

Week Four Assignment Directions:

- Complete Activity One, *Color Interaction Studies*, and choose one more of the following activities (complete all subcategories within the activity). Two activities total.
- Answer the questions and/or take photographs of your completed activity
- Save your file with your last name/first name ie: GravelSusannah.doc
- Upload a document with your photos and your answers to the Canvas Classroom assignment drop box.

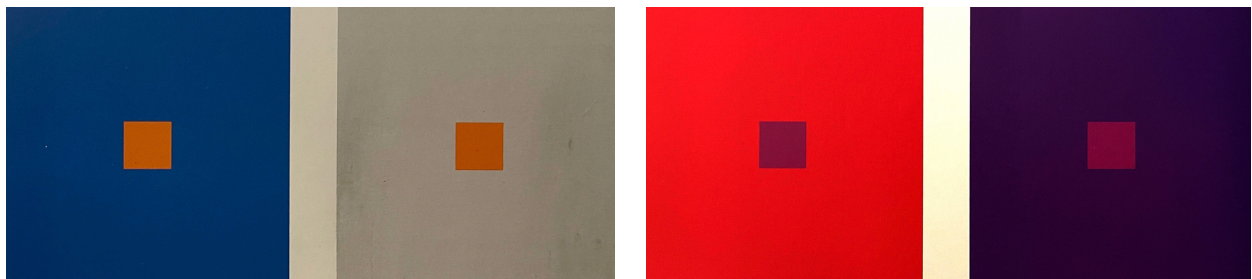
Activity #1: Color Interaction Studies

Materials: Colored paper.

Objective: for the student to understand that color perception is influenced by surrounding colors. The following are classic Albers studies of color interaction.

A. Make one color look like two colors

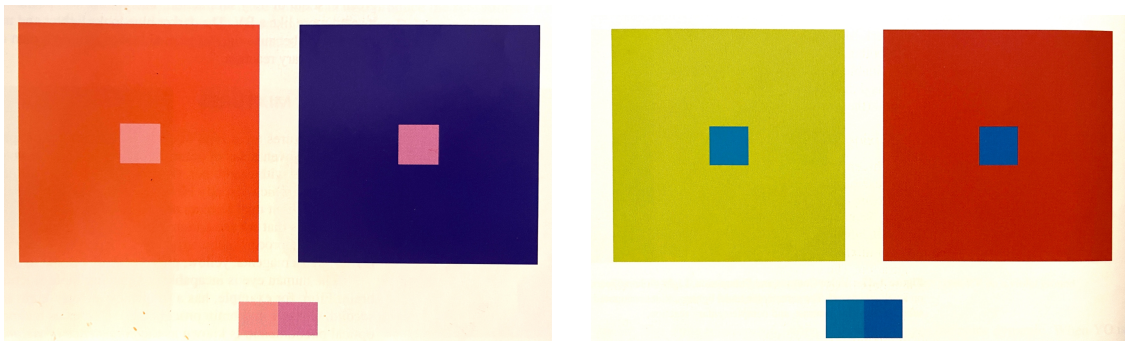
- Using the concepts in the lecture, take one color and place it on to different grounds to make it appear to be two different colors.
- The proportion should be approximately 6" x 6" or 5" x 5" square for the ground and 1" x 1" square or a 1/4-inch strip for the color to be changed.
- The point is to make the same color look radically different by manipulation of various colored grounds. Try many possibilities with color paper until you get a major color change.
- Remember to make the grounds different as possible. Differences in hues opposite hues, saturation, color temperature, and/or value are needed to truly change the color you've chosen.
- When the color interaction is complete, cite the principles use the implemented your color change.



B. Make two different colors appear to be the same color

- This study is invariably more difficult than the first study.
- Pick two slightly different colors from color paper.
- The colors may vary in value, for example, a lighter and a darker orange. They also can be slightly different in hue, a green BG and a B or BG, for example. The two colors might be slightly varied saturations of one color, for example, blue and a tone of blue. Now pick two different grounds to try to equalize the two colors that you have chosen.

- Try to use the three principles of color interaction to implement this. Example: if you are using a lighter and darker value of one color, you can put the light color on a light ground and the dark value on a dark ground. Also use a subtraction and/or complementary reaction if necessary.
- Save an extra piece of each color used and place it has shown below with your study. This will indicate where each color is placed and indicate the color differences.



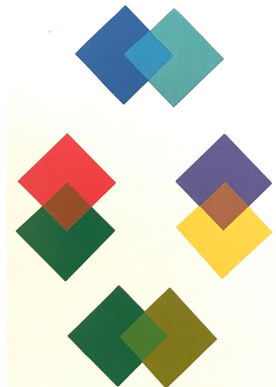
Activity #2: Optical Mixing Studies

Materials: Colored Paper

Objective: The student will create two optical mixtures, one that makes two colors blend visually and one to create complementary vibration. Physical movement can be used to create additive color mixtures.

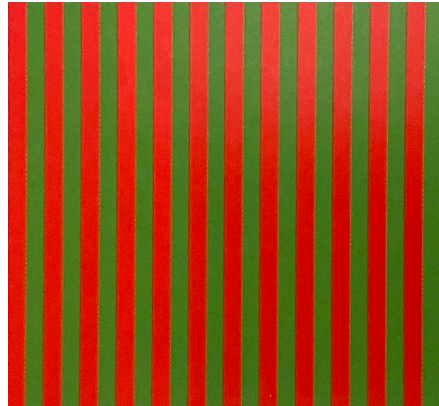
A. Analogous Optical Mixture

- Pick a pair of analogous or almost analogous hues by skipping the in between hue from the color circle. Example blue and BG or red and violet.
- The color should be keyed to the same value as closely as possible. The value match will create a better optical mixture.
- Make a pattern or fine mosaic of strips, dots, a grid, or any pattern using equal surface area for each of the two colors. This will let them blend visually when viewed from a reasonable distance.
- The result will be two colors of blend optically to create a third color that is in between the two. Example: yellow + orange equals YO or yellow + YO = YYO.



B. Complementary Vibration

- This visual mixture is the opposite of an analogous mixture.
- Pick any dyad or complementary pair from the colored paper.
- Make sure the colors of the dyad are high and saturation, as shown.
- Create a similar or the same pattern mesh as in exercise 2A.
- You should notice a strong movement or vibration as you look at this study.
- If you view it from across the room, you will notice a change in contrast and possibly a neutral color.



C. Optical Mixture Discs

- Make several optical mixing discs to show additive color mixtures.
- The discs should be circular, either glued or painted on a toy top or made of a flat cardboard disc to be spun on an electric drill.
- You can use the two analogous hues, complementary hues, or black and white. Glue or paint the two colors in an alternating stripe pattern or make them on a computer and print out and adhere onto heavy paper or light board.
- What color sensations do you get when the discs revolved? How are the results different from what you would've expected?

D. Additional (Optional) Optical Mixture Discs

- **Optical field mixtures:** In a much more casual manner, create optical mixtures With broken colors in paint. Using dots, marks, or small lines, create fields of color created from two or three analogous colors that are keyed to a similar value, such as light green, light BG, and light B. These can be created with paint, pastel or colored pencil.
- **Complementary Optical Field Mixtures:** can be made from complementary pairs such as BG to RO, in very small marks of paint, colored pencils, or pastel
- (these drawing materials can also be used along with the painted surfaces). These studies should change in appearance depending on how close the viewer is to the piece.



Activity #3: Bezold Effect Studies

Materials: Colored Paper, Paint or a Graphic Program on the Computer

Objective: The studies are meant to explore the concepts of the bezel defect, multiple color interactions, and color dominance. On any computer program, go to the RGB color mode.

A. Bezold Effect

- Plan a simple geometric pattern that uses four or more colors
- Choose two different grounds for your studies at substantially change the appearance of all the colors in the study. Try to choose grounds that are opposing light and dark values, complementary hues, or colors that are high and low and saturation.
- The design should appear to be very different chromatically for one ground to another.
- Make sure that you let the colors in each design interlock so that the change in interaction between them can also be noted.

B. Color Dominant Studies

- Pick five or more colors to create two or four studies. Create a simple design or pattern.
- Make two studies using the same color selection and the same design.
- Each study should have one color (from your chosen group) that dominates the whole study. You can also change the location, proportion, or repetition of colors from one study to the next.
- The point is to radically change the appearance of the same design and color grouping by the location and proportion of the colors.



Activity #4: Transparency Studies

Materials: Colored Paper, Watercolor or Acrylic Paint

Objective: The student will work with both actual transparencies (transparent media) and simulated transparencies (opaque media) to understand the difference between the two concepts.

A. Actual Transparency Study

- Choose at least four hues pigment colors with which to work.
- Make a simple overlapping design of geometric shapes or brushstrokes on cold press illustration board or watercolor paper. Draw the design out in pencil.
- Try to have some areas where at least three shapes overlap.
- Use either watercolor or acrylic paint (watered down and without) white to create washes of each of your chosen colors.
- Make sure all of your colored washes are approximately equal intensity.
- Carefully fill each shape of your design with the washes. Make sure that you let each layer dry before washing over with another layer. Layer colors carefully to create transparencies.
- As desired, you may leave background white or paint it black.



B. Simulated Transparency Study

- From colored paper, choose at least four pairs of colors that you want to overlap in the design. Make sure each pair is different type of color combinations.
- Design a simple overlapping structure using geometric or freehand shapes.
- Pick colors that represent the in-between or offspring color between all four sets of the parent colors that you've chosen.
- Where the components of your design overlap, place the appropriate colors to simulate the illusion of transparency.
- The negative or ground color should be dark or neutral to accentuate the illusion of transparency.



C. Consistent Value Shift

- In a flat composition of organic or created shapes, make one or two shapes that overlay the others. Inside this overlaid shape, the color values of everything inside will shift consistently lighter with a darker based upon the shape contained underneath. This will give you a feel this will give a feeling of a translucent shade or scrim that affects all the colors behind it. Choose or mix to make them lighter or darker visually, consistent with the values of the original colors.
- Can be made with color paper or paint. The study can be made on the computer, but it's not worthwhile as an exercise because the color changes can be made with transparent white or gray, using the transparency percentage slider rather than choosing or making colors visually, which is preferable.

