THE PRINCIPLES OF DESIGN

Directional Principles:
Repetition
Parallelism
Sequence
Alternation
Gradation
Transition
Radiation
Rhythm

Highlighting Principles:
Concentrism
Contrast
Emphasis

Synthesizing Principles:
Proportion
Scale
Balance
Harmony
Unity
REPETITION

REPETITION is the use of the same thing more than once, the same thing arranged in different locations. It is the simplest, most fundamental of all principles, and as such it is a building block for many of the others.
11-2(a) Line: Repetition of line path, thickness, continuity, consistency, edge, direction reinforces effects.

11-2(b) Line: Repetition of opposing line paths modifies effects.

11-2(c) Space: Horizontal repetition of spacing between lines invites the eye across.

11-2(d) Shape and form: More than one of the same shape emphasizes the direction of the repeat.

See Figure 8-25 for color repetition effects.

11-2(e) Texture: Several directions of repeats of texture help unify the bodice.

11-2(f) Pattern: Periodic repeats of arrangement as well as use in several garment parts here lead the eye vertically.

Figure 11-2  Repetition and the elements.
PARALLELISM

PARALLELISM is the use of lines lying on the same plane, equidistant at all points and never meeting. Although not very powerful, it is a simple yet interesting principle.
12-1(a) Line: Stripes are the same distance apart at all points.

12-1(b) Line and space: Lines parallel edge path.

12-1(c) Shape and space: Rows of shape stay same distance apart.

Figure 12-1 Parallelism and the elements.

(a) shirring  (b) pleats  (c) plaids, checks, or striped pattern

(d) trims  (e) tucks

Figure 12-2 Ways of introducing parallelism.
SEQUENCE

SEQUENCE is the following of one thing after another in a particular order. This occurs when a series of things with no meaning or importance of succession is repeated. In sequence order of succession is the key.
13-1(a) Line: Consistent order of aspects in each repeat.

13-1(b) Space: Regular order of spacing variations in each repeat.

13-1(c) Shape: Each unit in its proper place without repeats, or in the same position in each repeat.

See Figure 8-26 for color sequence effects.

13-1(d) Textures: Consistent order of thickness and light reactions.

13-1(e) Pattern: Succession of patterns in the same order.

Figure 13-1 Sequence and the elements.
ALTERNATION

ALTERNATION is a repeated sequence of two and only two, things changing back and forth in the same order. As a specific combination of repetition and sequence, it is a directional, or linear, principle.
14-1(a) Line: Alternating line path only.

14-1(b) Line: Alternating line path, thickness, continuity, and length.

14-1(c) Line: Alternating line direction.

14-1(d) Shape: Alternating shape size and contour.

14-1(e) Spacing and shape: Alternating space and shape within a line, and alternating distances of spacing between shapes.

See Figure 8-27 for color alternation effects.

14-1(f) Texture: Alternating thicker opaque with thin sheer.

14-1(g) Pattern: Alternating two patterns, and alternating pattern with plain area.

Figure 14-1 Alternation and the elements.
GRADATION

GRADATION is a sequence of adjacent units alike in all respects (usually) except one, which changes in consistent and distinct steps from one unit to the next. It is the process of change happening through a consecutive series of distinguishable increases or decreases.
15-1(a) Line: Graduation of line path from straight to wavy or curved, each line more curved than the preceding.

15-1(b) Line: Thickness increases progressively while spacing stays constant.

15-1(c) Line: Length increases consistently with each successive line.

15-1(d) Line: Direction changes gradually as each line becomes more horizontal.

15-1(e) Space: Spaces between lines become progressively narrower.

15-1(f) Shape: Contour of each succeeding shape becomes rounder.

15-1(g) Shape: Size of each next shape decreases consistently, with contours held constant.

Figure 15-1 Gradation and the elements.
15-1(h) Space and shape: Space in shapes may increase consecutively, changing shape proportions.

See Figures 8-2, 8-3, 8-4, 8-5, and 8-9 for color gradation effects.

15-1(i) Texture: Successive layers of sheer fabric gradually increase opacity.

15-1(j) Pattern: Motif size increases with each repeat.

15-1(k) Pattern: Motifs identical throughout one section increase in size in the next section.

15-1(l) Pattern: Motifs which overlap as well as reduce in size consecutively create a feeling of depth.

Figure 15-1 Continued.
TRANSITION

TRANSITION is a smooth, flowing passage from one condition to another. The change happens so continuously that there is no break point, no step, no distinct place to pinpoint the change. It is not simply a shift from one place to another, but a change so smooth, gradual and subtle that the change is barely detectable while occurring.
16-1(a) Line: Path gently changes from straight to curved.

16-1(b) Line: Thin lines gradually thicken into shapes.

16-1(c) Line: Edge fuzziness fades off into nothing.

16-1(d) Line: Direction changes smoothly as lines curve.

16-1(e) Space: Areas between darts smoothly increase or decrease.

16-1(f) Space and Shape: Shapes smoothly widen as they lengthen.

See Figure 8-28 for color transition effects.

16-1(g) Texture: Elasticized fabrics may flow from snug fit to soft folds.

16-1(h) Texture and shape: Soft textures and fluid folds slide smoothly from straight to flared.

Figure 16-1 Transition and the elements.
RADIATION

RADIATION is a feeling of movement steadily bursting outward in all directions from a visible or suggested central point, the emission of rays from a central source. This suggests a circle, like the spokes of a wheel, sunburst, or petals of a flower.
RHYTHM

RHYTHM is a feeling of organized movement. It may be flowing or staccato, clearly stated or subtly suggested. It can be either repeated or only related. It involves an arrangement of internally organized motion and does not require repetition, but gains strength from it.
18-3(a) Line: Wavy lines convey an undulating rhythm, moving similarly along a path.

18-3(b) Line: Zigzag lines spark a regular staccato beat.

18-3(c) Line: A single swirled line gives a powerful whirling rhythm.

18-3(d) Line: Jagged line erupts into a rhythmic vibration.

18-3(e) Shape: Sawtooth diamonds create an abrupt rhythm with repetition.

18-3(f) Shape: Undulating shapes weave into sinuous motion.

18-3(g) Pattern: Windblown shapes in pattern create dynamic yet graceful rhythm.

Figure 18-3 Rhythm and the elements.
CONCENTRISMO

CONCENTRISMO is the progressive increase in size of layers of the same shape, all having the same center. Edges may be straight or curved or free form, but they retain their relationship to each other and to the center through every step. It skirts around a central point, never pointing at it or coming in to touch it.
19-1(a) Line, space, and shape:
Concentric squares and rectangles lend themselves to straight edged pockets and garments.

19-1(b) Line and space: Concentric circles need care in placement.

19-1(c) Line, space, and shape:
Most distances between concentric shapes are parallel, but interesting concentricism can emerge with non-parallel edges.

19-1(d) Line, space, and shape:
Space between concentric edges need not always be equal among all sets of edges.

19-1(e) Line, shape, and space:
Freeform as well as geometric concentric shapes can give interesting effects.

Figure 19-1 Concentrism and the elements.
CONTRAST

CONTRAST is the feeling of distinct difference, the opposition of things for the purpose of showing unlikeness. It is a highlighting principle because it focuses attention to the place where the differences occur. It is one of the most powerful and commanding of all visual design principles.
20-1(a) Line thickness, direction, and continuity: Thin contrasts from thick, solid from broken, and perpendicular forms maximum directional opposition.

20-1(b) Space: Filled space emphasizes differences from empty space.

20-1(c) Space and shape: Large areas are set in opposition to small areas.

20-1(d) Shape and form: Straight edged structural rings and triangles show differences from curved edge spheres.

20-1(e) Shape: Decorative shape edges of varying contours accent differences among each.

See Figures 8-12a, 8-20b, 8-23a, and 8-29 for color contrast effects.

20-1(f) Texture: Shiny surfaces contrast from dull, and opaque from transparent in light reaction; rough from smooth in surface, and thick from thin in hand.

20-1(g) Pattern: Motifs within a pattern contrast each other and contrast between patterned and plain area accents structural edges.

20-1(h) Pattern: Juxtaposing contrasting patterns highlights differences among each.

Figure 20-1 Contrast and the elements.
EMPHASIS

EMPHASIS is the creation of a focal point, the most important center of interest to which all others are subordinated in order of their importance. It invites the eye to scan an arrangement, comparing various parts to establish what is most and least important. It gives a sense of organization and a complimentary relationship of dominance and support.
21-1(a) Line thickness, path, continuity, and direction: Any aspect of line can dominate the area it divides.

21-1(b) Shape: Contrasting shape contours and sizes accent the area that isolates them.

21-1(c) Form: Structural forms extended far away from or fitted very closely to the figure emphasize those body areas.

21-1(d) Space: Closely filled space used as a background allows empty space in shape to highlight area.

21-1(e) Light: Shiny highlights accent on area compared to a dull background.

See Figure 8-30 for color emphasis effects.

21-1(f) Texture: Advancing qualities of surface contour, hand, or light reaction pinpoint an area.

21-1(g) Pattern: One motif usually dominates a pattern, and a patterned accent will highlight a plain area.

Figure 21-1 Emphasis and the elements.
PROPORTION

PROPORTION is the result of comparative relationships of distances, amounts, sizes degrees or parts. It is always uses the phrase “in relation to” because spatial characteristics have little meaning except as they compare to something else. It invites exploration of parts and wholes, and pulls them together, synthesizing and integrating our perceptions
Figure 22-14  Very equal proportions within-part length to width and among-part ratios create little interest (a), but extremely unequal proportions (b) invite less part-to-part comparison than do gently unequal proportions (c). Compare the garments with the proportions in Figure 22-4.

Figure 22-15  Trousers and shirts of equal length (a) or an extremely long shirt in relation to shorter pants (b) offer less interest than do differences that invite comparison (c).
SCALE

SCALE is a consistent relationship of sizes to each other and to the whole, regardless of shapes. It is a first cousin to proportion although it compares only sizes, not other qualities. In dress scale typically relates the sizes of smaller features and ornamentation to the main parts of the garment and wearer.
ness of a small person, but repetition of small scale would seem more consistent in Western cultures where emphasis is more acceptable on smallness than on largeness. People who are extremes in size probably should avoid extremes of scale in dress or accessories because such dress extremes would emphasize their own either by repetition or contrast (Figures 23-2a, 7a, 8a, 2c, 7c, and 8c).

Psychologically, large shapes in Western cultures seem bold and aggressive, assertive and straightforward (Figures 23-1, 23-3c, and 23-5b), and small items seem delicate and dainty (Figures 23-3a and 23-10). In Western cultures one rarely finds small, fragile details in men’s wear, but in women’s wear it is very common. Similarly, large scale in line, shape, or space in women’s wear is more frequent in tailored clothes and casual sportswear where daintiness is usually less emphasized. Psychological satisfaction is easier to achieve if an ensemble uses scale consistently throughout. Where details are out of scale to each other, to the garment, or to the wearer, unity is destroyed. When they are in scale, they seem to belong to each other, and the result is harmonious.

**SCALE AND THE ELEMENTS**

Scale can apply directly or indirectly to all the elements. It most obviously involves shapes, as it relates shape sizes. It also involves the lines and spaces that make the shapes. It relates shapes and sizes of pattern motifs to each other, to the spaces between them, to the garment, and to the wearer.

Less obviously, scale also applies to color and texture. Their advancing qualities, which tend to enlarge appearances, suggest more grandiose scale, and their receding qualities which minimize appearance, suggest a smaller scale. Similarly, pattern, as filled space, enlarges more than plain areas. A tiny motif makes a large person seem larger by contrast but complements a small figure (Figures 23-2a and 23-2b). Large motifs overpower a petite person by contrast and enlarge a heavy person by repetition (Figures 23-2c and 23-2d).

**SCALE AND OTHER PRINCIPLES**

Of the linear principles, scale can, but need not, involve repetition. When sequence and alternation involve different sizes, they contribute to scale. In gradation, when each unit is consecutively larger or smaller, it is sometimes de-
BALANCE

BALANCE is the feeling of evenly distributed weight resulting in equilibrium, steadiness, repose, stability, rest. There are 3 kinds of balance: horizontal, vertical and radial. It can be symmetrical, (formal) or asymmetrical, (informal). Each part of the garment must interact to equalize each other around a balance point, compensating for any differences and countering any extremes.
24-1(a) Line path, direction, thickness, continuity: Curved lines help balance straight path, broken lines counter continuous ones, thick ones balance thin, and horizontals balance verticals and diagonals.

24-1(b) Space: Open spaces help balance closed or broken space just as unenclosed area highlights and balances isolated shapes.

24-1(c) Shape and space: Identical shape and space arrangements on each side of an imaginary center vertical create formal or symmetrical horizontal shape balance.

24-1(d) Shape and space: Identically sized and contoured shapes different distances from a center vertical will destroy a sense of balance.

24-1(e) Shape and space: Unequal shapes and arrangements on each side of an imaginary center vertical create dynamic informal or asymmetrical balance, with objects farther from the center smaller.

See Figure 8-32 for color balance effects.

24-1(f) Value: Larger areas of light, airy values balance smaller areas of darker, heavier values (a), while smaller areas of advancing and enlarging light values can balance larger areas of receding, reducing dark values (b).

24-1(g) Texture: Advancing and heavier qualities of texture need less area to balance larger areas of lighter or smoother texture.

24-1(h) Pattern: Individual motifs need well-balanced proportions, well distributed weight in arrangement, and well balanced distribution throughout the garment or ensemble.

Figure 24-1 Balance and the elements.
HARMONY

HARMONY is an agreement in feeling, a consistency in mood, a pleasing combination of differing things used in similar ways. It occurs when various elements and principles provide a pleasing compromise between the extremes of boredom and conflict, seeming to belong to one another, cooperating around a common theme.
UNITY

UNITY is a sense of completed oneness, wholeness, integrated totality, the quality of being coherent and finished. In visual design it requires variety, related, integrated and finished. It is a relationship in which all parts work together for one consistent, complete effect. It is the culminating principle and the goal to which all design aspires.