

# Step-by-step processing in Photoshop

(Barry Pearson, 02 April 2010; version 4).

For probably about 90% of photographs I intend to display to other people, I use the following method in Photoshop. The Photoshop techniques may superficially look complicated, and there are likely to be several layers and layer masks, etc. But the method does simple things a number of times, on different parts of the image, rather than doing complicated things.

The analogy is with a jigsaw puzzle. The pieces can be picked up and examined individually, and each one may be very simple, but they fit together in a well-defined way and combine to display the full picture. In Photoshop, typically each piece of the jigsaw (*whoops: image!*) is defined by a selection which is saved and used as a layer mask. There may then be a number of layers purely for that piece, each probably doing something fairly simple. Typically there is a background, which is what is left when all the other selections are subtracted, and the background gets its own simple set of treatments.

This isn't an original way of thinking about and handling photographs. It certainly isn't the only way, and for many people and/or many scenes it won't be the best way. But it is what I routinely and systematically do. An accusation is that if I took the pictures properly in the first place I wouldn't have to do this. If I got the shutter speed right and panned properly, I wouldn't have to use motion blur on the background. If I got the aperture right I would have the desired depth of field and wouldn't need to use lens blur on the background. If I composed the subject properly, I wouldn't have to remove so many distracting influences in the background.

Guilty as charged! I'm using an engineering approach to compensate for my deficiencies as a photographer.

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## First example - the jigsaw puzzle

### Summary

### Starting point

Here is the starting point in Photoshop.

I use Lightroom as my initial interface to my photographs. I typically crop there, and sort out various of other general aspects of the image. In effect, I treat Photoshop as a plug-in to Lightroom, with Lightroom managing both the original raw file and the Photoshop file.

So this image has already had a number of general adjustments to it.

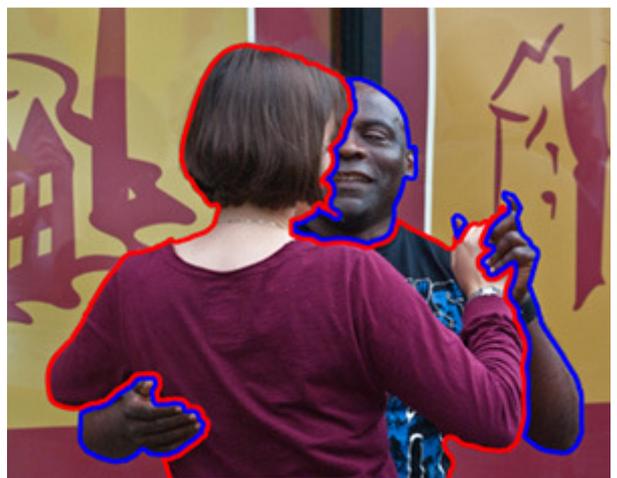


### Selections

The background needs different treatment from the figures.

Black skin is likely to need different treatment from white skin. A man's skin is likely to need different treatment from a woman's skin. (Clothes may need to be treated separately, but I decided not to in this case).

The 2 main selections are around the man's skin, and around the woman and their clothes.



## "Final" result

There is obvious blurring and contrast-reduction of the background, and a brighter and more saturated look of the figures.

In addition, there are different amounts of noise reduction and sharpening applied to the man and the woman. A degree of sharpening that is effective on a man's skin may result in a punch on the nose (or worse) if you apply it to a woman's skin!

This is non-destructive, and all details can be modified later.

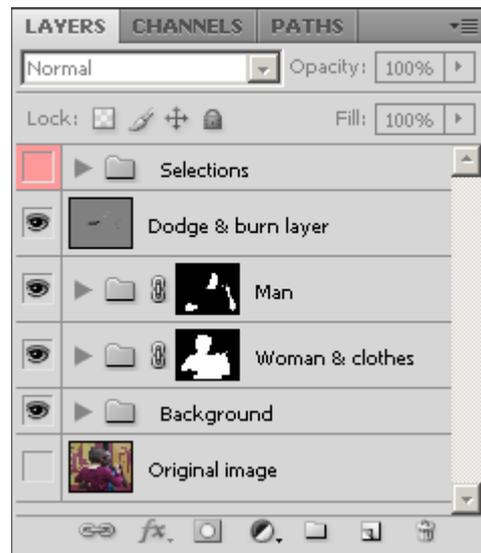


## Details

### Layers - overview

Based on the 2 main selections, there are 3 main Layer Groups. One for each of the selections, and one for "the rest" (the Background of the scene). (In this case, selections are also saved in their own Layer Group).

A Layer Group is simply a unit that contains one or more layers, and it can optionally have a layer mask associated with it. If it has a layer mask then all the layers in the group are constrained by the selection implied by the layer mask. In other words, the "Man" Layer Group has no effect on any other part of the picture.

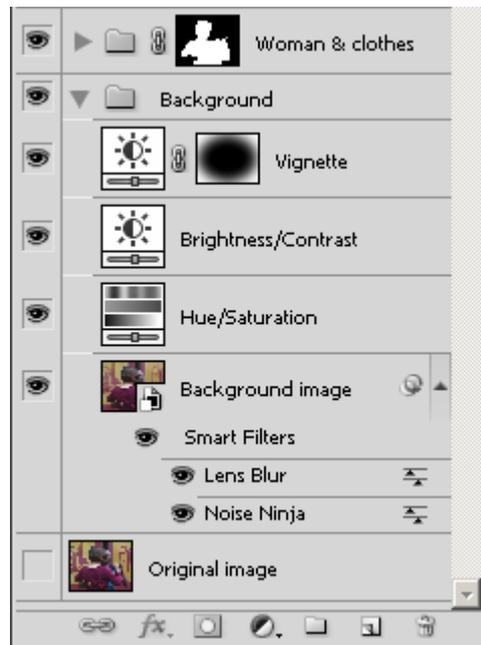


### Contents of "Background" Layer Group

Layer Groups are opened and closed by clicking on the triangle/pointer in the 2nd column. In this case the image itself ("Background image") is a Smart Filter layer, and is open here to show the filters applied: Noise Ninja to reduce noise, followed by Lens Blur. (Filters work from the bottom upwards).

The Hue/Saturation layer desaturates slightly, one Brightness/Contrast layer reduces brightness a little, while another Brightness/Contrast layer has a layer mask to make it work only at the corners of the image, and vignettes (darkens) them a little.

There is no layer mask applied to this Layer Group, simply because other Layer Groups hide parts of the background anyway.



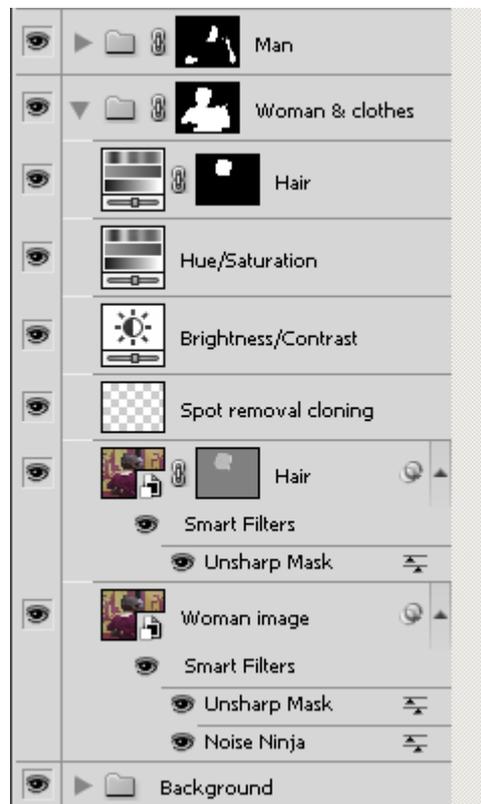
## Contents of "Woman & clothes" Layer Group

This is a bit more complicated, but there should be no surprises here. There are 3 image layers: the main one for the woman and their clothes; another for her hair; and one used to clone-out some moles on her back.

Her hair gets special treatment, first by not applying noise-reduction (Noise Ninja) to the "Hair" image, (see the layer mask), and then by using a Hue/Saturation layer (at the top of the Layer Group) to increase the redness of her hair.

Then there are general Hue/Saturation and Brightness/Contrast layers to make the woman and clothes stand out from the Background a bit.

Because of the layer mask applied to this Layer Group, none of these layers affect any other parts of the image.

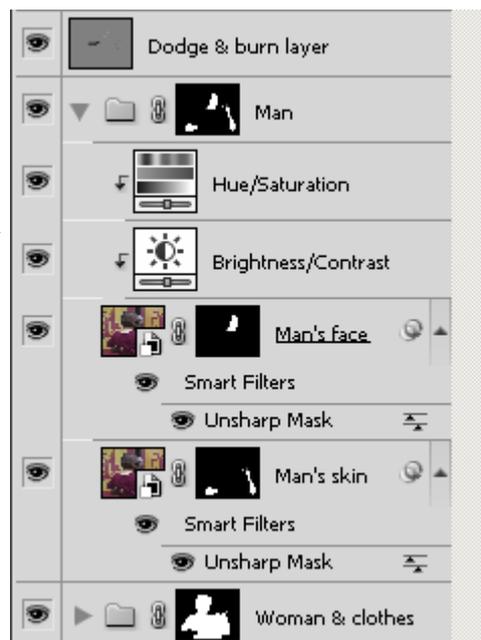


## Contents of "Man" Layer Group

There are 2 image layers, because the amount of sharpening on the face and arms is different.

An extra feature here is that the Hue/Saturation and Brightness/Contrast layers are "clipping masks" - they are clipped to (grouped with) the "Man's face" image layer, and so only affect his face, not his arms and hands. This is indicated by the little extra downwards-pointing arrows in those layers.

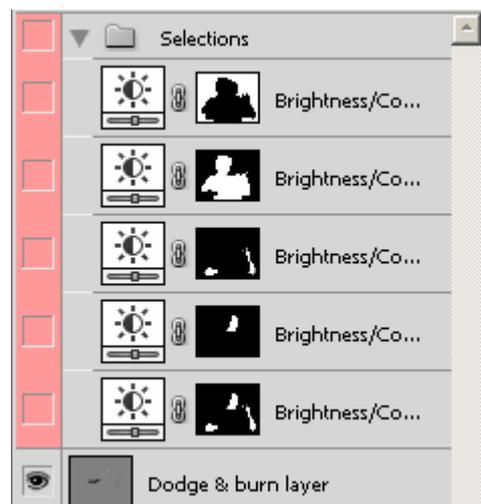
So, while the layer mask attached to the "Man" Layer Group constrains all these layers to just this part of the image, the clipping masks are further constrained by the layer mask attached to the "Man's face" image layer.



## Contents of "Selections" Layer Group

This is a way of saving layer masks, hence saving selections to be used later.

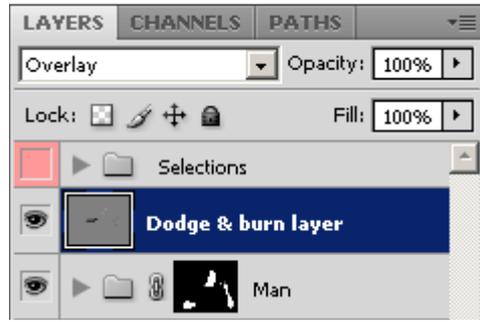
They are attached to "null adjustment layers" (it doesn't matter which type).



## Dodge & burn layer

This is an image layer, initially mid-grey, with Blending Mode "Overlay".

Painting onto this layer with black or white tweaks the tones of the image. It is useful as a way of fine-tuning the details, for example it makes the man's eyes and teeth a little lighter.



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## Second example - preventing bleeding colours

This section applies to "lens blur", and *some* of the filters in the filter gallery. It doesn't apply to *all* filters in the filter gallery, nor to "motion blur", "gaussian blur", or "radial blur". Experiment!

### Technique

#### Before and after

On the left is the image after cropping. On the right is the final image. The background is blurred with "lens blur".

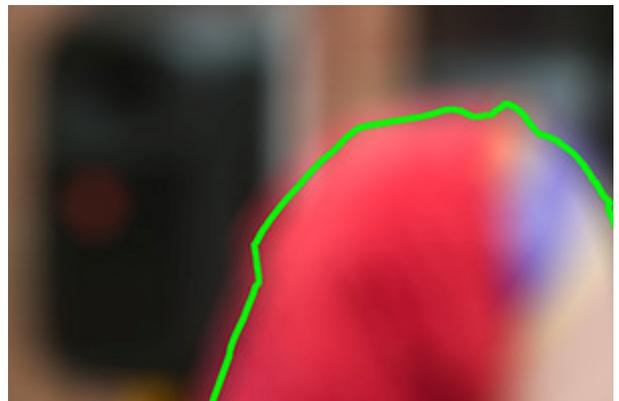
This image has one Layer Group for the figures and another for the background.



#### Bleeding colours

This is a view of just the background layer. See what happens if the background is simply blurred. The green line shows the edge of the figures.

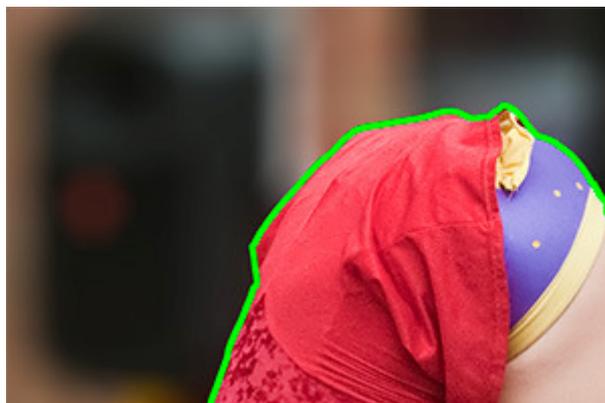
It doesn't matter that the bit of the background where the figures are is blurred on this layer. The figures layer will be "on top", and will hide their part of the background. But the colours of the figures have bled into the background, the red being very obvious in this case. This will show as a halo around the figures.



## Select just the background

Before doing "lens blur", select the background, as with the yellow line. (Perhaps select the figures, then invert the selection).

"Lens blur" then ignores the non-selected parts of the image. The green line shows the edge of the figures.



Compare with the equivalent image above, looking just to the left of, and above, the green line.

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## "Sketching" the result

Typically I "sketch" the result before refining the details. For example, with the first image:

1. I started with one selection for the combined figures, and one Layer Group for both (plus a separate one for the Background). Then when it became obvious that separate treatments were needed, (which didn't take long to realise), I duplicated the Layer groups, using different layer masks (by splitting the original selection) for each. The Layer Groups then each went their own way, unconstrained by one-another. (Except for the need to look right in the final result).
2. My initial selections were crude, using Quick Select (introduced in Photoshop CS3). This enables an image to be broken into components very quickly, so it can be judged whether the components are the right ones. Each selection is saved, and can be refined later when it is seen how visible its crude nature is. I mainly used the Polygonal Lasso Tool to refine the selections.
3. The adjustments within each Layer Group tend to get added to over time. For example, extra adjustment layers are added, and distractions may get cloned out. (Cloning doesn't work on a Smart Filter layer, so an extra layer is added above it, see the "Spot removal cloning" layer, and clone-sampling is set to "Current & below").

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## Appendix - Step-by-step processing in Lightroom

I use Lightroom as my initial interface to my photographs. I typically crop there, and sort out various of other general aspects of the image.

But I sometimes go further in Lightroom. I might clone out blemishes, apply a vignette, and apply some of the adjustments selectively. With each major release of Lightroom and/or Photoshop I rethink the balance between what I do in each package. And for photographs that will only be displayed on the web, at fairly low resolution, I may avoid Photoshop altogether. Many photographers, (especially those who get things more or less right when they take the picture!), find Lightroom is sufficient for most or all of their pictures.

In this example, I have reworked the first example above in Lightroom. I typically wouldn't go this far, because if I needed the extra power of Photoshop I would probably have to redo in Photoshop whatever I have already done in Lightroom. But this example may be as far as some people want to go. (Lightroom can only operate on one image, so if I want a results based on 2 or more images I need Photoshop).

## Third example - no Photoshop, just Lightroom 3

### Starting point

This is similar to the starting point in the first example.

This time, the image on the right (like the 2 main images at the bottom of this page) was exported directly from Lightroom, and hasn't been near Photoshop.

The background needs adjusting, and this example also changes her hair a little.



Only the 2 images of Lightroom selections immediately below have been through Photoshop:

### Selections

Lightroom has the ability to reveal its selections with an orange overlay.

These are the 2 selections used here.

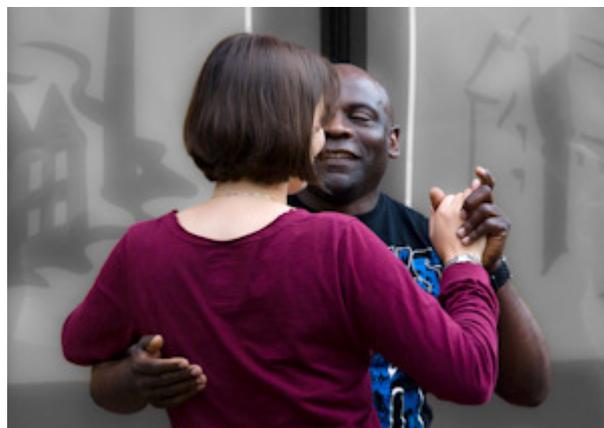


### Use of the background selection

The options are limited compared with Photoshop.

But this illustrates adding blur (with negative sharpening and negative clarity), and desaturating the background.

I didn't bother to refine the selection, (although I could have done so), and the edges would show in a larger image. With a less dramatic change to the background, the selection would be OK.



### Use of the hair selection

This brightens, sharpens, and adds some saturation to her hair.

It also adds a coloured overlay using the background selection, just for illustration. Although in this case the result is over the top, subtle addition of colour can be very effective. The colours can be "picked" from the image if desired, allowing artistic effects.

