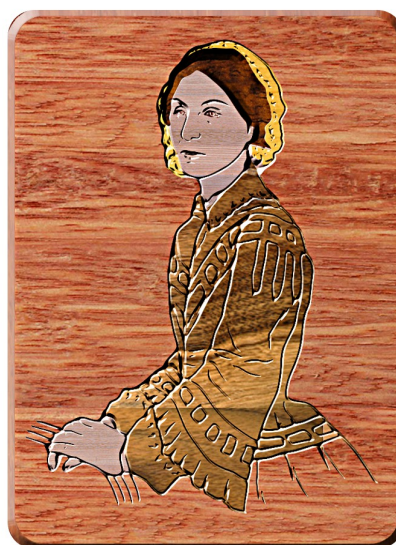
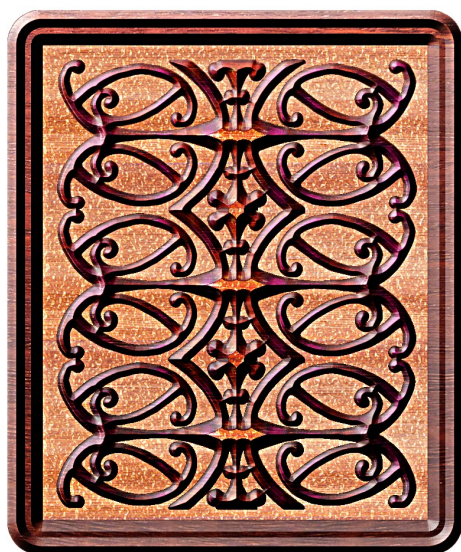


Playing With 'Chisel or Carve'

A multi part tutorial on various ways to use the 'Chisel or Carve' filter in GIMP

Part 1 – Introduction and Filter Parameters



By OldManGrumpy



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Introduction

I created this tutorial following a request from the Gimp Chat forum in a thread I originated with the name [Let's carve some wood](#). Once again this tutorial reflects my own learning journey and the experience I gained along the way, when using the GIMP Chisel or Carve filter. I fear that I speak with little authority on this subject, other than being a great fan of the filter and what it can produce.

Quite simply what we are doing is using this terrific script to use light and shadow in away that turns a flat (i.e. two dimensional) object into a three dimensional work of art (well an image anyway). For somebody who cannot draw, this filter, along with GIMP paths and line art drawings, allows me to derive much pleasure from playing with GIMP. I hope this tutorial will assist others to also gain pleasure from GIMP.

My tutorial as always targets **less experienced** GIMP users, but seeks to help both new and more experienced GIMP users create images something like that shown on the title page and also those to be found in the Gimp Chat thread at

<http://gimpchat.com/viewtopic.php?f=11&t=14177>

This tutorial comes in five parts as follows:

1. **Part 1** provides an introduction and also addresses the basics of the filter, its behaviour and the parameters available to manipulate it. Examples are provided.
2. **Part 2** is a 'step by step' tutorial, the objective of which is to reproduce a medallion image similar to that shown on the top left of the front cover of this document, in a choice of wood or metal. Whilst creating selections is not a difficult task in GIMP, a starter XCF file is provided that contains the basic materials and paths for selection, to deliver uniformity in getting this first outcome completed. Alternative medallion backgrounds are made available in a separate ZIP file.
3. **Part 3** addresses a different genre of chiselled/carved images by using the filter against line art drawings of lions and/or a giraffe to create transparent 'lead light' style images against a savannah dusk background. They are then filled with provided glass patterns or you can apply fillings of your own preference.
4. **Part 4** also uses line art, against which we use the Chisel or Carve filter, but we also apply different colouring to the selections to create a coloured image – a cameo style brooch of Florence Nightingale.
5. **Part 5** again changes tack to create a more 'robust' patterned image using 'heavier' filter settings on a provided gradient background or other of your choice.

I will also provide some hints on tweaking the final outcomes through the saving and manipulation of the 'bump maps' produced by the Chisel or Carve script.

Assumptions

It is assumed that the user at least has initial familiarity with basic GIMP actions.

The 'Chisel or Carve' filter is provided as an extra tool for GIMP by **Rob Antonishen** (RobA)

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and it can be downloaded from the Gimp Scripts registry using the following links -

<http://gimpscripts.com/?s=chisel+or+carve>

<http://gimpscripts.com/2015/03/chisel/>

There is a Gimp Chat forum thread posted by RobA at this link -

<http://gimpchat.com/viewtopic.php?f=9&t=7920>

Given that we will also probably use a GMIC filter in this tutorial, then you must have already installed GMIC in your GIMP plug-ins folder. For more information if required please visit:

<http://gmic.eu/gimp.shtml>

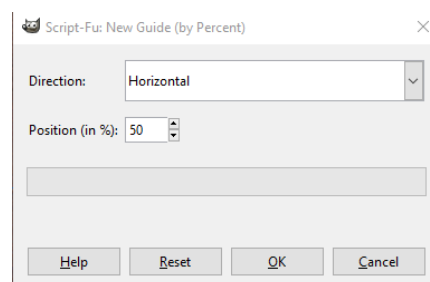
Conventions used in this tutorial

Instructions on accessing and using various GIMP functions and filters are expressed in the following format:

Image>Guides>New Guide (by Percent)...

This means that the user with a mouse, firstly left clicks on **Image** from the main GIMP menu, which then shows a drop down list of Image options available.

From this list the user with a mouse then left clicks on **Guides** to show the Guides options available. From this list the user then left clicks on **New Guide (by Percent)...** to display the following form for completion:



For ease of reference in this tutorial, I will use both **layer and path names** and instructions to name each such layer/path are included in the step by step dialogue.

References to the path names that we use will be identified like this – **Path name 1**

References to the layer names that we use will be identified like this – **Layer Name 1**

References to any guides we use when positioning objects on the canvas or as we create any required paths, will be in the following format:

Horizontal 1 for horizontal guides, top to bottom.

Vertical 1 for vertical guides, left to right.

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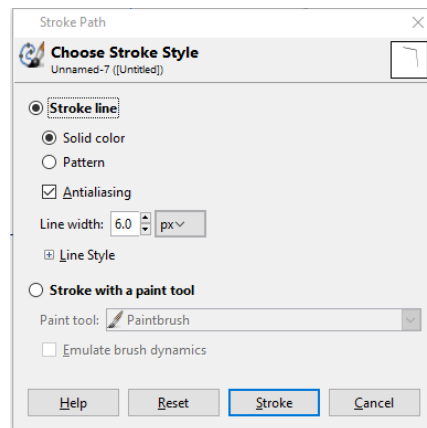
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I should state here that the correct location of the 'Chisel or Carve' filter, the subject of this tutorial, is found under:

[Filters>Decor>Chisel or Carve](#)

Other Scripts Used In/Required By OMG Tutorials

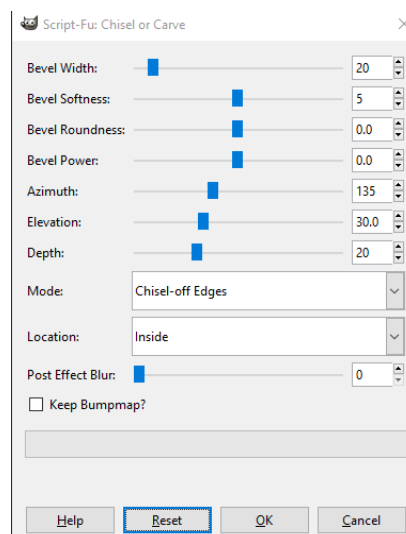
When it is necessary to stroke a **single path** I use the standard GIMP tool, [Edit>Stroke Path](#), as shown below:



TUTORIAL PART ONE

The parameters of the Chisel or Carve filter

The image below shows an example of the filter dialogue that will appear after its selection via [Filters>Decor>Chisel or Carve](#). It operates against the **current** layer in the GIMP layers dialogue window and the default parameters are shown below. An short explanation is provided of these parameters, what they each deliver and the effects of modifying them. I stress that it is my personal views that you are reading – hopefully they are close to the truth, but there is no warranty provided.



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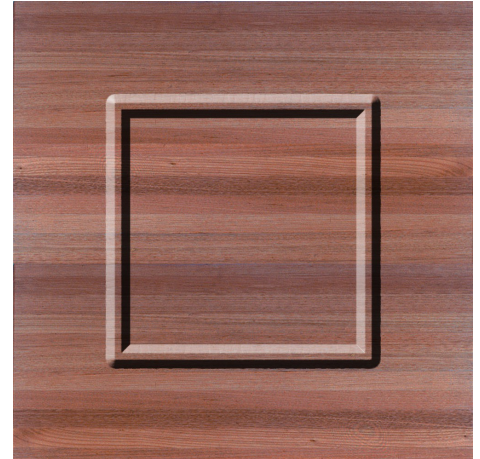
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I believe that gaining a reasonable level of understanding of the effect of changing the values of these parameters is **fundamental**. You can then consciously modify them for a targeted effect and obtain your desired and many different outcomes with this filter – although I am still a great fan of serendipity! So let's have a good look at what we have available in this filter.

1. Bevel Width –

To exemplify this parameter and its effect, all settings were left at default (i.e. bevel width 20 pixels) for this example against a square shaped selection just 15 pixels wide. The chisel off – outside setting is steep and strongly contrasted in this example with a clear flat table at the top of the slopes. Typically it is these default or lower end settings that I used for making the wooden images in the GIMP CHAT thread.



Just the bevel width was changed for this example and it was set at 100 pixels, again using the square selection itself 15 pixels wide. Both inside and outside slopes are now obviously longer, more gradual and less strongly defined.



Again just the bevel width was changed for this example and it was set at 200 pixels, still using the square selection 15 pixels wide. Both inside and outside slopes are now much longer, far more gradual and much less strongly defined.



Of course, mixing and matching the settings of low chisel/carve effect on one side and high chisel/carve effect on the other can give quite dramatic outcomes.

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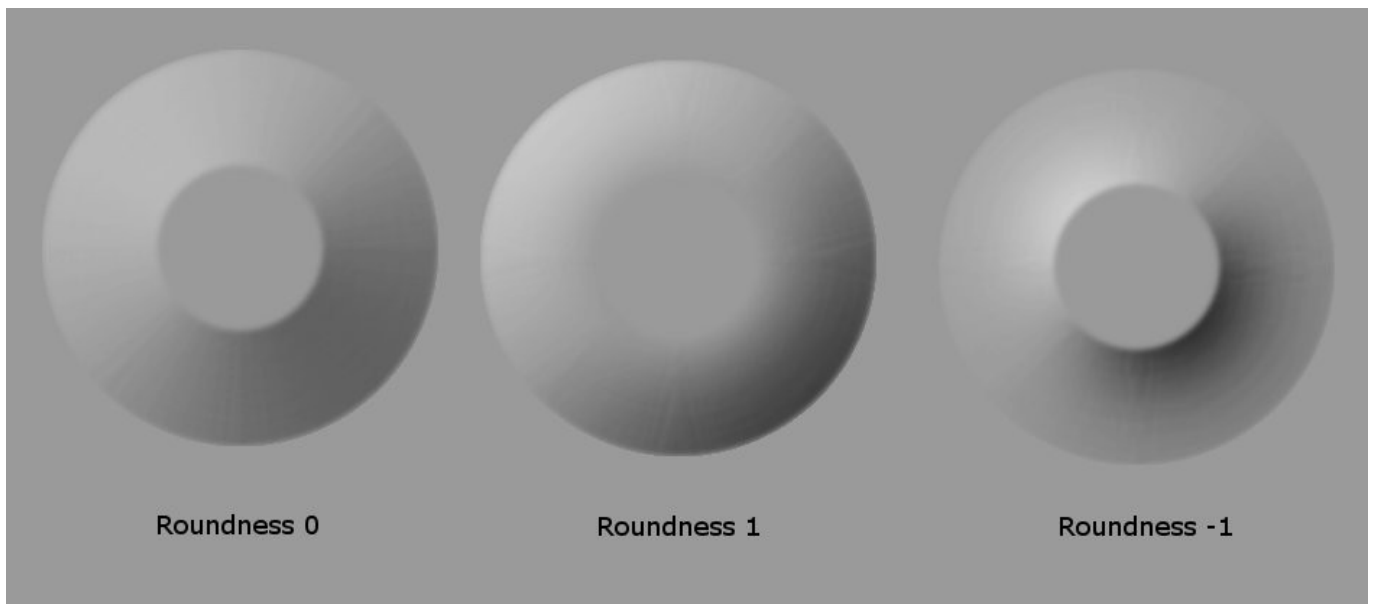
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2. Bevel Softness –

This parameter is the one I have most trouble in discerning the effect. I see little difference in outcome for three 20 pixel wide examples, all settings at default, but with Bevel Softness firstly set at minimum, then default mid way, then maximum. However, when the bevel widths are accentuated the softness is apparent – here, one carving at 80 pixels width is overlaying one of 20 pixels width – both are at the maximum softness level of 10.



3. **Bevel Roundness** – I will use here a reference to RobA's Gimp Chat thread identified above (page 3) and use his image from that thread to exemplify the effect of using this parameter. He states that “Roundness -1 is a quarter-circle fillet, +1 is a quarter-round, 0 is flat “.



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Again at low width/depth and default values, Bevel Roundness shows little impact. So for all these examples I used a larger Width of 60 pixels and greater Depth of 50 pixels against a square selection of 30 pixels for each image.

Then for this first outcome I set the Bevel Roundness to its minimum of -1. I am unsure of how to describe this result, but it does reflect the '**quarter fillet**' as RobA defines above and has softer shading at the slope bases than that of image 2 below.



For this second example outcome I set the Bevel Roundness to its default of 0. In Both this default example and that above the 30 pixel selection 'plateau' is sharply defined and the bevel itself is flat.



For this third example outcome I set the Bevel Roundness to its maximum of 1. At this setting the '**quarter round**' is very well defined softening and broadening that top plateau of the selection.



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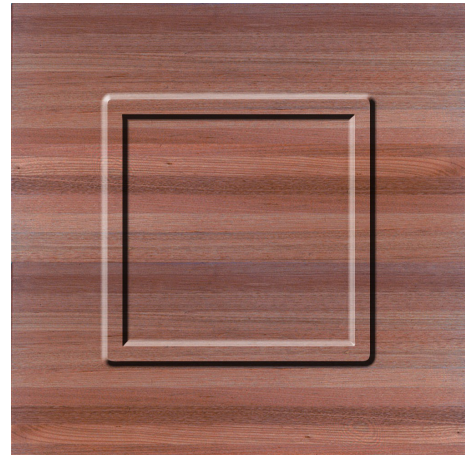
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4. Bevel Power -

RobA defines this feature as a '*power function applied on top of roundness to emphasize the curve more*'.

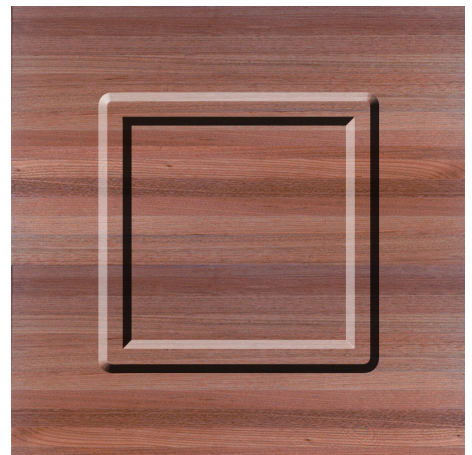
The first Bevel Power example here uses its minimum setting of -2, against a square selection of 30 pixels width with all other settings at default, except Location set as outside not inside.

Whilst clear and obvious, the light and shade at this level reduces the apparent width of the slopes in the bevel making them steeper.



This example here uses the default midway setting of 0 for Bevel Power, with all other settings as per example 1 above.

The light and shade either side of the selection plateau are now emphasised more and both slopes in the bevel appear broader and more gradual.



This third example uses the maximum setting of 2 for Bevel Power, with all other settings as per the examples above.

The light and shade either side of the selection plateau are now muted somewhat, certainly rounded and the selection plateau therefore appears broader. The height of the bevelled area therefore appears less than example 2 and similar to example 1

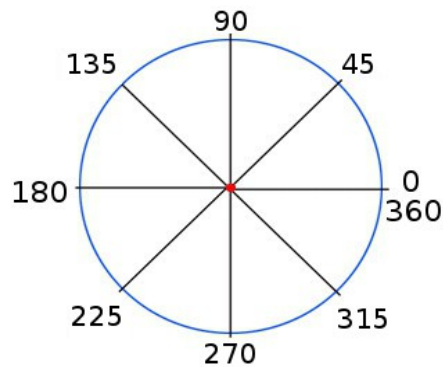


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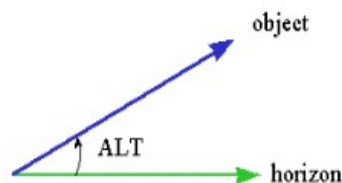
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5. **Azimuth** – These next two parameters determine just where the light source in our image is situated, both its direction and altitude and therefore governs where light comes from and where shadows are placed in our image. Azimuth is defined for GIMP as the **direction of the lighting source** from the observer and this means 'lighting' according to the points of the compass (0 – 360) as shown in the diagram below.



6. **Elevation** - The **elevation** angle, also called the **altitude**, of a light source, by measuring the angle between that point and the object, from the reference frame of the observer.



That's height from horizon (0.50°), up to zenith (90°) i.e. directly overhead.

7. Depth -

These depth examples use default values except for a 100 pixel width bevel and varying depth values; in the first example to the right the depth is set to only 1 pixel (the minimum), and you can see that the bevel is only barely discernible at this value.



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The second example to the right has the depth set to 32 pixels, approximately mid way on the scale and you can see that the bevels are clear with both light and shade well defined but not registering strongly.



The third example has the depth set to 65 pixels, the maximum on the scale, and you can see that the bevels are very clearly defined with both light and shade registering much more strongly.



8. **Mode** – is simple being 'Chisel-off-Edges' or 'Carve-in'. Sometimes for effect I use both together and, whilst the default layer mode for the outcomes is Hard Light at 80% opacity, again, I sometimes change those values too.
9. **Location** – once more a simple choice being 'Inside' the selection or 'Outside' of it.

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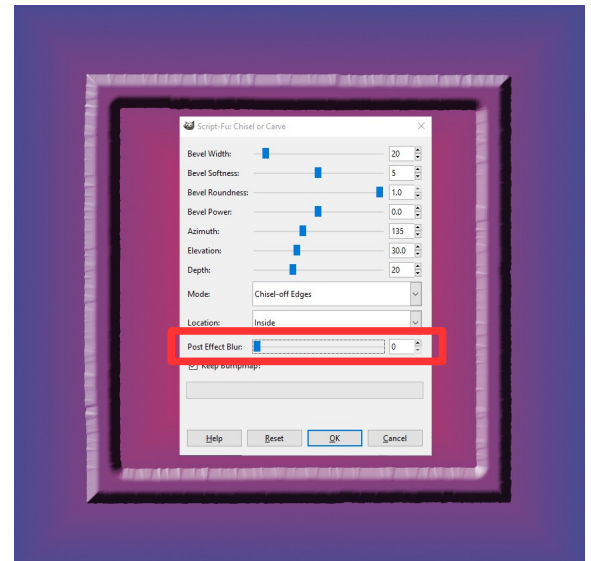
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10. Post Effect Blur -

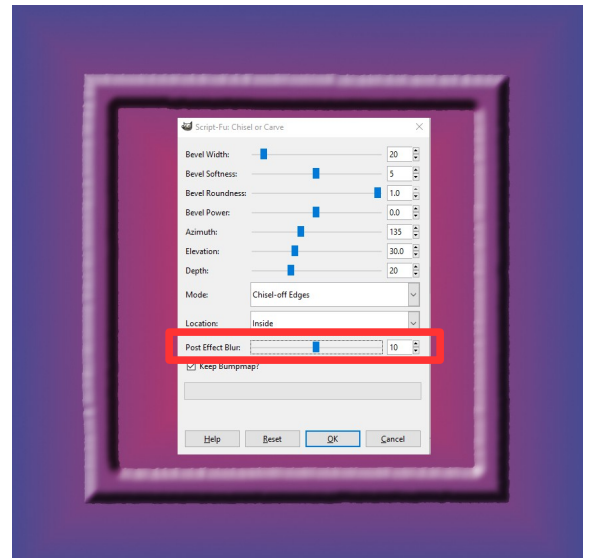
I will quote RobA here - *“Post Effect Blur is only masked off outside for an inner carve/chisel, and inside for an outer carve/chisel”* - but I am not sure I understand that!!

Settings are shown below at 0, 10 and 20 for Post Effect Blur (all others common) for 3 images with a 60 pixels wide selection. This selection is chiselled internally with a 20 pixel width and a 20 pixel depth to obtain the square ridged frame.

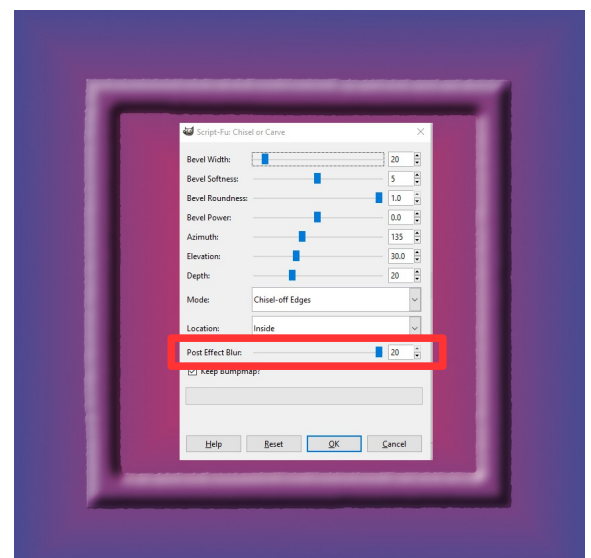
At zero blur (default), both chiselled sides are strongly emphasised with rugged effect visible.



At the midway blur setting of 10, the visible effect is less rugged and appears smoother, but still angled on both sides of the ridge.



At the maximum blur setting of 20, the visible effect is strikingly obvious, more rounded and much smoother, but with the light and shadow somewhat dimmer.



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11. **Keep Bumpmap?** - a simple check box and yes in these tutorials I will advise whether to set this 'on' so that we can use the bumpmap afterwards for 'tweaking' purposes.
12. **Reset button** – pressing this ['Reset'](#) button returns all parameter settings to their **default values**.

Hopefully providing these examples has some value, will have assisted you to better understand this filter and will also help you in making your settings for a particular desired effect.