# **BLACK AND WHITE PHOTOGRAPHY**

# PART TWO: IMAGE CONSTRUCTION AND TECHNIQUE



"Now to consult the rules of composition before making a picture is a little like consulting the rules of gravitation before going for a walk. Such rules and laws are deduced from the accomplished fact; they are the products of reflection."

Edward Weston 1886 - 1958

# Part Two – Chapter Six: The Basics of Image Making

### Introduction

Photography, unlike painting or sculpture, reveals the subject without interpretation. Because the lens sees the subject and transfers it to the film without alteration, the resulting photograph is a representation of the "thing itself." Although this might be considered a limitation on creative endeavor, it becomes instead one of photography's many strengths as a fine art form. As a result, the artist uses the inherent characteristics of the camera to assist in arranging the world within the viewfinder in a way that communicates an idea or message.

#### Image Elements

Although there are no specific rules for making a successful image, there are techniques which can make an exciting photograph that captures our interest with visual impact. When applied to any scene or subject, the techniques can harmonize, emphasize, and characterize the various picture components into an integrated whole, giving greater weight and meaning to what the photographer intended to express. The techniques include both methods and materials that can be termed "**Image Elements**" since they contribute to the basis of a successful photograph, and include the following:

- Shape
- Form
- Texture
- Tone
- Point of View
- Perspective
- Compositional Relationships

None of the Image Elements listed above stand alone in creating the image. All may be present at once, but the extent to which each contributes to the photograph determines if it is an essential part of the composition. In general, at least two of the Image Elements are present in all photographs we make, in large part due to the nature of making photographs. The level of success achieved using either two or all of the Image Elements depends upon the effort placed in using the strengths of each.

### <u>Shape</u>

The single most effective element in identifying subject matter is **shape**.<sup>12</sup> The most common form of simple shape is the silhouette, where all surface detail is eliminated within the outline of the subject. Shape alone can be very thought provoking, as it limits our visual exploration of the image and requires the viewer to consider the shape without form or texture. Use of shape alone can also make the subject anonymous, or mysterious, for the same reasons.

Picture Requirements for Shape

Separation of tonal values. The shape should be significantly darker or lighter than the background which creates it.

- Lack of detail. If possible, the amount of detail should be limited only to key features that may enhance the visual message.
- Dominance. The shape should be the primary subject, using up as much of the picture space as possible without creating exceptionally large "negative" areas (dark tonal values.)

## Form

**Form** conveys to the viewer that an object within the photograph is three-dimensional. Although shape identifies an object, form can give the object greater mass and prominence within the scene. By giving form to the object, the photographer can suggest the subject has unexpected qualities or characteristics that challenge the viewer to accept an alternative viewpoint. Edward Weston's careful use of lighting allowed a simple bell pepper to become sensuous, creating much more than documentation of a vegetable.<sup>13</sup>



Lighting is critical for the successful illustration of form. The photographer must practice viewing various objects

using different sources and directions of light in order to understand how each combination sculpts the subject.

Picture Requirements for Form

- In general, directional lighting from the side and above the subject best reveal form.
- Flat lighting, or lighting from behind the camera, is the least effective in revealing form.
- Strong sidelight (such as the direct sun) can obscure form with strong contrast that creates and emphasizes shapes instead.
- Directional Diffused lighting is the most effective in revealing form.

# <u>Texture</u>

**Texture** suggests that a surface is not smooth, and lends a tactile sensation to the viewer's experience. When we attach additional sensations to a visual experience, the photographer solicits more than just visual memories from the viewer. Revealing the rough quality of wood may remind us of a splinter, or the smell of cedar. Showing the lack of texture in a curving car fender might recall the smell of wax or a sunny summer day.

Diffuse directional lighting from the side of the subject is the most effective means to reveal texture. Strong lighting tends to emphasize shape within the texture, giving the impression of pattern when the contrast is too great.

Picture Requirements for Texture



Flat lighting, such as a cloudy day, is the **least** effective in revealing texture.

- Diffuse lighting from the side of the subject should be as low as possible when the object's texture is "shallow" or fine.
- Texture should be a supporting component of another picture element, not a primary feature of the photograph.

#### Tone

Black and white photographic prints are composed of a range of gray tones that vary from near-black to near-white. When viewed as a whole, the majority of gray tones may be either on the light or dark side of middle gray, giving the print an overall light or dark tone. Prints which have predominately light tones are referred to as "**High Key**" images, whereas prints having lower tonal values are termed "**Low Key**" images.

This overall average tone affects the "mood" of the image in terms of its character. Low Key images tend to reflect somber, sad, or introspective emotions such as despair or anxiety. High Key



images tend to reflect a more exuberant, outgoing state of mind. With that consideration, exposing the print to reflect a light or dark range of values can interject mood into the image, but care must be taken to not simply over or underexpose the print. Creating a low key or high key image at the expense of loosing a significant amount of detail into the shadows or high values will result in a print that appears badly made.

If possible, interjecting mood should take place at the camera, based upon a pre-visualization of the intended image. To avoid loosing important detail in either the high lights or low values, multiple exposures should be made of each scene, with the exposure "bracketed" (correct, over, and underexposed frames) to ensure one of the images can be printed up or down without sacrificing detail.

Picture Requirements for Tone

- Avoid strong, directional lighting as it creates higher contrast. Negatives with high contrast tend to "block up" when they are over or under exposed.
- Tone is a supporting or additional image element that should be added only after the composition is made strong enough by other image elements.
- Rainy days are suitable for low key subjects, whereas bright (but cloudy) days are the most suitable for high key subjects.

### Point of View

This is not a political statement, but instead the location of the camera when the image is made. An enduring strength of photography is to present a subject from a vantage point which is either unusual or unpracticed. Since the most common reference to our world is taken when standing or sitting, our memory and disposition have entrenched within us a pedestrian understanding of spatial relationships that is difficult to overcome. Photography shakes that standard by being able to present common views from both the eye of a bird or that of a gopher.

Application of this Image Element can be successful both in revealing a new side to the commonplace as well as challenging the viewer to understand an uncommon view of the uncommon itself. To that end, other

image elements must be used to balance and compliment the alternative points of view in a way that represents the intent of the image. As an example, a bird's eye view of a busy city sidewalk taken from an apartment window should consider the importance of shape and form in identifying the subjects.

Picture Requirements for Point of View

- Point of view should be obvious. Position yourself or the camera in such a way that what you present to the viewer is not commonplace.
- Maximize the depth of field. Soft focus in the foreground or background diminishes the effect. Use a small aperture opening and a tripod or other support if necessary.
- Point of view is a "background" picture element that gate up the subject in an uncommon situation



that sets up the subject in an uncommon situation. Although unusual in viewpoint, the subject must remain strong if the photograph is to retain interest.

# Perspective

Perspective can be defined as how we see the scene to be photographed in terms of relationships between image components. This differs from Point of View in that the latter establishes camera placement, where as **Perspective** refers to the arrangement of image components within the frame which may be controlled in part by camera placement. As an image element, Perspective should be considered a process where the photographer uses lens selection and subject emphasis to manage the hierarchy or importance of subject matter within the image frame.

Arranging the subject matter to establish a level of



importance requires a careful evaluation of the scene and how each subject component relates to the other. As an example, in a photograph that attempts to arrange a series of rock formations in a way that emphasizes one particular object, placing that object within the frame in a specific location that suggests the rest of the rock formations are subordinate is a method of controlling perspective. In practice, this may involve selection of a wide angle lens that allows the principle object to appear much larger than the rest, or to place the principle object within the frame in a location that suggests importance.

Picture Requirements for Perspective

Perspective is a background or supporting Image Element that arranges subject matter for effect. Wide angle and telephoto lenses which have the capacity to alter perspective by compressing or expanding apparent distance are excellent tools for controlling perspective. Use lighting to highlight principle image elements while subordinate objects remain at lower values. Note that the ratio between positive and negative space should favor the space that subordinate elements are placed.

### Compositional Relationships

Photographic composition refers to the systematic arrangement of subject matter within the frame. The subject matter can include (and should include nothing more if the photograph is to be efficient) all the graphic elements arranged within the picture frame that support the message or idea within the photograph. Because certain techniques and styles of arrangement have become standard fare for photographic composition, they compose what can be considered the "**Composition Standards**" for use when creating photographs.

Composition Standards can become clichés if used without consideration for the integrity of the subject. An image without a message, meaning, or idea can be made graphically palatable if the composition of the image is strengthened using the Composition Standards. As a result, the image gathers passing consideration but as a result dilutes and diminishes the strength of the standard.

Compositional Standards include the following:

- Rule of thirds. Dividing the image into thirds will create two vertical lines and two horizontal lines that divide the image into six equal parts. Placing the subject at any one of the intersections will produce a composition with tension, where the subject seems to pull or push at the sides of the frame.
- Framing. Using graphic shapes within the photograph to create an internal "frame" to enclose the subject points the viewers eyes directly to that point. Frames can be found in almost any scene, but care must be taken to avoid creating a cliché with this common Compositional Standard.
- Dynamic balance. A relatively dark toned subject is deliberately kept small within the frame in relationship to a large and simple light toned background. The overall effect of this approach gives the image balance, where the subject is made stronger due to its role in offsetting the light tone mass.







Frame rotation. Rotating the camera so the image is deliberately out of level. Very effective in lending additional tension to moving objects. Because our eyes see the frame of the image as level, presenting the subject by rotating the camera will alter that perception on the finished print.

Pattern. Arranging within the frame a set of objects that share the same basic geometric shape can give the image a sense of order, harmony, or movement. Pattern can also be described as a basic repetition of similar lines or an arrangement of lines that create rectangles and squares.

- Cropping. Trimming away any unwanted detail by moving closer to the subject or selecting a different focal length lens isolates the subject and removes distracting information. In general there are three basic rules for cropping either within the viewfinder or under the enlarger:
  - Small, bright or white areas should be placed well within the frame so they don't appear directly on the border. The resulting white areas on the print break up the fine line of the print edge and pull the eves away from the subject.
  - Round forms and curving lines should not touch the edge of the frame. Curving forms should be well within or cut deeply by the frame lines or print edge.
  - 3. Diagonal lines should never intersect with a corner of the frame, but instead always merge at least a slight distance from the corner.

Rules are meant to be broken, so the above "rules" for cropping should be strongly considered when composing the image but certainly discarded if the strength of the composition can support it.









#### Summary

Image Elements are graphic structures and techniques that both help describe photographs while defining for the artist a few basic tools that can be used to refine the image. Because the human eyes and camera see the world so differently, the impact of using Image Elements effectively requires an ability to "see" as the camera sees in a process called "**pre-visualization**." Learning how to pre-visualize an image starts with the application of Image Elements, followed by the printing process. Once complete, the print is returned to the original scene where the photographer can see the Image Elements in place. It is important that a reasonable time lapse occur between capturing the image and returning with the photographic print so that the effects of place are forgotten and the image is viewed without prejudice.

Understanding how the Image Elements work together to establish strong images with visual impact requires continued practice and review. Once the application is mastered, the photographer applies them to the photograph almost without being aware of doing so, and using those Image Elements that practice has determined are the strongest way for that individual to see.

#### **Review Questions**

- 1. What Image Element suggests the subject is three dimensional?
- 2. What is the difference between Point of View and Perspective?
- 3. What type of lighting best describes shape?
- 4. What two image elements use very similar types of lighting?
- 5. What types of emotions are conveyed by low key and high key images?
- 6. What Compositional Relationship suggests order?
- 7. What Compositional Relationship places the subject at a specified location in the frame? Within another frame?

### Photographic Assignment

Expose a 24 exposure roll of black and white film illustrating at least 6 of the Image Elements, with no fewer than 2 exposures (frames) of each. Process the film and make a correctly exposed contact sheet. Select the single frame which most strongly illustrates the Picture Element of choice and make a correctly exposed 8 x 10 print. Submit for grading the contact sheet, 8 x 10 print, and negatives in protective sleeves together inside a craft paper folder with your name on the outside.

## Part Two – Chapter Seven: Using Shape

#### Introduction

Shape is one of the most powerful Image elements for subject identification. Using shape as a primary Picture Element while others are subordinate or non-existent can illustrate the subject in a way which emphasizes the characteristics that give it definition, as opposed to a lesser effect when form or texture are introduced. Using shape alone can also challenge the viewer to identify the subject when only a few strong shapes exist within the photograph, but may share a common outline. This chapter will discuss and illustrate various means of emphasizing shape and how each affects the subject.

#### Figure and Foreground

When a shape is present alone within the image frame, the shape is referred to as the figure, and the remaining portion of the image is termed the foreground. Both definitions should be extended to include the shape when slight detail exists, or a foreground that has texture or some other picture element that gives it the appearance of slightly more than just a monotone void. There are no rules which limit the number or strength of image elements that can be present when shape is the predominate feature, but instead must be controlled by the photographer's own sense of balance and effect.

The silhouette is one of the most common uses of shape. It relies upon a strong back lighting such as the sun, bright sky, or other illuminated surface which, when exposed for that surface, the film is so underexposed for the shape that all detail disappears. To enable this effect, there must be a substantial difference in illumination between the foreground (which in this case is actually the background) and the side of the figure facing the camera. Use the following guidelines to obtain each effect:

- Seven stops difference in exposure for a complete loss of detail.
- Five stops difference in exposure for slight detail in either the figure or foreground.
- Three stops difference for recognizable detail in both the figure and foreground.

To evaluate the scene for this difference, focus the lens on the backlighting source and set the camera for the correct exposure. Note the aperture setting and shutter speed for that exposure, then focus the camera on the side of the figure facing it, and once again set the correct exposure. The difference between the two exposures in both aperture and shutter speed settings is the total difference in stops.



#### Tractor and Threshing Machine

The above photograph was taken just before sunset as the sky burst into color. A yellow filter was used to bring out contrast in the sky and to deepen the shadows that the sky alone illuminated. Film exposure was set for the clouds, knowing it would leave the subject in silhouette. Tri-X film, f16 @ 1/250 second. 12A (yellow) filter, 35mm lens.

In general, silhouettes seldom have any detail within the boundaries of the shape, and quite often are of subjects having a strong identification with shape, such as the human profile or some other object we

routinely see. Adding detail to the foreground can provide the viewer with additional information as to the location or circumstance surrounding the subject, and as a result add mood or other suggestive atmospheres.

#### Shadows creating Shapes

Light can outline the subject using its shadow in lieu of a silhouette. Searching for interesting shadows can become a passion unto itself as it often creates a new sense of awareness in our surroundings. Trees, buildings, and people all create interesting shadows that may or may not reflect their owners in every sense of proportion. Shadows late in the day stretch and lengthen, where as shadows during mid day shorten and compress.

Shadows can also be used to compliment or contrast their reflections by including both within the scene. Such a composition can create what is known as a "figure – foreground flip," where the subject and background change places depending upon the viewers own point of view. Revealing the subject in this way can be very abstract in context, as the relationship between the shape and identification is lost in a more interpretive environment.

For the photograph on the right, the subject tends to flip between the shadow being cast by the column and the column itself. The shape has become somewhat abstract in that it no longer represents the column, but instead takes on a new meaning that leaves the viewer an ability to assign it some other identification.

In contrast, the column and detail also draw our attention, due mostly to the fine detail present in the columns that invites closer inspection.

Finally, the handrail seems to act as a third party that draws both together into a type of dynamic tension, allowing the two strong components to exist side by side. The photograph ends up with an unusual combination of image elements that work in



#### Detail – Stairwell

This photograph was made in the entry of a building having ornate architectural columns and walls. The autumn sun was low in the sky and cast the unusual shadows on the interior walls. The film was exposed with an average meter reading in the center, knowing it would retain some shadow detail as a result. Plus-X film, f8 @ 1/125. No filter, 24mm wide angle lens.

harmony only due to the serendipity of moment, where the light, time of day, and atmosphere all suggested the composition might work.

Shadow created shapes can be produced by many forms of light, including interior lighting and street lamps. Because the tonal relationships within the image may not be of sufficient contrast to illustrate the shadows effectively, increased contrast applied during printing may be required.

### High Contrast Lighting

When the subject is illuminated with strong, directional lighting, the contrast levels within the scene may be so great that shadows are rendered into a deep black while moderately bright areas turn white without texture. This type of lighting can be very effective in creating shapes if an appropriate background is used.

In lieu of high contrast lighting, the film itself can be altered during exposure and processing to yield high contrast images. For the image on the right, a standard black and white film was used and was processed to yield a higher degree of contrast.

When film is underexposed it yields a negative that is "thin" or low in density. To recover the lost density, the film can be developed for a longer period of time. This process results in a negative which has much higher contrast.

Underexposing the film by one full stop can be accomplished by setting the film speed one stop faster. If using 400 speed film, set the film speed dial to 800. Two full stops of underexposure can be accomplished by setting the dial to 1600.



10 O'clock

This image was made on a slightly overcast winter day when the sun stays low in the sky. The two levers were placed in such a way that each tried to frame the barn and silo in the distance. The trees add to the framing effect, but it turns out the levers become the focal point of the print. Tri-X film, pushed to ISO 1600. Exposure f11 @ 1/500. 25A (red) filter, 70mm lens.

Once exposed, the film must be processed for a longer period of time. In general, one stop of underexposure requires the development time to be increased by 50%. Two stops of underexposure requires at least doubling the development time. Note that underexposing the film and increasing the development time will result in a significant increase in grain, which may be objectionable for some subjects.

### Filters and Contrast

Colored filters, when placed in front of the camera lens, can be very effective when illustrating light-tone shapes against a clear blue sky. This technique is successful when the subject shape is somewhat open and isn't minimized by the inclusion of subtle detail. For general photography, two basic filter colors are the most effective in revealing shape against a blue sky: red and yellow.<sup>14</sup> Filters function by transmitting light of one color while at the same time blocking others. Red and yellow filters transmit red and yellow light, but block the light of the "opposite" color – blue and green.

Because the sky is predominately blue, a red or yellow filter will reduce the tonal value of the sky significantly. While black and white film cannot reveal the change in color, it will record the reduction in tonal value caused by the filter. As a result, blue and green objects are rendered much darker than if no filter were used.

It's important to note that the color of the sky in the northern latitudes varies with the season. The sky from late spring to early fall is a deep blue that responds very well to a yellow filter. The winter sky is more azure in color, and requires a strong red filter to reduce its value significantly.

In addition to variations within the seasonal sky, filters also effect the relative illumination within the shadows. Because shadows by nature are illuminated only by skylight, it lends to reason that shadows are composed of blue light. Using a yellow or red filter will subdue the blue light, and as a result cast the shadows into a deeper tone value.

This effect can be beneficial if the added contrast can support the subject. In the image on the right, a 25A (red) filter was used on the camera to help isolate the silver bridge structure from the sky. The sun was somewhat low in the sky, so the lighting created deep shadows within the structure itself.

Because the shadows are somewhat blue, the red filter made them even darker, giving even greater drama to the scene and adding a strong graphic character to the composition. Although very abstract in its lack of subject, the bridge components are easily identified. As a result, the viewer is left to consider the graphic weight of the image, and evaluate it based on its merits in presenting a compelling shape that has visual impact.



The girder bridge illustrated above is only one of many figures that can be explored using the sky as the foreground (background). Consider exploring the following to create strong graphic shapes:

- Electrical transmission towers and lines.
- Traffic signals and signs.
- Water towers and grain elevators.
- Sculpture

#### Intrinsic Shapes

All objects have shape, but certain objects are of shape alone, such as a stop sign or other marker which has little depth and is quickly identified by its outline. Although less common as subject matter, intrinsic shapes can be combined with other image elements to create a theme or story. The strong graphic presence should be isolated against a simple background when possible, and used sparingly within the frame to prevent it from dominating the image.

The photograph on the right typifies using intrinsic shapes and found silhouettes. The ducks are easily identified, and placement on the rotated square sign suggests a warning.

It soon becomes obvious that the sign warns of ducks crossing on the roadway ahead, and that drivers are urged to use caution so that the fowl might have safe passage, since damage to a passing car would be slight if a collision were to occur.

Signs which warn of deer crossings or other large animals tend to suggest safety of the car and driver are more at risk, and that caution should be exercised to avoid personal injury. That juxtaposition of warnings suggests an irony, where the viewer might consider the relative value of animal species.



#### Duck Crossing

This photograph was made in the late summer using a on-camera flash to help illuminate the sign and add contrast to the image. The sign was placed against the cloudy sky for contrast and separation. Including the roadway and lake were important in conveying the message. Plus-X film. Exposure f8 @ 1/30 second with electronic flash.

The "duck" sign is that of a mother duck with ducklings in tow, bringing additional meaning to the sign. Waterfowl production, the ethics of hunting, road kill, and visual humor can all interact to form an interesting, if not compelling, image.

#### **Review Questions**

- 1. What is a silhouette?
- 2. What is the relationship between figure and foreground?
- 3. How can contrast be used to identify shape?
- 4. What are intrinsic shapes?

#### Photographic Assignment

Expose a 24 exposure roll of black and white film illustrating shape using the methods in this chapter. If you are underexposing your film for the purpose of increasing contrast, the entire roll must be exposed at that speed and contrast. Process the film and make a correctly exposed contact sheet. Select the single frame which most strongly illustrates the Picture Element of choice and make a correctly exposed 8 x 10 print. Submit for grading the contact sheet, 8 x 10 print, and negatives in protective sleeves together inside a craft paper folder with your name on the outside.

## Part Two – Chapter Eight: Understanding and Capturing Form

#### Introduction

Form is the three dimensional quality of an object. It is revealed through the two dimensional medium of photography by understanding and applying the principles of lighting which create it. Illustrating form within a photograph gives the illusion of mass only. Our minds understand three dimensions by using tools different from that of simple lighting alone, including the ability to see an object from more than one side. Because photographs compel the viewer to see the object as three dimensional using lighting alone, the concept of form takes on a more abstract meaning that now uses graduation of tone instead of a physical presence. Applying this to the subject matter can alter our perception of even common objects by literally shedding new light upon them.

#### Basic Lighting for Form

Revealing form is best accomplished through a careful balance of **side light** which illuminates the subject, and **fill light** which helps maintain shape and recognition. When a directional light source (such as side lighting) is used to illustrate form, the light is said to "**model**" the subject, and as a result it is often called "**modeling**" light.

For outdoor photography using natural light, the side lighting is almost always provided by the sun. The modeling qualities of the sunlight are dependent upon the time of day, season, and the atmospheric



#### Mayville Elevator

Taken during the winter months, the sun was low in the sky even during mid day. The somewhat hazy clouds helped fill in the shadows and give form to the structure. Because the shadows were filled by the cloudy sky they were less effected by the filter. Plus – X film, f8 @ 1/125 second. 25A (red) filter with 28mm lens.

conditions. The most common source of fill light for outdoor photography is the sky. Although obviously not as bright as the sun, the sky's large expanse creates a broad and diffuse source of light that creates no shadows and "fills" in those created by the sun with a soft, blue light. Like the sun's light, the quality of the sky light is determined by time of day, season, and atmospheric conditions.

**Time of Day.** When directly overhead, the sun is harsh and creates deep shadows that even the brightest sky struggles to fill. As a result, modeling the subject during mid day with a strong sun often results in disappointment. Once the sun creeps towards the horizon, its rays must travel a greater and greater distance through our atmosphere. This journey results in a softening of the suns harsh effect, but also brightens the sky.

As the sun gets closer to the horizon, its rays are almost parallel to the earth's surface, and the modeling effect becomes more dramatic as only vertical objects are illuminated. The sky fills not only the shadows, but also becomes the sole source of lighting for much of the horizontal surfaces that may surround the subject. The resulting "glow" created at this time of day is caused by diffusion of the sun's light through the atmosphere and the subdued base illumination produced by the sky.

Season. For northern climates especially, the sun's path through the sky varies greatly from summer to



Warsaw Church

The setting summer sun and cloudless sky provided the perfect lighting to reveal the depth of form in this classic church. The sun and sky balanced at this time of day to give just the right amount of contrast so that shadow areas could reveal some texture and detail. Plus – X film, f22 @  $1/30^{th}$  second with a 12A (yellow) filter and 35mm lens.

winter. During the summer months, the sun passes almost directly overhead and creates deep shadows under suspended horizontal surfaces. Because the sun's strength is at its peak, the sky's light is diminutive by comparison and cannot compete with the sun to fill in the heavy shadows. As a result. photographs during made the middle of a summer day are often high in contrast or like "soot and chalk" when printed.

When low in the summer sky during dusk and dawn, the sun's light is filtered by the abundance of

dust and pollen in the atmosphere, which in turn makes the sky's light more powerful. Even after the sun has set, it continues to illuminate by tinting the high clouds with a warm red glow that black and white film is typically less sensitive to. This shifting of color results in an underexposure of highlight values that reduces contrast and softens form. Although shutter speeds can be long with such conditions, it results in a delicate light that envelopes the subject, giving the subject form through a careful balance of similar tones.

Spring and Fall typically allow the photographer to work longer hours during the end of the day since the sun is moderately low in the sky as it passes overhead. As a result, it occupies the "peak" zone for photography slightly longer and offers light from a direction that was not available during the summer months. Autumn brings harvest to many areas, and the dust created hangs in the atmosphere for days. Although it varies from region to region, harvest dust can become so dense that the sun turns a deep red during its last hour of decent into the horizon. The light created can be similar to that of summer after the sun has just set, but results in shadows that have a sharper edge.

Sun can be rare in some months, but when it comes out it has a deep, penetrating light which is unhampered by the cold, dust – free air. In addition, since the sun remains low in the sky for the entire day, photographic conditions are good from sunrise to sunset. The winter sky is exceptionally weak in the winter, and suffers from a pale blue that responds poorly to a yellow filter. It also lacks the ability to fill in shadows, so winter scenes typically have more contrast than usual. If the ground has a snow cover, the white base

can assist the sky in reflecting additional light up and into shadows that remain hidden without it. Camera shutter speeds and apertures must be set carefully so as to not overexpose the snow and render it into a gray, lifeless mass.

Atmospheric Conditions. Haze, dust, snow, rain, clouds, and any other component of our atmosphere can have an effect on the quality of light used to model the subject. Overcast skies can fully diffuse the sun's brightness and create a huge, seamless light source that eliminates shadows. Dust and haze reduce the power of the sun, but tend to affect the sky light very little. The resulting images are typically lower in contrast with softer shadow edges than those produced with a clear atmosphere. Rain and snow typically are accompanied by a cloudy sky that reduces contrast. The rain tends to reduce the contrast even more as it creates shiny streets and sidewalks that reflect light back into those shadows which may have escaped the cloud's illumination.

The photographer learns to understand the effects of atmospheric conditions through practice. In time, the difference in lighting between high level haze and simple clouds becomes apparent, and the



#### Exhausted

This old redi-mix concrete truck has worked hard. The almost impenetrable winter clouds cast hardly a shadow, completely eliminating all form in favor of detail. Form is assumed for many by memory of a similar vehicle instead of by the quality of light. Tri-X Film f5.6 @ 1/125. No filter. 28mm lens.



#### Grain Tank and Spring Storm

The clouds were swirling above the camera, changing forms on the grain tank. As the photograph reveals, the clouds were both light and dark, resulting in a constant movement of the modeling light. Tri – X film, f8 @ 1/250. No filter. 35mm lens.

photographer adjusts the image capturing methods accordingly. Likewise, the effects of rain and snow are learned and become a part of the photographer's where kit. tool we bookmark certain subjects and plan on returning when a light rain or somber snow fall helps define the image more clearly.

The time of day, different seasons, and changing atmosphere allow us to see our subjects in a variety of conditions and subsequent lighting. We may be unsatisfied with how well the lighting reveals the form of our subject on any particular day. The inexperienced might abandon the subject or idea at this point, and move on to others with more potential. The experienced photographer learns to return at different times, seasons, and weather conditions to see how the subject may be revealing itself anew.

## Illustrating Form with Artificial Light

Working within the studio, apartment, or home to reveal form within everyday subjects can be one of the most rewarding aspects of photography. Common kitchen utensils, fruits & vegetables, or a favorite vase can be explored and interpreted using the simplest lighting tools. In general, the most favorable types of lighting to use indoors for capturing form include either a single light bulb or a window. Fluorescent lighting, or lighting that produces no shadows, are typically the least effective for illustrating form.

To set up a simple indoor studio for discovering form within common objects, collect the following materials:

- 1. A single bulb lamp, such as a table lamp.
- 2. A bed sheet or other large fabric to use as a background.
- 3. Aluminum foil to create a bulb reflector and subject reflector.



#### Step One: Set up your "studio"

Remove the shade from the lamp and fashion a simple reflector from aluminum foil. The purpose of the reflector is to focus light on the subject, and to reduce the amount of stray light that fills the room behind the lamp. The foil can be placed relatively close to the bulb, and will not burn or stay hot after use.



**Step Two**: Place your subject on the white sheet or other background, with the lighting to the right of the subject, at a distance of about 24 inches.



**Step Three**: Turn off any other room lights to allow only the studio light to illuminate the subject. Position the light to create the desired modeling on the subject.



**Step Four**: Use a small square of aluminum foil to reflect light back into the side of the subject opposite the light. This "fills" the shadows and gives them detail.





Although the type of subject matter is limitless, chose material that has substance and shape and responds well to light. Dark objects tend to absorb light and create deep shadows. Shiny objects (as the cookie jar above) tend to produce glare or have unwanted reflections. Limit the number of objects to one or two so as to not confuse the forms and introduce more unnecessary image elements.

#### Outdoor Subjects and Natural Light

Subjects for illustrating form are abundant and varied. The most important aspect of capturing form outdoors is the quality of light and time of day. Choose your subjects so you approach them from either the north or south, and determine if the sides facing the setting or rising sun have a clear view which isn't obstructed by trees or other objects which can cast a shadow upon the surface of your subject. The following subject matter is especially conducive to revealing form:

- ✤ Water towers.
- Grain tanks or other round tanks.
- Concrete grain elevators.
- Train cars.
- ✤ Grave stones or monuments.
- Unusual architecture.

#### **Review Questions**

- 1. How do the seasons affect the quality of light?
- 2. How does the time of day change how a subject is modeled?

- 3. What is meant by "modeling" the subject?
- 4. How do overcast skies affect illustration of form?

#### Photographic Assignment

Expose a 24 exposure roll of black and white film illustrating form using the methods in this chapter. If you are using artificial light indoors, set your film speed or exposure index to overexpose the film by one-half stop (i.e. set 400 speed film to 320). Process the film and make a correctly exposed contact sheet. Select the single frame which most strongly illustrates the Picture Element of choice and make a correctly exposed 8 x 10 print. Submit for grading the contact sheet, 8 x 10 print, and negatives in protective sleeves together inside a craft paper folder with your name on the outside

## Part Two – Chapter Nine: Texture and Tone

#### Introduction

Texture and Tone as image elements compliment and enhance the photograph. Both add a new dimension to what is revealed by giving the photograph the ability to elicit extended sensation from the viewer that might not be linked directly to the subject. This chapter will explore some of those basic sensations and illustrate the fundamental techniques used to successfully illustrate texture and tone within the photograph.

#### Basic Lighting for Texture

Texture, like form, thrives on directional light that is cast from the right or left of the camera's view. Revealing texture is best accomplished with a very low, or rakish, angle of light that seems to skim across the surface of the subject matter and highlights even the smallest surface irregularities. Unlike form, texture can be explored most any time of day as long as the sunlight is glancing across the surface.

Slightly diffuse, hazy lighting is often the best type of illumination for revealing texture, since a strong light can create excessive contrast in the surface. Late afternoon sunlight is often accompanied by a hazy horizon that helps reduce its intensity, whereas mid-day sunlight is harsh, and produces a "soot and chalk" effect on most every surface. Waiting for the sun to reappear from behind a cloud is a tried and true method of diffusion, where the photographer waits for the moment that the sun remains partially covered by the edges of the moving cloud.

The least effective lighting for revealing texture is a flat, or completely diffuse source which is unable to cast a shadow across the surface. Although the illusion of texture might be created by the type of material, the effect is more one of <u>pattern</u> than that of texture.

#### Using Texture

Texture by itself is not a primary image element. Texture instead is used to supplement or enhance the photograph by adding the element of touch or a similar sensory



#### Stucco Walls

Note the bright walls and the relationships between the bricks and stucco surfaces. Several variations of the above arrangement were used, all emphasizing the brick. The overhead sun was broken by a slight haze, which gives a tactile quality to the wall which supplements, but does not overwhelm, the subject. Tri- X film, f - 11 @ 1 / 500 second. No filter.

response. The image on the previous page may have been equally effective if taken on an overcast day, where the tone separation between the walls and brick accents would have been sufficient alone to illustrate the relationships between the dark shapes and irregular patterns. Being able to reveal the texture of the walls creates a context that is hard and rough, and would scuff the skin if you pulled your hands across the surface.



 $\label{eq:cable Spools} Cable Spools \\ These common cable spools or reels where pushed together randomly on a construction site. The late afternoon sun was strong, but seemed to bring out the weathered surface effectively. Plus-X film, f-8 @ 1/250. No filter.$ 

The relative degree that texture miaht contribute to the photograph varies as well. In some cases the image would fail to entice the viewer if not for the illusion of surface texture. This type of image may be somewhat weak in overall subject content, but captures the imagination by presenting the object in a way that is uncommon or seldom considered.

The image on the left is characteristic of a somewhat bland subject that is given new life when you explore the surface. Notice how the weathered wood appears smooth and glossy, yet your eves might deliberately avoid the sharp protrusions that suggest a sliver might be waiting for your hand to skim over the wood! In this image, the limited depth of subject matter would be much less interesting if not for revealing the quality of the material.

Texture is abundant in nature, being found in almost every tree trunk and snow bank. It is

possible to walk past the commonplace subject a hundred times and never notice that an intricate shape or detail can be found and emphasized with the camera. Closer inspection might reveal a hidden texture, which now gives new meaning to that familiar object. Careful composition, waiting for the appropriate light, and selecting the best point of view can turn what appears to be mundane into a "masterpiece."

### Examples

Ask yourself how the following surfaces might be photographed in order to best reveal the surface texture:

- Windows with flaking paint.
- Weathered wood.

- Rusting metal on an old railroad car.
- ✤ A cobblestone street.
- Skin.



This nameplate identifies the type of surface used to create the pseudo-cobblestone streets found in Grand Forks, North Dakota in the early Twentieth Century. Although the pattern might suggest texture, the flat lighting instead only illustrates the difference in materials. The sheen on the brass nameplate suggests a smooth surface that contrasts the granite chips imbedded in concrete. Plus-X film, f-5.6 @ 1/125 second. No filter was used.

# Using Tone

As an image element, tone (like texture) compliments or enhances the subject but does not overwhelm it. Tone is used to describe the relative darkness of lightness of the image, and as such tends to suggest emotions related to those values. When combined with high or low contrast, dark or light tone can shift the mood of the photograph from depressing to malevolent, from whimsy to psychotic. Using both in degrees can add a great deal to the overall impression of the subject.

The following images are presented as examples of using tone effectively to enhance the subject by adding mood. Evaluate each based on the relative merits of the subject matter itself, then decide if the overall tone improves or detracts from the message within the photograph.



#### Die Rich Garage

The sign above the door might be difficult to read in this format, but in a larger image clearly states the apparent result of operating a garage in rural North Dakota. Printed to a somewhat higher value than normal, the detail in the shadow areas remains strong. Plus – X film f-16@ 1/125 second. A light yellow (no. 8) filter.

Would the above image be improved by printing darker, or to a greater contrast? What would the effect of this printing be? Compare the image above (a fine print) to that on the right to evaluate the effects of tone.

For purposes of definition, an image that relies on the higher tone values of light gray and white is referred to as a **High Key** image. High key images tend to reflect moods that are light and humorous. When printed to a high contrast, high key images can be edgy and stark.



Contrast effects the nuance of tone, and can shift the mood in unusual directions. Depending on the subject matter and composition, increasing the contrast might enhance a somewhat dark or **Low Key** image.



Notice how dramatically the effects of contrast change the mood of the image in relationship to the snow and climate. In this example, printing the snow down to a lower value while retaining contrast in the shadows and preserving the shape of the rake helps refine the mood. It shifts from dreary and soft to hard-edged and cold – a survivor.



Hay Rake – Winter Taken with a strong back lighting, the shape of the rake is placed against the snow, yet still casts a strong shadow. Plus-X film, f-8 @ 1/1250 second, Orange filter.

Overcast days tend to shift our human moods to a more somber tone. The same is true for photographs taken under a cloudy sky, as they tend to lack life and suggest remorse or sorrow. Rain, snow, and fog also add to this effect, and can be printed as either high key or low key images. When combined with the right subject, the effect is almost immediate and uniform, and can create powerful, dramatic images.

Use the following guidelines for creating High Key and Low Key images:

- Low key images favor overcast skies.
- High key images favor hazy, sunny skies.
- Rain and fog can add mystery or melancholy to an image.
- Snow fall can add warmth to low key winter scenes.
- High key images should be slightly overexposed to retain detail in the high values.
- Low key images can be created in the darkroom more effectively than in the camera.
- Bracket your exposures for both low and high key images.



#### Off the Tracks

Made on an overcast day, this somewhat broken door reflects the overall condition of the surrounding property. The low key image is somber, yet not altogether sad in its revelation of the structure's demise. Plus – X film, f-8 @  $1/60^{th}$  second. No filter.

#### Review Questions

- 1. What type of lighting best reveals texture?
- 2. Is it possible to have a somber, high-key image?
- 3. What role does contrast play in describing high and low key images?
- 4. What effect does strong, directional lighting have on textured surfaces?

#### Photographic Assignment

Expose a 24 exposure roll of black and white film illustrating texture and tone using the methods in this chapter. Remember that neither texture or tone should overwhelm the subject, but only enhance it. Process the film and make a correctly exposed contact sheet. Select the single frame which most strongly illustrates the Picture Element of choice and make a correctly exposed 8 x 10 print. Submit for grading the contact sheet, 8 x 10 print, and negatives in protective sleeves together inside a craft paper folder with your name on the outside cover.

# Part Two – Chapter Ten: Point of View & Perspective

### Introduction

Two of the most important qualities of the 35mm SLR camera include the ability to use lenses of varying focal lengths and its ease of mobility. Because the focal length of the lens determines the angle of view or "breadth" of the scene captured by the film, the image composition can be changed drastically by selecting the appropriate lens. In a similar fashion, because the camera can easily be moved in relationship to the subject, doing so can alter relationships between the various image elements and enhance the visual strength of the composition. Mobility and lens selection are responsible for the Image Elements <u>Point of View</u> and <u>Perspective</u>.

### Point of View

Unlike any other visual art tool, the camera is unique in its ability to see the world from a position other than a normal human perspective. It can crouch low to the ground and look up to objects that we might typically consider short. It reaches up and over the tallest objects and looks down to give them less majesty or importance. It accompanies the artist to any point or position imaginable, and from that **point of view** is



Winged Figures of the Republic – Hoover Dam

The Norwegian sculptor Oscar J. W. Hansen created the pair of winged figures to represent "the eternal vigilance which is the price of liberty." The low camera angle places the sculpture against the sky and rock and gives it a majestic tone. Tri-X film, f-8 @ 1/500, 24mm lens with a yellow filter.

able to capture both the common and uncommon in a way that is unique and new. There are several elements within photographs that suggest the point of view is no longer a "standard" or from a typical standing position looking straight ahead:

- Moving the horizon offcenter. If you examine the typical snapshot taken outdoors, you'll notice that more often than not the horizon is placed near the center of the image. Moving the camera lower to the ground or taking it higher allows you to move the horizon in relationship to the subject.
- Stacking. We understand that a person's head is placed on their shoulders, and that the arms are above the leas. This order also applies all common to objects, and is what we expect to see when photographed from а standard point of view. Altering that natural state by

moving the camera creates a visual puzzle that the viewer must analyze in order to understand.

Parallel lines. When railroad tracks are viewed from a standard point of view, they disappear into the horizon appearing much narrower than when at your feet. This illusion of receding lines gives the impression of depth. When parallel lines recede into the sky or ground, you are given the unmistakable impression that the camera is looking up or down.

#### Camera Angle and Composition

Altering the point of view allows the photographer to select a more appropriate background for the subject. In most cases, a lower camera angle allows the sky to become more prominent in the scene, and can frame the subject with a neutral background. A higher camera angle provides an even greater number of opportunities by utilizing the ground surface as a source of texture for the background that may not be emphasized when a standard point of view is taken. Both high and low camera angles allow the photographer to crop unnecessary information from the scene by placing it below or above the frame lines.



#### Popcorn Buffet

This point of view was chosen to place the subject against the carpet background and to illustrate the action within the scene. Note how the subject's facial expression suggests the camera is above, and that he is looking upwards. It would be difficult to illustrate that the spilled popcorn was being enjoyed on the carpet from any other point of view. P3200 film, f-8 @ 1/250, 35mm lens with no filter.

Viewing a subject from a standard angle of view is the one most seen by others. In general, when some object or scene catches your eye, you're probably seeing it in the same way that it has been seen by many others. Capturing the image using that same point of view may result in a great photograph. but it may also result in a cliché that's been produced time time and again. Realizing that the subject has merit is the first step in creating a good image. But exploring the subiect requires that you consider the uncommon point of view means to as а say something new and visually dramatic.

Consider using the following process when exploring the subject to obtain the strongest composition:

- 1. Move in close to the subject so as to reduce the amount of unrelated information in your evaluation.
- 2. Begin with a standard point of view that takes into consideration the direction of the light falling on the subject.

- Crouch down low with the camera and frame the subject against the sky if possible. Move around the subject as much as the lighting will allow, and consider what position provides the most neutral background.
- 4. Raise the camera to a higher point of view by standing on a chair or using a step ladder when practical. If some other safe surface is near by that allows you to look down on the subject, do so but first ascertain that it can support you safely.
- Pre focus the camera, then lift it above your head or place it close to the ground when making the exposure. Although the framing may not be precise, unneeded detail can be cropped during printing.

### Perspective and Lens Selection

Choosing the best lens for each subject depends in part on the relationships between subject components. We tend to select a wide angle lens if we want to capture a great vista or scenic expanse. A telephoto or "long" lens is chosen when we want to capture a distant object that would disappear into the background if using a normal lens. Normal lenses are often used when there is no particular reason to choose another. For image composition, the characteristics of wide, telephoto, and normal lenses are more carefully directed at how they manage the subject in terms of visual balance and strength.

The following compositional traits are considered strengths for each lens type listed:



This photograph was taken at snow level to place the sundial in close proximity to the building mass. The goal was to balance the image "weights" while including some of the winter sky. Plus-X film, f-8 @ 1/125, yellow filter.



Mower

Using a 24mm lens brought the camera close to the subject and "stretch" it across the frame. Plus-X film, f-11 @ 1/60, orange filter.



- Wide angle lenses (15mm to 35mm in focal length) tend to exaggerate distance and stretch the subject. It can be used in close proximity to the subject as a means to emphasize a certain portion of the object while the remaining elements recede away. Wide angle lenses have a tremendous depth of field, and as such do not allow the effective use of selective focus to emphasize the subject. Instead, the photographer must carefully frame the image in order to reduce the amount of unwanted image clutter.
- Normal lenses (40mm to 70mm) provide a perspective of distance which most resembles that of the human eye. Although the angle of view is significantly less than the eye, the relationships between near and far subjects is not exaggerated and as a result does not draw attention to close or distant objects specifically.
- Telephoto or "long" lenses (75mm and greater) tend to compress distances and keep like sized subjects equal in stature although they may be some distance apart. This effect is referred to as "flattening" the image, or removing the sense of depth. This can be very effective when the photographer is attempting to make the subject elements nest together, exaggerating the two dimensional quality of the image.

Zoom lenses come in various ranges and are typically categorized by their relationship to the wide, normal, or telephoto fixed lenses. A 17 to 35mm zoom would be considered an extreme wide angle zoom, where as a 75 to 200mm would be considered a "short telephoto" zoom. Zoom lenses are invaluable for compositions that require a focal length that is between fixed lens selections. Zoom lenses also make less equipment necessary since each zoom lens takes the place of several fixed – focal length lenses.



Grain Market

I used a 40mm lens for this photograph in order to retain most of the distance scale without exaggerating the size of any single component. The grain cars and elevator remain reasonable in comparison, yet the tracks still recede into the distance giving a sense of depth. Plus – X film, f-11 @ 1/125 with a yellow filter.

Perspective allows the photographer to lend meaning to the image based upon the personal understanding each of us has for graphic relationships. Many viewers will not immediately notice the image characteristics of wide. normal. and telephoto lenses. but most will observe the relationships between the image components based on the relative size of each within the frame. This tool, like selective focus other and composition standards. structures the image into a meaningful whole that creates the strongest way of seeing the subject.

The most effective way of

comparing how various focal lengths can effect the composition is to explore the subject with a zoom lens. When combined with variations in point of view, the average subject of interest can consume several rolls of film before the photographer has exhausted all the possible combinations of focal length and camera position.

### Review Questions

- 1. What are the compositional characteristics of the various focal lengths?
- 2. When should you use a tripod to capture the image?
- 3. How does the camera position effect the meaning of the subject?

### Photographic Assignment

Expose a 24 exposure roll of black and white film illustrating perspective and point of view using the methods in this chapter. If you have only one lens, use point of view only. Select the single frame which most strongly illustrates the Picture Element of choice and make a correctly exposed 8 x 10 print. Submit for grading the contact sheet, 8 x 10 print, and negatives in protective sleeves together inside a craft paper folder with your name on the outside cover.

# Part Two – Chapter Eleven: Compositional Relationships

#### Introduction

As an **Image Element**, Compositional Relationships refers to the "bond" that exists between the various objects within the borders of a photograph. Describing compositional relationships using words can be a lesson in abstract thought, since some of the concepts are not directly linked to a concrete substance. Just like the word "beauty" is not attached to some real object, compositional relationships are not attached to a simple set of rules that describe its use. As a result, the application of this Image Element requires a subjective interpretation by the photographer that in reality becomes more intuitive with practice.

#### **Compositional Standards**

The various types of compositional relationships are numerous and as varied as the number of individual photographers who use them. Each of us has a preferred or distinct way of seeing which is reflected in the style of images we produce, although there may be a number of traits within the various styles that are comparable or similar to each other. Compositional Standards attempt to describe a few of the common traits that can be identified within the photograph as having a direct impact on the visual strength of the image and include the following:

- ✤ Rule of Thirds
- ✤ Framing
- Dynamic Balance
- Frame Rotation
- Pattern
- Cropping

Applying any of the standards to a composition should be the reverse process of that described above, where the general rule should be tailored to the individual's style. With that consideration, use each of the following standards as a basis to assist in determining your individual way of seeing the subject.

#### Rule of Thirds

Just as the frustrated chef might think to add catsup to a failing recipe, the frustrated photographer might apply the "Rule of Thirds" to a poor image Since the earliest days of describing visual art, <sup>15</sup> the process of placing the subject to one side of both the vertical and horizontal centers of the image has been noted as a way to strengthen the composition. Unfortunately, it is also a means to lend visual interest to a subject lacking any redeeming quality. But when used to support an already strong subject, the rule of thirds can create a powerful and dynamic image.



Using the rule of thirds to its greatest

advantage usually requires that the subject being placed in one of the intersections have a strong



The Commons No. 2

By itself, the old structure is one of countless many on the prairie which are slowly being consumed by the land. When placed in the context of the sky and surroundings the building assumed a unique identity suggested by the swirled clouds, fence line, and rolling hills. Plus-X film, f16 @  $1/60^{th}$  second, 25A (red) filter using a 24mm wide angle lens.

connection to the other subject matter filing the remaining two thirds of the frame. Environmental portraits, found still life, and street photography are good examples of photographs which can benefit from using the rule of thirds. For each category, the subject is usually strong by itself, but is better defined when additional information can be included within the frame.

As a practical application, consider the image to the left, "The Commons No. 2." The old structure was first noticed while driving past it during the last few hours of daylight on a bright summer day. Like many others, the building gives testimony to the exodus of people from a hard land which gave up few riches. The idea of a "silent sentinel" might come to mind, and it may force the individual to consider the subject as a witness to the changing seasons and broad sky.

With the above considerations, several camera positions were considered that placed the building in the best relationship with the rolling hills, extraordinary sky, and the prairie road and fence which leads to the subject. The final composition required the camera to be on a tall tripod in order to place the horizon slightly lower

in the frame. A moderately wide angle lens was used which somewhat exaggerates the size of the fence, but allows the prairie road to recede to a greater degree, giving more depth to the image. Because the clouds where so suggestive and painterly, A deep red filter was used to lower the value of the blue sky as much as possible.

### Framing

Like the rule of thirds, framing can become a photographic cliché when used inappropriately or as a means to improve a weak subject. But it also has the ability to strengthen and enhance an already vibrant subject by encircling or "framing" it with other subject matter <u>that is part of the photographic theme</u>. Just as a picture frame defines two dimensional artwork when placed on a wall, framing within the image helps define the subject within the overall context of the subject matter. Use the following guidelines when using framing techniques:

- The subject matter used to frame the principle subject should be of lesser importance, but must also contribute in some way to the overall message within the photograph.
- Subject matter that is outside of the frame should be kept to an absolute minimum unless it adds to the subject directly.
- When appropriate, combine framing with other image elements to strengthen the composition.

A somewhat common rural cemetery (right) was photographed on a cloudy day which completely removed the shadows from under the trees, but enveloped the fence and grave stones with a soft light that brought out all the wonderful detail. An entire roll of Tri\_X film was used under similar lighting conditions, allowing the entire roll to be underexposed by one stop and overdeveloped by about 50% to increase the contrast and improve the print quality.

To compose the image, several frames were exposed from various angles, but none appeared to work until the camera was set up on a tripod in the box of a truck. From that elevated vantage point, the end of the roadway between the gate and arch of the ornamental entrance were framed. Both 35mm and 85mm lenses on the setup were used, but the 85mm lens cut the tree tops away and left the image somewhat lacking in total meaning.

This image has been printed in several ways, with varying levels of contrast. A grade 3 paper seems to work best, burning in the upper half of the image lightly to better emphasize the tree



Lutheran Cemetery The vertical reaching trees and converging wheel ruts seemed to suggest "ascension". Tri-X, f8 @ 1/500. No filter on a 35mm lens.

detail. A card with a small opening is used to lightly burn the letter "N" on the center of the arch, separating it from the sky.



The image on the left was first composed in the rear view mirror of an automobile touring the Sheyene River Valley in eastern North Dakota. The abandoned farm building on the right was noticed along with the bridge prior to crossing, but neither seemed interesting by itself. Once seen together, a stronger composition emerged.

Composing the image reflected the combination of several image elements, including the Rule of Thirds & Framing. The roadway itself seems to carry your eyes through the image, where they pause within the bridge opening and rest upon the wooden structure. For cropping, a much

Country Bridge A quiet view along a meandering gravel road near the Sheyenne (sic) river in North Dakota. Plus-X film, f-16 a 1/30 . Deep yellow filter, 35mm lens.

wider lens (24mm) was used at first, but couldn't reconcile the addition of more trees and shrubs that were already a significant part of the image.

#### Dynamic Balance

Of the compositional standards explained in this chapter, Dynamic Balance is probably the most difficult to define with text since it deals with graphic elements that speak directly to our eyes. With that consideration, the following explanation is a weakened but best attempt to describe how the mass, tone, and arrangement of graphic elements can be balanced within the photograph to create a harmony of elements.



Curvature Taken during winter, I placed the edge of the tank against the weak sky, then brought the blue values down with a filter. Plus-X, f8 @ 1/125, orange filter on a 28mm lens.

The image on the left was discovered while exploring the various shapes and tones near a railroad grain terminal. Interest in the image was first piqued by the repetitive texture of the fasteners that appear in a regular order around the tank, and the symmetrical ridges in the roof. The winter sun was very strong and low in the sky, creating strong contrast on the surfaces of the tank and emphasizing the texture of the shiny steel.

Illustrating the textural qualities seemed best accomplished by comparing them with the neutral body of the sky. A variety of camera positions were considered, with one using a near vertical position was

used. The composition was balanced by limiting the amount of relative dark tones, accomplished by moving around the tank until the highlights and dark values balanced with the middle tone of the sky. Overall, the shadow values seem to have a greater visual weight than the remaining tones, resulting in those values being limited to approximately one third.

The image on the left is best described as a "<u>found still life</u>", where the composition is created by others who have placed the various objects in the positions they appear, allowing only the camera angle and camera position to manage and create a successful arrangement.

The winter light was very diffuse, with the resulting variation in tone stemming from



the various objects alone, with no assistance from the sun to create any meaningful shape or shadow. As a

result, the composition was relatively easy to balance using the darker shapes as anchor points within the image. The open window, boarded doorway, and pitchfork provide three declining areas of dark mass that are distributed evenly around the image. The snow and walls of the building provide the high key balance that makes the image viewable. Printing this image requires patience and careful exposure in order to ensure the snow values do not become an empty gray while retaining the almost obsidian black within the confines of the building itself. The Tri-X film used was underexposed by two stops, and then overdeveloped by about fifty percent using an aggressive developer that created the high contrast and sharp but grainy image.

### Frame Rotation

When presented with a two dimensional work of art in either a square or rectangular frame, viewers tend to automatically view the image by assuming the frame, not the image, should be right and level with the world. As a consequence, when the viewer identifies a subject within the frame that is assumed to be level but is presented otherwise, it adds tension to the image. The rotation can be subtle or severe, and should be applied to any subject we normally associate with being "square" with the world. The connotation derived from the rotation is varied, but for a few common subjects the results often fit two categories:

- 1. Stationary objects such as buildings tend to become abstract, where the viewer considers the subject as something other than a building. When presented as a low key image with dramatic lighting, buildings, trees, and other stationary objects can appear menacing.
- 2. Movable objects such as cars, trains, and people tend to appear in motion or have a sense of energy when rotated. As with stationary objects, if low-key lighting is used, they can appear menacing or ominous to the viewer.

For the image of the grain storage tanks on the right, the camera was rotated to make the top edge of the tanks parallel to the camera frame edge. Because the camera position was such that the tanks should be receding away, the rotation removes that impression and now suggests the tanks are somehow full of energy as if ready to leap.

Creating this type of image is a form of exploration. The bright white tanks seem to glow from within when the setting summer sun illuminates them with a strong, directional light. The image was pre-visualized as having a nearly black sky to



The tanks are painted a bright white, and seem to glow in the setting sun. I used a filter to darken the sky to black. Plus-X, f5.6 @ 1/125, a 25a (deep red) filter was used on a 28mm lens.

help define the shapes and lend dynamic balance to the scene. To accomplish this, a very dark red filter was used which virtually eliminates blue. When the filter is used at sunset, when the cloudless sky turns a dark blue, it renders the sky black. Because the filter is so strong, it typically takes two or three stops of additional light for a correct exposure.



A number of image elements working together. Tri-X film, F 2.0 at 1/400, no filter using a 85mm lens.

The image on the left rotates the subject within the frame of a mirror. Although several image elements are at work, including Dynamic Balance, Rule of Thirds, and Framing, Frame Rotation seems to be the strongest factor. What other image elements are at work?

This image was created as a means to illustrate emotions. By shooting into a mirror, a slightly soft framing effect was made possible by using the lens at the maximum aperture opening. The additional image behind the subject was created by the beveled edges of the mirror, and not from a double exposure.

The dramatic lighting adds a degree of suspense to the image, suggesting something is going to happen or has taken place. Using the window as a light source softens the surrounding room while allowing the subject (specifically the mask) to retain form as a result of the directional light source.

Although the image might appear dark and sinister, it also has the ability to suggest anxiety, fear, uncertainty, or other feelings of

vulnerability. Regardless of interpretation, the strength of the composition emphasizes a strong emotion within the subject.

#### Pattern

Just as we can find the pattern of an older tree within every new leaf, so can you find pattern within almost any texture or shape. To use pattern effectively, it must be very strong within the composition and used as though the message within the pattern is the main focus of the image.

The photograph on the right was made in the depth of winter when the sun's highest arc barely cleared the surrounding trees. Because the winter sky is very weak, the shadows are extraordinarily strong and require careful exposure to reduce any loss of detail in those areas. Outside of the high contrast, the somewhat flat lighting was perfect for illustrating the shapes of the various gears and the resulting pattern it creates.

At first glance, the array of wheels and chains might make it seem difficult to imagine how they could possibly work



A simple close up of the gears and chains which run the ancient machine. Plus-X, F5.6 @ 1/500, no filter on a 105mm lens.

together to make something function. The entire contraption appeared to be "an accident waiting to happen" at any moment should some inattentive farmer allow his arm or hand to stray too close to the whirling "gizmos." A photograph of the gears might create a sense of order and harmony, and suggest a more logical organization of the iron parts.

Regardless of the outcome, the image is both quaint and compelling at the same time. The image is organized so that the most interesting cluster was placed using the rule of thirds, and then cropped with the lens to remove any unnecessary detail. The print requires a somewhat soft paper (grade 1.5) in order to preserve the shadow detail, and must be exposed carefully so that the sheet metal behind the gears does not become a lifeless gray.



 $\label{eq:off-the-tracks-like} Off the Tracks II \\ \mbox{Although weathered and old, the door still seems to be worth fixing.} \\ \mbox{Plus-X film, F5.6 @ 1/250, no filter used on a 70mm lens.} \\$ 

The pattern within the image on the left is substantially more quiet and reserved than the previous example. The wood slats are weathered and smooth, adding to the tactile quality of the image while creating a wealth of deep grain. The door appears to be whole, and could possibly work once more if placed back on the tracks above it.

The repetitive nature of the wood slats, both on the door and the wall behind, might suggest a certain order and harmony that is relaxing to the eyes. The viewer might imagine the care and effort that went into creating the door from simple boards a long time ago, and suspect that craftsmanship contributes to its condition today. It is reminiscent of a sturdy boat that ran aground and was abandoned, but would sail again if only it could reach the sea.

The lighting for this image came from an overcast winter sky that created few strong shadows. Instead, the natural tone of the weathered wood gave contrast to the subject, which

was flat and smooth and less likely to reveal any texture or form. Because the low contrast lighting rendered the image flat as well, the film was underexposed by one stop, and overdeveloped by twenty five percent. This procedure increased the contrast of the image on film, making it easier to print on a grade three paper.

#### Cropping

Although not an obvious image element, cropping is responsible for the success of more images than any other component. Each image reproduced for this text book was cropped in some way during the image making process. Either a lens of sufficient focal length was used to reduce or expand the subject field, or

careful placement of the camera was made to ensure only contributing subject matter was included within the viewfinder. Cropping is a process that must be practiced within the camera in order to be effective. Although it is possible to trim away excess detail in the darkroom, you cannot add necessary detail or somehow recreate the effects of different camera lenses by doing so. As such, cropping becomes a key component for <u>Previsualization</u>, a concept discussed in the following chapter.

As we compose an image within the camera's viewfinder, we see the subject in color and three dimensions. Our eyes convey this information with a bias, since we know and assume that the world has color and form. But since we cannot share that ability with black and white film, we must learn to imagine the final result. Seeing the world as the camera and film do is referred to as Previsualization. Ansel Adams, the noted landscape photographer, coined the word "Previsualization" when he developed a system of tonal value control called the Zone System. Mr. Adams suggested that learning how to imagine the final print while looking through the viewfinder was critical to successful composition since only then could the photographer truly understand how to frame, arrange, and expose the subject to its full advantage.

Cropping within the camera becomes important to Previsualization since it determines the borders of the image and defines the subject matter, and because it places on the film the minimum required information and subsequently maximizes the image space for quality. As an example of this, consider the difference in grain between an image produced from the entire 35mm frame and one created by enlarging to a degree that only a small portion of the film was used. Although a print of the same size would be created, the relative amount of information on the negative would be much less than if the entire frame was used.

In summary, crop the image using the camera as much as possible. Be confident that what you are removing is unnecessary and if included would detract from the message. Spend a few extra moments exploring within the viewfinder to gain a sense of what the final print will be, and ask yourself about every component within the image: "Does this item help or hurt the composition?"

### **Review Questions**

- 1. What rules should we apply for using the compositional standards?
- 2. How does Framing and Frame Rotation work together?
- 3. Dynamic balance refers to "weight" within the image. How do we describe "weight" graphically?
- 4. What emotion or mood does pattern convey? What about Frame Rotation?
- 5. How do image elements work together within a single image?

#### Photographic Assignment

Expose a 24 exposure roll of black and white film illustrating any three of the compositional standards. Each image should concentrate on one particular standard, with the entire roll revealing three standards, each on its own. Select the single frame which most strongly illustrates the best use of a compositional standard and make a correctly exposed  $8 \times 10$  print. Submit for grading the contact sheet,  $8 \times 10$  print, and negatives in protective sleeves together inside a craft paper folder with your name on the outside cover.

# Part Two – Chapter Twelve: Pre-visualization

### Introduction

Effective use of the **Image Elements** described in previous chapters requires the development of techniques which allow us to imagine the three dimensional scene within the viewfinder as a black and white photograph. From experience in practicing the use of Image Elements we understand how shape, form, texture, pattern, point of view, perspective, and the Compositional Standards result in better photographs once they emerge from the developer. Being able to visualize those results prior to exposure is referred to as Pre-visualization, and allows the photographer to make fine adjustments in the composition and exposure that separate a good print from a great print.

#### Shades of Gray

Color has an enormous impact on our interpretation of the world. We are directed through traffic by the green, yellow, and red lights which control intersections, and as a result attribute certain emotions to each color based on experiences. How is a red sports car different from the same make and model when painted yellow? Do autumn leaves elicit a different mood than when previously displayed in vibrant green? Replacing strong colors with shades of gray removes those preconceptions, and as a result the black and white photograph fails to convey the color message within the original scene.

Because of its visual strength, colors may be what attracts our eye to a particular subject of scene. At the same time it is a distraction to those graphic elements of shape and form which rely not on color but instead on the direction and quality of light. Learning to minimize the effect color has on our photographic vision is one of the first steps in pre-visualization, and can be accomplished with several techniques:

- Brightness. Because our ability to perceive color is greatly diminished in dim lighting, reducing the scene brightness reveals the subject in levels of tone. This can be accomplished by wearing dark glasses, or even more effectively by squinting.
- Monochromatic filters. Viewing the scene through a No. 90 (dark grayish amber) filter renders the scene in the approximate values of the final print. Note that the eyes quickly adjust to the trick, so use the filter intermittently, a few seconds at a time.
- Polaroid prints. Large format photographers use Polaroid instant print film to preview their images in black and white. Available in a variety of formats and sizes, the film is exposed using a special holder that also process the film once it is removed from the camera.



<u>Pre-visualization Exercise No. 1:</u> Set up a simple still life using a variety of colored objects including red and green. Using either dark glasses or squinting, evaluate the still life for tonal range. Which color (green or red) seems to be dark or light? Which areas appear to be in shadows, whereas which appear to create the strongest high values?

#### Red - Green - Blue

As the previous exercise may have revealed, contrasting colors may appear as the same shade of gray within a black and white print. Just as selecting a large aperture opening can isolate the subject from a outof-focus background, so can the use of colored filters separate colored objects. Learning how to recognize and distinguish between contrasting colors within a scene, and subsequently select the appropriate filter to separate them is an important tool for pre-visualizing the black and white image.

Colored filters for black and white photography work on the principle that objects which are the same color as the filter are rendered lighter in the print, and objects of the opposite color are rendered darker. The three primary colors of the spectrum are red, green, and blue. A filter of any primary color would render the other two primary colors darker in a black and white print, and would render an object which is the combination of the two other colors the darkest.



In the color wheel above, the primary colors are in **BOLD**. When placing a colored filter on the front of the camera lens, the color opposite the filter on the color wheel would be rendered the darkest, while those nearest the color of the filter would be changed the least. As an example, if using a blue filter, yellow objects would be dark, green and red somewhat darker, and cyan or magenta objects made slightly brighter. Blue objects would be rendered much lighter.

<u>Pre-visualization</u> Exercise No. 2: Using the color wheel above, select a filter(s) which accomplishes the following tasks.

- 1. Render the sky darker. (Note: Is the sky always blue?)
- 2. Lighten the tone of an apple.
- 3. Lighten the tone of tree foliage while rendering the sky darker.

### Highlights and Shadows

"Expose for the shadows and develop for the highlights" is a phrase coined by photojournalists during an age when film was the primary media for news photography. The reasons for the rule are straightforward: because shadow areas represent the areas of least density on the film, any underexposure would result in a complete loss of detail. Similarly, since the high values created the densest area on the negative, development times should be modified in order to either raise or lower the maximum negative density so that it will print to a white with sufficient detail. Refer to Part One – Chapter Four for a detailed explanation of negative shadow and highlight values.

For pre-visualization, being able to identify which areas are to be rendered in low, mid-range, or high tonal values leads to the proper exposure and development times. In the now familiar image below, notice how the shadow areas and highlight areas have been assigned a numerical value based on the relative brightness each retains in the original scene.



Each numerical progression represents a scene value that is twice as bright as the previous, with all 9 of the values representing the range of brightness that black and white film is able to record with detail visible at both extremes. Zone 1 represents an area of true black that has little if any detail and should be kept to a very minimum within the print. Zone two represents an area which is black in the print, but has a limited

amount of detail present that suggests texture, form, or pattern is present. When we "expose for the shadows," Zone 2 is the area which determines the exposure. This is accomplished by moving in close to the subject and filling the viewfinder with the area we have determined should be rendered as a deep black with important detail. After the shutter speed and aperture are set for this value, reduce the exposure by using the aperture, shutter speed, or a combination of both by three stops. As an example, if your camera meter suggested an exposure of f5.6 and 1/60<sup>th</sup> second for zone two, the corrected exposure would be three stops less shutter speed (1/500<sup>th</sup> second,) or three stops smaller aperture (f16,) or perhaps a combination of both (f8 @ 1/250<sup>th</sup> second) to achieve an exposure which "falls" on Zone 5.

Once the correct exposure is determined, repeat the metering process by moving in close to the subject and read the values of the area chosen to be the brightest of the scene requiring a minimum of detail. For normal development times, that exposure should be three stops less than that determined above by measuring the shadow details. Using the same example, the optimum reading for normal development would be f11 @ 1/1000<sup>th</sup> of a second. If the meter reading for the high value chosen is either less or greater than three stops, use the following development adjustments:

- If the high value is only two stops greater than the exposure determined by measuring the shadow details, increase the development time by fifty percent.
- If the high value is four stops greater than the exposure determined by measuring the shadow details, decrease the development time by twenty five percent.
- NOTE: The entire roll of 35mm film must be developed for the same time, so you must evaluate the scenes in GENERAL for all exposures made on that roll. As an example, if entire roll is exposed on a day where the lighting generally remains the same, develop the film based on the average of your readings for the high values. If the film has been exposed over an extended period of time in which the lighting has varied considerably, develop the film normally.

<u>Pre-visualization Exercise No. 3:</u> Use your camera meter to read a variety of scenes in different lighting situations to determine how much variation there is in shadow values. Likewise do the same for reading the highlights, and consider the following:

- 1. Do the shadow areas vary greatly depending on time of day?
- 2. Are the highlight values lowered when the sky is overcast?
- 3. In general, do you find that printing from your negatives requires additional contrast in the darkroom, or less contrast?

#### Review Questions

- 1. How does developing for the highlight values improve the negative?
- 2. What are the primary colors?
- 3. What methods can we employ to better visualize a black and white print?

#### Assignment

Complete the various pre-visualization exercises, and determine for your own use and ability which methods of pre-visualization are the most useful for your photographic style.