

Lightroom 4 Artistry

Using the Develop Module for Color



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DOP2012-02

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Publisher: Steinmueller Photo, California USA

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Lightroom 4 Artistry: Intro

This book is about getting the best out of your photos in the Lightroom 4 Develop module. This means we only concentrate on the features we use in the Develop module. No other Lightroom modules or features are covered. We don't intend to replace the Lightroom manual for the Develop module. We want show our workflow and thoughts instead. In the past we only performed very basic raw processing in Lightroom and left the rest to Photoshop. We recently changed our approach and try to get as much done as possible in Lightroom 4. We leave only a few things for further work in Photoshop: like retouching, creative image blur/distortions and advanced selective editing to Photoshop.

We concentrate on color images only. Why? We have the most experience creating color images. Lightroom can produce nice B&W photos but we have to explore it some more in the future. Today we create most of our B&W image with 3rd party plugins in Photoshop.

We nearly always start with raw images if the camera can record raw files. In some cases, most notably the iPhone, we may also start from JPEGs. Still the principles are the same but with JPEGs we don't have the same latitude as with raw images.

Why do we concentrate on Lightroom? Lightroom and the functional identical Camera Raw engine are the most used raw converters in the market. They have reached a high level of sophistication and feature almost all the tools you want from a raw converter today. There are some other raw converters that may please more in some areas but overall Lightroom and Camera Raw are both top class tools. We also learned that it is better to know one tool really well than to use multiple tools. A friend of mine who knows imaging very well always challenged me when I thought there was a new "wonder" raw converter out. I sent him my results and the original raw files. Every time he came back with a result from Lightroom 4 that was a close match.

Even if we would use a different raw converter Lightroom would still be our photo organizer of choice (we right now have 150K images in our catalog). As mentioned before we will not cover the Library module in this book because we care the most about how our images look. Of course printing is very much related to the final look of our pictures. Although we also use Lightroom most of the time for our printing we won't cover printing either. The optimal processed images from the Develop module would always be needed for the best possible prints.

This book will cover first an overview so that you understand the Develop module user interface and the implications for the different tools and sliders. Then we show the use of all these tools with real world examples. These examples will be available as the original raw DNG files to our readers (as an optional 300MB paid download). This way you can work on the same images step by step and even create your own variations. With real examples you learn how to analyze your own images and perform the appropriate corrections in Lightroom.

Note: None of these images maybe posted and shared in public without our written permission. If you have any questions please ask us.

Lightroom has some of the most sophisticated Preset and History features. We also cover these features in more detail. We even share with you our personal default Preset settings.

We are often looking at cameras that produce the best raw images but you can't lose sight of the impact your lens choices can have. It is always best to use the best lenses available but even these lenses show some deficits on today's high pixel digital cameras. A modern raw converter should also help to reduce these artifacts. We say reduce and not correct because no raw converter in the world can really undo defects created by your lenses. Lightroom is quite capable reducing these artifacts.

Tools we need for our raw processing

Here are the general steps you want your raw converter to perform and Lightroom 4 does it all very well.

- Debayering of the raw files: Built-in into LR4 and ACR 7
- Color Calibration (based on internal or other profiles): Calibration tool
- White Balance (objective and subjective): WB in the Basic tool
- Global Tonality: Basic and Tone Curve tools
- Sharpening: Detail tool
- Noise handling: Detail tool
- Selective tonality tuning: Brushes and Gradients
- Selective Colors: HSL tool
- Lens Corrections: Lens Correction tool
- Vignette: Effects tools

Terminology

Non-Destructive Editing

One of the key strengths of Raw converters is non-destructive editing. This means the original raw image stays untouched and only instructions are saved. In Lightroom all operations are also non-destructive by nature. All changes can be undone and modified later at any time. The excellent History, Snapshot and Virtual Copy features make this sort of editing even more powerful in Lightroom.

Important aspects of the Human Vision

Because we present our work to other people it is also important to understand some basic aspects about how we perceive images and the world.

The human vision works quite differently than our cameras. We all know that our eyes adapt to scenes. If it is darker our pupils open and if it gets brighter they close. This process takes often quite a while and is not instant.

Contrast

All detail we can see is not based on absolute tonal values but based on contrast at some image edges. The eye is extremely sensitive to very small brightness changes. This makes the concept of contrast so important.

Global Contrast

Global contrast measures the brightness difference between the darkest and brightest element in the entire image. Tools like Curves and Levels only change global contrast as they treat all pixels with the same brightness levels identical.

The global contrast has three main regions:

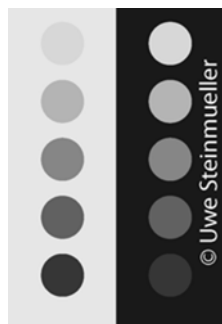
- Mid-tones
- Highlights
- Shadows

The sum of the contrast amounts of these three regions defines the global contrast. This means if you spend more global contrast on the mid-tones (very common needed) you can spend less global contrast on highlights/shadows at any given global contrast level.

The mid-tones normally show the main subject. If the mid-tones show low contrast the image lacks “snap”. Adding more global contrast to the mid-tones (“snap”) often results in compressed shadows and highlights. Adding some local contrast (see next) can help to improve the overall image presentation.

Local Contrast

The following chart helps to understand the concept of local contrast.



Local Contrast Chart

The circles in each row have exactly the identical brightness levels. Yet the top right circle looks a lot brighter than the one on the left. Why is that? Our eyes see the difference to the local surrounding. The right circle looks much brighter with the dark gray background compared to a brighter background on the left. Just the opposite is true for the two circles on the bottom. For our eyes the absolute brightness is of less importance than the relative relation to other close areas.

This effect - called Retinex Theory (<http://goo.gl/SKuG6>) - was described in 1971 by Edwin H. Land (founder of Polaroid).

Some of the Basic Lightroom tools and Photoshop’s Shadow/Highlight act locally and do not treat all pixels with the same brightness values identical.

The classic Dodge&Burn also manipulates the local brightness of contrast of images. Dodge&Burn is still one of the top methods to refine images because our own eyes

judge how the image is presented to the human eye. In some way modern imaging tools like Lightroom's Highlights and Shadows reduce the need for manual Dodge&Burn without replacing them. The main local contrast tool in Lightroom is the Clarity tool.

Tools acting Global

There are some controls in image editing that act 'global'. With global we mean that they treat all pixels equal and only depend on the single pixel value itself. Classic global controls are Level and Curves (also the Tone Curve in Lightroom).

Tools acting Local

Often more interesting are tools that act more local. The main tools in of this type in Lightroom are Highlights, Shadows and Clarity.

Selective Corrections

In image editing you always start with global corrections (means targeting the whole image). Then later you add selective corrections:

- Selective Colors: with the Lightroom HSL tool
- Selective image regions: with Gradient Filters and Adjustment Brushes.

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Credits

We would like to thank Terry Banet, Michael Johnsson and Guy Mancuso for their help, inspiration and contributions.

Sample DNG Images

The 7 original raw DNG files we use in our samples section are available in for download at extra cost. This way you can follow our steps on your own computer. The DNG files contain all the steps we used as embedded snapshots. Please only order these images if you have a good Internet connection because the download is about 300MB large (takes less than 2 minutes with our excellent connection).

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Sample 03: China Town Mural

This time we used a Canon 1D Mark III photo from San Francisco's China Town. This is the overexposed shot from a 3 shot bracketed HDR series.

1. Start



This is clearly washed out but the histogram does not signal any problematic clipping.

2. Standard



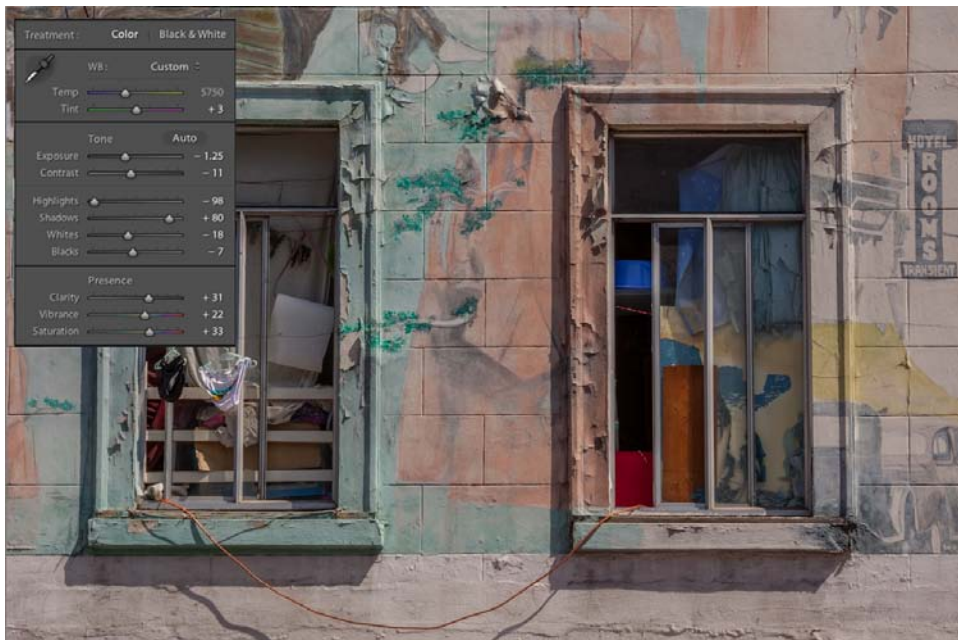
Our default Preset opens up the shadows but it is still way too washed out.

3. Crop

Obviously the shot is too much tilted and we have to straighten it using the Crop tool.



4. Basic



The Basic corrections bring the image to life.

- Exposure down to -1.25 (that was about the intentional overexposure for our HDR sequence)
- We lower the contrast to -11 which we then compensate with Clarity at +31
- Highlights -98 and Shadows to +80 (common for our style)
- Whites to -18 to avoid too aggressive highlights
- Blacks -7 for a better black foundation
- Vibrance to +22 and Saturation to +33 for a 'vibrant' look

References

Digital Outback Photo: <http://www.outbackphoto.net>

Lightroom Artistry: <http://www.lightroomartistry.com>

DOP Scripts for Photoshop: <http://goo.gl/0zoR0>

Our books: <http://goo.gl/6Bwdo>