

DIGITAL MONOCHROME METHODS

This article deals with some of the ways in which Photoshop CS can convert an image to monochrome. There are many ways to achieve the effect you desire in Photoshop; monochrome conversion is no exception.

Shoot RAW - don't shoot in mono JPEGs. Sure you will get a monochrome image but why let your camera make decisions for you? Shouldn't you be taking charge of the creative process? The best monochrome images are made by shooting RAW, colour images. This provides the maximum amount of tonal and colour information and sometimes editing colours can be very important to a finished monochrome image.

What makes a good monochrome?

Well first off what does not? A colour picture with the colour removed (by desaturation). A monochrome image requires tonal contrast, texture, suitable lighting and mood as well as the general rules for good photography including lead-in lines, composition, correct depth of field etc. The human eye is capable of resolving detail across a huge brightness range; its dynamic range far exceeds the camera sensor. This wide dynamic range is of enormous benefit to mankind but the trade off is a limited ability to perceive small tonal changes. In a colour image this is of little importance since the eye perceives the changes in colour but once the colours have been removed the eye / brain cannot detect small variations in brightness so enhancement of the differences presents a better image to the eye.

The main methods (but by no means the only ones) by which a conversion from colour to monochrome may be achieved are dealt with below.

Hue and saturation

Conversion by means of a hue and saturation adjustment layer is one of the less used conversion methods. It is however very useful in certain circumstances. I tend to employ it where there are large blocks of colours; cars, clothing etc. can all be converted to different tonal values using this method.

I have an action set up in Photoshop, which creates four hue and saturation adjustment layers. The first three are created with no adjustment at all initially, the fourth is set to fully desaturate only. This allows me to see how the conversion is looking as later work progresses and to easily switch between mono and colour. After creating the layers I reopen each one in turn and adjust the settings. My action of creating the layers names each one in turn, "red", "Yellow/green", "blue" and of course "desat." Each layer is then used to adjust the lightness of a selected colour. You can lighten or darken the yellow/green of the grass, the subject's tones and the sky totally independently. It is a versatile technique for which there are as many uses as a fertile mind can imagine. Masking of layers can limit the area of adjustments and for this reason each new layer needs to be independent and not attached to the clipping mask of the previous layer.

Channel mixer

I used to use this regularly but now prefer other methods.

Multiple exports from a single RAW.

One of the finest ways to create tonally rich monochrome images is by using multiple exports from a single original raw file. In a raw editor change the settings to greyscale (or whatever your converter calls mono) and then adjust the settings to maximise the tonal range in the sky (by which I mean the most pleasing, not necessarily the most contrast or indeed from full black to full white). Do the same for the mid-ground and again for the foreground and if necessary for any particular feature in any area. Use all the tools available at each stage, exposure, brightness, contrast, colour temperature and the lightness, or darkness, of each colour. All can make a huge difference. Watch that your settings at each stage do not introduce noise. If present in all areas a limited amount of noise can be very reminiscent of film but it looks entirely unnatural if it is present in one area only. The clarity tool has enormous power both to enhance and degrade an image, excessive clarity, especially coupled with subsequent sharpening can introduce unwanted artifacts, particularly contrast lines along horizons. Used to reduce clarity it can convey feelings of space or depth and can be used to focus the viewer's eye on the main content of the image.

Export each stage as a separate TIFF or PSD file. Open the ground layer and then open, copy and paste each of the other layers onto the first. I suggest you give each an individual name appropriate to its part in the final picture (sky, ground, castle, or whatever). All that then remains is to blend, using masks, each of the layers to take its part in the final image. The image can then finished using the usual tools including curves, levels, dodge and burn etc.

Multiple exports V2 – a favourite conversion method

Another method employing multiple exports from a single RAW file for this see at the end of this article “Monochrome Conversions - various Print Work Flows” - **Bill Allsopp's monochrome workflow**

The Gorman-Holbert (or Carr) method

This is also covered at the end in “Monochrome Conversions - various Print Work Flows”

Software plug-ins and standalone monochrome software

I use and can recommend Nik / Google Silver Efex Pro. I use it less frequently than I used to, preferring Lightroom and Photoshop for most work. This software creates a new layer in Photoshop onto which it applies the conversion to mono. As well as the inbuilt presets it also allows the user to create and save their own. It is immensely powerful and relatively quick to use. It is important to adopt the use of this software with care however otherwise it becomes a blunt instrument. Very rarely will a single run through produce the best possible overall effect and I recommend that you consider processing separate parts of an image with setting adjusted to be most suitable for that element and then blending them using layer masks.

The sensitivity slider (sensitivity to individual colours) is an extremely powerful and important part of this programme. The sharpening, contrast, grain and toning tools in Nik Silver Efex are also very useful for finishing the image and when adding grain or a tone I recommend you do so on a separate layer at the end of the process and do not flatten the image subsequently so that should you wish to make later revisions these do not become troublesome.

Topaz Labs detail plug-in is very useful for improving detail and sharpening. It contains numerous pre-sets but personally I found it vastly inferior to Silver Efex Pro for black and white conversions.

Remember, whatever plug-in you choose you should be in control of processing just as much as you decide on camera settings etc.

FINISHING OFF

All the above methods can usually be improved by judicious application of sharpening, levels, curves, selective colour adjustments and by dodging and burning. Sharpening techniques cover a vast range, more than can be covered in this short summary. Search for sharpening on my website.

Throughout all stages of conversion I urge you to keep an eye on the histogram, small amounts of full black or blown whites are acceptable but larger areas, which the viewer can see are not. The sooner you spot them the easier they are to deal with and so the less noticeable any rectification is. Also check the files regularly at 100% to ensure over aggressive editing is not introducing noise. Small amounts can sometimes be tolerated and sometimes masked by adding grain but uncorrected areas of noise not consistent throughout a file will ruin it. Careful work at all stages will however avoid these problems and obviate the subsequent use of such techniques to conceal them. NB Heavy handed use of the clarity slider can induce noise into the file when exported from the RAW.

If you are adding grain or toning I suggest you do so on a separate file so you keep your master file intact. If you use Lightroom, as I do, it can add grain and toning non-destructively and do so consistently so a toned panel can easily be produced.

Dodge and burn

Dodge and burn tools should be used judiciously, at low settings, on a copy layer. It is all too easy to go too far and not realise it until later. Done on a new layer that layer can be discarded and all your hard work prior to this is saved. An alternative method I employ to the dodge and burn tools is the creation of two new 50% grey layers, set to overlay, on which to paint using white to lighten and black (or shades of grey) to darken, I keep all lightening on one layer and all darkening on another. This is particularly useful for adding vignettes, grads, darkening skies, etc. as they can be masked or the layer opacity faded back as required. Also it is easy to delete these adjustments if you do not feel the final result is perfect, without losing previous stages.

Selective colour

Selective colour, in a monochrome image? The settings within the tool include blacks, neutrals and whites. I quite often tweak the whites, lightening highlight to add a bit more sparkle to an image. Another useful tool which, to the inexperienced may seem irrelevant



to monochrome work, is select / colour range. Here too it is possible to select highlights, mid-tones or shadows to give adjustments.

Some final tips

You can achieve an awful lot just with levels and curves if you work on individual sections of the image rather than just relying on global adjustments.

You have the final image? Try flattening it, duplicate the layer and set to “Soft Light” blend mode then reduce the opacity to 30%; just adds some final punch when you thought you were done!

Finally having made a monochrome masterpiece try laying that on your colour version and set the blend mode to luminosity; in many cases you will be amazed at the result!

Monochrome Conversion methods – various work flows

The Gorman-Holbert (or Carr) method

This black and white conversion method is named for Greg Gorman and Mac Holbert. It is also referred to as the Carr Method after its developer Rob Carr.

It is a Luminosity Based method. It gives outstanding results, especially for portraits and delicate subjects but works well with some landscapes too.

The bulk of this can be recorded as an action with stops at ##

Convert to LAB colour

Select Lightness channel

Set Image mode to Greyscale (discard other channels)

While holding the Cmd key click on the Gray channel to Select Shadows

Invert selection

Convert image back to RGB

Go to the layers palette

Create new fill layer and fill with colour (sepia R225:G141:B31 is a good place to start but you can use a plain grey, whatever you like.) ## (gives a chance to change colour if required)

Change blending mode of the colour layer to multiply

Create new merged layer above this (Cmd,Alt,Shift, E)

Amend blending method of this layer to Overlay and opacity to 20% ##

Run High Pass sharpen on this layer set at 50 pixels

The image is now very suitable to convert to a duotone if required

Bill Allsopp's monochrome workflow

(Based on a blending method originally put forward by Photoshop guru Katrin Eismann, as expounded by George De Wolfe and others)

Well suited to landscape, architecture and many other subjects

The bulk of this can be recorded as an action with stops at ##

BLEND RAW DATA – Lightroom part

Desaturate

Reduce exposure and increase blacks to create darker image without blocking blacks - Export

Increase exposure & reduce blacks as well as increasing brightness to generate lighter image without losing highlight detail Export (avoid fill and recovery in both if possible)

Photoshop

Lay DARK over LIGHT

Select the bottom layer

Select / colour range / highlights

Move to top layer

Add layer mask, using icon (Alt click the icon) (can feather selection if this helps) ##

If necessary use a brush to paint back seamlessly on the mask (can use dodge and burn tools on the mask) This step not available in all versions of Photoshop

FLATTEN ## and save

IMAGE BALANCE (outside action)

Decide how to balance the light, this is artistic vision the only tool available is your imagination

Use dark and light gradients to balance the levels (usually dark set to multiply and light set to soft light) apply these to a duplicate layer and use the fade back option as required

After adjusting as required FLATTEN and save (Check overall contrast with 15% Gaussian Blur)

IMAGE OPTIMISATION

Add levels adjustment (NOT on a layer) and set output to 30 : 230

Duplicate

Filter/Smartsharpen 150% : 0.8 pixels : Remove lens blur (adjust as required) apply when happy ## (N.B. the amount of sharpening is very camera/lens dependent for Canon 5D2 and "L" glass I found 150% sharpening right, for my Leica M9 I used only 75% at most).

FLATTEN

Image / autocontrast (fade back if required) ## (end of action)

Open levels adjustment layer (GLOBAL CONTRAST) and "ALT" click the end stops until the ends of the histogram are correct without blocked shadows or burnt highlights.

Final sharpen if needed - avoid clipping – see sharpening notes.

SUMMARY

BLEND DARK OVER LIGHT

EDIT MASK AND CONTRAST IF REQUIRED

CHECK WITH BLUR

OUTPUT LEVELS 30:230 before sharpen on new layer

AUTO CONTRAST – FADE BACK IF REQUIRED

TOUCH UP AS REQUIRED

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PHOTOGRAPHY

*Fine Art Prints
and Photography*

Space for your notes 1



*Fine Art Prints
and Photography*

Space for your notes 2