CHAPTER 7. THE BASIS OF IT ALL THE ELEMENTS AND PRINCIPLES OF DESIGN

The Elements of Design

All arts and crafts have at least one thing in common: they all are governed by the same elements and principles of design. *Elements of design* are the basic, visual qualities of a design, and are the working ingredients the arranger uses: light, space, line, form, size, color, texture and pattern. All of these are tangible, *actual tools* which a designer uses in creating a design.

LIGHT

Light must be present for any vision to be possible. It may be present in varying amounts and intensities, and may be of different types as well, but it *must* be present if we are to see and distinguish objects, textures and colors. Light is basically of two types, it is either natural (from sunlight) or artificial (manufactured). The kind, amount and intensity of light will affect how the eye sees color since light is the source of all color. Diffusion will give all colors and forms a softer, more delicate quality, while highly intense colors will seem brighter and more vivid under more highly lighted conditions.

It is a scientific fact that sunlight contains all of the visible light rays, and when blended together, these rays produce white light. White light can be separated into all of the individual hues of which that white light is composed by separating the rays through a glass prism. Light rays are transmitted by differing wave lengths. Each wave length has its own angle of refraction, so all light rays of the same wave length are reflected as the same hue. Longest wave lengths are reflected as red hues and the shortest wave lengths as violet. The band of color which starts with red on one end, proceeds to orange, yellow, green, then blue, and ends with violet on the other end is called the solar spectrum. These are the colors seen in a rainbow.

There is a wide variety in types of artificial lighting, and the flower arranger may utilize these for special color effects in designs. It is the wise flower show competitor who understands how light affects color, and takes this into account when planning an entry for a show. Knowing what kind of light is available in the show room as well as the intensity and location (or direction) of it are important

considerations when planning what plant materials will be chosen for use in designs. Artificial lighting can alter colors since it picks up and accentuates its own hue. Fluorescent lights have a blue-green undertone and a shortage of red rays, so they can intensify blue or green materials, but cause a graying effect to red, yellow and orange ones, making them seem less vivid. Incandescent lights have a yellow undertone, which make blue and lavender flowers seem to disappear in a design. Yellows, reds, oranges and yellow-greens will seem even brighter under incandescent lights.

Candlelight may be used on table settings in home situations. Candles are never seen burning in a flower show for reasons of safety. Since the light from candles is soft, those cool, receding colors such as blues and violets may not show up well, or may actually seem to disappear. White, yellow and cream are luminous colors, reflecting a good deal of light, so they would be particularly good choices for table settings lit by candlelight. In general, pastel colors will be preferable to darker ones in this lighting situation or in any low-light setting.

Lighting can create many special effects within a design, and should be carefully planned and controlled. Since light plays such an important part in our perception of form, color and texture, it must never be an after-thought in our designs, but must be a planned, controlled part of every design. The type of light and its placement (whether to one side or both sides, from above or below, from behind or in front of the design) can do many things: create interesting shadows, which become a definite part of the design, or eliminate all shadows; create an impression of depth; change the appearance of forms; intensify and modify textures; change, intensify or "wash out" colors depending on kind, location and intensity of light. The "mood" of light can be bright, sparkling and gay, or it can be dark, depressing, and forbidding.

Any texture, whether smooth or rough, dull or shiny will be seen in relation to how the surface planes reflect or block light. Shadows created by the type and source of light will intensify apparent surface roughness. If shadows are eliminated by diffusion of light, then apparent smoothness is the result. No surface can *absorb* all light rays and nothing can *reflect* all light rays. Any object, because of its surface quality, which absorbs nearly all light will appear to be black. Black is called a *saturated* color because it has absorbed the greatest possible amount of light. Conversely, white is called *luminous* because it reflects as many light rays as possible.

Designs may be given a reflective quality by including certain hard, smooth surfaces, such as mirrors, polished metals, glass, certain plastics , or even water within the design. The effect can be an exciting one, that of light seeming to shine through the design. Transparent or semi-transparent materials can also be used in a design as transmitters of light, creating still another dramatic effect within a design through the planned and controlled use of light.

Use of any special lighting in flower shows will be determined by the schedule, particularly if there is a need for the supplying of electricity.

SPACE

Space is also an important part of designs and should not be left to chance. We are surrounded by space, and flower arrangements are all the better when planned incorporation of space is a part of them. Space, the open areas in and around a design, is created by lines and forms, and it can be manipulated and utilized to make designs more rhythmic, have more dynamic and dramatic impact, and enhance apparent depth. The sculptor, Auguste Rodin, described sculpture as being "the art of the hole and the lump". In its most literal terms, this could also be said of flower arrangements.

When we create a design we do not have unlimited or undefined space. Space as it impacts a design is either real or suggested, but it will have actual or visual limits and boundaries placed upon it. When we talk about using space in designing, we must first consider the *total space* we will have to work with in a flower show. This will be determined by the schedule writers and the Staging Committee, since they will decide how much space is to be allotted to each exhibitor in every class. Flower arrangers work within a three-dimensional volume of space, their total available space, which has dimensions of height, width and depth.

In a class or section of Functional Table Settings, the dimensions of the table will determine the amount of space each exhibitor will have for staging an exhibit. For Exhibition Settings, the schedule will state the dimensions of each exhibitor's space. An exhibitor in a show has absolutely no control over the total space, but still will need to consider it when planning a design, so that proportions will be correct for conformance as well as being aesthetically pleasing. In the home, total space will be determined by where a design is to be placed, i.e., if it is on a certain table or portion of a table, next to a lamp and under a painting, then total space for a design is determined by the presence and dimensions of those limiting components. This total space can be changed somewhat by moving or removing such things as furniture, accessories, etc. For a table setting in the home, the entire room setting for the table must be considered as part of the total space.

We also consider *spaces within the components* we have chosen to use in the design, such as container, base, accessory or feature, plant materials and staging devices. These spaces can be manipulated and changed by pruning or reshaping of plant materials (by manipulating into certain shapes, such as loops or triangles, for instance), or by elevating a design to create more space beneath it, or by constructing staging devices which have planned enclosed spaces within them.

We as arrangers have control over this type of space through choice and selection of components. We can always choose those which have more or less space within them in order to achieve the desired effect. Instead of a solid, compact marigold, zinnia or dahlia, we might choose to use a Dutch iris or Bird of Paradise. Instead of a solid, straight cylinder or pillar, we might choose a modern container with numerous holes or openings, or for a more traditional design, we might choose one with prominent handles or one which is footed. We might use frames, or frames within frames, instead of a solid columnar pedestal to stage a design. The same would be true of accessories or features — they, too, may have enclosed spaces within them. Bases might have legs, scrolled-ends or feet rather than being

flat. Consciously made decisions will provide for the inclusion of interesting spaces within the final result of our designing efforts.

The final type of space with which an arranger must deal is *spaces created* within the design. This is the one type of space over which the arranger has complete control, since the development of spaces and solids are created by placement of lines and forms within the design. These placements determine sizes, shapes and limits of spaces.

The use of space can greatly affect the rhythm within a design. Spaces play a controlling part in directing involuntary eye movement, so spaces can influence the kind of movement as well as tempo of movement within a design. This tells us that space also greatly affects balance, since spaces are important, as are the solids, in controlling the visual stability of a design. In the final analysis, though, spaces cannot balance solids. Introduction of space can also be a tool for adjusting proportions of the overall design. The sizes and locations of spaces will control proximity of colors and textures to each other, determining how the eye perceives them.

We always start within the limitations of the total space, and then create individual spaces within it by the manner in which we choose, and then organize the chosen components. Each element and principle will in turn act and react upon the others.

Space can be a tool for interpretation of feelings and emotions. The amounts, kinds and locations of space can have symbolic meaning: designs incorporating a good deal of space within them can have a feeling of sparseness or stinginess, of tranquillity, restraint and reflection, while those designs consisting of large quantities of plant materials and incorporating few spaces can convey abundance, exuberance, or heaviness and busyness.

Color and texture of spaces are determined by the background against which they are seen and by other objects adjacent to the space. In the case of a table setting, the tablecloth is usually the background against which components are seen, with the possible exception of the decorative unit. The decorative unit would not be looked down upon unless it was a very low, horizontal type of design, so its background would not necessarily be the tablecloth. Its background would be the walls or other features of the room itself, such as doors and windows.

Think of a space as having all of the same characteristics of a form. It is present to some extent in most plant materials and other components used in a design. It is measurable, thus space can be said to have size; space has color and texture, as do forms, depending on what color and texture is seen through and behind the space; and space has shape — it can be determined upon observation and analysis whether it's shape is geometric or irregular.

Shapes of spaces need to be varied enough in a design that they add interest, but the creation of so many different shapes of spaces, causing a lack of dominance and creating visual confusion in the design, must be avoided. Introducing space without purpose, and to the detriment of the overall design is not a positive contribution and must be penalized.

We tend to think of the use of space within floral designs as being important in, and confined to, creative designs. It is very true, however, that incorporation of space is also important in traditional designs. Incorporating space and isolating individual flowers within it enable us to see and appreciate the varied forms of all of the different plant materials used in traditional designs. It might be said that the proportion of solids to spaces can determine the nature and character of a design. Space can give designs an airier, more open look, freeing them from the dense, packed look of the past which often lacked movement and grace.

Designers practicing the Oriental style of arranging have always shown an appreciation of space, while this same appreciation was a later arrival in Western floral design. We have come to understand that space can give a sense of order, grace and meaning to our designs, with its attendant elimination of unnecessary "clutter". Knowing the many ways in which the use of space can influence perception of the other elements and principles of design should inspire us to use space carefully and thoughtfully.

LINE

Line is the visual path through the design. Line is considered to be the foundation of design since lines are used to create the skeleton or structural outline of a design. Technically speaking, a pure line is the extension of a point and has only one dimension, which is length. Lines provide directional movement by forcing the eye to move along its length, thus establishing rhythm within a design. This directional movement can be actual, implied, continuous or "broken" (i.e., visually interrupted in some way). Because lines "move", they are very expressive elements of design.

The character and types of lines can be used to establish a mood or to interpret a feeling or emotion. Down-curving lines may be restful in feeling, or they may also be depressing, sorrowful and weary; up-turning lines are usually gay and lively; gently curving lines are graceful and feminine, or they may seem lazy, slow and aimless; vertical lines can convey a sense of dignity, of inspiration, poise, balance, integrity and of strength; horizontal lines are usually restful, serene, calm, and quiet; oblique lines and spiraling ones are forceful and exciting; diagonal lines are active, powerful, can suggest unbalance and a feeling of falling over, or can show resistance or insecurity, while zigzagging lines are usually disturbing, dynamic, restless, agitated or indecisive — as you can see, line truly has a language of its own. Contemporary creative thought has freed the designer to use crossing lines and lines emerging from more than one point within the design if this is done for a reason, rather than just being the result of haphazard placement. The employment of these lines can often increase a sense of depth.

Lines are characterized as being long or short, thick or thin, straight or curved, delicate or bold. A line which creates a cone, circle, or oval is said to be a line of geometric curve, since it is a line which brings the eye back to its starting point. This is a line which always encloses space. A crescent or zigzag are lines which only partially enclose space.

The most important line in any arrangement is the one which has the strongest visual attraction. This attraction may be attained by being the longest, heaviest, most interesting one or the one with the most variation in form or direction from all other lines in the design. The primary line is usually the tallest or longest line in a design, and is the one which is placed first in order to establish the height of the overall design, or strongly influence the width of a horizontal design. Placement of other lines will follow, and their placement as well as their force in the design will be influenced by the primary line. When placing any line, the designer must consider the placement of each previous one as well as each succeeding one, and all must be contributors to a harmonious whole in terms of rhythm, balance, dominance, contrast, proportion and scale.

Any line direction within a design may consist of only the chosen linear material or it can be created through the repetition of shapes, forms, textures, and colors which have been placed in a specific linear direction. Variations within lines can add great interest and distinction to a design. When you think of it, there are no two curves or shapes in materials created by nature which are absolutely and exactly alike. This is especially true of such unique natural sculptures as decorative wood. Each has its own distinct linear form which sets it apart from all others, and gives it a linear structure which can never be copied.

Lines can also create tempos of eye movement within a design. Visually, they can seem to move quickly or slowly due to the creation of visual stopping and starting points, so that the eye is directed (or "pulled") along that particular linear path. Downward lines seem to have a more dominant attraction to the eye than do upward ones, so usually the lines going upward are longer in order to balance this visual pull of downward directed lines.

Placement of lines and forms control the degree of visual depth found within a design. These structural elements control eye movement in both vertical and horizontal directions, stopping and starting according to placement and physical characteristics of the various lines, so they can also be used to direct the eye in and out and back and forth through the design. In this way, both visual and actual depth perception is controlled.

FORM

Form is sometimes confused with shape, but the two terms are not interchangeable, since form refers to three-dimensional objects, while shape (or outline) is two-dimensional. To put it simply, form might be referred to as shape with thickness or with depth added. In the broadest terms, all forms fall into two basic categories: they are either open or closed. An open form has an airy effect, having spreading parts with spaces between its parts. Open forms are lighter in visual weight than closed ones of the same color, size and form. Queen Anne's lace, alliums, lilies, iris are some examples of open forms. Closed forms are solid and compact, with few spaces between the individual parts. Marigolds, carnations, hydrangeas and football chrysanthemums are examples of closed forms.

Other than being open or closed, all plant materials can be said to fall within three basic types. They are either *spike* (elongated); *round*; or *profile* (indefinite/

irregular) in form. For example, larkspur, delphinium, stock, gladiolus, cattails, buddleias, snapdragon, delphinium, Bells of Ireland, liatris, tritoma, sansevieria, mullein, iris leaves, and plumed celosia are all spike, or elongated, forms. These are materials which lead the eye through and out of the design. Because of their tapering linear forms, they are referred to as releasing forms, which cause the eye to move along their length without being held over-long in any one place.

Round forms are hydrangeas, peonies, yarrow, carnations, full-blown roses, chrysanthemums, dahlias, zinnias, marigolds, camellias, alliums, certain rosette-form succulents, oranges, daisies, etc. Rounded forms hold the eye and provide resting points for it, and in traditional designs they can be used to create areas of interest or focal areas. They give stability to a design if placed near the base or the rim of the container. If too many rounded forms are used full-face, i.e. facing the viewer directly, the arrangement will become very static and uninteresting. Rhythm in such designs will be monotonous, with very little movement. Turning rounded flowers so they are seen at varied angles will solve some of this problem, but not all.

Plant materials with profile, or indefinite, forms are orchids, iris, daffodils, Bird of Paradise, some proteas, lilies, ginger, etc. These are forms having irregular contours, giving greater dramatic impact. They are often used in more creative types of designs.

Smaller, composite forms are used as transitions from spike to rounded forms. They are often used in traditional designs, but are seldom seen in creative ones. Transition, or filler, plant materials are such things as lilacs, spirea, sprays of pompon chrysanthemums, baby's breath, acacia, Queen Anne's lace, statice, fever-few, small-leafed materials such as boxwood, yew, cedar, artemisia, ferns, and many others.

If a design is to be interesting and free of monotony, then it must include variation of forms, but not have so much variety that the design lacks unity and the eye doesn't know where it should look first or longest.

Forms may be irregular or regular, symmetrical or asymmetrical, geometrical or non-geometric, angular or curved, solid or with enclosed spaces inside. They can be made to look entirely different, assuming different forms by changing the angle from which they are viewed.

SIZE

Size is probably the easiest of all of the elements to understand since it is defined as the dimension of a line, shape, form or space. It can be actually measured. In any type of designing, however, the concern is with visual or apparent size, rather than actual size. To be more specific, in any art form, how large something *seems to be* is much more important that how large it *actually is* in a measurable sense. The element of size is closely related to the design principles of scale and proportion.

A number of factors will determine visual size. Distance from the viewer is one: objects which are farther away will seem to be smaller than those which are nearer. Relative sizes of other objects seen simultaneously can also affect the

perception of the size of objects. For example, a spray of baby's breath seen next to a dinner plate-sized dahlia will seem to be smaller, when viewed comparatively, than it actually is. The placement in the design and the angle from which any thing is viewed is also a factor. If there are two objects of the same form, size and color, the one turned at an angle will seem smaller that the one facing straight to the viewer. A form of a bright, advancing color such as red, yellow, orange, and yellow-green will seem larger than a form of the same size which is of a cool, receding color, such as blue, green or violet. White and very pale colors will also cause an object to appear larger than will objects of darker colors. Objects with shiny textures seem to be larger than those of rough or coarse textures because the shiny object reflects more light, and for that reason seems to be larger.

COLOR

Color is probably the most compelling, most expressive, most attention-demanding of all of the elements. Color can be counted on to give life and personality to a design since it can be exciting, stimulating, forceful, provocative, bold, gentle, dramatic, dull, bright or have endless other qualities. We are emotionally involved with color, since each of us has definite likes, dislikes, preferences and prejudices for color.

Judges always have to be extremely diligent that they do not allow their personal feelings about color to influence their judging decisions. Exhibitors, too, must not allow their designs to fall into a predictable "rut" because they prefer using their favorite colors in all of them. Of course, people who are choosing colors for their own home can indulge their color preferences as much as they like, but in designs created for flower shows, exhibitors and judges need to be accepting of all colors if they are well-chosen and skillfully used.

When we speak of color, we are referring to a specific visual sensation, which is the response of the eye to wave-lengths of light reflected from a surface. All color has its beginning with light, since there is no color without the presence of light. The perception of color and its intensity will vary, depending on the type, source, and amount of light that is present. The color that we perceive as a result of these influences is called *atmospheric color*.

We also know that no one color is ever seen alone, but is affected and influenced by the other colors seen around it. If, however, a color could be seen isolated and alone, that type of color is called *local* color. This type of color especially must be considered when planning table settings, since colors found in all components — dishes, glassware, linens, and accessories or features — will affect and act upon each other. Colors can change, subdue or enhance each other, depending on placement within the design.

Color has three essential qualities or dimensions. The first is *hue*, which is the specific or family name of a color. The words color and hue are used interchangeably when referring to the specific identifying name of a color. You might say that a particular color (or hue) is red, or it is yellow, and so on.

Value is the second quality, and refers to the degree of lightness or darkness of the color, determined by how much white or how much black is present in the

color. If white is added to a color, the result is a light value, or *tint*. If black is added to a color, it becomes darker and is referred to as being a *shade* of a color.

Intensity is the third quality or dimension of a color and refers to the strength or purity of any particular color. It is what distinguishes a strong color from a weak one. Some art books may refer to intensity interchangeably with the words saturation or chroma. Intensity is diminished by adding gray to a color, which results in a *tone* of a color. The color then becomes less intense and weaker, more subdued. Intensity is a valuable tool for controlling the character of a design or its expressiveness. Subdued, less intense colors suggest refinement, elegance, restfulness, and gentleness, whereas bright, strong colors convey brilliance, vividness, or even garishness in some instances.

Color has a "language" or symbolism of its own. It can communicate feelings and emotions from one person to another, based on common associations within a culture or society, as well as those based on each individual's personal experiences with color. Specific combinations of colors also have special associations for each of us. To all Americans, the color combination of red, white and blue immediately speaks to us of the flag, love of home and country, patriotism, the Fourth of July, etc. The color combination of red, white and green would have similar associations for a citizen of Mexico.

We have immediate recall of certain holidays when we see a specific color combination or harmony. A color harmony based on shades of green calls to mind St. Patrick's Day, while red and white immediately reminds us of Valentine's Day, and the color harmony of red and green is traditionally associated with Christmas.

When considering the symbolism of color as a means to communicate with viewers in a flower show, the following color associations might be used:

- *Red:* Heat, fire, warmth, danger, a sunset, passion, courage, excitement, anger, aggression, the Devil, rubies, Santa Claus, Christmas, strength.
- *Pink:* Seashells, health, innocence, springtime, little girls, delicacy, femininity.
- *Yellow:* Sunshine and the sun, candlelight, warmth, springtime, liveliness, luminosity, cheerfulness, gaiety, youth, lemons, happiness, cowardice, deceit, topaz.
- *Gold:* Autumn, wealth, sunshine, the moon, the sun, ill-health.
- Orange: Autumn, Thanksgiving, Halloween, warmth, vitality, action, strength, flames, sunset, bravery, energy, vigor, modernity, excitement, earthiness, cordiality.
- *Blue:* The sea, sky, water, deep space, transparency, clarity, ice, cold, restfulness, peace, tranquillity, piety, inspiration, twilight, calm, sapphires, forget-me-nots, little boys, cleanliness, fidelity, depression, loneliness.
- Violet (or Purple): Royalty, richness, shadows, twilight and dusk, splendor, dignity, wisdom, luxury, violets, fantasy, amethysts, solemnity, melancholy, primness, resignation, penitence, Victorian, mystery, refinement, gentleness, reflective, sadness, sentiment.

- *Green:* The woods, trees, coolness, youth, immaturity, restfulness, springtime, envy, immortality, grass, jade, emeralds, nature, relaxation, freshness, rejuvenation, hope, neutrality, passivity, contemplation.
- *Black:* Night, darkness, mourning, depression, grief, evil, solemnity, magic, Halloween, witches, black cats, sophistication, severity, thunderstorms, formality, death, gloom, harshness.
- *White:* Innocence, purity, coldness, serenity, honesty, truth, chastity, delicacy, cleanliness, weddings, brides, lightness, surrender, crispness, diamonds, light, snow, ice. In some cultures, white symbolizes mourning.
- *Gray:* Fog, twilight, shadows, old age, melancholy, dignity, dullness, tiredness, cloudy days, passivity, frugality, subtlety, resignation, restraint.

The thoughtful designer will choose colors to produce the desired mood or emotion. Those colors referred to as warm colors (red, yellow, orange, yellow-green, red-violet) are bold and stimulating, and can give the viewer a perception of gaiety, warmth, action. Those colors which are referred to as cool colors (blue, green, violet, blue-green, blue-violet) produce a feeling of restfulness, tranquillity and peacefulness.

Color also can give a sense of movement, with the warm colors seeming to advance or come forward in a design, while the cool ones seem to retreat or recede in the design. Warm colored objects can be placed in an area (or areas) of a table setting where the designer wishes the eye to stop or be held. If a form needs to appear larger in order to aid balance, proportion and scale, then choosing a warm colored form will fulfill that need. Using the cool colors will produce the opposite effect.

Scientists and color experts agree that there are three basic or *primary* colors, red, yellow and blue, and from these all other colors can be created by mixing combinations of the pure primary colors in varying amounts. This is called the Pigment System. Equal amounts of yellow and blue mixed together will produce green. Equal amounts of red and blue mixed together produce violet, while equal amounts of red and yellow mixed will produce orange. These three colors — green, orange and violet — are called the *secondary* colors. *Intermediate* colors are those found between the primary and secondary colors, and will bear the names of both of their adjacent colors, such as blue-green; yellow-orange; red-violet; yellow-green; red-orange, and blue-violet.

Complementary colors are those which are directly opposite each other on the Color Wheel: yellow and violet; orange and blue; red and green, etc. (The Color Wheel will be found in the Appendix.) There are also complements of the intermediate hues, such as red-violet and yellow-green; blue-violet and yellow-orange; blue-green and red-orange. The complementary colors are referred to as contrasting color harmonies.

Black, white and gray are *neutral*, or *achromatic*, colors. All other hues are called chromatic colors. White in scientific terms is the presence of all color; black

is the absence of all color; and gray results from an equal mixture of the two. The amount of these which are present in any other hue will give that hue its tonal value, which will determine its sense of lightness or heaviness, or its visual weight. White appears lightest and black the heaviest. Many people mistakenly refer to brown and navy blue as neutral colors, which they are not. Brown is a dark shade of orange, while navy is a dark shade of blue.

The name, color scheme or color harmony, is given to certain recognized groupings of colors. These are basic groupings of colors which have evolved because people could easily see the relationships between them, and so, have given that particular grouping a name to designate it and differentiate it from other color groupings.

If a color scheme consists of those colors called *split complements*, then the harmony is one which uses three colors instead of only two. If a hue is selected on the Color Wheel, first find its direct complement (the one directly opposite it). The two colors on either side of that complementary (opposite) color would be the two colors used with the chosen hue to complete the split complementary color scheme. For example, suppose the color chosen first is orange. The complementary color of orange (the one directly opposite orange on the Color Wheel) is blue. The two colors on each side of blue on the Color Wheel are blue-green and blue-violet. Thus, this particular split complementary color harmony would be orange, blue-green and blue-violet. Split complementary color harmonies can be made using every hue on the Color Wheel as a starting point. A split complementary harmony is known as a *contrasting* color harmony.

Monochromatic, translated literally, means "one color". A monochromatic color harmony is one which includes tints, shades and tones of only one hue. For example, if we again choose orange, as we did when illustrating an example of the split complements harmony, this time to serve as the base hue for our monochromatic color harmony, we could use *tints* of orange, which would be pale peach or apricot shades, as well as related *shades* of orange, (the darkest shade of orange is brown; tints and tones of brown could also be used, ranging from beige through rust), and *tones* — grayed hues of any from this large color grouping. Monochromatic is classified as being a *related* color harmony.

Some consider monochromatic color harmonies to be monotonous, but perhaps a better characterization would be that it is elegant, simple, and pleasant. Really, there are so many different possibilities for blending and contrasting, even when confined to the variations of only one color, that possibilities are infinite. Additional contrast can be introduced into the design through variations in textures and sizes. Designers and judges should not demand too rigid adherence to this, or any, other color harmony because they will find that flowers rarely have only one color within their make-up. Most have green leaves and stems (some have gray, purple, yellow, red or brownish leaves and stems), and the color of the leaves and stems may not be within the chosen color harmony. Many flowers will have other colors in their centers, and these colors too may not be within the monochromatic harmony. This is one reason why very few flower show schedules of today specify that exhibitors must use a specific color harmony. They are too

difficult to achieve and are much too confining for creative work, particularly if no allowance is made for "incidental" color, such as those other colors found within a flower

Analagous color harmonies are closely *related* color harmonies. A grouping of colors within an analagous color harmony would include no more than one primary color, plus other colors adjacent to it. There should be no less than three colors in this color harmony and it should include no more than one-third of the Color Wheel, which would mean no more than four colors would be included. To illustrate, let's suppose the chosen color is vellow. Other colors adjacent to vellow can be chosen until you come to another primary color on the Color Wheel, where vou would stop. Another primary color would never be included. If you moved to the left of vellow on the Color Wheel until you came to red, you would find that the colors composing that particular analagous color harmony would be yellow, vellow-orange, orange and red-orange. If you chose vellow and moved to the right of it on the Color Wheel until you came to the next primary color, blue, then the colors in that particular analagous harmony would be vellow, vellow-green, green and blue-green. Another possibility would be to start with yellow and to choose adjacent colors from *both* to the right and left of yellow. In that case, the analogous color harmony would include yellow, yellow-orange, yellow-green and green. Adjacent colors should always be used, with no skips between them. There are many possible combinations of colors within analagous color harmonies, since the starting point for composing it can be any color found on the Color Wheel.

Triadic color harmonies are composed of three colors which are equidistant from each other on the Color Wheel. If you drew an equilateral triangle, with the points on three different colors, this would tell you what colors would be included in a particular triadic harmony. Some examples are red, yellow and blue; yellow-orange, yellow-green, and blue-violet; or orange, green and violet. These will be made more interesting by using tints, tones and shades of the three colors rather than the pure hues. Many paintings by the Old Masters employed triadic color harmonies.

Tetradic color harmonies are those which are formed by combining four hues which are equally distant from each other on the Color Wheel. An example would be blue, red-violet, yellow-green and red-orange.

Polychromatic color harmonies are those using any combination of many bright, strong, harmonious colors. This was a scheme often employed by the Dutch-Flemish painters of bold and vivid fruit and flower still-life compositions. To avoid total anarchy, one color should be dominant, however. This is true of all color harmonies, and the total effect will be much more pleasing if there is variation in tint, shade and tone as well, rather than using all pure colors at full intensity.

Colors chosen for a table setting must be given careful consideration, since they are an important factor in the overall unity of a setting, as well as being a strong determinant of the table's degree of formality and suitability for the theme or occasion.

TEXTURE

Texture is defined as the surface quality of an object. It is closely related to our sense of touch as well as to our visual sense. Every material has a texture, and these textures will produce varying sensations when we touch them. This is known as tactile value. Texture may be actual – in other words, when you touch an object, it feels the way that your eye told you it would feel - either rough or smooth, coarse or fine, hard or soft, glossy or dull. There are, naturally, variations within each kind. Texture is not confined to the extremes, but may be one of "in-betweens" – an object may be very coarse or moderately coarse, for example. Texture may also be visual – because the surface of an object is patterned, your eye may tell you that the object should feel rough, but if you touch it you will find that it is actually smooth. There is the illusion of a particular texture being present, in other words, where that texture does not actually exist. Examples of this can be found in certain patterned foliages, such as sansevieria ("Mother-in-law's tongue"), spotted aucuba, or variegated ivy among many. Carnation petals feel silky, but they look rough because of their jagged form. These materials are all smooth, but our eyes tell us they should feel rough.

Potters, painters and other artists and craftsmen can control the surface structure of their creations, but flower arrangers are more limited. We can perhaps change the textural qualities of containers, bases, accessories and features, as well as of some dried materials by applying a surface-coating of some material, but in the case of dried materials, only if the schedule permits this to be done. We cannot ever change the surface quality of fresh plant materials, however. Our main approach to control of textures in our designs will, therefore, be through *selection* of textures. There is such an infinite variety of textures available in the wealth of plant materials from which we can choose that this should never be a problem for us.

Some materials may have more than one texture within their make-up. For example, a rose or a camellia blossom is soft and velvety, while their leaves are slick and hard to the touch. A thistle's leaf is very velvety in the center, but rough and prickly on the edges. On a table setting, a very fine, closely-woven tablecloth would feel smooth to the touch, while embroidered details on it could be more rough. The eye would perceive these variations in texture just as surely as would the fingers. This is one way variation in texture is incorporated into a design.

Texture has a very sensual aspect, with each texture having a "personality" of its own. We may delight in stroking a fur, velvet or satiny fabric, or those plants which have a velvety texture, but we would never try to stroke a teasel, a pine cone or a cactus. We know that they are not particularly pleasant to the touch, even though we may find them visually attractive and appealing. We recognize actual textures through associations with our sense of touch and by previous experiences. We may possibly find certain textures more visually appealing than others also, based on our personal likes and dislikes.

Texture can affect the perceived size or color of an object. The amount of light reflected from an object is directionally proportionate to its texture: rough textures absorb light, making the color seem darkened and weaker, and the object seem

heavier; shiny, smooth textured objects reflect light, making the object seem to be brighter colored and larger, yet lighter in visual weight.

The distribution of textures within a design will affect its rhythm, balance, and dominance, as well as the perception of color and form. Shiny or glossy materials attract the eye, so they must be placed where they do not adversely affect the balance or rhythm within the design. Highly polished and reflective containers tend to hold the eye, for example, and make the design seem bottom-heavy. The eye is held there and cannot continue on smoothly throughout the design. A too shiny base or accessory may have the same effect. A very shiny piece of plant material, such as an anthurium, if placed much higher than other components in the design and leaning away for the visual central axis of a design, will give the viewer an uncomfortable feeling that the whole design is going to fall in that direction in which the anthurium is leaning.

Light and lighting affect the textural quality of any material or form. Rough surfaces are enhanced and intensified by the contrast between light and shadows. Turning plant materials so they have varying planes will create this play on light and shadow, which also enhances the rhythm within a design. Light affects shiny materials in the same way, and varied reflections on different planes of those will have the same effect.

Texture also has the ability to "speak" to the viewer, making it a tool for expression and interpretation within a design. For example, roughness suggests masculinity and strength; smooth, fine textures are suggestive of more delicate, feminine qualities (Gloria Steinem, *please* don't call!); rough prickly surfaces suggest anger, confrontation, viciousness; and smooth, silky, satiny surfaces seem to be elegant, sophisticated, and worldly.

Some variation of texture within a table setting is essential if the setting is to avoid being dull and uninspiring because of too much sameness. The mere presence of texture is not enough, however, since texture needs to be carefully selected, distributed, and controlled by the designer if the end result is to be one of beauty and harmony. Contrasts of shiny against dull, rough to smooth add interest since the special quality of each is emphasized and enhanced by their differences. Textures which are too similar to each other do little to enhance each other and their differences are often not perceived or fully appreciated. Variety in textures can add interest and distinction, but too *much* variety can create a feeling of busyness and unrest. A careful selection of textures is essential to the overall unity of the setting. Texture, more than any other quality, will determine the degree of formality of a table setting. In general, the rougher the chosen textures, the more casual and informal will be the setting, while the smoother the textures, the more formal and elegant will be the character of the setting.

PATTERN

Pattern is the design formed by solids, spaces and colors. It is the result of various combinations or groupings of elements, such as various combinations of lines, shapes, spaces, forms, colors, all of which go to make up the pattern as a whole.

All plant materials have a pattern: it may be from the arrangement of leaves on the stem; from the way smaller stems branch from the main stem; from the way florets are placed on the stem; from the way petals are arranged within the blossom, or it may be from the way lines, shapes or colors are arranged within the overall form or object. When we come to know many different plant materials, we can expect to find certain organized and consistent patterns within specific types of materials. We can know that most ferns, for example, have an expected and constant pattern of a central stem with paired leaves opposing each other along the stem, with fairly even and equal spaces between each pair of leaves. All of these traits will be typical of a particular genus or variety, but there may be variations due to poor growing conditions or genetic changes within a particular specimen which would alter its pattern. Perhaps the designer has consciously altered the pattern by pruning, reshaping, or distorting the original pattern of the material in some way.

Patterns within plant materials may change as the stage of maturity of a particular piece of plant material changes. For example, a gladiolus stalk which has all its florets as tightly closed buds will have an entirely different pattern from one with part of the florets opened. The pattern would be more different still when all of the florets have become fully opened. The successful designer must be familiar with many different kinds of plant materials and know what to expect from them. Does a certain plant's pattern change radically as that plant material ages? Will it continue to change even after it has been cut and placed in the design, or does it stop all changing once the material has been cut? Both choice and placement of plant materials must be considered by the careful designer who wants to control pattern within a design.

Variegated leaves may have regular or irregular color patterns. Aucuba, for example, has spots of random sizes and shapes, scattered haphazardly all over the leaf, while certain hostas may have the same color pattern on every leaf of the plant. Colored margins along the edge of leaves or colored centers also form a color pattern. These are all illustrations of pattern within individual parts which may be included into a design. Flowers may also have color patterns, such as streaking, spotting, different colored edges or centers. There may be blending of colors, either at the base of individual petals, throughout the entire petal, or in the throat of the flower.

All components will have either a regular or irregular pattern. Regular patterns in plant materials are either concentric, converging or a combination of the two. A rose, which has a swirling arrangement of petals is an example of concentric pattern, while a daisy, which has petals all meeting at a defined center is a converging pattern. Plant material which has a strongly defined center with petals swirling out from it in a clockwise or counter-clockwise manner is an example of one whose pattern is a combination of the two, both concentric and converging.

Irregular patterns are found in materials on which shapes, spaces or colors are randomly placed within the overall structure or form. Changing the viewing angle of a material or form can also change our perception of it, from being regularly patterned to becoming one which is irregularly patterned.

Pattern can cause problems in the relationship of various forms and spaces.

A pattern can have forms and spaces within it, and conversely, there may be spaces and patterns within a form, or forms and patterns within a space. All of these must be recognized, and carefully placed within a design to avoid confusion and conflict within a design.

Individual plant materials may be combined to create a design, which will itself have an overall pattern. If the components within a design are arranged in such a way that the design has a basic outline of an oval, a circle, or a triangle, etc., then that is the overall pattern of the design. Many creative designs have an irregular pattern or silhouette which cannot be classified as being of any specific geometric form. This is one major way in which these designs depart from the traditional, geometrically shaped, designs of the past.

Components chosen for a table setting have patterns, too. A tablecloth might be printed all over with overlapping circles, flowers or large leaves, for example. This material, then, is patterned. Glassware may have swirling, incised bands, or an embossed floral design, creating a pattern. China may have a motif of flowers, geometric forms, bands, etc. These also are patterns. Every component chosen for a setting could conceivably be patterned. If carefully chosen, these patterns may be harmonious together and create a pleasing whole, but great care must be exercised when combining several patterns. Otherwise, the setting may be confusing, disturbing, and lacking in unity.

The Principles of Design

The principles of design are the basic art standards used to organize design elements. They are balance, dominance, contrast, rhythm, proportion and scale. They provide guidelines, or a plan, by which those basic and actual ingredients or tools, the elements of design, are arranged into a pleasing and ordered whole. If the principles are utilized well, the result will be beauty, harmony, distinction and expression within the design. All arts and crafts incorporate the same principles in their successful execution, and flower arranging *is* an art.

BALANCE

Balance is the ordered placement of components within a design which produces an impression of stability and of visual comfort. It means that components within the design are arranged in such a way that there is a fairly equal visual attraction on both sides of an imaginary line if it were drawn through the center of the design, both horizontally through the center and vertically through the center. This will be achieved by the designer's placement of components within the design. These placements will either aid or destroy that essential feeling of visual comfort.

For example, if materials are placed near the rim of a container, or on a base with no container being used, then the viewer has the feeling that the object so placed has support from below, and thus has visual stability. However, when we place any object out in space and away from its point of support, then we may begin to experience visual discomfort because the apparent weight of any object becomes greater the further it is placed from its point of support. It then becomes

essential that there be some other object placed in such a way that it offers similar or equal visual attraction to that one which is causing the problem. This "tool" for providing the essential visual comfort is called counter-balance. Materials placed low, near or at the imaginary central axis of a design do not need to be counter-balanced, since balance is inherently there already.

Weight placed low in a design always helps to establish that needed feeling of stability. If we place *too much* weight low in a design, then a feeling of bottom-heaviness will be the result, so there has to be a happy compromise in the distribution of weight. The container, base, and accessories, if used, must be carefully chosen and incorporated if this impression of bottom-heaviness is to be avoided. A container of thick and heavy pottery would be poorly balanced by light and airy plant materials placed within it. Plant materials must be compatible in visual weight to their container as well as to other components. Sometimes a feeling of imbalance due to a too heavy container or base can be corrected by using taller than usual plant materials with them. Designers must also be aware that space can never balance solids in a design, so these too must be carefully distributed.

Lighting can also affect balance. Light coming from above a design casts shadows below the design, which gives a feeling of weightiness in that area, adding stability and perhaps bottom-heaviness. If light comes from only one side, one side of the design will be dark and the other light, making the darkened side seem heavier. Light from below casts shadows above the design and decreases the visual weight of forms low in the design while increasing the visual weight of those which are higher.

In addition to balance of forms and spaces, there must be color-balance within a design. There are certain general guidelines which are followed for achieving balance within a design. As has been discussed earlier, the visual weight of plant materials will be determined by either size, form, texture, or color, or perhaps a combination of these elements. For that reason, those things (flowers, foliages, decorative wood, wire, plastic, metals, etc.) which are smaller in size, lighter in visual weight, and in color are usually placed towards the top and the outer edges of the design, while those which are larger, heavier in visual weight, darker or brighter in color are placed lower and nearer the center of the design. Those materials which are largest, darkest, or brightest in color are placed nearest to the rim of the container or closest to that imaginary center of the design. The designer must take care that there is not too much massing, or too much dominance by dark or bright colors, so that the appearance of bottom-heaviness or of concentrating too much attention in any one particular area is avoided. Every design must be balanced from top to bottom, from side to side, and from front to back.

In table settings this general guideline for achieving balance will be used in construction of the decorative unit, and it will also be used in placement of the other various components on the table, so that the table as a whole will be well balanced. To achieve this, imaginary lines will be drawn on the table's top, dividing it into quarters. Components will then be placed so that neither side and neither

quarter of the table will appear visually heavier than the others. For example, if you were setting a buffet table, and you planned to use a large platter, a big wooden salad bowl, several smaller vegetable bowls, and a copper chafing dish, you would not place most of them on the right half of the table with nothing on the left side except a stack of plates and some glass tumblers. You would be justified in saying that the table was actually balanced, if after it had been set, the table did not tilt to the right and dump everything onto the floor. You would not be able to say that the table would be visually balanced, however, because no doubt you would look at any table set in the way described and feel that it was much too heavy on the right side. To correct the problem, you might place the chafing dish and the platter on the right side in a descending angle, with the plates in front of them, the vegetable bowls in the center, and the tumblers on the left side along with colorful napkins and a fairly large decorative unit, placed toward the back on that side of the table. This imaginary table would then be balanced in its use of forms. You would not be able to say that the last word about balance had been said, however, until you had also considered the placement and distribution of colors and textures. The choice of colors and textures of components, and where those things are placed on the table will certainly influence the overall balance.

There are two types of balance which may be used, either in a design or in an entire table setting. The first is *symmetrical* balance, also called formal balance. This type of balance is used in designs and table settings of a more traditional style. In this type of balance, if that imaginary line is drawn through the center of the design or of the table, both sides are as nearly alike as possible due to placement of like or highly similar components directly opposite each other.

An *asymmetrically* balanced design or table setting has different types/kinds of components or materials on either side of the imaginary central axis, but they are things which are more or less equal in visual attraction or visual weight.

Balance can also be defined as being either static or dynamic. Static balance is that which is still, not moving, in perfect equilibrium. This kind of balance would be found more often in symmetrically balanced designs and those which do not contain a great deal of rhythmic movement within them. Identical or very similar objects placed on each side of the imaginary central axis gives static balance. This kind of balance is the easier to achieve of the two types. Dynamic balance is active and moving, involving a great deal of rhythmic movement within the design. The eye does not stay still, but these designs are still in balance if components within them have been correctly placed.



Fig. 90. This setting is an example of symmetrical balance. The decorative unit is placed in the center and towards the back of the table, with two identical place settings placed on each side of it. If an imaginary line were drawn from the tip of the main line in the decorative unit to the table's edge, there would be exactly equal visual attraction on both sides of it, due to the placement of the components as well as to the equal distribution of colors, forms, sizes and textures. The decorative unit as well is an excellent example of symmetrical balance within a design. If that imaginary line is drawn from the tip of the tallest Dutch iris to the center of the container's base, you can see that colors, forms and sizes are distributed very equally on the two sides of the arrangement.

As with all well-executed table settings, this setting is exemplary in other ways besides in its handling of balance. There is a dramatic choice of color, which gives the setting personality and "pizzazz", with unexpected contrast provided by the lime green tablecloth. The color, yellow, provides the dominant note, but with just enough dominance to avoid any feeling of monotony. The use of space is interesting within the decorative unit, and especially within the twisted stem of the container. There are pleasing and harmonious variations of texture and of form. All components are well scaled to each other and to the overall design. Proportions too are pleasing, with the right amount and distribution of components so that the table seems neither too cluttered and full, nor too skimpy. (Deen Day Smith).



Fig. 91. A lovely setting with an air of autumn is a fine example of a table setting having asymmetrical balance. There is no feeling of unequal visual heaviness in any area of the table. The large covered tureen on one side is balanced by the decorative unit on the other side. Glass candlesticks with brass sockets and bases give a lightening touch to the center of the overall design, as does the delicate crystal stemware. The color harmony is especially lovely in this table setting. The Line-Mass design, in which a pitcher from the china service is used as a container, is also an example of an asymmetrical design. (Deen Day Smith).

DOMINANCE

If a design is said to have dominance, then something within that design is stronger, more compelling than everything else within it. Dominance is actually the process of differentiating between what is more important from the less important in the design. To say that something is dominant is not a criticism. There must be a certain level of dominance in every design or it will suffer from dullness, monotony, too much sameness because everything in it is of equal importance to the eye. There will be no zest or vitality in it. If something in a design is dominant, then it captures and holds our interest. In well-conceived designs, there must be

some place where the eye can pause and rest before moving on, and this is the result of dominance. We must take care, however, that no one thing is so dominant that it holds the eye over-long and will not let it move on freely throughout the rest of the design, disturbing both rhythm and balance.

The very word, dominance, implies subordination. If something is dominant, it has command over something else, it possesses more importance and more influence than other things. For example, there may be more curved lines than straight ones, there may be more of elongated forms than of round ones, there may be more bright blue components than of yellow ones, all examples of the use of repetition. This will mean that *one* of those aspects of the design will be dominant. Of course, the skilled designer will not overemphasize any part of the design with too much repetition, or else the design will become boring. There must be enough contrast to avoid dullness, but enough repetition to achieve unity.

Anyone should immediately be able to look at a design and determine what is dominant in it. We should not have to analyze deeply, study and ponder, or search diligently, we should *know* immediately what is dominant! If you can't decide, if you first say to yourself, "I believe it is the black base", then, "No, I think it is probably the red flowers", and finally, "Well, it may be the curving line material" — if this is your reaction to a design, then it is a sure sign that the design is suffering from too much contrast among equals, and from inadequate dominance in the design.

Dominance brings that essential order to design. There is necessary cohesion in a design when interest is not too equally divided and when one thing is stressed. Bold and interesting forms, bright colors, and repetition — either of line, line direction, form, pattern, texture or color — are means for achieving dominance, but are not an end within themselves. The designer's skill in choice and placement of components as well as the creation of pleasing proportions within the overall design will be the determining factor.

Usually we are safe in saying that the plant material should be dominant and not the container, base or accessory. However, this reference to containers is dependent on the design-type or style. In abstract designs, it is not a requirement that the container be subordinate. In certain period designs, containers may also have special importance, but they are not usually dominant. If the inspiration for a design is a container or an accessory, it will still be true in all instances, except for the one exception concerning containers which was just discussed, that these components will play a supporting role and not a starring one, and the plant materials used within them will be dominant in its relationship to these other things.

Emphasis within plant materials can be achieved in various ways. We might have large flowers which are dominant because of their size; flowers may be of especially bright or striking colors, or the designer may have chosen an unusual combination of colors; flowers may be of unusual or exotic form, such as certain fresh or dried tropical materials; or they may be dominant because of their quantity in the design or due to their placement in it. Dominance is one important key to outstanding designs.

CONTRAST

Contrast, in the simplest of terms, can be defined as differences, or having unlike qualities. It is through contrast that we can be *aware* of differences if unlike elements are placed side to side or in close proximity to each other. Variety brings interest to all things — to our daily lives, to the food we eat, to the people with whom we interact, and to our designs. Contrast is needed in all things if we are to truly appreciate anything. How can we savor the good times in life if we have never experienced bad ones? How can we appreciate delicious food if we have never eaten any which was less tasty? How can we value joy if we have never been unhappy? Life is like that — so is design.

The whole concept of contrast involves comparison, and of necessity, comparisons between and among unlike things. There may be comparisons of different shapes or forms, comparisons of the visual attraction of different colors, comparisons of dimensions or sizes of objects, comparisons of textures, etc. Contrast is achieved by placing unlike qualities together to emphasize their differences. Of course, the level of contrast may vary. There may be slight variations or there may be strong contradictions. Contrast gives personality, vitality, and that special spark of interest to our designs. All of us become bored by too much sameness, and designs lacking in adequate contrast fail to hold our interest.

Contrast within a design is necessary if the design is to be interesting and free from monotony, but the designer must use contrast with great care and discrimination, or else the result will be chaos within the design. Something must be stronger in the design in order to control busyness and to draw attention to itself. This is why contrast is so strongly related to, and so dependent on, dominance. To have a pleasing and harmonious, yet interesting design, it is impossible to have one without also having the other.

How do we achieve contrast? By using plant materials having different forms, either spikes or round forms or irregular forms; by introducing variety in colors — variations between light and dark values, between warm colors and cool colors, between high intensity colors and those of lesser saturation, and by varying the amounts or proportions of colors used; by choosing forms of different sizes, shapes, textures or colors; by using different kinds of textures in unequal amounts; by using different types of lines, dimensions of lines or varying line directions; and by varied sizes and proportions of solids and spaces.

Contrast will be used and emphasized in different ways, depending on the design's style or type. In more traditional designs, contrasts or differences will be more subtle, gradual, and therefore the overall effect will probably be more gentle, restful, subdued, and harmonious. Most traditional designs may actually be said to use variations rather than strong contrasts. In very creative and abstract designs, though, contrasts may be sharp, extreme, exaggerated and abrupt with little use of transition to soften contrasts. The emphasis here is on dynamic impact and excitement. Contrast can be a strong force in achieving these effects in a design. Contrast, used skillfully, judiciously and with purpose will give our designs needed variety and interest, but should never be a cause for confusion and lack of unity.



Fig. 92. This fresh and crisp table setting is an excellent example of the use of both dominance and contrast. Since only two colors have been used, white and dark green, they stand in sharp contrast to each other. There is contrast in the decorative unit between the spike forms of the foliage and the rounded forms of the flowers. There is contrast between solid-colored components (the dishes and glassware) and patterned ones (the tablecloth). If we are discussing dominance, is there any questions in anyone's mind about what is dominant? The tablecloth! It attracts our eye immediately. It states unequivocally, "I am in control here", yet it is so well related to the other components in color and in pattern that it is a pleasing part of the whole. (Deen Day Smith).

RHYTHM

Rhythm is created by placing components, or accents, so that the eye has stopping and starting or pausing points. Each pause causes the eye to move on to the next pause, and then to the next. For interest in the design, these pauses should not all be too equal and regular, or monotony of rhythm will be the result. All designs must have motion and then rest if rhythm can be said to have been used well.

Basically all designs are categorized as having two types of rhythm: regular, which is repeated and recognizable as having been repeated, or free and variable rhythm, in which the eye is led through the design in an uneven manner. Just as too much regularity and rest is boring, too much movement is tiring and overly stimulating. Rhythm is something which makes its presence known as the design takes shape and must continue to evolve through careful placement of components. Rhythm is not an after-thought which you can come back to and add later after the design is completed. Rhythm is one of those common factors, present in all good designs, which binds the whole together.

Rhythm may be achieved in several ways. *Repetition* of a certain line, line direction, form, texture or color is one way. Repetition of any of these will lead the eye to follow the repeated element. These repetitions will cause the eye to sense ordered movement and will give unity, continuity and harmony to the design. When certain elements in the design are repeated, the eye will only change direction when it has been redirected to do so by some other differing factor. That variation must occur, or else the design will lack interest. There may be rhythms within rhythms (contrasting or conflicting line directions), and these may contribute needed variety and interest, but one of these rhythms must always be dominant. There *must* be a dominant type of movement or the result will be confusion and lack of cohesiveness.

Gradation is another path to rhythm. Gradation is a gradual change by steps or stages from one condition or quality to another. It is a logical and orderly sequence by which extremes are avoided through a series of harmonious, smooth, and gradually accelerating visual movements. One type of gradation is a slow and gradual change in sizes: the eye moving from the largest material at the base of the design through slightly smaller ones, then to the smallest ones at the top. Movement from darker shade or tone to a slightly lighter one to a still lighter tint of a color is another example of gradation, as is the gradual change in textures, spaces or forms. Gradation gives a very slow, gentle rhythm because it is a regular and gradual change. It is a rhythmic tool more often used in traditional designs than in creative or abstract ones.

Radiation is another form of rhythm which is employed in traditional designs. This means that all lines within the design seem to come from one central point near the base of the design in a radiating fashion. There is one implied point of emergence for all materials. Too great a feeling of radiation weakens rhythm since line direction is less definite, thus it is dissipated.

There are various *tempos* of rhythms — they may be graceful, smooth and flowing, jarring and abrupt, or they may be fast or slow . Think of the rhythms we



Fig. 93. This Exhibition Table Setting, Type II, is certainly rhythmic. The eye is led around the outer circle of the hula hoop frame, then continues to follow the circular forms of the plates, and of the circles created by the little wrought-iron cowboys' bowed legs. The looped and curled black painted vines introduce more swirling, circular lines. The placement of the clipped palmetto frond, painted black, and the cluster of shiny red fresh chile peppers attached to the top of the circular frame, reinforces the main line direction. The large red and white checked napkin, however, gives some needed contrast of vertical line, as well as of color. A second cluster of red peppers adds repetition of form and color. (Deen Day Smith).

see in nature as an illustration of this: the rolling in of waves on a beach: these may be gentle, placid, and undulating on a calm, still day, or during a storm, they may come crashing in at varied intervals. Think of the movement in trees — there may be gentle swaying in a breeze, or twisting and thrashing wildly in a strong wind. Picture birds flying: some flap their wings in order to fly, while the eagle floats and soars. Think of the placement of buds, flowers, leaves on a stalk of plant materials. The smallest one is usually at the tip of the stalk, with the medium sized ones near the center, and the largest ones near the base — this is true of both the flowers and the leaves. This gradation in sizes of the parts of the whole creates a certain rhythm. Use of rhythmic tempos is a tool for expression and interpretation of ideas, emotions and feelings in designs. In nature, all rhythms have a more or less recurring sequence, and these rhythms usually move together with many small counter-movements into a larger rhythmic pattern. This is also true of skillfully constructed designs. We have much to learn from the world around us if we will only take the time to observe.

Rhythm should also be present in table settings. The eye should be able to move freely and smoothly without being stopped or held for too long. There should not be unpleasant stopping and starting of the eye when looking at the setting due to poorly placed components, or to poorly distributed colors, forms, sizes and textures.

PROPORTION

Proportion is the comparative relationship of areas and amounts to each other and to the whole. Several of these relationships within a design must be considered. Since all comparisons are relative, compare the quantity of plant material to the container; the amount of space occupied by the arrangement compared to its background; the relative amount of one type of form in comparison to another; comparative amounts of one pattern to another; amounts of one texture or space to another; and the amount of one color when compared to another.

This is not as difficult as it seems. We all make decisions regarding proportion everyday, probably without realizing it. When we try on a dress and we reject it as unsuitable for ourselves because we feel it is too short, making our legs look too large and the rest of our body look awkward and ungraceful, that judgment is based on our feelings about proportion. When we shop for antique furniture for our dining room, and we decide against that tall, huge armoire or china cabinet because we feel it would be too large and overpowering for our small, low-ceilinged dining room, that decision is made based on our sense of proportion.

Artists have long been concerned with proportion in their work. Ancient Egyptians were the first to use proportions which could be worked out mathematically in their art work. This formula was used in tomb wall paintings as well as in the construction of buildings, tombs and the pyramids. They called their formula The Golden Section. Greek mathematicians studied the Egyptian formulas and used it as a basis for their formulation of ideal proportions called The Golden Mean. Builders of medieval cathedrals used similar formulas to decide proportions, and called their formulas "the mystic proportion".

Proportion does not have to be a precise, mathematical calculation, and in most art forms, it is not. Most of us have a reasonably developed sense of what constitutes pleasing proportions, and we can usually trust our eye to tell us whether proportions are correct or not. This ability improves, as does the skilled use of all the other elements and principles, with practice. Many books on flower arrangement will state that a pleasing proportion of plant material to container is material which is one and a half times, or possibly two times, as long or as tall as the greatest dimension of the container — and so it is, but you will find there are many variations and exceptions to this, so it should only be regarded as a guideline, not as an unbreakable, unbendable "rule". Trust your eye to judge what is pleasing and right in a particular design.

The same holds true of relative proportions of arrangement to a staging device in a flower show: if the arrangement is so small that half or more of the background is seen as unoccupied space, then the design is too small in proportion to its background. On the other hand, if parts of the design extend beyond the background, either at the top or to the sides, then that design is too large proportionally to its background or other staging device. In either case, points would be deducted under Design from the points allotted to proportion in the Scale of Points.

The same would be true of a design in a home situation. If a large design is placed on a table so small in comparison that it looks as if the table can barely support it, then that is a problem of proportion. If a design is placed on a table and parts of it extend under and into the shade of the adjoining tablelamp, and the painting behind it is totally hidden, then that arrangement is too large for the amount of space it occupies, and the problem, again, is one of proportion. Simply stated, you needed an arrangement which would occupy a smaller amount of space when compared to the other things with which it was sharing that space.

In a table setting, the amount of unoccupied space on a table, or within the dimensions of any other staging device, such as background, frame, etc., is compared to space occupied by appointments; to the amount of space occupied by the decorative unit compared to the total space of the table, frame, background, etc; to the comparative amounts of various colors and textures, etc. All of these things will govern how pleasingly proportioned any table setting will be.

We are not striving to use equal amounts in order to achieve pleasing proportions, since such a distribution of interest is dull and uninteresting. On the other hand, one of the elements should not be used to such an excess that proportions become distorted and unpleasant in the overall design.



Fig. 94. A dramatic and exciting Exhibition Table Setting, Type I, owes much of its appeal to the pleasing application of proportions. Two colors are used to provide excellent contrast for interest, but yellow definitely has some advantage in comparative attraction over the black, so there is no problem with there being too equal or exact a division in interest. The involvement of space against solids also introduces a skilled employment of proportions. An area in the top corner is filled by a black tablecloth hung from the top of the frame, while the other sections of the frame are open spaces, but this one filled space is of the exactly right amount: any more and the whole exhibit would have been too heavy, any less and it would have been much less appealing. The whole setting is *almost* divided into quarters, due to the placement and size of the smaller frame within a frame, but not *quite*, again showing skilled application of the principle of proportion. The decorative unit contains yellow lillies, tiny yellow asters, hosta leaves and ivy. (Deen Day Smith).



Fig. 95. Cover the two variegated ginger leaves which provide the bold and dynamic horizontal thrust to this decorative unit with your finger, and you will see a design in which the amount of plant material is almost exactly equal to the size and visual attraction of the bright yellow oval container. Remove your finger, and you will see that these two leaves are exactly right in visual attraction to make the proportion of plant material to container a pleasing one. Sometimes the change or addition is slight, but it takes just exactly that to provide what the design needs. The horizontal lines of the decorative unit are contrasted with the strongly vertical lines of the napkin within the goblet. Since the horizontal decorative unit is so vividly colored, however, it holds its own and is dominant over the unit on the opposite side. This is a very contemporary table setting, totally of today. It has great flair. (Deen Day Smith).

SCALE

Scale refers to the *relative* size of one object in relation to another object, such as the comparative size of a flower to the container, of one flower to another, of base to container, of container to accessory, of container to background. In choosing components for a table setting, we would consider the scale of those components listed above as well as others, such as comparative size of plate to place mat, of plate to cup or glass, of napkin to plate and place mat, etc. Size relationships in a table setting should be pleasing without exaggeration or an abrupt difference in comparative sizes.

What do we mean by relative? We can only judge how large or how small something is by comparing it to some other known thing. We would have no idea whether a man was large or small if we had only seen one man in our lives. Having seen great numbers of men, though, every one of us can look at a man and say with accuracy, "That is a big man", or "That man is unusually small". We can do the same in our designing. If we place a large plate on a place mat which is practically hidden by the plate, we immediately know that we have to use either a larger mat or a smaller plate because the two of them are not in pleasing scale, or size relationship, to each other. We are not talking about relative *amounts* (proportion) at all, because we are comparing these things *one on one to each other*, so the problem is caused by their relative and comparative *size* relationship, or scale. Scale is closely related to proportion, but they are not the same. Proportion deals only in comparative amounts and scale deals only in comparative sizes. Scale is measurable, both visually and actually.

Each of the elements and principles of design is equally important in the creation of an outstanding flower arrangement or table setting. All of them must be carefully considered and employed if the final result is to be a successful one.



Fig. 96. In this elegant Exhibition Table Setting, Type I, there is no single component which calls undue attention to itself because it is either too large or too small when compared to every thing else in the overall design. That is the essence of the correct use of scale in a design. If the setting is analyzed according to the other principles of design, there is balance, achieved through careful placement of components and distribution of color; the color, rust, is dominant enough for interest, but not so dominant that it affects the other principles; there is contrast in line, color, and forms; the decorative unit is rhythmic as is the feature used in it, and the placement of components allows the eye to move smoothly through the overall design; proportions are pleasing, with the setting being neither too crowded or too sparse, and all components are in scale with each other. (June Wood).

While writing the text for the book was my responsibility, the illustrations of table settings in this book are the work of two people, Deen Day Smith and myself. We both have our own special styles since we are two individuals with different personalities, but never the less, we do have similar tastes. This is probably reflected in the settings we have created. Both of us greatly enjoy doing table settings for our homes, for competition in flower shows, as well as sharing our knowledge with others by doing programs on table settings. We also derive great pleasure from seeking out unusual and exciting appointments for table settings.

All of you who have read this book are also very unique people, with your own tastes, personal styles and creative abilities. It is our hope that you will have been inspired to develop even more creativity and distinction in the table settings you do in your own home, and in flower shows if you enjoy competitive exhibiting. In so doing, may your lives be enriched.

I traveled to Atlanta to make the table settings which I created for the book, and they were photographed there. Deen also created a number of table settings at the same time, so we had great fun sharing ideas and critiquing each other's work. We sincerely hope you will enjoy seeing them and studying them as much as we did the creation of them.

Hopefully this book will meet the interests and needs of a diverse group of people — those of you who are members of garden clubs, are exhibitors in flower shows, and/or judges. For you, may you have gained some new, needed information as well as creative inspiration. May your every entry be a blue ribbon, or better yet, a Top Award winner!

For those of you who are not members of a garden club, but simply want to learn more about setting attractive, interesting and exciting tables for your homes, we hope this book meets your needs as well. Why not think about joining us in the clubs, states, and Regions which make up the *National Council of State Garden Clubs, Inc.?* You'll learn a lot, and we would be very happy to welcome you.