

## Day 25: Add Contrast

So far we have used brightness and darkness by themselves. Now we will change them as related to each other. That is referred to as contrast.

### About contrast

Contrast is the scale of differences between white and black. If you have no contrast at all, all you have is a single-shaded image, which is essentially nothing. Therefore, in a sense, contrast is what makes your image.

Your image will start with an amount of contrast. You don't always need to add more contrast (sometimes you might actually want to reduce it), but usually you will end up wanting to add some. Remember that you are starting with RAW files, and they will likely come out of the camera looking a little flat and lifeless. Adding contrast will go a long way in fixing that.

Let's take a look at a before and after, so you can see exactly what adding contrast means to your pictures. First, here is a RAW file straight out of the camera with no adjustments:



Now here is the same thing with only a simple, global contrast adjustment added:

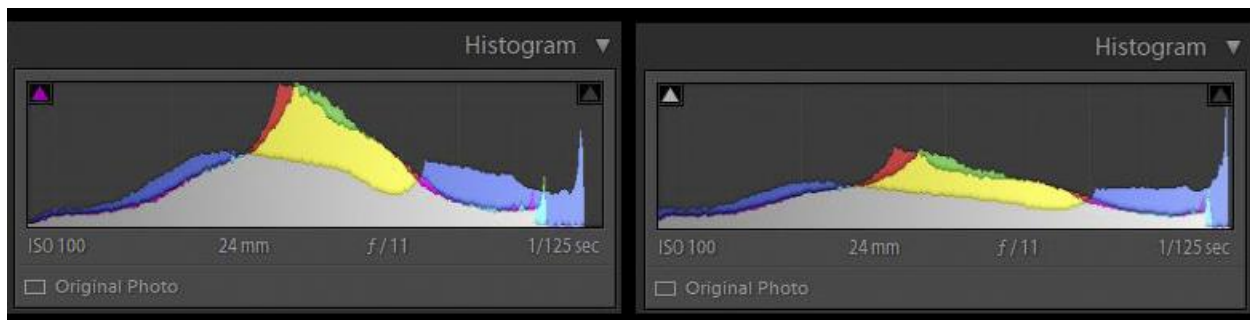


This example isn't meant to "wow" you, but rather to make sure you are clear on what we are talking about. There is a pretty clear difference.

## Measuring Contrast

We will get into how to actually add contrast in a second, but first let's talk about how to measure it. The best way to measure contrast is through the histogram. Remember that the histogram will show all the tones in your image, and also show how many pixels in your image there are in each of the tones.

"Good contrast" is usually defined as having tones run across the entire histogram. If you have ever used a Levels command in Photoshop, this is the reason why people do something called "setting the white point" and "setting the black point." When you do that, you are adding contrast and making sure that your picture contains the full range of tones. (By the way, you never need use a Levels command ever again - you can do the same thing (set the white and black points) in a Curves Adjustment Layer and then still have the full power of that tool available to you as well. Further, as you'll see shortly, you can also do it in Lightroom).



*Here is a "before and after" look at the histogram relating to contrast. On the left is the histogram for the unedited picture I just showed you previously. Notice that most of the pixels are bunched in the middle. On the right is the histogram for the edited picture, with the pixels more spread out over the available range of tones.*

In this lesson, we'll talk about adding contrast to the whole image, and also to discrete portions of the image. Adding contrast to the whole image (referred to as a global change) generally makes the image pop and addresses the RAW file problem mentioned above. Adding contrast to discrete portions of the image (referred to as local adjustments) are great ways to add texture and sharpness to your image.

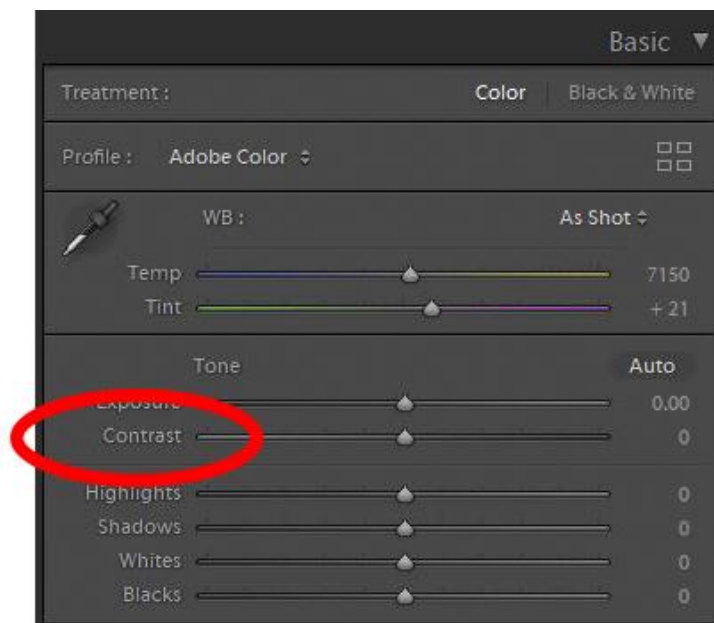
## How to Add Contrast Using Lightroom

We'll start in Lightroom (or the Adobe Camera Raw (ACR) screens, if you only use Photoshop or Photoshop Elements). Adding global contrast could not be simpler. You'll see in the Basic panel

of sliders one labeled Contrast. Simply pull the Contrast slider to the right. *Voila*, you have increased contrast.

Watch the histogram as you pull the Contrast slider to the right. You'll see that what it is doing is spreading out the tones in your image. It is pushing the tones to the left and the right of the histogram. That gives you a good idea of what is going on here.

Keep in mind you can also accomplish this same thing with the other exposure controls we have used previously in this course. You can also do it by pushing the Whites and pulling the Blacks. In fact, you can also use these sliders to set the white point and black point. If you hold Shift key while double-clicking on the head of the Whites slider, it will set the white point. Doing the same thing on the Blacks slider will set the Black point.



*For global contrast, often all you need is an increase of the contrast slider. It is just that simple. Or you can have additional control by using the Highlights, Shadows, Whites, and Blacks sliders just below. Set your white and black points by Shift+Double-Clicking on the head of the Whites and Blacks sliders.*

## Local Contrast

You cannot always just push global contrast to improve your image. Often you have parts of your image that are too dark and too bright already. This is very common in outdoor photos, where you have a bright sky and a dark foreground. Adding global contrast will just make things worse.

What do you do? You use your local adjustment tools (covered yesterday) and add contrast that way. A good way is to grab your Adjustment Brush, paint in the desired area, and increase the contrast. I just mentioned the typical outdoor scene, so let's continue with that example. In that

case, you might first select the sky. Use the Auto Mask feature to keep from spilling over to the ground. Once you have made your selection using the Adjustment Brush, make your contrast adjustment. You have a few options for doing so. One way is just to use the Contrast slider within the tools of the Adjustment Brush. Another way is to use the other exposure controls for a more fine-tuned adjustment. You might increase the Whites and pull down the blacks, for instance. However, since you are presumably starting with a very bright selection, you might actually leave the Whites alone and simply work on the Blacks and Shadows (reduce them).

When you are done with that, grab your Adjustment Brush again and this time paint on the foreground. Then do the same thing here in terms of making a contrast increase. This time, however, you will be starting a dark selection, so you will worry more about brightening than anything else. You might reduce the Blacks just a touch but make a more dramatic increase to the Whites or even the overexposure (using the Exposure slider).

Most of the time Lightroom (or ACR) will be all you ever need. The tools are simple and powerful. For those times that you need to move into Photoshop, we'll cover that next.

## How to Add Contrast Using Photoshop

Once again we have our usual theme of Lightroom versus Photoshop. Lightroom does a great job very simply, and Photoshop is even more powerful but the process is much more complicated.

The good news for you is that you won't need to learn any new techniques in this lesson. We'll go about this in the exact same way as we used previously. We will use Curves Adjustment Layers, masking, and the same selection tools we used yesterday (the Quick Selection Tool and the Brush).

Here's the deal: if you are going to get involved with using Photoshop to add contrast, it is almost always because you are doing something beyond just adding a little global contrast to your image. If that is all you are doing, just use Lightroom or ACR screens that appear when you open the image. They are much simpler and will do everything you need.

If you are going to be using Photoshop, it is likely due to the power of masking/selections. Usually, this is done to add contrast to one discrete portion of your image. There is often one area in your picture that you really want to stand out. So that is what we will focus on here.

## A Good Way to Add Sharpness

Remember that sharpness is really a contrast increase. Sharpness is created by increasing contrast in lighter and darker portions, and this makes things appear sharper. You can create this effect using Curves Adjustment Layers in Photoshop. You likely saw that in the video example

(the night shot of Manhattan). Here, we'll cover those steps to make sure you understand everything.

Here's what to do:

- First, make a selection of the pixels you want to adjust. Use your Quick Selection Tool to do so. Remember that you can do this process as many times as you want, so you don't need to include all the pixels you want to change in one selection.
- Once you have created a selection, create a Curves Adjustment Layer. Just click on the icon I showed you previously to do so. When you do that, not only will Photoshop create a Curves Adjustment Layer, but it will also create a mask whereby your selection will show up in white (reveal) and everything else will show up in black (hide). When you make changes to your tone curve, only the white (your selection) will show the changes.
- By the way, take a look at your histogram now. It will be a histogram for only the selection. That way you can use the histogram to great effect as you make changes.

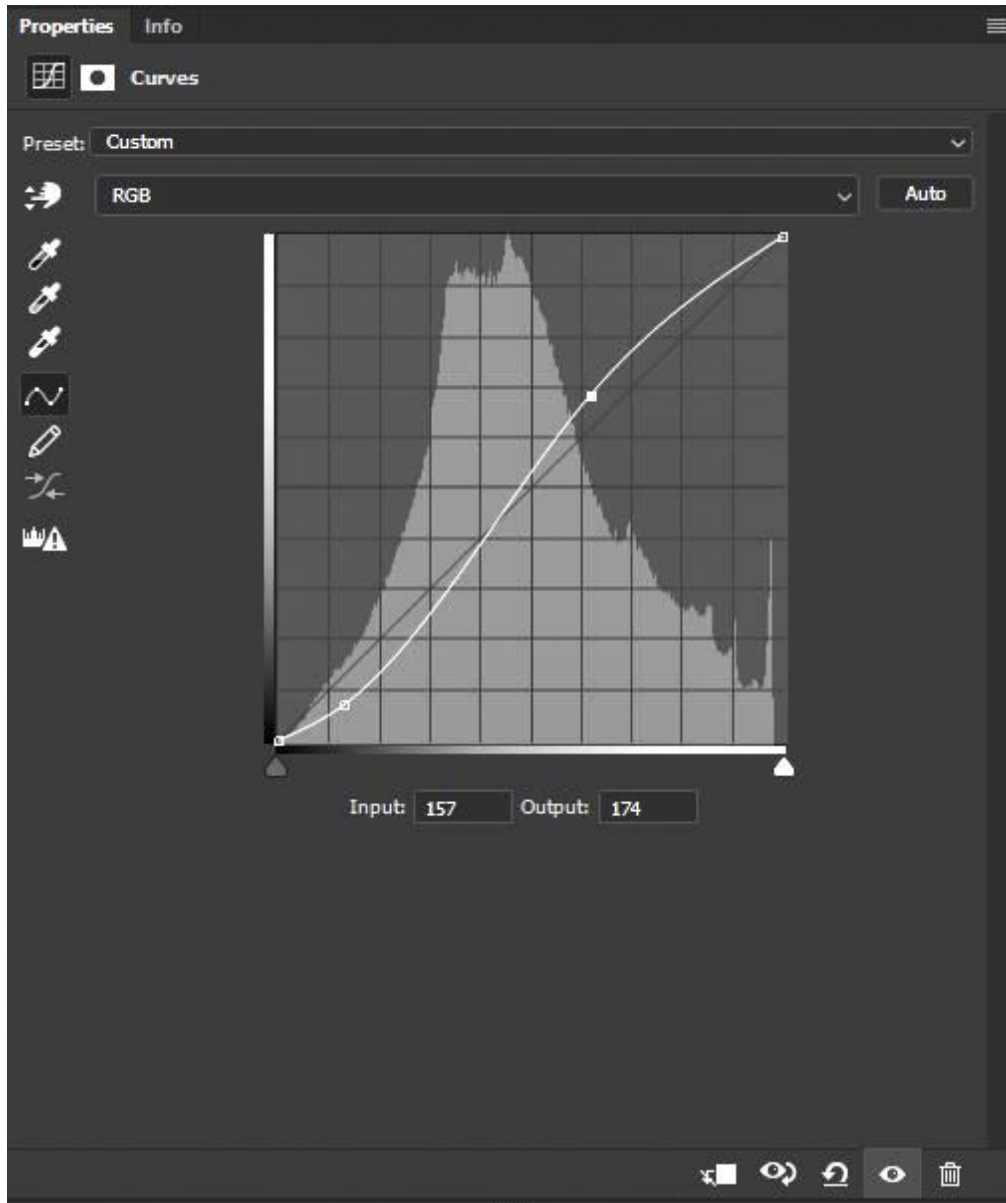
### Steepen the Slope: Creating an S-Curve

Now we're getting to the interesting bit, and the part that will be new to you. This is the part where we actually add contrast to the image.

We will do so, of course, by changing the line that runs across the histogram showing in your Curves Adjustment Layer. You are probably wondering how to adjust it to create contrast. Remember that an increase in contrast results when you make the dark tones darker and the bright tones brighter. So that's what we'll do using our Curves Adjustment Layer. Here's how:

- **Pull Down the Curve on the Left Side:** You know that the dark tones are on the left side. You also know that by pulling down in the line, you decrease brightness. So what you will do first is pull *down* on the line on the *left* side of the histogram.
- **Pull Up the Curve on the Right Side:** At the same time, you know that the bright tones are on the right side. You also know that by pulling up on the line that runs across the histogram, you increase brightness. So what you will do next is pull *up* on the line on the *right* side of the histogram.

Where, specifically, should you pull up or down? That depends on your histogram. You want to pull down just to the left of where the most pixels in your selection are, and you want to pull up just to the right of where you have the most pixels.



*Here is a Curves Adjustment Layer demonstrating the classic Photoshop S-Curve. Notice that I pulled down just to the left of the big mass of pixels, and I pulled up just to the right of it. That steepens the slope of the curve where there are the most pixels, which is what you usually want.*

Ultimately, you want the curve to be the steepest where there are the most pixels. That means there is a lot of change going on where you have the pixels of your selection. This is referred to as an S-Curve. If you follow the process described here, the line in your Curves Adjustment layer will go from being straight to having a slight S shape to it.



Remember you can repeat this process as many times as you want. You can select pixels, create a layer for that, and then create a new one with different changes for different areas of your image. This allows you to be very specific with your changes.

# Day 25 Assignment

## Add Contrast

### Description:

Add texture and punch to your picture by adding Contrast.

### Keys to Success:

- Keep an eye on your Histogram as you make these changes. Watch as the pixels get pushed out to the sides of the Histogram. Make sure you don't create a dynamic range problem.
- Keep your global changes on the mild to moderate side; you can get more aggressive with local changes though.
- Use Curves Adjustment Layers in Photoshop and steepen the slope of the curve where there are the most pixels.

### Upon Completion of this Assignment:

I refer to contrast as the “miracle drug” for your pictures, because it generally makes everything look better. You can use it to cure the flatness inherent in RAW files, add punch to your pictures, add texture, etc. It even sharpens your pictures.