

General Elements and Principles of Landscape Design

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Landscape design, like painting, sculpture, and architecture, is a form of art. "Design" is defined as "the planned arrangement of elements to form a visual pattern" in David Laurer's *Design Basics*. The opposite of design is to place elements by chance or at random.

Landscape design differs from other three-dimensional art forms in that it is dominated by the color green and it is a living form that continues to change with its component plants' adaptation, nutritional status, and pest problems. Its technical considerations may include irrigation, lighting, water features, and the need to accommodate "hardscape" features such as streets, sidewalks, and walls. A landscape's functional needs must also be satisfied in the design.

Elements in design are form, line, texture, and color. In landscape design, additional elements of sound (chimes, or the sound of water in rivers, the ocean, or waterfalls) and fragrance can also be included. Design elements are arranged according to design principles. These include order and unity, scale and proportion, balance and harmony, and rhythm and repetition. Design themes such as Japanese, tropical, or contemporary can also unite the design components in a distinct fashion.

Order and unity

Agricultural fields convey a strong sense of order, with their equal spacing between crop plants and rows. In

Hawaii, both residents and visitors value the open, orderly vistas preserved by agriculture (Cox and Veith 1997). Sugarcane and pineapple fields (Fig. 1) are part of Hawaii's landscape, providing aesthetically pleasing views of order and unity that benefit the tourism industry.

unpleasant when elements look like they are placed by chance or at random. The uniformity of a large field of anthuriums in flower is aesthetically appealing (Fig. 2). In nature, a plant species can become dominant under certain environmental conditions that favor that species. The stand of white albizzias in Kipapa gulch near Mililani (Fig. 3), the swamp eucalyptus grove in Nuuanu valley, and conifer forests in the U.S. Northwest (Fig. 4) are examples of aesthetically appealing unity in nature.

Humans naturally look for order and tend to find it









Rhythm and repetition

The principle of rhythm and repetition tends to achieve visual unity. Golf courses (Fig. 5) have a natural aesthetic appeal because of the repetition of grassed areas. Water features (Fig. 6), the ocean (Fig. 7), lakes (Fig. 8), and rivers (Fig. 9) achieve an effect because of the repetition of water. Many people take pictures of sunsets over the ocean (Fig. 10) because of the outstanding color of the setting sun and the stark simplicity of the sky and ocean. The rhythm and repetition of sand in sand dunes (Fig. 11) and deserts is also visually appealing. Even a walkway (Fig. 12) that curves to the front door of a residence can give a strong feeling of rhythm to a landscape, even when the rest of the landscape is not that good.

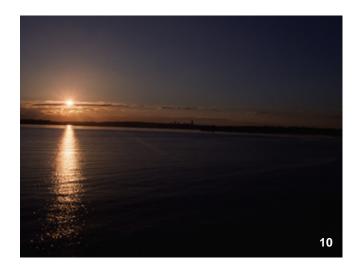






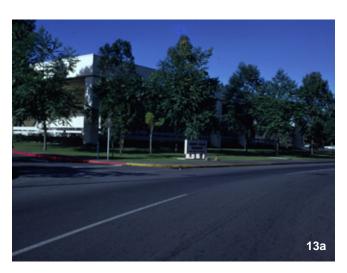






Repetition of the same plant species (Fig. 13a, b) automatically repeats the same texture, color, and form. With more repetition of different elements (Fig. 14a, b, c, d) the design becomes more powerful. In Figure 14 the plant materials repeat texture, weeping growth habit (form), and color. In Japanese and tropical-themed landscapes the trees, shrubs, and groundcovers need to be consistent with the theme. In landscape design the principle of rhythm and repetition is the most important. Absolute order and unity can be somewhat monotonous and boring. So, one of the last steps in creating a design can be to add some disunity. As a general rule, change some elements of the plant material, but not more than twenty percent.

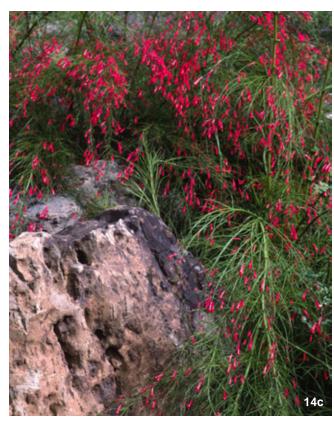
















14. Repetition of design elements

Scale and proportion

Scale and proportion can refer to individual plants or the relationship of the plants to the architectural struc-

ture. If a ti plant has a diameter of 6 inches from one end of the foliage to the other end, the plant may be in good proportion below 1 foot (Fig. 15) or be out of proportion above 2 feet. Single-trunk tree ferns and palms (Fig. 16) may be in scale when young but out of proportion when old. Large trees such as monkeypods are generally too large for small lots but are fine for large parks (Fig. 17).



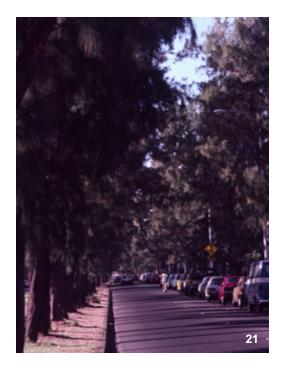


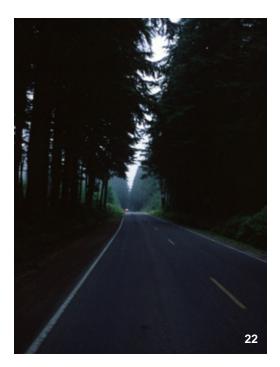
















Balance and harmony

The use of line can be a strong element in design. Vertical lines, for example, can impart an emotional lift to a design. In Hawaii, coconut trees (Fig. 18), Cook pines (Fig.19), bamboo (Fig. 20), and ironwood trees (Fig. 21) have been used as vertical elements in landscapes. In the U.S. Northwest, conifers (Fig. 22) can be used in the same way. The use of horizontal lines in hedges (Fig. 23) and the stairs of buildings (Fig. 24) can impart a solid, grounded feeling.

One use of the principle of balance and harmony would be the juxtaposition of a single large tree on one side of a residential lot with many smaller trees on the other side of the lot. Even the use of complimentary colors can provide a balance between the colors (Itten 1970). For example, one part of yellow balances three parts of violet, one part of orange balances two parts of blue, and one part of red balances one part of green (for more on this subject, see "Color Basics for Landscapes," http://www.ctahr.hawaii.edu/oc/freepubs/pdf/L-18.pdf).

Literature cited

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