



Repair and Replace

This tutorial is on repairing blemishes on images and making changes to them. There are three main tools designed to do these jobs and we'll have a look at each of them.

Spot Healing Brush

The first is the spot healing brush. This tool blends the surrounding pixels into the area to be repaired. It's particularly good at things like removing small blemishes on skin or getting rid of dust specks that have been inadvertently scanned with your image. All you have to do is

- Select the tool from the toolbox – it's under the healing brush, which looks like a plaster (J)
- Re-size the brush until it's just a little bigger than the blemish you want to repair, otherwise you can pull in parts of the image that you don't want. The easiest way is to use the square brackets. If you remember from the brushes tutorial, pressing the right square bracket (]) increases the size of the brush and the left square bracket ([) decreases the size.
- The Type option has three settings which are only subtly different. I've always used Content-aware as that is the most 'intelligent' of the three and does an excellent job.
- The other option to check is 'Sample all Layers'. If your image is made up of more than one layer then selecting this option tells the brush to use pixels from all the layers in the image to do the repair rather than just the active one.
- Then click on the blemish. Seemingly like magic, the blemish is blended into its surroundings.

A tip: if nothing seems to be happening, just make sure the 'blemish' isn't a bit of dust on your monitor! I once spent quite a long time trying to erase something which was a blob on my screen ... Ho, hum ... ☺.

Healing Brush and Clone Tool

The most well known use for these two tools is to repair old photographs by getting rid of scratches etc but they can also be used to erase elements of a photograph you don't want such as obtrusive electricity pylons.

- It's usually a good idea to work on a separate layer for your repairs. This is so that you can change the opacity of the changes later if they are too 'strong' or obtrusive. As with the spot healing brush, if you are going to work with layers you need to have 'Sample all layers' selected in the Options bar.
- Working like this also lets you switch the repairs layer on and off so that you can see how you are doing compared to the original image.

Both the clone tool and the healing brush use the same sequence of key strokes:

- Select an area that you want to copy – known as sampling – by holding the Alt key down while you click on it.
- Then click on the area you want to change, to paste your sample over the offending element.

So, it's Alt-click to sample then just click to paste. You can see the cursor change to the sampling cursor when you press the Alt key.

The difference between the two tools is that the healing brush tries to blend the surrounding pixels into the pasted area whereas the clone tool doesn't. So, the clone tool tends to give a 'crisper' result while the results from the healing brush are softer. This is definitely one area where you really have to experiment with the different tools as they work well on different images but not always in the way you expect, even when you've had some experience.

My friend and student, Gill Burgess has been repairing some photographs that had been water damaged, for a friend, and has very kindly allowed me to show one of her before and after examples.

I asked her for her tips on applying these tools in a real life situation. She suggested:

- Save frequently so that you end up with a sequence – you may well prefer an earlier version to the one you ended up with.
- With facial photos, very slight adjustments in tone, texture or colour can make all the difference!
- Don't try and do too much in one go, walk away, have a coffee and look again, fresh eyes can sometimes spot something you missed earlier.
- Zoom in to the area you are working on so you can see what you are doing better.
- Use a brush with very soft edges when working on skin.

I would endorse all these and would add:

- If you are trying to remove an element from an image that is tangled up with other elements then select it, using a suitable tool, so you won't inadvertently paste over an area you don't want to – watch the demo on the stem of Brussels sprouts to see what I mean.
- You can sample from one image and paste on to another. I haven't actually needed to do this yet but it's possible.

- If either the clone tool or the healing brush appears to stop working as you think it should, make sure:
 - the Aligned option isn't set
 - the Mode is set to normal
 - if you are working in layers that you have Sample all Layers selected
 - and if you are using the healing brush check that the Source is set to Sampled not Pattern
 - If all these are ok, try resetting the tool back to its defaults by clicking on the little reset triangle at the top left of the Options Bar and selecting 'Reset Tool'.

Assignment:

This is going to be deliberately vague: what I'd like you to do is select up to three images, remove an element from each and upload a before and after version. If you have time, work on as many images as you can and just upload your favourites.