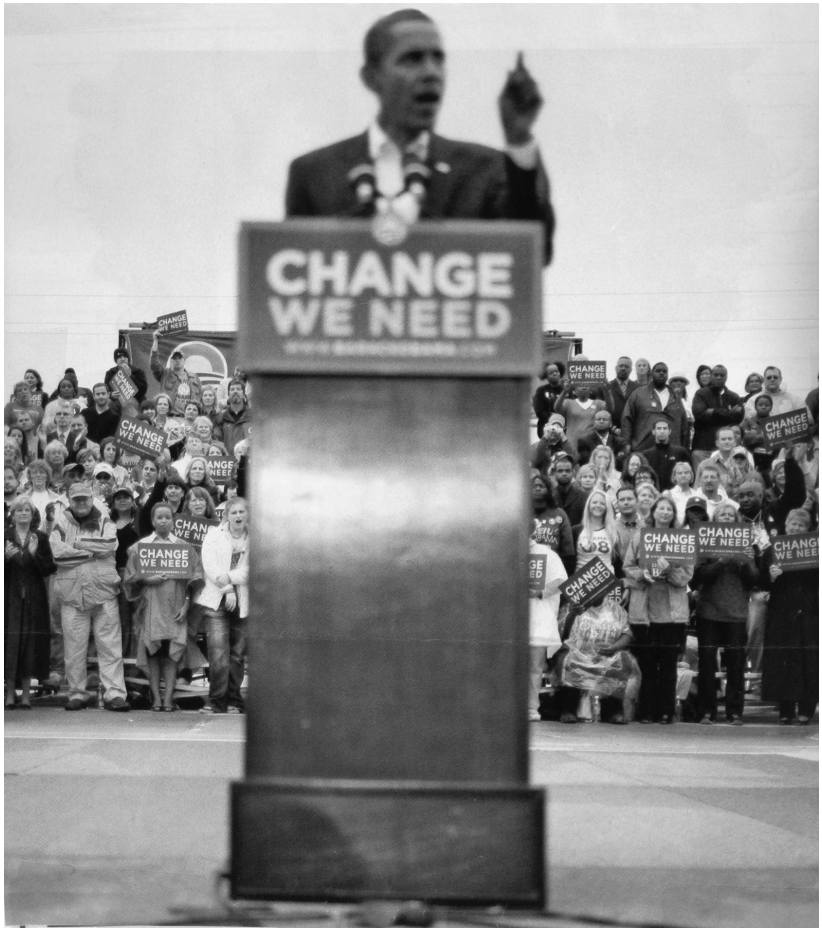
Monroe Community College (3 credits)
PHO 106 Fall 2010 Lecture 381, Lab 385 & 386
Instructor: Joe Ziolkowski " Joe Z. " 20100907

"Assignment #6": "Focus, Focus, Focus!"
Creative Depth of Field Techniques.

READ ALL BELOW INFORMATION CAREFULLY BEFORE DOING ASSIGNMENT!



Final Prints Due: November 2nd & 3rd, 2010 (Lab) Unknown photographer © 2008

Objective:
This assignment is designed to develop a basic understanding of sharpness control through the correct use of aperture and shutter speed. Student will learn how to use the relationship of aperture to control Depth of Field and shutter speed on their cameras. Student will explore the relationship between the technical effects of shutter and aperture and their conceptual ideas expressing objects in relationship to the space they occupy.

Assignment Overview:

- Use a large aperture to isolate subjects through shallow Depth of Field.
- Use a small aperture to give a sense of expanse and detail through great Depth of Field.

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 great depth of field and shallow depth of field as discussed in class and in the readings.
- Do try applying equivalent exposures with some of your subject matter to create images using large and small aperture with a common subject when possible.
- Try illustrating the extremes of depth of field techniques.

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 Great Depth of Field (Small F/Stop).
    b. 1 Shallow Depth of Field (Large F/Stop).
    c. 1 Experimental print using a slow shutter speed and Great Depth of Field (optional).
- All prints should be as “full frame” as possible.
- Name printed on back of each print and category of depth of field 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.

Depth Of Field

Depth of field is the area of acceptable sharpness in front of and behind the point of critical focus.

1. Large or Great Depth of Field.

The print will show sharpness stretching from the closest foreground element, across the important elements of the scene, and keeping the background sharp (Hyperfocal Focusing) or as sharp as possible. Be sure to compose the photograph so that there is something no farther away than 10 feet which is sharp.

2. Small or Shallow Depth of Field.

The print will show a very small or shallow area of sharpness, isolating the subject within the photograph. Use Equivalent Exposures to make sure the depth of field is not too small. Usually you want the main subject to be the close focus point in the foreground with a blurred, out of focus background.

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

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

To get a f/stop and shutter speed combination which gives a large depth of field 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	(larger D/F)
	2x as much light		1/2 as much light
		1/125 at f/11	(even Larger D/F)
	2x as much light		1/2 as much light
		1/60 at f/16	(Largest D/F w/Slowest Shutter Speed to Hand Hold)
	2x as much light		1/2 as much light
	(blur action)	1/30 at f/22	(More D/F, But Tripod Needed)

"G.I. Joe at Manza Mo Coast", Okinawa, Japan