

Lexicon of Photographic Terms

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Abstract

A photograph that is not intended to represent reality directly.

Adobe RGB

Adobe is the name of a company that produces software to manipulate images. They have defined a standard for the range of colours that can be presented on computer devices. RGB stands for red, green and blue which, when combined, can form any other colour.

Ambient Light

The light that is available naturally within the scene to be photographed. This excludes light that is deliberately added by the photographer via a flash unit or other artificial source.

Angle of View

When we look through a lens on a camera, how wide is the image we can see? Some lenses are termed 'wide angle' lenses because they can see more width than normal lens. Extremely wide angled lenses are often called 'fish eye' lenses.

Aperture

The size of the hole through which light is allowed to pass into the camera. The wider the hole, the more light can pass.

Aperture Priority

A function on a camera that allows the photographer to choose the aperture size manually while the camera will automatically decide each of the other settings to ensure a correct exposure.

Archival

A term used for photographic prints that can be stored for a long time without the image fading from the paper. Archival inks and paper will be more expensive to buy.

Artifacts

These are unwanted elements in an image that may have come about through image processing errors. Artifacts abound in poorly processed digital imagery.

Aspect Ratio

The relationship between the height and width of an image. A square has an aspect ratio of one to one, also written as 1:1. In 35mm cameras the width of the negative was 36mm and its height was 24mm, which gave an aspect ratio of 3:2 Other cameras have aspect ratios of 5:4 or 4:3

Auto Exposure

A function on a camera that automatically chooses settings to expose an image. This mode of operation does not allow the photographer any choice in how the image will be represented and may average the light readings in the overall image meaning that the subject of the photograph may not be captured perfectly.

Auto Focus

A function on a camera to adjust the focus of the lens usually to a user defined position on the image in the view. Some cameras have a dedicated button for auto focus while others require you to half press the shutter release button. The opposite of auto focus is manual focus mode.

Back Light

A term used when a light is placed behind a subject. It may be that a building or person is positioned in front of the source of sunlight, for example, or in a studio where a photographer has deliberately placed a light behind the subject.

Blend

A way to construct an image by combining it with another, often in quite complex ways, for example, using only a percentage of the light available from two images combined to make another image. Often images to be blended are manipulated in some specific way to add a desired effect.

Bokeh

A term used to describe out of focus elements within an image, especially points of light. If the blurred points are circular, the image is said to have good bokeh. The word derives from Japanese and is pronounced 'bow kay'. It is a measure of the manufacture of the camera elements that form the aperture.

Bracketing

A function on a camera that takes more than one photograph when the shutter release button is pressed with each image exposed differently. Some cameras allow the photographer to preset the number of images taken and the range of exposures. For digital cameras that do not have the same range of exposure as film, this is a means of extending the range of exposure, however, the final image will have to be constructed from a blend of these images.

Bulb

Other than the term used to represent a light bulb, it is also a mode of operation on a camera that allows the photographer to determine how long the shutter will stay open. Nighttime photography and the use of very dense filters on lenses will necessitate very long exposures.

Burning

A method of darkening areas of an image. The term refers back to dark room practice of allowing more light to fall on the paper during development. The paper starts bright and is 'burned' by light to produce an image. One can create a mask to place between the light source and the paper to allow some areas to be burned more than others.

Butterfly Lighting

This is a term for artificial lights placed above and in front of a human subject to simulate summer sunshine. The shadow cast by the human nose will be in the shape of a butterfly.

Calibration

A term used for the adjustments to be made to cameras, computer screens and printers to align them with known standards. For example, it is desirable to have the colours that can be printed on paper to be the colours presented on a computer monitor to be the same colours produced by the camera. However, technically this may not be possible and certain tradeoffs will need to be made. In order to control printing, it is important to ensure the colours represented on your computer screen matches the colours produced by your chosen ink on your chosen paper.

Camera Shake

The blurred effect caused on an image when the camera is moved during the process of capturing the image. This is more pronounced with hand held shots taken with slow shutter speeds or of images taken at far distances. Landscape photographers, especially, will go to extreme lengths to ensure no vibration of the camera occurs during long exposures; such as mounting on a tripod, weighting the tripod to avoid wind shake; raising the internal mirror to avoid vibration from its rising action; using remote triggers to avoid manual depression of the shutter release from causing vibration, etc.

Catchlight

The bright reflection of a light source in the eye of a person or animal.

Curves

A technical measure of the amount of contrast within an image. It is the graph of the image density plotted against the logarithmic values of exposure, if you really must know! Curves are easily adjusted within image processing software to allow image manipulation without needing to know anything about its mathematically underpinnings.

Chromatic Aberration

the different colours of light have different wavelengths that need to be bent into the camera using a lens. Colour errors or 'chromatic aberration' occur when the lens cannot bend all colours equally and some colours separate akin to how a rainbow is formed

Clipping

The camera sensor can only measure a range of light intensities. Any intensity below the minimum threshold (full black) or above the maximum threshold (full white) is not registered and is termed clipped as if it was cut off the end.

Colorimeter

A device used to measure the light emitted from a computer screen or reflected off a printed image. It is used as part of the measurement process of calibrating computers and printers.

Colour Wheel

A representation of the visible light spectrum as an aid to photographers when choosing colours. Some colours are considered complimentary and some are considered opposites. The use of complimentary or opposite colours has an effect on the perceived mood of an image.

Cast

An undesirable local or global colour that affects an image. For example, photographs taken before sunset can have a yellow or orange cast that gives them a warm mood; those taken after sunset can have a blue cast giving them a colder mood. Digital image processing can have side effects that introduce casts.

Colour Management

A suite of software used in conjunction with colorimeters to calibrate computer screens and printers to ensure the same colours are visible at all steps in the workflow.

Colour Space

A two or three dimensional model of how colours can be represented particularly with respect to how colour is captured in cameras and moved to computers and printed. They are used for image manipulation and calibration.

Colour Temperature

Objects reflect, absorb and emit light depending on their temperature. Thus, it is possible to measure the temperature of an object by the colour of its light. Colour temperature of an image can be manipulated to change the mood of the image, hence, introducing a deliberate cast.

Complementary Colour

any colour directly opposite another on the colour wheel. Adding two complimentary colours will produce a neutral result

Composition

The process of positioning elements of interest within an image in order to express the intent of the photographer.

Contrast

The perceived difference between light and dark elements within an image. Complementary colours are considered to have high colour contrast.

Cropping

A cropped image remains after the deletion of unwanted parts

Cross Processing

Simulating the deliberate use of incorrect chemical processing of film negatives to produce dramatic colour casts

Depth of Field

apparent sharpness in front of and behind the point of focus in an image

Diffraction

When light passes through a small hole it can be bent from its straight path. This can cause an image taken through a small aperture to be blurred.

Diffuse Light

Light emanating from a source whose surface area is much larger than the subject of an image. It is used to light the subject evenly.

Distortion

A number of effects that can cause an image to render known shapes incorrectly, for example, where parallel lines bulge due to the spherical nature of the glass in the lens. Software can correct lens distortion and libraries are available for different lenses sorted by manufacturer.

Dodging

A method of lightening areas of an image. The term refers back to dark room practice of placing hands or other objects between the light and the paper during development. The paper starts light and is 'burned' by light to produce an image. By dodging the light, the paper stays light coloured.

Double Exposure

A method of creating one image from two photographs. Using film cameras, one could expose the same piece of film twice, hence, the term double. Using computer software it is now common practice to blend multiple images together to change the look and feel of an original image.

DPI

Dots per inch – a term used for inkjet printers, in particular. A typical value of 1,440 dots per inch is considered good quality for inkjet printers.

Dynamic Range

The ratio between the brightest and darkest light intensities that can be captured by photographic media, be they film or digital sensors. A doubling of light intensity is called a stop. So, if the lowest intensity detectable is X and the maximum intensity is 256 times X then the dynamic range is 1:256 or 8 stops.

Enlargement

A term used to make an image copy that is larger than the original. When using computer software to perform this task one should take care to differentiate between changing the size of the pixels or adding more pixels between existing pixels using a process known as interpolation.

EXIF

Exchangeable Image File Format is a term used to describe a standardized method of storing camera information on digital media. These data can be stored on computers along with the image data. This avoids the need to take note of exposure, aperture and ISO readings during the process of taking photographs for the purpose of analysis thereafter.

Exposure

The amount of light falling on photographic media or simply the act of taking a photograph. Allowing more light to fall on media increases the exposure, allowing less, reduces the exposure. A photograph with too little exposure is said to be under exposed whereas one with too much is said to be over exposed. Exposure in a digital camera is controlled by the aperture, shutter speed and ISO settings.

Exposure Compensation

Camera light meters measure reflected light, as opposed to incident light, and they tell the camera to expose an average for the whole image, which would be 50% grey overall. For very dark scenes or very white scenes, it is necessary to adjust the exposure up or down respectively to capture a better representation of the true scene. Cameras have an exposure compensation button that allows these adjustments to be made.

Extension Tube

A camera fitting that is placed between the camera body and the lens to move the lens further from the sensor thereby increasing magnification. This is a popular technique in macro photography as, if the length of the tube equals the focal length of the lens, the image produced will be life size.

Fill Light

When a main light, be that artificial or sunlight, casts a shadow that the photographer wishes to lighten, a smaller light can be placed to shine only on the shadow area. That smaller light is called a fill light and its job is to reduce contrast on the subject.

Filter

Transparent glass placed in front of a lens to modify the light entering the camera. There are many different filters. Some are colour filters that block ranges of colour; some alter other light properties such as 'ultra violet' or 'polarization'. Some are termed 'stoppers' and appear to be opaque but they do allow a tiny amount of light through and are used for long exposures.

Fisheye

An extremely wide-angled, short focal length lens with significant depth of field. Some give a circular image and others yield cropped rectangular images. Straight lines are visible through the horizontal or vertical axes but as lines deviate from these, they have significant curvature. Initially, they were developed for meteorologists to be able to image the whole sky.

Flare

When a lens is pointed towards a light source, some of the light may not be reflected off the subject matter but may enter the lens directly. As it bounces off various lens elements it can produce bright patches on the captured image. In general, this is undesirable but some photographers use it artistically. Coatings may be placed on lens to reduce the effect as well as the use of filters and a lens hood.

Flash

An artificially induced bright light used to illuminate a scene. There are many different types and they may be used together provided they are synchronized to fire simultaneously. The camera and the flash(es) need to be synchronized too so that the light is available when the shutter is open.

Fluorescent

A type of light bulb that produces significant amounts of ultra violet light that is converted to normal light using chemical coatings on the inside of the glass. These are often made in a tubular format. The quality of light from a fluorescent light is different from sunlight and needs to be compensated for in terms of true colour reproduction.

f-Number

a numeric value used to represent the aperture. It is defined as the focal length divided by the diameter of the opening. For example, if I had a 200mm lens and the aperture was open to a diameter of 25mm, then the f-number would be $200/25$ or 8; we would say the aperture is set to f8. The f-number is an abstract quantity that allows different focal length lenses and their various real aperture diameter settings to be compared so that f8 on a 200mm lens and f8 on a 20mm lens can have some similarity in the quality of image produced even if they would have other qualities that are quite different.

Focal Length

The distance from the centre of the lens to the point of focus. For a more complex set of lenses this measure assumes the set behaves like a single lens. Image size is in proportion to the lens focal length so doubling the focal length will magnify the image by two. All lenses with the same focal length will produce images of the same size.

Focal Plane Shutter

A variable speed shutter in the place of focus of the lens within the camera comprised of two 'curtains' that move relative to each other either vertically or horizontally. It is important to synchronize the shutter speed with flash to avoid photographing the moving shutter, which would produce a dark band in an image.

Focal Plane

An imaginary flat surface inside the camera where the image is in focus

Field Plane

An imaginary flat surface in the image where image elements are in focus

Flat Light

Where the incident light falling on the subject produces no shadow to create any depth within the image. Subjects are said to be 2-dimensional (height and width) without having the third dimension of depth simulated by the shading effects of shadow.

Front Light

Where the light for the subject is slightly above and behind the photographer. This angle produces shadow behind the subject, which cannot be seen by the camera and, thus, the subject does not appear to have any depth and is often referred to as 'flat'.

Giclée

Squirted – from the French verb to squirt, gicler. It is an art term, which originated in the US, to refer to a large format inkjet print for a fine art reproduction of an artist's work.

Graduated Filter

A filter that has a gradual change from one effect to another, for example, from a darkening effect to normal brightness. IT should be noted that any filter, even a clear one, will absorb some light and have a slight darkening effect.

Grain

A random distribution of light sensitivity specks in an image. Originally in film photography, these were tiny specks of silver. In digital photography, they occur due to both electronic and random quantum noise in the light sensitive element. Some photographers will add random noise for artistic effect.

High Dynamic Range

Cameras are not capable of capturing the range of intensities that are available in nature. Details in very dark blacks and very bright whites are lost. It is possible to adjust the exposure range for a given image capture by closing the aperture and increasing the shutter speed to let less light into the camera for very bright scenes and the opposite for very dark scenes. It is possible to take several photographs at different exposure settings when the range of light intensity in the image is greater than that available for capture in a single image. The collection of photographs can be combined to produce a high dynamic range image.

Highlight

This is the brightest parts of an image.

Histogram

A graphic image, usually presented on the rear of a camera or in some image processing software to show the range of intensities that have been captured in a photograph. It is a bar chart that maps the number of pixels within the image that have a given light intensity from black, through grey, to white. It should be noted that the graphic image is not linear, rather, it is logarithmic. This implies images should be skewed to the right to increase the detail captured in the image. Normally one would avoid 'clipping' a histogram by capturing intensities that are shown as pure black or as pure white.

Hyperfocal Distance

For a given focal length and aperture, the hyperfocal distance gives the maximum depth of field measured from half that distance to infinity. A general rule of thumb suggests it is 1/3 of the way into an image but mathematical calculations allow it to be established accurately.

Infrared Photography

Using a camera that has been modified to allow it to capture wavelengths of light that extend longer than the visible red light spectrum. The warmer an image is, the brighter it will be in the infrared spectrum. The images produced are monochromatic.

Inkjet Printers

A printer that uses tiny drops of few colours of ink, when laid very closely, can mimic a spectrum of colours. Basic inkjet printers will use a minimum of three colours: cyan, magenta and yellow but more complex printers will use many more.

Interpolation

A means of filling in missing data through a best-guess method. Usually, two points are measured and a third point calculated as the average of the outer two is placed between. This process can be repeated again and again to enlarge the size of an image but the effect will be to smooth out areas of high contrast and lower the perceived sharpness of an image.

Inverse Square Law

The intensity of light diminishes by the square of the distance from the light source. If you double your distance from a light source, you will quarter the light intensity.

ISO

International Standards Organization

ISO Number

A standardized measure of the speed at which a photographic film reacts to light. Digital cameras use this number to represent the sensitivity of the camera's sensor. The higher the number, the more sensitive to light; doubling the number should mean twice as sensitive. High sensitivity will be susceptible to chromatic and electrical noise that will degrade the image captured.

JPEG

Joint Photographic Experts Group

JPEG Format

A computer file compression algorithm devised to save computer file space on expensive hardware. The compression is lossy, which implies not all data is recoverable, and saving a file in JPEG format many times will degrade the image substantially.

Key

A word used to describe the overall tone of an image. A high key image is very bright whereas a low key image is substantially dark. This is not to be confused with under or over exposure. A key light is used in a studio to give an image its predominant brightness.

Landscape

The orientation of an image where the width is greater than the height.

Lens

A medium that bends light, allowing it to be focused on an area.

Lens Hood

A device that attaches to the end of a camera lens to shade its surface as a protection against lens flare – stray or unwanted light that may enter the camera and spoil an image.

Light Meter

An automated means of measuring the intensity of light in a scene in order to correctly expose an image. Light meters may measure the incident light falling on the meter or the reflected light 'bouncing' off elements in a scene.

Macro

A term used to refer to close-up photography or images that are reproduced close to their actual size 1:1. A macro lens is designed to optimize image capture close to the lens. Some macro lenses may magnify an image but one an image is greater than 20:1 the term marco is replaced with photomicrography.

Metadata

Data about data. In photography, this is additional information used in the capture on an image such as the ISO, aperture, shutter speed, image size, file format etc.

Moiré

An interference pattern caused by the interaction of the digital sensors pixel layout and a similar patterned element within a scene. Normally it is undesirable and may be reduced or eliminated using software or by modifying the image sampling process.

Monochrome

An image containing only one colour normally using varous shades of that colour. Traditional black and white photography uses various shades of grey to produce an image but any single colour may be used to produce a monochromatic image.

Monopod

Like a tri-pod but with only a single leg. It is used mainly to balance a large lens used to capture fast action as it can be manipulated quicker than a tripod but is less stable.

Negative

An inversed image that is dark where light is expected and light where darkness would be expected.

Neutral Density

A filter that reduces light intensity evenly across all wayleaves of visible light – or at least try to – the more expensive ones are better at eliminating either a red or blue hue at either end of the visible spectrum.

Noise

Unwanted pixels with random colour values found in digital images. The amount of noise in a digital image will increase with higher ISO settings and on longer exposures. Normally this is not desired but it may enhance monochrome images by simulating film grain. Software algorithms may be used to reduce the amount of noise in an image.

Panning

The act of moving the camera to follow a moving subject to make it appear stationary in an image with the background details blurred by the motion. The slower the shutter speed, the more the background will be blurred and the faster the subject will appear to be moving.

Panorama

An image with a wide view that exceeds the natural angle of human vision. Often, multiple images are combined to produce a single wide-view image, however, some specialized cameras exist for making panoramas and some compensate for perspective distortion by stretching the image at each end.

Perspective

The means by which human vision conceives three-dimensional space in a two dimensional image. Perspective is conceived through a gradual change in scale, lines receding to a point (on or off the image) or gradual changes in brightness where closer objects appear darker. The focal length of a camera lens will exaggerate linear perspective with smaller focal lengths yielding greater depth.

Photoshop

A software suite of computer programs for the manipulation of digital images. Many of its functions are designed and named to replicate the dark room processes used in film photography.

Pixel

The smallest individual element within a digital picture. Pixels can have different sizes and shapes. The more pixels per unit area in an image, the greater its resolution. Large images can have millions of pixels with a million pixels termed a 'megapixel'.

Pixellation

Where an image is captured with low resolution or where part of an image is enlarged to the extent where individual pixels are visible. This produces a 'block' or 'staircase' impression within the image.

Polarization

Light can be described as a wave and can be shown to oscillate in different directions. A polarizing filter is essentially a grating spaced to allow only one direction of oscillation through. This will lower the intensity of the light and require a longer exposure, however, it is beneficial when photographing water or reflections as it greatly reduces glare.

Portrait

In particular an image of a single person or a small group of people and, in general, applied to an image format where the height is greater than the width.

PPI

Pixels per inch – a term used for computer monitors, in particular. The more pixels per inch, the better the resolution of the monitor.

Prime Lens

A lens manufactured with a fixed focal length i.e. no ability to zoom. A prime lens will have a simpler design, which should imply a higher resolution image that has less distortion.

Range Finder

A type of camera that has a viewfinder that is capable of focusing the camera. This is usually achieved by combining two separated views of the subject and presenting them in the viewfinder.

Raw

The unprocessed sensor information that is contained within a camera when a photograph is taken. Software suites, such as Photoshop, provide programs to view and manipulate raw files to provide more control over the processing of exposure, colour and white balance etc.

Reflector

A device used to bounce incident light onto a subject rather than shining a light on the subject. For example, a white card may be used to lighten the shadows on the side of a face opposite a light source. Different colour cards and metal foils can be used to modify the reflected light.

Rim Lighting

When a subject is placed in front of a bright light source they are in silhouette with a rim of bright light around their edge.

Ring Flash

A flashlight formed in a circle and positioned so that it encircles a lens. Often used for portraiture or fashion photography yielding a telltale doughnut catchlight in eyes.

Rule of Thirds

A compositional rule of thumb that persists, even though it was based on a statistical mistake, that suggests the most interesting points within an image lie on the lines that divide an image vertically or horizontally into thirds.

Saturation

This is the strength of a colour. If all colours are completely desaturated you have a black and white image. Pastel images are created by mildly saturated colours. Our eyes are drawn to strongly saturated colours in an image, which may be used selectively for composition.

Sensor

The light sensitive electronic element within a digital camera. It is composed as an array of photosites that have red, green and blue filters arranged in particular patterns to best simulate how the eye perceives colour. The photosites are often referred to as pixels and there may be millions of them within a sensor whose size will be defined in mega pixels.

Sepia

Originally, this was a chemical process within the dark room that turned black silver halide into a brown silver sulphide to partially or completely tone the image.

Shadow

The darker areas within an image.

Sharpening

A sharp image is finally detailed in its areas of interest. This means the areas of interest are not blurred. Sharpness will be reduced by camera shake or vibration, subject motion, too slow shutter speed, too small lens aperture, bad focus or depth of field.

Shutter

A mechanical mechanism that opens for a well-defined length of time to allow light to fall on a sensitive material or a digital sensor. The duration for which the shutter is open contributes to the amount of light that is captured.

Shutter Priority

a semi-automatic exposure mode that lets the photographer choose a shutter speed while the camera automatically chooses a matching aperture to produce a good exposure .

Shutter Speed

The exact time for which the shutter is opened, usually expressed as a fraction of a second.

Silhouette

A dark shape seen against a lighter background that has little or no textural detail or colour, often a backlit subject seen in its own shadow.

Single Lens Reflex (SLR)

A camera with a single lens and a mirror to allow the user to view the scene through the lens before the image is captured. To capture the image, the mirror must move out of the way to allow the light through the lens to fall on the light sensitive material.

Soft

A term used to describe an image as being slightly out of focus.

Softbox

A box or frame covered in a light diffusing material to soften the light emitted from a flash.

Soft Focus

Created using a soft focus lens or filter to create a halo of differently focused images around a central image to give a 'dream like' effect. This is not the same as an out of focus or blurred image.

Spherical Aberration

A fault in a lens whereby the light rays that are focused at the centre of the lens do not focus at the same point as light rays focused by the edges of the lens.

Split Tone

A method of colouring the highlights and shadows in an image using different hues.

Spot Meter

A dedicated, hand held, device that measures reflected light from a small part of the scene. Most cameras offer small area metering rather than a spot metering function.

Stitching

A method of combining multiple overlapping images into one larger image.

Stop

A relative unit of luminosity. Doubling the intensity of light increases it by one stop. Halving the intensity of light reduces it by one stop. Therefore, a change of 2-stops will increase the intensity by 4 or reduce it to $\frac{1}{4}$ and similarly, 3-stops will increase it by 8 or reduce it to $\frac{1}{8}$ of its original value.

Sync

The measure of time taken to fully open and close the shutter during which a flash may be operated. Should the shutter move faster than the sync speed, the shutter movement may be captured in the image; if the shutter speed is slower than the sync speed, the flash's light may not be visible to light the scene in the image. Modern cameras have various controls to assist with synchronizing the opening of the shutter with the firing of one or many flash units.

Tele-Converter

An additional lens that fits between the camera body and a telephoto lens to extend the range of the focal length.

Telephoto

Lenses that have narrow angles of view and long focal lengths usually in excess of 180mm. Some are designed to zoom whereas others are referred to as 'prime' lenses as they do not zoom and have a fixed focal length.

Texture

A term used for any type of rough surface where light can be angled to form micro contrast, lots of very small areas of light and dark that yields a three dimensional effect.

Thumbnail

An image that is a very small copy of a much larger image and is often displayed as part of an index into a collection of images. Displaying thumbnail images is considerably faster when browsing than trying to render the original images in the full size.

TIFF

is an acronym for Tagged Image File Format that can be used to store image information on computer media and can support certain types of lossless compression.

Tint

is the term used to colour a monochrome gray scale image with another single colour so that the resultant image is still monochromatic but often uses browns and blues to warm or cool the original gray scale image.

Tone

is a word used to refer to any particular shade of gray within a monochromatic image.

Tone Mapping

is a technique used with high dynamic range images, on media with a lower dynamic range, to more closely match human perception.

Toning

in the dark room involved changing the chemistry to alter colours in a monochrome image. In digital photography, toning alters the colour of a monochrome image to simulate dark room effects.

Tripod

is a three legged camera support mechanism. Primarily, fixing the camera in place removes the possibility of blur due to hand held shaking especially for telephoto lenses or for longer shutter speeds. In addition, it allows for multiple image capture of the same scene, perhaps at different exposures, to blend these images to form a high dynamic range image.

Ultra Violet

is the name associated with a range of light frequencies that lie just outside the visible spectrum on its blue end. Although strictly non visible to humans, these higher energy photons of light may interact with digital sensors and, often, an ultra violet filter will be used on lenses as a form of protection.

Umbrellas

can be used, especially with flash, to diffuse light or to reflect light. A white umbrella made from a translucent material will act as a diffuser. A black umbrella lined with a white or silver reflective material will act as a reflector.

Unsharp Mask

is a technique used to increase edge contrast and, thus, the apparent sharpness of an image. Surprisingly, this is achieved by blending a blurred copy of the image, hence, the term 'unsharp'.

Vibrance

The ability to increase the saturation of colours that are not already saturated, thus, avoiding oversaturation that would occur if the overall saturation were increased.

Vignetting

is an unwanted effect on wide-angle lenses whereby the light intensity falls closer to the edges. However, the same effect can be added to an image to remove attention from the edges and allow the viewer to focus more on the subject.

Warm Colours

are those hues on the magenta-red-yellow side of the colour wheel. This is a subjective term where blue is considered cold and as colours move from blue to red they are considered warmer. This should not be confused with the objective measure of light temperature, which is the physical temperature of a body emitting light.

White Balance

is the process of adding a complimentary colour to an image to compensate for the reflection of the illuminating light source's colour temperature on a white surface. The objective is to render white objects in white colour or at least as a neutral colour close to pure white where neutral implies that equal values of red, green and blue are used.

Wide-angle Lens

is any lens with a focal length less than 50mm where less than 20mm is considered super-wide and less than 14mm is considered ultra-wide. Fish eye lens fall into the category of ultra-wide angled lenses.

Workflow

is the entire process of planning, capturing, processing and printing an image.

Zone System

is a practical photographic process to expose a black and white image to achieve ten discrete areas of exposure within an image in an effort to produce fine quality reproduction of the originally imagined scene.

Zoom Lenses

are those that do not have a fixed focal length but can be varied continuously between a minimum and a maximum focal length e.g. 18-70mm