

Long Exposure Case Study #3

MIXING MOTION AND MOTIONLESS SUBJECT MATTER

by Kent DuFault

When you think of long exposure photography, what is the standard image that comes to mind? You put your camera on a tripod. You attach a remote shutter release or a cable release to the camera. You're shooting in little light. Your shutter speed is slow enough that the camera cannot be handheld. You're careful to steady the camera before, during, and after the exposure.

The image below is a typical example of this type of prolonged exposure photograph.

One thing that you may not realize is that long exposure photography is one of the most creative, fun, and versatile tools out there for you to play with.

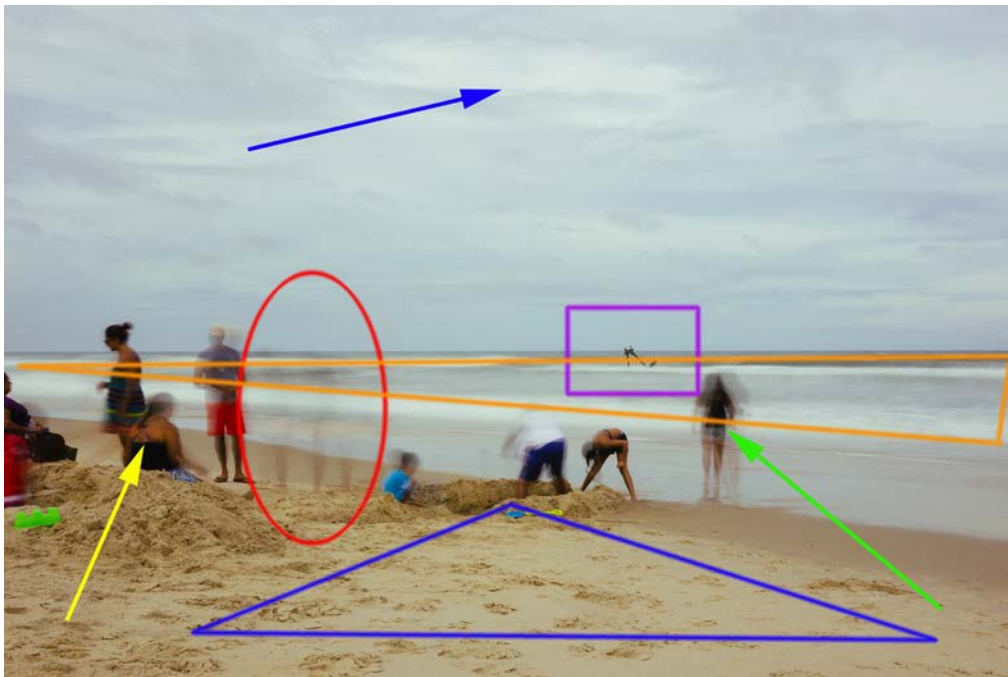
There are so many factors that can influence how a long exposure photograph will turn out. It can be completely unpredictable, which is what makes it so much fun. Some of these factors include the length of the long exposure (i.e., a one-second exposure will yield very different results from a 10-second exposure or even a 2-second exposure). Other factors include subject movement, camera movement, subject and camera movement, the speed of any movement, and adding or subtracting light sources. You can even move light sources, create gelled and non-gelled light sources, and time-lapse, to name a few. Can you think of any other possibilities on your own?

In this case study, we are going to examine mixing moving and motionless subjects within the same frame.





This image is a classic example of mixing moving objects with motionless objects to create visual tension. Faster shutter speeds could have easily frozen all of the movement. However, that would have created a far less exciting picture to look at and study.



Let's see what we can learn by dissecting this picture.

- 1) The level of blur within the red circle indicates that this was a relatively long exposure. Probably, at least one second and perhaps a bit longer. If an object is partially blurred, or almost wholly blurred, to the point of 'disappearing,' as in the case of the person within the red circle, they are moving during the entire exposure. The faster they move, the more likely they are to completely disappear from the photograph depending upon how long the shutter is open. Did you know that this is a great technique to eliminate bystanders in public spaces? Set a very long exposure, and as they move, they will disappear from the scene!
- 2) The clouds, (indicated by the blue arrow), were not moving at all. They are very sharp. This tells us there was likely little to no wind when this shot was created.
- 3) The girl at the green arrow (more blur) was moving faster than the woman at the yellow arrow (less blur). Did you know that not only does the speed of a moving object drastically change the amount of blur in a long exposure, but

also the direction of the movement! Oh yes, another factor for our list of creative options: the path of action plays a vital role in how it will be recorded in a long exposure photograph.

- 4) The object in the water (see purple rectangle), had no movement whatsoever and the bird sitting upon it did not move. They are incredibly sharp and focused. This brings up an interesting question. What is the subject of this photograph? The composition of this photograph isn't well executed. A clear subject doesn't stand out. Remember, a technique such as long exposure isn't enough to create professional-level photography. You must think through and plan your entire composition.
- 5) We do know that the camera was on a tripod. The motionless sand areas (within the blue triangle) are sharp and focused. The moving water (within the orange triangle) is completely blurred.

You should practice dissecting images. It definitely will help you become a better photographer. It will also inspire you to new techniques, mainly because you will develop an understanding of how an image was created.



Is this image a long exposure photograph? No, a reflection of the water created the blur. The photographer simply flipped the image upside down for creative effect.



Is the above image a long exposure? No, this effect was created by either the use of a lens filter or a post-production filtering process. I know this because of how the transition line from blur to sharp occurs. The more you study photographs, the easier it will be to recognize the technique.



This image mixes moving objects (the vehicles and the people), with non-moving objects, (the road, signage, and buildings). What about the sky? It looks kind of blurry. That was added in post-production.



When you see objects within a photograph that exhibit a 'halo' effect, as viewed in the orange rectangles in the image above, you know that this was a post-production effect that was added.

I am not a big fan of blatant manipulation like this, but others like it.



This image mixes a motionless object, the leaves, with an object in motion, the camera. When the camera is purposefully in motion, this is known as 'intentional camera movement.' The technique has been popularized with the acronym ICM. Intentional camera movement is loads of fun. You must try it. It will give excellent results with any shutter speed $\frac{1}{4}$ of a second or slower. The results will vary widely depending upon the length of time that the shutter is left open. This is covered a little more thoroughly in another case study.

To create a photograph similar to the image above, the right choice of shutter speed would be several seconds. You would place your camera on a tripod and open the shutter with a release cable, thus keeping the camera steady. In the final moments of exposure, before the curtain closes, you move the camera: even a slight bump of the camera will create an effect. How you move the camera, and at what point in the exposure you move the camera, will vastly change your outcome. So, lots of fun for experimentation!



Here is one final consideration for long exposure with moving and motionless objects. In this image here, the subject is almost stationary, the architecture is motionless, and yet still slightly blurred, which indicates a small amount of

camera movement. However, the real blur is being provided by a moving light source, which is creating the light-colored streaks! See how many options there are for prolonged exposure.

Your Challenge

#1 Create a series of photographs where the camera has no movement, and other objects within the frame are moving at different speeds. Try at least 10 different shutter speed combinations ranging from 1 second to 30 seconds.

#2 Create a series of photographs where the camera moves, but everything within the frame is motionless. Move the camera in at least 10 different ways: up and down, erratic, diagonally, horizontally, in a circle, etc. Try at least 10 different shutter speed combinations ranging from 1 second to 30 seconds.

#3 Create a series of photographs where the camera moves, and some of the elements within the frame are moving, but others are motionless. Decide on a camera movement and try to repeat it on every shot. Try at least 10 different shutter speed combinations ranging from 1 second to 30 seconds.

#4 Create a series of photographs where the camera is motionless, and all the elements in the frame are stationary, but light sources are moving. Try at least 10 different shutter speed combinations ranging from 1 second to 30 seconds.

Evaluation

Did you have fun with this Challenge? I bet you did. Were there one of the 4 challenges that you especially enjoyed? If so, how could you expand upon it to put your aesthetic interest to work and expand your creative portfolio? Did you find that a specific range of shutter speeds seemed to provide better results for you consistently? Did you learn anything that surprised you?