Универзитет „Св. Кирил и Методиј“ во Скопје
ФАКУЛТЕТ ЗА ИНФОРМАТИЧКИ НАУКИ И КОМПЈУТЕРСКО ИНЖЕНЕРСТВО

ФАКУЛТЕТ ЗА ИНФОРМАТИЧКИ НАУКИ И КОМПЈУТЕРСКО ИНЖЕНЕРСТВО

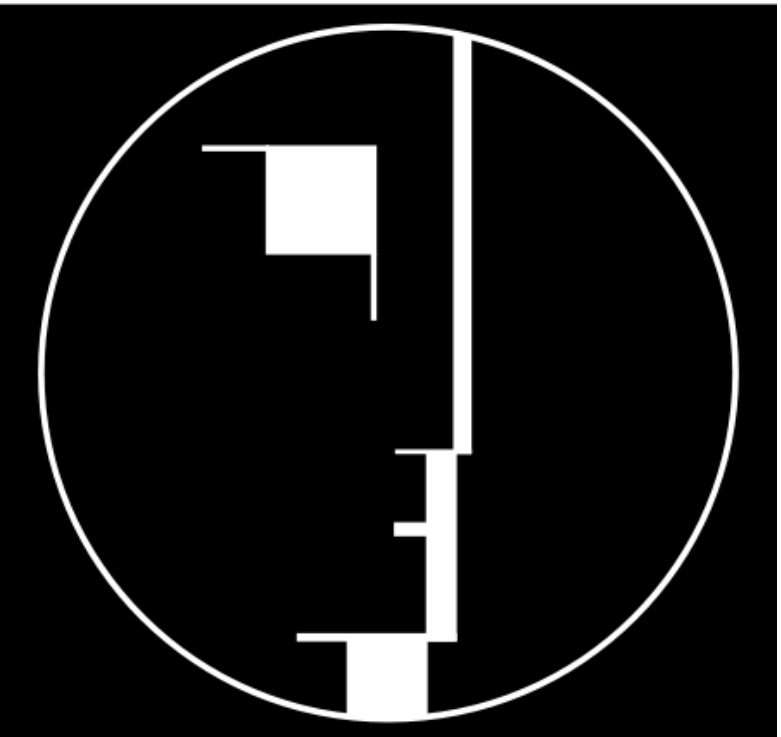
Introduction in graphic design theory

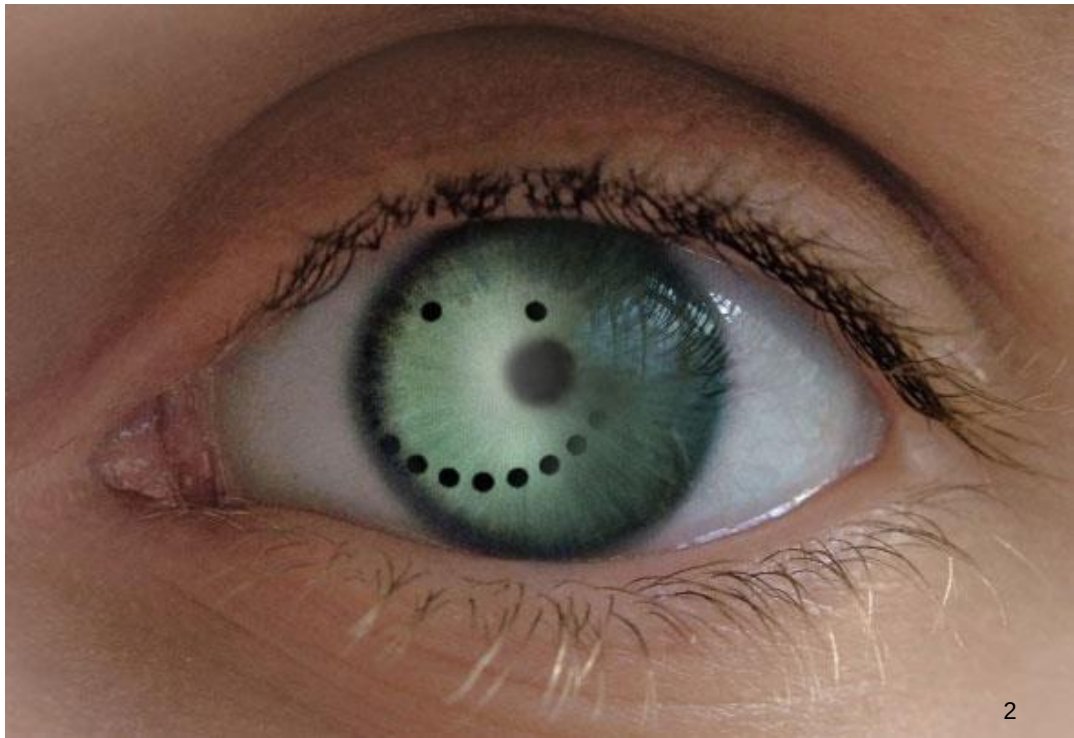
Basics of Web design

ФИНКИ 2017

Gestalt Theory

- Gestalt theory originated in Austria and Germany toward the end of the 19th century. Since then, Gestalt theory has has become fundamental to several related disciplines, including art, graphic design, web design and interior design.



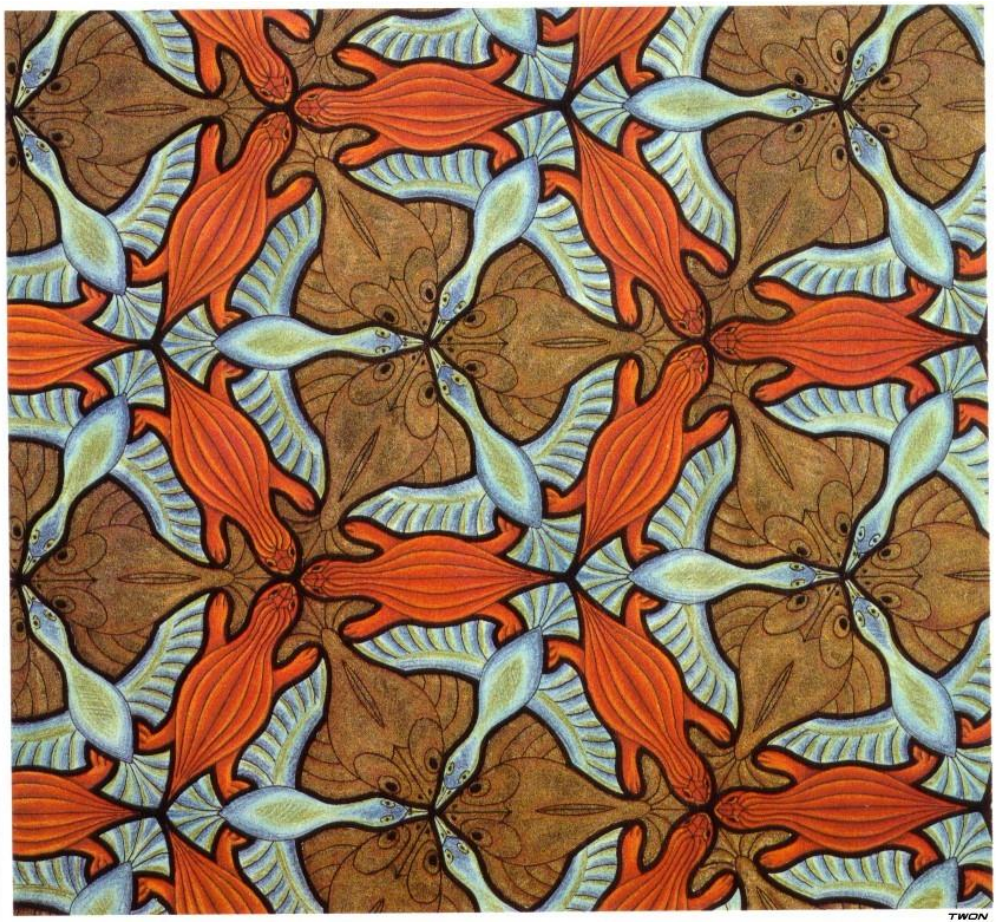


What is Gestalt Theory

- Gestalt theory focuses on the mind’s perceptive processes
- The word "Gestalt" has no direct translation in English, but refers to "a way a thing has been *gestellt* ; i.e., ‘placed,’ or ‘put together’";
- common translations include "form" and "shape"

What is Gestalt Theory

- Gestalt theorists followed the basic principle that the whole is greater than the sum of its parts.
- In viewing the "whole," a cognitive process takes place – the mind makes a leap from comprehending the parts to realizing the whole.



The whole is greater than the sum of its parts.

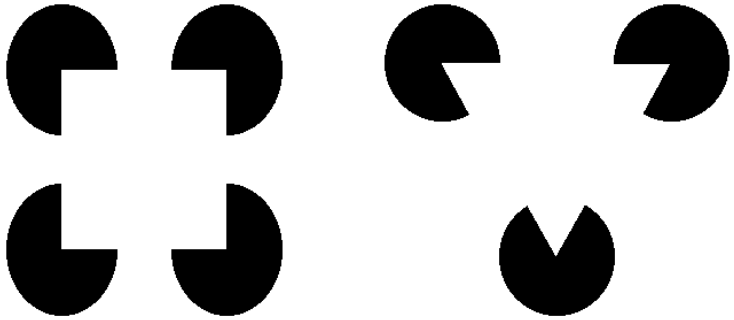
Figure Ground Segregation

- When you look at the environment, you look at it as a whole picture, not separate parts.
- There are images in the environment that people are aware, this would be the figure.
- Images people are not aware of make up the ground.

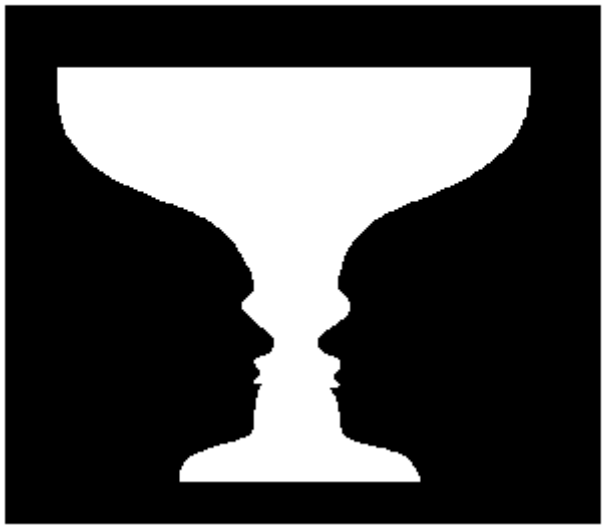
Figure – Ground Segregation

- The figure is what a person is concentrating on;
- The ground would be everything else in that environment;
- Some properties of figure ground:
  - Figures hold more memorable association than the ground.
  - Figures are seen as being in front of the ground.
  - The ground is seen as uniformed material and seems to extend behind the figure.
  - The contour separating the figure from the ground appears to belong to the figure. (Goldstein, pp. 156-159)

Illusory Contours



Ambiguous Figure - Faces or Vase?



Reversible figure/ground

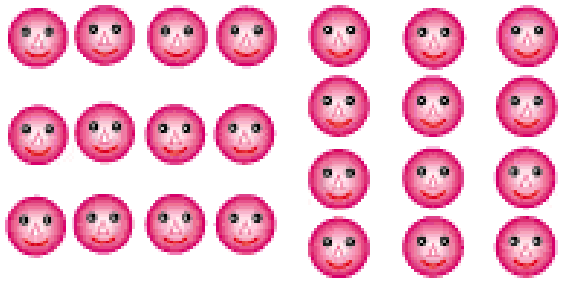
- There are no correct interpretations to what the figure is and what the ground is; it is the individual's choice.
- People have different memories and experiences that influence their perception of images.
- We have seen that meaningfulness can help determine which area we see as figure.
- If something has meaning to someone, it normally "jumps out" at them, and is more noticeable

Gestalt Laws of Organization

1. **proximity** - elements tend to be grouped together according to their nearness
2. **similarity** - items similar in some respect tend to be grouped together
3. **closure** - items are grouped together if they tend to complete some entity
4. **simplicity** - items will be organized into simple figures according to symmetry, regularity, and smoothness

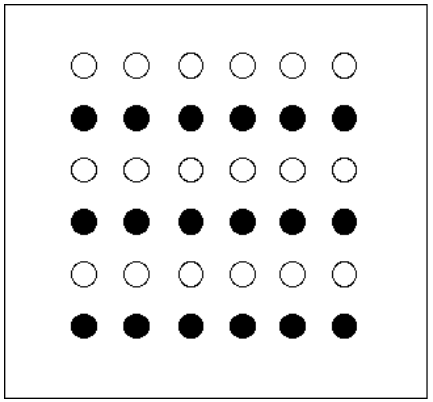
Law of Proximity

- The Gestalt law of proximity states that "objects or shapes that are close to one another appear to form groups“
- Even if the shapes, sizes, and objects are radically different, they will appear as a group if they are close together.



Law of Similarity

- *Similarity* occurs when **objects look similar** to one another. People often perceive them as a group or pattern.
- Our mind groups similar elements to an entity.
- The similarity depends on form, color, size and brightness of the elements.



Law of Closure

- Gestalt theory seeks completeness; when shapes aren't closed, we tend to add the missing elements to complete the image
- Although the panda is not complete, enough is present for the eye to complete the shape.
- When the *viewer's perception completes a shape*, **closure** occurs.

Law of Good Continuation

- Continuation occurs when the eye is compelled to **move through** one object and **continue** to another object.
- "tend to continue shapes beyond their ending points"

Graphic Design

- The process and art of combining text and graphics
- Communicating an effective message in the design of logos, graphics, brochures, newsletters, posters, signs, and any other type of visual communication
- Web design

Building Blocks of Graphic Design

The five elements of

- lines,
- shapes,
- mass,
- texture,
- and color

are the building blocks of design for desktop publishers.

Lines

- Sometimes a designer uses a line alone to divide or unite elements on a page.
- Lines can denote direction of movement (as in diagonal lines and arrows) or provide an anchor to hold elements on a page (such as lines at the top, bottom, or sides of a page).

Lines

50
QUANDO SEI COL BABBO A
LUI STA ATTENTO CON LO
LA STRADA SENTI PIÚ

Hello.
Forums
Podcasts
Resources
22,600
Free Job Ads!
"I'M IN LOVE WITH SOMEBODY ELSE"

Shapes

- Circle, square, and triangle are the three basic shapes used in graphic design.
- Perhaps the most familiar shape to desktop publishing is the square (and rectangle).
- Paper is rectangular. Most text blocks are square or rectangular.
- While you may encounter printed projects cut into other shapes, most circles, triangles, and freeform shapes in desktop published materials are found on the page within the graphics or in the way the elements are placed on the page.

Shape

- The logo uses **implied shape and lines to create the E and the beebody.** This practice of implied shape is often referred to as **Gestalt theory**, which basically states that you can **infer a whole by only seeing its parts**. There really is nothing to that bee body other than three lines, but you see the striped body of a bee because your mind says you should.

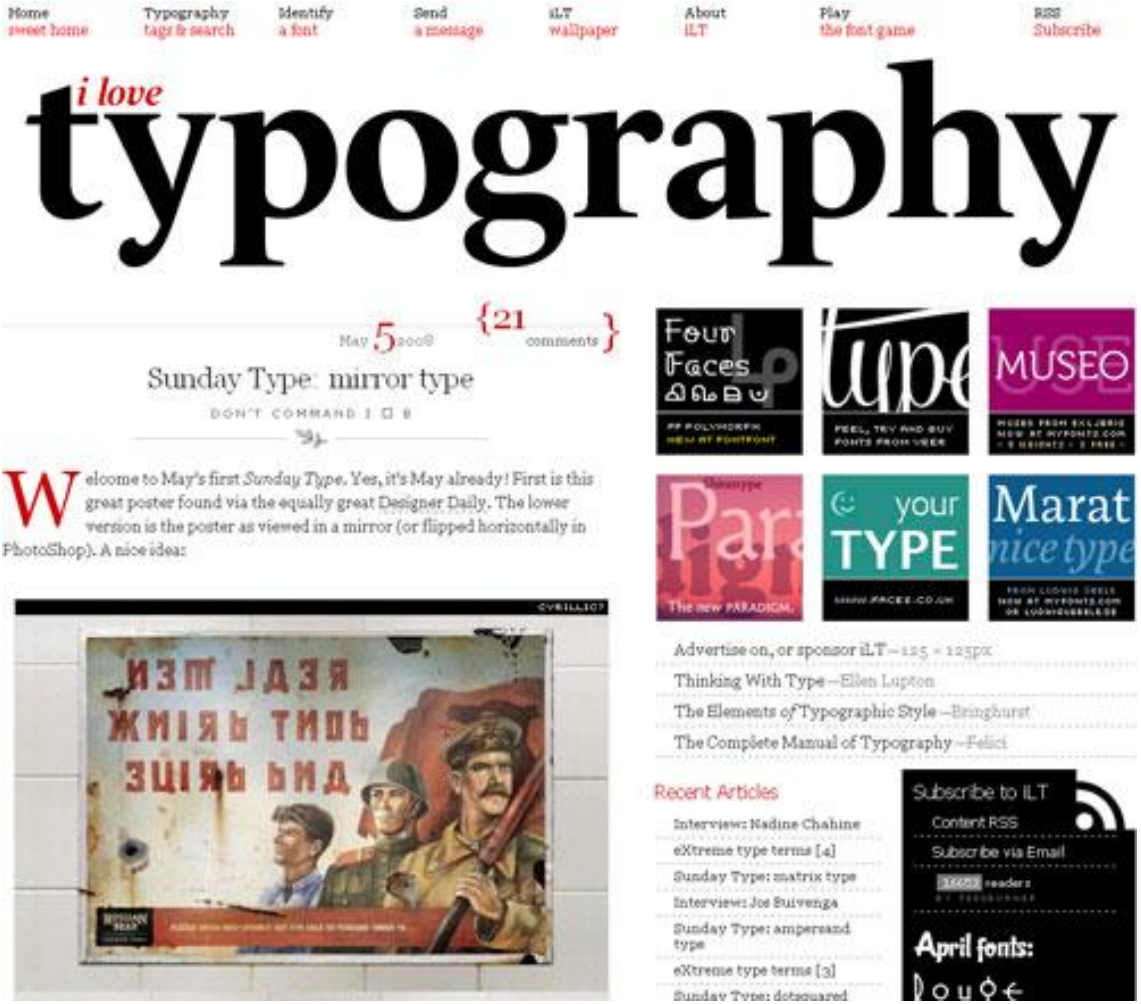
Shape

- **Typography can take shape, too**. With weight (bold, light), leading, size, style (regular, italic), tracking or kerning, and word wrap, you can control the shape your type takes. Also pay attention to the shape of your body copy and remember that you can **wrap** it around images or make it **take on shapes of its own** to incorporate it into the rest of the design.

Mass

- Mass is size.
- There is physical size and visual size.
- Size can be relative.
- A physically small brochure can have a great deal of mass through the use of heavy text and graphic elements.
- A physically large brochure can appear smaller, lighter by using text and graphics sparingly

Mass



It is **easy to distinguish** the header from the headline, byline, subheaders and body copy. This is because they **vary in size** and your **eye is naturally drawn to the largest element first.** Note the drop cap, too; it's a great way to indicate where the reader should start and an example of using size to direct the viewer's eye.

Texture

- For desktop publishing, actual texture is the feel of the paper.
- Is it smooth to the touch or rough?
- Textures can also be visual. On the Web, especially, backgrounds that simulate familiar fabrics, stone, and other textures are common

Texture

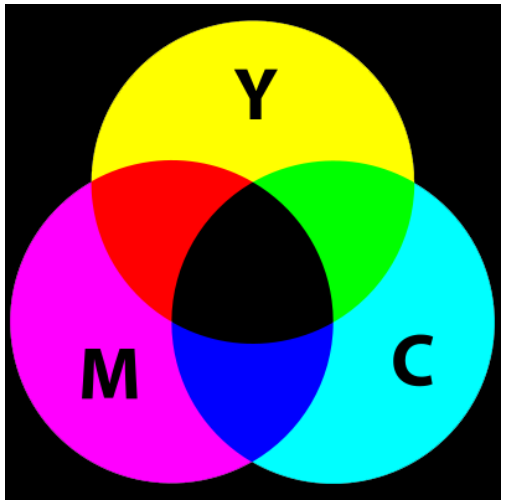
- Free People integrates the **unique textures and patterns of its textiles**, so the design not only is a great example of texture, it's also an excellent use of **incorporating the product into the design**. The textures used in this site give it a very earthy, down-home, yet semi-exotic feeling.

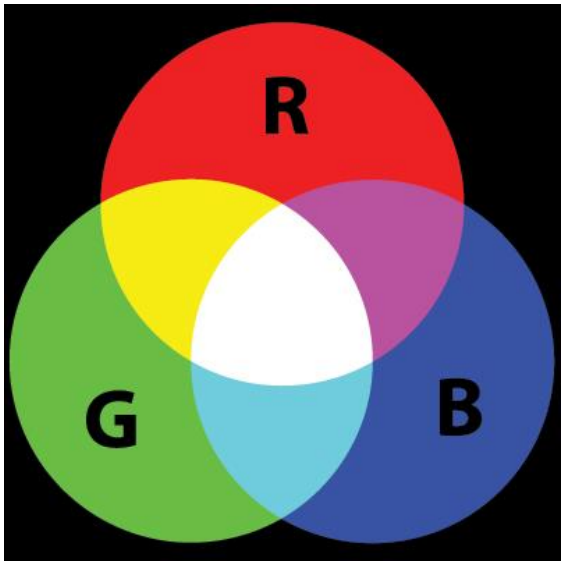
Color

- Color can be used to elicit specific emotions and reactions.
- Red is typically thought of as an attention-grabbing, hot color.
- Blues are more calming or convey stability. Some color combinations are used to create a specific identity (corporate colors, school colors) or may be used in conjunction with texture to simulate the look of other objects (the look of plain paper wrapping or neon lights, for example).
- Color may provide cues for the reader.

Types of Colour Theories

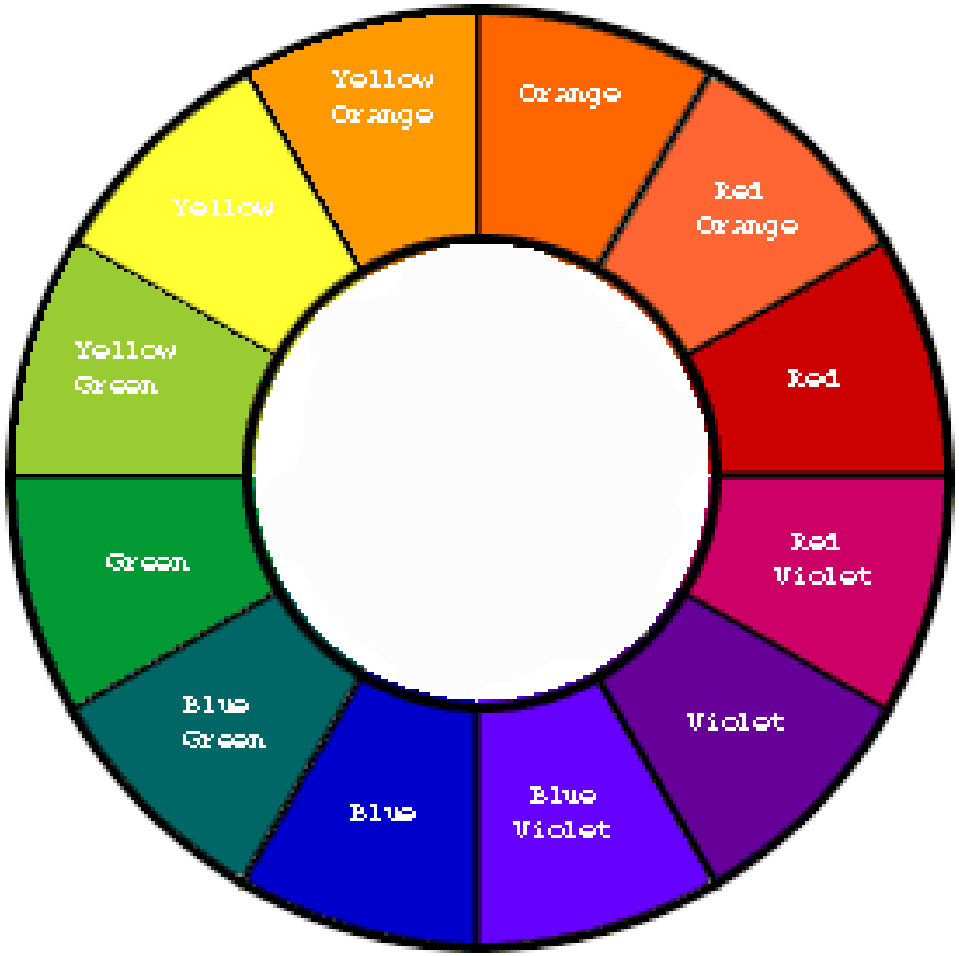
1. Subtractive Theory
   - The **subtractive**, or **pigment** theory deals with how white light is absorbed and reflected off of coloured surfaces.
2. Additive Theory
   - The **Additive**, or **light** theory deals with radiated and filtered light.



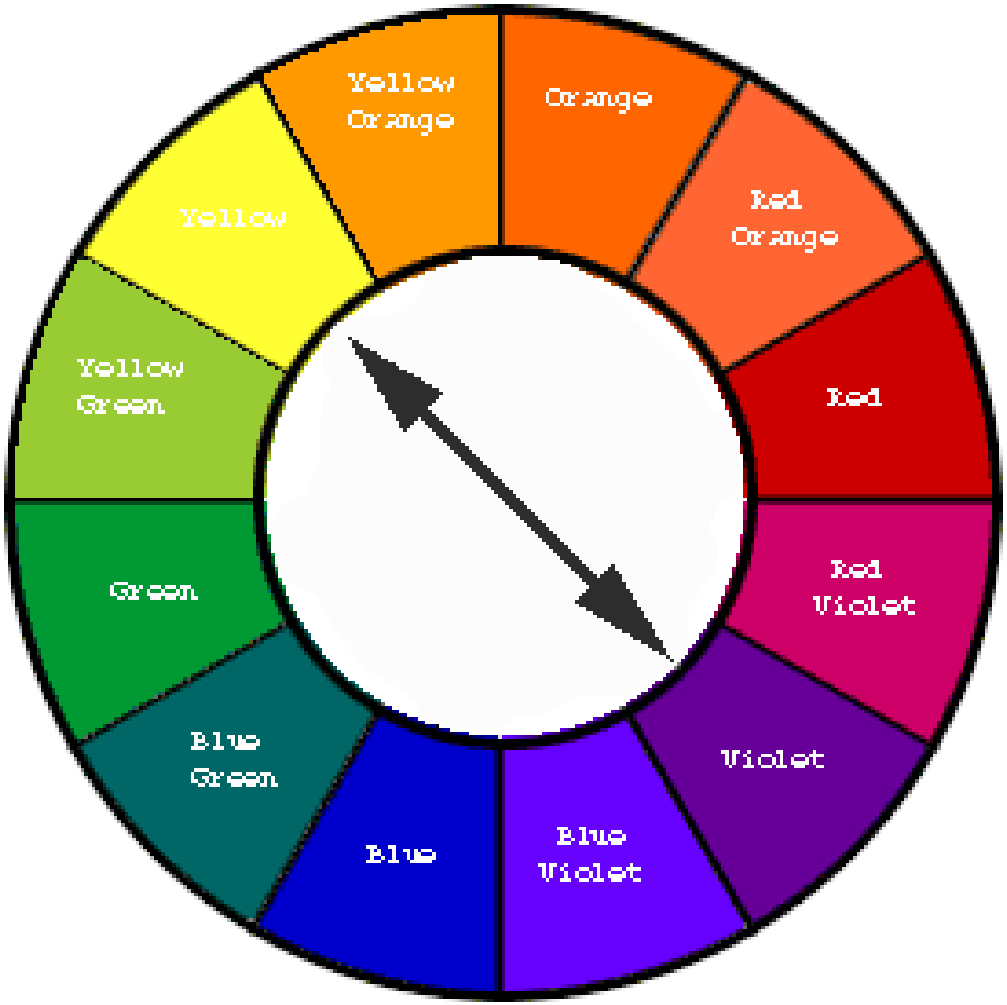


Color

- Color holds the most critical appeal to emotions out of all the elements of design!



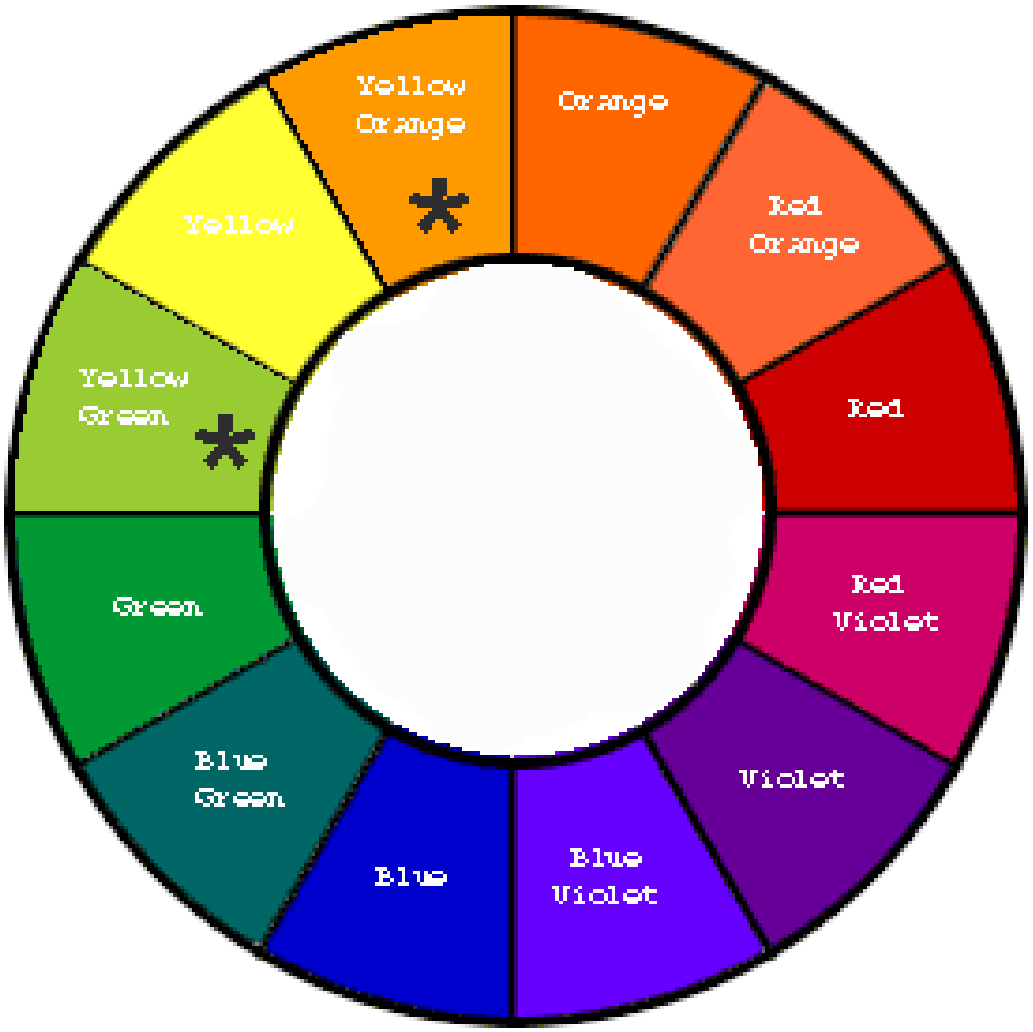
Complementary Colors



Pick a color on the color wheel then draw a straight line across the color wheel, this is the color's complement. These colors are basically opposites. On the wheel we started with yellow and its complement or opposite is violet. The complementary colors are used to offset the main color and are thought to complete each other.

There are also split complementary colors which means that once you pick the complimentary you choose one of the colors next to it giving it a more subtle look.

Analogous Colors



This is when you choose a color on the color wheel that is next to the color you are choosing. If we choose yellow the analogous colors would be yellow green and yellow orange. This type of color choice is great when you don't want to match the exact color or if you want to use your art work and/or accessories to create the dramatic colors in the room highlighting the art.

Quite often neutrals are used when highlighting the art work such as white, off whites, grays and browns, even black.

Triad Colors

Choose a color on the color wheel then draw an equilateral triangle to find the two other colors. You will notice that each color has 3 colors between them to form the triangle. Let's choose violet, the other two colors will be orange and green. These colors would be the secondary colors. The approach organizes the colors in terms of purity but can be a little more difficult to work with.

Color

- This packaging uses the colors **orange and green, two pieces of a triad (purple would be the other one)**. This produces an interesting and often unexplored combination; it's not quite a complimentary, but the colors still go well together.

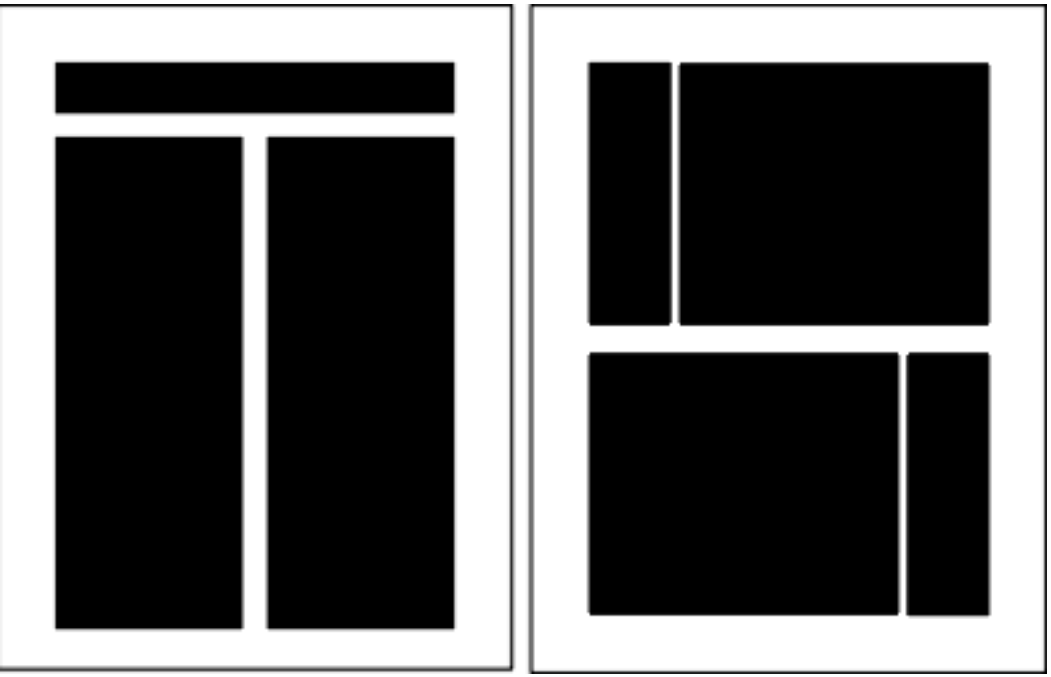
The Big Picture

- Different instructors or designers have their own idea about the basic principles of design but most are encompassed in the 6 principles of:
  - balance
  - proximity
  - alignment
  - repetition or consistency
  - contrast
  - white space

Balance

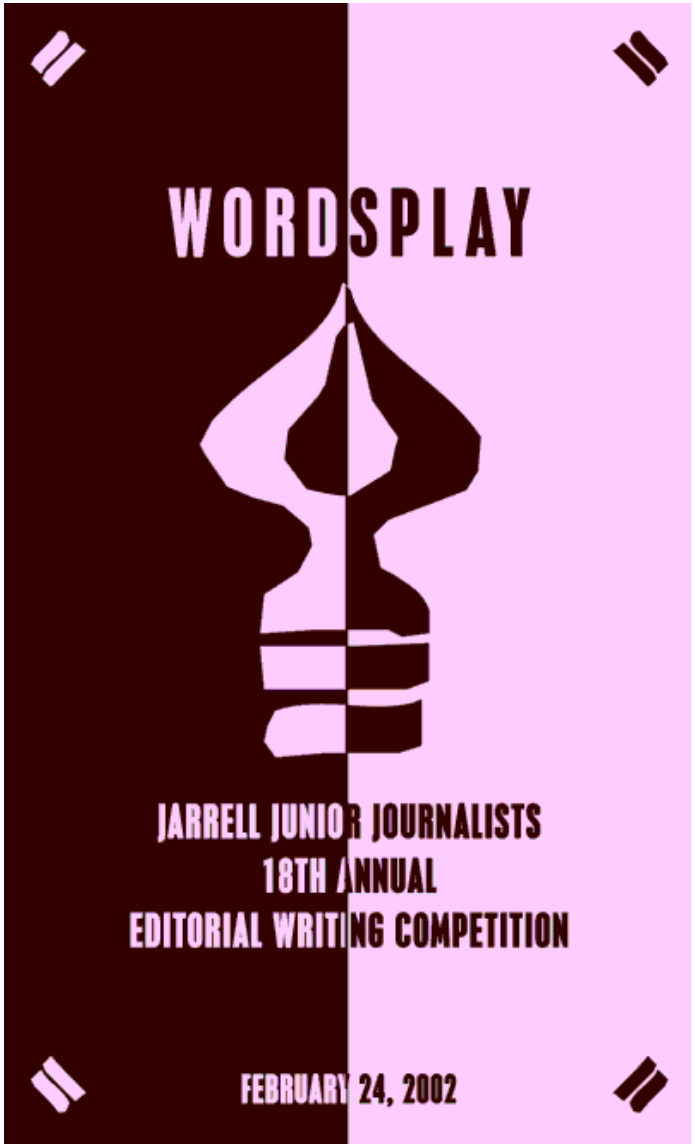
- Primarily there are three types of balance in page design:
  - symmetrical
  - asymmetrical
  - radial
- Additionally, we'll discuss:
  - the rule of thirds
  - the visual center of a page
  - the use of grids

Symmetrical Balance



- In a design with only two elements they would be almost identical or have nearly the same visual mass. If one element was replaced by a smaller one, it could throw the page out of symmetry. To reclaim perfect symmetrical balance you might need to add or subtract or rearrange the elements so that they evenly divide the page such as a centered alignment or one that divides the page in even segments (halves, quarters, etc.).

Symmetrical Balance



- **Vertical Symmetry** — Each vertical half (excluding text) of the brochure is a near mirror image of the other, emphasized with the reverse in colors. Even the perfectly centered text picks up the color reversal here. This symmetrically balanced layout is very formal in appearance.

Symmetrical Balance

- **Vertical & Horizontal Symmetry** — This poster design divides the page into four equal sections. Although not mirror images the overall look is very symmetrical and balanced. Each of the line drawings are more or less centered within their section. The graphic (text and image) in the upper center of the page is the focal point tying all the parts together.

Asymmetrical Balance

- This page uses a 3 column format to create a neatly organized asymmetrical layout. The two columns of text are balanced by the blocks of color in the lower left topped by a large block of white space. In this case, because the white space is in a block shaped much like the text columns, it becomes an element of the design in its own right.

Radial Balance

- Here we have an example of radial balance in a rectangular space. The year represents the center of the design with the subtle color sections radiating from that center. The calendar month grids and their corresponding astrological symbols

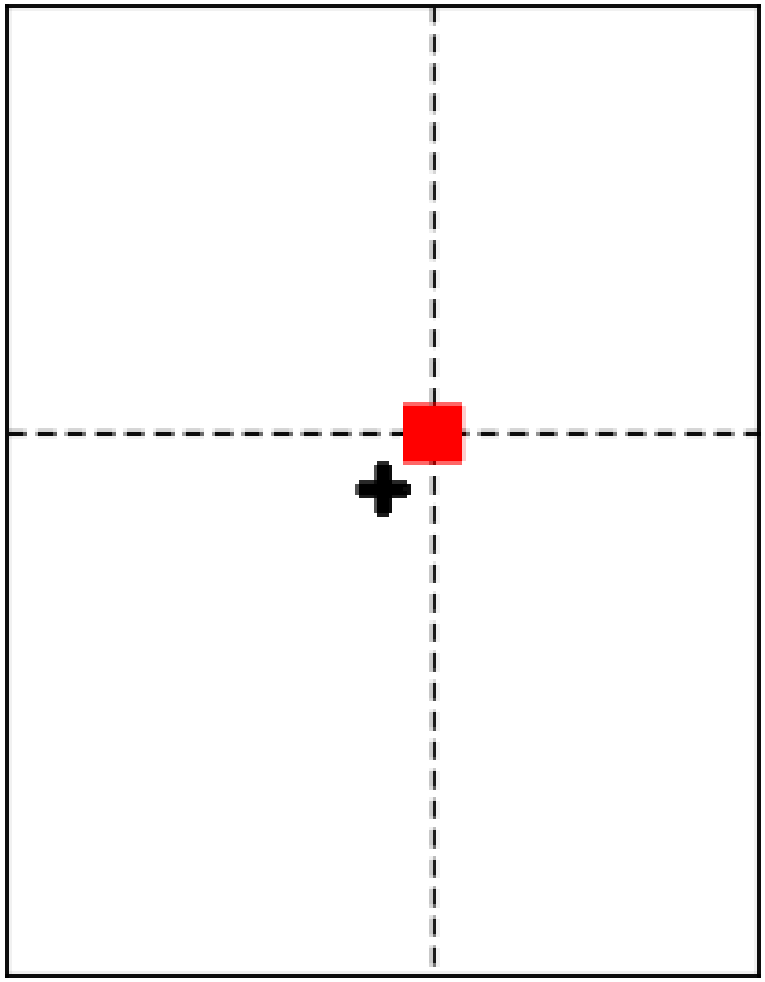
Rules of Thirds

- The rule of thirds says that most designs can be made more interesting by visually dividing the page into thirds vertically and/or horizontally and placing our most important elements within those thirds.
- Take this concept a step further, especially in photographic composition, by dividing the page into thirds both vertically and horizontally and placing your most important elements at one or more of the four intersections of those lines.

Rules of Thirds

- In this vertically symmetrical layout the headline appears in the upper third of the page, the logo in the middle third, and the supporting descriptive text in the lower third. The most important information is in that lower third and anchors the page.

Visual Center and Balance



- Placing important elements or the focal point of the design within the visual center of a piece is another design trick.
- The visual center is slightly to the right of and above the actual center of a page.

Grids and Balance

- Sometimes the use of a grid is obvious.
- This asymmetrically balanced design uses a simple three column grid to ensure that each text column is the same width and that it is balanced by the nearly empty column on the left.
- The grid also dictates the margins and ensures that the page number and header appear in the same place on each page..

Proximity

- Keeping like items together and creating unity by how close or far apart elements are from each other.

Alignment

- While centered text has its place it is often the mark of a novice designer.
- Align text and graphics to create more interesting, dynamic, or appropriate layouts.

Proximity & Alignment

Repetition/Consistency

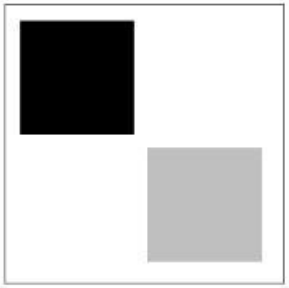
- Consistent and balanced look through different types of repetition

CHANEL

Contrast

- Big vs. small, black vs. white. These are some ways to create contrast and visual interest

Visual Contrast

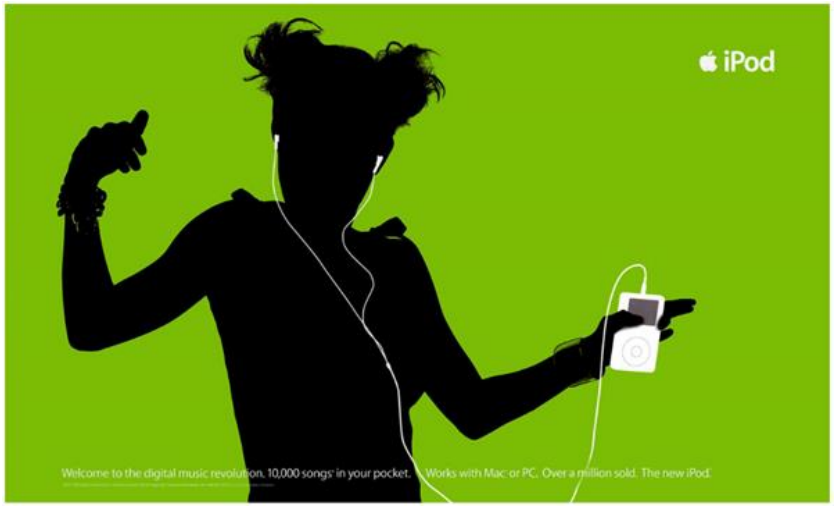


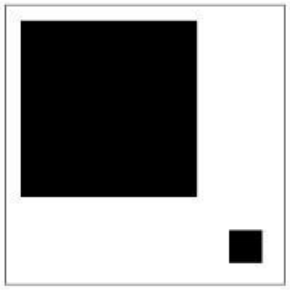
dark - light
solid - textured

Contrast in value

curvilinear - rectilinear

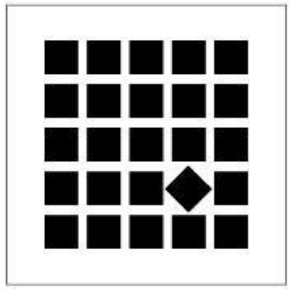
Contrast in shape





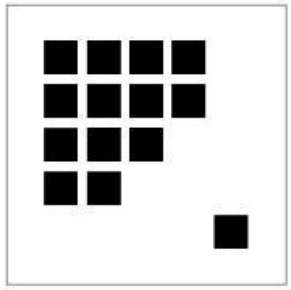
small - large

Contrast in scale



static - dynamic

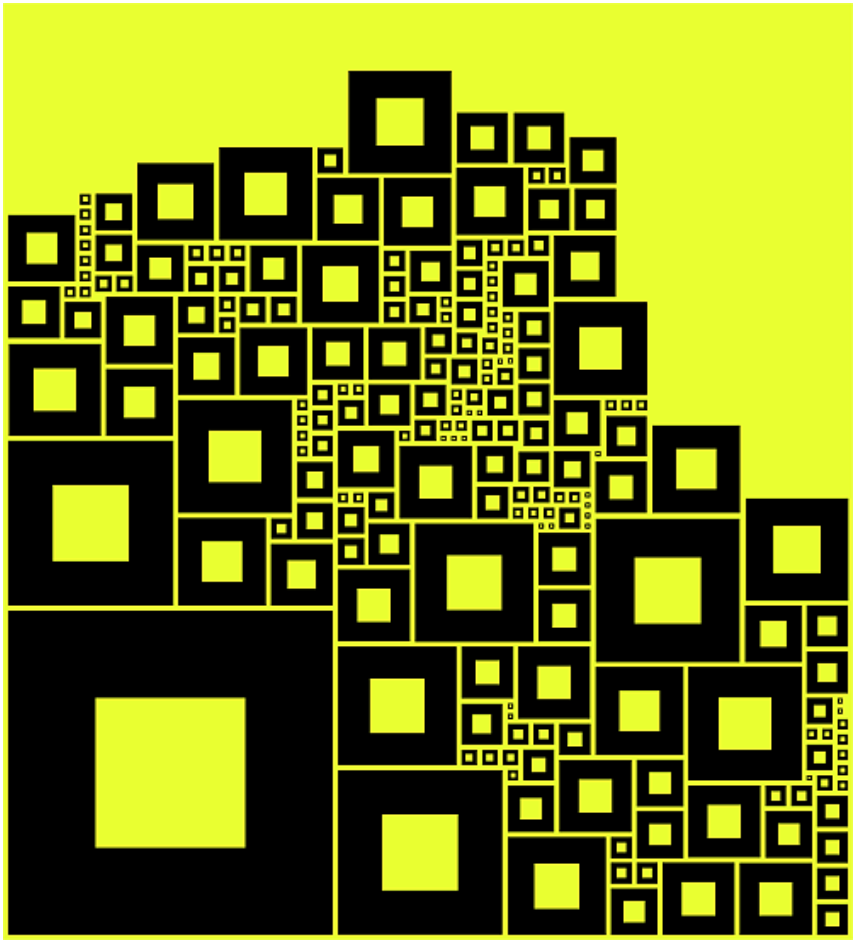
Contrast in movement/direction



isolated - grouped

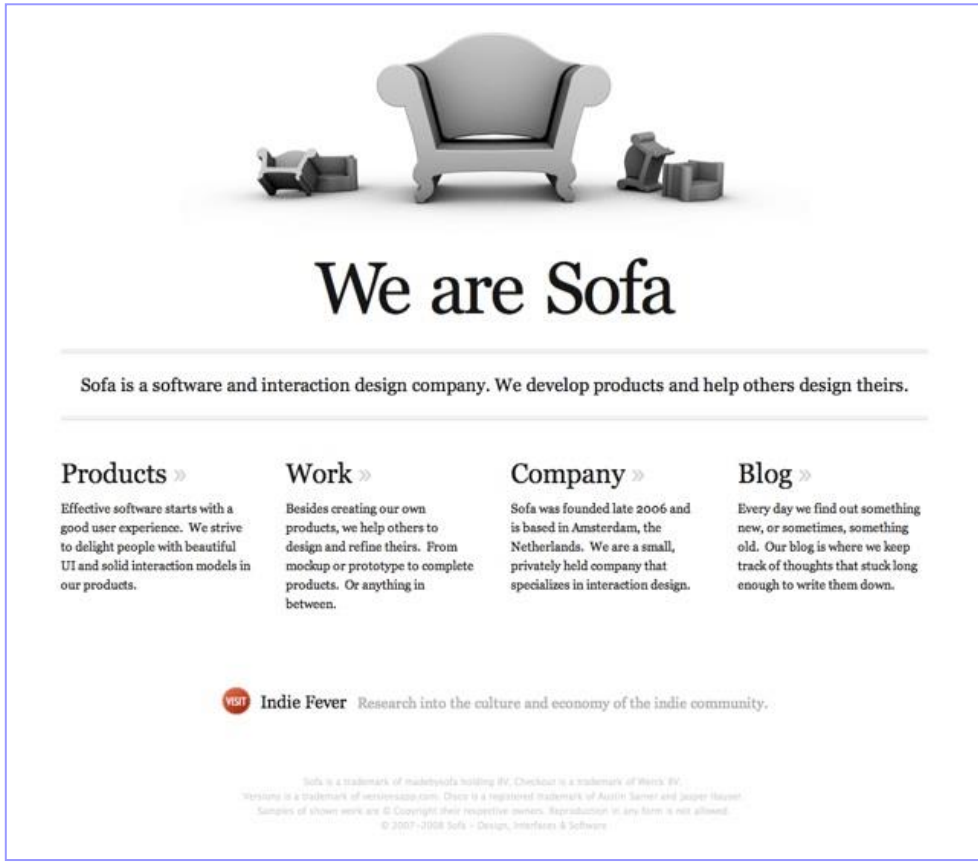
Contrast by space

Contrast



White Space

- The art of nothing is another description for this principle.



What's Your Graphic Design IQ?

- Can you recognize the differences between 'good' and 'bad' graphic design?

What's Your Graphic Design IQ?

Everybody Loves The Great Taste Of QuiggleBites.

Everyody's talking about the terrific new cereal that not only tastes great, but also is great FOR you...QuiggleBites.

These chocolatey, scrumptious morsels melt in your mouth and leave you craving more and more! They don't get mushy in milk, and they go great with all kinds of fruit.

You won't want to stop with just one bowl of QuiggleBtes. And since they are extremely low in fat, calories and carbs, you won't have to!

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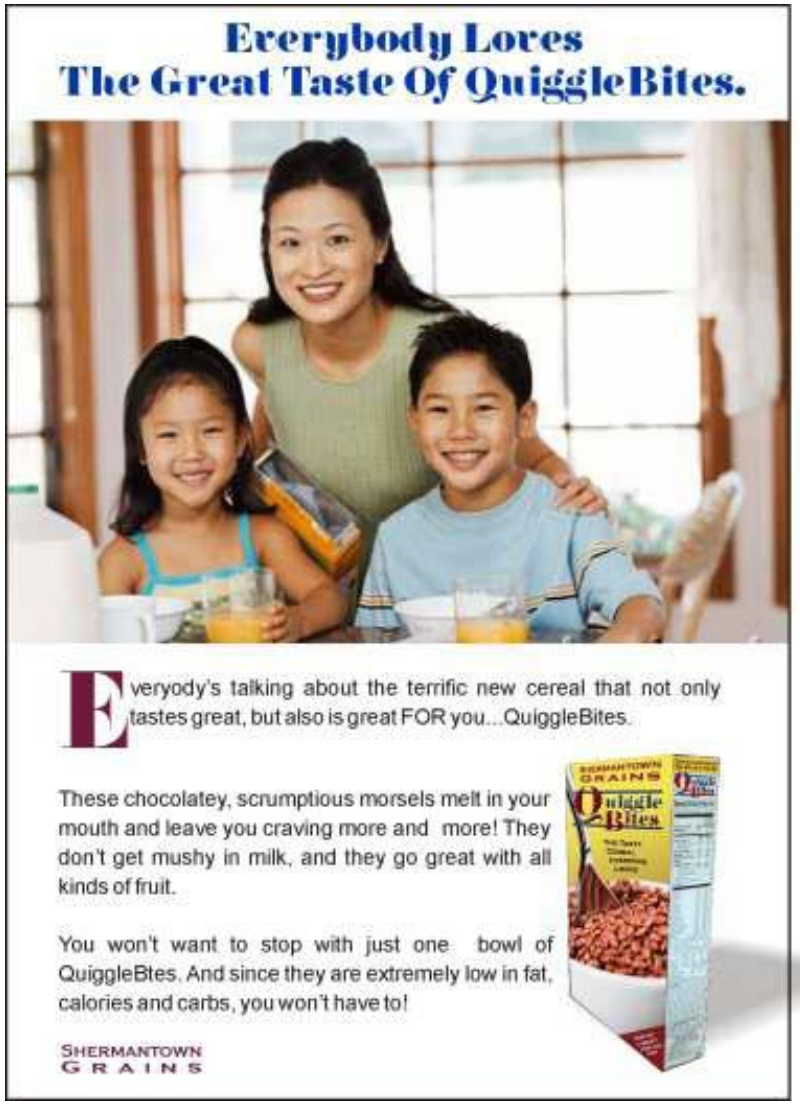

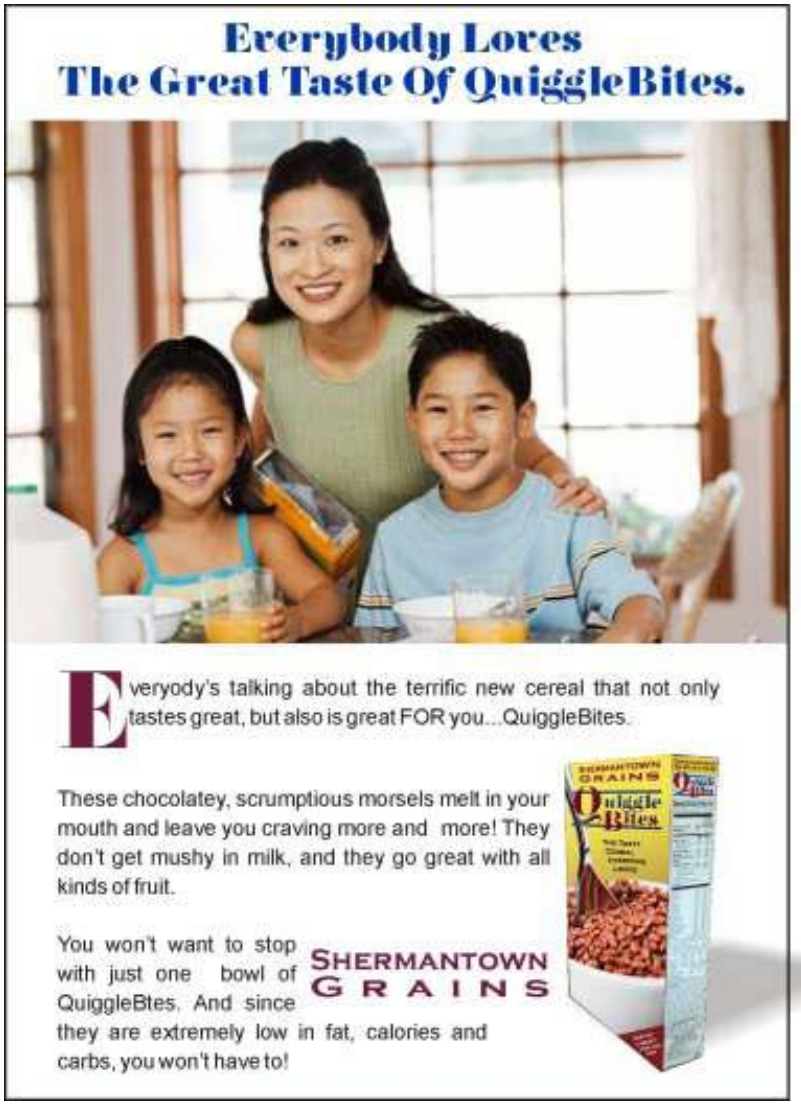

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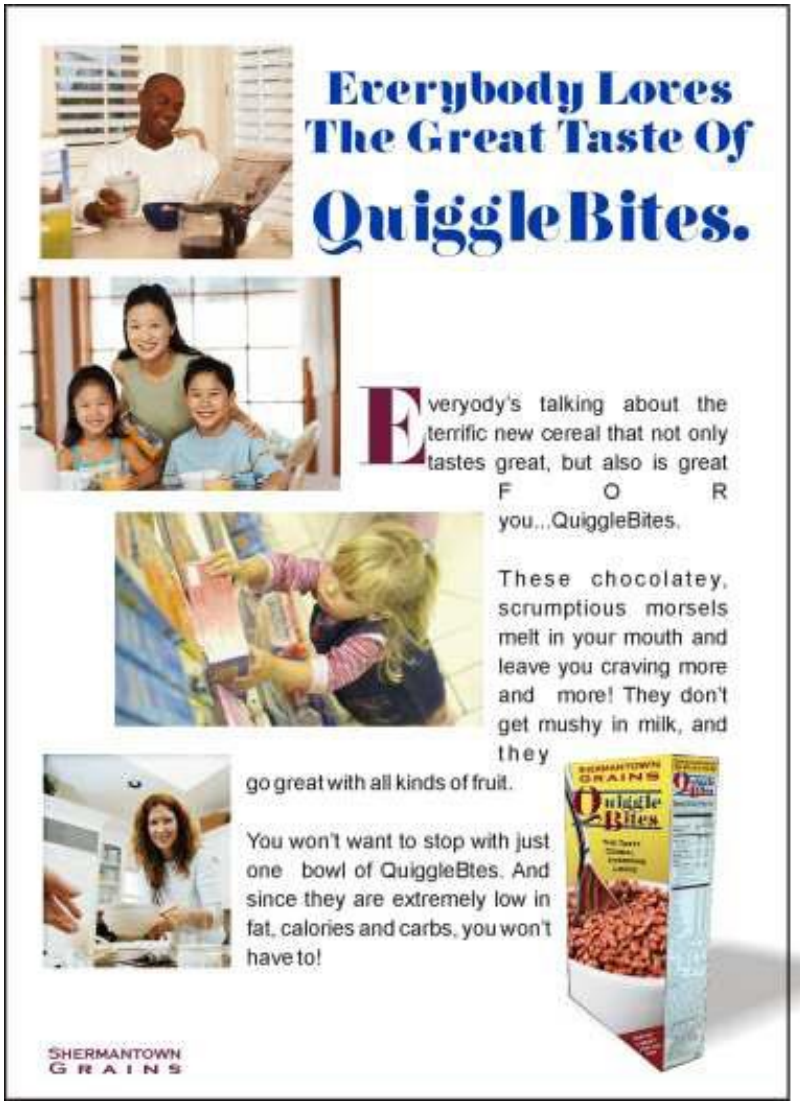

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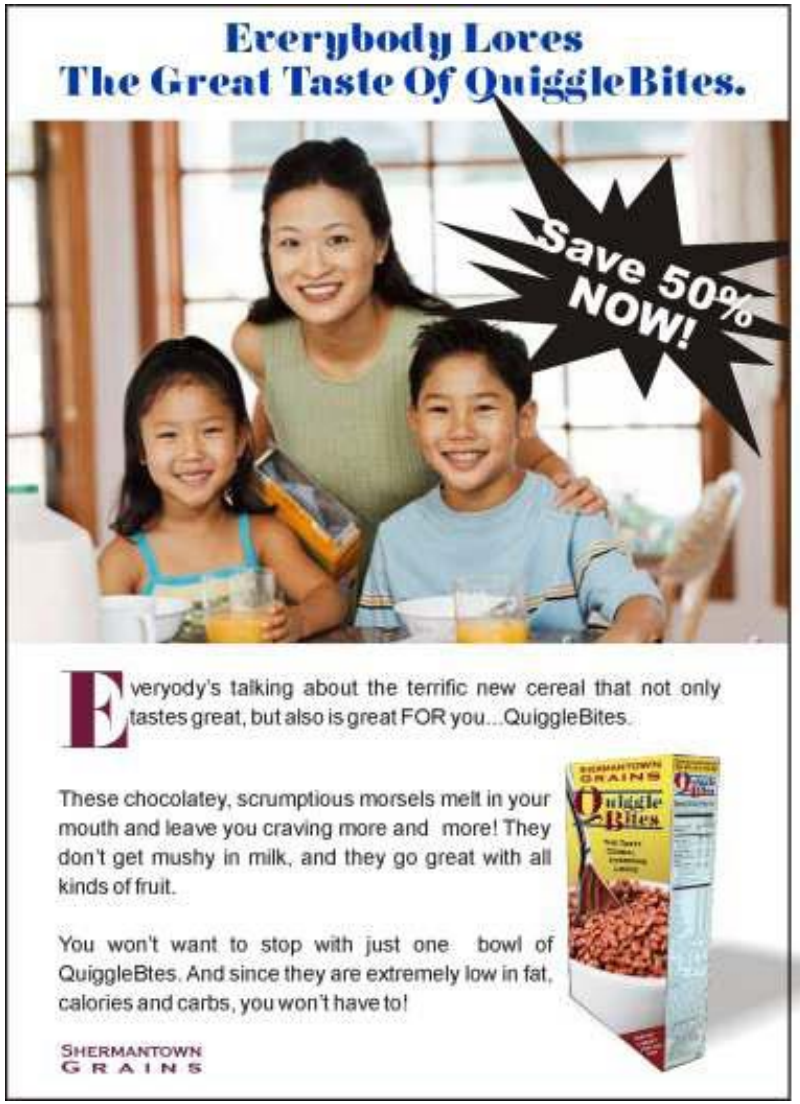

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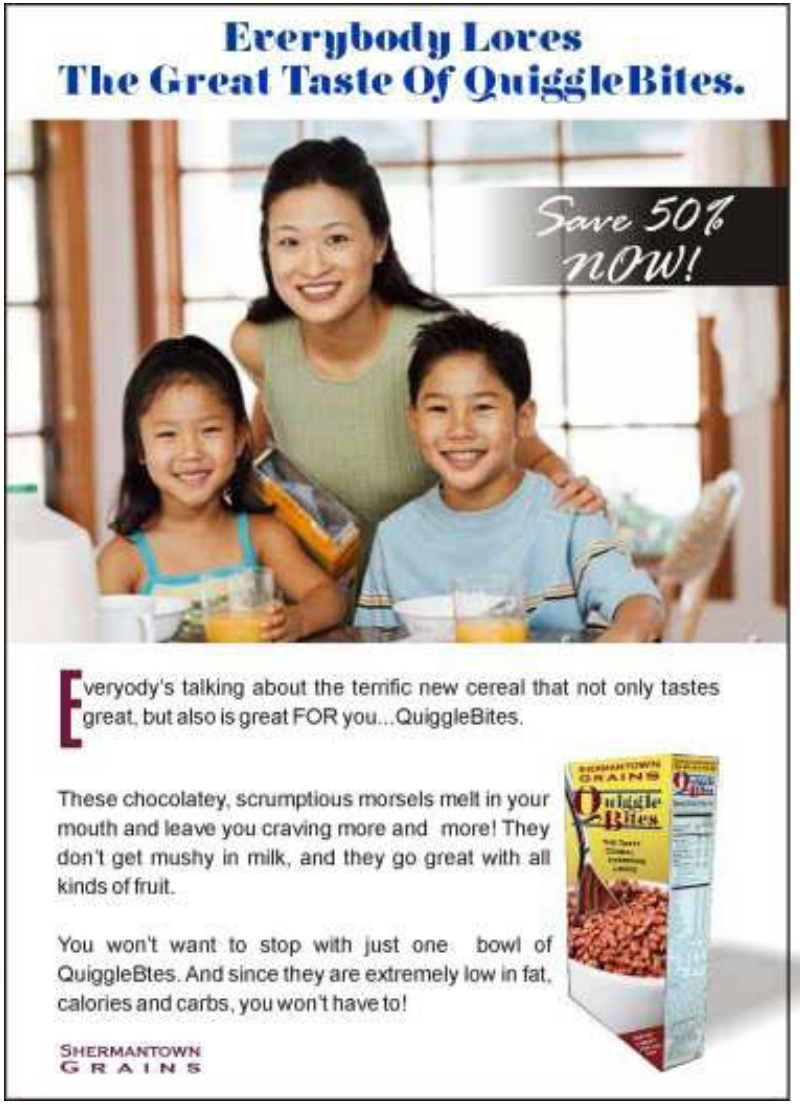

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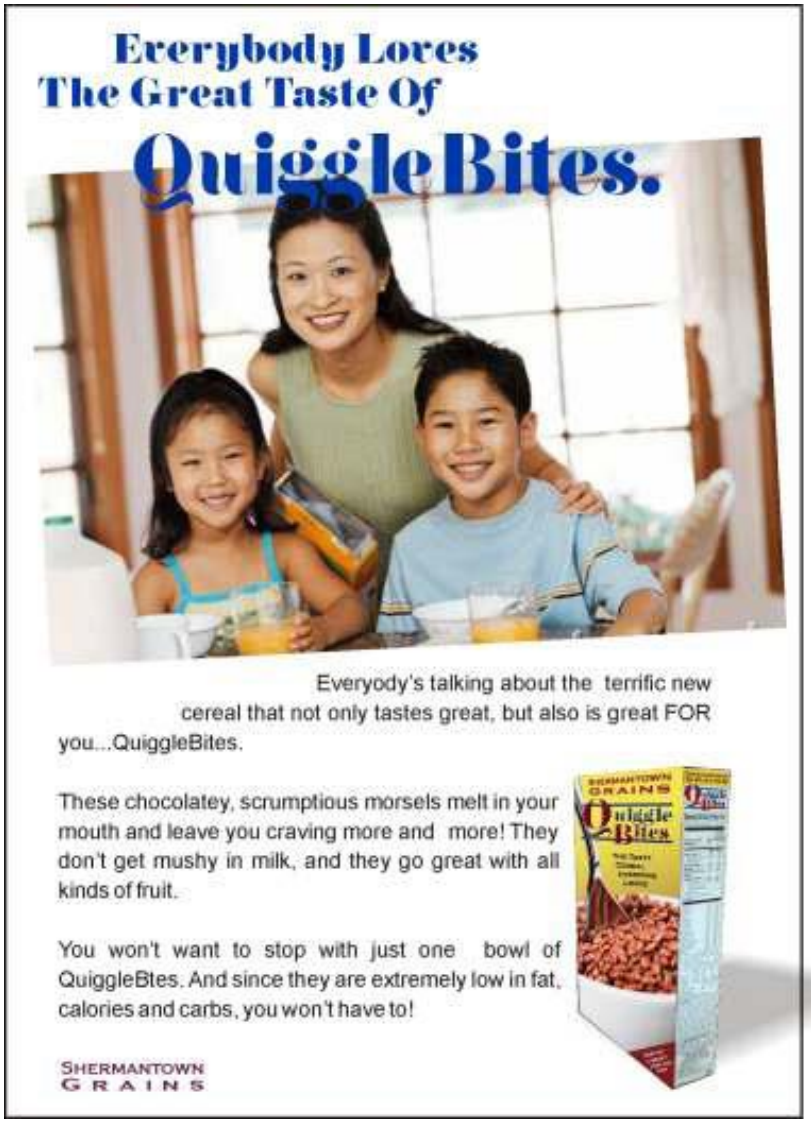

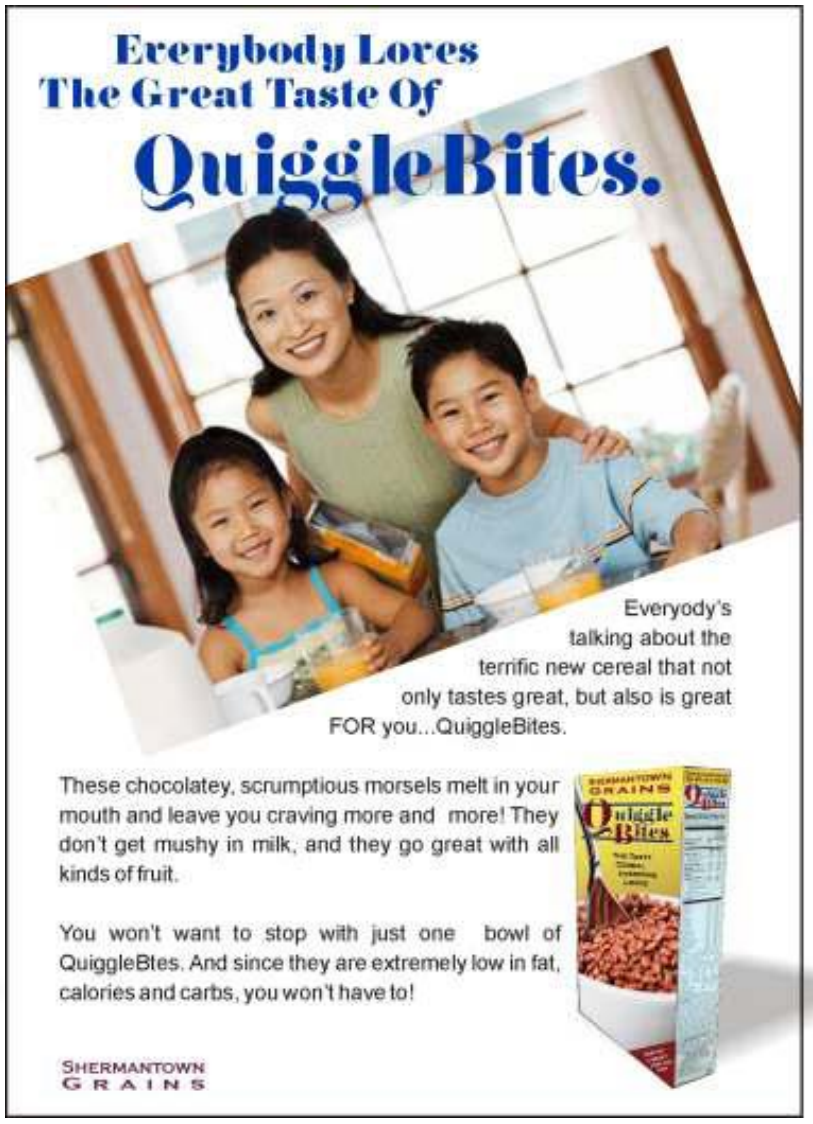

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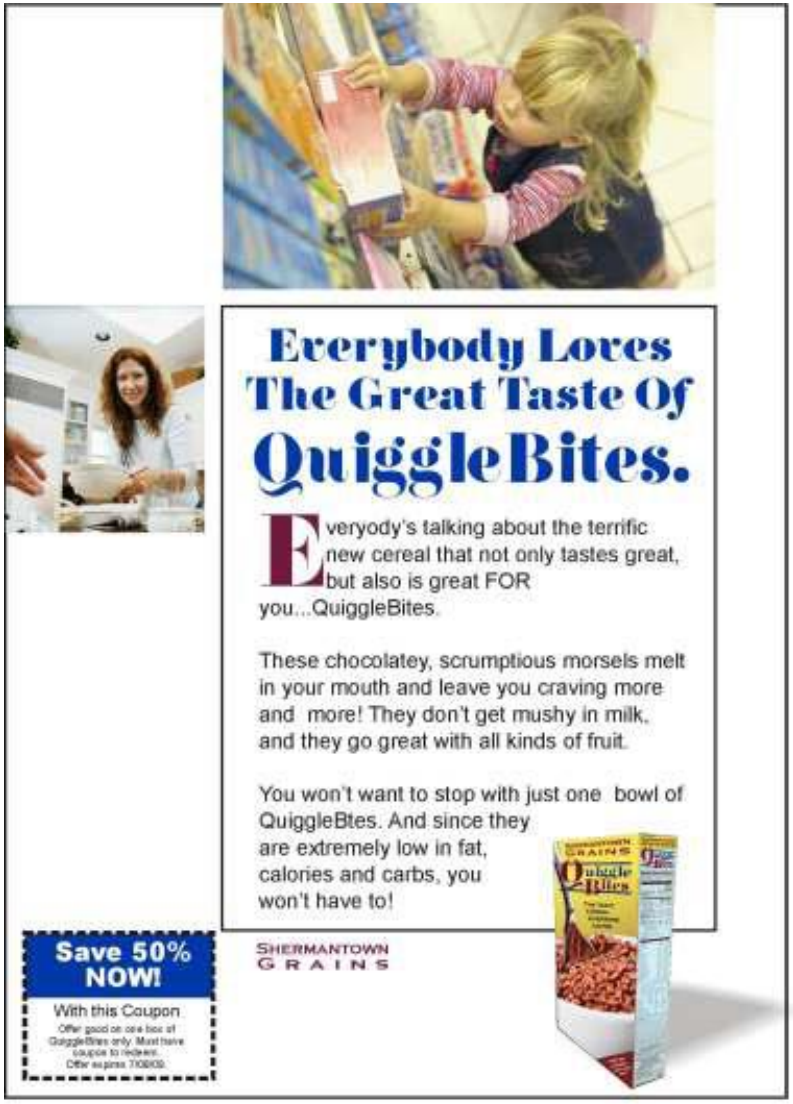

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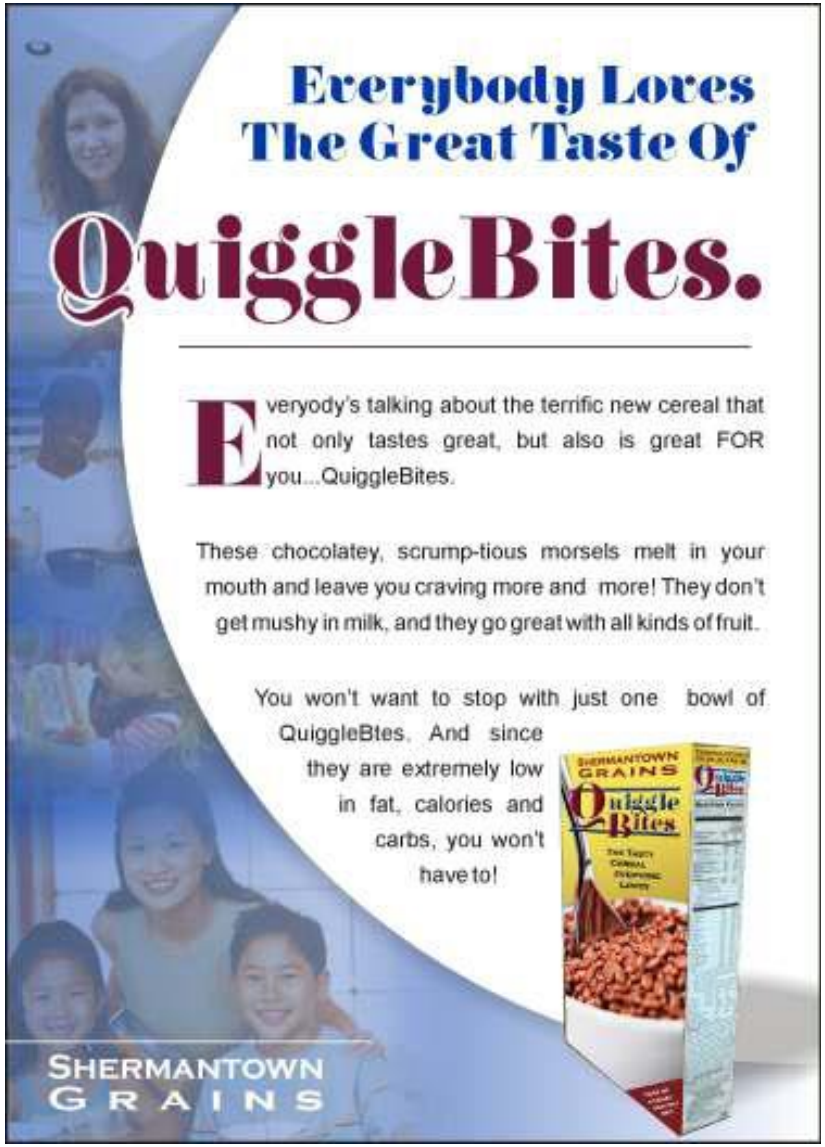
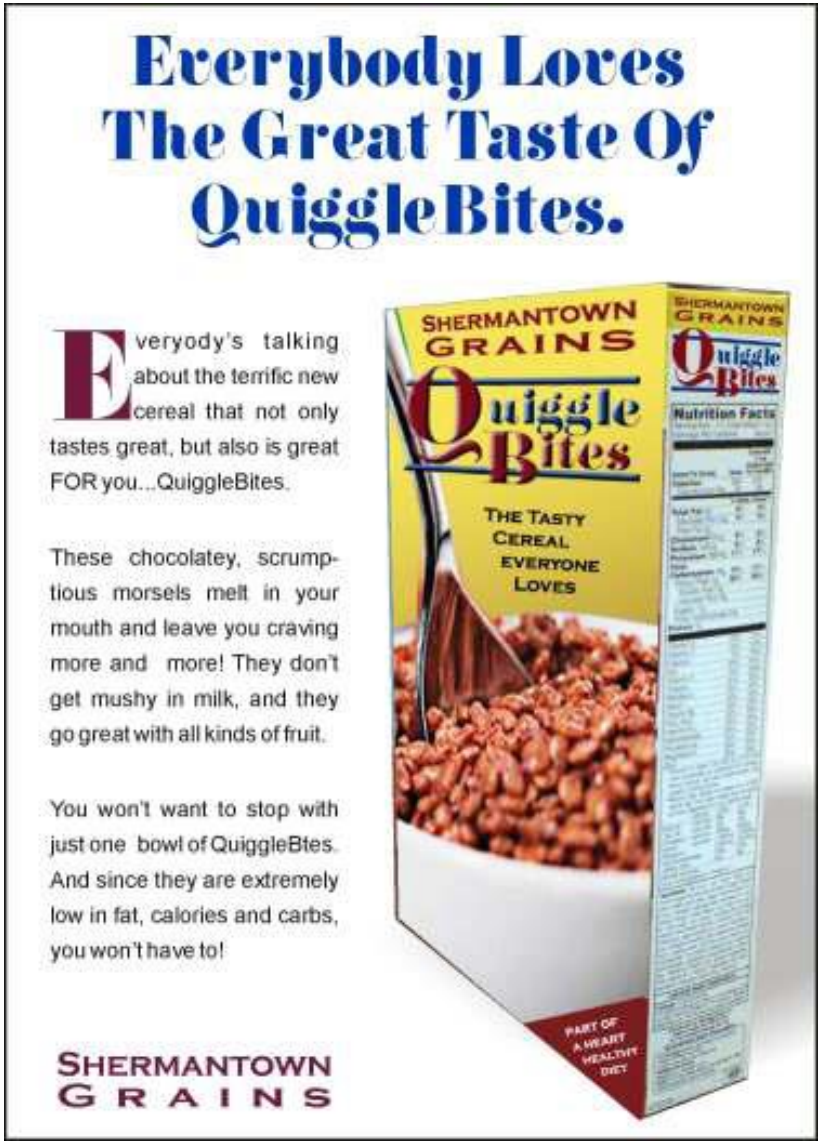




RGB vs. CMYK

- Red, Green, and Blue are "additive colors". If we combine red, green and blue light you will get white light. This is the principal behind the TV set in your living room and the monitor you are staring at now.
- Additive color, or RGB mode, is optimized for display on computer monitors, ie. Websites, powerpoints.
- Cyan, Magenta and Yellow are "subtractive colors". If we print cyan, magenta and yellow inks on white paper, they absorb the light shining on the page. Since our eyes receive no reflected light from the paper, we perceive black... in a perfect world!
- The printing world operates in subtractive color, or CMYK mode.

Always PRINT your al images in CMYK mode!

- One of the most common errors made by inexperienced graphic designers is submitting RGB files. Convert into CMYK
- Most of the time, the color change that will occur is slight. However, every once in a while, the color range after conversion is compressed during the transition to CMYK mode resulting in a complete change in color tones.
- Be warned that there is absolutely no way to get that deep RGB blue using CMYK, no matter how much we want t

Image Resolution & Size

- Resolution: detail an image holds
  - 300ppi (pixels per inch) for print
  - 72ppi for on screen
- Jpg or Tiff?
- Not all al cameras will offer TIFF as a choice, but when you have both TIFF and JPG available, then here's how I'd think about your choices:
- TIFF files will always be higher quality than JPEGs, and JPEG files will always be smaller than TIFFs. The main problem with TIFF files is that they are huge, which will cause your camera to slow down when trying to write your images to the memory card loaded into your computer.
- That also means that the number of images you can capture in one minute will be much less with TIFF than with JPG (and, ultimately, you'll take less photos because of storage limitations).

Printing Full Bleed

- Printing that goes beyond the edge of the sheet after trimming
- Need gutters (trim area)

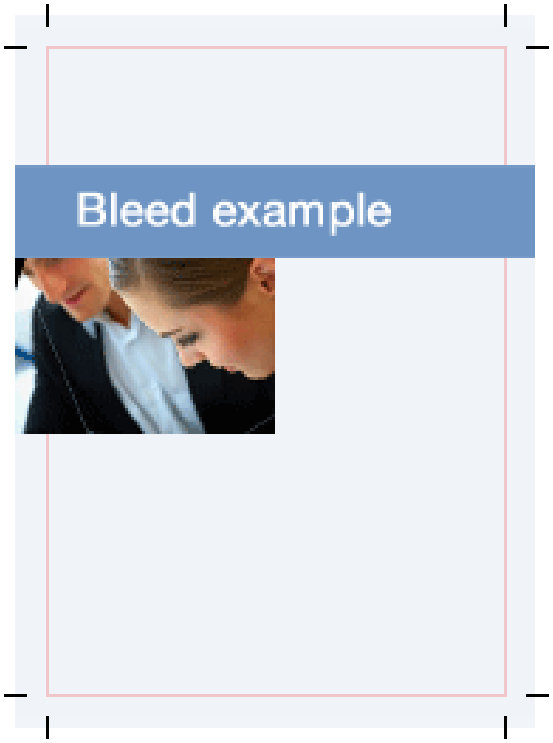
Printing Full Bleed

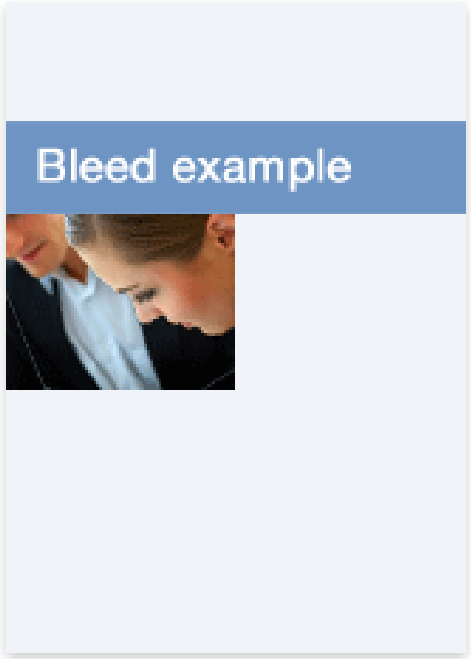
- Full Bleed (printing beyond regular product size) If you wish to have colored backgrounds or images continue to the edge of the product, they must continue past the trim marks to the full bleed margin. Going beyond your regular size. If they do not continue to the full bleed margin you most likely will end up with white lines along the edges of the product due to cutting tolerance.

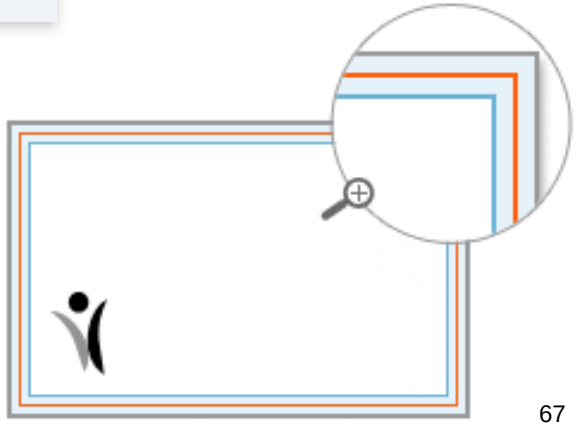
- Cut & Trim Marks (this is where your product is sized to correct specs) The product will be cut on the trim mark (blue line), however the cut may shift up to 1/16 of an inch in any direction. This is why you should design your files with that extra 0.125" bleed.

- Safe Zone (make sure important text and/or images do not go pass this area)The text or other elements you want to guarantee not to be trimmed off must be placed within the safe zone. If they are placed directly next to the trim mark and the cutting is off but within tolerance, the text will be chopped off.

Printing Full Bleed







Printing Full Bleed

- The image on the left is the correct way to align your text within the guides. Notice the phone number laid right on top of the blue guide.
- Anything beyond the yellow will be cut off.
- The final product will look like the image to the right.