

Lecture 38

Esthetics of Horticulture

Esthetic Values

In addition to their utility, plants have esthetic value. Owing to particular qualities that collectively we call beauty, certain plants provide us with pleasure. Beauty is not a tangible quality that can be measured or weighed, it is a value judgment. A thing is beautiful when someone decides that it is. The artist is one who can make this judgment and communicate the experience. This judgment is a reflection of cultural tradition. People of widely different heritages will have quite different opinions about what is beautiful and what is ugly.

Experiencing visual beauty depends upon our response to things sensed visually. Although a certain amount of our perception is innate, many perceptual responses are learned. To a great extent we are aware only of what we are able to interpret. For example, upon hearing a foreign language, we do not actually perceive most of the nuances of sound and inflection until we have learned to imitate them; yet even a newborn baby is aware of a sudden loud noise and can distinguish between gentle and disapproving tones of voice. Similarly, the botanist learns to discern small differences in plants that may be all but invisible to the layperson. So it is with beauty: we must learn to recognize it.

With reference to the concept of beauty, it is difficult to determine what part the innate psychological stimulation plays in the learned response. If any generalization can be made, it is that we tend to enjoy the full exercise of our perceptive facilities. Consider, for instance, the universal preferences for color, depth, and contrast for our visual experiences. Nevertheless, experiencing beauty is basically a learned response. This fact explains the underlying conservatism concerning beauty. We prefer what we are used to and tend to reject the completely strange and new. Yet, we learn to enjoy small, subtle differences and can be “trained” to expect them, as the automobile manufacturers and flower breeders have discovered.

If we accept that beauty is relative, it is apparent that we cannot arbitrarily define it. We cannot say absolutely whether a particular object, or arrangement of objects, is beautiful or not. We must suspend judgment until we have examined the object in relation to its beholder. Snakes, spiders, and worms are considered ugly by many people but beautiful by others. It is no coincidence that they are feared objects in our culture and that a certain fear of them is passed down by each generation. Thus, our perception of beauty is strongly affected by our emotional feelings and by our cultural attitudes toward objects. This is to say, the standards of one culture cannot in-time be applied in all cases to another, for our method of evaluation—our yardstick—has been molded by the culture in which it developed. Generally, the things that have been accepted as beautiful for long periods of time, and which are more or less universally admired, have a basic simplicity and harmony of form and function. In conclusion, our concept of beauty is made up of two parts: (1) sensory stimulation and (2) our responses to this stimulation, which have strong personal and cultural components.

Most plants have an inherent capacity to stimulate visually. Their most obvious feature is their coloring; not only the brilliant hues of flowers, fruits, and (in some plants) leaves, but the muted tones of stem and bark. Green, of course, is the most common color, and our response is probably more than coincidental since it is also psychologically the most restful. The stimulation that plant color provides is enhanced by contrast and texture.

Also significant with respect to visual effects are the plant's structure and shape; that is, its form. Form can be seen not only in the plant as a whole but in its parts as well. The forms of plants are infinitely varied. But the same could be said of random stones, which are considerably less interesting. The perpetual interest in plants is a result of their ordered arrangements of parts, which involve symmetry, the repetition of parts on either side of the axis. Symmetry can make any random shape an orderly one. The psychological satisfaction experienced in viewing symmetrical objects is probably due to their inherent order. The human being exhibits a universal awareness of symmetry, which is not strange considering its common occurrence

in biological forms (Fig. 38-1). Although all plants show some types of symmetry, the growth of many plants produces asymmetrical patterns. It is this deviation from symmetry that makes for visual interest. The basis of contemporary design is to achieve balance and harmony without the monotony of perfect symmetry.

With the possible exception of Arctic peoples, human cultures have developed in plant-dominated environments. Plants provide food for people and their animals, as well as fiber, shelter, and shade. Our dependence upon plants has influenced and molded our esthetic consideration of them. We need plants, and no doubt plants have been culturally accepted as beautiful partially because they are useful. In our present American culture, in which only a relatively few people are directly involved with the growing of plants (although we still all depend on them), all of us have traditional attachments to plant material. Horticulture has a place in all our lives.



Fig. 38-1. Symmetry in the rose. [Photograph by J.C. Allen & Son.]

DESIGN

Design refers to the manner in which objects are artificially arranged in order to achieve a particular objective. Usually, but not always, this, objective involves both a functional and a visibly pleasing arrangement. Designs are evaluated esthetically with regard to their elements of color, texture, form, and line by long-established human value judgments called design principles: balance, rhythm, emphasis, and harmony. The importance attributed to each of these will vary with the objective of the design. When a design is successful, it is usually considered appropriate, functional, and beautiful.

Elements of Design

The design elements are visible features of all objects.

Color is the visual sensation produced by different wavelengths of light. It may be described in terms of its **hue** (red, blue, yellow), **value** (light versus dark), and **intensity**, or **chroma** (saturation or brilliance).

Texture in design refers to the visual effect of tactile surface qualities. Consider, for instance, the visual difference between burlap and silk or between the surface of a pineapple and that of a rose petal.

Form refers to the shape and structure of a three-dimensional object (sphere, cube, pyramid). However, when we view these forms in a plane, they may appear to be two-dimensional (as a circle, a square, and a triangle, respectively). In design we are concerned not only with the form of the individual objects but with the larger forms made up by their arrangement.

Line delimits shape and structure. The

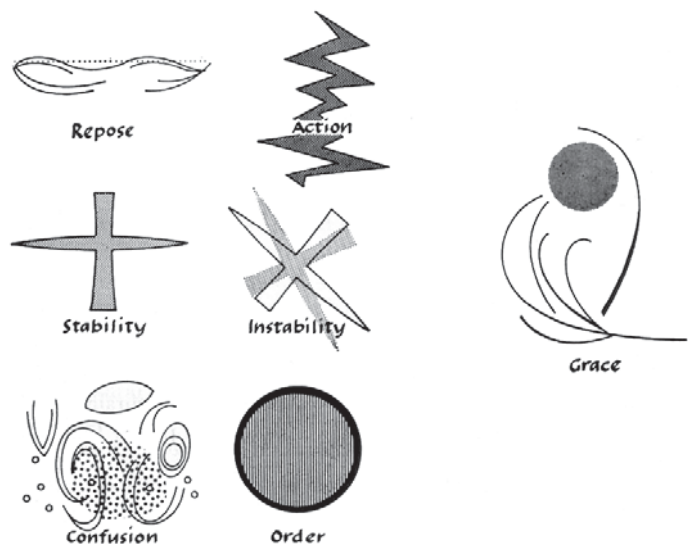


Fig. 38-2. Line elicits emotional responses.

concept of line in design involves the means by which form guides the eye. Line becomes a one-dimensional interpretation of form. Emotional significance has been attributed to line, as shown in Fig. 38-2.

Principles of Design

The principles of design (balance, rhythm, emphasis, and harmony) apply to each of the design elements as well as to their interrelations. Thus, we speak of balanced color as well as of balanced form. The artistic application of these principles is the basis of esthetic success as measured by beauty and expressiveness.

Balance implies stability. Our eye becomes accustomed to material balance, and as a result we grow uneasy with objects that appear unstable or ready to topple over. This concept is carried over to arrangements in which balance applies to the illusion of equilibrium around a vertical axis. It is achieved automatically by the symmetrical placement of objects around a central vertical axis. Balance is also achieved in nonsymmetrical arrangements (utilizing the lever principle) by the coordination of mass, distance, and space (Fig. 38-3). Emphasis should be placed on the fact that, in design, we are concerned with the illusion of balance rather than with actual physical balance.

Rhythm, in the auditory sense, refers to a pulsating beat. Similarly, rhythm in the visual context lies in the pattern of "spatial" beats that our eye follows in any arrangement of objects. Rhythm leads and directs the eye through the design. It suggests movement; design without rhythm becomes uninteresting. Its proper use makes for expression and excitement.

Emphasis in design serves to lead the eye and focus its attention on some dominant aspect of the design. By accenting and emphasizing various elements (for example, a particular form, a strong horizontal line, or a brilliant color), the separate parts of the design may be drawn together. Emphasis, properly made, coordinates the design elements and creates an orderly and simplified arrangement.

Harmony qualifies the unity and completeness of the design. This quality is seldom achieved except by proper planning and organization. It relies principally on scale and proportion, the pleasing relationship of size and shape. The separate components lose their identity to become part of an idea, the basis of design.

Reference

Janick, J. 1986. The Esthetics of Horticulture. Chapter 22. In: Horticultural Science. 4th ed. W.H. Freeman & Co., New York.

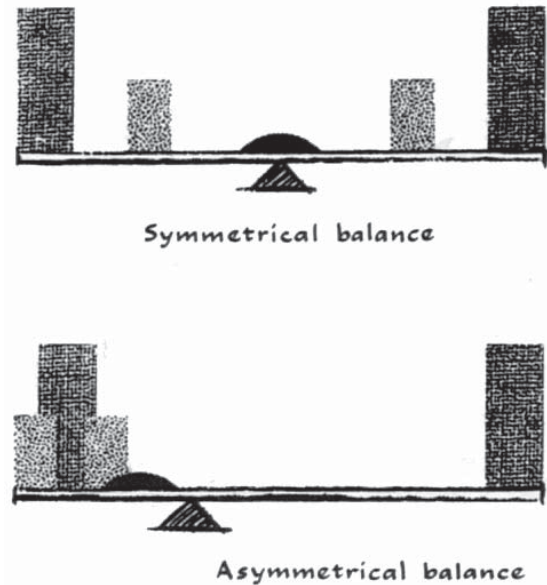


Fig. 38-3. Graphic representation of symmetrical and asymmetrical balance.