



October 2010

# PRINTtips



**Graphics  
Printing  
Mailing  
Under One Roof**

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## Good Graphic Design... The Secret Ingredient in Visual Communication

**C**ommunicating via visual means is central to the selling process. Imagine trying to explain your product or service without having the assistance of a brochure, a display ad, or a web site. Think how difficult it would be to differentiate your product from others on the shelf without attractive packaging. All buying decisions include some amount of emotion – how would you quickly evoke emotion without the assistance of images?

*Visual communication* is a process that uses investigation, analysis, and planning to identify a communication requirement as a first step in designing something meant to be seen rather than heard or felt. Visual communication is a broad discipline that uses graphic design, drawing, illustration, typography, and color to convey a thought, to inform, to educate, or to persuade a target audience.

You may have heard us use the term *graphic design* when discussing a marketing or sales-related printed piece, creating or refreshing a logo, or updating a web site. What we mean by this is all the techniques, from composition to page layout, that are needed to prepare for the final step – printing, taking a web site live, branding, etc.

### Graphic design as a discipline

Graphic design combines words, images, and symbols into a coordinated whole that communicates to an audience. Graphic design can mean both the process of designing and the



finished product. Here are some of the tools of graphic design:

- *Lines* direct the reader to points of interest, create shapes and forms, and divide space into sections.
- *Color* attracts attention and evokes emotion.
- *Typography* creates emphasis and contrast.
- *Images and photographs* convey meaning and bring forth emotion.
- *Symbols represent ideas or concepts.*
- *White space* separates elements so they are easier to read and provides the eyes with a brief rest.
- *Grids and templates* provide underlying structure and organization.

A *layout* refers to how these elements are arranged to convey the message. An effective layout uses a grid or template to organize the lines, color, typography, symbols, images, and photographs into a visually pleasing whole.

## Good Graphic Design (continued)

*“An effective layout quickly captures the reader’s attention...”*

The layout influences how much time the reader initially invests in the communication vehicle (*i.e.*, whether to continue reading, save for later reading, or discard) and controls the order in which the reader moves around on the page, column, or panel. An effective layout quickly captures the reader’s attention and leads him through a series of steps to understand the message and what action to take next.

### Preparing for graphic design

Graphic design is not the starting point for visual communication. Rather, it is a subsequent step after investigation, analysis, planning, and organization.

In past issues of Printips we’ve stressed the importance of thoroughly preparing before sitting down at the computer to begin layout. Until you are clear on the purpose of the marketing and sales material, the web site, or the display ad; until you have defined the target audience and determined the message; until you have investigated the communication preferences of the target audience; you won’t have enough information to be sure your communication hits the mark.

*“Graphic design is a combination of technical skills and artistic creation.”*

With the purpose of the visual communication in mind and a thorough understanding of the message and its intended audience, you are ready to select and assemble the images, photographs, symbols, and text and to select the color palette. Now is when technical knowledge of the visual communication media – print or multimedia; small or large format – is critical. Technical issues include:

- **Color space.** Color space is the color model and color mapping information that uses mathematics to describe the way colors are represented. The color model used in print is CMYK where the colors are created using the primary colors of pigment (cyan, magenta, yellow and black, represented as K). Web sites and the Internet use an RGB color model where the colors are created using red, green and blue glowing phosphors.

When represented mathematically in three dimensions (x, y and z axis), the RGB and CMYK color spaces do not match exactly. This means that some colors produced with RGB cannot be matched in the CMYK color space.

- **Image resolution.** Resolution measures how sharply an image is rendered and is expressed as the total number of pixels (picture elements) or dots per inch that make up the image. Computer screens render images well with a very low resolution (72 to 92 pixels per inch); printed images require a minimum resolution of 150 dots per inch at image size.
- **Fonts.** Fonts used on web sites will only render correctly if the font is installed on the viewing computer screen. This severely limits font selection for multimedia presentations but is not an issue for print.
- **Background color.** Readability for print is best when there is high contrast between the background color and the type. This generally means a light background with a contrasting, darker type. For multimedia, readability is enhanced when text and images are reversed out of a solid color background.

### The art of graphic design

Graphic design is a combination of technical skills and artistic creation. A type of commercial art, graphic design differs from fine art mainly in its purpose: to convey a message to an intended audience.

Graphic design shares with fine art many principles of design including balance, emphasis, movement, rhythm, contrast, proportion, and unity. These principles, when combined with planning and technical knowledge of print and multimedia, result in marketing materials, sales collateral, and cross media promotional materials that convey

## Good Graphic Design (continued)

an advertising message in a visually pleasing manner.

Let us show you the difference good graphic design can make. Select a brochure or sell sheet whose information needs to be updated and

let us redesign it using the principles of graphic design. We predict you'll be impressed with the results. For more information and a quotation, contact us at 248-2121.

*“Graphic design shares with fine art many principles of design including balance...”*

## Repurposing

**P**utting your company's printed documents on your web site is a popular and convenient way to make information available to prospects and customers. The process of converting a file created for print to one that will load quickly and display successfully on a web site is called *repurposing*.

If a printed piece is text-heavy (such as an instruction manual), it may be best to offer

a file download rather than to repurpose the file to display correctly on a computer screen. In such a situation, we can provide you with a PDF version of your printed piece. We can include the PDF as part of the job if you tell us you need it when you place the order. Or we can retrieve the native application file from our archives and create a PDF later, when the need arises. Contact us for assistance.



*“... putting printed documents on your web site is a popular and convenient way to make information available to prospects...”*

**Q.** *What is the difference between additive and subtractive color?*

**A.** Additive and subtractive color models use two different bases to create color. Additive color uses the primary colors found in light (red, green and blue) and adds them together (*i.e.*, combines them) to create all other colors. White results from combining red, green and blue light in equal intensities. The secondary colors of additive color are magenta, yellow and cyan.

Subtractive color is the basis for creating colors when mixing paint, dye, or ink. Color is created when some wave lengths of light are subtracted (*i.e.*, absorbed) while others are reflected. The color display on a surface (a wall, a piece of cloth, a sheet of paper) depends on which colors are reflected by it and therefore made visible.

The primary ink colors used in printing are cyan, magenta, and yellow. Cyan is the complement of red, which means it absorbs (subtracts) red. So the amount of cyan ink printed on a sheet of paper controls how much red will show. Magenta is the complement of green; yellow is the complement of blue.

Red, yellow and blue (RYB) used to be the standard set of subtractive primary colors used for mixing pigments and is still used in art (particularly painting). RYB are the primary colors of a standard color wheel; the secondary colors of violet, orange and green are formed by mixing equal parts of red and blue, red and yellow and blue and yellow.

*“Additive and subtractive color models use two different bases to create color.”*

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Milford, OH

## Color Terminology



*“The three most common harmonies are monochromatic, analogous, and complementary.”*

**H**ere is some color terminology to help you describe to us the color characteristics you are seeking.

**Hue** is the color name.

**Value** is the lightness or darkness of a hue.

**Tint** is the result of adding white to a hue.

**Shade** is the result of adding black to a hue.

**Intensity** or **chroma** is the brightness or darkness of a color.

**Saturation** is the relative strength or weakness of a hue. *Full saturation* is a hue at full strength.

**Temperature** describes a hue's warmth or coolness. Warm hues include yellows, oranges

and reds; cool hues are blues and violets.

Warm hues accelerate the pulse, increase body temperature and elicit an extroverted emotional response. Cool hues are seen as receding, tranquil and passive.

**Harmony** is a scheme for combining color. The three most common harmonies are monochromatic, analogous, and complementary. *Monochromatic harmony* is developed around one hue; an example is light, medium and dark blue. *Analogous harmony* is developed by choosing colors that are close to each other on the color wheel (yellow, yellow-green and green, for example). *Complementary harmony* is developed by selecting colors that are opposite each other on the color wheel, such as red and green.