Part 3: Flower Arranging and Color What Is Color?

Color is the most vital element in a flower arrangement, for it adds life, sparkle, zip. It plays a leading role and can have either a dramatic or subtle impact, but it cannot be used independently of, or without regard to, the basic principles of art. Since color is always present in plant materials, it is essential that you have a working knowledge of what color is and how to use it effectively.

First of all, color is something you see, just as sound is something you hear. Color is the effect of a stimulation of the visual nerve centers of the brain. It is the result of the reflection of light rays from a surface carried by the eye and interpreted by the brain. Color is a *visual sensation*. Discussed below are two approaches to an explanation of color.

Color Language

Colors "speak" in the sense that they convey a message, and people "hear" in the sense that they respond emotionally. Some people respond more and react in a different way than others, but it is a fact that every person does respond to some degree in the same way to a color. This fact has a practical, everyday use in arranging flowers, and it is important to learn the effects various colors have on the emotions. This is the "Psychological Approach" which divides colors into three groups:

Advancing or warm colors — Reds, oranges, and yellows "talk" the loudest, for they have the greatest visual attraction and the strongest emotional response. These are the exciting, stimulating colors that always seem to be coming toward you, or advancing. A very large room can be made to look smaller by using these colors at the far end. Throughout the ages, red and orange have been associated with fire and yellow with sunshine. Since fire and sunshine mean warmth, these are the warm colors and express joy and activity.

Receding or cool colors — The blues, greens, and violets seem to go away, to recede into the distance. Used in a small room, these colors can make the room seem larger and are useful in creating an illusion of depth in a flower arrangement. Blue is associated with the calm and quiet of a clear sky, green with the coolness and restfulness of leaves and violet

with shadows at dusk. Emotional reactions to these colors are ones of peace, serenity and rest.

Neutral or stable colors — Black, white, and gray are sometimes called the background colors, the colors that "stay put" because they neither advance nor recede.

Technically these are not colors at all, for they do not appear in the spectrum (the rainbow) and have no visible hue or chroma.

Black is the result of complete absorption of all light rays, the absence of reflected light.

White is the total reflection of all light rays, the presence of all colors.

Gray is a mixture of black and white, different proportions giving different degrees of warmth or coolness.

But since our eyes do see black, white, and gray; and since these are pigment colors that are produced artificially, we must consider them as colors.

In arranging flowers, both black and white are used to sharpen or intensify other colors by their contrast with them. Gray is excellent for blending, toning down, and even neutralizing brilliant, adjacent colors.

Kinds of Color

The second approach to understanding color is to learn their natural and physical properties. There are two kinds of color—spectrum and pigment—and each has its own characteristic quality or property.

SPECTRUM COLORS

These are the colors of the rainbow, the result of breaking up a ray of sunlight. They represent *transmitted* light. This is the *spectrum theory*:

White light from the sun contains rays of varying wave lengths, each ray having its own wave length and angle of refraction — the way it is bent from a straight line.

Direct sunlight, passing through a glass prism onto a white surface, is broken up and bent into other rays of varying lengths that appear as a colored band on the white surface. At one end of the band is red (the longest wave length); at the other end is violet (the shortest). In between are color blends through orange, yellow, green, and blue. These colors form the *solar spectrum* or *spectrum band*. These are the colors you see in the rainbow.

Spectrum colors reflected from a white surface, are pure colors, undiluted with black, white or gray, and are used as the basis for the names of colors as we know them — red, yellow, blue, etc.

PIGMENT COLORS

Pigment colors, which are referred to as reflected light, are obtained from pigment materials — minerals, dyes and chemicals suspended in carriers (usually oil or water) — used for painting and dyeing. Ochre, for example is yellow (or red) ore of iron; indigo is a dye obtained from plants.

We think of pigments as paints, as something we can mix — colors we can spread on a surface. Pigment itself is not a color but is a coloring matter, a surface material that has the power of absorbing or reflecting light rays. It is the pigment quality of the surface that absorbs all of the light rays except the one which it reflects — and this is the one we see. A leaf is green because all other rays of white light have been absorbed and only the green is reflected and visible to our eye. A blue dress is blue because all rays of white light except the blue, have been absorbed.

Pigments are used in mixing paints and dyes.

Color wheels and charts are based on pigment

Nature has provided the pigments that give plants their colors.

The neutral colors (black, white, and gray) are included in the pigment range, for they can be made artificially. They are not in the spectrum band.

The Color Wheel

If you could bend the spectrum band into a circle and fasten the two ends together, you would have a simple color wheel of six colors, with red next to violet and the other four (orange, yellow, green, and blue) in between.

COLOR WHEEL CHART

The color chart is simply the color wheel made larger by:

Adding new colors by mixing together in equal amounts two colors that are side by side to form a third. Red plus orange makes red-orange; red plus violet makes red-violet, etc. Each new color is

inserted into the wheel between its parents and this process is repeated around the wheel, until all the colors of the spectrum have been used.

By adding black and white to each color to alter its values (shades and tints).

A color chart is useful in learning to understand color, but remember that it can only approximate (come near) colors as we see them and people see colors differently.

FUNDAMENTAL COLORS

These are the main pigment colors that make up the twelve-segment color chart on the cover.

Primary colors are the basic colors — red, yellow, and blue — from which all other pigment colors may be made and which are placed equidistant from each other on the color chart.

Secondary colors are equal mixtures of two primaries and are spaced half way between their parents. Orange is half way between red and yellow; green between yellow and blue, and violet between blue and red.

Tertiary colors are the equal mixture of a primary and the secondary color next to it and they too are half way between their parents. (Tertiary means "third order".) Tertiary colors are: red-violet, red-orange, yellow-orange, yellow-green, blue-green, and blue-violet. In naming these colors, the name of the primary is placed first, as in red-violet.

A color chart can be expanded to an almost limitless degree by continuing to add colors and values.

Color Vocabulary

Hue — This is the specific, or family, name of a color. Color is an all inclusive term that includes hues, values, and chromas. Thus red is a hue, while pink (tint of red), dubonnet (shade of red) and dusty rose (tone of red) are colors. But generally the terms, hue and color, are used interchangeably.

Dimensions of hue — Every hue has three dimensions that are called attributes or qualities. Since hue is a family name, these attributes can be called members of the family.

Value is the degree of lightness or darkness of a hue. On the color chart the pure or spectrum hue is the middle section of each wedge. All colors above and below this are values.

Tints are lighter than pure hues, diluted by the addition of white, and are placed toward the outer edge of the chart. Pink is a "tint" of red.

Shades are darker than pure hues, made so by adding black, and are closer to the center of the chart. Dubonnet is a "shade" of red.

The number of values varies with different hues. There are more in the blue than in the yellow range.

Chroma is the brightness or dullness of a hue. It is also called the brilliance, intensity and purity. Chromas are not shown on the color chart but the pure or spectrum hue (in the middle) has the greatest brilliance, or full chroma.

Tone is a hue made dull by adding gray or its direct complement. Dusty rose is a "tone" of red. This term is seldom used in flower arranging although some flower colors are tones.

Texture in flowers and foilages is the surface quality that most often determines the chroma. A hairy leaf is duller than a smooth one, so it has a lower chroma. A velvety flower has a lower chroma than a satiny one.

Weight does not refer to pounds and ounces but to the eye appeal, eye attraction, and eye impact of a hue. Place a pink flower beside a dark red, close your eyes and then open them quickly, and your eye will go first to the pink — but will remain longer on the red. Replace the pink flower with a bright red and repeat the experiment. Your eyes will go first to the bright red and then to the dark, but will return to the bright color. The conclusion of many flower arrangers is that dark values and bright chromas are "heavy", while pale values and dull chromas are "light", but since "weight" is eye appeal, the opposite is true.

Weight can also be explained psychologically. In our everyday life we think of the sky as being light and the earth dark. It naturally follows that pale colors will seem to have less visual weight than dark colors and should, therefore, be placed at the top of the arrangement. This is not necessarily true. You can place your colors anywhere you wish, providing you keep in mind the principle of color balance.

Color Schemes

Just as in design, harmony in color refers to that which is pleasing, or colors that go well together. Although there is no *right* or *wrong* way to combine colors (this is a matter of personal taste), the following are recommended guides of color schemes, for they have proved to be the most pleasing to the most people. Black, white, or gray may be used with any of them to lighten or darken them if desired.

Monochromatic — one hue with its various values and chromas. It may be any hue — primary, secondary, tertiary, or intermediate. If red is used, the

range can be from the lightest, brightest pink to the darkest, dullest red, but it may not include a neighboring hue such as red-orange or red-violet.

Analogous — two or more hues that are adjacent or neighboring on the color chart, together with their various values and chromas. While more than one primary color cannot be used, it is not necessary to use a primary at all. If red is the primary, you can use red, red-orange and orange — but not yellow-orange. Or green, green-yellow and yellow-green — but not blue-green.

Contrasting or Direct Complement — two hues with their various shades, tints and tones that are directly opposite each other on the color chart. (Example: red is opposite green, blue opposite orange, and yellow opposite violet.)

Split complement — one hue with the two that lie on each side of its direct complement. Red with yellow-green and blue-green; yellow with red-violet and blue-violet; and blue with orange-yellow and orange-red. It may help you remember if you think of the letter "Y".

Triad — three hues, with their values and chromas, that lie at equal distances from each other on the color chart. This could be called an equilateral triangle of color. Red, yellow, and blue; orange, green, and violet, or red-orange, yellow-green, and blue-violet — all are triadic color schemes.

Paired Complements — four hues; two pairs of complementary hues are combined.

Color in Arrangements

As we said at the beginning of this chapter, color adds life, sparkle, zip to an arrangement. It is the dominant element because of its appeal and its psychological effect on the viewer, but you must remember that it is only *one* element. It cannot be used without regard to the basic principles of art. Color balance, rhythm, dominance, and contrast must all be carefully thought out.

COLOR BALANCE

By color balance we mean the careful grouping of colors on either side of a central axis (real or imaginary) so that there is equal visual weight on each side. This can be done by:

- Using more of a lighter value than a dark value.
- Using a small amount of a brilliant color with a large amount of a dull color.

- Keeping the stronger, darker colors toward the center and low, and the weaker, lighter ones nearer the outer edges.
- Balancing dark colors at the top with a much greater area of light values at the center to avoid a top-heavy appearance.
- Balancing dark colors on one side with a greater area of light colors on the opposite side, to avoid a "tippy" appearance.
- In color amounts, using three parts of a light value plus two parts of a medium value to balance a very small amount of a spectrum value (red, blue, etc.).

COLOR RHYTHM

There are two approaches to color rhythm in arranging flowers.

Transition is a gradual change from one hue to another, from one value to another, from one chroma to another. Make these color changes in easy steps, with one hue, value, or chroma flowing (not jumping) into the next one. Any wedge-shaped segment on the color wheel is a good example of color transition.

Repetition is very important. Don't use a color once and then drop it. Pick up a color in one area and repeat it in another, but in a modified form. For example — red glads in one area, white glads with red throats in another; dark red foliage to repeat a lighter red of flowers.

COLOR DOMINANCE

Unequal amounts of colors, with one color more important or more conspicuous than the others, can be found over and over in flowers. In the red and yellow dwarf marigolds, some will have more red than yellow and others more yellow than red, but the reds and yellows are rarely equally divided in the same flower. There are two kinds of color dominance in flower arranging:

I. Area dominance or mass effect means using a larger area of one color, a smaller area of another, and a still smaller area of a third. In a two-color arrangement of green and white, you would use more

white than green and the white therefore would dominate. If you add enough light yellow to cover the same amount of space as the white, the two would compete for attention, so you would either use less of the yellow or place the flowers closer together so they take up less space. If another color is added, it should occupy a still smaller space.

2. Dominance by emphasis or accent in an arrangement means dominance by a strong color because it demands attention. This color, then, must be used in small amounts if color balance is to be maintained. The strongest color should be used at the focal point.

COLOR CONTRAST

Differences in hues or values can be emphasized by placing them close together or side by side. A red flower looks much redder against a green leaf than it does by itself; pale pink tulips appear much pinker used with dark blue delphinium than they do with white ones. In flower arranging there are two kinds of contrasts:

Quiet, subtle contrasts (pale blues, lavenders, pinks together) are best for close viewing, for their beauty is lost at a distance.

Strong, sharp contrasts (light pink or white with red) can be seen easily at a distance.

COLOR AND LIGHTING

In the garden, dark colors become darker at night, and light colors lighter. Under artificial lights, there is an even greater change. Fluorescent (white) light intensifies the blues, the violets and the greens but deadens the reds, oranges and yellows. Incandescent (yellow) light has just the opposite effect, for it brightens the warm colors and dulls the cool colors. In bright light all colors seem brighter and in subdued light they soften.

Strong front lighting makes an arrangement seem flatter but light from the back adds depth. Top lighting seems to broaden it, side lighting gives it height, and a diagonal light from a shaded lamp brings it closer.