(Art Notes Demonstration Outline for Wet Canvas Internet Tutorial, January 2011)

Painting with Color and Natural Light
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This month we will be learning about "Painting with Color and Natural Light". We will explore some of the key principles of using personal color choices and natural light together as strong and versatile design tools in our watercolor paintings. Although we will be applying these principles to landscape subjects, the principles are equally applicable to subjects of all types from animals, florals, and still lifes to portraits. Join us!

Why do color and natural light matter?

- Color may be one of the painter's strongest tools for personal interpretations of a subject and for conveying emotions or personal feelings about it;
- Light illuminates what we see and influences our perceived colors, values, emotions, and even our sense of wellness and comfort;
- Together, color and light model a subject matter's volume and solidity, while strongly affecting the mood and content of a painting.

Organization
The tutorial will be divided into two parts followed by a demonstration painting. Thereafter, you will have the opportunity to apply the principles in your own painting in the Homework Thread.

Objectives:

Part 1—Introduction and application of some key principles of color and natural light in painting.
Part 2—Introduction and application of some key components of illumination: 1) illuminated surfaces, 2) surfaces in shade and shadow, and 3) reflections, "light traps" and "halos".
Part 3—Painting with Color and Light: A demonstration painting employing these principles and components of using color and light in a painting.

Above All Else: Let's have fun and learn from one another.

Administrative Principles:

Color: To me, painting with color means the imaginative and personal use of a favorite palette of colors. If you are not already a colorist painter, I hope you will create a colorful palette of your choices and give it a try for this tutorial. It's a little like being back in kindergarten class where you can play and there are no "wrongs".

If it helps, here's a photo of my current palette of colors (American Journey and DaVinci paints, using a Skip Lawrence palette), which are as follows (see Fig. 1_1):

Figure 1_1

- **Lower row (L to R):** Hansa yellow, Indian yellow, Cad scarlet, Naples yellow, Peachy keen, Quin gold, Cad orange, Quin burnt orange, Quin rose, Cobalt violet

- **Upper row (L to R):** Ultramarine blue, Cobalt, Phathlo blue, Manganese blue, Andrew's turquoise, Phathlo green, Spring green, Payne's gray

Your Approach to Making a Painting: There are as many different approaches as there are painters. Regardless of your method, I urge you to develop your personal approach for this painting by first exploring composition and values with some thumbnail pencil sketches. Thereafter, develop your personal color scheme to express the feelings and emotions that you wish to convey about the subject. Vigorously execute your plan as you paint! Remember the 80-20 Rule: Make at least 80% of the painting about your idea!

Introduction to Color and Light in Painting — Lesson 1 Tutorial

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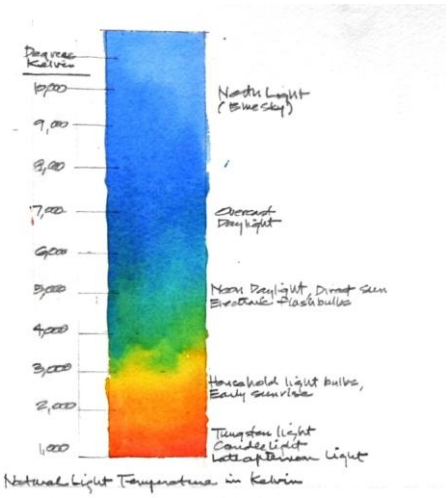
Key Principles for Seeing and Painting with Color and Natural Light

Color and Temperature of Light: Let's get cranking! Perhaps the most important principle for painting with color and natural light is to understand that light, indeed, has both color and temperature!

- **Physics and Painterly Effects:** The illustrations below show the color of light in degrees Kelvin (see Fig 1_2).

  Figure 1_2



- As you can see, natural light has many colors! Light can also be represented in a painterly manner to create different emotions and effects. I've illustrated some options for using color to represent different lighting effects, i.e., neutral mid-day, early morning, and late afternoon, plus atmospheric effects such as mist and fog (see Figs. 1_3 and 1_4).

Figure 1_3

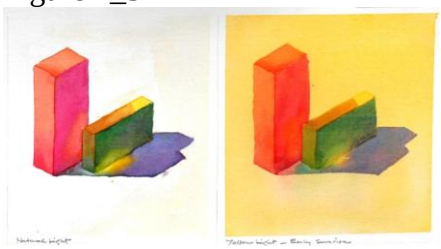


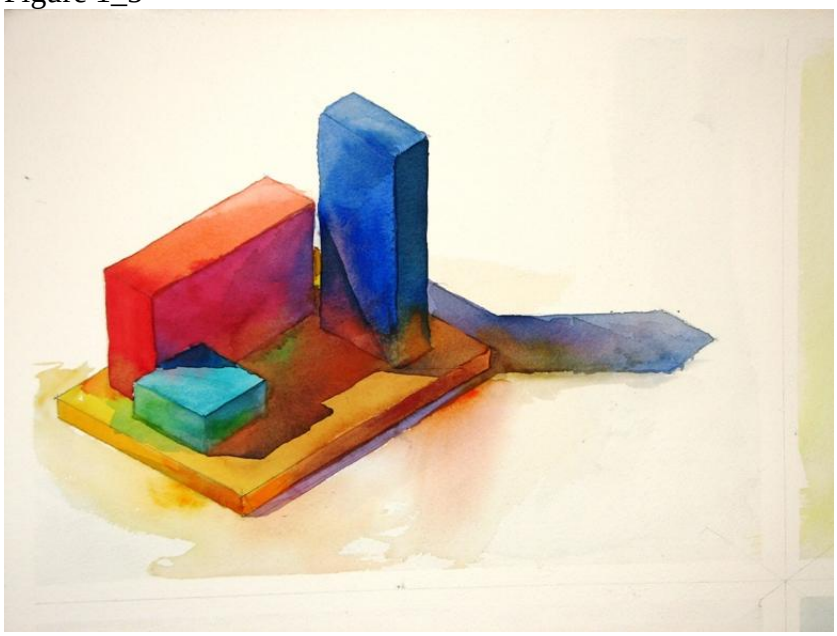
Figure 1_4

- **Importance:** While colors may be classified as either warm or cool, it really is the color of the prevailing light and reflected light in the environment that sets the perceived color and temperature of a subject and a painting. Even local value is affected by the color and intensity of the illuminating light and the surrounding environment.

Intensity of Light: A second important principle of light deals with the intensity of the ambient light. I've illustrated four options for intensity below: two ways to suggest strong illumination; a way to suggest weak illumination; and a way to suggest atmospheric effects.

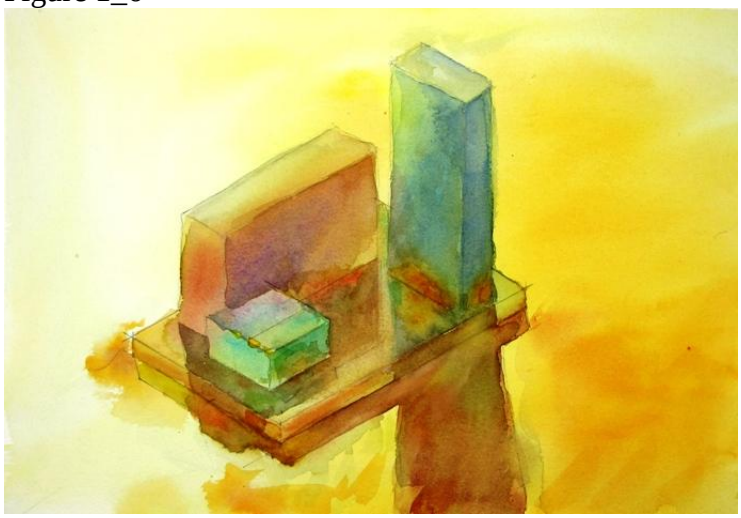
- **Strong illumination:** Strong illumination is generally characterized by a wide range of saturated warm colors on the illuminated surfaces, accompanied by cool accents and strong contrasting shadow areas; and a strong, full range of values. Strong illumination may be rendered in various ways. Here are two examples:
    - **Spotlight effect:** Characterized by wide and intense range of color and value contrasts. Be cautious that this approach does not place too much emphasis on isolated objects (see Fig 1_5).

Figure 1_5



- **Floodlight and/or "glare" effects:** In contrast to the extreme spotlight effects of intense color and value contrasts, strong illumination may also be represented by close value and color contrasts suggesting "glare". These conditions may be characterized by filtered light with softer or lost edges, together with close color and value contrasts (see Fig. 1_6).

Figure 1_6



- **Weak illumination:** Weaker illumination is caused by less warm light being present. Thus, weak illumination is characterized by employing a reduced range of cooler colors in the illuminated areas and cool accents and moderate to limited shadows depending upon the desired effect and strength of ambient illumination. In weak illumination, there are few strong contrasts in color or value. Shapes are flatter with less modeling and reduced detail/texture (see Figs 1_7 & 1_8).

Figure 1_7

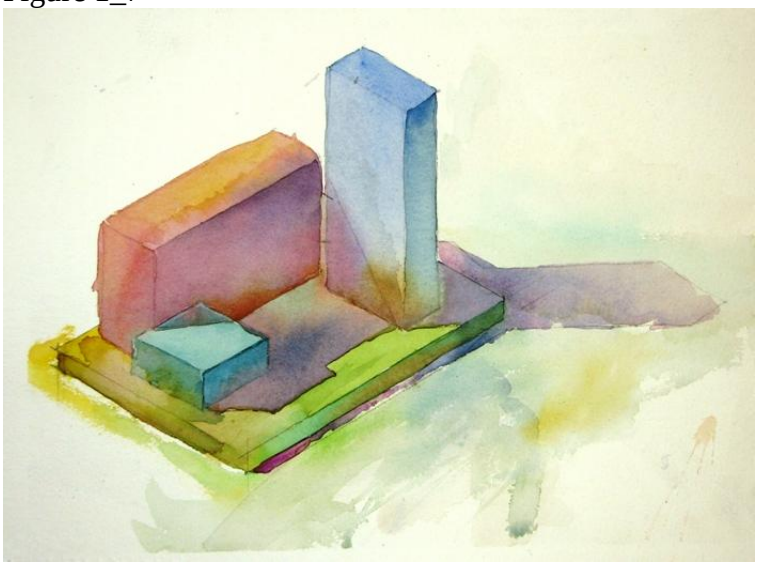
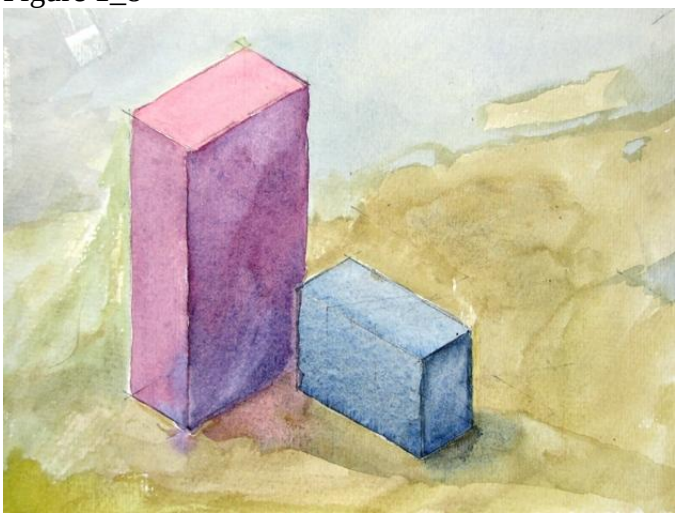


Figure 1_8



- **Atmospheric effects on illumination:** Rain, mist, and fog are typical atmospheric effects that create special lighting conditions. Compared to weak illumination, atmospheric lighting effects have even greater reductions in color and value range. These effects are characterized by greatly reduced contrast (primarily mid to light value ranges and muted, tinted cooler colors). Shapes are almost completely flat silhouettes, with virtually no modeling, detail or texture (see Figs. 1_9 & 1_10).

Figure 1_9

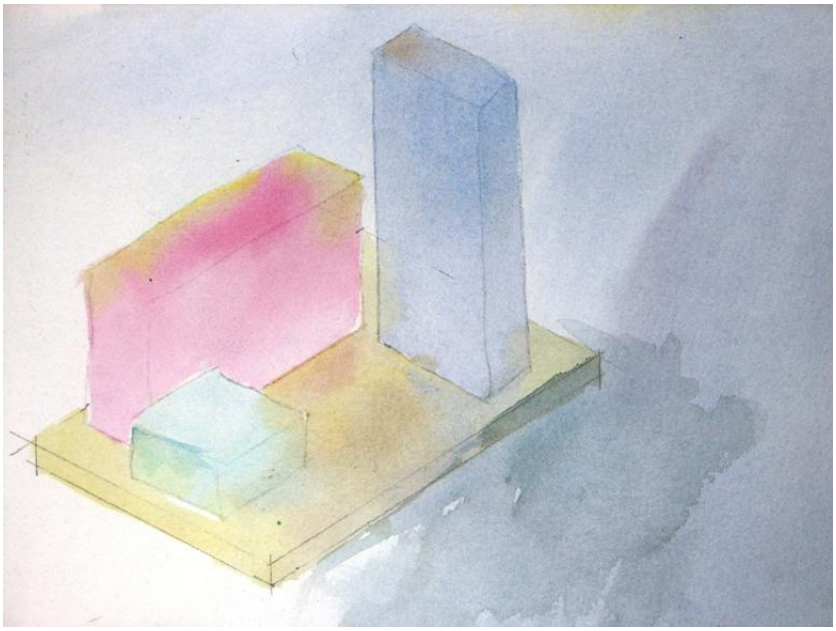
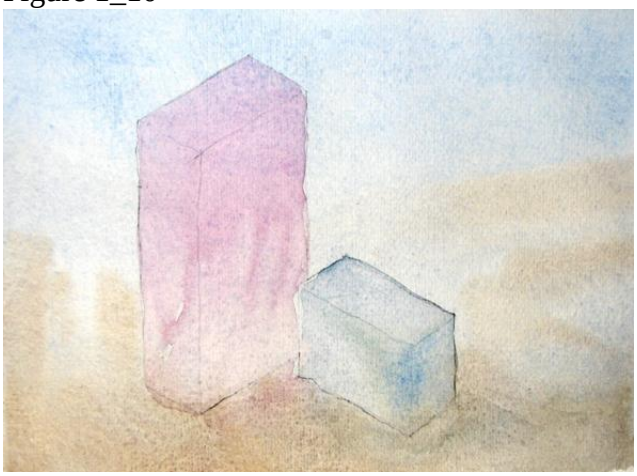


Figure 1_10



Effect on surfaces: In normal natural light, horizontal planes collect or reflect light and tend to appear lighter while vertical planes retain color and appear darker in color and value. This can lead to painting situations such as a black roof being lighter than a shaded wall!

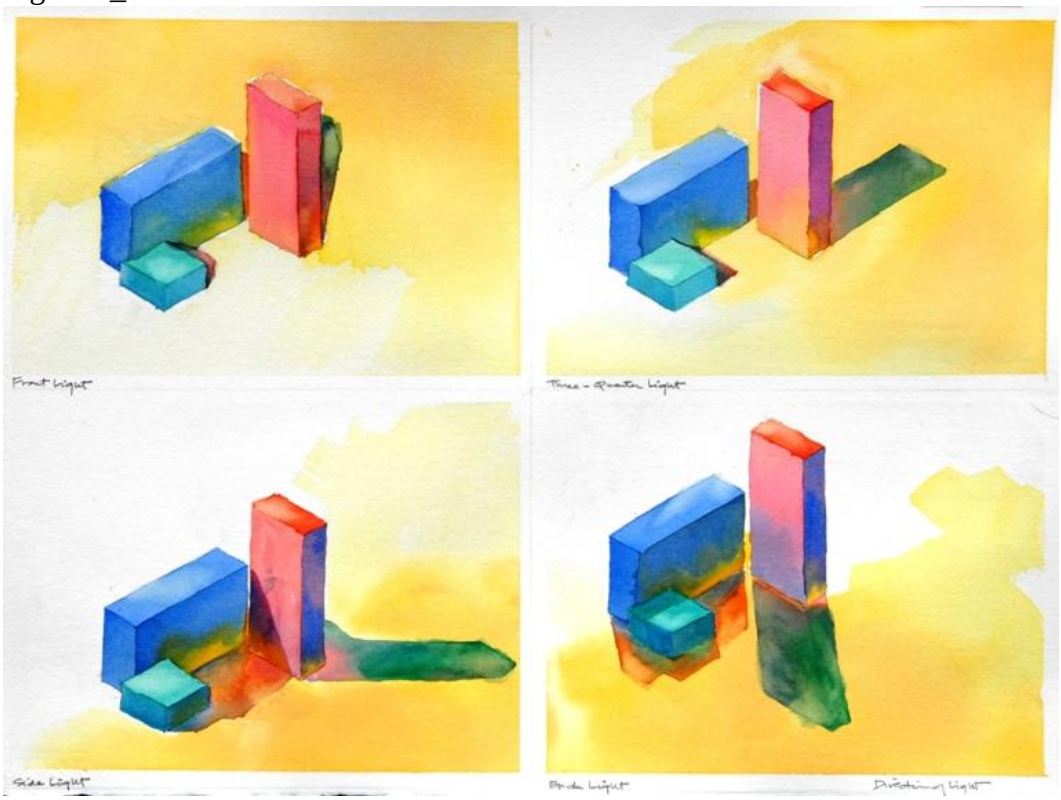
Direction of Lighting: A final principle important in painting with light is to understand the characteristics of the varying directions of lighting. The direction of the lighting affects modeling and definition of the subject and its setting, as well as the mood and atmosphere of the painting.

Four major directions for light to enter the painting are shown below: from the front, three-quarter, side, and back.

- **Front lighting:** Light coming directly from the front tends to reduce descriptive modeling to a minimum since most visible surfaces are equally illuminated and there is

little or no visible shadow. Rich, intense colors and values are possible (see Fig. 1_11, upper left).

Figure 1_11



- **Three-quarters lighting:** At an angle of approximately 45 degrees to the subject, light, shade, and shadow are all present in significant amounts. This improves the descriptive modeling of the subject and provides opportunities for rich color, values and contrast (see Fig. 1_11, upper right).

- **Side lighting:** Like three-quarters lighting, side lighting gives a strong feeling of solidity and three-dimensionality. Very dramatic cast shadows are often possible, creating opportunity for strong forms which may be very descriptive of the surfaces on which they fall. There is strong dramatic potential for design and composition purposes with side lighting (see Fig. 1_11, lower left).

- **Back lighting:** Light coming from behind the subject creates more of a silhouetted image. You can brighten and soften edges of shapes where appropriate to indicate the way light creates a "halo" or rim effect. This lighting is characterized by a narrow range of mid to dark values. Colors should be cool and muted. Depending on lighting intensity, forms may flatten and details become vague. The overall impression may be low-key, shadowy and cool, ambiguous, or even mysterious. This type of lighting has the potential for great dramatic design and composition purposes (see Fig. 1_11, lower right).

Practical Exercise: Before we get to Lesson Two of the Tutorial, why don't you use the illustrations from Tutorial 1 to help you paint some reference sheets showing these three key principles?

- **Color and temperature of light**
- **Intensity of light**
- **Direction of light**

If you print out this tutorial and paint your reference sheets about 8" X 10", you can make a useful 3-ring binder for future reference.

Introduction to Key Components of Natural Light — Lesson 2 Tutorial

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Illuminated Surfaces, Shade, Shadows, and Reflections
Let's start with some common definitions for these terms (see Fig. 2_1):

Figure 2_1

- **Illuminated surfaces:** The surfaces of an object that are lit by the available light source.

- **Shade:** The surfaces of an object that are away from and not illuminated by the light source. This also may be called the "form shadow" by some sources.

- **Shadows:** The shapes cast by an illuminated object upon adjacent forms and surfaces. Shadows are transformed by the shape of the form or surface where they appear. These may be called the cast shadows by some sources.

- **Reflections:** The reversed image, color, and value of an object that may be seen in adjacent forms and surfaces under favorable lighting conditions.

Some General Rules of Thumb

- **Composition:** Either the **i**lluminated areas or the shadow areas should dominate to maximize the effect of light in landscapes. When illuminated areas and shadow areas are approximately equal, the effect of lighting is reduced, and the risk of a "static" composition is increased.

- **Temperature:** In normal natural light, illuminated objects tend to be "warmer" and objects in shade and shadow tend to be "cooler".

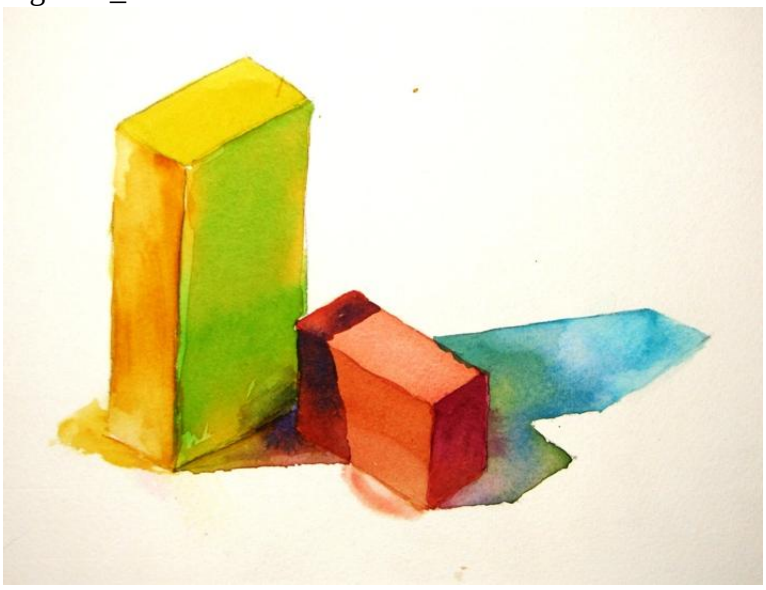
- **Intensity and value:** Shadows are a more intense color and darker value than shade.

Shape and intensity of Shadows

Now that we have a common vocabulary and a few simple rules to keep in mind, the first key principle of shadows is their shape and intensity. Shadows are influenced by both the intensity of the light source and the distance from the subject that is casting the shadow.

- **Intense or hard shadows:** Shadows closer to the light source and subject are more intense, warmer, and hard-edged (see Fig. 2_2).

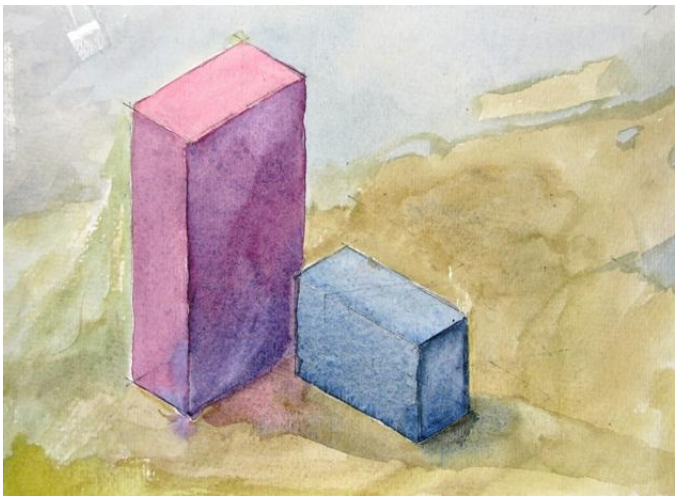
  Figure 2_2



- **Muted or soft shadows:** Shadows that are more distant from the light source and subject are less intense, cooler and softer edged (see Fig 2_2).

- **Little or no visible shadows:** Depending on ambient lighting, shadows may be reduced or not appear to be present in weak light and atmospheric conditions (see Fig. 2_3).

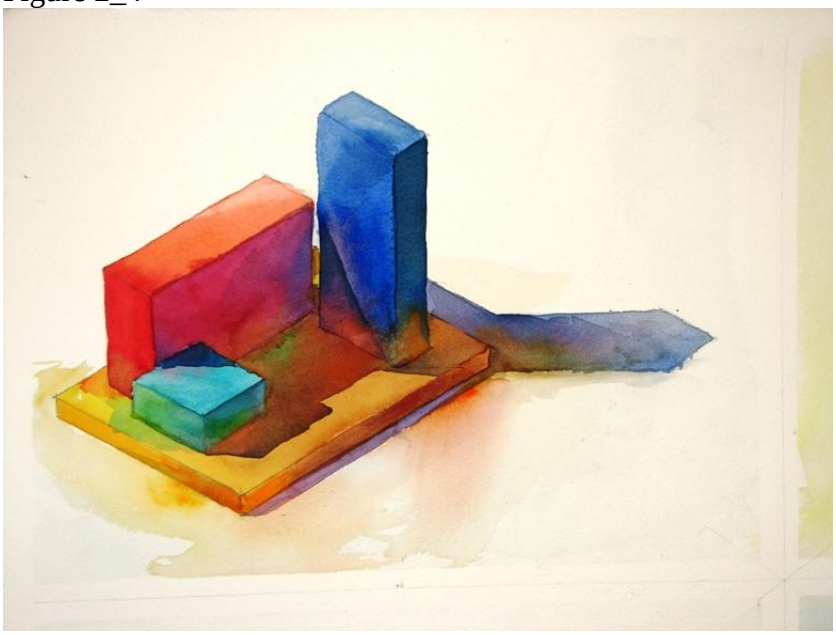
  Figure 2_3



The Color and Temperature of Shade and Shadows
The second key principle of shadows is their color and temperature:

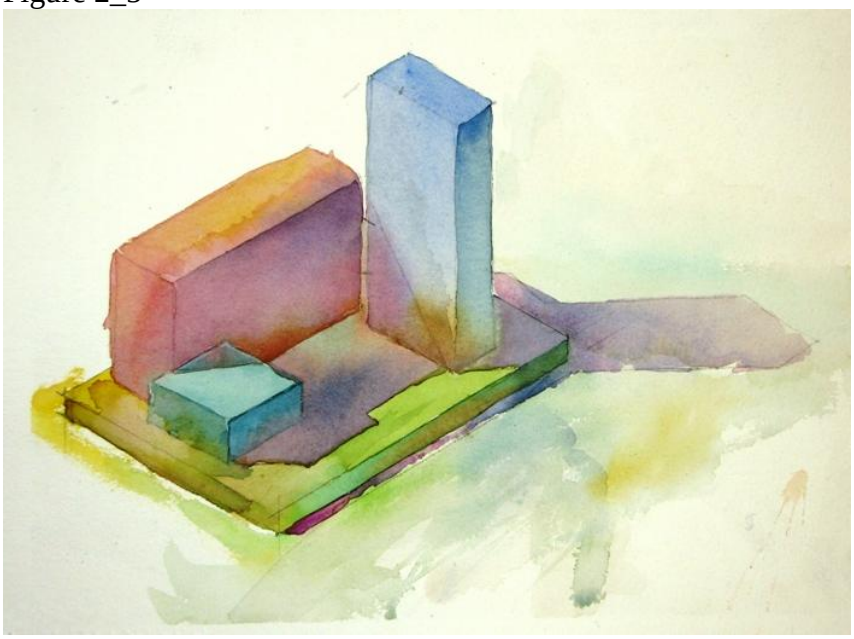
- **Strong light:** In bright full light, shadows pick up the colors around them and from the surfaces upon which they fall. Try to keep shade and shadows as luminous as possible. Do not "scrub" them into the paper! Remember the principles above and vary your shadows as they become more distant from the light source and the subject casting the shadows (see Fig. 2_4).

  Figure 2_4



- **Weak light:** Weak light means there is less warm light present, i.e., the lighting temperature is cooler and the intensity of lighting is less. Thus, shadows, if present, will be substantially muted, much cooler, and greatly softened (see Fig 2_5).

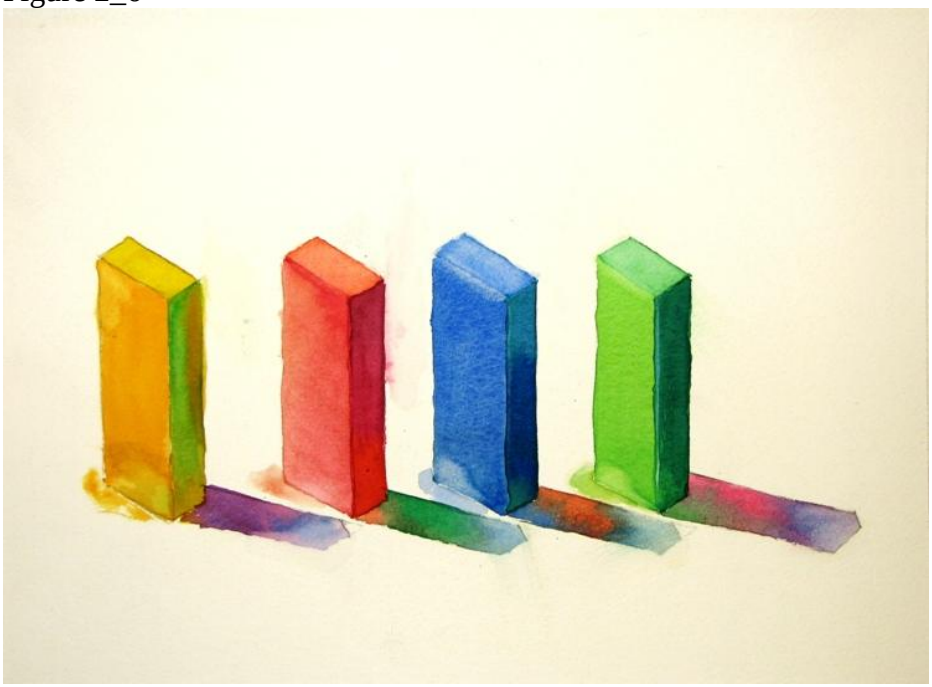
Figure 2_5



Painterly Effects

For a painterly effect, shadows may include the complement of the color casting the shadow particularly in strong light. Use of complementary colors can provide remarkable, shimmering luminosity, especially when working with intense ambient light. Alternatively, random "jewels" of dropped-in color will enliven both sunlit and shadowed areas (see Fig 2_6).

Figure 2_6



Reflections, "Light Traps" and "Halos"
The third and final principle for shade and shadows has to do with three small design elements which can add large effects when painting with light. The illustrations below variously employ all of these design elements**.**

- **Reflections** (see Fig 2_7)**:**

  Figure 2_7

  1. Reflections add to the painterly effect of color and light by energizing the play of highlighted color and the "sparkle" effects of the ambient lighting.
  2. Reflections may occur in illuminated surfaces, shade, and shadow, particularly in strong illumination.
  3. Reflections are most easily seen on sunny days or in bright illumination; they are less prevalent in weaker lighting; and almost non-existent in atmospheric lighting conditions.
  4. General rules for reflections:
     - They are lighter in value in any shadow area in which they fall
     - They are darker in value in any light area in which they fall.
  5. Application techniques: Reflections may be created in vertical and horizontal surfaces using wet into wet applications, or they may result from "lifting" a surface color.

- **"Light traps"** (see Fig 2_8)**:** This is my term for the intersections of vertical and horizontal shapes or surfaces where the light may be perceived to be "trapped" and

bounces or reflects from one surface to the other**.** Application technique is similar to that of reflections, above. I've never met an intersection of a vertical and a horizontal that I didn't like!

Figure 2_8

- **"Halo effects"** (see Fig 2_9)**:** This is my term for the edges of forms where light can reasonably be perceived to be passing or being reflected. It could also be called the "rim effect". It is especially prevalent with back lighting, but reasonable in other directional lighting as well. Application involves use of softened or lost edges, combined with wet into wet or lifting a surface color to create the "halo". Use this effect judiciously—a little goes a long way!

Figure 2_9

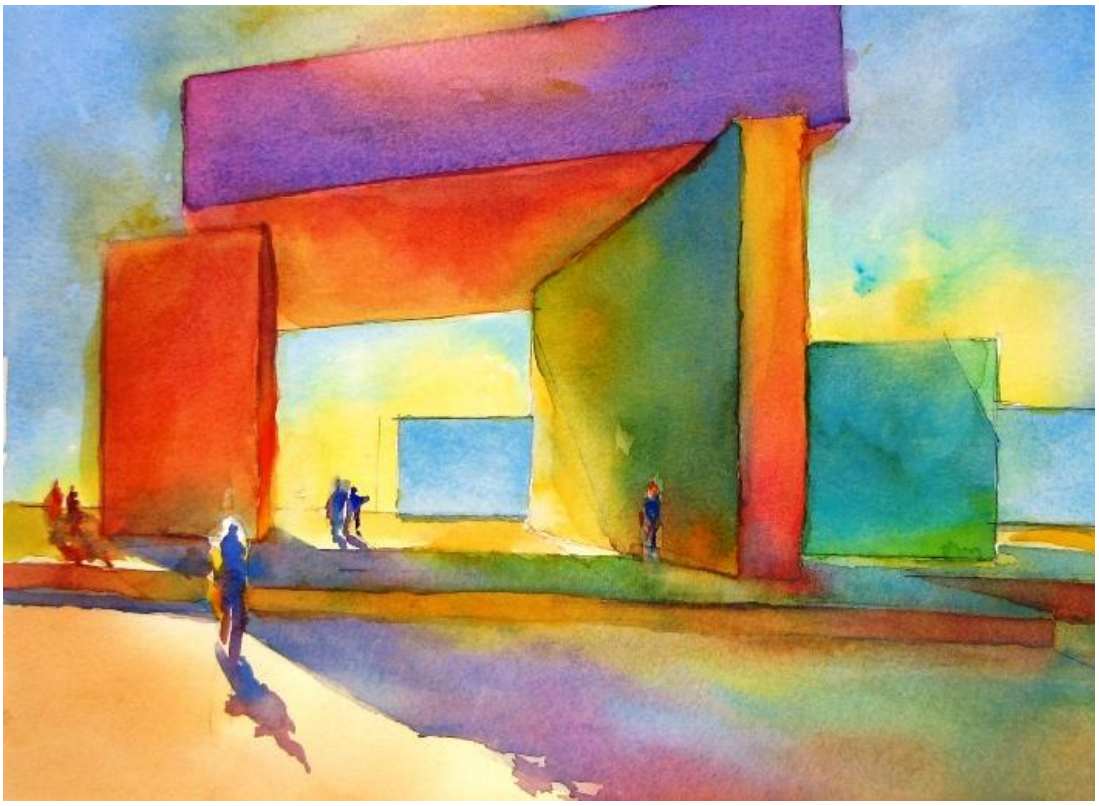


Figure 2_10

Myths About Shade and Shadows

- **Shade and shadow are the "absence of light":** Shadows are not the absence of light—light is always present in shade and shadows. Prove it by going outside and looking at an object in the shade and a shadowed area. You can clearly see and differentiate between every object in the shade and the shadow! If there was an absence of light, you would see nothing! So much for black shadows!

- **Shade and shadow are a "universal color":** There is no "universal" shade or shadow color such as gray, violet, blue, or "shadow green". The color of a shadow is derived from the color of the ambient illumination and the colors of the objects on which the shade and shadow fall. For example, the shadow on a brick walk is not the same as the color of the same shadow on the adjacent grass. Of course, you can do anything you wish for your best painterly effect.

Practical Exercise: Before we get to the actual demonstration painting, why don't you use the illustrations from Tutorial 2 to help you paint reference sheets of some of these key principles for shade, shadows and reflections?

- **Shape of shadows**
- **Color and temperature of shadows**
- **Reflections, "light traps" and "halos"**

If you print out the tutorial and paint your reference sheets about 8" X 10", you can add them to the 3-ring binder you started in Lesson One.

Demonstration Painting — Lesson 3 Tutorial "Spring Is Just Around the Corner"

The reference photo, which I have titled "Spring Is Just Around the Corner", illustrates a landscape that consists of both natural and man-made objects which will maximize the opportunities to use the principles of this tutorial (see Fig 3_1). You may wish to print the photo for a larger reference.

Figure 3_1

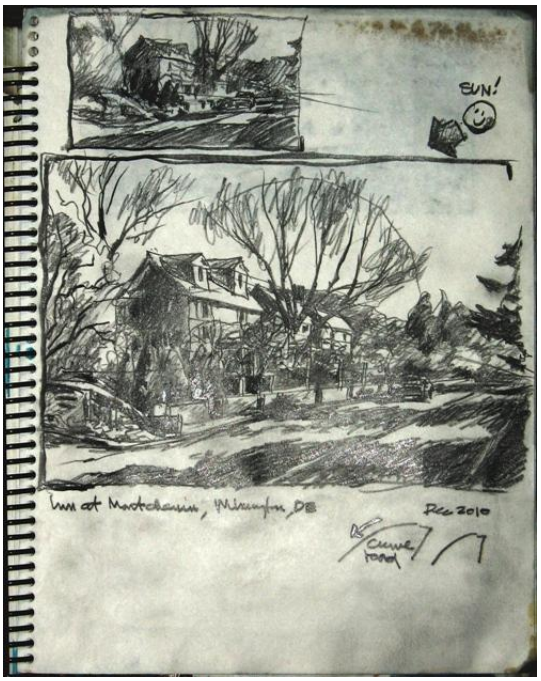
The existing lighting is from the side, creating forms with surfaces that are both illuminated and in shade. The side light also creates opportunity for strong shadow forms. For the demonstration, I have chosen to increase the existing shadows for a stronger painterly effect. I've added a few objects for compositional interest and "overlapping" shapes.

The actual subject is a charming inn that is located in the Wilmington, Delaware, area in the USA.

Demonstration approach for "Spring Is Just Around the Corner"

1. Employ several thumbnail sketches to explore and confirm your composition and to establish your value scale (see Fig. 3_2).

   Figure 3_2



2. Paint the sky and foreground (wet on wet): introduce some of the light sky colors into the foreground areas for color harmony, particularly where there will be no shadows.
3. Lay in the light natural objects and foliage that overlay the buildings and other man-made objects (wet on wet) (see Fig. 3_3).

Figure 3_3

4. Paint buildings and man-made objects (wet on dry) and lay in some of the early mid-value shapes (see Fig 3_4).

Figure 3_4

5. Paint the remaining mid-value natural objects.
6. Introduce the darks: paint shadows and other darks (wet on dry: pre-mix sufficient quantity to ensure a continuous, consistent wash) (see Fig. 3_5).

Figure 3_5

7. Add needed details/textures (tree trunks, limbs, etc.) and any needed coordinating and adjusting washes.
8. Completed painting (see Fig. 3_6).

Figure 3_6

Rationale:

1. Use your sketchbook to analyze the photo; to identify and develop your design, composition and values, and to establish your overall painting plan.
2. Begin by defining and laying in lightest areas and objects.
3. Major geometrical shapes and significant color areas often benefit from early placement of key color notes on clean paper.
4. Remaining natural objects can be added as grouped shapes.
5. Add/build mid-tone values, followed by dark values last so as to create "clean" shapes and edges.
6. Introduce limited details and any texture needed to convey painterly intent.
7. Tie colors and values together with coordinating washes where needed.

For your painting, you may use the photo (Figure 3_1) or one of your choosing that shows the principles of the tutorial which we are practicing. You may paint the photo as is, or recompose it to meet your own painterly goals.

Post your paintings in the Homework thread identified and don't forget to

Have fun!