PHOTO FUNDAMENTALS

CAMERA AND DARKROOM PART FOUR: THE BASICS OF GETTING READY

INTRODUCTION

This assignment will give the student basic instruction in loading the camera with film, checking its operation, and understanding the various controls.

REVIEW

From our last handout, we learned that the aperture and shutter work together to set the exposure value for the scene. We also learned how the light meter determines how much light is present on a scene, then sets the exposure value based upon the film speed. Finally, we learned how the exposure meter sets and exposure value that will turn whatever it sees into a middle gray value on film.

LOADING FILM

Although this process seems simple enough, go through the following checklist before loading that first roll of film.

1. Check the camera batteries. Some cameras have the batteries located inside the camera next to the film. If the batteries are weak or go dead, you can’t get at them without rewinding the film.

2. Check the operation of the shutter by pressing the shutter release while the film door is open. Does the shutter speed seem to change as you turn the dial or change the setting? Does the shutter seem slow or sluggish? Does the "B" setting on the camera shutter work?

3. Check the film door. Is it straight across the back, or is there a bow that might cause light to leak in? Is the latch working OK? Is the light seal in one piece, or does it have short sections missing?

4. Is the film area clean? Debris inside the camera can latch onto the film, and cause dust specks in the print. They can also lodge inside the felt strips of the film cassette, and cause the film to scratch along its entire length when you rewind the film. Bad.

Once you've gone through the above, and your confident the camera is working OK, take the film out of the box and remove it from the plastic drum. Keep the drum to store the exposed film in after you remove it from the camera. Open the film door in the back of the camera, and go through the following steps:

1. Locate the take-up spool and the film advance or "sprocket" spool. Wind the film advance lever, and note which direction the two spools turn. Does the take up spool turn the same or opposite direction of the sprocket spool?
2. Hold the camera in your lap by placing the lens between your legs. Have the top of the camera towards you, with the take up spool on your left.

3. Hold the film cassette in your right hand, then slip the film leader (the narrow part) into the slot in the take up spool. Advance the take up spool one turn by hand by rotating it with your finger in the direction you noted it moves.

4. Slowly pull the cassette to the right while holding the film in place on the take up spool. Be careful not to pull an excessive amount of film from the cassette. Drop the cassette into its well on your right (the camera's left).

5. Be sure the sprocket spool teeth are through the sprocket holes of the camera. If not roll the take up spool a little more until the film drops into the teeth.

6. Double check that everything looks OK, then close the back.

NOTE: Some photographers prefer to advance the film at least one frame while the back is open to be sure everything is hooked up right. The choice is yours, but doing so uses up one more frame of film.

Once the film is loaded and the back is closed, find the following:

1. The film frame counter window.
2. The rewind knob.
3. The ASA or ISO film speed setting dial.
4. A film memo holder (some cameras have this little slot on the film door).

The next few steps are very important in having a success with your first roll of film. Be sure to follow them each time you load the film to be sure that the camera is doing what it is supposed to do, and that you will have a correctly exposed roll of film to develop.

1. Set the film speed on the film speed dial. Double check the film speed on the film box. Kodak Tri-X film is ISO 400.
2. If you have a film memo slot, tear the cover from the film box. Slide it into the memo slot to remind you of what film is in the camera. Some photographers jot down the date on the cover to remind them how long film has been in the camera.
3. Note what number the film frame counter is on before winding the film again. It should say "S" or some other reference to the beginning of the film. "S" refers to "safe", indicating it is still OK to open the camera back, as no exposures have been made.
4. Advance the film lever once and press the shutter.
5. Carefully turn the rewind knob until you feel a slight resistance. This takes up all the slack inside the film cassette. If you feel no resistance after a few turns, stop.
6. Advance the film lever once more, and note if the film rewind knob is turning. If so, you've loaded the film correctly and are ready to take pictures. If not, advance the film several more times to ascertain it is not moving, and if it remains motionless, open up the back to see what went wrong. Repeat the steps above when you've located and corrected the problem.
7. Advance the film lever and press the shutter button until you’ve reached "0" on the frame counter.

CAMERA CARE

One of the single most common reasons for bad images is a lack of housekeeping. Using a dirty camera is like using a dirty toothbrush. Film specks, camera breakdowns, and fuzzy images can most often be traced to a lack of cleaning. It is one of the instructor’s pet peeves, and he will tell you your camera is dirty without hesitation.

Each time you load film into your camera, take a few minutes to wipe off the body and “touchable” surfaces of the lens with a soft cloth. Remove the lens (yes, you can remove the lens with film in the camera) and examine the mirror chamber. Is there any dust? Blow it out with a squeeze bulb or other low pressure air supply. **DO NOT** use canned air or a air hose inside your camera. Both have too much pressure, and can damage the sensitive mechanical parts or drive dust and dirt into crevices where they will never come out.

Cleaning your lens requires special care. **NEVER** use paper towel or some other paper product that may have course fibers. The delicate coatings on the lens surface can be easily scratched by Charmin toilet tissue, let alone the recycled sandpaper provided for you by the University.

**PLEASE: NO ONE SHOULD ASK ME ABOUT THE DOOR PRIZE AT THE SONS OF NORWAY MEETING. PLEASE DON'T ASK ME ABOUT THIS**. **PLEASE.**

Clean your lens by using lens cleaning tissue or a soft chamois. Do not place lens cleaning liquid on the lens itself. Place it on the tissue, then apply it to the lens. Clean the lens with a circular motion starting at the outside, and working towards the middle.

1. **ALWAYS BLOW THE LENS FREE OF DUST WITH A BLOWER BRUSH OR BY CAREFULLY USING CANNED AIR.**
2. **BE GENTLE! PRESSING TO HARD ON THE TISSUE CAN CAUSE CLEANING MARKS.**
3. **DO NOT "OVERCLEAN" THE LENS. DO SO ONLY WHEN THE CANNED AIR OR BLOWER BRUSH WILL NOT REMOVE THE DIRT OR SMUDGE.**

METERING AND PREPARING TO MAKE AN EXPOSURE

Because this is a creative class and not a technical class, it's important to get the technical stuff out of the way so you can concentrate on making the image. Here's a brief, flexible, and always changeable guideline to making each exposure:

- For each assignment, imagine the image you want to make, or evaluate the scene you want to capture by visualizing a frame around the photograph.
• After deciding on the basic framing, focus the camera and set the exposure controls.
• Start composing the image by selecting a variety of camera angles, points of view, and distance. Concentrate on the aesthetics in the viewfinder, not the exposure settings.

Because the camera meter records what it sees as middle gray, ask yourself if any of the following are in the scene:

A) Bright spots or reflections that are relatively large and should remain bright.
B) Dark areas of shade or color that are relatively large and should remain dark.
C) Small reflections of the sun that are very bright.

If any of the above are included, move in until the lens can focus on an area that can appear as middle gray, then set the exposure for that value. Remember that large areas of light or dark, or small reflections of the sun can greatly affect the exposure, and make the negative difficult to print in the darkroom.

THINK ABOUT THE IMAGE

What are you trying to capture on the film, and what camera settings will work the best.

• Do I want a great depth of field, or should I limit the sharp focus to a single subject?
• Do I want to convey a sense of motion by including blur, or should I freeze the action?
• Should I use a tripod, or some other means to support the camera?
• Should I use a fast shutter speed, since I tend to shake the camera too much?
• Should I use a middle aperture setting, since I don’t have a need for either a small or large depth of field?

REWINDING THE FILM

As you make your last exposures, be careful when the film reaches the end of its travel. The film advance lever will not fully load the shutter if the film has bottomed out, but be careful not to force it. You can finish advancing the film lever by pressing the rewind button that is usually located on the bottom of the camera. This button releases the sprocket spool from the rewind lever, and allows it to continue forward for part of a frame.

Once you’ve reached the end of the film, you rewind the exposed film into the cassette by turning the rewind crank in the direction of the arrow. Do so by first pressing in the rewind button that is located on the bottom of the camera, or in the from of some Olympus cameras.
Rewind the film SLOWLY. Winding the film too fast when the air is dry can cause static electricity to form inside the camera, and can create "lightning bolts" across the film. Cool effect, but not if its daylight. Rewinding the film too fast can also cause scratches on the surface as it slides through the felt linings on the entrance to the cassette.

Feel for resistance on the rewind lever as it reaches the end of the film. Listen carefully for the film to “pop” off the take up spool. STOP rewinding when you hear the film slip off. This makes it much easier to load onto the developing spools. Open the back when you're sure the film has been rewound.

Place the exposed film in the plastic drum. DO NOT put it in your pocket without the drum. Dirt and lint can get into the film cassette, and cause all sorts of specks and UFO's (unidentified funny objects) to form on the print. Keep the film in the drum until you're ready to process it, and protect it from extreme heat and cold. This means don't keep your camera in your car during the winter. No. Bad student. BAD BAD.

This is about it for the camera training. Next stop is darkroom basics.