Antique-Style Maps in Gimp
a tutorial by Candacis of Cartographer's Guild
based on Ascension's tutorial "Antique-Style Maps in Photoshop"

This is a tutorial especially for the graphics program Gimp. The same Photoshop Tutorial was written by Ascension. I want to thank him for his fantastic guide, additional thanks goes to RobA for his pioneer work with map-making in Gimp. Without those two this tutorial wouldn't have been possible. I tried to mimic all the functions from Photoshop, but of course Gimp has its limit and sometimes I had to take a long way around to create the same outcome. It is not the same end result as in the Photoshop tutorial, but hopefully close enough.

Please excuse some grammatical and orthographical errors. English is not my native language. Don't hesitate to point those shortcomings out, so that I can correct them. Any other questions and comments are welcome, too.

Hint: "Using Gimp to create an artistic regional map" by RobA is a useful guide to every Gimp Cartography User and it has some extra tips.

Difficulty: This tutorial is for beginners, with steps in detail. However, basic knowledge, like creating a new layer, tools and layer modes, is expected. Check Beginning with Gimp [Extern Link] for a starter tutorial and how to work with Gimp. Don't follow the settings and numbers in my tutorial too closely. If you think a different setting suits your map better, go for it.
I work with Gimp 2.6.

1. Create a new Gimp document (.xcf file). I will use a 700x700px size with RGB color, transparent background and a 72ppi resolution (due to my weak netbook). For a map you want to print, I recommend a larger size (2.000x2.000) and 300ppi. You may have to adjust some techniques, if you have chosen a large size.

One comment before I start: If I say I create a new layer, this layer is my active layer (just click in the layer box on the new layer and it is active) until I create a new one or say so otherwise. Oh, and save often.

2. Check the first four steps of RobA's tutorial "Using Gimp to create an artistic regional map", if you have a sketch of your map you want to use. I will use his Three-Layer-Sandwich (TLS) technique for a random map.
- First create a new transparent layer, fill it with the grey color #808080.
- Create a new transparent layer on top of that, name it "Noise", go to Filters/Render/Clouds/Solid Noise. Set the detail to 15. I used x and y size 4,0, but try different options depending on the size of your picture. Press the "new Seed" Button until you are satisfied with the result. Set the layer mode to "Overlay".
- Create a new white layer on top of that, set its layer mode to "Lighten Only" and name the layer "Land 1". Open the "Levels" box (Colors/Levels), take the
white arrowhead on the right side of the output (not input) slider and drag it slowly to the left until enough land is revealed. I stopped the slider at 120, but that's just my setting and it might be different for you. If you have a nice difference between landmass and water, click OK. Choose the Fuzzy Select Tool, check the box "Sample merged" and set the threshold to 0 and the mode to "Add to the current selection". Click with the tool anywhere in the darker area. Invert the selection (Select/Invert).

- Create a new black layer, call it "Land Mask". With "Land Mask" as active layer, fill the selection with white color. If you are at this point and at the opinion the black mass is more suitable for land than water, go to Colors/Invert and white and black should switch places. But remember: white is your land and black your water. Go to Select/None.

**Hint:** If you are unhappy with the look of your landmass, go back to the step with the noise layer and try a different noise effect. Or try to use a map draft instead of the grey layer. Working with a white rough grunge brush to connect some little landmasses is possible, too. Check RobA's tutorial for more advice.

3. "Land Mask" is your active layer. Go to Filters/Map/Displace. The Displacement Mode is "Cartesian", the Edge Behavior is "Smear". Chose the noise layer as map and set 20 X and -20 Y. Click Ok. Do another Displace Map, but this time with -20 X and 20 Y. This gives the coastlines some nicer edges. Duplicate the "Land Mask", make the duplicate invisible. This is just a precaution in case you want to go back to this step.

4. "Land Mask" is your active layer. Use the Select by Color Tool and click with it anywhere in the black area. Go to Edit/Clear or just hit the delete key on your
keypad. Deselect (Select/None).
- Create a new transparent layer beneath the "Land Mask". Name the new layer "Ocean". Fill it with #808080. Choose "Land Mask" again as your active layer. Right click the layer and choose Alpha to Selection. This should select only your landmass.
- Create a new transparent layer on top of the "Land Mask". Name it "Coastlines". You have now two different options for creating a better coastline. Either go to Edit/Stroke Selection and use a black stroke line width 1px or go to Select/Border, choose 1 or 2 pixel and fill the new border selection with black color. Either way you should have a black coastline in your new layer. Deselect. Now you can toggle the opacity until the black coastline is a fine line. I used the first method and 27% opacity.

5. "Land Mask" is the active layer, use a Alpha Selection. Create a new transparency layer named "Rivers" beneath the Coastlines, this is your new active layer. With the landmasses selected, you will paint the rivers only on the land. Choose #808080 (or black) as foreground color and a circle (01) as pencil. The paintbrush works fine, too. Draw some rivers, starting at the ocean and going inland. Try doing some of the majors rivers and then adding branches. You can apply a Gaussian Blur (Filters/Blur/Gaussian Blur) of 1px if you want to smoothen the rivers a bit.
Hint: RobA has created a script for rivers in Gimp, named "Tapered Rivers in Gimp".

6. Create a new transparent layer and name it "Mountains 1". I will use different mountains than the one in the Photoshop tutorial, but they can be done quite easily, too. First the Ascension Mountains:
- Choose black as foreground color and a big round brush. I used a Circle (09). Draw some basic lines where the mountains are supposed to be. It don't has to be pretty, just don't draw to close to the coastlines.
- Create a new transparent layer and name it "Mountains". Use a smaller brush, check the fade out box and set it to 20px (or what length your lines should have) zoom in and draw some hair lines around the mountains. It should look like a paramecium. Now hide the Mountain 1 layer. Deselect.
- Alternate Mountains: I used a different approach. Choose the color #808080 as foreground color and a grunge brush. I downloaded some free grunge brushes from www.deviantart.com, where you can download all sorts of useful stuff for Gimp, because Photoshop brushes work in Gimp, too. I used the second brush of these. Copy the brush file in Gimp/share/gimp/2.0/brushes. You may have to refresh the brushes in order to use the new brush. Draw rough shapes in the places where you want your mountains. Open Filters/Distorts/Emboss. Play with the three controls until you have nice mountains. Deselect.
7. Create a new white layer named "White" beneath the "Ocean" layer. Choose the "Ocean" layer as your active layer. Set the foreground color to #BEDCE6 and the background color to #F5D7D7. Use the Blend Tool to fill the Ocean layer with a gradient, where blue is in the lower half of the picture and pink in the upper half. Set the opacity to 50%.
- Create a new white layer beneath the "Land Mask", name it "Noise 2". Apply a RGB Noise Filter (Filters/Noise/RGB Noise) with Red, Green and Blue at 0,20 and the independent RGB Box checked. Set the layer mode to Multiply and the opacity to 60%. But a Grain Extract at 15% or a Darken only at 70% could result to some nice effects, too.
- Create a new layer, naming it "Aging" with #84745E as color on top of the highest layer, set the opacity to 15%. Go to Filters/Artistic/Apply Canvas and use a Detail of 4 and select a top-right direction. Another fine effect is to set the layer mode to Soft Light and the opacity to 80%.

8. Now for the rings around the land: Create a new transparent layer beneath the "Noise 2" layer, name it "Rings". Activate the "Land Mask" layer and use an Alpha Selection on it. Go to Select/Grow. Expand the selection about 2 (or 1) pixel. Activate the "Rings" layer. Go to Select/Border, choose a 1px border. Fill it with black. Deselect. Repeat these steps, expanding the selection about 5 and 8 pixels and so on. More or less. It depends on the size of your image. Make sure that the "Rings" layer is active, when you fill the border selection. Choose a Gaussian Blur with 0,5px (Filters/Blur/Gaussian Blur). Set the layer mode to Grain Merge. Copy the Rings layer, if your rings are too light.
9. Create a new layer with the color #84745E over the "Aging" layer. Name it "Aging 2". Go to Select/All, than to Select/Shrink and shrink the selection about 50px (or less/more, depending on the size of your image). Go to Select/Rounded Rectangle and give it a radius of 75%. Use Edit/Clear to delete the brown color in the middle of the picture. Deselect. Set the layer mode to Soft Light. Toggle with the opacity (I have it at 70%) until the color blends nicely. Then use a grunge brush as eraser and/or smudge tool to smooth the edges. Another method to "age" the picture is to alpha select the landmass (in the "Land Mask" layer), then shrink the selection about 20px, feather it and delete (in the "Aging 2" layer), set it to soft light and you have a more darkish ocean.

10. Time for countries! Create a new transparent layer above the mountain mask layer (or beneath mountains and rivers. Whatever suits you best). Name it after the name of the country. Take a color you like, any pen or brush and paint the shape of the country, then fill it with the color. Do this for every country. It is important that every country has its own layer! It doesn't matter if you paint in the ocean, we will delete that later. Actually it is better to make sure the coast of the country is well covered, too.

- Now activate the "Land Mask" layer and make an alpha selection. Go to Select/Invert. Activate each country layer once and hit the delete button (or use Edit/Clear). This will erase every overlapping color part. Deselect.
- To prevent countries from overlapping you can do a similar step. Choose your first country, make an alpha selection and then activate a country that touches the first country. Press Delete. Do this for every overlapping country.

11. A tedious process follows to mimic outer/inner glow in Gimp. Activate your first country, set the layer mode to Hard Light and roughly 20% (or more) opacity, alpha select it. Create a new transparent layer above the country, name it "[Countryname] border". Shrink the selection about 1 or 2 pixels (Select/Shrink), go to Select/Border. Make a 2px feather border, fill it with the color of the country. Deselect. Apply a 0,5 Gaussian Blur (or more) to the border layer, set the layer mode to Hard Light (optional). Create a new transparent layer beneath the border layer, name it "[Countryname] pattern". Now you need a pattern with diagonal lines. I took Ascension's pattern from his tutorial. You can find it here. Or create your own pattern on www.stripegenerator.com. Open the pattern image in Gimp, go to Select/All and Edit/Copy and Edit/Paste as. Select Paste as New Pattern. You have now a new Gimp pattern. I chose to make a second pattern with the lines in the opposite direction. Just go to Image/Transform/Flip Horizontally. Save it as a new pattern like the first one. Now activate the country layer which whom your currently working. Make an Alpha Selection. Activate the pattern layer and use the Fill Tool to fill it with one of the two new patterns. Deselect. Set the layer mode to Overlay (sometimes the Multiply mode with a low opacity gives better results). Repeat these steps for every country and switch to the second pattern, this helps to accentuate each country from another. I'm sure there are some other techniques to recreate this step in Gimp than my way and if you know one, don't hesitate to post your suggestion and advice.

12. Let's add cities. Create a new transparent layer above the "Mountains" layer, name it "Cities". I use a 10x10 square blur brush, I think it is one of Gimps default brushes. Otherwise create an own brush (5x5px big with only a blurry black outline) or download one. I scaled the brush to 0,70 and put a lot of cities on the "Cities" layer. Cities are usually build at river deltas, the coast or other useful stuff for humans. Because this is a more modern kind of map, put more cities in it than for a medieval map. You can use a bigger square brush for larger/capital cities.

- Now every city has to be named. Ascension's rule of thumb: 2 towns for 1 city. Select the Text Tool, use Times New Roman, but use Times New Roman Italic for towns. Set the font size to 14px for cities and 12px for towns. Merge all names down to a single layer, naming "City Names" (right-click on the layers, select Merge down). Set the opacity between 70-80%. Duplicate the layer, naming it "City Names Glow". Go to Colors/Map/Color Exchange. Change from color #000000 (black) or whatever color your city names are to color #F5F5F0. Apply a Gaussian Blur of 2 (or 3)px. I set it the layer mode to
Difference and the opacity to 45%, but try around with different modes. Just moving the Glow layer beneath the city names layer works nice, too.

13. Now you can give your continent (or biggest landmass) a name. Use Times New Roman, but all in Caps. Type the name with a font size of 40px (depending on the size of your image). See the last symbol on the font settings that looks a little bit like a_b? This controls the space between letters, set it to 30. Switch to the path tool and create a path across the image, where you want the text. For this click simply somewhere in the left half of the picture and then somewhere on the right. Now you should see a line, make sure it is as long as your text. Check the edit box of the path tool. Click in the middle of the path and drag it slightly to the top, forming a bended path. Activate your text layer and go to Layer/Text along path. Use the path tool again and create a selection from the new text path. Create a new transparent layer, name it "Continent name", fill the selection with black. You should now have a bended text. Make the text layer with the unbended text invisible (or delete it). Duplicate the "Continent name" layer to thicken the letters, merge it down.

Hint: Using the Rotate and Perspective Tool is another method to warp text. Repeat the Glow steps I described for the "City Names" layer. If the continent name overlaps some of the other names, go to the City Names layer, cut the name out with the Ellipse select tool and paste it in again, moving it around, then merge it with the City Names layer again. Do the same for the glow.

14. Next step is naming Oceans, bays and other water bodies. Use a smaller font-size and Times New Roman Italic. Write the Oceans in Caps and use the a_b
Button to widen the space between the letters (I use a fontsize of 25px and space 15). For smaller water bodies use a smaller font-size and upper and lower case letters. Sometimes you have to create paths again to bend the text around the coastlines. When you're finished, merge the names down to one layer, naming it "Ocean Names". Apply the same steps for a glow as before. Although I find it nice to leave the Glow layer mode at normal this time.

15. Almost done with naming. Next in the line are countries. For this I will use Arial, all in Caps and with some spacing between letters, depending on the size of the country. For countries that are tall and skinny you will have to put the text on two lines (make sure you hit the enter key after the first word with no space) and make sure that the text style is centered and not left aligned or right aligned. Also, change the Leading in the text tool window. It is the symbol above the spacing symbol. This changes the amount of space between text lines. Once this is all done, merge the layers, name it "Country Names" and make a Glow again.

- For geological features like mountains use Arial Italic with a small fontsize, in all caps, but without spacing between the letters. River names are in Times New Roman italic with a small fontsize, zero spacing and they have to be warped with the path tool to fit to the rivers. This can be take a long, long time and for this tutorial I will skip this.
16. For an easy border, go to Filters/Decor/Add Border. Set it to 8 X and 8 Y (or smaller for a thinner border), color black. This will create a black border around the image. Use Select/All on the new border-layer. Go to Select/Shrink and shrink it about 12px, then Select/Border and choose a 1px border. Fill it with black. Now you have a simple border with two black rings. This works for me, but you can use Ascensions' method as well. If you don't want to make the size of your picture larger (which the Add Border filter does), just work only with the Select/All → Shrink → Border technique. Make sure you do it on a new transparent layer above the "Aging 2" layer, name this layer "Frame".

- Nonetheless we need a transparent layer for the frame box which will contain the name of the map and a scale bar. Use the move tool and go to the corner of the picture where you want to put this box. I have a little space in the left bottom corner, so I will use this. Drag the guidelines from the ruler with the move tool in the picture. To do this just click on the ruler and drag until you see a horizontal or vertical line (depending on the ruler). They’re just for orientation; you can switch them off with View/Show Guides. Grab the rectangle select tool and drag out a selection that fills the marked area. Go to Select/Border and make it a 4px border, fill it with black. Deselect. Drag the guidelines inside the new box. Make a new selection within these guidelines, make a 1px border, fill it with black. Deselect. If you have rings or text showing through, then go and erase them. Put in the name of your map/world or whatever title text you wish. Use Times New Roman Italic for any subtitle and Times New Roman, all in caps, a larger font-size and with a little spacing for the main title.

17. Time for the scale bar. Make a new transparent layer and name it "Scale Bar". Zoom in and use the square 10x10 brush to make four squares closely together so that you have a 10px tall and 40px weight bar. Fill it with black. Make four more squares, but this time erase the inner black lines that separates the squares from one another. Now you have a black and white bar. Copy (make an alpha selection and go to Edit/Copy) and paste this (you have now a floating section, click new layer and the floating section transforms to a new layer with the pasted scale bar part), use the move tool to move this part to the right end of the scale bar. Do this as often as you like until you have a fine scale bar, merge the parts down to one layer.

- Now use the text tool to put the miles (or kilometer) numbers (0, 100, 200 etc.) above the scale bar. Use Arial and a small font-size. Keep each number on a different layer, that you can move them around. Using the Move tool try to get each number centered above the color stops and make sure that each number touches the scale bar. When done, link and merge these number layers. Move this layer up 5 pixels. I find it easier to use the arrow keys on my keypad to move the numbers so that they are all on same height. Write "Scales In Miles" or whatever information you want to pass along beneath the scale bar (Arial, all Caps, little spacing). Position it with the move tool.

Hint: Save the scale bar in a new png or xcf picture to use it for other maps.
18. If you want, you can put a compass in your map. Choose one that is not too modern or too ancient. I used a compass that RobA posted in his Artistic Map tutorial thread [here](#). Now, everything that is above the aging layers needs a Gaussian Blur, this means the frames, the map title box and the compass. Either merge this all down to one single layer and apply a Gaussian Blur (Filters/Blur/Gaussian Blur with 0,5 - 2px) or apply the Blur to every layer individually. Use CTRL+F to reapply the Blur over and over again. Move everything under the "Aging" layer. Give the frames, scale, compass etc. a glow much like we did for the names (see Step 12). I set the Difference layer mode to 15% opacity and used a 2px Gaussian Blur.

19. Click on the Background layer, go to **Image/Canvas Size** and make the image bigger (I chose 1.000px for each and an offset of 100 for X and Y). Create a new transparent layer on top of everything, name it "Grid". Go to **Filters/Render/PATTERN/Grid**. This filter will lay latitude and longitude lines over the image. I use Width 1, Spacing 80 and Offset 10. The width setting is for the thickness of the lines and the spacing is important for the quantity of lines. If you have a larger image-size, you need a greater spacing, but keep in mind that the next filter will widen the grid. Go to **Filters/Light and Shadow/Apply Lens**. Set it to 1,20. The **Filters/Map/Map Object** and Sphere should work similar, but my netbook doesn't have the power for it. Now go to the Border layer, make an Alpha Selection and go to **Image/Crop to Selection**.
You should now have the image-size back where it started. Deselect. Erase any lines that go through the frame. Next, put in the numbers to indicate the degrees of latitude and longitude (use Times New Roman in italic and a small font size). Apply a Gaussian Blur of 0,5px. Make a glow layer as in step 12. Move the grid layer beneath the "Aging" layer.

Hint: This process works perfect, if your continent is on the equator; if your continent is above or below the equator then you will have to add more lines and then move them around after the apply lens is done.

20. It is almost done. Now you can tweak little things like adding a dark glow around the landmass. This is easily done. Duplicate the "Coastline" layer, apply a Gaussian Blur of 4 or 5px and toggle with the opacity. You can use the empty space for doing inset maps of islands or cites or add clipart or whatever. Just make sure that anything you add is genre appropriate (no spaceships). I will rework some of the country borders. I use the smear and blur tool to smoothen the edges between countries a little bit.

21. To give the map a more antique look, you can lay a paper texture over it. I used RobA's great tutorial "Creating Old Paper/Parchment in Gimp" to make the map look old. Then I set the paper layer to multiply and played with the opacity of the other layers from his tutorial. I used grunge and splatter brushes from deviantArt.