Photoshop Layers: A Primer, Part 3 – David Jenkins

Layer Modes

When I first talked with your editor about a series of Photoshop tutorials, at the head of the list was "*Explain Layer Modes*". Over the previous tutorials, we've looked at many of the features of Layer Modes and how to use the results to improve our bird pictures.

The Layer Modes are often referred to as *Blending Modes.*

They seem to hold more mystery than practicality, and usually when they are described, a range of images are shown with the modes applied - and none seem to be relevant to the type of work you and I might want to do to enhance our bird photos.

Not only are they tricky, but the labels used for them seem to bear no resemblance to any of the enhancements we'd like to make.

So rather than describe all 20+ of them, and give ordinary examples, I'm going to walk through the ones that are most useful. As you'll see, we've already looked at most of them in previous tutorials.

Definition. *I think I got this from Richard Harrington, photographer and Adobe certified trainer*:

> *"A blending mode compares the content of two layers and enacts changes based on the content of both layers."*

Or, it uses the pixel values (in red, green, blue (RGB)) from both layers and, using the mathematical formula which describes the specific layer mode (behind the scenes, and not available to we mere mortals), changes the combined values to give a new set of values. In other words, it makes the pixels lighter or darker, or changes their colours, or excludes or includes pixel luminance detail, or lots of other stuff.

To move on, the pixel values in one layer are added, multiplied, divided or subtracted according to the algorithm in the Layer mode; the final result is a change to the image.

Working with Layer Modes

Enough definition. Let's open up an image and see what happens.

Generally, for most photographic work, we make a copy of one layer and then work with the original layer and the copy. But not always - we might explore that another time.

Open an image, and then make a layer copy. I'd use **Ctrl/Command** (Windows/Mac) and tap the **J** key. Or you could use the menu item **Layer > Duplicate Layer**.

Either way you'll end up with a Background and a Copy Layer.
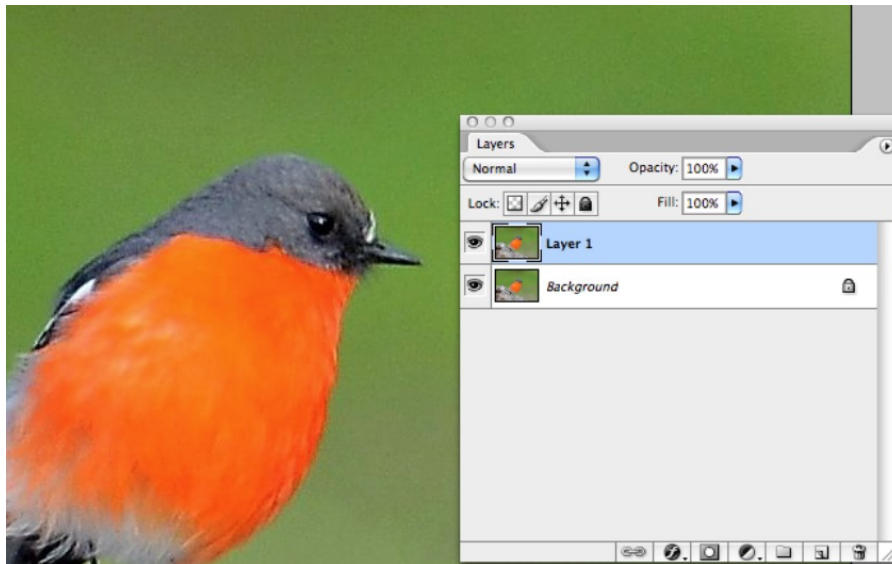
In the Layers dialog box, just below the Layers tab, is a drop-down sheet. Click on the arrows, and the sheet will become visible. It is normally labelled **Normal** - thought you'd like that!
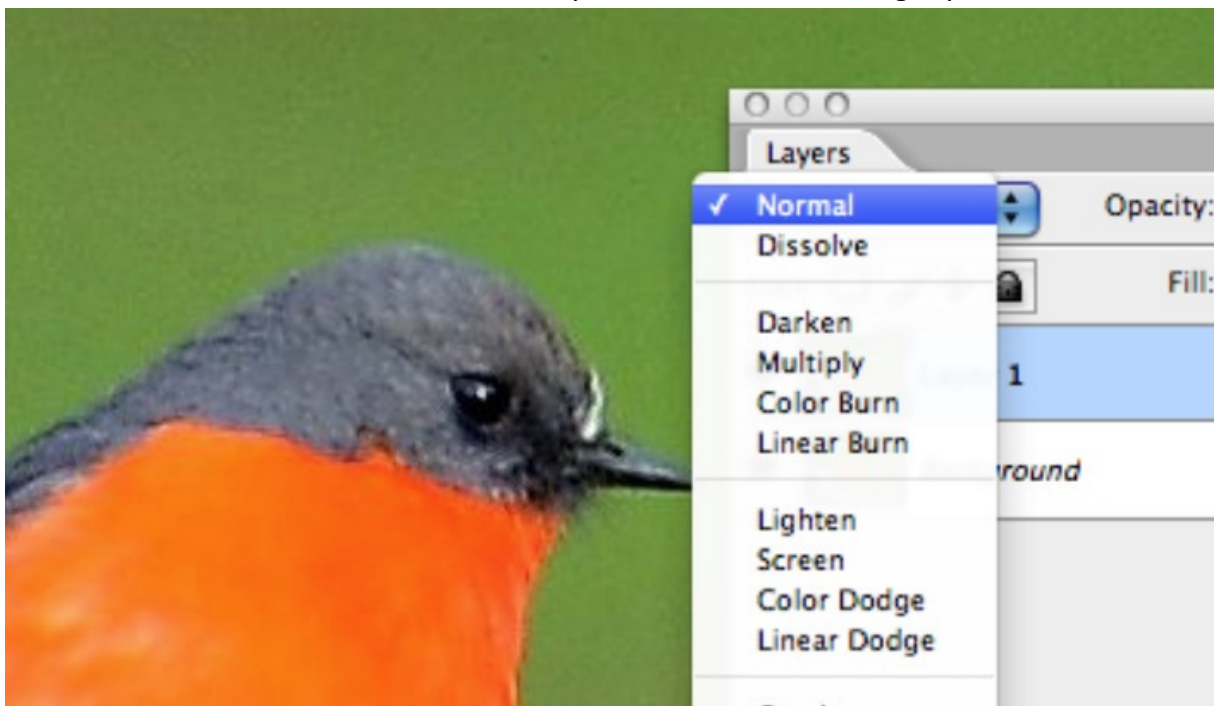
The drop down sheet has all the Blends that are available. Note that they are divided into groups by horizontal lines. This links together modes that have approximately (I was going to write vaguely) the same effects.

Here are some notes about a few of them:

Normal: is, well, normal. It excludes any values from the layer underneath; what you see are the values of the upper layer. So if you make a duplicate of the Background Layer, the duplicate looks exactly like the original. No interaction takes place.

Darken and Multiply: These use a little arithmetic to reduce the values of the layers and so create a darker composite. Think "*fixing an overexposed picture*". So let's do that:

1. Make a layer duplicate - **Ctrl/Cmd J**
2. Set the mode to **Multiply**. The image will become darker.
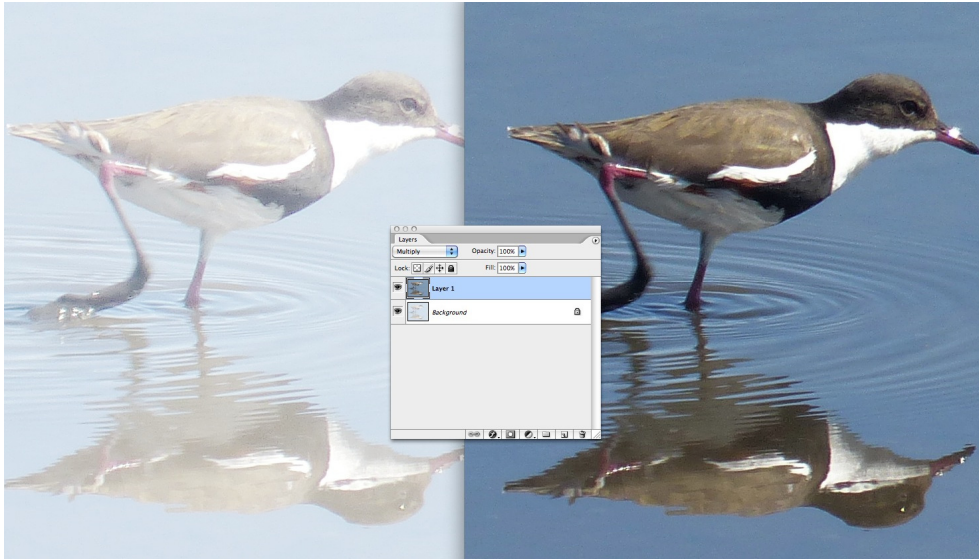
Now I'd love to be able to say that it adds all pixel values the same, but I really don't know. However, we've now gained a little extra detail, and lost the highlight glare. The shadows have also gone a little darker, methinks.

Lighten and Screen: this time the numbers are combined to increase the values and the image becomes lighter. Think "*underexposed picture*". If you don't have any, congratulations; if you'd like a few (or lots), give me a call.   Let's fix one:

1. Make a layer duplicate - **Ctrl/Cmd J**
2. Set the mode to **Screen.** The image will become lighter.
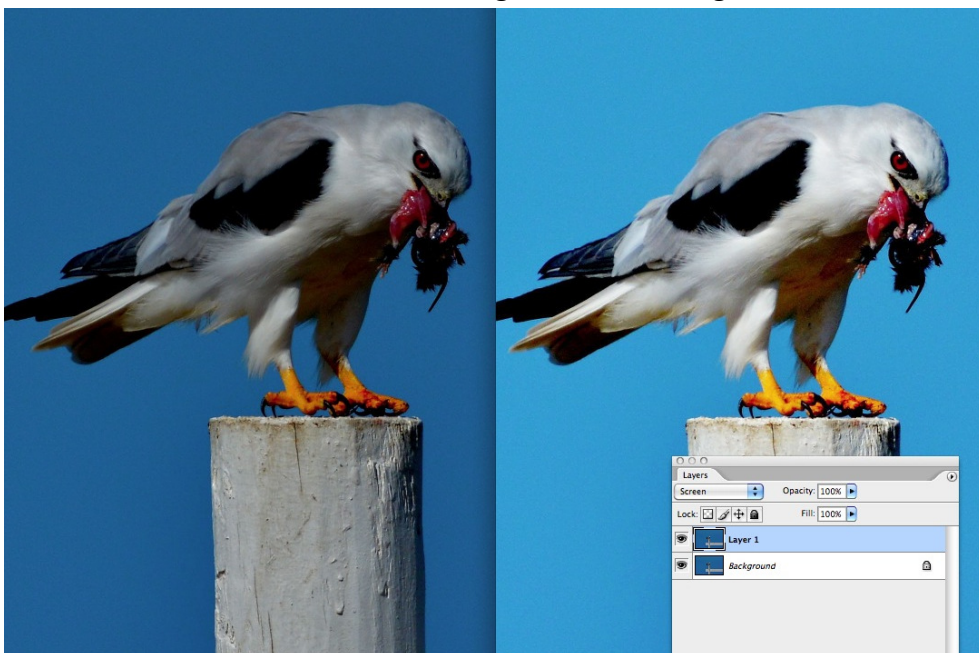
The shadow areas open up and we can begin to see some of the detail in the darker feathers. Again, be careful as it might well make the highlights a bit too light.

Overlay, **Hard Light** and **Soft Light**: All do pretty much the same thing, but the values they start working from are different. We'll only use the **Overlay**.

1. **Open** an image that needs a little local correction, light and/or dark.
2. Make a **New Layer** - hold down the **ALT** key and click on the **New Layer** icon in the Layer Palette.
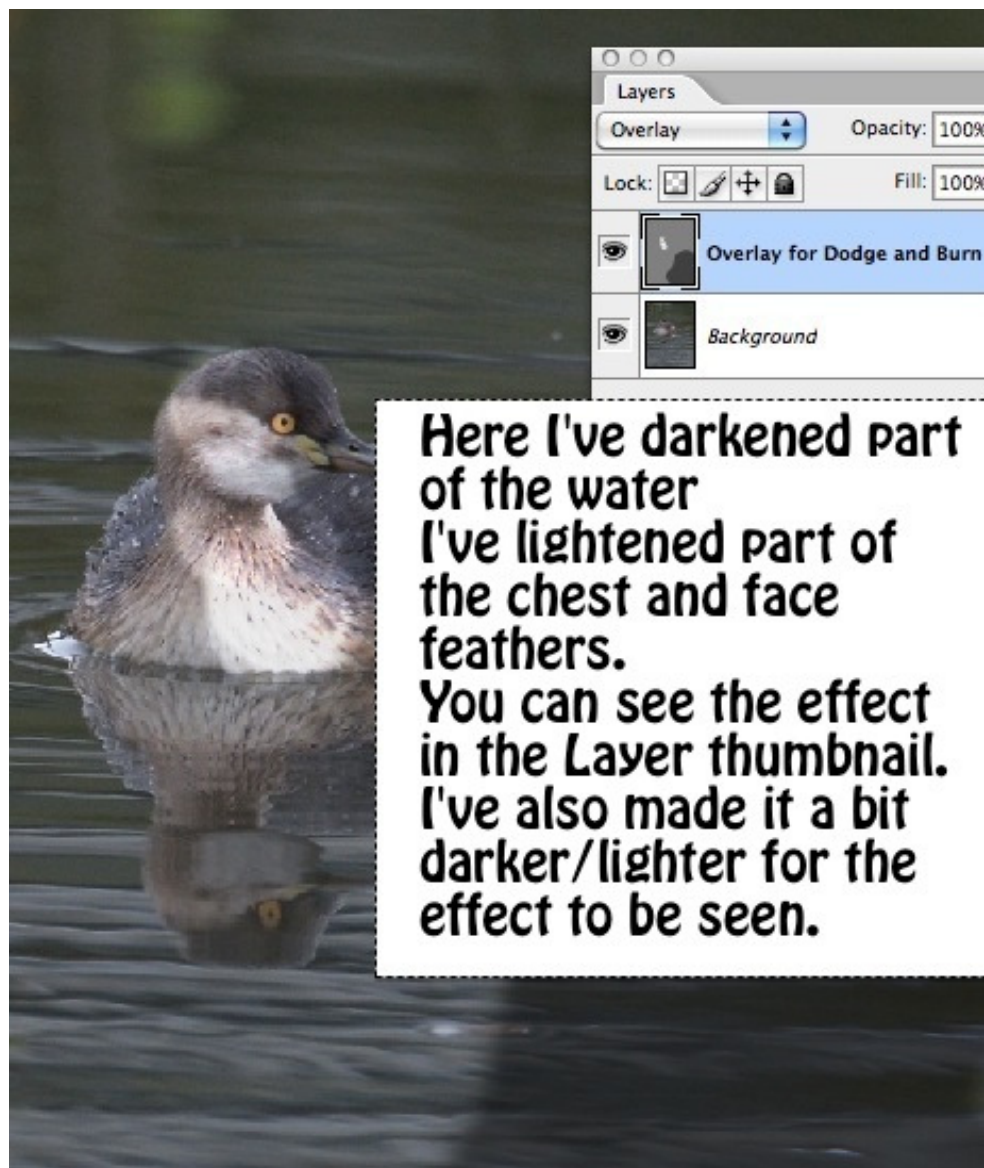3. In the dialogue box, change the mode to **Opacity**, and then be sure to check the box for 50% gray.
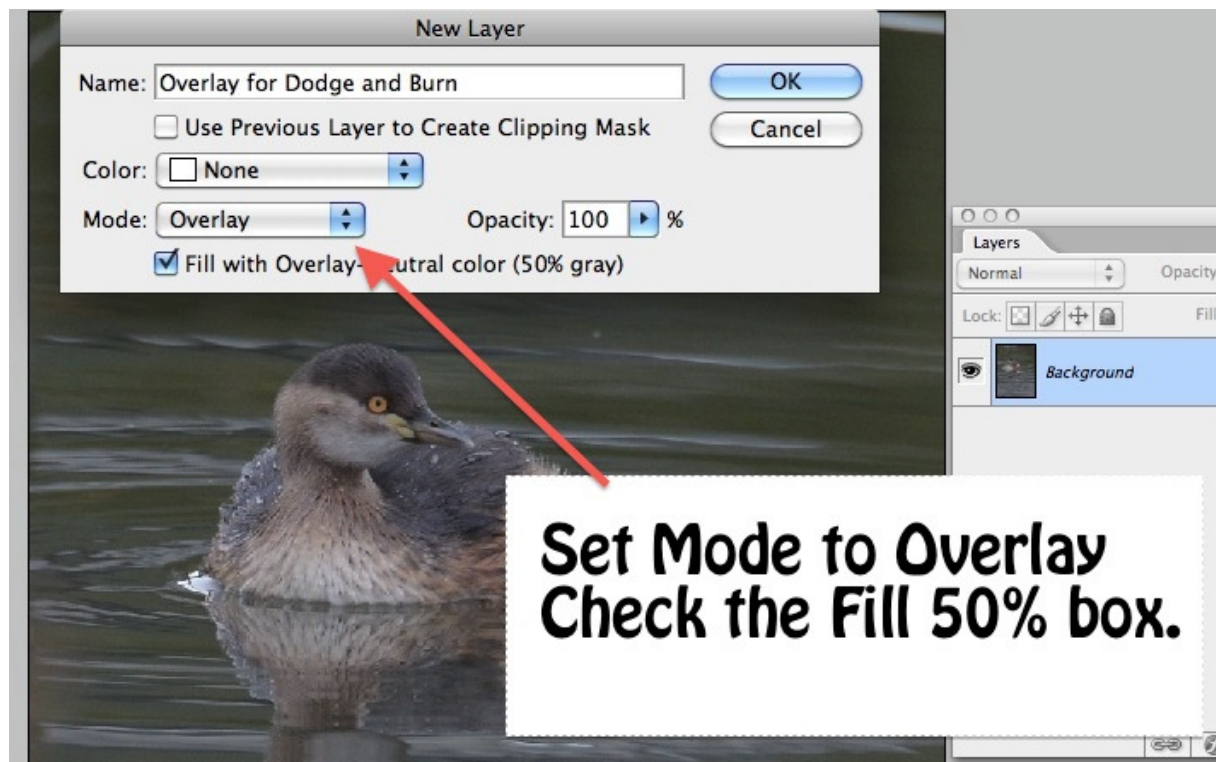
A grey overlay will appear in the Layer Palette, but the image will still show the values of the background layer.

1. Press **B** to choose a **Brush.**
2. Make sure that the default Foreground/ Background colours are set to Black/White. Press **D** for **Default**. **X** to **eXchange** the values as needed.
3. Set a brush opacity value of, say, 30% .
4. If you now *paint with a White brush*, it will *lighten* the area you paint. *Dodging*.
5. If you *paint with a Black Brush*, the values will become *darker*. *Burning*.

Why not use the dodge and burn tools available in Photoshop? Because on a layer it is easier to correct.

With any of these layer modes, if you want less effect then reduce the opacity of the Layer.
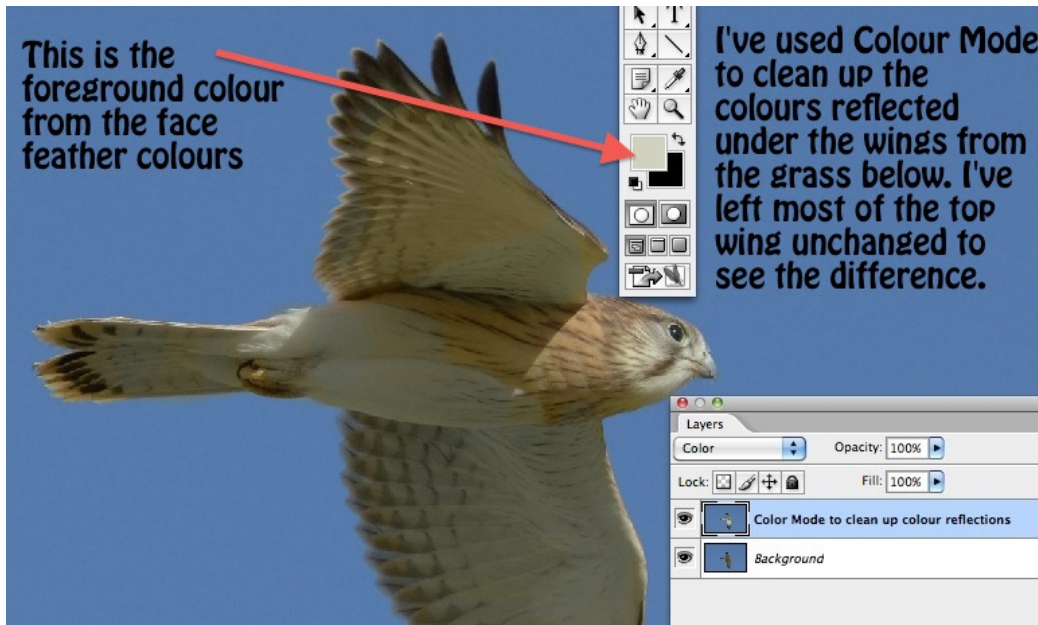
Here I've darkened part of the water
I've lightened part of the chest and face feathers.
You can see the effect in the Layer thumbnail.
I've also made it a bit darker/lighter for the effect to be seen.

Color: This one is super for fixing colours in shadows, or highlights from other reflected colours; eg. green from the grass showing up in the white of the bird.

Its secret is that *it deals only with the colour and hue values and doesn't affect the luminosity values* (which are where the details are), so *we don't lose detail, it simply removes the colour*.

1. Duplicate the Layer - **Ctrl/Cmd J**
2. Set the duplicate layer mode to **Color**
3. Press **B** to choose a **Brush**.
4. Holding down the **ALT** key, **click** on the **colour** you'd like to use to replace the colour cast. In this case I chose the white on the face feathers as it seemed pretty clean. Holding and clicking with the Alt key selects that colour as the foreground colour.

5. **Paint** over the area that needs to be cleaned up. Because the Color layer mode does not affect luminosity, the detail will remain, only the colour will change. Cool!

This is the foreground colour from the face feather colours

I've used Colour Mode to clean up the colours reflected under the wings from the grass below. I've left most of the top wing unchanged to see the difference.

For extra details on how these techniques work please refer to the earlier tutorials, where I covered each action in much more detail.

For those of us using Lightroom or Aperture, the techniques are still available, but now we just select to lighten or darken, or dodge and burn, and the layer modes are prepared in the background. We just brush in what we need. So much more elegant.

Next time I'll revisit the use of the modes for making local control enhancements using the ability to brush in or brush out the Layer Mode values.