

Name of photographer:

Date:

PA7 - PERFORMING THE POST-PROCESSING

Informed by the analysis you have made in the PA6, you should now proceed to post-process the images by using Adobe Lightroom. You should do it by approaching post-processing as an iterative process, combining global and local adjustments and stopping to re-interpret the image as you process it.

When working with Lightroom your RAW files, the order in which you make the adjustments is arbitrary (raw developer), but you could follow this one as a suggestion. Obviously, you do not need to perform all these, only if applicable or needed!

GLOBAL ADJUSTMENTS

1. Crop - format - orientation (already performed in PA5)
2. White balance, using the tint and temperature
3. Tonal range - set up the black point and white point, using tonal curve or black / white sliders
4. Tonal separation in the highlights: - Highlights + Whites
5. Tonal separation in the midtones: Clarity slider
6. Tonal separation in the shadows: +Shadows - Blacks
7. Control of luminosity in the midtones: using tonal curve or exposure slider
8. Contrast boost: S shape with tonal curve
9. Color adjustments: saturation and luminance in HSL section
10. Sharpness - noise reduction - grain

LOCAL ADJUSTMENTS

1. Luminosity adjustments - dodging and burning
2. Tonal separation in highlights, shadows and midtones
3. Selective white balance adjustments
4. Highlighting the focal point
5. Hiding visual distractions
6. Balancing tones
7. Tunnel view
8. Stability and tonal balance
9. Volume sculpting (depth)
10. Saturation and luminance of colours

Typically, at the end of the Local Adjustments you will need to revisit some of the Global Adjustments you did, in order to correct certain deviations that might become apparent. This makes the post-processing an iterative adventure, where at every adjustment you are getting closer to the visualized result.

This Practical Assignment should be undertaken after having reviewed the corresponding Modules of the MasterCOURSE. However, in the following few pages we will cover some basic aspects of post-processing that will particularly apply to the Practical Assignments PA7 and PA6.

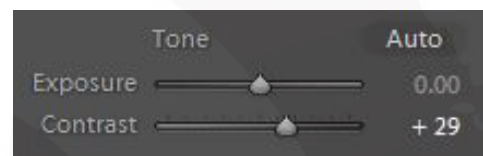
HOW TO PROCEED / CHEAT-SHEET

We refer the student to the modules “Post-processing with Intent” of this MasterCOURSE. In addition, however, we are compiling here a cheat-sheet to help you go through the application of the adjustments you defined in the PA6. All the following procedures apply to the software Adobe Lightroom.

CONTROL OF CONTRAST: SLIDER AND TONE CURVE

The contrast in Adobe Lightroom can be adjusted in different ways. Some of them are more recommended than others:

- SLIDER “CONTRAST”: Not recommended to increase the contrast, since you can clip both whites and blacks. It can be helpful however for a quick reduction of contrast, particularly at the end of the post-processing as a final tweak.



- TONE CURVE: Recommended particularly to increase contrast. We can increase contrast by using a S curve, dragging highlights upwards and shadows downwards.

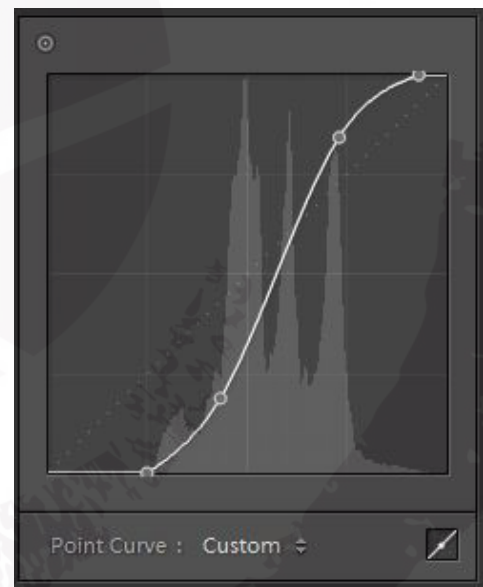
The advantage of using this tool is that both edges (white and black point) remain in place, and clipping does not occur.

Therefore, we can have a more localized control over different tones.

Another way of increasing or decreasing contrast is by expanding or contracting the edges of the histogram, that is, moving the blackest black and the whitest white points.

This can be used in order to set up the black and white points, if we need pure black and pure white in our image (increase of contrast).

This can also be used to do just the opposite, lightening up the darkest shadows or darkening the lightest highlights, moving away from pure black and pure white so that we have less bright “whites” and less dark “blacks” (less contrast).



CONTROL OF CONTRAST: USING TONAL SLIDERS

We can also increase or decrease the contrast by using the tonal sliders: Blacks, Shadows, Highlights, Whites.

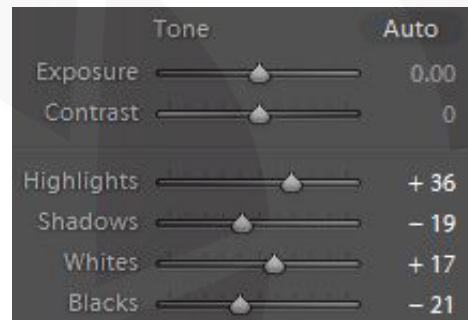
Remember:

*When we darken the darks, or lighten up the lights, we increase the contrast
The histogram will get expanded*

*When we lighten up the darks, or darken the lights, we decrease the contrast
The histogram will get compressed*

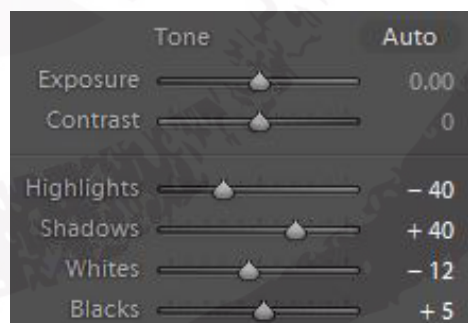
We can achieve an increase of contrast (C+) with:

Highlights + Whites +
Shadows - Blacks -



We can achieve a decrease of contrast (C-) with:

Highlights - Whites -
Shadows + Blacks +



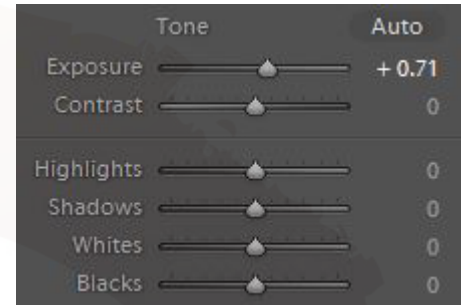
- **COLOR LUMINANCE:** By changing the colour luminance (HSL settings), we are also affecting the tonality too. When we increase the luminance of any colour, we are lightening up the lights, and therefore an increase of contrast is obtained. When we reduce the luminance, we darken the lights, and therefore a loss of tonal contrast is the side effect.

CONTROL OF TONE - NOT AFFECTING CONTRAST: T+ / T-

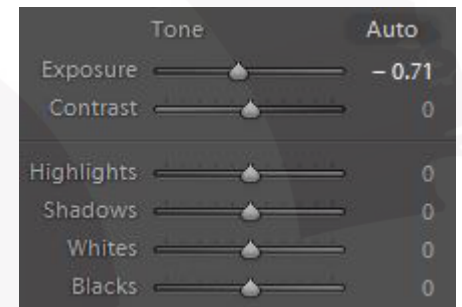
In order to lighten or darken the overall tone without affecting too much the contrast, we can use:

a) “EXPOSURE” SLIDER: By using the exposure slider, we are in fact affecting mostly the midtones.

T+ Exposure + provides an overall lighter image, where mostly the midtones are getting lighter, (even if all the other tones lighten too, but to a minor extent), without producing major changes in the overall contrast. This will make the histogram “move” towards the right, without expanding or contracting much. Beware the clipping of the whites.

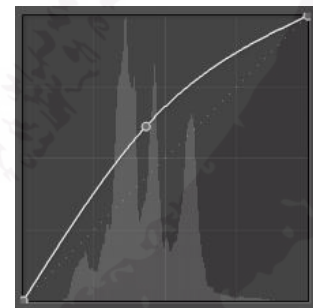


T- Exposure - provides an overall darker (and muddier) image, where mostly the midtones are getting darker (even if all the other tones darken too, but to a minor extent), without producing major changes in the overall contrast. This will make the histogram “move” towards the left, without expanding or contracting much. Beware the clipping of the blacks.

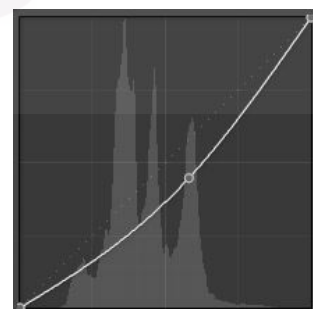


b) TONE CURVE: By using the tone curve, we can also increase or decrease overall tone (T+ T-) without affecting too much the overall contrast.

T+: We should insert a point in the midtones (middle of the curve) and drag upwards. All tones get lighter, even if most of the effect concentrates around the midtones. The histogram moves to the right, without expanding or contracting too much. By using the tone curve, there is less risk of clipping the highlights than when using the slider “Exposure”.



T-: We should insert a point in the midtones (middle of the curve) and drag downwards. All tones get darker, even if most of the effect concentrates around the midtones. The histogram moves to the left, without expanding or contracting too much. By using the tone curve, there is less risk of clipping the blacks than when using the slider “Exposure”.



CONTROL OF TONE - AFFECTING CONTRAST: T+ / T- / C+ / C-

By using the tone sliders of Lightroom, we can selectively lighten or darken certain tonal ranges, whilst also affecting the contrast.

We can use the sliders Blacks / Shadows / Highlights / Whites.

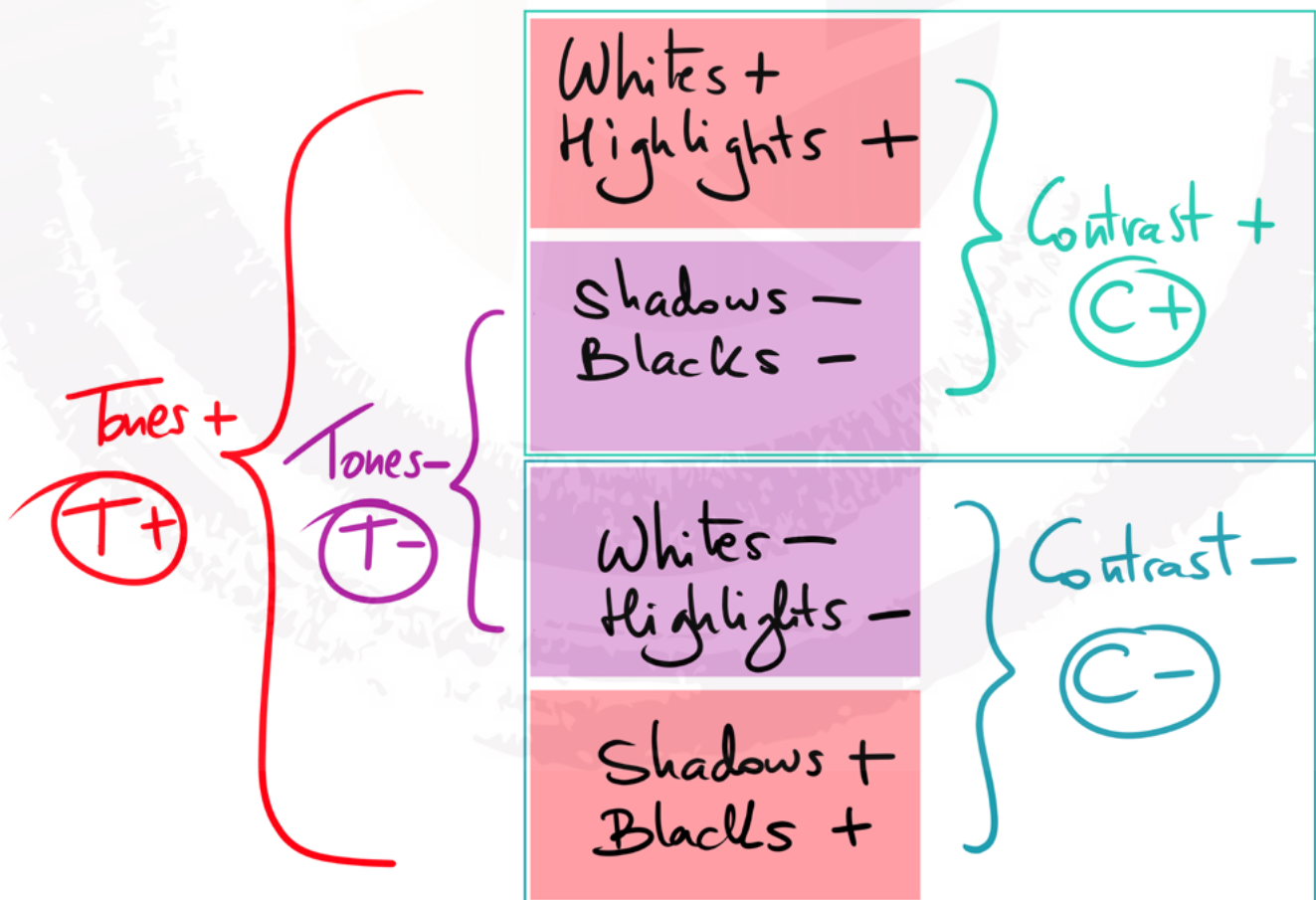
Tonal changes using these sliders will lead to changes in the overall contrast. We need to remember, again, that:

*When we darken the darks, or lighten up the lights, we increase the contrast
The histogram will get expanded*

*When we lighten up the darks, or darken the lights, we decrease the contrast
The histogram will get compressed*

For this reason, when deciding on the tonal slider that we will use in order to perform T+ (more luminosity) or T- (less luminosity), we should pay attention to whether we want more or less contrast, whether we have or not possibility to move the Blacks and Whites before clipping.

Very often, we will obtain T+ or T- with a combination of sliders, affecting some tonal ranges more than others.



CONTROL OF MICRO-CONTRAST: MC+ / MC-

The micro-contrast is related to the idea of tonal separation, and can be thought of as “texture” or “detail” in an area. A good micro-contrast or tonal separation means that there is a rich and equal distribution of tones within a certain tonal range, and could be imagined as a “stretching of tones” in the histogram, creating more tones where there were just a few ones.

The control of micro-contrast can be done in Lightroom for the shadows, midtones and highlights, in different ways.

Micro-contrast in the Shadows: Shadows + / Black -

First, we open up the shadows by using the tonal slider Shadows + . This will reveal more detail in the shadows, but will also make them look washed out and dull. Because we are lightening up the shadows, we have reduced contrast. In the process, also the Blacks will have got lighter, and eventually the black point (if we wanted our darkest shadows appearing as pure black) might have got lost in the process.

For these reasons, we might need to gain back the black point, inject more density back into the shadows and increase the contrast. What we do is Blacks -, stretching back the histogram left edge towards the left.

The result is stretching the area of tones between blacks and midtones (Shadow areas), and “creating” more tones that appear now clearly. There is more detail, but however, there is less mystery and more visual distractions.

Micro-contrast in the Highlights: Highlights - / Whites +

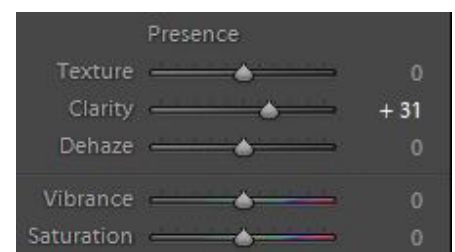
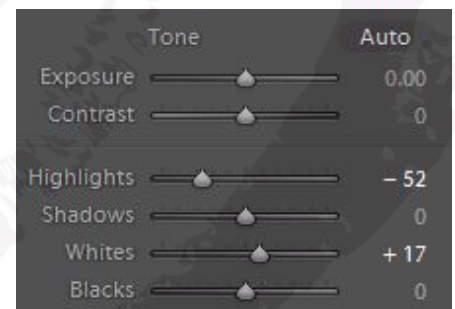
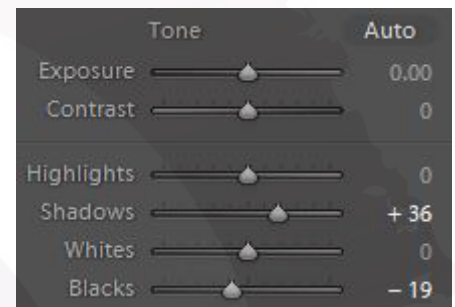
First, we reveal more detail in the Highlights by using the tonal slider Highlights - . This will reveal more detail in the highlights, but will also make them look dirty and dull. In the process, also the Whites will get darker, and eventually the white point might get lost in the process. Because we are darkening the lights, we have reduced contrast.

For these reasons, we might need to gain back the white point, gain back the overall luminosity and increase the contrast. What we do is Whites +, stretching back the histogram right edge towards the right.

The result is stretching the area of tones between highlights and whites (Light areas), and “creating” more tones that appear now clearly. There is more detail, but however, there is less high key effect and more visual distractions.

Micro-contrast in the Midtones: Clarity +

In order to increase the micro-contrast in the midtones, separating the tones and revealing more detail and texture, we can use the Clarity adjustment in Lightroom, that controls exactly that. When using it, you will see more detail appearing, and the histogram will flatten out through the midtones area mainly, turning from “peak” to “table”.



COLOUR ADJUSTMENTS

When controlling the colours, we need to control the Hue, Saturation and Luminance.

The colours can be modified as a global adjustment (affecting the whole image) by using the HSL sliders in Lightroom. If only local adjustments to some areas of the image want to be applied, then a good solution is to make a local selection (brush, graduated filter or radial filter), and then apply a colour mask to the selection that only targets a certain colour. Then, we can use the normal sliders of the local adjustment (tonal sliders, saturation, vibrance, etc) that will affect the selected coloured areas.

COLOUR - CONTRAST - LUMINANCE - MICRO-CONTRAST INTERACTIONS

There are some interactions between colour and tonal contrast, luminosity and micro-contrast that we need to take into account when processing in RGB mode (like in Lightroom):

+ Tonal Contrast = + Saturation of colours

Whenever we increase tonal contrast, the saturation of the colours go up. For this reason, every time you increase Contrast (C+) you need to reduce colour saturation (S-).

- Tonal Contrast = - Saturation of colours

Whenever we decrease tonal contrast, the saturation of the colours go down. For this reason, every time you reduce Contrast (C-) you need to increase colour saturation (S+).

+ Colour Luminance = - Saturation of colours

Whenever we increase the luminance of a given colour in HSL settings, the saturation of the corresponding colour goes down. For this reason, every time you increase Colour Luminance (CL+) you need to increase the saturation of the corresponding colour (S+).

- Colour Luminance = + Saturation of colours

Whenever we reduce the luminance of a given colour in HSL settings, the saturation of the corresponding colour goes up. For this reason, every time you decrease Colour Luminance (CL-) you need to decrease the saturation of the corresponding colour (S-).

+ Colour Luminance = + Micro-Contrast

Whenever we increase the luminance of a given colour in HSL settings, the micro-contrast (feeling of detail and texture) of the corresponding colour also increases. You just need to evaluate the effect, and eventually reduce it back by applying Clarity - locally.

- Colour Luminance = - Micro-Contrast

Whenever we reduce the luminance of a given colour in HSL settings, the micro-contrast (feeling of detail and texture) of the corresponding colour gets also reduced. You just need to evaluate the effect, and eventually regain it back by applying Clarity + locally.