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Photography Terminology: A Glossary of Photographic Terms



Speaking "Photographer" – the Basics

These are the terms you'll find in your camera's manual and in most beginner tutorials on how to use it. Hopefully this will help you get a better grasp on them so the manual isn't quite so foreign.

- **Photography** the word photography comes from two old Greek words "phos" meaning light and "graph" meaning to draw. So photograph literally means to draw with light, or a drawing made with light. So photography is the art of drawing with light.
- **Aperture** the variable opening in the lens through which light passes to the film or digital sensor. Measured in f-stops. I like to compare it to your pupil which opens and closes to allow more or less light to enter your eye depending on the brightness level of the room.
- Bracketing taking a series of images at different exposures or EV. You may see a
 setting on your camera that says AEB (auto exposure bracketing). This is often used
 when creating HDR images or in difficult lighting situations where you may want to
 have a range of exposures from light to dark.
- Bulb the "B" setting on your camera where the shutter remains opened as long as the button or cable release (remote trigger) is pressed. On a Canon it may be on your mode dial on top of the camera, or at the low end of the shutter speed settings (also where it is on a Nikon)
- **DSLR** digital single lens reflex camera. Any digital camera with interchangeable lenses where the image is viewed using a mirror and prism, and the image is taken directly through that lens. What you see in your viewfinder is what the lens sees.
- **EV** Exposure Value is a number that represents the various different combinations of aperture and shutter speed that can create the same exposure effect.

- Exposure compensation modifying the shutter speed or aperture from the camera's recommended exposure to create a certain effect (over or under exposing) usually used in the Shutter Priority or Aperture Priority modes. Represented by a little +/- button on your camera. Your camera reads light bouncing off your subject and is designed to expose for medium grey. So when photographing a subject that is lighter or darker than 18% grey, you can use this setting to tell the camera the proper exposure (- or + respectfully)
- **Exposure** the total amount of light reaching the digital sensor. It is controlled by setting the aperture, shutter speed and ISO
- **F-stop** is a measure of the aperture opening in the lens defined by dividing the focal length of the lens by the aperture diameter. Sequence of f-stops are multiples of the square root of 2 (1.414...): 1, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22, etc. Even though these numbers are rather cryptic, just remember that each step is double the amount of light. Know that and it's half the battle.
- **ISO** stands for International Standards Organization and represents the sensitivity of your camera's digital sensor to light. The lower the number (ISO 100), the less sensitive, the higher the number (ISO 3200) the more sensitive. A higher ISO allows you to shoot in low light conditions.
- Shutter speed the amount of time the shutter is opened during an exposure. The shutter speed controls motion. Use a fast speed (like 1/2000th of a second) to freeze motion, or a slow one (1/4 of a second or longer) to blur moving objects Zoom lens any lens that has variable focal lengths such as a 24-70mm or 18-55mm. You zoom in or out by rotating the barrel of the lens.
- **Prime or fixed lens** any lens that does not zoom and is a set focal length such as a <u>nifty 50mm lens</u>.
- **Remote trigger or digital cable release** a device that allows the camera to be fired without pressing the button or touching the camera. Helps eliminate movement of the camera during long exposures.
- **Macro lens** one that focuses very close to the subject allowing for 1:1 reproduction size of the object or larger.
- "Normal" lens generally a 50mm lens (on a full frame sensor camera) is considered to be a "normal" lens because it is closest to what the human eye sees. If you have a cropped sensor that will be closer to 35mm.
- **Telephoto lens** simply stated a telephoto lens is one that is longer than a normal lens, eg., 70-300mm. The dictionary says: a lens with a longer focal length than standard, giving a narrow field of view and a magnified image. Super telephoto is usually 300mm and longer lenses.
- Wide angle lens again simple answer is a lens that shows a wider field of view than a normal lens, which allows more to be fit into the frame. Depending on the

degree of wide angle there may also be edge distortion (super wide angle), and if you get wide enough the image will become a circle (fish-eye).

- **Tilt shift lens** a lens that attempts to recreate the movements available when using a view camera. Being able to tilt the front lens element allows for realignment of the plane of focus. Shift allows adjusting the placement of the subject within the frame without angling the camera, thus keep parallel lines from converging. This is a popular lens for architectural and landscape photographers, and is becoming more widely used by portrait photographers for creating a unique stylized look.
- **Camera resolution** expressed in megapixels is the dimensions your camera's sensor is capable of capturing. For example Canon's new 6D has a resolution of 5472 x 3648 which equals 19,961,856, which they've rounded off to 20 megapixels. This is not the only factor in image quality, but generally the large the number, the larger prints you can produce from it without loss of quality.
- File format jpg versus RAW most DSLR's have the ability to shoot both formats. If you choose JPG, the camera will shoot a RAW file, process it using the picture style you've selected in your menu, save it as a JPG and discard the RAW version. If shot in RAW the resulting file will be larger, carry more information (but the same pixel resolution, see above) and require software to process. It gives you the photographer more control over the final look of your image.
- Full frame vs cropped sensor I get asked about this in my classes all the time. A full frame sensor is roughly the size as the "old" 35mm frame of film. Lenses are made to create a circle of light just large enough to cover that area (covering power). In a cropped sensor camera the physical size of the sensor is smaller so it only captures a portion of the entire image the lens is projecting, effectively cropping part of the image out
- **Camera modes** manual: full manual the user is setting the ISO, shutter speed and aperture. Shutter priority (Tv on a Canon or S on a Nikon) the user is selecting ISO and shutter speed, the camera is then choosing the aperture to make a correct exposure.
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. Lighting and Portrait Photography Terms

• **Ambient light** – also referred to as available light, is the light that is occurring in the scene without adding any flash or light modifiers. This could be daylight, or man made light such as tungsten or fluorescent bulbs.

- **Main light or key light**: is the main light source for a photograph. It could be the sun, a studio strobe, a flash, a reflector or something else. But it is the source of light that is producing the pattern of light on the subject with the most intensity.
- **Fill light**: is the light source that is secondary to the mail light. It is used to "fill" in the shadows to a desired degree. It can be produced by using a flash, a reflector, or a studio strobe.
- Lighting pattern: this is the way the light falls on the subjects face. A particular pattern of light and shadow that is created.
- Lighting ratio: is a comparison between the intensity (brightness) of the main light and the fill light and thus the difference of the lit and shadow sides of the subject's face.
- **Incident light meter**: is a handheld device separate from your camera that measures the amount of light falling on a subject (as opposed to the reflective reading your camera takes which is light bouncing off the subject back to the camera). The incident meter is not fooled by the brightness range of the subject, where as in camera reflective meters can be fooled.
- **Speedlight (speedlite for Canon users)**: small portable flash which can attach to your camera's hot shoe, or stand alone if activated remotely.
- **Reflector** a device that is used to reflect light, generally back towards the subject. It can be a specialized factory made reflector (I recommend getting a 5-in-1 if you get one) or as simple as a piece of white cardboard
- Light meter a device that measures the amount of light in a scene. Your DSLR has one built in, it uses reflective readings (light bouncing off the subject coming back through the lens [TTL])
- **Remote flash trigger** a device used to fire speedlights off camera. Pocket Wizard is a popular brand.
- **Subtractive lighting** as the name implies it is the taking away of light to create a desired affect. Commonly it involves holding a reflector or opaque panel over the subject's head to block light from above and open up deep eye shadows cause by overhead lighting. It can also mean holding a black reflector opposite your main light to create a deeper shadow, in essence reflecting black onto the subject instead of light.
- Hard light harsh or undiffused light such as produced by bright sunlight, a small speedlight, or an on-camera flash. It produces harsh shadows with well defined edges (edge transfer), contrast, and texture (if used at an angle to the subject). Emphasizes texture, lines and wrinkles, and used to create a more dramatic type of portrait (character study).

- **Soft light** diffused light such as from an overcast sky, north facing window with no direct light, or a large studio softbox. This type of light produces soft shadows with soft edges, lower contrast, and less texture. Generally preferred by most wedding and portrait photographers as it flatter the subject more.
- Edge transfer where the light turns into the shadow, the edge transfer is how quickly it goes from dark to light. If using harsh light the edge transfer is very defined and sudden, almost a clear line. When using soft lighting the edge transfer will be much more subtle, almost imperceptible as it gradually changes from light to dark.
- **Flash sync** simply put is the synchronization of the firing of an electronic flash and the shutter speed. You need to know what shutter speed your camera syncs at, otherwise if you shoot too fast a shutter speed you may get a partially illuminated image. For most cameras that is around 1/200th of a second, but it can be adjusted if you have a flash that can be set for fast speeds.

Slang and Photography Jargon

Here's a few other terms that are a bit more advanced, and even completely made up jargon. Become familiar with them so you can walk among the pros with confidence!

- **Fast glass** refers to a lens with a very large maximum aperture such as f1.8 or f1.2. "Fast" as in, it allows you to shoot at a fast shutter speed due to the large aperture.
- **Chimping** slang term meaning looking at the back of the camera after every image. Spending too much time reviewing images on camera, not enough time shooting.
- **Bokeh** often mispronounced "bow-kay" or "bow-kuh" it is correctly pronounced as "bo-ke" like the ke in kettle. It is used to described the out of focus blurred bits in the background when "fast glass" is used. Most often bokeh occurs where small light sources are in the background, far in the distance.
- **Depth of Field** (DOF or DoF)- the distance between the nearest and farthest objects in your scene that appear in focus. It is controlled by many factors including the aperture, lens focal length, distance to subject, film or digital sensor size, and camera format..
- Circles of confusion closely related to the above bokeh, the textbook definition is: the largest blur spot that is indistinguishable from the point source that is being rendered. Objects outside the depth of field of an image that the human eye can determine as "out of focus".
- Hyperfocal distance often used by landscape photographers, it is the focus distance providing the the maximum amount of depth of field. Older prime lenses for film cameras usually had hyperfocal distance marks to aid in finding this magic sweet

spot. With today's lenses it is possible to calculate, just takes a bit more work and a hyperfocal distance calculator.

- **Gobo** something used to block unwanted or stray light from falling onto the subject. Often a reflector (using the black side) can serve a dual purpose and act as a gobo as well.
- Scrim a translucent device used to diffuse and soften the light, could be a reflector with a translucent panel or option. Also used on movie sets scrims can be made extremely large, several feet across, and clamped in place to create shade where these is direct sun without it.
- **Shutter lag** every camera has a slight delay from the time you press the shutter button to the time it actually fires and opens. In DSLR's it is minimal and almost unnoticeable. In smaller point and shoot cameras the delay is more pronounced such that it may actually cause a missed shot of a fast moving subject.
- **Chromatic aberration** in terms of lens optics it is the failure of the lens to focus all colours (RGB) at the same point. It shows up as colour fringes in areas of the image where dark meet light (think edge of a building against the sky). It is more common in wide angle lenses, and those of inferior optics (kit lenses). It is correctable, to some degree, using Photoshop, Lightroom or software of your choice.
- **Rear shutter curtain sync** by default most cameras are set to front curtain sync which means that if the flash fires, it does so at the beginning of the exposure time. By setting to rear shutter curtain sync it fires the flash at the end of the exposure time. The difference in some cases me be negligible, but in shooting a moving subject front sync will put any motion blur in front of the subject, where as rear sync will place the blur behind the subject. Neither is wrong, just preference.
- Camera shake this is a blurry image which has resulted from an insufficiently fast enough shutter speed, while hand holding the camera. So how slow is too slow? Many teachers will say that 1/60th of a second is the rule of thumb. I tend to recommend 1 over the focal lens of your lens instead, as the longer the lens the more amplified any shake will become.
- Lens flare occurs when the light source hits the lens directly, it can manifest as a hazy looking image or artifacts such as circles of light. Some photographers actually desire lens flare and position their camera to create it and use it as a compositional element.
- Kelvin is the absolute measurement of colour temperature. On your camera under the White Balance settings you make see a "K" setting. This allows you to adjust the colour manually by degrees kelvin. The lower numbers represent warmer colours like orange (tungsten light) and the higher numbers are cooler (blues). Play with this scale to create different affects.
- **ND filter** stands for neutral density filter which is a filter designed to go in front of the lens to block out some of the light entering the camera. Often used by landscape

photographers to be able to get slow shutter speeds when photographing waterfalls and streams in full daylight.

- **Panning** the act of using a slow shutter speed, and moving the camera in the same direction as a moving subject, during the exposure to create a blurred background.
- **Stopping down** the act of closing down the aperture to a smaller opening. El going from f5.6 to f8.
- TTL and ETTL stands for Through The Lens, refers to the metering system in regards to flash exposure. The flash emits light until it is turned off by the camera sensor. ETTL is evaluative through the lens metering and fires a "preflash" to evaluate and calculate for lost light then compensates and fires the main flash. It happens so fast you do not see two flashes.
- **Photog** short for photographers, something pros often call each other
- Glass lens, as is "what glass do you own?"
- **Golden hour** also called "magic hour" is the hour right before sunset or right after sunrise. The sun is low on the horizon and it is an optimal time for photography.
- **Spray and pray** shoot as many images as possible and that hope and pray you got something good. Not a philosophy I personally recommend.
- **Blown out** having highlights that are off the chart on the right side of the histogram, having no detail in the white areas. Eg: "the bride's dress is blown out"
- **Clipped** similar to blown out being off the histogram, but it can also apply to shadow or blacks areas of the image.
- **Grip and grin** often used to describe a quick photoshoot at an event or set up with two people shaking hands. Most photographers have had to shoot these during their career.
- Selfie a self portrait
- **SOOC** straight out of camera, no post processing or editing done
- **Dust bunnies** dark spots that appear on the image, caused by bits of dust on the digital sensor
- **Pixel peeper** someone that spends too much time looking at images at 100% size in Photoshop
- Nifty 50 an old school prime 50mm lens, great to have
- ACR Adobe Camera Raw
- **Flash and drag** the method of using a slow shutter speed combined to flash to capture more of the ambient light in proportion to the flash

• Wide open – using your lens with the aperture at the widest setting (f1.8 for example)