



EXPOSURE - PART 1 THE HISTOGRAM

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Have you ever felt like spicing up your photography... snapping your dial out of "AUTO" to something..... anything!....that'll make your photography much better and much more exciting?

Sure ya have!

I have... and I did... and you can, too! With a little help from your friend here.... that's me, Glenys!

I know exactly how to tune up your photos... and your confidence. When it's done you'll be shocked with how easy and pain-free the learning process was... and you'll think.... bring on more 'cause my photos are looking pretty darned good.

The great **Zig Ziegler** said, "You don't have to be great to start, but you have to start to be great." Hmm. So then let's start with our basics... and that would be EXPOSURE.

In this video, you'll meet the **Histogram**, a VIC (very important concept) that will help you understand exposure better.

When digital first came on the scene... most pro photographers didn't run right out and buy a DSLR ... I mean, the image quality was pretty gruesome and files were tiny ... they weren't good for very much. BUT, we all know how fast that changed.

Back then I loved film... and I still do. But I admit there **are** perks to shooting digital. One of those is — you guessed it — the **histogram!**

So what exactly is it? Well, in simple terms, it's a picture or a map of all the tones in a photo. It goes from the darkest tones on the left side to the lightest tones on the right and all the other tones in between.

If you have a digital camera or even apps on your **cell** phone camera, you have access to this little gem.

Get out your manual and find out how to switch it on. Do it now, okay I'm waiting. Do it now.

Did you do it?

EXPLAINING A HISTOGRAM

This histogram can help me explain the concept of a tone curve and how it can help with your exposure.

What's the strip underneath it? See the 10 different tones all the way from very dark (just a touch off black)then lighter and lighter until they're a smidge off pure white. It's not actually step, step, step like these 10 blocks, it's a gradual flow of 256 different tones.

You need a little imagination but this might help you.... the tones in a histogram look more like this. But it's a bit of a strain to see the highlights so let's go back to the all-blacks... (Did you get the soccer call-out there?)

Yes, the histogram... are there any darks here? Only a microscopic number! But shadows? Yes. But the mid-tones **rule** in this image. Look at em all! Okay, what about highlights? Yep, got them, too. But we haven't lost any detail to white. No pure whites.

So, what do you think? Is this a **good** histogram? Can there be a bad histogram?

Of course there are **'bad' histograms**... but like Einstein said "It's all relative."

Let's take a little detour here before we dive into good vs. evil...oops, I mean bad! Good vs. bad.

MY CAMERA'S HISTOGRAM

How about I show you the histogram on my camera? Ahh, A lovely red rose just for you. I want to check in with my histogram to make sure I got all the tones. I don't want to clip (that means lose) any darks or highlights.

This is my “live view”. I’m scrolling through the different choices, first the rose, then the histogram.

Alright... this is excellent. All the tones are there. If I want more information than the histogram gives me, I just have to look underneath to know exactly what my exposure was.

This histogram shows the *luminance map*, not the colours. Usually... that’s all I care about. The odd time, you might want to see a colour histogram, like reds for skin tones. **Maybe** you have the option on your camera. If you happen to want colour information... check your manual to see if it’s an option! It is on almost every newer digital camera.

Okay, let’s move on...

THE PARTS OF A HISTOGRAM

Now for some fun. Let’s slice and dice a histogram.

You’re looking at the whole tonal range here... darks, shadows, to mid-tones to highlights.... all 256 tones.

What happens if I cut out the darks?

No surprises... there’s a nice little gap on the left side of our histogram. shadows, mid-tones and highlights minus the darks.

So let’s cut the shadows, too.

Great big gap now. Only mid-tones and highlights left standing. Straight forward, right?

Our last bit of surgery..... eliminate the mid-tones

The histogram looks a little sparse now with only highlights left. Almost always, the photo that goes with this histogram would be overexposed. So game over now!

If you understand histograms and you use them to check all your photos, it’s a promise that your pictures are going to improve. It’ll become so obvious to you if you bummed up your exposure.

Every histogram is kind of like a finger print. It’s unique to only one photo.

You can’t look at a histogram and say that it’s a good histogram unless you look at it in the context of that particular photo.

POP QUIZ TIME!

Both of these histograms belong to the same photo. Same scene with an exposure adjustment. You're going to guess which one equals the better picture!

Histogram 1 has a clipping warning... see the little triangle with an exclamation mark, I highlighted it in red. We're missing detail in the dark tones.... pure black instead of darks. There are a lot more mid-tones and shadows than histogram 2.

Histogram 2 has a clipping warning also but here it's in the highlights. Some highlights are pure white so we've lost detail in those highlights. This histogram is heavy on the darks and shadows with some mid-tones and highlights.

You might want to pause the video and think about which histogram gets your vote for the best exposure for the image.

Here's the image for histogram 1. Not great exposure. Too light for a night shot. You expect lots of darks and shadows. And with fireworks you get lots of highlights. The photo with histogram 2 looks so much better. In this case the histogram's skewed to the left... to the dark side gets my vote.

CHECKING HISTOGRAMS MORE PHOTOS - MORE HISTOGRAMS

It's a good idea to look at more photos and their histograms to get an idea of how the histogram relates to its image. This photo has the full spectrum of tones. Pause the video if you want and look it over. It has a clipping warning and you can see that a few of the darks have lost detail. They don't seem to affect the photo so I'm okay with that.

For some photographers, this image is too light or overexposed. But it is a trend now and I've seen a lot of this overexposed look in fashion. There just aren't any tones in the dark range here. Now the curve is all stretched out into the darks and more of the shadows. Remember Einstein "It's all relative"? So whichever photo you like best, it's your choice. That's the best histogram.

Ah, the blue hour. Doesn't this look like a peaceful scene? We've got very few darks, not many shadows, but lots of mid-tones. And the highlight are all around the sun and in the sky and the reflection. There is a clipping warning and I'd say that those blown highlights are in within the sun. The mid-tones predominate and it's so restful.

This is a great histogram. The spike right in the middle of the histogram is middle grey and that's in the centre of the photo, the grey in the iPad. There's some middle grey in the ribbon and tiny bits in the wood. The placemat isn't pure white. Look at the histogram and you can see that it doesn't go over the edge. But the black in the iPad does create a clipping warning. Look at the spike. That's all around the edges of the iPad. There's lots of shadow and darker mid-tones.

A black and white photo with a lot of bright sky. That sky is what you see as the huge bump in the histogram in the highlight area. The darks and shadows and mid-tones are all in the buildings.

This is a look I love. And I like to create it in my photo-editing. There are no bright highlights here. This is an "old" look, an worn photo and it's called the 'antique look'. I manipulate the histogram in Photoshop or ON1. My original would have lots of highlights so in my photo editor, I just shift those highlights into mid-tones. But you could shoot this in your camera if you wanted to.

If you saw this histogram without your photo you'd probably throw away the shot and you'd say "bad, bad histogram". It just goes to show that you have to judge the two together. This photo is exactly what it's meant to be here. There are a few shadows, the little bump on the left. They're the dark shades of green at the top of the stem. The middle tones are greys, some shades of green, yellow and gold. A lovely picture that will remind you to check your histogram with your photo that you're trying to create.

A scene with blacks and whites is one of the most challenging scenes to shoot. If you don't check your histogram, you could easily blow this shot....in one of two ways:

Your darks might all be bunched up against the left side. Not enough light's getting to the sensor. That's underexposure. Give it more light. Shoot again, check your histogram.

Or...the opposite... all your highlights are blocked up on the right side. Too much light! Adjust your exposure by reducing the light, check your histogram. Better?

In this picture, over-exposure or under-exposure would be a *bad* thing. That's not true for every photo but in this one... it is.

Make time with your camera this week. Check your camera manual... find out how to turn your histogram on. And use it... always and forever.

Congratulations, you've just taken your step away from Auto Mode... by getting to know your histogram.

Next time we'll talk about Shutter Speed, what it is, what it does and what we have to think about when we choose it. Things like... am I photographing a high school soccer game or a mountain? Maybe I'm photographing my dog running along the beach. Do I want his legs to be blurred to show how fast he's going. Nope, I want all of him to be tack sharp. Is there lots of light or is it a dark, cloudy day?

Make sure you come back for the entire series on exposure... because the only way to shoot consistently great photos..... is to take control away from your camera and put it where it belongs.... in your hands!

Now sit back and enjoy a few of my images and I'll see you next time around.

Cheers,

A handwritten signature in a cursive script that reads "Glennys".

SHOUT-OUTS AND THANK YOU:

Thank you to picjumbo.com, unsplash.com, dreamypixel.com, isorepublic.com and kaboompics.com for use of their images. Most of the images in this video are my own. Several are from these websites. And from Wikipedia:

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