at this point. I may do some further work on it, but for now its ok by any standards. Now lets give that water some transparency while still retaining those edges that I keep referring to. OK?



The Water Highlights and reflections were produced on the Texture itself. Those are permanent. I do that after I'm happy with the layout of the water. Now we go back to the Water Layer Mask so click on the Mask to get the mask icon.

Here's the way my Palette looks right now. You can see on the Masks where you have painted the texture in or out. Another trick you can do to Really see what has been masked is to Option-Click on the Mask. OMG, ITS BLACK & WHYT!!! That is what your mask actually looks like. Now if you really want to get funky you can Shift-Click on the mask after Option-Clicking. The mask should get a red X on it. Once you see a red X on the Mask, then click on the water texture beside it & you can see your full layer of texture with NO Masking. Kind of neat to see the changes you've made to the water to make it shallow & such. Just thought you might like to see that. So back to adding transparency. Option-Click twice on the Mask to get it back to where it shows normally with the sand & masked water. Wow... lookin' sexy already.



Now. Take the Paintbrush tool & select a blurred brush of about 100. Set your Foreground color to Black because were going to subtly paint out the edges of the water to give a transparent effect. NOTE: by doing it this way we are not blurring ANYTHING. The nice edge we made is still there. We are only making it somewhat transparent. It's a technical difference, but the difference in visual quality is immense in the final product.

So take your Paintbrush & start scrubbing back & forth along the edges. You'll see it starting to get transparent, or the sand showing through. How much you use is up to you. If it is working to fast or slow for you just change the Opacity setting for the Paintbrush tool. When you get the water how you want it stop & look at your handiwork. Here's where I stopped.



Now that the water is temporarily good enough I'll turn my attention to some of the sand.

As I stated before I'm not going to walk you through complete specifics, but here is another trick that I use a lot when color mapping. First open the provided texture BrownBag.jpg. NOTE: I do not work from jpeg images unless absolutely necessary. Jpegs are a lossy format, which means when you save as a jpeg tiny minute details get thrown away in order to make the file smaller. Pict files are much larger, but do not throw away anything when saving. I tend to keep all my personal textures in Pict format if possible.

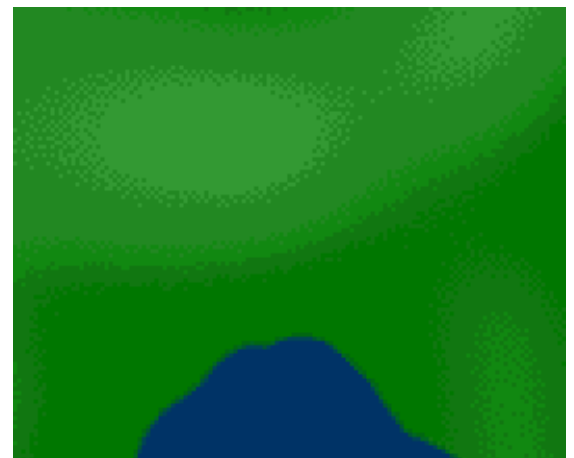
Now that BrownBag.jpg is open I want you to select all of that texture (Cmd-A) then go up to the menu bar to Edit, then Define Pattern. This will set brownbag.jpg as the set pattern for PS to use. Next Option-click on the Clone Stamp tool, which turns it into the Pattern Stamp tool. Now any pattern you have defined will be placed down when using the Stamp tool. (PS6 allows you to select from a menu of saved patterns, but PS5 does not so I'm speaking generally here) Now select a brush of your choice to use with the Stamp tool as well as an Opacity of about 50% or less initially. Now start using the stamp tool on a New Layer on top of the sand layer. You can see that you are essentially painting using this new pattern. This process allows you to elegantly add textures & such on top of other textures. It's similar to masking but I use this way to specifically detail the different areas of a map. In this case the sand. I'm going to go ahead & work with my sand some & we'll see what I come up with.



Here's the section that I've been highlighting throughout this part with the sand & bank edges more to my liking. I can't really finish off the edges of the sand underneath the grass until I work on the grass & get it more to a point of being finished at least initially.

Grass. Almost every map has it and there is yet one map, which seems to capture the essence of grass looking good in-game and that map is Gimble. There's a few things I've found from doing many color maps. One is that usually a mapmaker tends to get overly wild with texture when trying to make grass. Usually this ends up in grass looking like a mass of confusing rubble that is actually quite distracting in-game. The other contrast is when a mapmaker lays down a solid expanse of flat green with nothing breaking it up what-so-ever which also looks like ass when it is indexed and viewed in-game. I've found a couple things useful and hopefully will make sense regarding grass building.

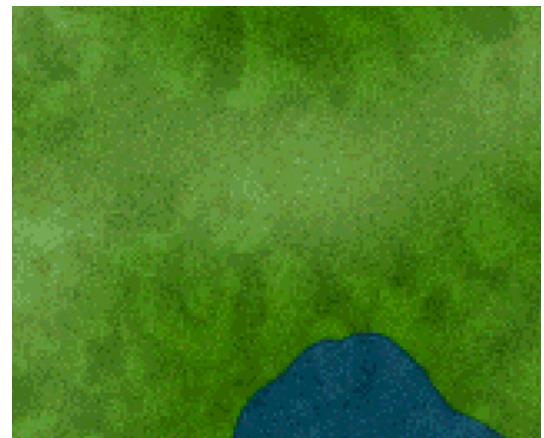
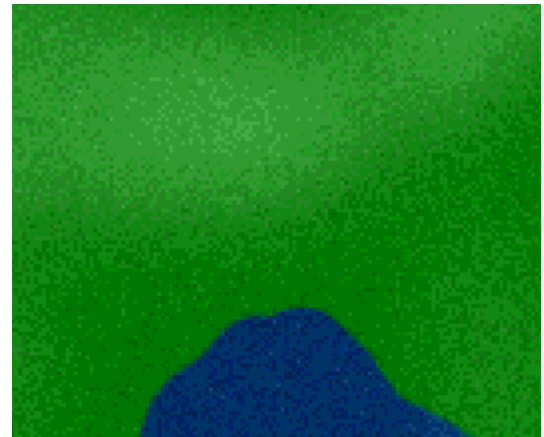
First regarding flat expanses of color. How many times have you ignored your common sense and downloaded a map stating that the color map is beautiful and Gimble-like only to expand & find something like this????



We all have. We all know better and we all think the same thing. OMG, IZ DIZ GUY A COMPLEET FOO???? He may be, but the commonality of this happening allows me to address a point. Here is a snapshot of a section of Gimble's grass. Any mapmaker with Loathing has the ability to export and study precisely how other maps are made. Most of the time however mapmakers simply rely on their memory and never really investigate ways to duplicate what actually make a map visually great. I've spent a lot of time doing this. In fact I have a Library of about 100 color maps both online and printed out to a Color Copier to reference when I'm trying to get different effects and want to refer to what works and what I feel is less than successful.



One big thing you notice is that there is no banding in the Gimble color map. Banding... ugh... the mapmakers indexing bane. Sometimes areas of a map just seem Set on being solid colors no matter what you do. Want a quick answer? NOISE. Lets look at our SOOK color map after applying a Noise filter to it at setting of about 2.5 Gaussian Noise set to be Monochromatic. Which means the noise will stay within the Hue of the area it is being added to and not be Neon pink spots in a green grass. I know you've all tried that... don't try to act like you haven't. Now I'll index that same Sook color map having only applied noise to it. GREAT GOOGLEY MOOGLEY... look at the difference!!!! Now granted there is no "artistic style" in the Sook one, but you can see that it now has a lot more going for it than just Green. Now, lets take it a set further. I'll take a grayscale image of some random texture like.... Ohhhh.... Open the sidewalk.jpg image in the provided textures. Now I define that grayscale image as a Pattern as we did when working with the sand earlier. Now I go to the Pattern Stamp tool once again and make a new layer. Now set the pattern stamp tool to about ohhh 20% or so & start painting onto that new layer. Looks like Ass again doesn't it??? Yup... I agree. However, if you go to your layers palette and set the new layer with the Grayscale painting on it to Overlay I think you will notice a dramatic difference. Now I wouldn't necessarily use this exact texture to capture the Gimble feel, but I think I get my point across and can already sense the "lights" going off over your heads. OMG, CLEM CHETZ. Damn straight. Not cheating... just once again using a program the way it actually is designed to be used coupled with a good amount of research and trial and error and testing different processes. Now I never tried here to exactly knock off Gimble I was only showing the process to arm you with that ability also.



Now... we'll take this new ability and the others we've talked about thus far and work on our grass some. How I'm going to approach this part is to go ahead and do my grass work and then talk through what I did to achieve it now that each of you is starting to understand the different techniques I use. And honestly... this is about all of them. There's a few specific tricks left, but using these main techniques will make you a much better color mapper. If you want to be and put the time into trying to be. And I'm not talking about 3-4 hours... I'm talking weeks and many, many efforts.

Where a good part of this map is a beach or barren type terrain I want my grass to be fairly sparse or at least in certain areas. So I used a combination of Layer Masking and the Pattern Stamp tool to get the effect for grass you see here. Not really a whole lot more to say specifically about this part other than we're starting to get to areas where it becomes as much "personal taste" as it is technique. Mastery of



the techniques comes only from using them a lot and pushing yourself to do better than your last project. Another thing that is very important is to learn to be honest with your self. "You Know" in your heart if something you've produced is good or not. You also know if something your trying to pull-off visually is working or is not working. Start out with things that you truly think you can master. This will bolster your confidence and make you feel good about starting your next project.

There is absolutely nothing wrong with a basic Gimble-like Water/Grass/Mud or Dirt map if it is constructed well and is complementary to the Displacement you are putting it on, or in my case the Displacement you build underneath the color map.

I feel very strongly that a successful map is a much a marrying of both Displacement & color map as anything. Of course the layout and idea are paramount to the maps success, but if the color map and displacement do not Jive with each other very very well the map will feel disjointed and players will find it awkward and confusing when playing it. Myth is a real time strategy game & the player reacts directly to things he sees. As a mapmaker you must provide players with visual clues for things like where they can go, water edges, terrain types, etc. If you clearly define the differences between these things and they visually make sense your map will play a lot smoother both visually and logically to players. (just my thoughts)

Ok, I've spent some time getting MY grass to a point where I like it. It probably will get some additional attention, but for now I'm considering it done. Here's a shot of the Markon courtyard.

You'll notice that not only have I been adding some highlighting to the grass, but I also have altered the color of the grass in places to represent darker or sun burnt grass where the soil in Markon is not very rich.

My, my... path's also have seemed to show up. I do these differently on about all of my maps. This one I handled by making a new layer & then using the Pattern Stamp tool using my Tablet & a small brush.

Now, I think I'm about ready to spend some time working on the Reflection Map. Water can seem very daunting to mapmakers at first. When I first started I purposely stayed away from water until I got to a point of feeling confident of being able to handle it right. I suggest that the primary thing you concentrate on is getting your reflection map to match your water as precisely as possible. Again, this is a Playability issue for people who download your map. When water "looks" like water yet isn't water players tend to go off in a fickle tizzy fit that seems fairly common in the myth community. Usually you'll find that it is the ones who do the littlest who critique and complain about your work the loudest. Personally I do not care when an experienced mapmaker gives input or makes statements about my work. If his work is to the level of mine or higher I see no problem with it. What I do not like is when people decide to appoint themselves as Myth Critic's extraordinaire and proceed to tell the entire myth community what is exactly wrong with everything released. If someone cannot put-up then it is my feeling that they should shut-up.



Because 90% of what comes out of this kind of critiques mouth is not “Right vs. Wrong” issues, but instead their personal taste that they have decided to try to convince the Myth Community is the Right way for things to be done. There are Right & Wrong issues with the Technical aspects of Myth Mapmaking, but when it comes to color mapping the majority of it is personal taste. I get a lot of emails from mapmakers asking me to critique their color maps. Before I do anything I ask them very clearly if they truly want my opinions. If they say yes I usually give them a detailed synopsis as what I personally feel is good about their work & what I feel could be improved upon.

Hopefully this Walk-Thru will empower some of these mapmakers with some more tools to further their skills.

Reflection Maps

Ah yes... the dreaded reflection map. How many times have I heard a mapmaker tell someone else on a forum “just select you water, make a new layer & fill it with black. EHHHHH!!!! Though not technically wrong, the resulting reflection map will look like a jagged quilt that doesn’t match your water worth a crap. As with Terrain Maps in Loathing I tend to view the Reflection Map as something that is some of the most value time to dedicate to your map. Here’s how I do mine.



This is the Loathing grid pattern. It represents the mesh structure that Displacements are built from. Displacements are what make up the hills, valleys, rivers and any raise or lowering of elevation on a Myth map. This grid pattern also comes into play when you start making a reflection map.

A black filled cell represents water in a reflection map, but in order for Loathing to recognize those cells as reflective the entire cell must be filled. If the entire cell is not filled when you import your Reflection Map Loathing will simply consider it NOT to be reflective and that chunk of water will not be reflective. Plain and Simple. No Voodoo what-so-ever. Now... how do we get around that??? It’s very easy.

Make a new layer above your water. Personally I make it the very top layer of the document. Now, open the Loathing Grid pattern I provide with this Walkthrough. Select all of the grid pattern & Define Pattern. Now close that grid file & go to the top blank layer of your color map file. Select Edit/Fill/Pattern and fill that layer with the grid pattern. That’s a nasty pattern isn’t it and you can’t see a damn thing now either. Easy to fix. In your layers palette, set the grid pattern layer as Hard Light with an Opacity of about 20% or so. Again, this is just my personal way of doing it. Now double click on your magnifying glass tool and then click on your color map with the magnifying glass two or three times depending on how close you want to work. I tend to work fairly close in this phase. Here is what I’m looking at. When I built the water layers I also roughly followed this same grid pattern. By doing this you can even better ensure that your Reflection map will a groovy sexy one and also make this process of making a Reflection Map much easier.

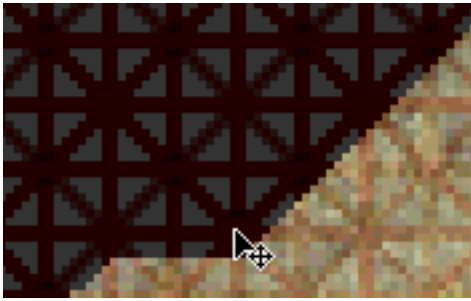


Now, I’ll demonstrate what works & doesn’t work.



As you can see to the left I have filled some cells with black. I do this using the Pencil tool and a solid brush to insure that I’m only working with black and no grays.

The problem with what is to the left is that my reflection map is not going to match my water. All of the water that you see Above is not being filled by black cells. When this happens you end up with a splotchy and jagged reflection map.



Now look at a correctly produced reflection map.

Look at this image. See how I “over-painted” the grid pattern so that every cell that covers water actually has black on the Outside of it? When I import this color map it will be perfect and just as I want it. No guess-work and no surprises.

You over-paint all of your water areas this way. When done fill any non-water areas on the layer with pure white.

Now say save your Photoshop file, then say Save a Copy As and save just the black and white layer as a pict for mac or BMP for PC's. You then import this reflection map into Loathing and I think you'll be pleased with the results. The closer you follow the grid pattern when building/laying out your water initially the closer you'll be able to follow the grid pattern when making your reflection map and obviously the closer your reflection map will match your water when in Loathing.

Multi Level Water

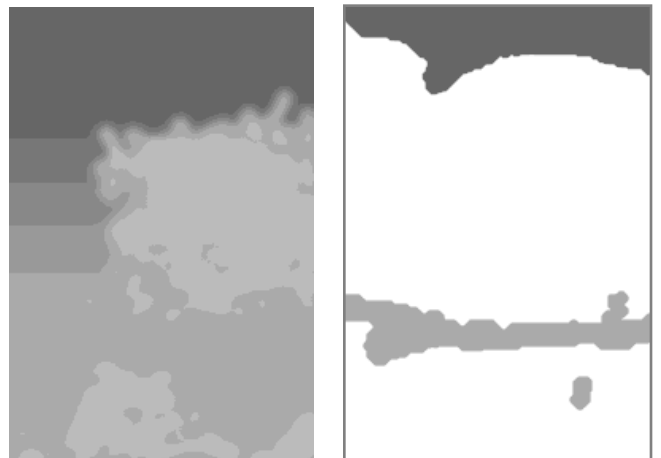
This is something that has been used some by mapmakers but not a lot. Modest has made good use of it and some others have had fun with these abilities also. As with this entire walkthrough, here's how “I” do it.

After doing this several times I've found that it's a lot easier to manage if you build almost all of your displacement for the map/mesh before you import the reflection map. Why? When you import the reflection map all of your water is slammed onto one level that you “can” move up and down but overall it's a bit awkward to work with. So, based on that lets NOT import the reflection map yet.

I'm not going to talk directly about Markon here, but instead just about any map in general.

Start a new map or use an existing map using what we've talked about already. Using your knowledge from other tutorials build a displacement that fits your maps identity & has the different levels of what “will be” water on different levels of your map. NOTE: Make sure ponds, lakes, etc are on a flat level. Once you've got your displacement where you like it I export the displacement map from Loathing. Bring that displacement map into Photoshop onto a new layer of you color map file. Now... here's how multiple level water works. In your reflection map you painted solid black & solid white. You DO NOT do this for the Water Levels image. The levels of water are defined in the Displacement area of Loathing & not in the Reflection Map area. I see multiple water levels as an extension of the displacement map. For water to be the same level as your displacement you need to Over paint the grid pattern in those areas of your Water Levels layer with the same color of gray from that section of your maps displacement that you pasted in. A lighter gray makes your water higher, a darker is lower. A gradient from a dark to a light will make your water sloped. Yes, sloped. Yes, you could make a sloped river or rapids running down a map, but there are subtleties to this that can be a challenge. How far you take this process is up to you, but will take some practice.

Here are how the Displacement and water levels for the Markon level look. Just look at the displacement shades of gray & the shades of gray of the water. Once you get that figured out and making sense it really isn't tough at all. Just make sure you Over paint your water areas quite a bit. If a section of Reflection map that is to be multiple levels is not completely filled in the Water Levels image when you import it you get some very nasty Spikes & Jaggies around the edges of your water. Yes, you will see this most likely, but just be prepared to fix it or recognize what it is when it happens. The only way to fix it is to alter your Water Levels image & re-import the fixed one. Enjoy this part.



Indexing your initial Color map

What? You can control indexing? Yes, & here's how.

First let me introduce you to the Victim of this Tutorial. We're calling it Vertigo & it will be a large Team Map released with The Seventh God.

The small marquee'd area will be the trouble area we will be dealing with in this tutorial.

Any mapmaker knows that you spend a lot of time building what you feel is a great color map only to have it Ruined when you index it to 240 colors. I've been through it, but through a trick I discovered when dealing with Index Colors for multimedia projects you can work wonders.

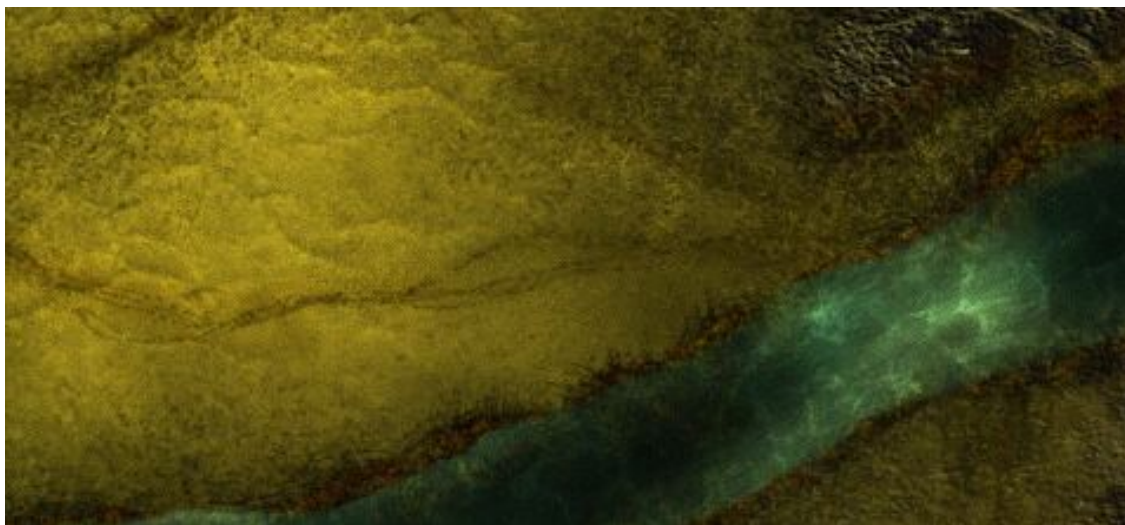
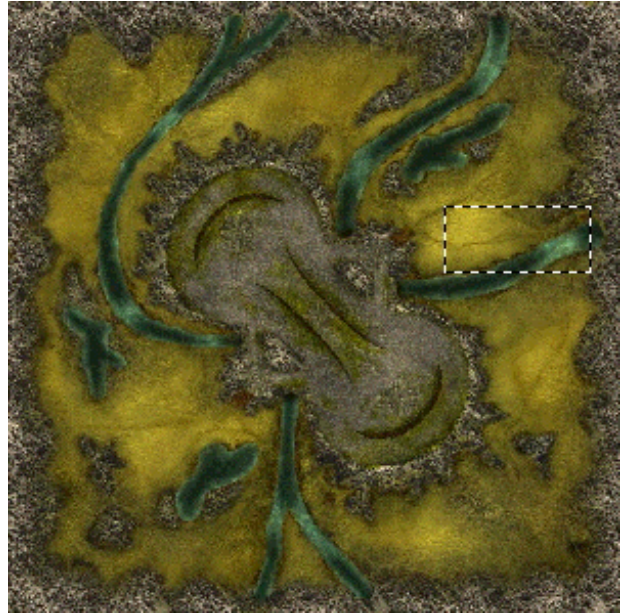
First, you should still try to keep the number of Unique colors down when building your color maps (cmaps). Normally if you have a blue water, a green grass, a nice tan sand & Gray Mountains you're really starting to push it. It's better usually to try to work out of the same area of palette rather than picking wildly opposing colors.

Why? When you index a map Photoshop takes your 24 bit RGB image & reduces it to 240 colors. That process leaves you with only 240 colors to make up a natural looking landscape. When you use colors that are from the same area of the palette (Tans, Browns... Blues, Grays... etc) it allows these indexed colors to crossover & be used in other areas than just Grass or Hills. When your colors are wildly varied these indexed colors are more apt to keep to their own areas & not be able to crossover. This is when you start to see "Banding" in your color maps.

Banding is when there is a wide jump from one color to the next & in Myth that means you can see those nasty blocks of color when your playing the game. One way to help out with Extremely flat looking color is to simply add some Noise to your color map to break up any solid blocks of color that may exist. I use the noise filter... Gaussian, Monochromatic & set to about 3 or 4 at most. This does nothing more than keeps the indexing from deciding that this is all the same color & thus turning it to solid which looks like crap in Myth. That is little tip 1.

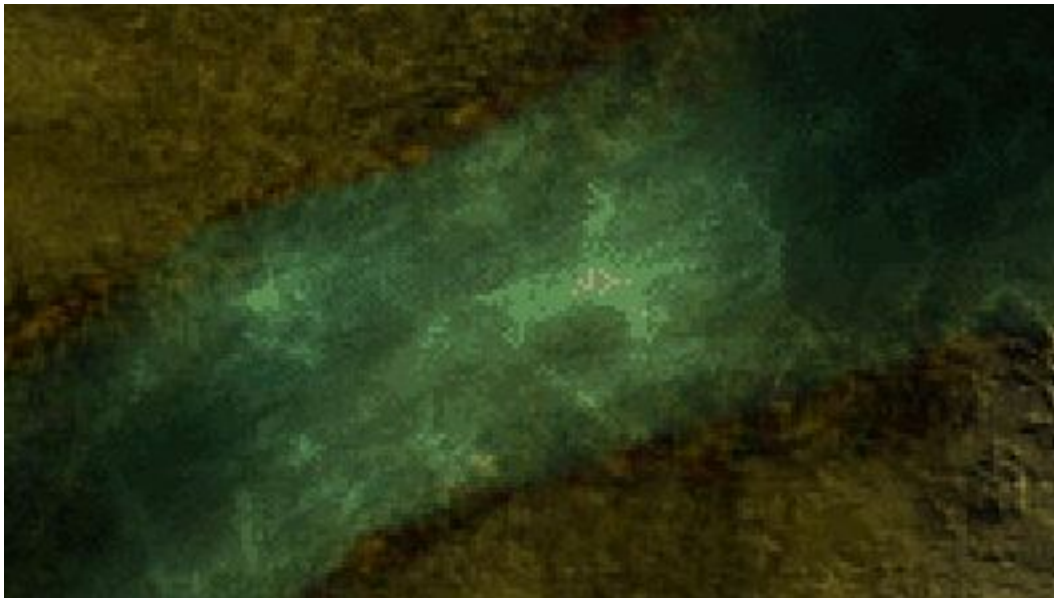
Now for the more in-depth stuff.

Here is the Marquee'd section from the above color map up close.



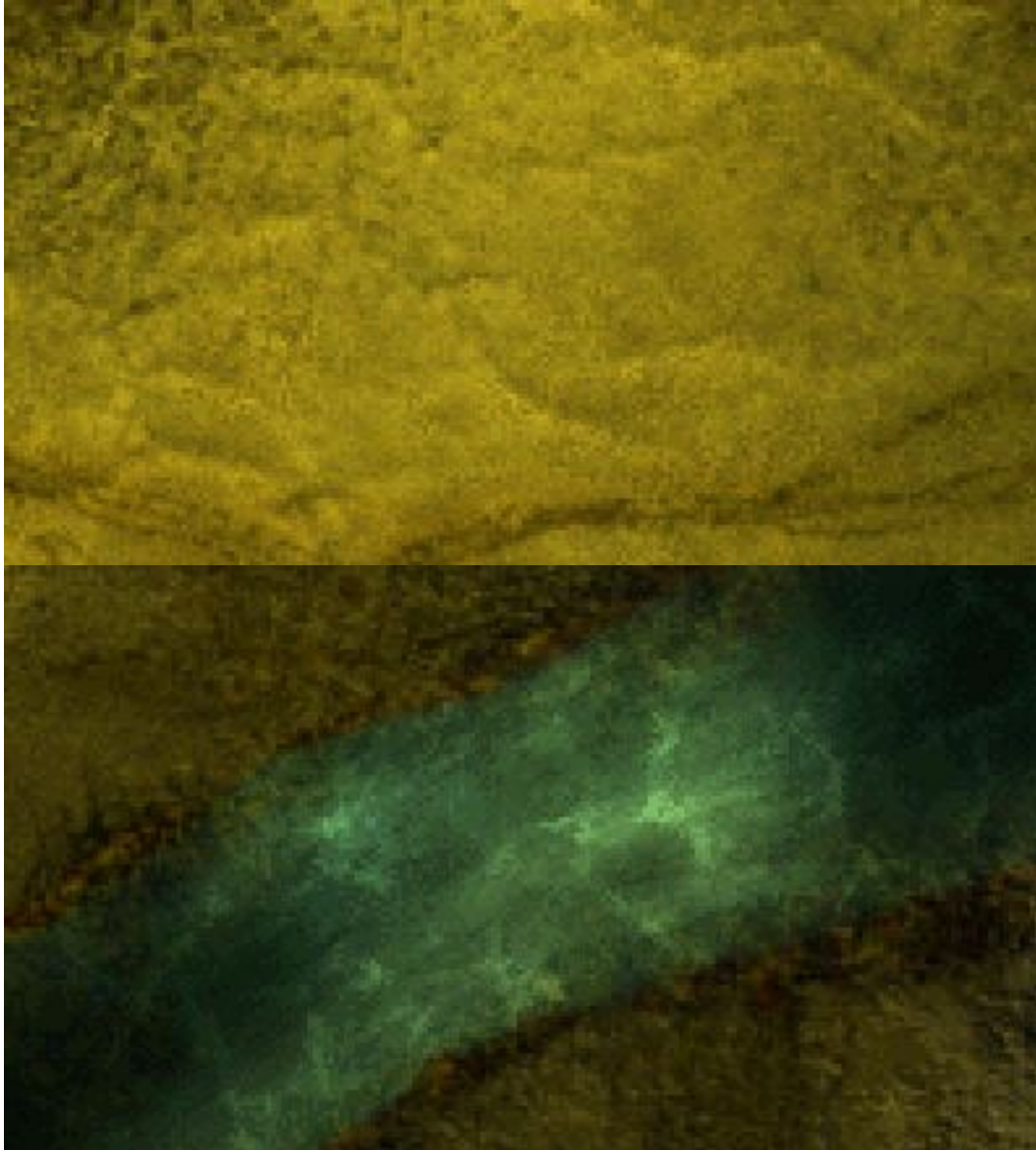
It's smooth, pretty & would be fun to tromp around on & blow shit up on. BUT, due to the amount of other colors

on the map these section get the short end of the stick when I index the map. So, this section is a good example of what I do to help out indexing of a color map. We'll be working with the Grass section & the Water section.



Here's how each of these sections looked when I let Photoshop do as it sees fit when indexing this color map. The grass got completely unacceptable & lost any subtle detail to it, which also seems to happen a lot with Sand on maps. The water also lost any detail in the highlight section & would be completely irritating to walk through in a game of Myth.

So... now is where you learn. Go back to your Un-indexed color map in Photoshop. Take the Marquee tool & draw a marquee box around a small portion of an area that you are Losing when it gets indexed. After that, tell Photoshop to now Index your color map to 240 colors again. WOW, that area now looks



Great!

What happens is that by drawing a marquee box you are telling Photoshop to Index that specific area "first" before moving on to the rest of the color map. Here's how the revised indexing looked on each of my samples.

As mentioned before... these areas/colors now index "before" others & that forces these primary areas of concern to look Great. The downfall to it is that there are other areas of the map that now may have less detail to them, but most of the time things seem to even out.

What I actually do for my final indexing is to draw "MULTIPLE" marquee boxes around specific areas that I feel are important & then tell Photoshop to index the color map. When it's done I look over the map & see what I think of the results. If I still do not like the results I Undo & go back & re-Marquee different areas & go back & forth with this process until my color map looks exactly like I want it to in Indexed form.

Now I admit that I often Push the Limits of what should be tried when building a color map. Basically every one of my Personal maps are experiments in one form or another. I may be playing with Color Combinations or Types of Displacements or Design, but no matter what I do, this process almost always ends up making me look great. Good luck with it

Loathing Loathing

Most mapmakers obviously have favorite and least favorite parts of the mapmaking process. For some reason I actually have grown to love the entire process. I've found something in each part of the process to focus in on and enjoy each part differently.

As some of you know there are quite a few Tutorials on Mapmaking in general. I'm not going to take you through the entire process. I will however take you through a few things that I personally feel have been miss-taught by A LOT of mapmakers when giving advice to others in forums and such. Usually advice that is given is assumed notions and not necessarily the best practices. At least by my considerations.

Most mapmakers all follow their own step to making displacements and terrain maps. Personally 90% of my Loathing work is done by hand then later possibly tweaked in Photoshop for Ramps or man-made features. A mapmaker needs to become very accustomed and comfortable with Loathing's tools if they wish to get the most out of them. I'll step through some of the ones that I feel newer mapmakers often either overlook or do not entirely understand.

Function Keys.

F1 – Elevation Adjustment

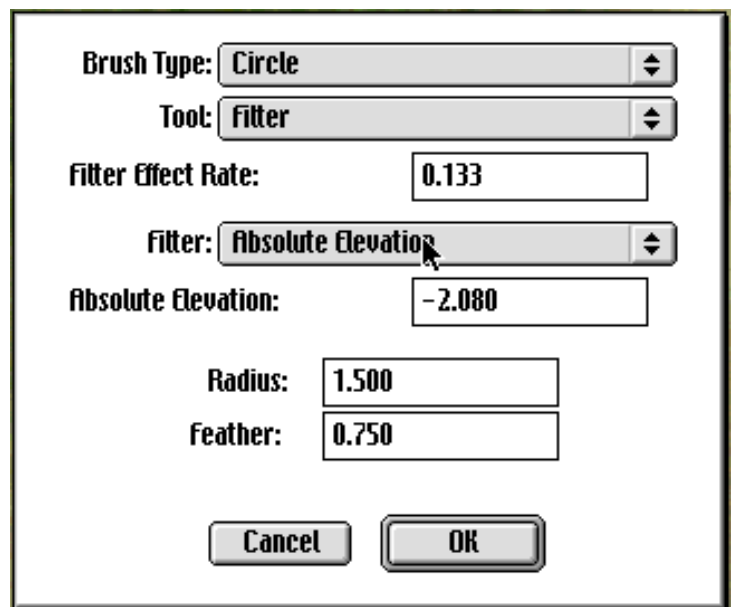
By clicking on the Brush Tool and then selecting an amount with the [-key for lower and the]-key for higher you can effectively raise or lower an entire area of a map a specified amount but it stays very similar to how it was before if not exact only is higher or lower depending on the amount you've chosen via the "[]" keys. This is handy for raising areas that you've already made to your liking but decide needs to be just higher or lower than how you originally made it overall.

F2 – Absolute Elevation

Select the Brush Tool then press F2 then go to Edit Tool preferences. You'll see some most likely confusing choices at first. If you click on the Tool pull down and choose Filter and then select Absolute Elevation you can then put a absolute height number in. This allows you to effectively Paint areas to a perfect height very easily. I find this is useful for initially roughing in displacement areas as well as for building up man-made areas. There's many uses for this once you start playing with it.

F3 – Smooth

This is a great tool. Sometimes when you import displacements things can be a little out of control. Using this tool you can go through & subtly smooth out areas that may be a little harsh. Using different Loathing brush sizes (F9-F10 and F11-F12) you can have good control. Also don't forget that you can adjust the amount your brushes effect your mesh by



clicking the “ -, =, [and] “ keys.

F4 – Noise

One of my favorites. How many times have you played a map that is so unrealistically FLAT that it's obvious this person did little or nothing to it. Noise allows you to paint varying amounts of disturbances onto your mesh. Bumps basically. Nature is not Flat. Nature has bumps, ripples, imperfections, etc that can be simulated within Loathing. A field of dirt with rocks in it would be a good example of a usage for this. I actually use it to a small degree over grass & anything. When your units walk over it they logically move slightly up and down and give a better impression of realism. Of course like any tool this can be taken to extremes and used entirely for evil.

F5 – Tool of Satan

I have no clue what this Function key is supposed to be used for but pressing it tends to HaXor your screen and in some cases crash the video on your machine. Not used a lot, at least by me.

F7 – Raise / Flatten / Filter tool

By repeatedly toggling through this tool you can choose to Raise parts of your mesh using the brush tool or Lower. It's also a handy way to switch to the F2, F3, key you last used as it remembers. Note that with the Raise or Flatten tool you can hold down Shift and do the Opposite of the tools function. So if you're raising & go to far you can just hold Shift and paint it back Down a bit. You can use Undo Cmd-Z on some Loathing tools, but just when you count on them they won't work efficiently. Just one of those things.

F8 – Circle Brush / Square Brush

Just as it says. Cycles between a Circular Brush and a Square brush.

F9, F10 – Brush Diameter

This Function Key controls the Inner diameter of your brush. F9 reduces it. F10 enlarges it. Not much else to say... just play with it.

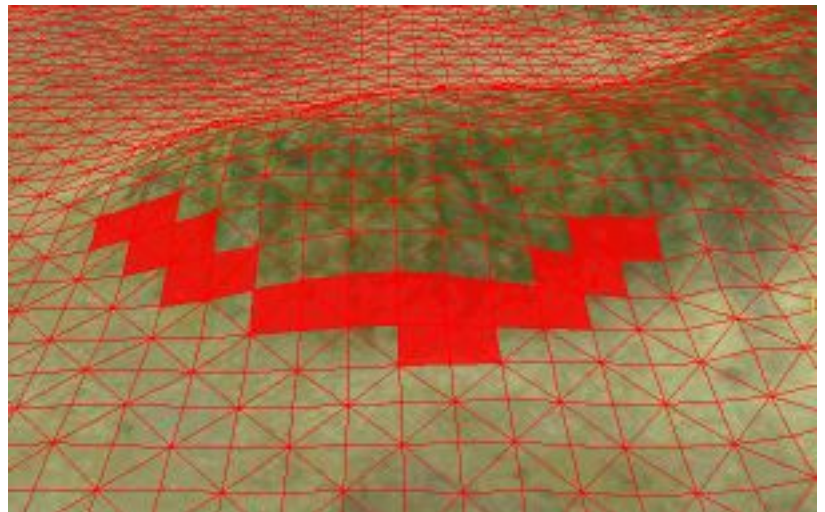
F11, F12 – Brush Feather

Controls the area around the Brush Diameter. If you use a Brush Diameter with no feathering the effect will be very harsh. Sometimes this is needed and useful. Most of the time though you'll use a brush feather of varying widths to make the things you raise or lower more subtle and smooth. Kind of like a Feathered brush in Photoshop. Brush Diameters and Feathering can be Huge if you want them to be and effect a large amount of your mesh. You can also control these settings from within the Tool Preferences.

Terrain Maps

How many times have you opened a map by a 3rd party mapmaker and seen a terrain map that looks something like this???? It works. However it will cause a multitude of problems in both Solo and Multiplayer maps.

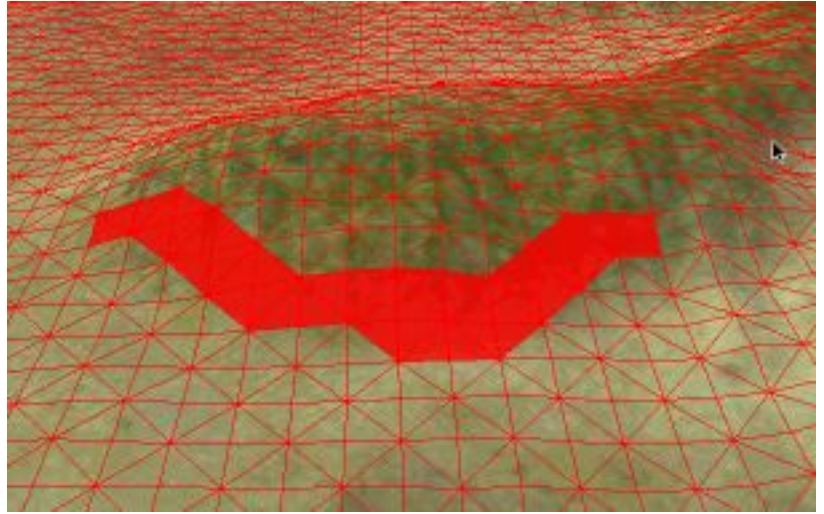
Units find their way around a map using Path finding. Everyone has had times when a unit sometimes cannot find there way around an seemingly uncomplicated part of a map. In solos sometimes units will bunch up and stay there till killed. Many times this is due to what I call a Jaggy Terrain Map. Most unknowing mapmakers simply go into Loathing and grab the brush tool and start painting in boxes on their terrain



map. Then they start complaining that terrain maps Sook and start trying to find a better, faster or more precise way. Not needed in most cases I say.

Now look at this same Smooth and Sexy terrain map. It's the same exact area, only I have produced it correctly and smoothly and units will now be able to easily find their way around this section of the map without getting stuck. All done entirely inside Loathing in about 5 seconds.

How???? Not Going to Tell!!!! Nyah!!!



Well, ok.

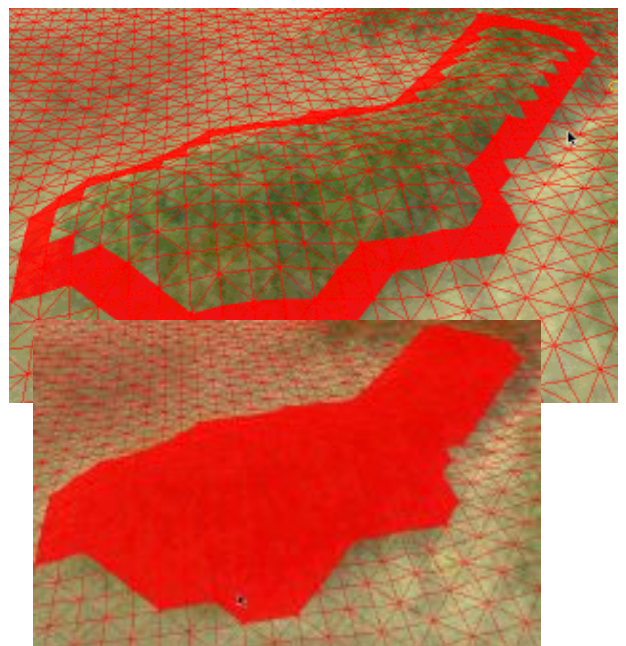
Rather than just using the basic brush and painting those nasty full grid boxes of color simply try holding down the option key while painting your terrain map. OMFG!!!! Now you're painting triangles and not full blocks!!! Now you can very easily smooth out all those nasty terrain maps and make Myth Players everywhere a lot happier with the FEEL of your map's game play. Trust me, it makes a huge difference.

Another Trick I use regarding Loathing Terrains is when producing the entire Terrain Map. I feel that in order for a terrain map to accurately match a color map you should produce the Terrain Map entirely in Loathing. However, until you get accustomed to it you'll think it will never end. Here's a couple tips.

Using the Opt-Paint tip above works great for all parts of you terrain map. However I find its usage for Large areas of Terrain painting to also be great. Take a group of Hills for instance. The entire hill should be either Steep or Flying Impassable depending on your needs. You "could" go through and meticulously paint the entire thing. Or you could do it in Photoshop and import it and then be forced to go around the entire map and touch it up or you could do it this way. Using the Opt-Paint trick simply go around the outside of this area and outline the area with the terrain type you want to use. I'll continue with this same hill, though actually it's not as large as what I'm talking about.

In this Snapshot I've outlined an example. You can produce these outlines very quickly and you are producing a smooth terrain map in the process. Now if you simply hold down SHIFT and click within that entirely enclosed outline magic happens. I promise.

Yup, you saw it right. You can fill in Loathing just like you can fill in Photoshop. Now you can ZIP around your meshes and make highly functional terrain maps in a manner that is surprising fast, but most importantly in a manner that does not require you to go back and later Tweak or fix because Loathing changed something when you imported it because the imported image wasn't perfect.



We're about done now with the info I've found to be useful. Here is one last thing I have just recently found that deals with placing Models.

Models

Pick a model of your choice from within Loathing and place it anywhere on a mesh. Now, say it's not rotated the way you want it to be. Grab that sucker and give it a yank. Some models like Houses and such don't react violently. Other's, like castle walls for example go airborne when rotated and tend to take the mesh with them. The first time this happens you go Holy Cranky, WTF just happened here. Then you delete the model and sit there staring at what used to be your displacement in wonder. There IS a better way for this also.

Select a model again from the model selections. Now, this time before you click on the mesh to place the model let your mouse hover there over your mesh where you want your bridge or castle wall placed. Now click the Left or Right arrow key on your keyboard. WOW, you just rotated the model before you placed it... congratulations. NOTE: you still need to become talented at placing models where you want them, but your time fixing those rotation issues are now over. ALSO NOTE: Animated Models cannot be rotated. If you do they will not animate correctly or at least until Apathy comes out and we can fix everything needed.

I've found this trick has made it so I am way less intimidated by Models overall. Enjoy.

And with that last tip I think I am done with this initial Journey. I'll continue to post updates of this as things pop into my head or as I find new things that I find important. What I want to try to get across with this is that there are MANY ways to accomplish the same thing in mapmaking. I get weekly emails from people asking how I do things and have finally just gotten bugged enough to spend the time to document these things. Others will have different ways of doing things. These are simply mine.

If you use them or learn anything from this Walkthrough then send me an email or give me a credit or something. My aim is to share some knowledge and extinguish some myths that had been bugging me for a while.

Good Mapmaking to you all.

Clem

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