



Learning to See

# Learning to See

This lesson is going to be more about photography and less technical in nature. I have a very technical brain and, in the past, I would try to analyze everything when I was out shooting, trying to come up with some formula for how to create the best photograph.

Over time, I found that there are multiple categories of things that I was completely ignoring in a scene. As I became a better and better photographer, some of those things that I used to completely ignore in a scene eventually became some of the most important elements within my most successful photographs.

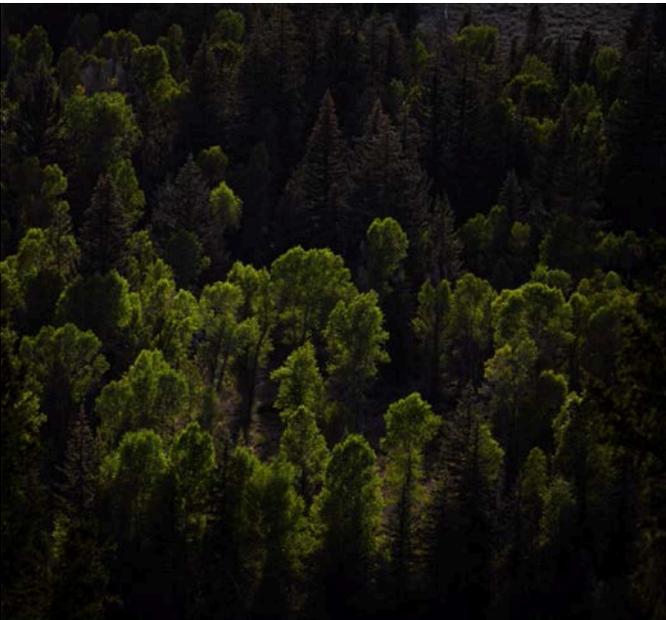
I want to share with you some of the tips that I've learned so you can train your brain to see when you're out capturing photographs.

## Light as subject

There are only two things required to take a photograph: a camera and some light. A key to making a successful photo is being able to pay attention to what the light is doing and deciding when it's optimal for taking a good photograph. When walking through an area, I am constantly looking to see where the light is falling and determining whether that lit area would make for a good photograph. Often times, it has to do with the quality of the light, and its color. I pay extra attention during sunrise and sunset because the color of the light is especially optimal during these times and I can frequently make a photograph that is solely based on the light in the scene.



**The light is what drew me to this otherwise uninteresting alley.**



All of these images are about what's happening with the light. In the case of the bell tower, it's the quality and color of the soft sunset light. In the table scene, it's about the beautiful light making the overall scene more interesting. The trees in the forest at left have extra character and dimension because of the way the light is hitting them.

## Backlit subjects

In addition to looking for the light, I will also keep an eye out for thin subjects that I can back-light, such as the leaves on a tree branch. I will position the subject between my camera and the light so that the subject is being lit from behind.



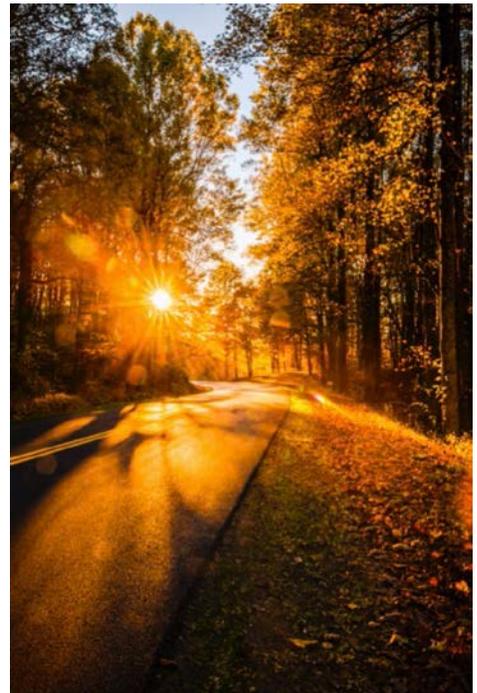
All of these subjects were lit from behind, creating added interest in their appearance.

## Position of light

I also think about where I would like my light source to be in the photograph and often times use the sun itself as an element in my images. When doing this, the camera needs to be precisely positioned in order to place the sun exactly where I want it. Moving in one direction by just an inch or two could change the composition.



Precise placement of the light source was key in creating these images. In the images above, they were both shot at the same time. The only difference was that I moved the camera a few inches.



## Change the appearance of the light source

You can control the appearance of a light source using the aperture setting on your camera. For example, if you ever want to turn a bright light source (the sun, a street light, etc.) into a starburst shape, use the smallest aperture setting. This is commonly f22.

Know that you can run into some problems when attempting to shoot a starburst. For example, there are some scenes that have several bright light sources and I only want one of them to appear as a starburst. When shooting the scene at f22, all bright lights may either turn into starbursts or change their appearance in a way that I don't want. In a case like this, I will shoot more than one photo of the scene. I'll shoot one at f22 and another using a wider aperture. Then I will merge the two images later.



**In the top image, a larger aperture was used and the sun appears as a round ball. The bottom image was shot at f22 and you can see that the sun appears as a starburst.**

## Light beams

There is sometimes a way to make the falling light visible in the scene in the form of light beams. In order to be visible like this, the light needs to be hitting something in the air. This can be fog, smoke, dust particles, etc. This is why so many concert stages have fog machines. When the spotlights hit the fog, they become visible beams of light.

Keep your eye out for scenes that have some kind of particles in the air, as these can create light beams in your images. You can also introduce these elements into your images by use of a lit cigarette/cigar to create smoke or by throwing sand into the air in a place where directional light is falling. For example, when shooting in the slot canyons, I will throw sand into the air in the area where the sun is shining through the canyon opening.



**LEFT:** This was shot in the slot canyons, where light falls through the openings in the top of the canyon. Sand was thrown in the air so the light would fall on it, creating the beams.  
**RIGHT:** There was a lot of dust in the air inside this kiva, and that dust made the light visible as beams.

## Control the camera's limited brightness range

Your eyes, combined with your brain, can see a massive brightness range. Your camera is much more limited. If you have a scene with a large brightness range (ex: noontime sun), your camera will either be able to capture what's in the shadows or what's in the highlights, but not both. There will likely be a loss of detail in the area you are not exposing for. This is just something to be aware of when evaluating a scene. You can either use exposure compensation to make sure you capture detail in the area you want (either the bright areas or the shadow areas) or you can shoot for HDR, where you will capture a bracketed set of images and then merge them later on the computer.



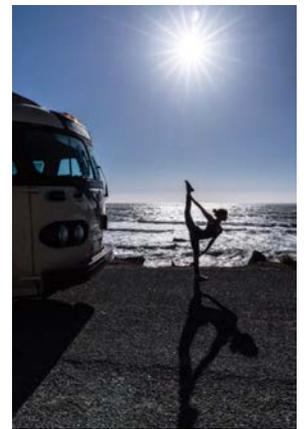
The image on the left is an HDR image and depicts how I saw the scene with my eyes. The camera could not see the scene like this because it can only capture a limited brightness range. The camera can either capture what's in the shadows, as seen in the middle image, or what's in the highlights, as seen in the image on the right.



LEFT: In this high contrast scene, exposure compensation was used to make the bird and cage in the foreground go to solid black. RIGHT: Here, I underexposed the image so that the background went black while the figures in the foreground got the correct exposure.

## Shadows as graphic elements

Our minds have been trained to ignore certain elements when waking through a scene, and shadows are one of those things. If you start to pay attention to the shadows, you will find that they can create much visual interest in your photographs. I like to view scenes from above when the sun is very low because the shadows can be very striking! When walking through a scene, I am always looking at the shadows and deciding whether they can become graphic elements in my images.



In all of these images, the shadows were used as graphic elements. In the image on the bottom right, the shadow itself is actually the subject of the photograph.

## Color as a key element

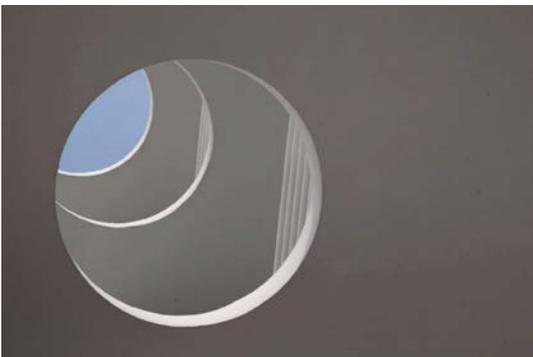
The better I got at photography, the more I realized that color can be used as an element in my images. When evaluating a scene, keep in mind that color in itself can be strong enough to make a photograph. It doesn't need to be purely about color, but look for colorful elements because the eye is naturally drawn to them.



Here are some examples of where color makes the photograph. These images would not be nearly as interesting without the element of color.

## Shape as a key element

You can also use shapes as graphic elements to make some really strong images. When out shooting, keep your eye out for interesting and striking shapes, as they can sometimes make the photograph. In some cases, it doesn't even need to be obvious as to where the photo was taken because the image can be solely about the shape.



Shape is used as a key element in each of these images. Some combine shape AND color to create visual interest.

## Repetition in shape

Repetition in itself can be an interesting component in photography so it's something that I actively try to search out.

Consistent repetition may not be enough to hold a photograph on its own. What can be more interesting is repetition that is broken or imperfect. For example, a scene consisting of repeated shapes or objects can be made much more interesting by an object or color breaking that repetition in one spot.



**Using repetition can make for unique images, and breaking up that repetition (as seen in the image at right) can add even more visual interest.**

When incorporating repeating elements into my images, I have found that using odd numbers can be more visually pleasing. For this reason, I'll look for similar objects in groups of 3, 5, 7, etc. Even numbers just seem to feel more ordered and predictable, whereas odd numbers are usually more enjoyable.



**When incorporating repetition in your images, odd numbers can be more pleasing to look at.**

## Isolate with a narrow depth of field

When walking through a scene, your eyes can see the elements that are close to you as well as the elements that are far away. To our eyes, all of this looks sharp. With the camera, you can use the aperture setting to determine how much of the scene is sharp, so you can make the camera see differently than your eyes see. The wider the aperture and the lower the f-stop number, the narrower the focal range will be. You can shoot “wide open,” at the lowest f-stop your lens goes to in order to get the subject in focus and the rest of the scene out of focus. This is easier to achieve when you have zoomed your lens as far as it goes. For example, if I am using a 70-200, f2.8 lens, I can zoom to 200mm, shooting at f2.8 and make my subject crisp while the entire background gets completely blurry.

You can also isolate your subject by shooting at a low aperture and getting the camera as close to them as possible. This, too, will help to create that shallow depth of field.

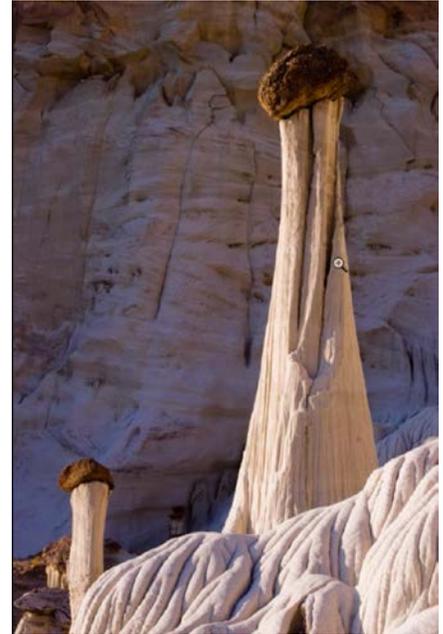
Knowing all of this, you can train your mind to pick up on photo opportunities that have more potential than meets the eye. You may see an interesting subject that is easy to ignore because the background is too busy. But if you know how to control the depth of field, you can isolate that subject by shooting with a wide aperture and completely blurring out that busy background.



The image at left was shot with a higher aperture setting and you can see that the busy background is distracting. In the image at right, a very low aperture setting was used so the background went out of focus, isolating the subjects.

## Make the subject contrast with its background

Our eyes are naturally drawn to things that are bright and things that have a lot of contrast. When I find a subject I would like to photograph, I will try to see if I can find an angle where the subject is lit but the background is not. This draws the eye to the bright subject and makes that subject stand out from the background. Not only is the subject bright, but it contrasts from the background.



**The same subjects were shot from different angles. The one on the left is more striking because the bright subject contrasts with the dark background.**

You can also do the opposite of this, by finding a bright background and a subject with which you can create a silhouette against that bright background. You will again have the element of contrast, which attracts the viewer's eye.



**The subject placement makes all the difference in these two images. By placing the subject in the shade, she contrasts from the bright background, creating more visual interest.**

## Compression: Control relationship between near and far objects

You can use camera and lens settings to control the visual distance between near and far objects. You can either compress the space, so near and far objects feel like they are close to each other, or you can make them feel like they are really far apart. The way to control this has to do with what lens you use. As you use wider and wider angle lenses, the distance between near and far objects will feel farther and farther away. As you use longer and longer lenses, the distance between what's far away and what's near will feel more compressed.



**Here, the same exact scene was shot with a wide angle lens (top) and a long lens (directly above). With the wide lens, I am standing close to the edge of the bridge. Using the long lens to compress space, I am zooming the lens and walking farther away.**

Because of the difference in focal length, you will need to walk closer or farther from the scene in order to capture everything. For example, if I frame up a scene with a wide angle lens, I will likely be very close to it in order to incorporate everything. If I wanted to capture the same exact scene with a long lens (to compress space), then I would need to walk farther away in order to incorporate all of the same elements.

## Make the subject interact with the background

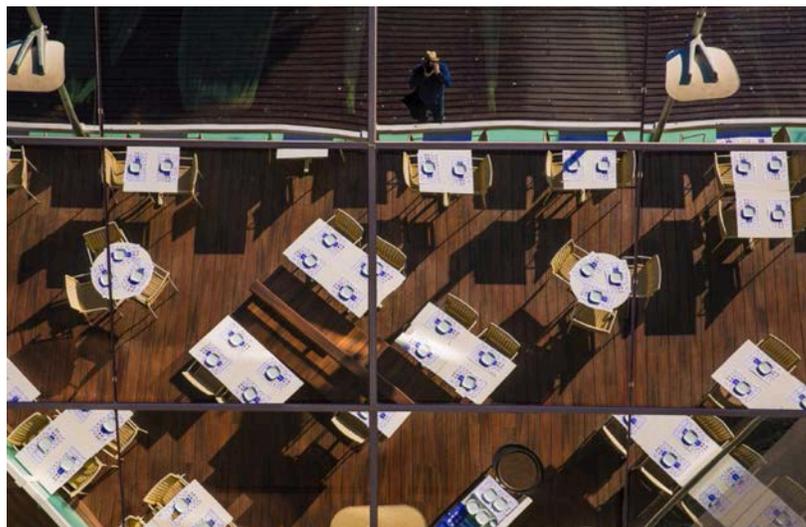
In some cases, you can position your subject so that it interacts with the background in an interesting way. It can be fun to make it look like they touch even though it's obvious that they're nowhere near touching.



In these images, the camera positioning and focal length were used to make the subjects interact with elements in the background.

## Incorporate reflections

Our eyes are so used to seeing reflections that we often times walk by them without even knowing they're there. These can be in the form of mirrors, reflections in water, in glass, etc. If you train your brain to look for them, then you can suddenly start using reflections as elements in your photography and use them to create more compelling photos.



**This image was shot upward into an angled mirror wall.**

When photographing reflections, you can make things more interesting by using something to break up the reflection in one area. This goes along with the concept of breaking up a scene of repeating elements with something that's a different color, shape, etc. With reflections, you can shoot down into the water, but perhaps incorporate a rock or a leaf floating in the water to break up the reflection in some way.



**At left, the image captures the water in Venice and the boat breaks up the reflection, making the image more interesting. Above, the image was underexposed in order to make the birds and their reflections go to black.**

## Long exposures

The blurry effect you can achieve by using long exposures is something that you can't see with your eyes, so it's something you need to think about when evaluating a scene. How would this moving object look with motion blur applied? In many cases, it can look more interesting than if the motion was frozen in time. To capture a long exposure, you will need to steady your camera on something, whether that be a tripod or something nearby like a wall, chair, fence, etc.

Waterfalls are an obvious choice for the long exposure technique because it makes the water look silky smooth, but there are many other creative uses. You can blur people walking through a scene, get light trails by using a long exposure on cars, etc.



With both images on the left, a fast shutter speed was used to stop the motion in the scene. In the images at right, a longer shutter speed was used to create a motion blur effect and, as a result, the images became much more interesting.

## **A lot of concepts...**

We've covered a lot of different concepts and many of these photo elements are ones that are naturally easy to overlook. You often times need to train your brain to recognize all of these elements that can be used in your photographs. The more of these concepts you incorporate into a photo, the more interesting that photograph can become.