

» **Gimp** Open source image-editing software you can get your teeth into

Gimp: Shattered

She's breakin' up, captain! Gimp author **Michael J Hammel** shows how to make someone's face fragment and drift away in a few simple steps.



» Our goal is to make a face look as though it's breaking up and drifting away in a cloud of squares.



Our expert

Michael J Hammel is a contributor to the *Gimp* project and the author of three books on the subject, including his latest, *The Artist's Guide to Gimp Effects*.

This month's tutorial is one I've thought about for years, but never really understood how to do until now. The concept is simple enough: snip pieces out of a photo and make them look as if they're floating away, as though the original photo were slowly dissolving. The obvious way to do this is with manual clippings. You select shapes from the original, cut and copy them to a new layer, which you then position slightly left or right of the original, and repeat. Using differently sized selections, you can simulate the pieces moving closer or further away. This is easy enough to explain, but in practice, you end up needing hundreds of layers to get the desired effect. There's no reason it can't be produced in this way, but it's much more work than you should have to do. And managing countless layers, each for one small clipping, will become a real pain.

My thinking on this problem has always focused on taking bits of the original and moving them, but I was never able to come up with a fast and easy way of doing it. The ideal

process would involve nothing more than painting. Imagine using the Clone tool for the clippings: at first glance, cloning seems to be perfect. However, there are two problems with this. The first is that cloning doesn't remove the part of the image from the original location; the second is that cloning only copies the original to a new location, it doesn't create clippings that aren't adjacent to each other. And the whole point of the dissolve is to make it look like pieces of the original are floating away from each other.

In my never-ending rummaging through internet tutorials, I finally found a *Photoshop* walkthrough that explained the real trick for this effect: duplicating the original layer and scaling it in the direction that the pieces will float away. The scaled layer is placed below the original, a black mask is added to the scaled layer and a white mask to the original one. Shapes are drawn in the masks, to cut from the original or expose in the scaled layer. Brush Dynamics are used to produce randomly sized shapes, so that the floating pieces (or cuts from the original) can be created using simple brush strokes or dabbing. In the end, only a single layer is required for the floating pieces and another for the original, with the dissolving bits clipped from it.

This month's tutorial will expand on this process by adding a few artistic features, but for the most part will focus on the dissolving effect. I'll be using the *Gimp Paint Studio* (*GPS*) collection of presets and brushes for the artistic portion, but this isn't required for the dissolving effect. We'll create a new brush with the *Brush Editor*, prior to making the floating bits.

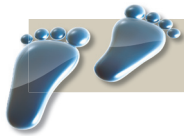
Project resources

This tutorial is based on PSDFan's Shattered Face tutorial

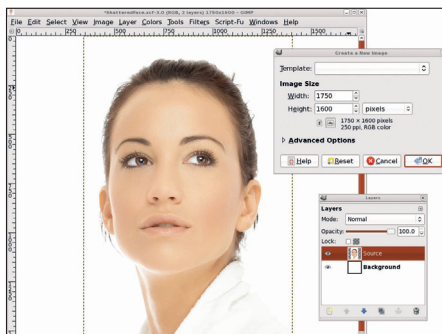
- » psdfan.com/tutorials/designing/create-a-shattered-face-graphic
- » *Gimp Paint Studio* code.google.com/p/gps-gimp-paint-studio
- » Stock photo www.bigstockphoto.com/photo/view/1892998

» **Last month** we took a step into the wonderful world of desktop icons.

face

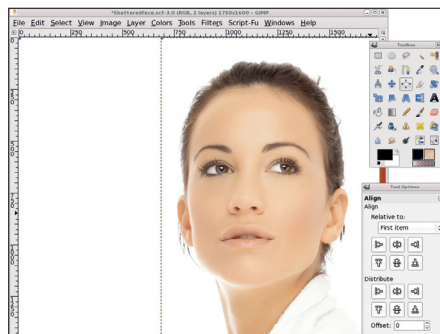


Step by step: Dissolve a face



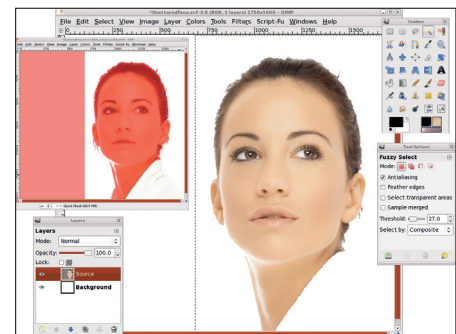
1 Get the source image

The original 1064x1600 source image comes from the www.bigstockphoto.com collection. The photo was chosen for its high-contrast background and limited hair around the face. Both features will make it easier to select just the face from the photo. In *Gimp*, create a new image (File > New) that's 1750x1600 pixels in size. Open the source photo (File > Open) and drag its only layer into the new image window. Name the layer that this creates Source.



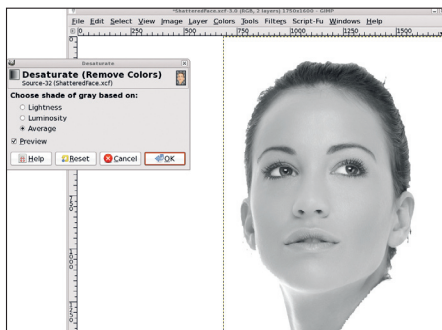
2 Align source image

Add an Alpha Channel (Layer > Transparency > Add Alpha Channel) to the Source layer. Choose the Align tool from the Toolbox. Click on the background layer in the image window first, then hold down the Shift key and click on the Source layer in the image window. In the Tool Options dialog, set the Relative To option to First Item, then click the Align Right Edge button, followed by the Align Top Edge button.



3 Select the face

Choose the Fuzzy Select tool from the Toolbox. In the Tool Options dialog, set the Threshold to 27. Make sure the Source layer is active in the Layers dialog, and click in the upper-right area of the image window. Use the Quick Mask to clean up the selection around the neck and lower-left of the face. Grow the selection (Select > Grow) by 3 pixels, then cut it from the layer (Ctrl+X). Finally, clear the selection by clicking Select > None.



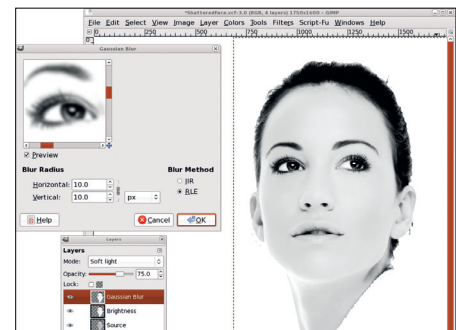
4 Desaturate the face

To avoid issues with out-of-gamut colours when printing, desaturate the Source layer (Colours > Desaturate). Use the Average setting in the Desaturate dialog, because it provides the best contrast in facial features, such as the lips, nose and eyes. Over the following two steps, we'll enhance the face so that it contrasts better with the backdrop that we'll create for the image later on.



5 Brightness and contrast

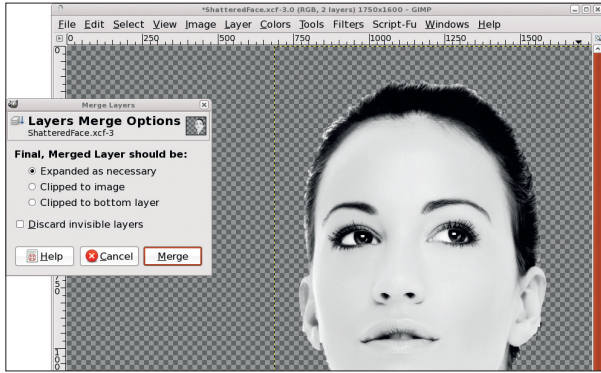
Duplicate the Source layer (Layer > Duplicate) and name the new layer Brightness. Next, open the Brightness/Contrast dialog (Colours > Brightness-Contrast). Set the Brightness slider to 30 and the Contrast to 70, then apply these settings. Once you've done this, set the Brightness layer mode to Multiply and its Opacity to 75%.



6 Gaussian blur

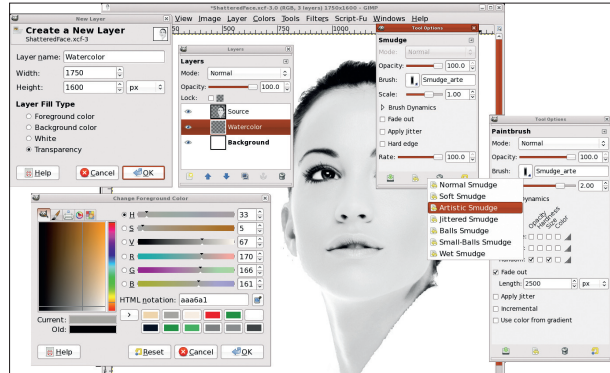
Duplicate the Brightness layer that you've just created and name the new layer Gaussian Blur. Open the Gaussian Blur filter (Filters > Blur > Gaussian Blur). In the dialog, set both the horizontal and the vertical Blur Radius values to 10.0 and the Blur Method to RLE (run-length encoding). Click on OK to apply these settings to the image. Next, in the Layers dialog, set the Blur layer mode to Soft Light and the Opacity level to 75%. »

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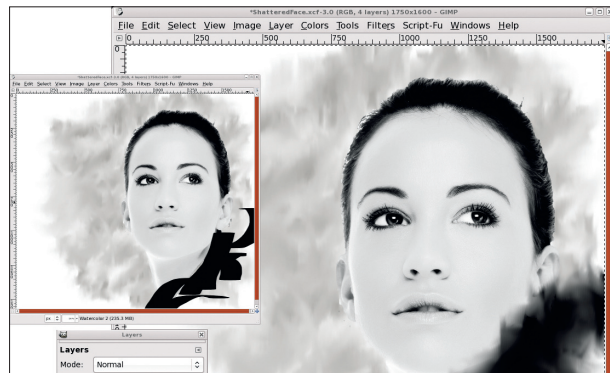
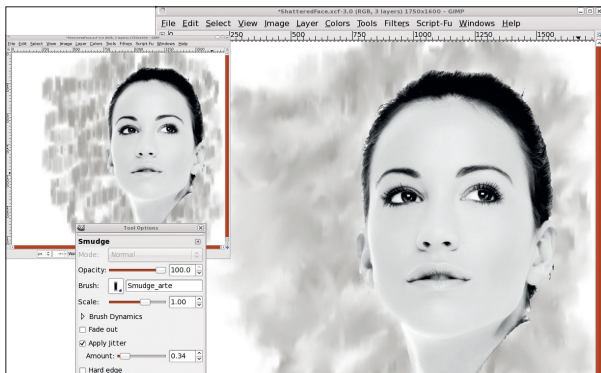
7 Merge face layers

In the Layers dialog, click the Eye icon to turn off the visibility of the Background layer. Choose Image > Merge Visible Layers and in the Layers Merge Options dialog, choose Expanded As Necessary. Click Merge. The resulting layer will take the name of the lowest one. Turn visibility of the Background layer back on.



8 Backdrop watercolour setup

Add a transparent layer (Layer > New). Name it Watercolour, and make sure it's above Background but below Source. Click the Smudge tool and select the Artistic Smudge preset in the Tool Options dialog. Choose the Paintbrush tool, set Fade Out length to 2500 and Scale to 2.0 in the Tool Options. Set the Foreground colour to a light grey.

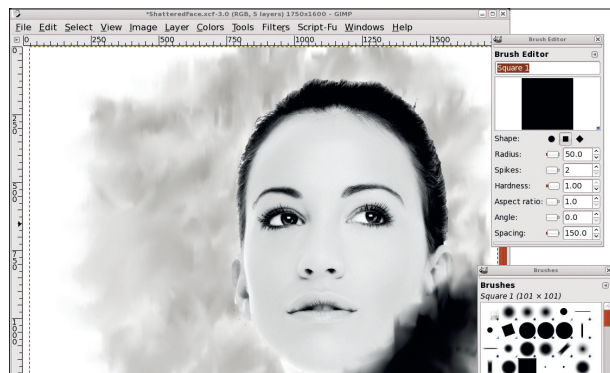
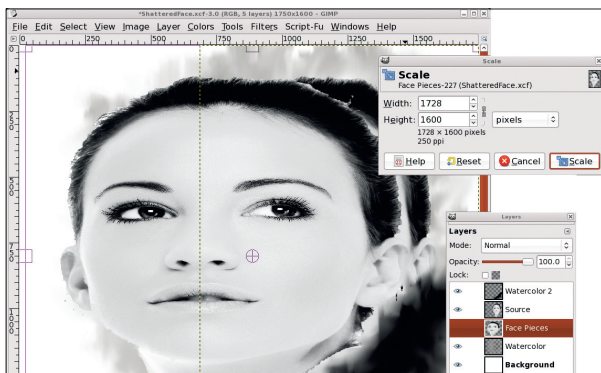


9 Paint the backdrop

Starting around the edge of the face, paint wavy strokes on the Watercolour layer. Do this until there's a large amount of grey, but not a solid block. Switch to the Smudge tool, tick Apply Jitter in the Tool Options and smear the grey into random patterns. Feel free to skip this step and the next, as they aren't required for the dissolve effect.

10 Paint the foreground

Add a transparent layer, name it Watercolour 2 and move it above the Source layer in the Layers dialog. Set the Foreground Colour to Black. Use the Paintbrush tool's Palette Knife preset to paint short random strokes along the lower-right side of the face. Switch to the Smudge tool's Artistic Smudge preset to smear the strokes. Repeat as desired.



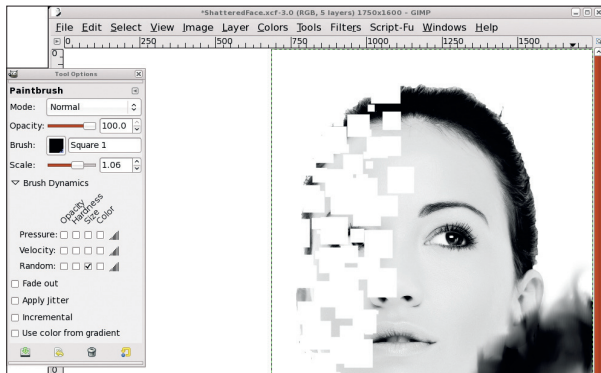
11 Face pieces layer

Click on the Source layer in the Layers dialog. Duplicate it, call the new one Face Pieces and then move it to below Source. Make sure it's the active layer and choose the Scale tool. Click on the image window and drag the left side of the Face Pieces layer to the left, almost to the edge of the image window. Turn off the visibility of the Face Pieces layer.

12 Create a square brush

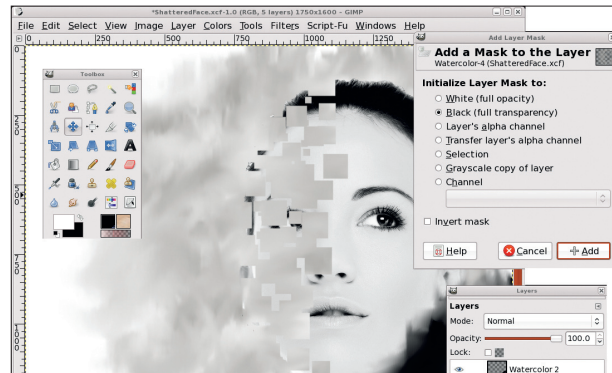
There are no suitable brushes for this project in the stock brush collection or in GPS, so let's create one. Open the Brushes dialog (Windows > Dockable Dialogs > Brushes). Click the New Brush icon, set the Shape to Square, the Radius to 50, the Hardness to 1 and the spacing to 150. Name the brush Square 1; it's automatically saved.

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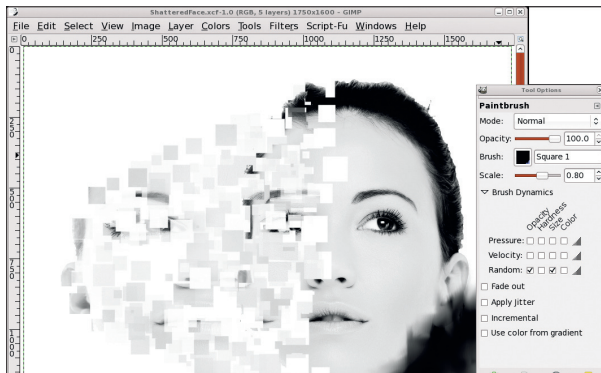
13 Mask the Source layer

Select the Source layer in the Layers dialog and add a white layer mask (Layer > Mask > Add Layer Mask). Select the Square 1 brush. In the Tool Options, set the Scale to 1, enable Brush Dynamics and tick to use a random Size. Click, don't stroke, over a wide area of the left side of the face. Turn off the Watercolour layer's visibility to see better.



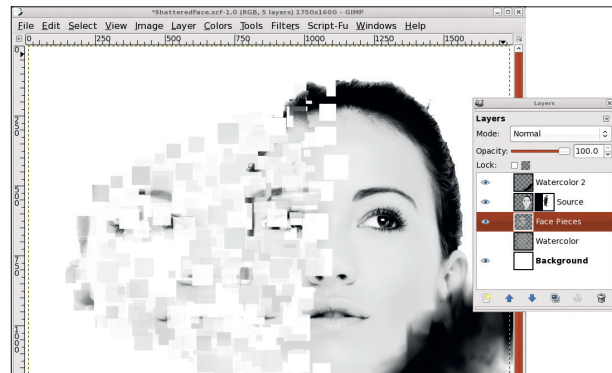
14 Prepare to mask Face Pieces layer

Click the Face Pieces layer in the Layers dialog to activate it. Make the layer visible again and add a black layer mask. Type D in the image window to reset the Foreground and Background Colours to black and white, respectively. Type X to swap the colours so that the Foreground Colour is now white.



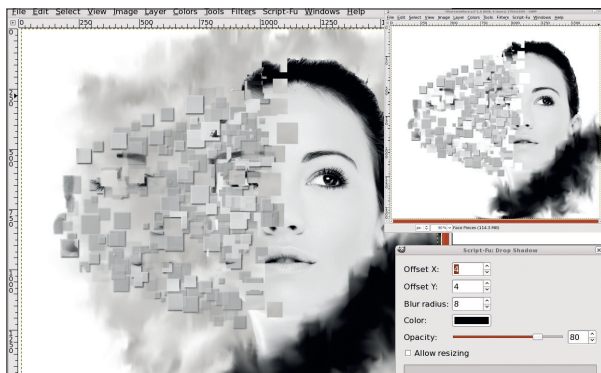
15 Mask the Face Pieces layer

Choose the Paintbrush and select the Square brush. In the Tool Options, set Opacity to 100%, Scale to 0.80, enable Brush Dynamics and tick Random Opacity and Size. Make brush strokes over a large area of the left side of the image, including part of the face. Toggle the Source and Watercolour layers' visibility as needed.



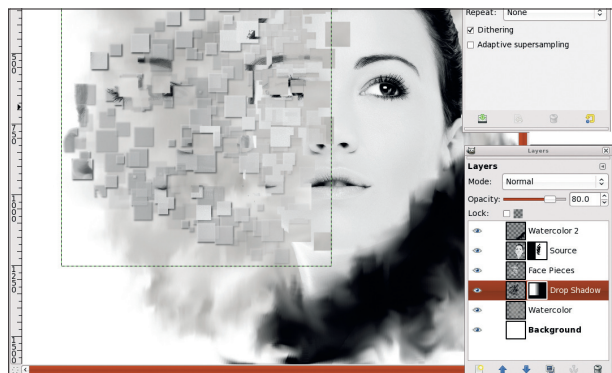
16 Apply layer mask

The pieces floating away from the model's face are not easily seen at this point. To make them more visible, a drop shadow needs to be added to the Face Pieces layer. Before doing this, the layer mask must be applied to this layer. Click on the Face Pieces layer in the Layers dialog and apply the layer mask (Layer > Mask > Apply Layer Mask).



17 Add drop shadow

Open the Drop Shadow filter (Filters > Light and Shadow > Drop Shadow). Set the Offset X and Offset Y values to 4, the Blur Radius to 8, the Opacity to 80 and untick the Allow Resizing option. Click OK to apply the drop shadow.



18 Add gradient mask to shadow

To make the pieces appear to be floating away from the face, add a white layer mask to the Drop Shadow layer. Choose the Blend tool, set Opacity to 100%, Gradient to FG to BG and Shape to Linear. Drag in the layer mask from the right edge to the middle. If the pieces aren't distinct enough, duplicate the Drop Shadow layer once or twice. **LXF**

» **Next month** It'll be the last *Gimp* tutorial for a while, covering T-shirt designs.