

Monroe Community College (3 credits)
PHO 106 Fall 2010 Lecture 381, Lab 385 & 386
Instructor: Joe Ziolkowski “ Joe Z. “ 20100907

Assignment #5: “Stop That/What Was That!”
Creative Shutter Speed Techniques.

READ ALL BELOW INFORMATION CAREFULLY BEFORE DOING ASSIGNMENT!



Due: October 19 & 20th, 2010 (Lab)

Stephen Dummit © 2002

Objective:

This assignment is designed to develop a basic understanding sharpness and motion control through the correct use of shutter speed in relationship to the aperture. As the student explores the relationship between the use of Depth of Field by controlling the aperture, they will explore creative use of slow and fast shutter speed controls. Students will also continue to develop their skills using black and white film and black and white printing.

Assignment Overview:

- Use a slow shutter speed to create a sense of motion and time.
- Use a fast shutter speed to create a sense of stop action in time.
- Use of experimentation to create an unexpected and creative photograph. (Optional).



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Equipment and Supplies Needed:

- Camera, light meter, shooting log(s), multiple rolls of 36 exposure or equivalent of traditional black and white film.
- Black and White Photographic Paper.
- Adjustable 35mm camera.
- Tripod (optional).
- Self timer (optional).
- Cable release (optional).

Procedure:

- Explore a variety of subjects and experiment with fast shutter speeds and slow shutter speeds as discussed in class and in the readings.
- Do try applying equivalent exposures with some of your subject matter to create images using slow shutter speed and fast shutter speed of a common subject when possible.
- Try illustrating the extremes of shutter techniques.
- Using a very fast shutter speed, or a very slow shutter speed.

Submit:

- In your small portfolio enclosed envelope, include the following.
- On your original stationary that has all your contact information.
- An assessment for the assignment.
- Completed Exposure Sheet
- Properly exposed contact sheets for film shot for assignment.
- At least 2 - 8x10 RC prints.
 - a. 1 Fast Shutter Speed (stop action).
 - b. 1 Slow Shutter Speed (blur movement).
 - c. 1 Experimental print using creative shutter speed techniques. (optional).
- All prints should be as "full frame" as possible.
- Name printed on back of each print and category of shutter speed used in black Sharpie, no ink pen.
- Make sure you write on the back of the print, and not on the image area.
- Make sure you code your prints to the negative page and frame number.
- Remember to only write on RC prints after they have dried.

Shutter Speed as a tool for motion control.

In this as in all assignments choose subject matter that works for what you are doing. Don't just do the assignment to get it done. Creative thinking counts to make your portfolio more dynamic and interesting. When panning a subject for instance, don't just go to a street corner and wait for a car to go by. Use the effect to your advantage. Say something about your subject. Set up a situation to which panning is an integral part of the image.

When exposing your film, experiment with the effects of shutter to illustrate the visual possibilities of different speeds as they relate to rate of movement of your subject. Find subjects that are moving, try to find a variety of different rates of movement.

For each, photograph them.

1. Same subject at a fast shutter speed, 1/250" or higher, the FASTEST shutter speed you can get!
2. Same subject at a middle shutter speed, 1/60".
3. Same subject at a slow shutter speed 1/4" or slower.
You may need a tripod for the slower speeds.
4. Practice panning. Find subjects moving in one direction and at a shutter speed of 1/30", or 1/15" move camera with them to capture subject. At least 4 frames of panning.
5. Repeat with several different subjects until you feel confident you have a good understanding of fast and slow shutter speed.

After you have processed the film and examined contact sheets, observe how changing the aperture and shutter speed combinations gives a visual effect to the images. What worked well visually? What did not? In what kinds of situations did the effect of motion and the use of the Depth of Field become critical to the visual impact of the image. Make note of these and then further explore these situations, concepts. How can you apply the information to improve on your ideas and try to work on a new idea?

After looking at your first attempt of film, take these ideas and move beyond shutter speed or aperture "effect" and into conceptualizing your subject in terms of most appropriate combination for the subject. For a given subject, visualize what you want the image to look like and make shutter choices accordingly. Your task is to express movement and space through the use of aperture and shutter. How do the two intersect?

Some ideas:

- a. Freeze a moment in time of swiftly moving subjects.
Show passage of time as FROZEN.
Show time as CHAOTIC.
- b. Show speed by blurring the moving subject.
- c. Show movement by moving the camera instead of the subject or along with a subject (panning).
- d. Experiment with night photography using long shutter speeds.
- e. Isolate a subject from its surroundings.
- f. Give a feeling of expansion or depth.
- g. Play with the scale possibilities of foreground /background interactions.

Use of Light:

- The use of light will be an important aspect of this assignment.
Work with the qualities of light whenever possible.
- Do not use a electronic flash at any point during this assignment.

Do not forget the three Factors Which Affect Depth of Field:

1. Aperture (f/stop)
 - a. The smaller the aperture opening, the greater the depth of field.
OR, the larger the f/stop number the larger the depth of field.
 - b. The larger the aperture opening, the less depth of field.
OR, the smaller the f/stop number the smaller the depth of field.
2. Focal Length
 - a. The shorter the focal length of the lens, the greater the depth of field.
 - b. The longer the focal length of the lens, the less depth of field.
3. Camera to Subject Distance
 - a. The greater the distance, the greater the depth of field.
 - b. The shorter the distance, the less depth of field.

Equivalent Exposures:

Use equivalent exposures to achieve the type of shutter speed you desire, a correct exposure, and an aperture which produces interesting negatives. Make at least 6 correct equivalent exposures. Use Gray Card Metering for the starting point correct exposure. Then use equivalent exposure(s) with more and/or less shutter speed control. Record both Gray Card exposure and equivalent exposure on the shooting log.

For example, you want to make a photograph with a large fast shutter speed. Your light meter reading from the gray card is 1/500 at f/5.6.

To get a slower shutter speed and f/stop combination which gives a sense of motion and still gives a correct exposure:

Start at	(stop action)	1/500 at f/5.6	
	2x as much light		1/2 as much light
		1/250 at f/8	(slower shutter and larger D/F)
	2x as much light		1/2 as much light
		1/125 at f/11	(slower shutter and even more D/F)
	2x as much light		1/2 as much light
		1/60 at f/16	(Slower Shutter w/Largest D/F Speed to Hand Hold)
	2x as much light		1/2 as much light
	(blur action)	1/30 at f/22	(Even slower shutter speed and more D/F, But Tripod Needed).



“Fast Shutter Speed”

Loria Lasissa © 2008



“Slow Shutter Speed”

Loria Lasissa © 2008