

Graphic Design Basics

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The Design Grid

What is a Design Grid?

- A series of horizontal and vertical lines that evenly divide a page, whether it is a printed page or a page in a website.

Why Use a Design Grid?

- A grid organizes all of the content on a page or screen and makes it easier and much more interesting to read and comprehend.

When to Use a Design Grid?

- Any type of communication that contains several elements such as graphics, photos, and text can benefit from the use of a grid.
 - Print designs (flyers, brochures, multi-page documents).
 - Screen designs (websites, training applications).

The Design Grid

- Provides a way to create relationships between text and imagery.
- Creates consistency.
- Easier for a user to follow.
- Gives the design a sense of order and constraint.
- Used to emphasize the most important parts of your content, organize it into categories, and make it visually interesting and not static.



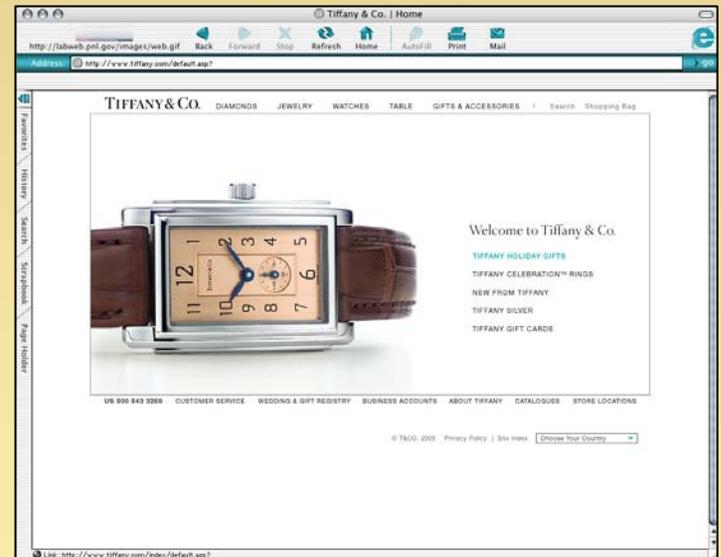
No visual hierarchy



Clear visual structure

The Design Grid: Importance of White Space

- Takes on an added importance on the web because more of a strain is placed on the eyes than with print material.
- Going through the same amount of web pages as print pages can be more visually demanding - flickering pixels vs. printed ink.
- White space provides our brains with much-needed breathing room to absorb the material displayed before us.
- Treat white space as more than just a background - treat it as an integral part to your page design.



Contrast

- Contrast, together with placement between elements on a page, creates a hierarchy of importance.
- The largest, brightest and boldest elements on a page are where our eye is first drawn.
- If elements on a page have a different function then the contrast between them should be obvious.
 - Example: if headings are always Arial 16 point red and the body text is always Times New Roman 12 point black then the user will always know what is a heading and what is informational text.

Types of Contrast

Contrast Creates visual interest by placing two different objects next to one another. Create contrast using:

- Color
- Scale
- Proximity
- Value
- Typography
- Texture

Contrast: Color

Color

- the only item on a page that is a different color will stand out
- this effect diminishes with the number of colors chosen
- If you have many elements in many different colors, you lose your contrast.
- When used sparingly for emphasis, color is an effective means of conveying contrast.



Contrast: Scale

Scale

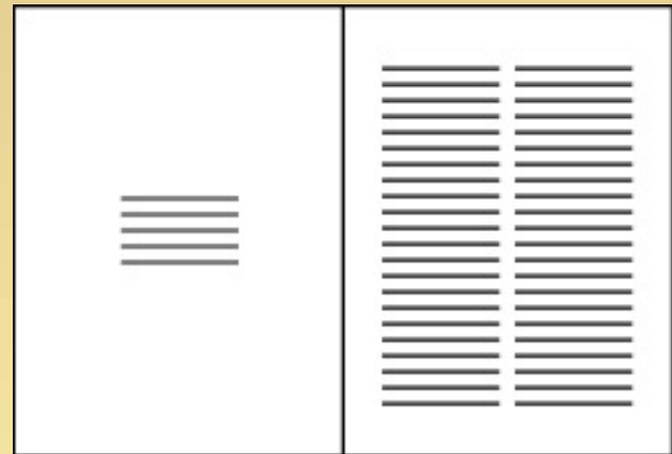
- the largest item on a page can be used to draw the viewer to the item you want them to read.
- the drop cap is a time-tested device for drawing the viewer into a block of text. Not as easy to accomplish in HTML as it is in print, but still an effective example of contrast of scale.
- Vary the size of page elements to create interest, focal points, and hierarchy.



Contrast: Proximity

Proximity

- One of the best ways to get something noticed is not to make it bigger, but to put space around it
- put it in the pathway and your reader won't miss it.
- Proximity is a function of quantity plus placement - the number of items on a page and where they are placed.



Contrast: Value and Typographic

Contrasts of Value include:

- light to dark
- negative to positive
- solid to tint

Typographic contrast

- weight and texture
- bold sans-serif face stands out over a traditional serif face



Typography: Font vs. Typeface

Font vs. typeface

- A font is a complete set of characters in a particular size and style of type.
 - Includes the letter set, the number set, and all of the special character.
- A typeface contains a series of fonts.
 - Example: Times Bold, Times Italic, and Times Roman are actually 3 fonts.

Typography Terms

- Point - measurement of letter height, 72 points in an inch
- Alignment - positioning of text within page margin
 - flush left
 - flush right
 - centered
 - justified
- Leading - amount of space added between lines of text to make the document legible
- Kerning - adjustment of horizontal space between individual characters in a line of text
- Serif - small decorative strokes that are added to the end of a letter's main strokes
- Sans serif - A type face that does not have serifs.

Types of Typefaces

3 basic categories of typefaces:

- Serif, with little "feet," is a more traditional-looking style.
- Sans serif, with no "feet," a more contemporary looking style.
- A decorative typeface is everything that doesn't fit neatly into the other two categories.
 - script typefaces
 - display typefaces

Serif fonts:

Times Roman

Garamond

Palatino

Sans Serif Fonts:

Helvetica

Arial

Avant Garde

Decorative Fonts:

Lucida Handwriting

Apple Chancery

Bauhaus

Color

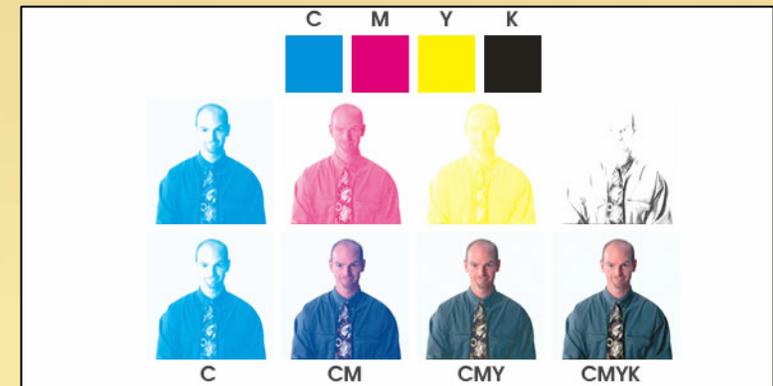
- The use of color in graphic design is a powerful tool for eliciting an emotional response from the viewer.
- When used correctly color has the ability to influence how the audience perceives a product, service or company.
- The advantage of color on the web is that it's cheap.
- Too much color on a web page can be distracting - use color sparingly.
- Three main color models used for design depending on the application:
 - CMYK
 - RGB
 - Spot



Color Models: CMYK

CMYK - Cyan, Magenta Yellow, and black.

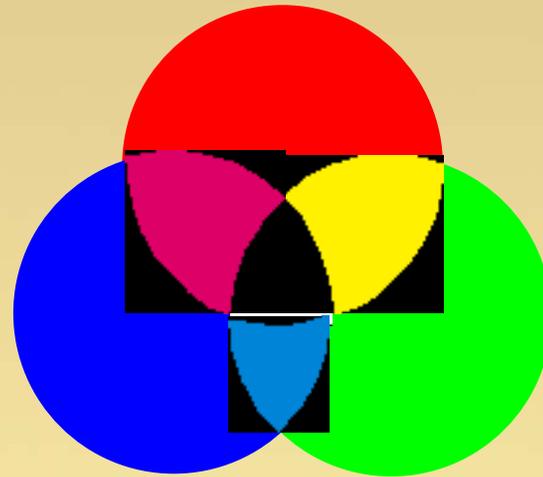
- Commonly referred to as four-color process - printed material.
- These four colors combined and layered on paper allow the creation in theory of all colors.
- Not only the industry standard, but the required color mode for all offset printed materials.
- Creates color through the addition of colors, not addition of light like RGB. Because of this, colors reproduced in CMYK sometimes can't match the exact colors created in RGB.



Color Models: RGB

RGB - Red, Green, and Blue

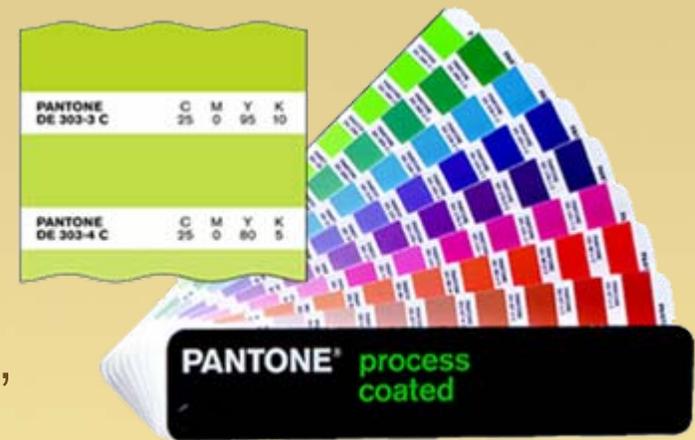
- primary colors of light that create every other tone of color that is visible on your computer monitor or television.
- since the color used for web design isn't meant to be printed there are no cost limitations on the use of color for the web.



Color Models: Spot

Spot colors - Pantone colors

- Used in the printing process when you want an exact color match.
- Pantone color is used in the design of logos and corporate identity.
- If you specify pantone color for a print job, the color will be exactly as you want it from one printed piece to the next.
- The use of spot colors will increase the cost of printing, but is necessary if you want a consistent look throughout all of your printed material.



Resolution: Screen

Screen

- The typical screen (or web) resolution is 72 dpi.
- Monitor resolution determines the physical display size of an image.
- It is important to realize that a computer monitor is a different medium than a printed magazine or newsletter. Therefore, a file that looks fine on a monitor when browsing the web, most likely will not be suitable for printing.
- Images used for the Internet are kept to a small file size for quicker downloading and viewing.
- Images on the web should not be saved to use for publishing any printed matter. They are usually not the correct image size or resolution.

Resolution: Print

Print

- Print resolution refers to the number of dots per inch (dpi) that the output device, such as a laser printer, imagesetter, or offset press produces.
- All image files or scans should ideally be 300 dpi at 100% of final desired size to render them properly for print reproduction.
- Some high end printing methods may even require resolution as high as 2400 dpi.
- Do not be alarmed; your file sizes for print quality images will be significantly larger than images saved at web resolution.
 - For example the same 5"x7" 72dpi image that was 500K may be as large as 12MB when saved at 300 dpi.
- ***When in doubt it is always best to save images at print resolution, they can always be made smaller if needed!***