

Finding Creative Exposures

By Chuck Palmer

In his book, “Understanding Exposure”, Bryan Peterson suggests that before every picture taking opportunity, you must decide if you want to simply make an exposure, or if you want to make a creative exposure. A remarkable photo often is the result of a creative exposure. So, let’s unpack how we can go about finding creative exposures for capturing remarkable images that tells the story we want to tell.

Exposure Triangle

Since the first photograph made in the early 1800’s, a photographic exposure is the result of three components that expose a photo media with light. . . Aperture, Shutter Speed, and ISO. While ISO (Film/Sensor Light Sensitivity) is an important component of exposure, we can create at least six “creative exposures” by taking advantage of the unique photographic properties of Aperture and Shutter Speed.

Aperture

Aperture is simply the hole inside the lens. The bigger the opening in the lens the more light reaches the photo media. . . film or a digital sensor. The aperture opening can be adjusted in increments, commonly called “stops”. The smallest aperture numbers $f/1.4$, $f/1.2$, $f/2.8$, $f/4$ reflects the largest lens openings while the largest aperture numbers $f/16$, $f/22$, $f/32$ represents the smallest lens openings. Conveniently, the size of the aperture (lens opening) controls the depth of field or range of sharpness in our photograph. Small numbered apertures (large opening) results in a shallow range of sharpness while the largest numbered apertures (small opening) produces a large range of sharpness from the image foreground to the background.

Shutter Speed

Shutter speed indicates how long the aperture remains open during exposure. Obviously, slow shutter speeds let more light into the camera than fast shutter speeds. Shutter Speeds can be adjusted in fractions of a second or in seconds. “Slow” shutter speeds, $1/2$, $1/4$, $1/8$, $1/15$, 1 second, etc. will blur any objects that are moving during these longer exposure times. Conversely, “fast” shutter speeds $1/250$, $1/500$, $1/1000$ second will freeze action and motion during these shorter exposures.

Finding Creative Exposures

Understanding the unique attributes of Aperture and Shutter Speed variation gives us the opportunity to find a creative exposure that adds interest to our photograph. Making a Creative Exposure can also convey important information to our viewers about the story we want to tell. Let’s look at the possibilities.

- Isolation Apertures – Setting your camera to one of the smallest aperture numbers will result in the narrowest range of image sharpness. Focusing on our subject while creating the exposure with an Isolation Aperture renders the image background out of focus which effectively isolates our subject from the background. Our viewers will pay more attention to our subject instead of the out-of-focus background. The degree to which the background is out of focus will convey how much information you share with your viewers about where and when the photograph was taken.



| Isolation Apertures |



Isolation Aperture - Narrow Depth of Field - 1/100 sec @ f/2.8 – 90 mm

- Inclusion Apertures – Setting your camera to one of the largest aperture numbers will result in the largest range of image sharpness. Utilizing an Inclusion Aperture allows us to tell the whole story in focus from the image foreground to the background. Inclusion Apertures are especially useful in capturing landscapes.



| Inclusion Apertures |



Inclusion Aperture - Large Depth of Field - 1/125 sec @ f/16 – 24 mm

- Sharpest Apertures – Often the image we capture has no significant dimension or perspective from front to back. An example of a “flat” image is a portrait of a person standing in front of a colorful wall. In this situation, a creative exposure made with one of the mid-range apertures would produce the sharpest image. Due to the physical properties of lens construction, the sharpest apertures of any given lens are the mid-range apertures. If an Isolation or Inclusion Aperture is not needed for your photo, a selection of one of the Sharpest Apertures makes the sharpest image possible.



| Sharpest Apertures |



Sharpest Aperture - 1/60 sec @ f/10 – 52 mm

- Motion Blur, Camera Still – Depicting motion in a still photograph can result in a most interesting photograph your viewers will love to study. Making use of a Slow Shutter Speed, allowing elements of a photograph to move during the exposure, creates motion blur. Holding the camera still while composing an image with a moving and still object often produces an interesting contrast. A tripod is the most effective method to assure your camera remains still for this creative exposure.



1/4

1/8

1/15

1/30

1/60

1/125

1/250

1/500

1/1000

Slow SS - Motion Blur

Fast SS – Freeze Action



Motion Blur – Camera Still - 1/4 sec @ f/22 – 18 mm - Tripod

- Motion Blur, Camera Panning – Utilizing a slow shutter speed while moving or panning your camera at the same speed as the motion of your subject, results in a pleasing background blur. The background blur obviously produces a feeling of motion and speed but panning also is an effective method to eliminate a distracting background.



1/4

1/8

1/15

1/30

Slow SS - Motion Blur



1/60

1/125



1/250

1/500



1/1000

Fast SS – Freeze Action



Motion Blur – Camera Panning - 1/15 sec @ f/13 – 40 mm

- Fast Shutter Speed – Freeze Action – Many photographic opportunities call for freezing the action. Sports photography or just capturing a child having fun playing in the surf are good examples. Utilizing a Fast Shutter Speed effectively freezes the action, capturing your moving subject in sharp focus.



1/4

1/8

1/15

1/30

1/60

1/125

1/250

1/500

1/1000

Slow SS - Motion Blur

Fast SS – Freeze Action



Fast Shutter Speed - Freeze Action - 1/640 sec @ f/5.6 – 145 mm

The most remarkable images very often make use of one of the creative exposures we have reviewed. In every picture taking opportunity we have at least 6 creative exposures we can experiment with, transforming our great photo into a remarkable one.

As always, keep shooting and may only the most remarkable photos be yours.

Chuck