# SOLUTIONS MANUAL



# Chapter 02 Graphic Design: The Basics

#### Objectives

- 01 examine the formal elements of graphic design
- 02 understand the principles of design
- 03 comprehend visual hierarchy
- 04 learn about scale

# Overview

Concentrate on teaching (or reviewing) the formal elements of two-dimensional design: line, shape, color, and texture and the basic design principles. Emphasize that the basic principles are absolutely interdependent. Point out balance is about stability and creating equilibrium. Balance helps stabilize a composition. Creating emphasis through organizing a visual hierarchy improves communication. Designing a whole composition in which graphic elements have a discernable visual relationship relies on the principle of unity. Rhythm is a visual pulse and flow from one graphic element to another.

Some students may have previously studied 2D. A refresher is always helpful especially when applied to graphic design projects. Therefore, you could assign a poster for a social cause, such as flu prevention or blood donation, in order to evaluate the students' fundamental skill set.

Focus on composition basics, such as visual hierarchy, which seems to be a weak area for most students. As I will point out later, students tend to design in a top down hierarchy. The earlier you can address organizing a visual hierarchy in different ways, the better their compositional skills will be later on for more challenging graphic design problems.

#### Lecture 1: Elements

Go over the basic design elements:

 Line: A point or dot is the smallest unit of a line and one that is usually recognized as circular.

Point out line plays many roles in composition and communication.

Show Dia. 2-1 /// Lines Made With A Variety Of Media And Tools

# Exercise 2-1 Exploring Lines

- 01. Divide a page into four units.
- 02. Draw a curving line from corner to corner in each square.
- 03. Draw different types of lines of varying direction and qualities in each square.
  - Shape: The general outline of something is a shape. A shape also is defined as a closed form or closed path.

>>Review the different kinds of shapes and forms.

- Show Fig. 2-1 /// Graphic identity
- Show Dia. 2-2 /// Basic shapes and forms
- Show Dia. 2-3 /// Shapes
  - Study figure/ground, also called positive and negative space, as a basic principle of visual perception and refers to the relationship of shapes, of figure to ground, on a two-dimensional surface.
- Show Dia. 2-4 /// Equivocal Space
- Show Fig. 2-2 /// Poster: Stop the Plant
- Show Fig. 2-3 /// Poster: Hope for Peace
- Show Fig. 2-4 /// Poster: Romeo and Juliet
  - Review typographic shapes: In graphic design, letterforms, numerals, and punctuation marks also are shapes—albeit highly specialized ones

that represent the sounds of language. And like basic shapes, emphasize that type can be rectilinear, curvilinear, geometric, or organic.

Color:

>>Discuss Color nomenclature

>>Go over Primary and Secondary colors

- >>Explain different color systems: RGB, CMYK, Additive, Subtractive
  - Show Dia. 2-5 /// Additive color system and Dia. 2-6 /// Subtractive color system
  - Show Dia. 2-7 /// Subtractive primary hues with CMYK percentages
- Value
  - >>Discuss the meaning of value and cover value and hue contrast
    - Show Dia. 2-9 /// Value Contrast and Hue contrast
- Texture
  - >>Go over the difference between tactile and visual textures
    - Show Dia. 2-10 /// Tactile Textures
    - Show Dia. 2-11 /// Visual Textures

#### Lecture 2: Principles of Design

Focus on getting students to understand how the principles are interdependent. Tell them the design principles are a required skill set composing effectively.

- Format: Explain and give further detail about the shape of formats, single page, multipage, and aspect ratios.
  - Show Dia. 2-12 /// Folding styles
  - Show Dia. 2-13 /// Aspect ratios
- Balance: Explain as the stability or equilibrium created by an even distribution of visual weight on each side of a central axis as well as by an even distribution of weight among all the elements of the composition.

>>Review this list of the Factors Affecting Visual Weight:

- o Orientation and location of an element within the format
- Line of vision (directional pull)
- o Size and shape of an element
- o Whether the element is figure or ground
- o Color: hue, value, saturation, and temperature
- o Texture
- o Density or number of elements in a given area
- Isolation and emphasis of an element in the composition (focal point)
- Groupings (equal groups; group of several small shapes could counterbalance one large shape)
- Actual movement (in time-based/screen-based media, motion graphics)
- Show Dia. 2-14 /// Size and shape of an element

>>Go over Symmetric versus Asymmetric Balance

>>Ensure students understand how to compose a balanced asymmetrical composition; make sure they grasp that any adjustment to a composition affects the balance.

- Show Dia. 2-15 /// Symmetrical arrangement (top)
  Asymmetrical arrangement (middle) Radial arrangement (bottom))
- ➢ Show Fig. 2-7 /// Logo
- Show Fig. 2-8 /// Design Fall 2004 Cover: "T," The New York Times Style Magazine
- Visual Hierarchy: Underscore they must control visual hierarchy in a composition, determining what to emphasize and what to de-emphasize. It is well worth spending a good deal of time on this content. Assigning simple exercises using graphic elements such as arrows and dots to explore the following is helpful.

#### >>Go over ways to achieve emphasis:

- Emphasis by Isolation
- Emphasis by Placement
- o Emphasis Through Scale
- Emphasis Through Contrast
- o Emphasis Through Direction and Pointers
- o Emphasis Through Diagrammatic Structures
  - Show Dia. 2-16 /// Emphasis
  - Show Dia. 2-17 /// Trees, nests, and stairs

## Project 2-1 Creating a Visual Hierarchy

- 1. Draw seven shapes of varying sizes.
- 2. Use color or texture on some of them. Leave others in outline form.
- 3. Cut them out.
- 4. Decide which shapes should be seen first, second, third, and so on.
- 5. On an  $8\frac{1}{2}$ " x 11" page, arrange them in hierarchical order.
- 6. Produce ten sketches and one rough before creating a final solution.

# Presentation

Present the solution on an 11" x 14" board or display on screen.

- Rhythm: Talk about rhythm as a strong and consistent repetition, a pattern of elements can set up a rhythm, which causes the viewer's eyes to move around the page.
  - >>Discuss Repetition and Variation
- Unity: Underscore the goal to compose all graphic elements in an interrelated manner so that they form a greater whole. Discuss:

>>Laws of Perceptual Organization

- >>Correspondence
  - Show Dia. 2-18 /// Laws of perceptual organization
  - Show Fig. 2-13 /// Poster: Flaming Lips
- >>Structure and Unity
  - Show Dia. 2-19 /// A Modular Grid
  - Show Fig. 2-11 /// Book Cover Series: "The Neversink Library"
  - Show Fig. 2-12 /// Website and Logo: The Design Studio at Kean University
- Scale: Go over the issue of the size of one graphic element in relation to another in a composition.
  - Show fig. 2-14 /// Poster: Metropolis
  - Show Fig. 2-15 /// Poster

# Project 2-2 Achieving Unity

1. Choose a group of objects, such as tools or chess pieces, and photocopy or draw

them with conventional drawing tools or by digital means.

- **2**. Cut them out. Or scan them.
- 3. Arrange them on a page with type (found type or handmade).
- **4**. To achieve unity, use the principles of flow and correspondence. For example,

repeat colors in the design to create visual relationships among the elements.

5. Create at least ten sketches before going to the final stage.

# Presentation

Present the solution on an 11" x 14" board or display on screen.

# Topics for Classroom Discussion

(Please note that the answers provided here are guides. Before each topic's discussion, students should read *Graphic Design Solutions*, taking responsibility for their own learning. Each chapter of *Graphic Design Solutions*, 5<sup>th</sup> ed., is a "lecture" or "lectures" [depending upon your course], providing archived content for review or remediation, enabling a flipped classroom model.)

- What are the different kinds of balance? Explain the difference.
  - Symmetry is an equal distribution of visual weights, a mirroring of equivalent elements on either side of a central axis; it is also called reflection symmetry.
  - Asymmetry is an equal distribution of visual weights achieved through weight and counterweight by balancing one element with the weight of a counterpointing element *without mirroring* elements on either side of a central axis.
  - **Radial balance** is symmetry achieved through a combination of horizontally and vertically oriented symmetry.
- What is visual hierarchy? Explain the importance of establishing a visual hierarchy and ways to achieve emphasis.

To guide the viewer, the designer uses visual hierarchy, the arrangement of *all* graphic elements according to emphasis. Emphasis is the arrangement of visual elements according to importance, stressing some elements over others, making some superordinate (dominant) elements and subordinating other elements. Basically, the designer determines which graphic elements the viewer will see first, second, third, and so on.

Visual hierarchy aids communication.

There are several means to achieve emphasis:

- Emphasis by Isolation
- Emphasis by Placement
- Emphasis Through Scale
- Emphasis Through Contrast
- Emphasis Through Direction and Pointers
- Emphasis Through Diagrammatic Structures

What is the purpose of rhythm in a composition? How is it similar to a beat in music? Can a designer create different rhythms? If so, describe one or two. (The third part of this question should be left to the students to explain, perhaps using examples they find online or in print.)
 In graphic design, similar to a beat in music, a strong and consistent repetition pattern of elements can set up a **rhythm**, which causes the viewer's eyes to move around the page. Timing can be set by the intervals between and among the position of elements on the page. Just as in music, a pattern can be established and then interrupted, slowed, or sped up.

Rhythm—a sequence of visual elements at prescribed intervals (think strong dance beat)—across multiple-page formats, such as book design, website design, and magazine design, as well as motion graphics, is critical to developing a coherent visual flow from one page to another. Equally important is incorporating an element of *variance* to punctuate, accent, and create visual interest.

Many factors can contribute to establishing rhythm—color, texture, figure/ground relationships, emphasis, and balance.

• How can you unify a composition?

There are many ways to achieve unity where all the graphic elements in a

design are so interrelated they form a greater whole.

When you repeat an element such as color, value, shape, texture, or parallel directions or establish a style, like a linear style, you establish a visual connection or correspondence among the elements.

Alignment is the positioning of visual elements relative to one another so that their edges or axes line up. Aligning visual elements aids unity.

Various structural devices can aid in unifying a static page or multiple-page formats. Modular systems, grids, and mathematical devices and alignment can help establish unity.

- Why do you have to take the format into account when designing?
  The interior graphic space must respond to the defined perimeter and shape of the format.
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