## Week 9

## Critique / Discussion: De constructing the Cube <br> Critique / Discussion: Confusing figure and ground



## Lecture / Discussion: Value

As you move toward thinking about color your need to focus your attention and intention on the design element of value. Value refers to lightness or darkness. Value together with Chroma (or Hue) and Intensity describe color. We'll discuss Chroma and Intensity in a week or two. For now accept that medium, $50 \%$ gray represents all color Hues but without any Intensity. If we add white to $50 \%$ gray we create a Tint of that medium gray. If we add black to gray, we create a Shade of that medium gray. Most of us can distinguish, say in a black and white photograph, perhaps 30-40 steps of value gradations between deep black and pure white. Some rare individuals with higher levels of visual perception can perceive as many as 150 gradations. Perception of Value (as well as chroma and intensity) depend on a great deal on the Values surounding another value. Because no color, other than black and white, appear on a gray scale we call it Achromatic - meaning without Chroma.

Imagine placing one drop of ink into a ten thousand-gallon tank of clear water. Stir well. With a small brush, paint a $1-1 / 2$ inch square swatch of this mixture on white water color paper. Now repeat: add one more drop, mix and paint - continue this repetition over and over again, until you achieve black. It will take many life-times to finish, and the swatches may circle the globe several times. You would not be able to distinguish between the various values next to each other because their difference would appear far to slight.

Exercise: Using your 6 B pencil on newsprint - (1) Create a $11 / 2$ " square swatch of the lightest value possible (2) About 5 " away from that sqare, create a swatch of the darkest value possible. (3) Midway between those two, place a $50 \%$ mid-value between 1 and 2 . (4) Now place a mid value exactly between 1 and 3. (5) Then place a mid-value between 2 and 3. You've just created a 5 step value scale. How accurate a value scale depends on your perceptive abilities as well as your drawing abilities.

On page 43 you can see a 12 step value scale; a stipple technique drawing of a fish which contains a range of values; a value scale created with the use of parallel lines of decreasing width; and a value scale created with a 6 sided polygon - these examples demonstrate entirely different means for a designer /illustrator to create, control and use the element, Value. In all cases we're looking at illusions of Value. In the case of the 12 step value scale a halftone screen creates the illusion of value. The halftone is created with the use of fine dots of black or white distributed on a field of its opposite. The use of halftone screens allow us to print the illusion of value with only pure black ink. And the distribution of pixels on our computer screens also allows us to perceive the illusion of value. Paint, on the other hand allows us to truly create real value.

## Homework Project 23 - Creating a 10 Step Value Scale

Purpose: To train the eyes to recognize Relative Values, and Value Shifts. To train the mind and hands to mix paint to achieve Tints and Shades. Adding White to a color = Tinting. Light red is a tint of red.

## Light Values $=$ Tints

Adding Black to a color $=$ Shading. Dark red is a shade of red.
Dark Values $=$ Shades
This exercise will prove useful for developing your painting skills, deepening your understanding of both value and color, it will serve you well in traditional darkroom work, digital imaging, inkjet or other printing techniques, etc.

Discussion: Please recall and refer to our discussion and work with halftone concepts. This painted 10 step Value scale would approximately duplicate a $0 \%, 11 \%, 22 \%, 33 \%, 44 \%, 55 \%, 66 \%, 77 \%, 88 \%$, and $100 \%$ halftone scale on a computer screen or in print theory.

In Photography: Light meters are calibrated to achieve "middle gray". Increasing and decreasing exposure by 1.4 will achieve an equal value shift through 10 steps of gray, from white to black.

Materials: Carolina board (or better), Pencil, Ruler, $90^{\circ}$ Triangle or T Square, Black Acrylic Paint, White Acrylic Paint, Paint Brushes.
Instructions:
Create a rectangle $1-1 / 2$ " $\times 15$ " using a light pencil.
Within the rectangle create $101-1 / 2^{\prime \prime} \times 1-1 / 2^{\prime \prime}$ squares using a light pencil.
Paint the Far Left Square (\#1) White
Paint the Far Right Square (\#10) Black
Paint the Remaining Squares (\#2 through \#9) using 8 values of gray. Each shade or tint must shift equidistantly in value.
Each value should butt the adjacent value. Do not outline the squares.
NOTE: Dark colors dry lighter. Light colors dry darker. You must take this into consideration.
Be advised that success with this project will require that you experiment a bit on scraps of board, and allow your mind/eye to "learn" about paint, mixing, drying, etc. before painting your final squares.
Due: Week 10 - Use the same board for both projects 22 and 23. Design that board!.


Homework Project 24 - Repeat "Pattern" to Imply Value Shift.
Purpose: To deepen the experiential understanding and appreciation of value, pattern and scale.
Discussion: Again, recall and refer to our discussion with half tone concepts, especially the work with stippling and crosshatching. Realize that you can repeat any shape to create a pattern. And depending on the size and placement of the shape(s) you can "imply" a value from very light gray to very dark gray.
Materials: Carolina board, Pencil, Ruler, $90^{\circ}$ Triangle or T Square, Fremch Curves, Black Acrylic Paint, Paint Brushes.
Interactive

## Instructions:

Create a 6" 6 6" square using a light pencil.
Design a shape to use for this project.
Within the square, using only black paint,
asymmetrical balance, movement, rhythm and other design principles.
Due: Week 10 - Use the same board for both projects 22 and 23. Design the board.


Tone Created with Repeat Pattern of Black Triangles Lines = Linear Gray Scale

