

How I Created The Hair In My Sketch Portraits



By OldManGrumpy



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Introduction

My GIMP Chat friend **Wallace** suggested that I should provide an explanation of/guide to creating **hair** as exemplified in recent sketch portraits posted in Gimp Chat, examples of which are on the title page and which show both wavy and spiky hairstyles. As yet I have not explored applying this same method to other styles such as pig tails, bun or pony tail – more research still to do!

Essentially, this document reflects my own recent experience of finding a suitable method to create a 'different look' for hair and hairstyles, whilst learning to do sketch portraits. The method I ended up choosing involves three key elements:

- Paths and Ofnuts '*Generate intermediate paths*' plug-in (path-inbetween-0.2.py)
- A brush (*omg_stroker2*) that I made to create hair in my normal portraits – though the standard Gimp 'Hardness 100' brush or one of the GIMP bristle brushes could be used also
- The 'Fade to Fade' brush dynamic

For completeness I have included each of these resources in the zip file with this tutorial.

Objectives

This document is not a tutorial per se, as it will focus on the **method**, including slight variations, that I used to produce the different shaped hair results in my posted sketch portraits. It will not produce any specific target sketch or portrait.

I will demonstrate how I set up the original hairstyles and then how to transform those shapes using the '*Generate intermediate paths*' plug-in and the Stroke Paths Tool. Let's call the end result a **sketch hairstyle**.

I will also provide an addendum covering work on the spiky hairstyle in regards to extra definition for the non stroked areas.

After reading and absorbing this information, I hope you will be able to design and create your own sketch hairstyles.

Caveat

For less experienced Gimpers, I need to make the following assumptions:

- that you are able to draw a simple path with three or four points
- that you can curve the path either by dragging the line segments between points or manipulating the handles on each point.
- if necessary refer to the GIMP User Manual section at the following link - <https://docs.gimp.org/2.10/en/gimp-using-paths.html>

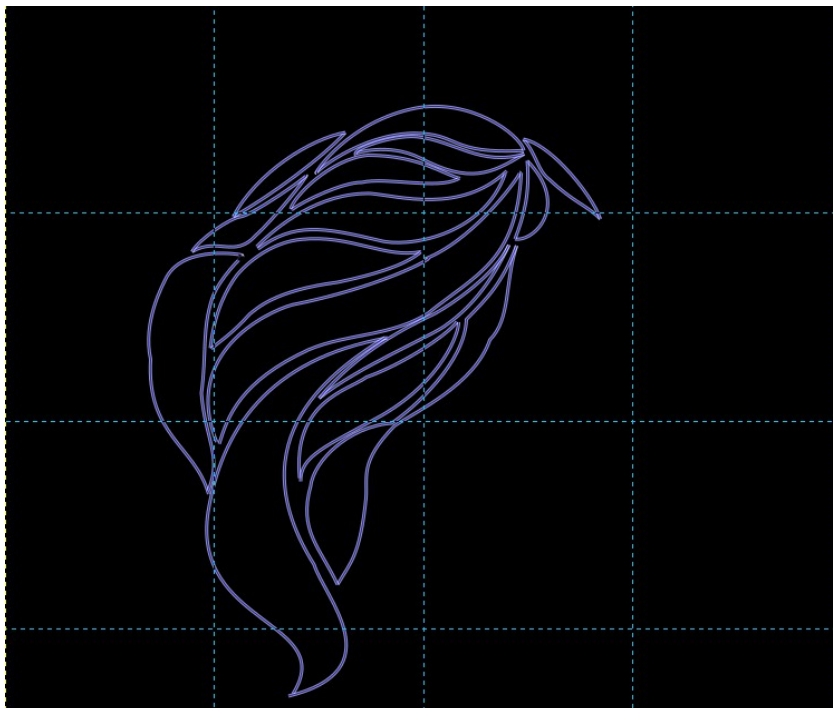
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First steps – paths generation

We need to understand three key components, being the overall shape and style of the hair we will create (e.g. short and spiky, long and wavy), the paths that will define that shape and style and how they will be operated upon by Ofnuts' plug-in to deliver our desired result.

1. Shape and style of hair

You can either create your own mental 'hairstyle outline' or use a photo as a guide, deciding whether it will be a **front** or **side** view. The following images show the 'hairstyle outlines' from my two posts, each comprising shapes made from paths; more on that below. I used a layer with a photo to assist me, but did modify them somewhat, particularly in the first where I added paths to give me extra spikes.

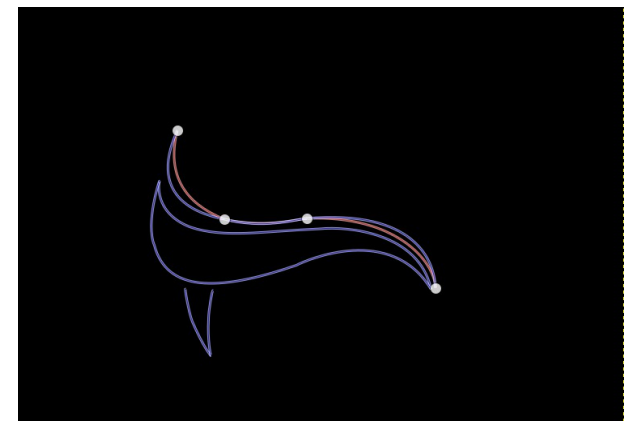
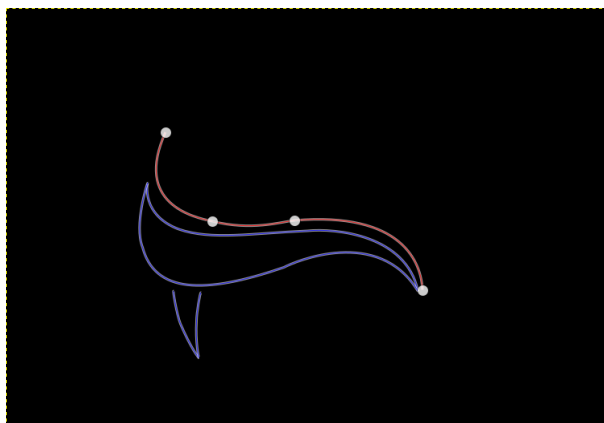
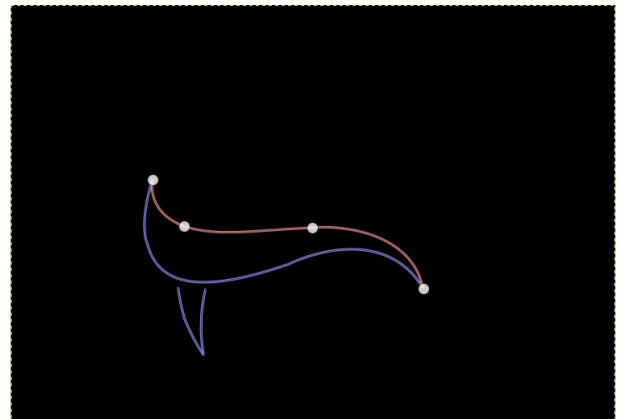
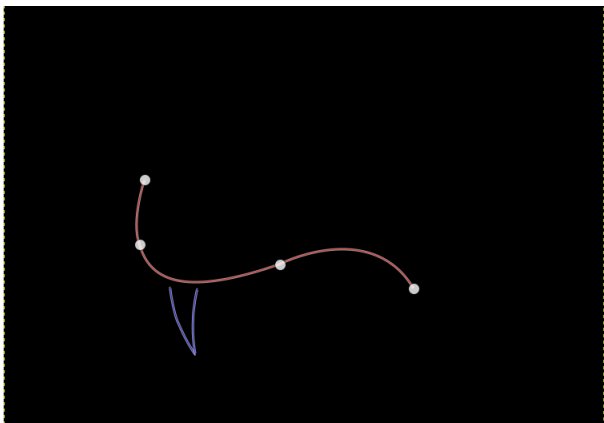
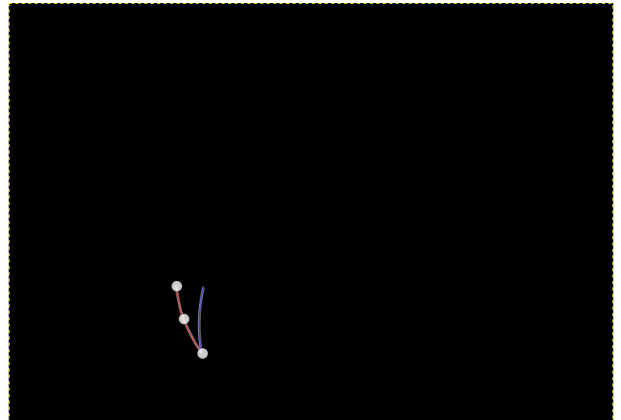
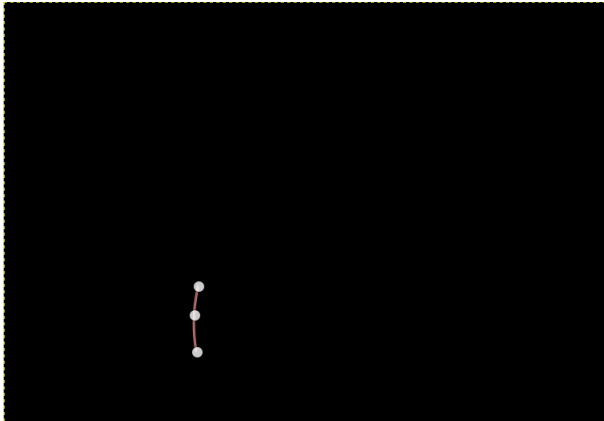


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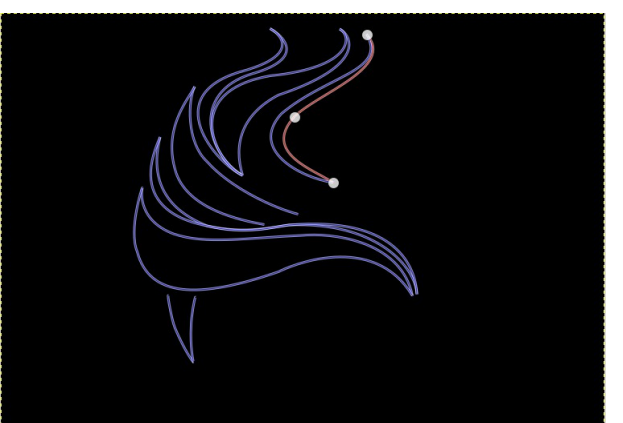
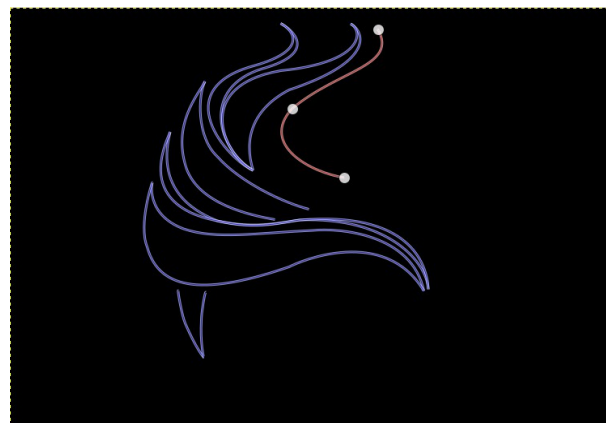
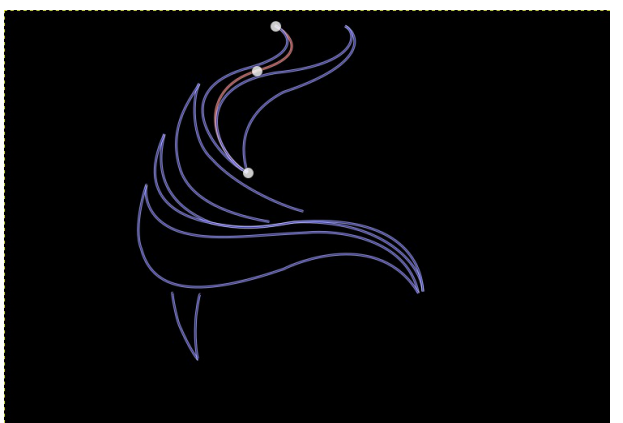
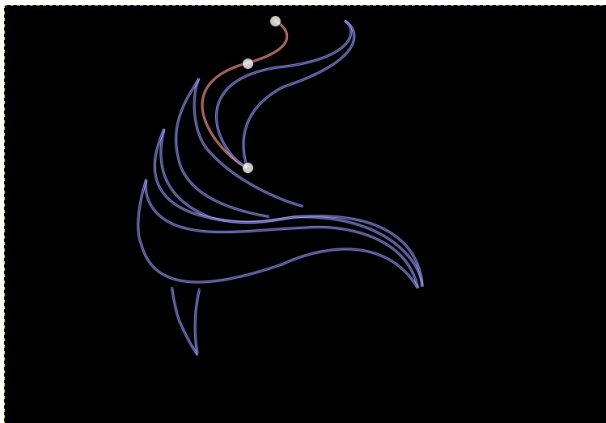
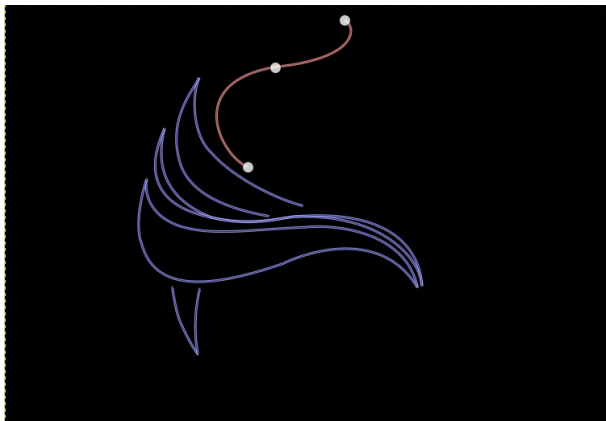
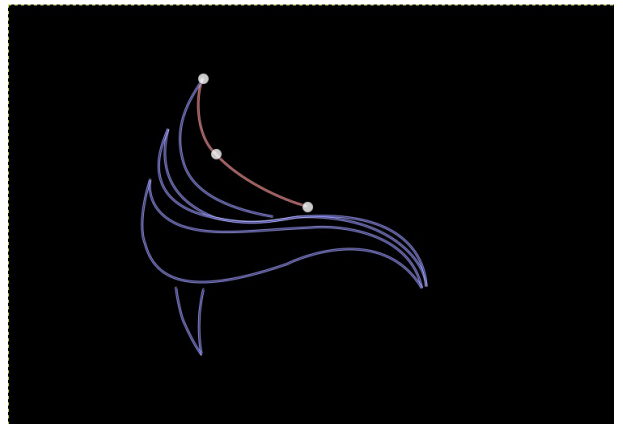
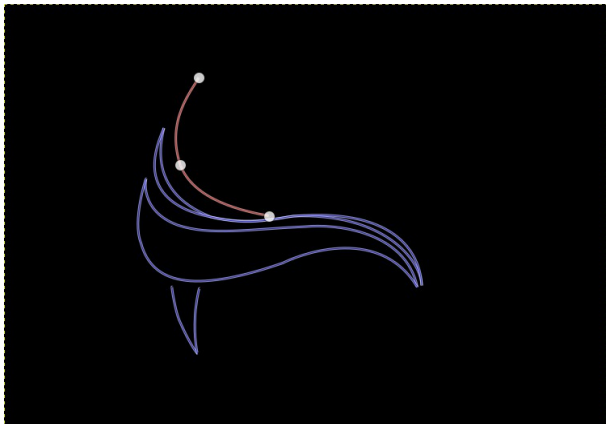
2. Creating the shaped paths that will define the hairstyle

The shaped paths that were created in the above images are somewhat like a relief map, they define the contours of the hair, it's highs and lows, its curves and flows and even where it interleaves. This is the approach you will take when you use this technique for real.

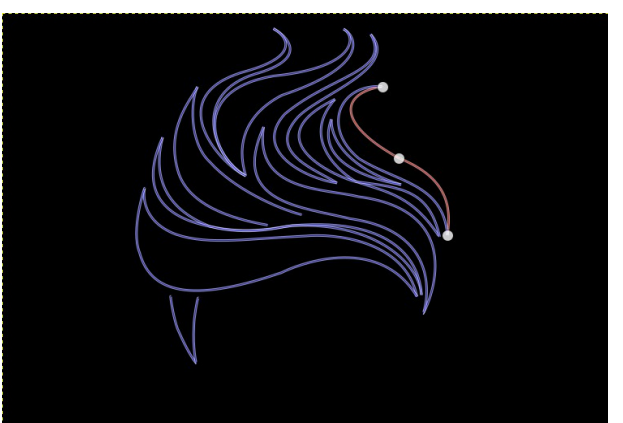
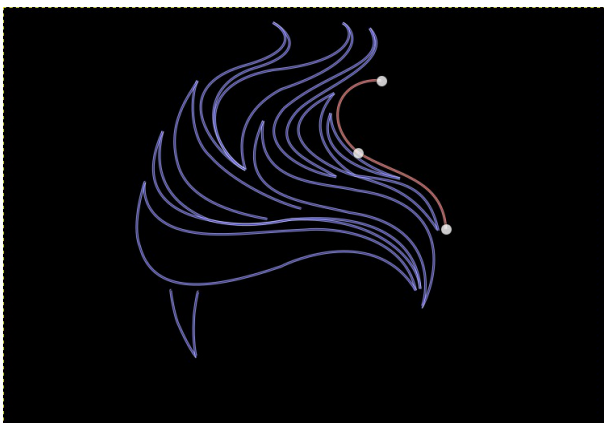
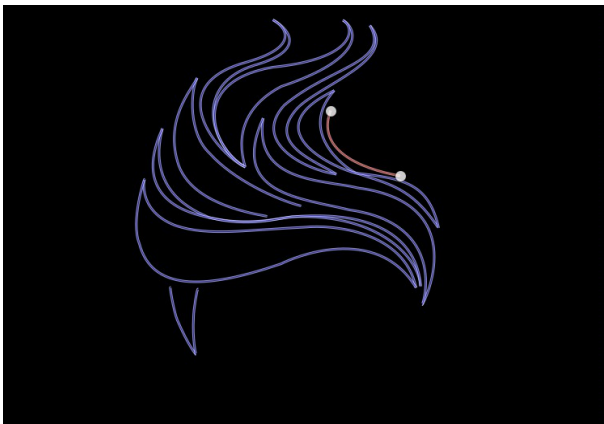
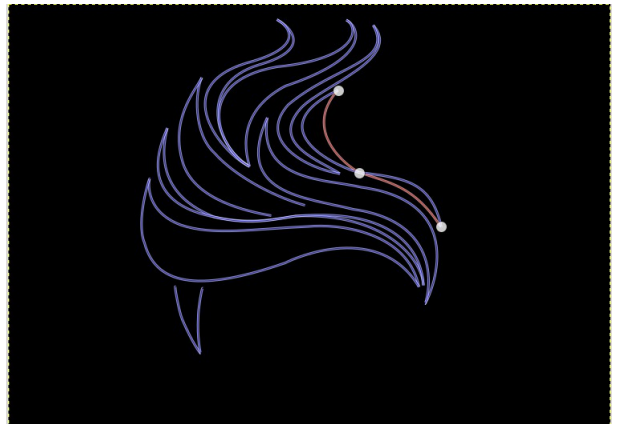
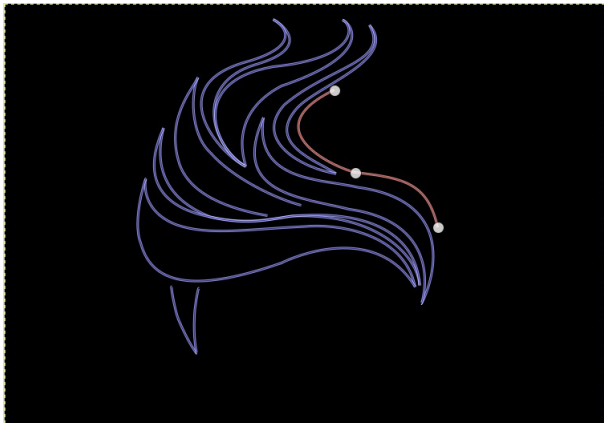
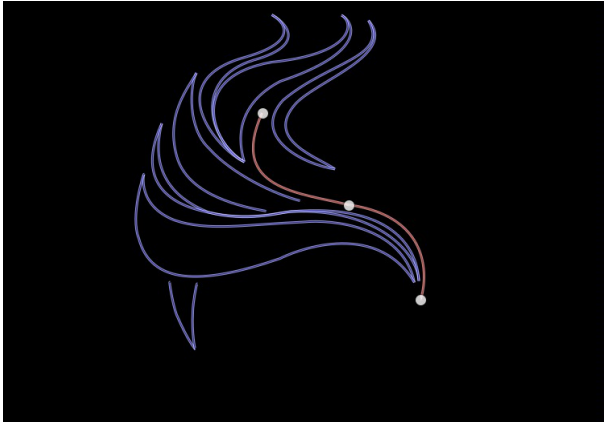
The following images show a progressive build up of the individual path pairs and their shapes, to deliver the first image in section1 above. The current path at the time is shown in red with the number of points on the path visible.



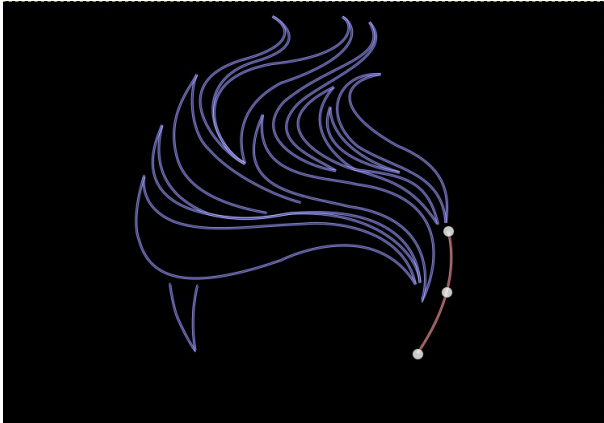
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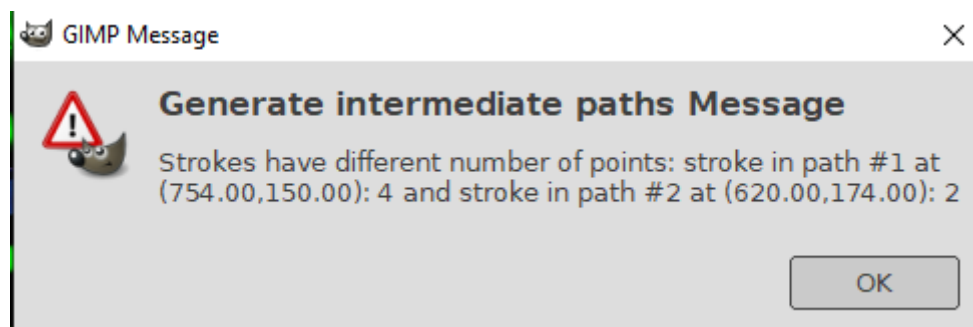


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Some of these paths meet or nearly meet at each end, some have one end wide and others actually cross over in the centre. These variations allow different effects to be obtained from the path stroking, and this will be exemplified below.

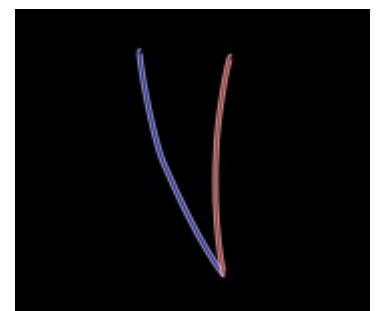
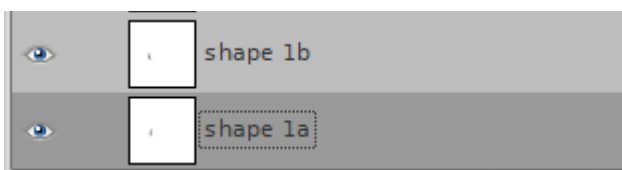
Hopefully, you will also have noticed that each shape comprises two separate paths and that each path pair has the same number of points. This point (forgive the pun!) is very important because we are going to use the [Generate Intermediate Paths](#) plug-in next and if we have a different number of points in the two target paths ... then we receive this error message.



3. Using the Generate Intermediate Paths plug-in

I will show the use of the plug-in with 3 variably shaped path pairs in default mode firstly and then I will address its use with a guide path.

Shape 1 is the first pair in the progressive images above, comprising the two named paths below left..

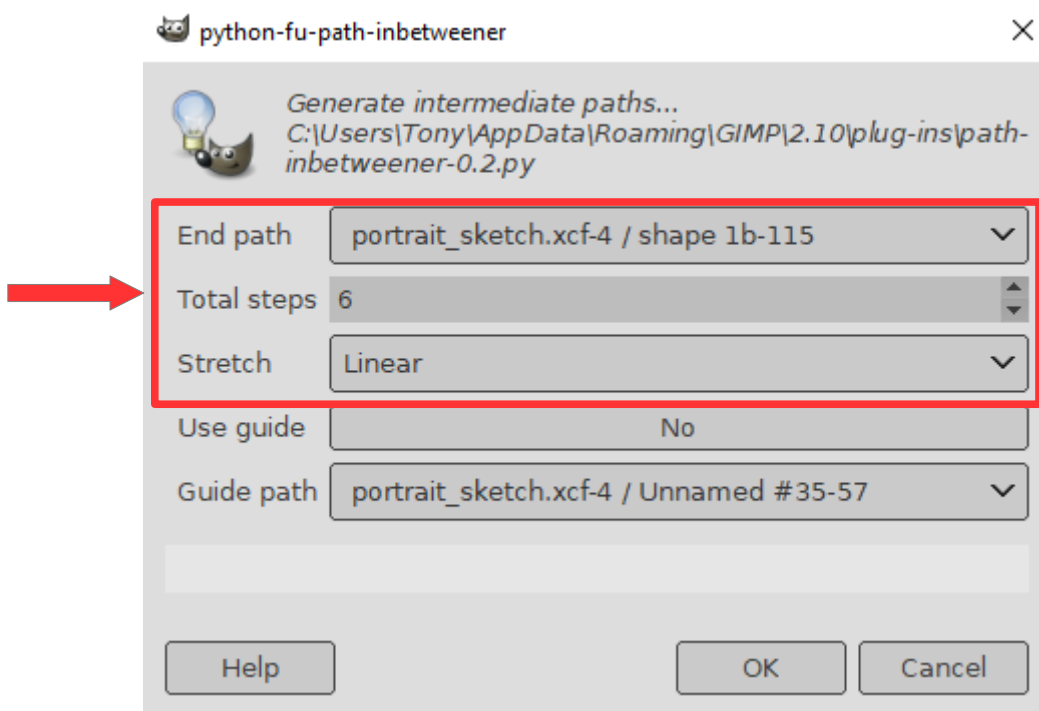


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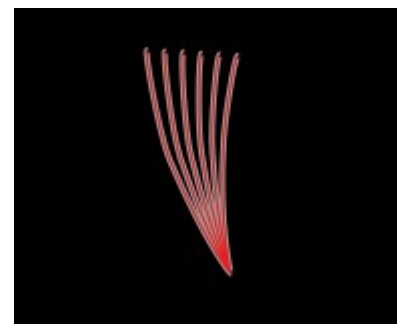
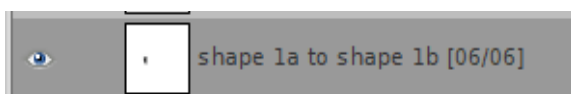
By right clicking on the **current path** (shape 1a) I obtain the paths dialogue menu and I select **Tools>Generate intermediate paths** to display this parameter window..

I select the target end path from the drop down list, the number of paths I want created as **6** (which will include the start and end path locations) and the **Stretch** option **Linear** which delivers proportional spacing between the paths. Other **Stretch** options are available but I will not address them here; they can be experimented with at your leisure as can the use of a **guide path** to deliver variable stroked path content.

Choosing the number of paths (**Total Steps** arrowed below) has always been a 'gut feeling' for me based on the size and shape of the target paths – obviously a key impact is the result of stroking the subsequent paths at whatever pixel size brush is going to be used. To date I have no rules or formulae that I apply, just experience. The good thing is that this process is speedy and can be redone if necessary.

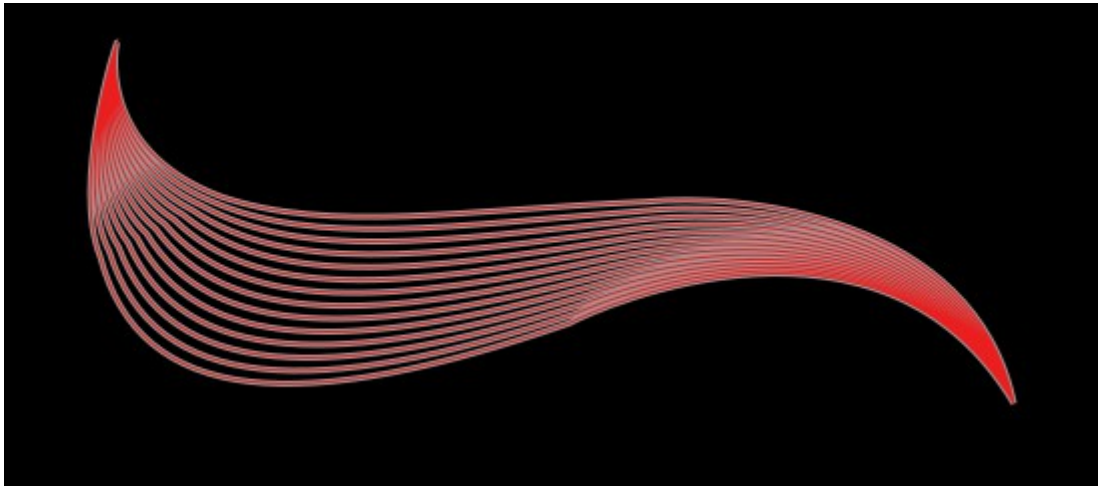
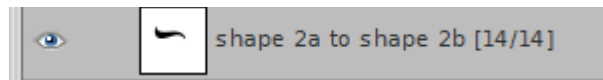


Click OK and the plug-in delivers a new path as shown below in the paths dialogue on the left and the actual multi pronged path on the right. The number of generated paths is included in the path name.

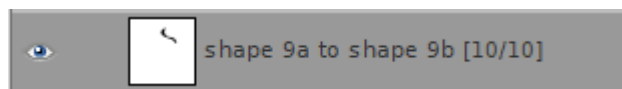


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Repeating this process for the second pair of paths in the progressive list delivers this new path



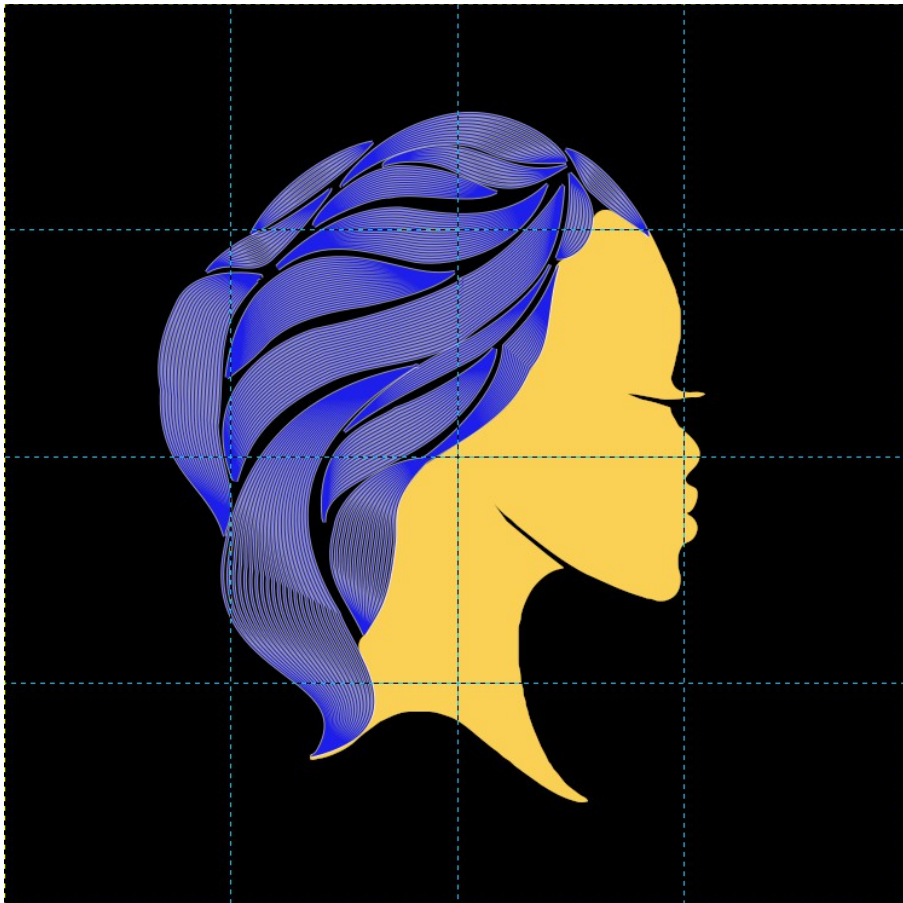
And once more with the ninth pair of paths in the progressive list – the overlapping ones



Note that the generated paths merge where the input path start/ends were located or they crossover, so stroking at those positions will be equivalent to a colour fill.

Having applied the plug-in to all the path pairs the following results was obtained for the two posted images of mine.

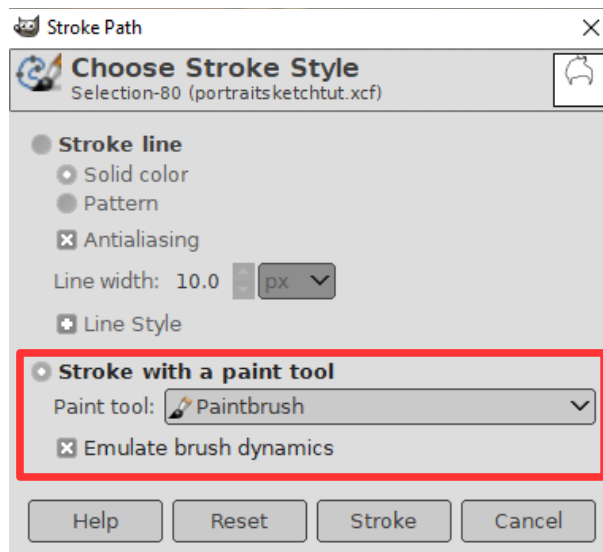
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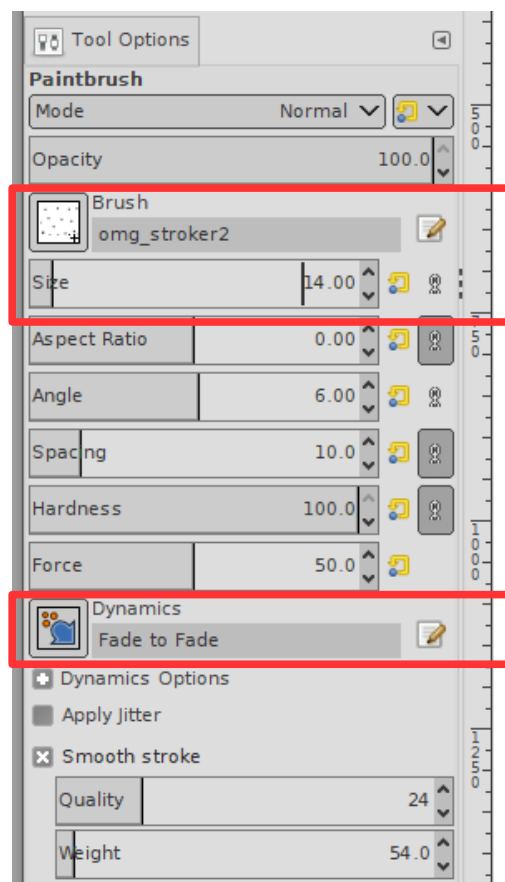
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Stroking the paths

There are several ways to stroke these new paths. I used [Edit>Stroke Path](#) to show this window.



When using my 'hair brush' (omg_stroker2), I set the parameters enclosed in red above and then set the parameters in [Tool Options](#) below; note [Fade To Fade](#) option in the [Dynamics](#) box.

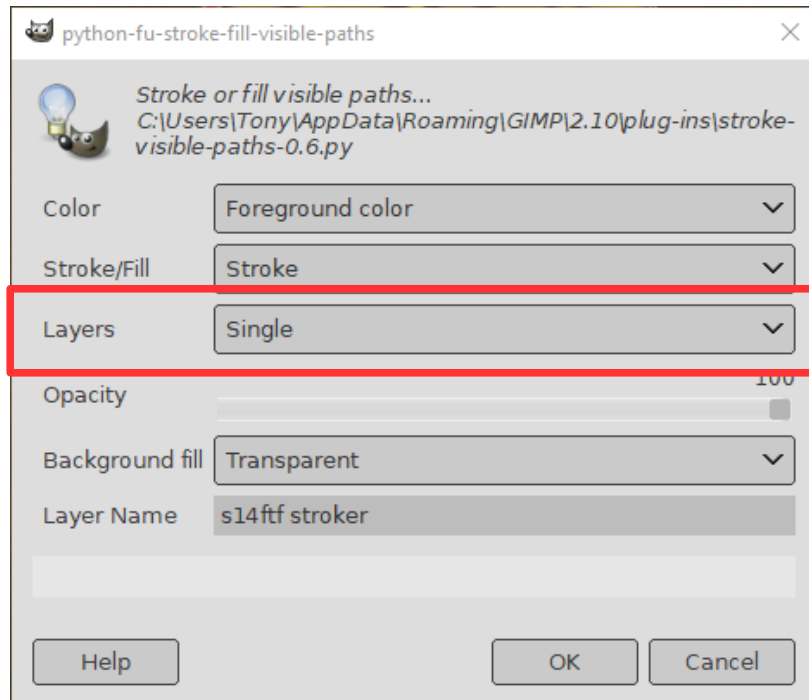


If I use the [Gimp Hardness 100](#) brush I would set the size to 3 pixels. However it is always useful to check out smaller or larger pixels sizes to gauge the effect.

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Note that this Gimp option only strokes one path at a time, so you have the choice of doing each path separately or initially merging all those paths into one and then stroking it. Doing one path at a time allows a separate layer to be used for each stroked path, whilst of course the merge option delivers all stroked paths on one layer.

There is another approach whereby you can leave all the individual paths separate and stroke them using another Ofnuts plug-in [Stroke or Fill Visible Paths](#), located under the [Image](#) menu.



You still set your [Tool Box](#) options as desired and the plug-in creates your choice of one layer per stroked path or a single layer for all stroked paths. You also provide a meaningful [Layer Name](#).

Which ever approach you take you will still need to choose your preferred colour for the stroking function. In this case I used **fad055** and obtained these results for the Hardness 100 brush at 3 pixels and my **omg_stroker2** brush at 14 pixels respectively.



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Typically, the stroked path colour and your background colours need to blend successfully and in the above case I could leave the images as is. Again, typically, I use the stroked paths layer itself to provide a 'hairstyle' background, in each of these cases by duplicating the layer, slightly blurring the base layer, then duplicating the upper layer and using appropriate blend modes to achieve the desired result as demonstrated below. It is all a matter of preference.



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Addendum

I want to share some further information relevant to the spiky hairstyle sketch portrait itemised above.

Spiky Hairstyle Additional Definition To Transparent Areas

Having completed all the path stroking on the spiky hairstyle, I added further definition within the transparent areas between those stroked paths as follows.

1. Selected the alpha area on a 'visible layer' of all stroked paths.
2. Inverted that selection to reflect the area occupied by all the stroked paths and saved the selection to a path.
3. Grew that selection by 20 pixels to eliminate the indentations of the stroked paths.
4. Shrank the selection by 20 pixels which then defined the border of the hairstyle and I saved it to a path as shown below.



5. Then from that selection I subtracted the path created in 2. above
6. Next I filled that resulting selection with colour **5a450a**
7. I followed that by running **Filters>Decor>Chisel or Carve** against that selection, changed the resulting layer's blend mode to **Overlay** and **Opacity 100**, duplicated that layer and ended up with this:



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Conclusion

I hope this document has proven useful for you. The technique I have used is work in progress, but there is so much potential in Gimp, that I doubt it will ever stop.

Thank you for trying out this approach I have developed and good luck in your own Gimp experimentation.