Evaluating Monochrome Photography



"The most colourful thing in the world is black and white, it contains all colours and at the same time excludes all"....Vikrmn

"Colour is everything, black and white is more"...Dominic Rouse

"Colour is descriptive... Black and white is interpretive"... Elliot Erwitt



Monochrome photography records the the different amounts of light intensity (luminance) in an image and not the different hues.

Black and white photos contains tones of grey from black to white.

Monochrome images by definition contain different tones of a single colour but not necessarily grey.



By way of Definition

Monochrome photography is any photography that utilizes differing amounts of light instead of different colors to capture and represent images. Whereas standard color photography (known as polychrome) displays colors from across the spectrum, monochrome photography takes only one single color and uses a range of tones of that color.

This is the case in black and white photography, which uses varying shades of neutral gray instead of the actual colors of the objects photographed. Monochrome is not exclusively black and white, however. It can be achieved using varying shades of other colors like sepia or cyan.







By way of semantics...



Black is made up of all colours, completely absorbed and mixed together.

Its essence is the absence of light and therefore can be perceived as threatening and creates a sense of unease.

It envelopes personalities and shrouds everything in mystery. It absorbs all wavelengths of light and too much black can leave one fearful and alone



White reflects all light wavelengths and is associated with tranquility, happiness and serenity.

An overbearing amount of light can give the impression of sterility, emptiness and unattainable purity.



Grey is the only colour that does not have an emotional or psychological link but is depressing to look at. It has a lacklustre feel. feels flat and uninteresting.



In a black and white image ... it is the balance between pure whites/ pure blacks and grey tones that contributes towards a successful image....



Understanding basics

Content and meaning ... The reason for creating the image .. this message is conveyed to the viewer by the way the author manipulates the building blocks of visual design.

This can be purely instinctive or carefully considered.

Visual Aspects

- Line
- Shape
- Texture
- Colour
- These are all dependant on light
- defines line
- defines shape defines texture
- determines colour









Light at certain angles envelopes subject and moulds it into 3 dimensional forms from a two dimensional medium.



stairwell



line and recognisable shape to create depth and perspective to the image





Texture is the personality of the image...makes it tangible..again conferring on it a 3 dimensional quality



Colour is determined by light

Colour is a combination of hue, saturation and luminance (HSL)

Hue= name of colour

Saturation = intensity of colour

Luminance = brightness of light emitted or reflected off a surface.

Saturation Changes Brightness Changes	Hue Changes	
	Saturation Changes	
Brightness Changes		
	Brightness Changes	

Sky is always blue...but colour is determined by the light

At night it remains blue but with the absence of light it appears black.

The following important concept to understand in order to successfully transform images into monochrome...

Images start off in colour...we see in colour...visualise in mono tone

HSL panel in LR/PS











different levels of brightness



The luminance is basically the intensity of light which emits from a unit surface area in a particular direction.

The SI unit Luminance is candela per meter square or cd/m, also referred to as a nit. It measures the intensity of light that passes through from a source, reflects and falls back within a solid angle. Moreover, the luminance factor depends upon the nature of the surface and also the area of the surface from which it emits.



Understanding Tonal Range

0	1	2	3	4	5	6	7	8	9	10
Pure Black	Near Black slight tonality no detail	Dark Black slight detail in shadows	Very Dark Gray distinct shadow texture is visible	Medium Dark Gray slightly darker black skin, dark foliage, landscape shadows	black	Middle Light Gray average white skin, light stone, shadow areas on snow	Light Gray pale white skin, concrete or gray asphalt in sunlight	Gray/ White pale detail in highlights, white wall in sunlight, bright surfaces	Bright White slight detail in highlights, white paper, snow, white water	Pure White no deta light sources specula highlight

Light and Shadow are fundamentals of photography

Zone system originally created for determining film exposure and developing in darkroom

Valid in digital era for determining luminance when editing.

Zone 1/2 and 8/9 can be useful to lead eye to area of interest.. Zones 2-8 contain all the detail.

Image needs to be well exposed for the highlights without clipping ... ETTR

Develop for the shadows



Amounts of bright and dark often a mark of the author's personal preference and style

Full range of mid-greys should be covered in the transition zones

In nature..the transition zone is gradual and subtle..we detect detail with our eyes in almost all the zones

Shadow and light attract the viewer but the grey tones give mood and the timeless character of the image



The light in the image represented by the tones of grey

A successful image should aim for harmony in composition, tones and contrasts

The beauty of the image lies in well-placed local contrasts, beautiful highlights and shadows, tonal and compositional balance



As important as the use of rich tonal range is the use of enough mid-grey to make images visually pleasing and create neutral areas where the eye can relax. The zones 5-8 create rich silvery tones which compensate for dramatic high contrast areas in other parts of the image



The eye is drawn to areas of high contrast

An area of pure black against pure white will draw all the attention

..High contrast is generally used in the area of most importance

..Low contrast in areas that one wishes to sublimate.

Selective use of tonal contrast is one of the most important elements of a black and white image.

Usually achieved by selective dodging and burning.





Darkness and light symbolise good and evil and are in eternal antagonism..it is a battle between two lighting situations.

The viewers eye travels between the dark and the light areas trying to decide which is more important..the inclusion of the dark silhouette makes the choice more difficult. The act of comparing light and dark and deciding which is more important, is what chiaroscuro is all about.






Interesting shadows create impact when used as compositional elements

A high contrast image with strong shadows gives a sense of strength and power , boldness and edginess.

Street and architectural images come to life by revealing details highlighted by the presence of shadow as opposed to light.







Light creates the accents and shadow the form.

The direction of light creates dark and light areas in the frame and defines the subject...

Figure to ground composition...grabs the viewers attention

This is a basic principle of visual perception.

You can heighten the figure to ground relationship during post processing. Using the dodge and burn tools.







Shadows enhance the emotions of melancholy, loneliness , fear and isolation as well as triggering the imagination to wonder what lurks in the hidden areas of the frame.



Alternating bands of light and shadow create visual interest.

Not all shadows need to be crushed ie no detail.

Very rarely do we perceive no detail in dark areas and large areas of absolute black appear unnatural, unless used as a compositional tool. Maintaining detail in shadow areas is a combination of exposure and editing.



So why convert to Mono?

- Strips image to its essence
- honesty and truth
- dignity
- timelessness
- elevates the mundane
- artistic
- elegant / classic
- romantic
- drama/mood/emotion

Mono images are an interpretation of a scene..as it is a departure from reality....

Colour will always tie images to reality.

A good photograph is memorable, impressionable and reactive!

A good image grabs the viewers attention, evokes a feeling, perhaps stir a memory, may moves them and creates a lasting impression. Not quickly forgotten...











most successful mono images are previsualised...when colour is not a primary element of the image they mostly work in B&W... worth trying to know what works by experimenting



7 elements of successful monochrome images

- Shadows... become a major element of the composition...carry visual weight
- Contrast...needs to make sense for your subject. Can be stark or subtle.
- Tones...cornerstone of every B&W image .
- Shapes...they are interpretive and anchor and simplify the photo
- Texture...fills in the rest
- Composition...a sense of the underlying purpose
- Emotion



Shadows...make impact ...not just dark areas of an image...major element of composition and sometimes the subject itself



Contrast...including the component of proximity. The difference in brightness exaggerated the closer the dark/light areas are. High contrast...dynamic intensity Low contrast ...more subtle



Tones...They are the underlying darkness, brightness and shades of grey that appear in the image. Adds the emotional impact and tells the story. Slight variations in tone can swing the photos emotions



Shapes ...anchor and simplify the photo...if there is no colour the only way we recognise subjects is by shape.



Textures are the foundations of an images personality.



Composition...hints at the reason why the photographer captured the scene in that particular way. It has structure and order. Emphasis in the composition may be different when composing for Mono as apposed to colour images



Emotion...the most important part of photography ..all the elements discussed are tools that need to combine to convey the mood and message of the image.

Let us consider other concepts associated with monochrome photography

- toning
- high key
- low key
- infrared
- minimalism



In darkroom days silver papers were and are toned sepia, brown and even blue for various image effects, as well as for archival reasons. Often the toning of a monochrome print is one of the keys to its beauty, and can evoke add mood of the image . It adds a timelessness and a nostalgic feel.

The terminology stems from chemical darkroom processes such as sepia/ cyanotype/ selenium/ copper toning etc

These effects can be added in PS and other plug ins such as Silver fx and Exposure software which do a good job at emulating these darkroom processes.



A warm copper tone to mirror the colour of steel staircase at Zeits MOCAA



Timelessness of the St Genevieve library in Paris





Flamenco... to add passion to image



Split toned or duo tone

Split toning is a method of processing an image that colors the highlights and shadows separately. This is a process that has carried over in the digital age from the darkroom. It allows photographers to adjust the colors in an image without toning the entire image at once.



Often yellowish tones to hi lights and bluish to shadow areas...

There is more than one colour used to tone these images and therefore they are not classed as monochrome images!



This image retains vestiges of a number of colours and therefore not monochrome. Image that are split toned or selectively coloured are not classed as monochrome images!



windows



building


toned black and white...H stays within 20-30 points

Unfortunately when we save as a jpg it saves in the RGB ICC profile and some colour artefacts are retained...



Green or purple fringing on PDI ... especially at areas of high contrast

What you're seeing is chromatic aberration. It is the failure of a lens to focus all colors to the same point. This will result in color fringing between light and dark areas of the image.

A low cost projector comes with an even lower cost lens assembly

.Opt for projectors with low dispersion lenses.

Choose projectors with higher optical resolution.

Check for projectors that mention advanced color correction or optical design features.



A high-key images are bright in tone, lacks significant contrast and also lacks shadows. But, this is also the origin of a few common misconceptions about high-key images. High-key images can and often do have very small amounts of black. These, together with some mid tones, will prevent the image from looking washed out and can mean the difference between a high-key image and one that is just clearly overexposed.

High-key images - ethereal, delicate and dream-like...often the whites are off the scale...contrast is too high and eyes actually hurt...

The histogram is heaped up on the right but the whites should not be blown out. An image is High key when the tonal values are mainly in the brightest part of the tonal range.













A low-key photograph is usually minimalistic, simple and uncluttered; predominantly composed of dark tones, highlighting, and intense contrast. Only specific components of the subject are illuminated, while the background is typically very dark or pitch black, which creates an eminently dramatic and mysterious atmosphere.









IR ...filters or modified camera. Images have a surreal look Punchy dramatic high-contrast B&W

Most striking characteristics of infrared photography are the typical white vegetation, black water, and dark skies. Often shot in the middle of the day. Perfect for those landscape photographers that hate early mornings! The deep black skies really allow the clouds to stand out.



Wood effect...vegetation has a surreal glow..chlorophyl in foliage emits IR light...



Old and abandoned buildings good subject choice







Often flare...can be used in the composition successfully?



Storytelling images with emotive detail yet very little in the frame. Impactful and evocative.

Often interpretive

Often presented in monotone...

Of course minimalist use of colour effective images



Simplicity

Keeping it simple doesn't mean boring. A minimalist approach requires careful thought, observation and the creativity of working within certain boundaries – exploring how much information to keep and how much to take away from the image before it loses impact.





Negative space...What you do with negative (or empty) space is contrary to what the term implies. Negative space is the element that determines how freely the eye moves about in the image, and directs the eye to a place to rest. Negative space can be smooth, textured, and/or even contain some detail. It can be an overcast sky, a calm lake, a blanket of snow, a thick haze of fog, an open field, an unadorned wall.

Negative space has visual mass. The key to the amount and placement of negative space is achieving a balance between the impact of it and your subject. This openness is meant to create breathing room for the subject, but not lose the prominence of the subject entirely. That said, not all images require expansive negative space to make an impact.







Composition is critical in minimalism photography. An appealing placement of the subject creates ease when our eyes read the image. Otherwise, our eyes are going to swirl around, looking for an anchor in the image, and do it over and over again until we lose interest. Working within the rule of thirds, or even a smidge tighter when I'm composing minimalistic images. This technique helps bring the eye from left to right, or top to bottom, and creates a balance without perfect symmetry. That's important: Although your subject may be the smallest element in the frame, it needs to become the most significant once the eye comes to rest on it.



Isolation...Because the frame will contain so little, it's important to think about the nature of your subject, and how its relevance in the frame will create an impact on the viewer. How will you isolate the subject, whether it's a lone tree in a field or a hiking hut in the snow? By eliminating all other distractions from the scene, the viewer can really connect with the subject.



Leading lines guide the eyes through an image and can contribute to the viewer's sense of isolation, separation, distance, and scale. With little other information to go by, leading lines are often necessary.

Shapes work well to create a sense of abstract in your frame. Think of using repetition, symmetry or geometry to frame a subject or draw attention. Strong, unique shadows can also captivate and pull a viewer into the frame.



Gestalt theory...an organized whole that is perceived as more than the sum of its parts.

Its all about the light....the quality and direction of it...where the light falls will direct the viewers eye and attention to the story or subject

Technical ability...in camera proficiency is key...a bad photo should not be relegated to B&W

Composition...how the author uses and arranges the building blocks of visual design to convey the story...line, shape and texture

Style ... in both capture and editing

Localised dodging and burning to enhance mood tonality and contrast..and lead viewer around the image...often lacking...just push contrast slider...often results in halos

Final presentation...whether for PDI or print



Photographic genres that translate well into Mono

- landscape photography
- portrait photography
- architectural photography
- street photography
- abstract photography
- wildlife
- macro and more!









Long exposures Isolate static structures...create fine art feel








Viewers connects with the soul of the person...not distracted by clothing colours etc











Architectural repetition of shapes creating a rhythm Symmetry and balance





spirals dynamism to image...pulled down this vortex









Street photography...historically been in B&W

...photographer usually has to compose quickly and converting to mono can simplifies what can be very busy









chiascura strong contrast story telling







Abstraction..Strips image down to basic elements and further removes them from reality A careful consideration of line and shape to create a harmonious result













Wildlife difficult to convert...sandy coloured lion in dry grass...flat and lack impact Unless lighting is good and one can see a difference in tones



Backlighting often works well









macro and more



Using Greyscale or desaturate sliders in LR/PS ...often leads to flat images lacking contrast

Adobe b/w adjustment layer that you can manipulate the luminance of various hues in the image and gives much more focussed control over the tones

Silver efex pro good program for targeted adjustments.

Dodging and burning is imperative ... it serves to lead the viewers eye around the image and to the subject and hold their attention.

Look for halos around over-sharpened areas...areas of high contrast

When it comes to technically perfect colour photos, digital noise is viewed as a blemish, and camera manufacturers are constantly improving their sensors to minimize noise..

It is not necessarily a bad thing and can be desirable in B&W to create mood and drama. It is usually best added afterwards as luminance noise.

Stroke...to finish off the image and indicate the edges of image (1 pixel line)... Sometimes the intentional use of no stroke indicate space/ looming from dark can be effective

Digital borders and frames can work but should be subtle...but should not overwhelm the image



The print is the final product in the continuum from capture to paper...

Usually the stand out prints are the ones that have been pre visualised as a print...

Different papers suit different types of images...matt/ gloss ...the base colour of the paper can contribute to the warmth or coldness of the image...this is a learnt over many years and a good relationship with a printer is really beneficial to the final product....

Unfortunately any technical difficulties in the capturing of the image are very noticeable in print...judge has more time to examine it and the print is unforgiving...often over sharpening halos around areas of high contrast

Presentation...overall appearance..the way it is matted or mounted definitely has a bearing on the judges opinion.



Images often look too dark when printed.

People work on backlit screens and often to not compensate for this before they give the file to the printer..papers are solid substrate..

ICC profiles for different papers are available for soft proofing....best is to have test prints made...

And once the printer knows your style he will usually advise if something will print too dark or shadows will be crushed etc..

Prints need to be viewed on a proper viewing booth with a 5000 kelvin daylight bulb...this affords them the viewing they deserve as author has gone to a lot of trouble and expense to print and present their work..

Also prints should be judged from the print and not from the PDI...preferably judges should not have oversight of the PDIs of print entries but form their opinions when viewing the prints for the first time..

