

## Image Processing with Gimp

# Touch Up Tools

When the temperature starts to drop, people like to dig out their vacation snapshots and relish those memories. And this is when the big gap between your own photos and more professional offerings tends to hit home.

Never mind – there is always Gimp to help you polish up your original material, getting rid of scratches, tears, stains, and redeye in no time at all.

BY PETER HÜWE

The hand of time weighs heavily on even the best of photos. Fortunately, a combination of Gimp [1], a few **Script-Fus** and a modicum of skill is all you need to polish up your vacation memorabilia from way back when.

If you want to show off with your portrait against a picturesque background, but actually spent your summer vacation in your own back yard, or simply want to polish out the redeye or other small blemishes from your original images, Gimp is the tool to look to.

The notorious redeye effect is an unfortunate fact of life for amateur photographers. It might be a good idea to

touch up photos that you use for job applications, for example.

## Redeye retouched

Zoom the image in to the redeye until it just fits the window, as shown in Figure 3.

Select the *Airbrush* tool (“Airbrush with variable pressure”) (see Figure 1) with the smallest *Circle Fuzzy* brush (see Figure 2). Now spray the red part of the eyes black, taking care not to color the white reflections in the pupils by mistake. To avoid this you can spray the red areas at the edges of the light reflexes white instead of black.



A slightly larger light reflex will be barely noticeable, but do make sure that the reflex is spread evenly on both eyes.

There is no need to panic if you make a mistake as you can undo individual steps by pressing [Ctrl-Z]. The number of *Undo* steps depends on your configuration. It does make sense however, to save backup copies regularly, as some scripted actions cannot be undone.

## Rings Under the Eyes

Rings under the eyes tend to create a bad impression in portrait photographs. The *Dodge or burn* tool (see Figure 1) is per-

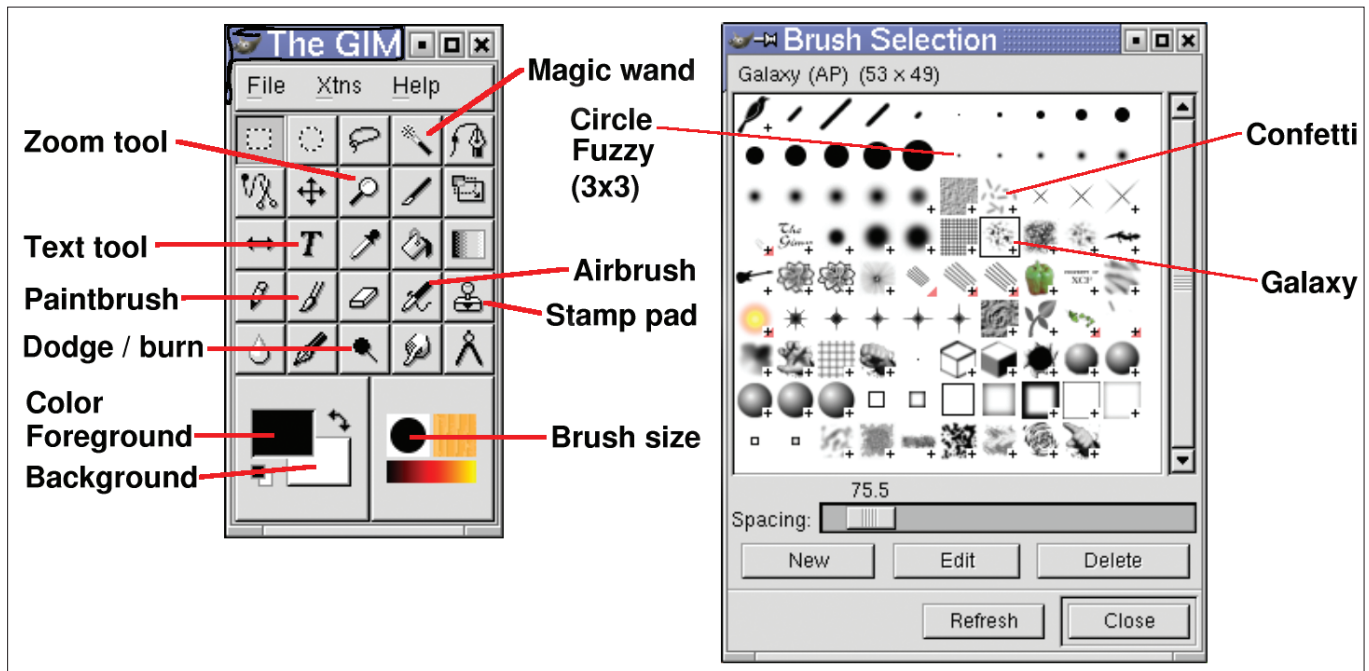


Figure 1 & 2: The toolbox and brush selection menus from the GIMP. A click on the Brush Size icon on the main toolbox, brings up the Brush Selection menu

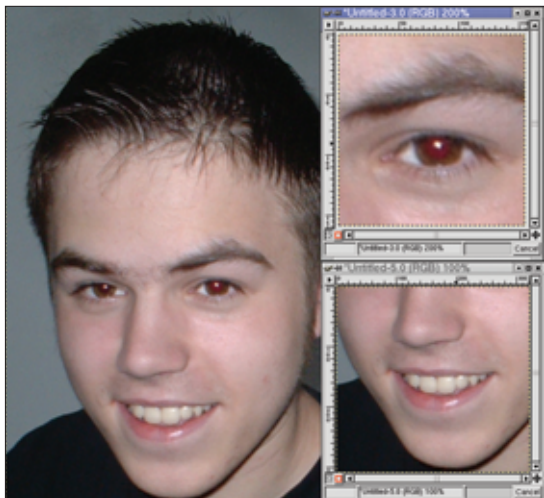


Figure 3: Eyes and teeth need touching up

fect for removing the telltale signs of tiredness.

You can double click the tool symbol to open the options for the tool. In the case of *Dodge or burn* you will want to set the exposure rate at about 5%, and select the *(Type)* to *Dodge*. Doing so lightens up any areas you click by the selected factor.

The number of applications you need will depend on the original image. The sample image in Figure 3 was perfect after three “Dodges”.

## Whiter than White Teeth

Of course your teeth should really be a question of dental hygiene, but the *Colorize* [2] script can help you out of a spot. The tool colorizes a selected area without changing any existing gradients.

The red square at the bottom left of the image window opens the so-called *Quick-Mask* view (see Figure 4). Now use a white brush to paint in the surfaces of the teeth. If you then click on the black circle icon next to the Quick-Mask icon to return to the normal view, you will notice that Gimp has selected these areas.

Now right click on the selection to open the menu; the *Colorize* script is located in *Script-Fu / xMedia*. You can use the dialog box to change the color to white. Then click on *OK* to let Dr. Gimp finish off the treatment. Of course, stub-

born stains may need a second appointment.

If the color gradients in the image are clearly segregated, you can use the magic wand tool rather than the quick mask. Just click on a tooth and, if required, shift-click to select multiple teeth, until your selection is complete.

## Out Damned Spot!

Trouble with wrinkles, zits, blemishes – but also scratches, tears, stains? Then it's plastic surgeon Dr. Gimp to the rescue!

Use the magnifying glass icon to zoom in as closely as possible to the area you want to touch up such that you can recognize the detail without losing touch with the image as a whole. Select the Stamp pad icon for cloning with a small *Circle Fuzzy* brush, then double click on the tool icon to open the Options window, and select *Aligned* below *Alignment*. This keeps the same angle and distance between the brush and the source image region.

Look for an area adjacent to the damaged area that you can use as a touch up source. Hold down the [Ctrl] key to toggle the cursor to a crosshair and click to select a source. Then paint over the area you want to touch up until the blemish is invisible to the naked eye.

To quickly check the general impression of these changes, press [Ctrl-Shift-N] to open the navigation window.



Figure 5: A do-it-yourself vacation photo

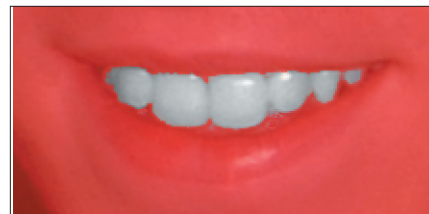


Figure 4: Periodontitis? The image turns red in the Quick Mask view

This allows you to scale the selected area up and down variably.

After completing this step, you can use the airbrush tool with the smallest *Circle Fuzzy* brush to apply the finishing touches. Hold down the [Ctrl] to toggle the cursor to a pipette and absorb a color for the selected tool. Choose a lighter area in the vicinity of the area you are touching up, and then apply the airbrush to the blemish.

Swapping lighter colors for darker ones at the edges of the area will give your image a more realistic appearance. Various cloning templates and brushes, such as *Confetti* or *Galaxy*, rather than *Circle Fuzzy*, add some variety and thus create a natural appearance. You can then smooth off hard edges using the *Smudge* tool.

## Vacation Snapshots in Your Own Back Yard

Did your camera decide to go on strike during your visit to the pyramids? But you don't want to miss out on a photo like that in your slideshow, right? If your conscience can handle it, Gimp will have no qualms about helping you to reconstruct the scene.

Open an image of yourself and the landscape of your choice. Numerous online photo archives provide suitable landscapes (see Box 2).

Use the Quick Mask function to select the edges of the people you want to

## GLOSSARY

**Script-Fu:** A Gimp macro that applies multiple steps to an image or section.

## Box 1: Installing external scripts

The Gimp *Xtns / Script-Fu* menu lists the scripts available in the `/usr/share/gimp/1.2/scripts/` or `~/gimp-1.2/scripts/` directories when you launched the program. To extend the list, you simply copy the script file to one of these directories. The *Xtns / Script-Fu / Refresh* menu entry refreshes the menu for the current Gimp session.





Figure 6: The original



Figure 7: A new "old" photo

appear in the new photo. Mark the edges as precisely as possible to avoid transferring parts of the original background to the new image. Then paint over the content inside the selected border with a larger brush.

After quitting Quick Mask mode, press [Ctrl-C] to copy your selection to the clipboard. Then create a new *Transparent* layer in your background image by pressing [Ctrl-N] in the *Layers, Channels and Paths* dialog box.

The new layer can be the same size as the background image. Unused areas will be transparent, and this does mean that you will not need to worry about making things fit.

Now press [Ctrl-V] to paste the content of the clipboard into the layer. Move the selection you are pasting to the required position; you will be able to scale and edit the foreground and back-

ground layers independently. The results could be something similar to Figure 5.

### Text Effects

Now for the text tool or *dynamic text* filter in the *Filter / Render* menu. The filter is more flexible, but the text tool is useful for creating banners. Select the latter and click the position where you intend to insert your text.

The dialog box that then appears allows you to specify the font size and type, and the text content. The dynamic text filter creates diagonal and multiple-line text.

Of course you can enhance text passages just like any other object, by adapting the text to a color gradient in the image, for example, or using the transformation tool to jazz up the text.

Would you like to take a trip back in time rather than go on vacation? The *Old*

*Photo* script in the *Script-Fu / Decor* menu allows you to convert modern digital images to resemble your or even your grandparent's (see Figure 7) childhood photos.

You can disable all the effects apart from *Sepia* in the dialog box to keep the original quality of the photo, simply removing the color to obtain a monochrome image.

### Artistic

The *Artistic* group of filters allows you to completely re-vamp your photos. However, in some cases the results have very little in common with the original image.

Both the *Oilify* and *apply canvas* [3] filters have a similar effect. In fact, the latter often produces more pleasing results, as it applies the oilify effect in multiple steps using soft-focus (see Figure 8).

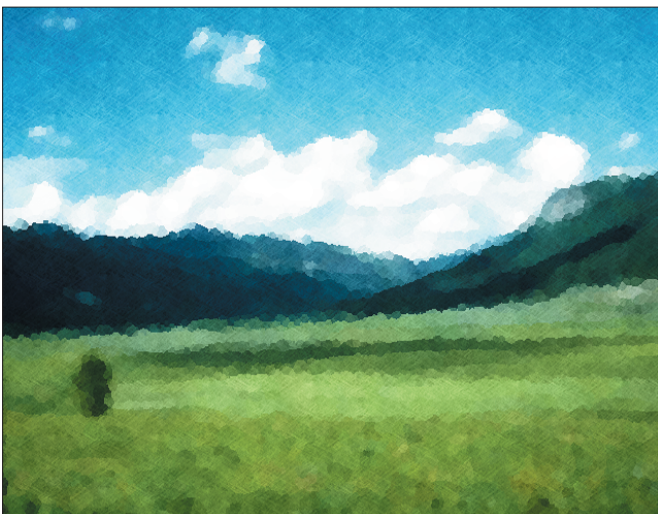


Figure 8: A watercolor



Figure 9: The Lomo effect



Figure 10: For comparison's sake: The Davo effect



Figure 11: Image with round corners

## Lomo and Davo

Fans of Lomo cameras [5], which have an extremely long exposure time amongst other features, will really appreciate the Lomo script available from [4].

After running the script on them, photos really do look as though they were taken with a lomo camera: the colors are more radiant, and the image blurs towards its edges (see Figure 9).

The Davo effect [4] was created by the same author. Instead of blurring the image in all directions it does so either horizontally (*Landscape*) or vertically (*Portrait*) (see Figure 10).

## Frames

Before you display your photos and works of art, you will probably want to choose an appropriate frame. Gimp offers you all kinds of options for applying a stylish frame to your work.



Figure 12: Round corners with drop-shadow

Before running the *Round corners* script, first press [Ctrl-A] to select the whole image. In the dropdown menu click on *Select / Shrink* to shrink the selection by 20 pixels to allow the frame to stand out from the image.

Now select the *Script-Fu / Decor / Round corners* item. The *Edge Radius*

defines how abrupt the transition should be: the higher the value for this parameter, the softer the edge is drawn. Figure 11 shows the results.

*Script-Fu / Decor / Fuzzy border* and *Add border* provide other options. The former creates digitally frayed edges, and the latter places a border in the color and width of your choice around the image.

*Round corners* rounds off the corners of an image and adds a drop-shadow if required. This effect, which

is also available individually in *Script-Fu / Shadow / Drop-Shadow* creates a 3D effect where the image appears to float above the background (see Figure 12).

Finally *Script-Fu / Decor / Slide* converts a photo to a slide. You can use an option to add captions that help you organize your slideshows (see Figure 13).

## INFO

- [1] The GIMP: <http://www.gimp.org/>
- [2] Colorize tool: <http://www.deviantart.com/view/1473101/>
- [3] Aquarel script: <http://www.deviantart.com/view/1660912/>
- [4] Lomo and Davo scripts: <http://thermos.goose24.org/gimp/>
- [5] Lomo cameras: <http://www.lomo.com/>



Figure 13: A Slide

## THE AUTHOR

Peter Hüwe is a Gimp fan and as such always interested in sharing his enthusiasm for The Gimp with others. When Peter is not busy painting or writing, he puts in a lot of hours at his PC, and has taught himself various programming languages.

