Stonebridge Photography Club

Photo Tips

September, 2015

Photos of "Motion"

You sometimes hear photographers talk about taking pictures that capture the "**idea of motion**". You know, a photo of a car traveling on a roadway, a horse racing, a child jumping, etc.

These types of photos often look completely different. Sometimes everything is perfectly clear and in focus. Sometimes small parts of the photo are blurred. Sometimes large parts of the image are blurred. If it's done properly, they all make you feel like you're looking at something that's "moving".

This is not always an easy thing to do. Don't forget, a photo is a static, still image.

I'm sure we've all tried to take photos of moving cars, of planes in flight, of participants at sporting events or any place where fast action is taking place. Most of the time we're probably not really thinking about what we're trying to do with the shot until after we get it into the computer. We just shoot away.

Have you ever taken a favorite shot that has some blur in it and tried to pass it off as capturing the "essence of motion"? (I admit I have, when quite accidentally the wings of a seagull came out blurred while the rest of the body looked fairly focused. "Captures the idea of flight," I said.)

So what exactly are we looking at and what is the best way to go about taking this type of photo? Let's talk about a few techniques. What is noted below is not meant to be an all inclusive look at "how to take motion photos" - there are too many different techniques that photographers use to accomplish this.

The idea is to give you a point of reference so you can better think about what you are trying to accomplish when you take your shots, so that maybe your "essence of motion" shots will be planned rather than accidental.

Many photographers would say that there are three types of photos that are used to capture the idea of "motion": Freezing, Panning, and Smearing.

FREEZING

This is the simplest of the motion photo techniques. In this type of photo, the photographer tries to capture the image of an object moving at high speed. The photographer tries to "freeze" the action.

This will normally give you a shot where just about everything in the photo is static, clear, and focused.

Sometimes it may be difficult to know that the object is even moving unless you take into account the context of the photo. For example, someone frozen in mid-air jumping off a diving board.

The most direct way to do this is by using as high a **shutter speed** as possible. This may not always be as easy as it seems, especially in low light situations.

To get the highest shutter speed you can, think about using as wide an aperture as possible (lets in

more light), raise your ISO setting (makes the camera sensor more sensitive to the available light) and when possible, use a flash to add light to the scene.

In order to be able to adjust your camera settings properly, especially shutter speed, shoot in Shutter Priority or Manual mode. (You could also try the "Sport" shooting mode on many cameras.)

Example: Freezing

A rule of thumb sometimes used to give you a minimum required shutter speed for standard hand-held shots, is that the shutter speed should be at least as fast as the focal length of the lens you are using for the shot (e.g. 80 mm lens should require at least 1/80 sec; 200 mm lens would need 1/200 sec).

However, this minimum is just to compensate for movement of the camera during a static shot - the more important factor when trying to "freeze" motion is the speed of the object you are shooting. Set your shutter speed based on how fast the action is in the scene you're shooting.

To get a better chance of getting your moving object in **focus**, use **"continuous focus mode"** (or however this feature is termed for your camera model).

After you begin to depress the shutter release button, the camera begins to focus the lens on the subject in the focus point/s. In "continuous focus mode", the camera continues to refocus the lens based on the movements of the main subject, until the shutter is released.

Another technique that might help in focusing is to focus ahead of time where the moving object is expected to be in the planned composition. Maintain the focus and either follow the object into the focus position or hold the camera steady and wait for the object to appear at the focus position. A little tricky.

Another thing to consider is using a **"continuous shooting mode".** Taking **multiple shots** all at once enhances your chances of getting the shot at the right moment.

Lastly, another method often used to "freeze" a shot is through the use of a **flash** with a slow shutter speed. When a flash is your only, or at least primary, source of lighting, you can use a slow shutter speed to achieve some very interesting stop action shots. In effect, the quick burst of light from the flash acts as a fast shutter.

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Example: Panning

PANNING

If you don't want the static, posed looking "motion" shots that you sometimes get when you "freeze" a scene with fast shutter speeds, you might want to try panning.

When panning, you freeze a moving subject by moving the camera in parallel to the subject. The subject should stay sharp and focused, while the background is blurred. The background blur should appear to be in the opposite direction of the motion of the subject.

When done right, panning does a good job of capturing the feeling of "motion".

It also helps to isolate the subject of the image from the background, usually a desired goal. Even background objects that would normally be in focus with a steady camera, because of a wide depth-of-field, will now be blurred because of the moving camera.

The effects of panning are achieved by using a **slow shutter speed** while moving the camera.

When setting the shutter speed, consider the speed of and your distance from the moving subject. You want the shutter speed to be slow enough to capture the moving subject while allowing the background to blur, but not so slow that the subject becomes blurred. To start with, try shutter speeds between 1/15 and 1/60 sec.

To have better control of the shutter speed, shoot in Shutter Priority or Manual mode, and if you have Image Stabilization available, use it.

You should also consider using "continuous shooting mode". Taking **multiple shots** gives you a greater chance of getting that one good shot.

Lastly, when "panning" the camera, try to move it in a steady and level fashion.

It is also a good idea to start following the subject before actually depressing the shutter.

SMEARING

Smearing is used when you want the subject, or one of the subjects, in an image to show "motion blur" while the rest of the image, including the background, is in focus. This is practically the oppo-

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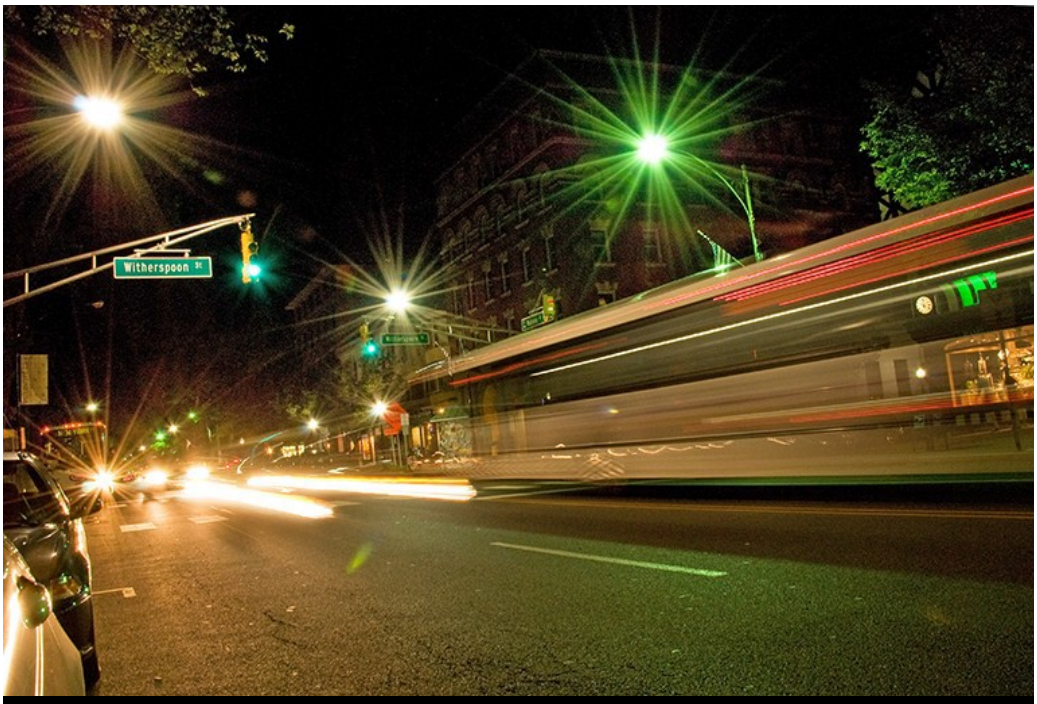
site of panning.

This technique is just another way of showing the idea of “motion”. It is often used to tell a story (e.g. how the crowd is reacting while the blurred race cars go by).



Example: Smearing

The effects of smearing are achieved by using a **shutter speed** slow enough to have moving subjects in the image appear to blur, but not so slow that parts of the rest of the image are not in focus.

Consider using a tripod to get the “non-moving” elements of the photo clear and focused. The slow shutter speed will cause the moving elements of the photo to appear blurred.

This is very important. The rest of the image needs to be in focus since a main goal of this technique is to highlight subjects in motion within a clear, focused, static setting. In the end, the only difference between panning and smearing is that the camera stays stable throughout the shot.

- by M. Edini