



Homeowner Garden Design Series: Elements and Principles of Design

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Designing a landscape is a lot like creating a piece of art. In design, we use line, texture and form to transform space, just as an artist uses these same elements to compose a painting. The main difference between a piece of art and a landscape is that a landscape is experienced from within as you move through its spaces. Understanding the elements of design and the guiding principles used to bring those elements together is the first step in creating a harmonious, unified landscape.

Elements of Design

There are five primary elements of design: mass, form, line, texture and color. Of these, mass, form and line are the main tools used to organize space in a landscape. Texture and color provide a supporting role, adding interest and richness. The elements of design guide us in selecting and organizing plants and hardscape elements in the landscape.

Mass

Mass describes the space or area occupied by an object. Your house as well as the structures and plantings in a landscape all have mass, as do individual plants. Empty spaces or voids also "occupy" a distinct area, and empty space is more important to landscape design than occupied space (Figure 1). In essence, we design the voids of a landscape. As you select plants and seek balance in a landscape, the mass of individual components (plants and structures), as well as groups of components, will become very important.

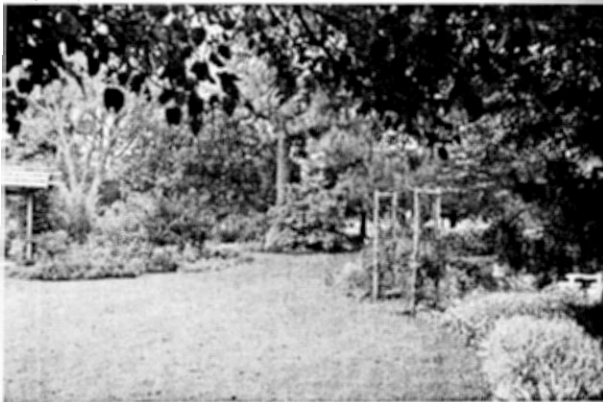


Figure 1. In this photo, the lawn (the void) is the dominate element that serves to unite the surrounding landscape.

Form

Form refers to the shapes of objects in a landscape, as well as the relationships of objects to each other. The landscape itself has form, both natural and manmade. For example, existing structures such as the house, walkways and driveways delineate squares, circles, triangles or irregular shapes, as do plants, slopes and other natural elements. Plants also have individual form. Plant forms include pyramidal, rounded, oval, columnar, vase, and flat or spreading (Figure 2a). Different forms evoke different feelings or emotions. Rectangular forms feel orderly and formal, circles are soft, triangles are strong and irregular shapes are casual and free. When plants are placed into groups, they take on a new form as a group. Two different plants with unique forms may produce the same group form (Figure 2b). Often the form of plant groupings is more important than individual plant form.

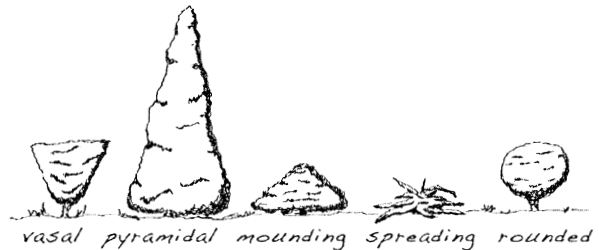


Figure 2a. Common forms of plants.

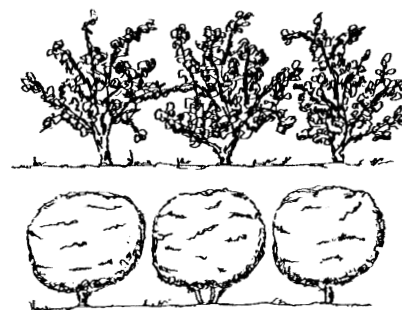


Figure 2b. Groups of plants with different individual forms may have the same group form.

Line

Lines direct the movement of the eye through a landscape. Line is one of the most important aspects of design; it determines the way beds and paths flow together. Much like form, different types of lines elicit various emotional responses. Straight lines are formal and direct, while curved lines are more gentle and natural, and jagged lines can be exciting or distracting. Consider line when shaping beds and walkways, or in choosing hardscape elements such as fences. Visualize how the straight line of a fence or a curved walkway might fit with the existing lines of the house, driveway, or trees.

Texture

Texture describes the physical characteristics of a material relative to other materials. Texture is generally determined by the relative size of parts or particles. A plant with a coarse texture has large leaves or flowers and a bold appearance. A fine-textured plant has small leaves and flowers and a soft, delicate, even elegant look. A hosta or plantain lily (*Hosta* spp.) is an example of a coarse-textured plant, while a fern has a fine texture. Other materials such as stones can have fine or coarse textures, again based upon the relative size of individual particles. Texture can also be created by rough or smooth surfaces, or by darkness or lightness. A landscape should include more fine than coarse textured plants and objects. Fine elements provide a soft background to contrast the more pronounced course elements in the landscape.

Color

Color is an important design element, but is often given too much attention. Line, form and mass provide the bones of a garden; neglecting these structural elements will result in a poor design. Once the structure is established, color can be used to add interest and evoke emotion. Warm colors (red, orange, and yellow) give a feeling of warmth and excitement. Warm colors can make an object appear larger and closer to you. Cool colors (green and blue) are calming and make objects look smaller and farther away. Purple looks cool next to a warm color, and looks warm next to a cool color. White is used for contrast and to separate conflicting colors. Dark colors seem to move away from the viewer, while bright colors jump out. This can be used to create greater depth to a planting. Color can be used to direct the eye, but if used improperly, can also be distracting.

The way colors are combined can have a large impact on how individual colors appear as well as the overall feeling of a planting. Several common combinations called color schemes are used in planting. You will want to refer to the color wheel to understand and visualize the color schemes (Figure 3).

- **Monochromatic:** this color scheme utilizes a single color, such as pink, as the base of the planting. Flowers and foliage in tints (lighter colors) and shades (darker colors) of pink would be used in the planting.

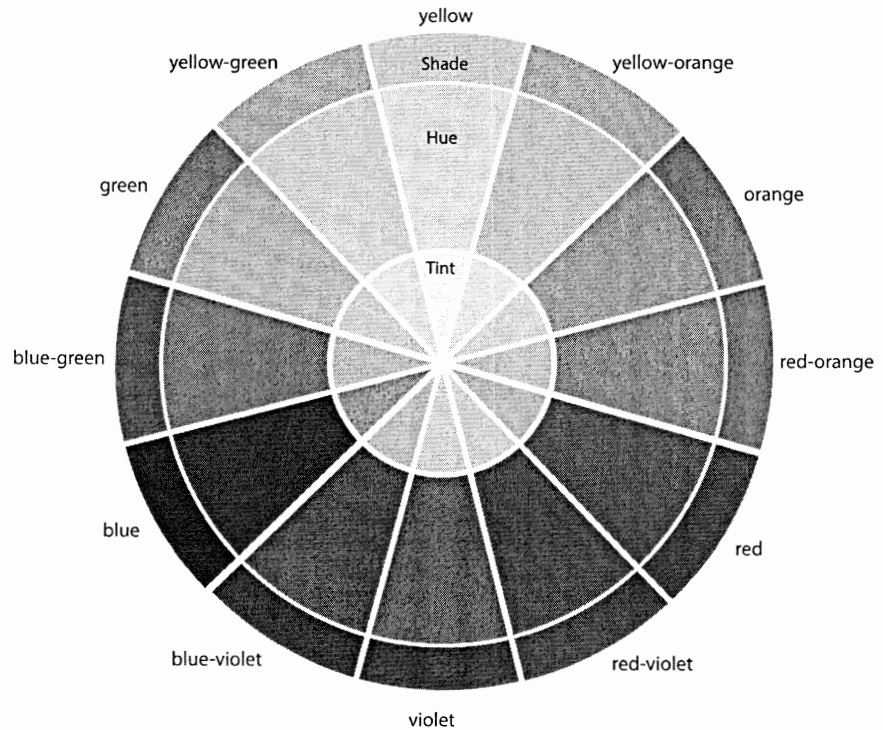


Figure 3. The color wheel, including shades (darker colors) and tints (lighter colors) of hues, can be used to plan color schemes in the garden.

- **Polychromatic:** Quite the opposite of monochrome, this scheme combines many colors in a single garden including shades and tints of several hues. This type of planting can become too busy or distracting if too many bold colors are used.
- **Complementary:** Complementary colors are those that appear opposite one another on the color wheel. Complementary colors look better together than they do by themselves. A complementary garden uses flowers and foliage in complementary colors: blue and orange, yellow and purple, and red and green.
- **Analogous:** This color scheme utilizes colors that are immediately adjacent on the color wheel. Examples include red with red-violet and violet, or orange with yellow-orange and yellow.

Foundations of Design:

- **Unity** – The primary goal in landscape design is to create harmony throughout the landscape.
- **Elements of design** – mass, form, line, texture and color – direct the selection of plants and structures for the landscape.
- **The principles of design** – scale, balance, rhythm, simplicity and emphasis – guide the integration of individual landscape components to achieve unity.

Principles of Design

A landscape is composed of various combinations of masses, lines, forms, colors and textures. The principles of design guide the integration and composition of the various design elements into a cohesive whole. These principles include scale or proportion, balance, rhythm, emphasis, simplicity, and sequence or transition.

Scale or Proportion

Scale is the relative size of one component of a landscape compared to another. If a plant or object is out of proportion, it is too large or too small for its surroundings. For example, a tiny flower bed becomes lost in a vast lawn. Individual components should be sized according to their surroundings. A large lawn can accommodate a large flower bed. In landscape design, human scale is the most important relative scale. Everything in the landscape must be sized and/or placed relative to the human body. Stairs are spaced according to a person's stride; scenes are designed to be viewed from the height of a typical adult's sight line, or from a carefully positioned bench.

Balance

The distribution of mass (visual weight) in a landscape creates balance. Balance can be either symmetrical or asymmetrical (Figures 4a and 4b). In a symmetrical design, one side of the landscape is essentially a mirror image of the other. If you divided a symmetrical design in half, both sides would share the same shape, form and plantings. Symmetrical designs are very rigid and formal, and do not work with many landscapes. In an asymmetrical design, plant sizes and numbers are only relatively similar on both sides.

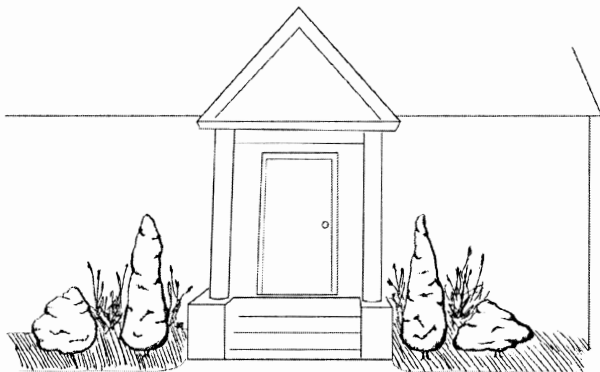


Figure 4a. Representation of symmetrical balance.

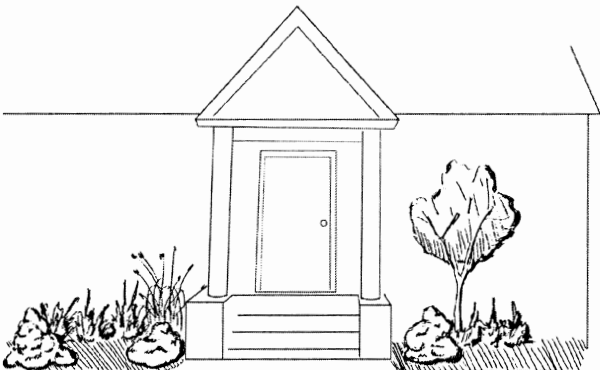


Figure 4b. Representation of asymmetrical balance.

The overall weight or mass may be similar, but the form of that mass differs. For example, one side of the landscape may have a very large component, balanced on the other side by two or three smaller components with a comparable combined mass.

Rhythm

Rhythm helps us to achieve unity in a landscape. Rhythm is the predictable repetition of materials and elements such as mass, form, line, texture and color. It is good to use a variety of materials and elements in the landscape, but repeating these elements provides harmony and movement. There is a fine line in balancing variety versus monotony. Too much of any one element can make a garden feel boring or uninteresting, while too many different elements can create clutter and confusion.

Emphasis

Emphasis can be a focal point, or it can be a dominant element or space (Figures 5a and 5b). A focal point can be

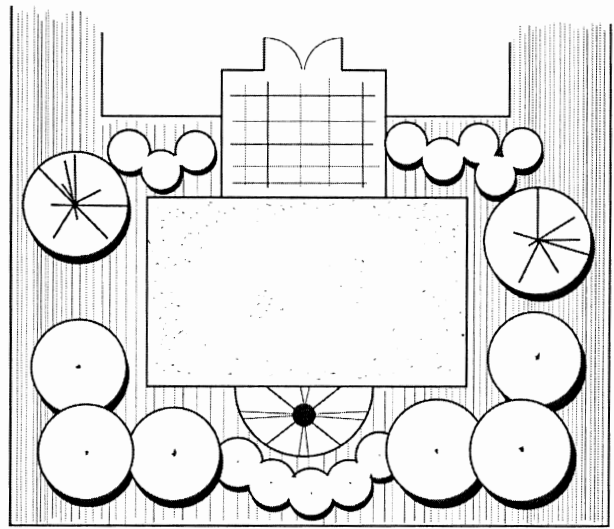


Figure 5a. Example of dominant space with a focal point.

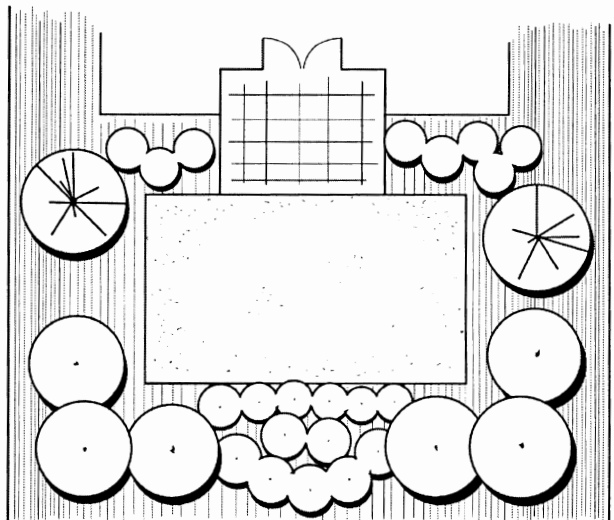


Figure 5b. Example of emphasis on dominant space.

any variety of objects such as a specimen tree, fountain or statue. An empty expanse of lawn can act as a dominant space, especially when surrounded by taller plantings or walls. The emphasis may be part of a structure like the entryway to a house, or it may be a view in the distance like a hilltop church or a pond. The design of the landscape or garden helps create emphasis by directing your eye. A landscape may have more than one emphasis in different areas or plantings.

Simplicity

We have all heard the old saying “less is more”. Landscape design embodies this philosophy. Overcomplicating a design disrupts rhythm and balance, eliminates focus and reduces harmony. Simplicity can be achieved by limiting the variety of colors, textures, forms, construction materials used in a space, and by staying within one theme or style. Of course, simplicity can be taken too far, rendering a boring, monotonous landscape. It is best to start simple, you can always add more at a later time.

Sequence or Transition

Transition is change across a space, or from one space to another. How we make the transition from one area to another depends upon the relative scales of the two connected areas. When two areas have a similar scale, it is best to make changes gradually so as to maintain rhythm and harmony (Figure 6). Only one element is changed at a time and only gradually. For example, plant height stair-steps down from a small tree to shrubs to herbaceous plants and finally to groundcover. Likewise, coarse texture can transition to medium and then fine texture. The same principle can be applied to form, mass and color.



Figure 6. Gradual transition: plant size changes incrementally across a planting bed.

When we move between areas with very distinct change in scale—such as from a small, confined space into a large, open space—we can make more abrupt transitions (Figure 7). The abrupt transition is typically demarcated by a portal of some fashion: a gate, arbor, door or hedge. The portal indicates that we are moving from one “room” to another, and tempers the stark changes between the two spaces. Good transitions can add depth to a planting or be used to frame or accent a focal point.

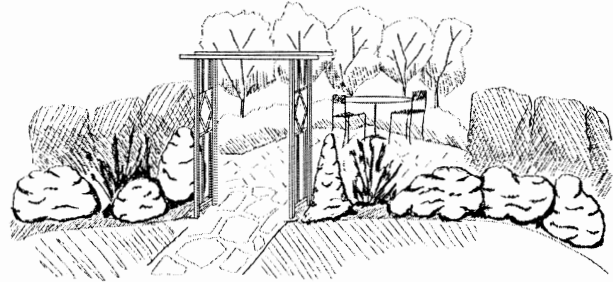


Figure 7. Abrupt transitions can be used to move between areas with a distinct change in scale.

The elements of design are used to organize space in the landscape. The way in which we bring these different elements together is guided by the principles of design. Together, these foundations of design guide us in selecting plant material and hardscape elements that will blend harmoniously with the surrounding environment. A successful design builds off the existing structures and natural features of a site to create a unified landscape.