

# **Principles of Design**

## **A Course in Design Production**

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**Professional Certified Florists' Program**

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# Principles of Design

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### I. INTRODUCTION

This course "Principles of Design", might well be called "Tools of Design". These principles are not arbitrary rules: they are constant guidelines. They are the tools of all the arts, and no artist can vary them until he has mastered them. A careful study and understanding of these principles of design enable one to express his personality in floral art. It is through this mastery that distinction and individuality are created and reflected in design. Distinction is that extra note of quality, taste, and originality for which all persons strive.

The two terms *Principles* and *Elements* are synonymous. They are used interchangeably in floral design. They are one and the same:

*Principle* — an essential element, constituent, or quality, especially one that produces a specific effect: as the principle of design.

*Element* — a component, feature, or principle of something: basic part, rudiments. Irreducible parts of principles of anything concrete or abstract.

Each principle will be discussed separately though they are inter-related to each other.

Flowers placed in a container without any thought of design are satisfying simply because they are in themselves pleasing to the eye. However, these same flowers arranged according to certain guidelines can become works of creative art. The artist is challenged to use their natural beauty to the best advantage.

In developing the floral picture certain guidelines must be defined and thoroughly understood. All art forms are developed by the use of basic principles which govern design. These are known as the Principles of Design. The results will vary in accordance to the individuals own interpretation of these basic principles.

## II. PRINCIPLES OF DESIGN

### A. Composition

Composition is the selection and subsequent grouping of components to create a pattern (design). All parts must be selected to complete a single idea or theme. Each part should contribute its full value to the finished design. All parts must be compatible with their environment.

An arrangement of flowers in a container may fulfill all the requirements of good design within itself. However, should it not be compatible with its setting or blend with the decor of the room it will be unsatisfactory because unity is lost. The word "suitability" becomes important and must be considered. One's appreciation changes with the times. Acceptance of new combinations of materials will influence one's decisions as to suitability. Personal preference as to "good taste" — which means the right time, right place, and right purpose, can only answer the questions of appropriate design.

For special occasions, such as Halloween, one may decorate with designs not compatible with the interior of the home. But in designing a decorative piece for the home, office, church, or any specific location, one must unify the composition to its setting.



**Composition**

### B. Harmony

Harmony is an abstract term closely associated with Composition that also varies with personal preference. Harmony is the relationship between the components chosen. Harmony is unity. This principle brings many elements together, thus creating the impression of completeness. The combination of composition and harmony forms a pleasing concordant whole where unity is immediately obvious.

Generally most flowers can be combined harmoniously; however, the associational attributes are sometimes unfavorable. For example: zinnias, sweet peas, roses and marigolds may grow together in the garden, but they do not necessarily make good companions in flower arrangements. Rough texture is associated with zinnias and marigolds, and a fine texture with sweet peas and roses. A grouping of zinnias and sweet peas would not blend, nor would the zinnias be at home in delicate crystal whereas sweet peas would be lovely. Some flowers, however, are quite versatile. Roses would be happy in the finest crystal or the roughest earthenware. It is the quality of being one in spirit, sentiment, mood, theme, purpose and setting which creates unity.

Another way of expressing harmony is through strong contrast. Contrasting colors, shapes, or textures may give excitement to an otherwise monotonous design. Often both unity and contrast are expressed in the same flower arrangement; for example, blending colors and contrasting textures.

### C. Focal Point

In life we have an aim — a purpose to which we direct effort. It may be found in the guidance of our children, or a goal we wish to achieve in business. In either case, this is a focus toward which we strive. So it is with any creative project we undertake.

In traditional flower arrangement this center of interest is called focal point. Focal point is the point of origin or convergence to which the eye is drawn. This vital spot dominates the composition. The other elements emphasize this area.

Focal point can be developed in several ways. Stem placement is critical; all stems should come together at one point. Criss-crossed stems cause confusion. Graduation of color is another way to emphasize the focal point. Lighter colors are kept to the extremities with stronger colors used toward the center. Graduation of sizes of materials is important. Larger and heavier materials are used at the focal point while light weight or smaller materials are extended outward. The focal point is often accented with the use of an accessory such as a holiday novelty, figurine, or bow.



**Focal Point**

Thus, in geometrical design, the focal point is clearly defined. The main axis of the design runs through this focus, and balance is governed by the division of materials.

### D. Balance

Balance is equilibrium; it is achieved by the division of materials by visual or actual weight to either side of a central axis.

An accomplished ballet dancer may be motionless on pointed toe, but the weight is so distributed that a feeling of equilibrium is produced: grace and beauty results. The Leaning Tower of Pisa is balanced by weight in relation to the center of gravity, but it does not have visual balance, therefore a disturbed feeling is produced.

Correct balance results in a feeling of stability and security. It is achieved in two ways:

*Mechanical (or structural) Balance is gained by the proper placement of main stems forming the design or pattern. The materials establish the skeletal pattern or the desired composition. This may be referred to as the blueprint, or skeleton.*

a) *Symmetrical — formal, perfect, man-made equilateral.*

b) *Asymmetrical — informal, natural.*

*Visual Balance is achieved by the proper use of color and placement in sequence of related sizes of materials in conjunction with structural balance.*

*Symmetrical Balance* is characterized by perfect symmetry. The central stem giving the height of the arrangement is always placed first.

It is always placed over the center of the container and establishes the central axis of the composition. The corresponding side arms are then placed, equal in length and similar in kind. Wedding decorations, table centerpieces and arrangements for teas and receptions are usually planned with formal balance. The perfect symmetry of the background or setting often dictates this choice. Man, due to his instinct to organize, uses this pattern for authority and formality.

Perfect symmetry may be obtained in symmetrical triangle, fan, oval, round and cone-shaped designs.

*Asymmetrical Balance* is more natural and relaxing. It allows more flexibility in the use of materials.

A pair of asymmetrical arrangements designed for a mantel or altar may be placed to frame a center object; thus producing formal balance in the overall composition. These arrangements will accent the corners of the area if placed with their vertical lines toward the outer edges. Their positions can be reversed, placing the vertical sides toward center to accent height.

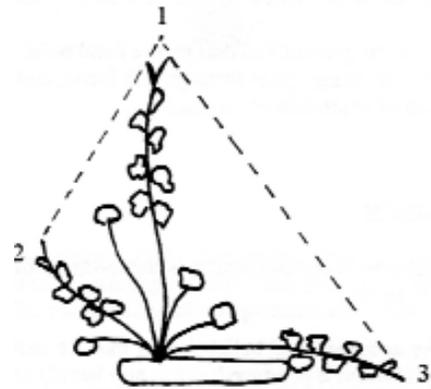
*Visual Balance* is gained by the selection of correct sizes of materials, and uses of color, textures and accessories.

Darker colors appear heavy and generally should be used low, while lighter colors are used toward the extremities. However, if the heavy color appears in the smaller, finer textural flower, and the lighter color in the larger mass forms then color placement will be reversed, since color would be less demanding than size. Mass and size determine visual balance in this instance to offset the color positions.

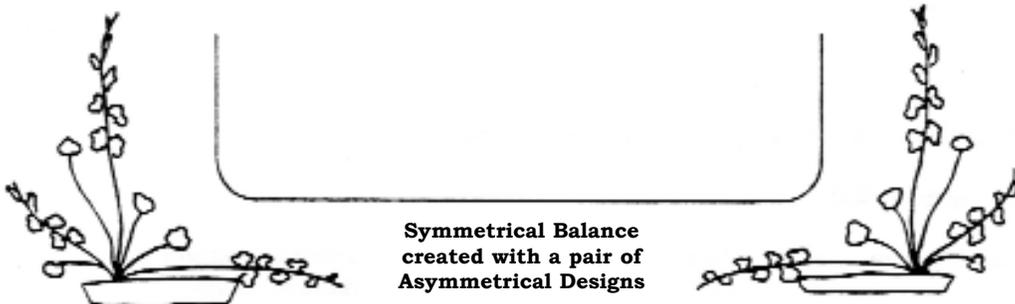
Accessories such as figurines or candles may be used to create visual balance in a given setting. Consider carefully the texture of both plant materials and containers before combining them, as this quality plays an important part in creating the appearance of proper balance. Thus, fragile containers would be overpowered by massive, rough-textured materials, and vice versa.



**Symmetrical Balance**



**Asymmetrical Balance**

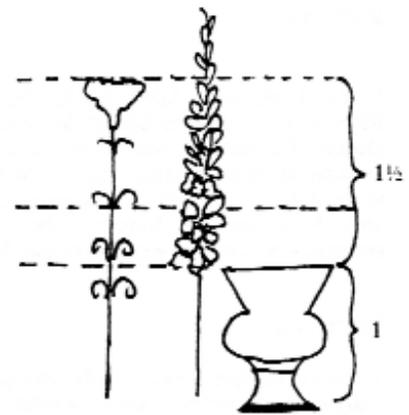


## E. Proportion

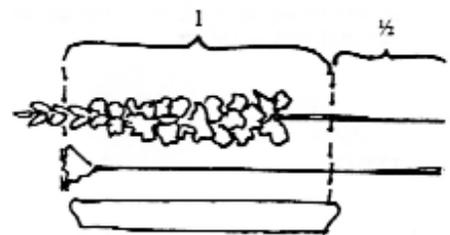
Balance and proportion are interdependent in most cases. Proportion compares the relationship of the units of a composition to each other in size, quantity, and setting (environment). Proportion is often referred to as scale when applied to the placement of an arrangement.

From the Japanese, American designers have learned that proportion will be pleasing if materials are approximately 1-1/2 times the height of a tall container — 1-1/2 times the width of a low container. Their ratio 1-1/2 : 1 has been established through constant use and experimentation over hundreds of years in all types of art. When a base is used under a container, it is considered part of the container and is included in the measurements. The measurement ratio may be exceeded where plant materials are graceful and light weight when used with a sturdy or heavy container.

The scale of an arrangement is governed by the furnishings of a room in which it is to be placed. A heavy oak dining table in a large paneled room needs an arrangement of strength and massiveness. Fragile materials would be lost. A room decorated in delicate flowing lines and soft pastel colors is complemented by an arrangement of similar materials. For a "sit-down" dinner, the proportion of the arrangement is determined by its immediate setting: The size of the table. A maximum height of 14" will allow clear vision and comfortable conversation over any table centerpiece. However, for a "buffet" dinner, the arrangement is viewed from a greater distance; hence the entire room or a large portion of it may be considered as the setting which governs the proportion of the arrangement.



**Proportion — Tall Container**



**Proportion — Flat Container**

## F. Line

Line is the visual path the eye follows thus producing motion. The principle of line is one of the most important in any design. It may be severe and masculine, exhibiting strength and vitality, or it may be whimsical and feminine, expressing gentleness and delicacy. Line is used to provide the skeletal pattern of the arrangement with linear materials (stems, branches, or line flowers), or it can be developed by the placement of round, mass forms in sequence, creating a feeling of direction.

The development of line may give balance, create rhythm, convey motion, and be dynamic. Line is never static; it produces a vibrant quality that gives a feeling of growth and life to the design ... to maintain this feeling, the continuity of line must never be broken. The understanding of line enables one to make a suitable selection of flowers and foliage, and container to express a desired idea. The lines of all materials must be in agreement. Let the furnishings of a room and the location of the arrangement govern the line of the design.



**Line and Rhythm**

## **G. Rhythm**

Line and rhythm are interdependent in most instances like composition and harmony or balance and proportion. Rhythm is the apparent flow of line from the visual center of interest or focal point. Repetition is achieved by the placement of materials and the gradation of the material sizes. Rhythm in music is the flow of the melody. Rhythm in floral design is similar, giving life and movement; it is the unity and flow of materials that creates a pleasing image to the eye. Rhythm is accomplished if the eye first sees the focal point then travels smoothly outward and through the secondary features of the design. Proper transition of elements and materials gives aesthetic value to arrangements, creating a quality of excellence. (See preceding illustrations)

## **H. Texture**

Texture is relative; it refers to the physical surface qualities of plant materials (smooth, rough, velvety, etc.) or the composition of the arrangement of petals, leaves, twigs, or branches of main stems. Ferns have a more delicate texture than huckleberry or salal foliage. Texture in floral design is embodied in the qualities that affect the senses of sight and touch along with one's associational values. One knows that earthenware has a coarse texture even though it feels smooth. In floral design, the texture of each part of a composition must be so related that it blends pleasingly with its neighbors, or it may be used in strong contrast, causing one part to compliment the other and to add interest. One must be sure to avoid the look of confusion that many intermediate textures could give to a design.

Many flowers are versatile such as roses which could compliment equally silk or tweed. Other flowers such as zinnias would look well in pottery but not in delicate crystal vases. Texture also varies with color. Delicate colors such as pink usually have a fine textural appearance, whereas brown suggests a rough texture. Brilliant red may look waxy, and dark red, velvety.

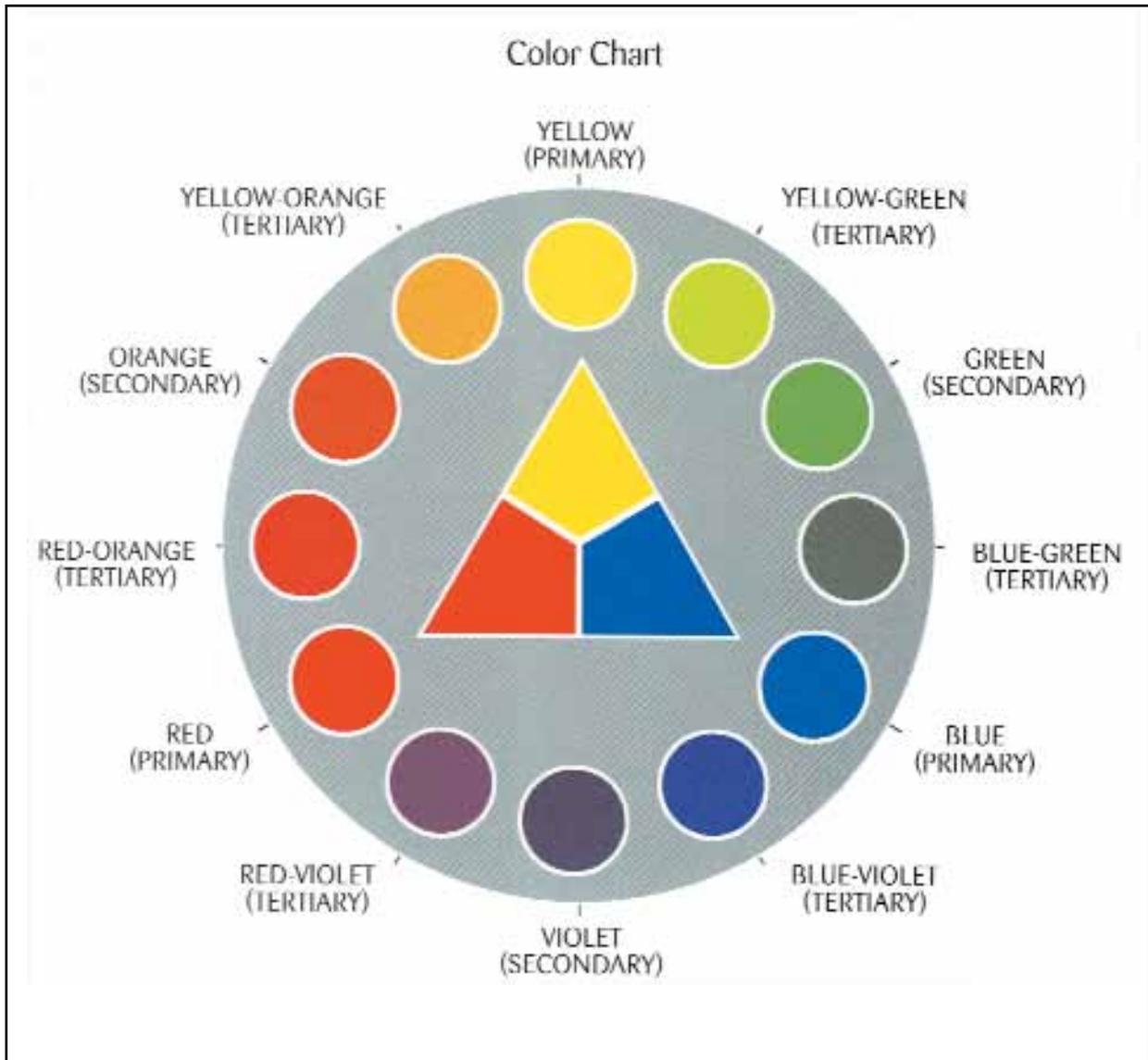
## **I. Color**

An understanding of the function of color and a mastery of its use will increase the versatility of any designer and strengthen his ability to create desired atmospheres and effects. Through the use of almost any color, desired impressions can be easily produced.

Color gives life and personality to designs. It can "turn people on" ... or "off". Harmonious colors will produce designs that satisfy even though they lack proper design. Conversely, if arrangements are perfect in form, but poor in color selection, they may never satisfy (or sell!).

Design (skeletal pattern of the arrangement) pleases the sense of physical balance and proportion, while color satisfies the esthetic taste - senses of sight, taste, touch and smell. It is not necessary to understand the theory of the internal combustion engine to drive a car. It is imperative, however, to know and understand human reaction to color and how to skillfully employ it. People react differently to color. Their reactions are governed by their emotional responses and their background experience. Skillful use of color should be employed not only in arrangements, but in the display of merchandise as well. The understanding of color can be a powerful sales tool.

# BENZ COLOR WHEEL



## THE COLOR CHART

The basic colors - Red, Yellow, and Blue - are the primary colors from which all others are made. They are the building blocks for the entire color pigment system. Nature has provided the special qualities of red which is advancing, exciting, and warm; blue which is receding, cool and quieting; and yellow which is brilliant and cheerful.

The mixture of any two primary colors produces a secondary color; orange, green or violet.

*Yellow and red = orange.*  
*Blue and yellow = green.*  
*Red and blue = violet.*

The mixture of any primary color with it's secondary color neighbor gives a tertiary color.

*Yellow and orange = yellow-orange.*  
*Orange and red =red-orange.*  
*Red and violet =red-violet.*  
*Violet and blue = blue-violet.*  
*Blue and green = blue-green*  
*Green and yellow = yellow-green*

The color wheel may be divided in half to show which colors are cool and which are warm. Red, orange and yellow which symbolize blood and fire are warm; green, blue and violet recall sky and water which are cool. The warm colors advance (stand out from a distance) while the cool colors recede. These qualities become critical when decorating a display window, or a church for a wedding.

## NEUTRAL COLORS

Black, white, and gray are known as neutral colors. They do not appear in the color wheel, but they are used to change the tonal quality or value of a color. White lessens color value, making it lighter. Black increases color value making the hues darker, adding depth. A white background blends colors, reducing their brilliance. Pastels harmonize well because of the large quantity of white they contain. To blend two colors that appear to "fight", mix the two in the mind's eye. Add white with this resulting color to get the pastel. This pastel will blend the two colors and give the transition color that is needed. For example: hot pink and orange may appear to "fight" . . . mix them in the mind's eye to get bright coral, then add white to gain a soft coral. The soft coral will be an excellent transition color for orange and hot pink.

Black is used as a background for colors when they need to look intensified. Black absorbs light rays, which increases the brilliance of red, blue, yellow-orange, and green; violet is eliminated.

## **COLOR BALANCE**

Color balance is as important in design as is the balancing of ingredients in making a cake. Too much of one element will spoil the whole. Learning color value will greatly aid in achieving variety and pleasing color effects. A few guidelines will help.

*Balance:* Use the strong chroma (brighter and darker values) in the focal point and the pastels to the outside.

*Proportion:* The more dominant the color the less it is used. Like spices in cooking — a little will aid greatly — too much will spoil the dish.

*Interest:* Interest and transition will be gained by the percentages and rhythm created by the variation in amounts.

The following percentages will be an invaluable guide to use in achieving color balance to add variety and interest to an arrangement and create color rhythm:

50-75% of a tint.  
10-15% of a strong chroma  
15-25% of a shade.

An arrangement of pink snapdragons (tint) combined with rich pink roses (intensity) and deep blue iris (shade) illustrates the percentages combined to achieve color balance. The same can be applied to the selection of flowers for a corsage to compliment a dress. If the dress is primarily a tint, the flowers could furnish the shade or intense color, with the ribbon completing the alternate color in this color percentage "recipe".

## COLOR TERMINOLOGY

The following terms and definitions present the background necessary before color harmony can be clearly understood and used to the best advantage in floral design.

*Color Harmony* — The various usable or pleasing combinations of color.

*Hue* — means color, any color.

*Chroma* — the purity of a color, determined by its degree of freedom from white, gray or black.

*Value* — is the term used to designate the lightness or darkness of a hue. For example, the values of red range from pink to maroon.

*Tint* — any color to which white has been added (red plus white becomes pink).

*Shade* — a color to which black has been added (red plus black is maroon).

*Tone* — any color to which gray has been added.

## COLOR HARMONY

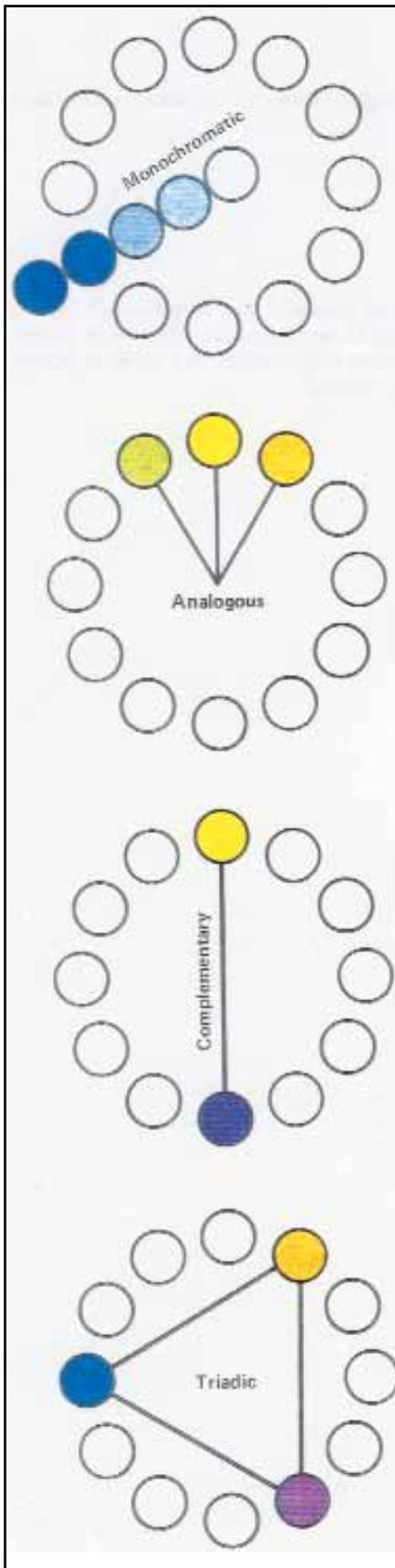
All florists work with color harmonies every day. It is prudent to know the meanings of basic color combinations.

*Monochromatic Color* — different values of one hue (pink, red, maroon). Color gradations must be used carefully with the strongest value placed at the focal point. Interesting textures play a vital role in this harmony, to prevent monotony.

*Analogous Color* — is achieved through the use of three or more hues in sequence on the color wheel, with only one being a primary color (yellow). Analogous colors produce special moods and seasonal effects.

*Complementary Color* — is a combination of hues in the very strongest contrast; opposites on the color wheel (red and green, orange and blue, yellow and violet). This combination gives dramatic emphasis to any decoration or display.

*Triad* — any three colors that are equally spaced on the color wheel (red-blue-yellow or orange-green-violet). This color harmony always creates great interest.



## **REFERENCE LIST**

Benz, M., Flowers: Geometric Form, San Jacinto Publishing Company, Texas A&M University, College Station, TX 77843, pp. 2 - 42.

Benz, M. Flowers: Free-Form Interpretive Design, San Jacinto Publishing Company, Texas A&M University, College Station, TX 77843.