The Digital Eye

BY STEPHEN ROMANIELLO

Principles of Layout

Design concepts and techniques that deliver the most impact

Stephen Romaniello is and artist and educator teaching digital art at Pima Community College in Tucson, Arizona for over twenty years. He is a certified instructor in Adobe Photoshop and the author of several books on the creative use of digital graphics software. Steve is the founder of GlobalEye systems, a company that offers training and consulting in digital graphics software and creative imaging.

Visual communication is just like any language. Images, like words, can be mumbled or expressed with energy and clarity. All too frequently we see a muddle of elements when the design isn't carefully considered. The important elements of a design can work in harmony to control the viewer's eye so that the message is clear and the emphasis is where it should be. This article reveals the principles and techniques that coordinate the multiple elements of a design into a unified whole to create energy and impact. I hope you who work with images on a daily basis will find this information useful.

Graphic Design

Many designers, artists and photographers work primarily by intuition. They can sense when a page works. The basic principles of graphic design are embedded in their brains and are used to create a harmonious relationship of the elements of any image, whether it is a photograph, a drawing, a painting, a digital collage or a sign. Using these principles will assure that the image is compelling and has impact no matter what the subject matter. What follows is a list of concepts that designers employ in their creative process.

Balance—The distribution of the visual weight of shapes, colors, texture and space help impart stability to a design (see **Figure 1**).

Emphasis—When looking at an image, it's the first thing you see. It is the dominant part of the design that captures the viewer's attention. Elements can be emphasized by size, color, texture, brightness or shape (see **Figure 2**).

Movement—A good design controls the path of the viewer's eye as it moves across the design field. The eye can be directed by the placement of ele-

Figure 1: A balanced typographical design using different weights colors and sizes of type.

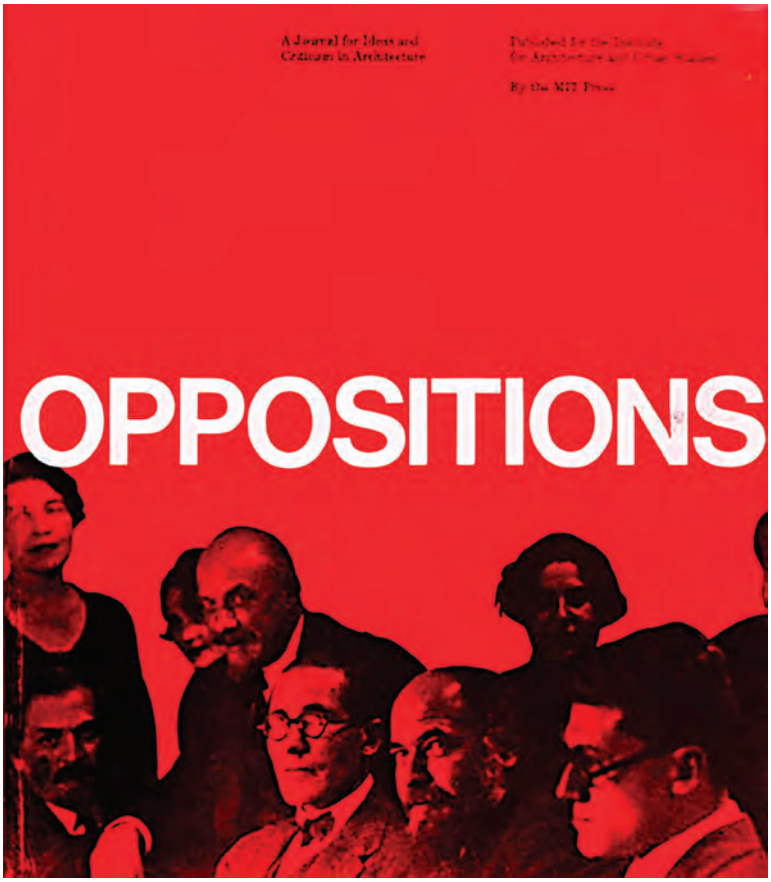


Figure 2: In this layout the headline type is the dominant element, being white and centered. The bold red field and the picture become a background plane of lesser significance, as does the black type at the top of the poster.

Figure 3: The undulating pattern directs the path of the viewer's eye as it moves across the design field.

Figure 4: The reappearance of elements, in this case the triangular facets that compose the lion, produce a solid visual unity that is nicely contrasted with the thin type.

ments along lines, edges, shapes, colors and sizes of elements (see **Figure 3**).

Repetition—The reappearance of elements in a design field produce visual unity. Often patterns are used to repeat elements and to create a rhythmic balance (see **Figure 4**).

Proportion—It unifies all of the elements in the design by virtue of their visual weight and assures that all of the elements relate well with each other (see **Figure 5**).

Figure 5: The proportion and repetition of the cars unifies all of the elements in this design. Their visual weight contrasts the elements and creates foreground emphasis while the similarity of theme unifies them.

Figure 6: The slight variation of these shapes adds interest to the image.

Figure 7: Symmetrical layout is the most basic of all compositions yet it can be used very creatively, as in this poster.

Variety—Like repetition, variable elements of the design create interest to hold the viewer's attention (see **Figure 6**).

Unity—Harmonious relationships between all of the elements create a unified whole.

Compositional Tools

In addition to the basic design principles there are aesthetic aspects to image creation that should be considered. These concepts involve the relationship of the various elements within the design plane into a systematic structure that control the audience's visual experience.

Symmetry/Asymmetry—A symmetrical layout is the most basic of all compositions. The elements reflect from the center of the page maintaining even margins. Rotational and reflectional symmetry can add interest and rhythm. An asymmetrical layout can create diagonal tension. Elements might be slightly off center and balanced with smaller or minor elements balancing the layout (see **Figure 7**).

Golden Ratio—The golden ratio is also known as the divine proportion (see **Figure 8**). A proportion is golden if the ratio of the sum of the quantities to the larger quantity is equal to the ratio of the larger quantity to the smaller one. Proportions like five by eight, or 1 to 1.6 have been used since the earliest times of human history because they

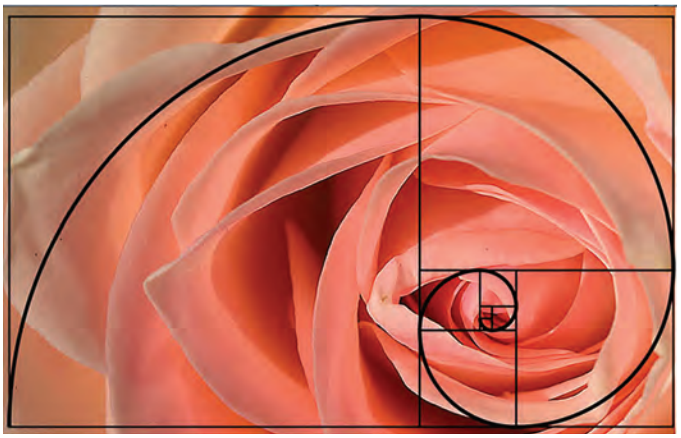


Figure 8: The golden ratio is found in nature and has been used throughout history because it is pleasing to the eye.

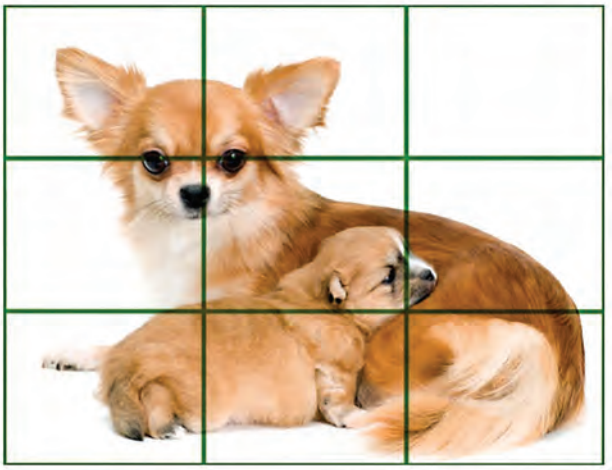


Figure 9: The rule of thirds works by splitting an image into nine equal cells that are horizontally and vertically identical in scale.

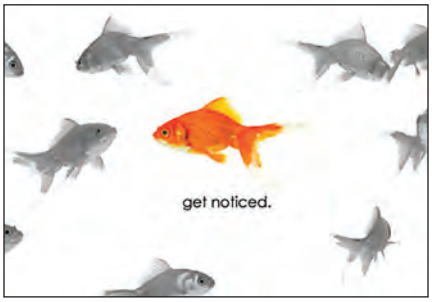


Figure 10: When key features are emphasized they resonate and guide the viewer's eye around the page and emphasize important features and understate others.

are most pleasing to the human eye. Building your design using the golden proportion can produce a dynamic composition. Positioning important elements such as headlines three-eighths from the top of the page will get any layout off to a good start. The same principle can be used for scaling type. For example, 10-point copy can have headlines set at 16 points.

Rule of Thirds—This rule is used by professional photographers the world over. The rule of thirds works by splitting an image into nine equal cells that are horizontally and vertically identical in scale. Similar to the golden proportion, the rule of thirds divides the page into a nine-cell grid. Guides can be used to divide the work area into an equal three-by-three grid. Key elements are positioned where any two of the axes meet to create a focal point. The rest of the layout is developed around the primary element using the remaining guide intersections for alignment (see **Figure 9**).

Hierarchy—A hierarchy within a design is a determination of the scale of each element's importance to the overall concept. Elements with the same visual weight visually compete for attention. By varying each element's size, color, brightness or shape a hierarchy is created thereby controlling the order in which the viewer experiences each element (see **Figure 10**). When key features are emphasized, they resonate and guide the viewer's eye around the page and highlight important features and understate other less important ones.

Figure 11: Empty space can invoke the feeling of tranquility, cleanliness and vastness.

Figure 12: Positive and negative space relationships can be can be used to effectively juxtapose black and white shapes.

Figure 13: One way to control unwanted background dominance is to reduce the opacity of the background and "ghost" it back.

The Grid

Grid structures are among the most powerful tools a designer has. The grid is the invisible armature on which the components of the design are structured. A grid aligns the extremities of elements and contains all of content into a cohesive whole. Grids can be very simple, like a one or two column grid or complex like a grid based on a spiral or the golden ratio. Within the rectangle of the page grid assures that the position of elements is united. Creating the grid is the first step in the graphic design process. All mainstream graphic software programs like Illustrator, Photoshop or InDesign have grid preferences that can generate a grid on any sized page and custom grids can be composed using ruler guides.

Space

Space is a special commodity in graphic design. Emptiness can invoke the feeling of tranquility, cleanliness and vastness. Of course in a design field space isn't really empty, it usually consists of a large white or light colored field or even a very light gradient. The visual elements like text or images are usually small in proportion to the space or they are placed far apart. Emphasis on the visual elements within the design is created by the fact that they are the first and only thing you see when you look at spacious layout (see **Figure 11**).

Positive and negative space relationships can be can be used effectively to juxtapose silhouettes for dramatic results. The interplay of black and white enhances and balances its opposite and creates strong interlocking shapes (see **Figure 12**).

Backgrounds

The background is very important to the design scheme. How elements are emphasized depend a lot on the environment in which they are surrounded. If the background elements are too strong or too cluttered, they can compete with the text or pictures in the foreground where the message usually resides. One way to control unwanted background dominance is to reduce the opacity of the background and "ghost" it back. For a subtle background, the opacity can be adjusted to 10 or 20 percent (see **Figure 13**). Or, to just tweak the background a little, drop the opacity to between 40 and 80 percent.

Similarly a background can be blurred to emphasize foreground elements. The blur pushes the sharper elements forward while emphasizing the foreground.

Interplay

A successful layout is a dynamic interplay of all visual components within a predefined grid structure. Designers employ these principles to achieve superb results that visually communicate information with impact. Sometimes, however, the dynamics necessary to express a complex concept can be illusive. In these cases, the designer may tweak the elements, scaling, rotating, repositioning, adjusting tones and colors before perfection is achieved and the image "pops."

Get Started

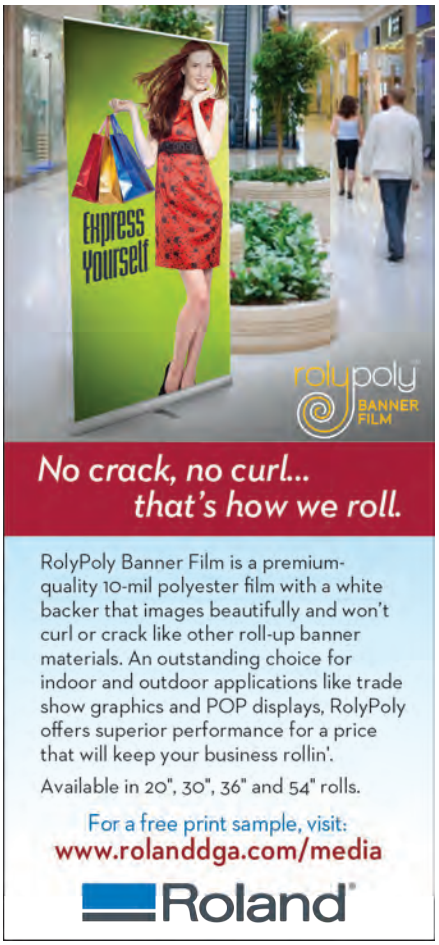
I've included a few URLs of informative graphic design websites that can help you get started in understanding the design process. These websites illustrate the different styles of layout that are commonly used in print and Web publications.

Panduaji—*www.panduaji.com/2012/01/10-type-of-magazine-layout.html*

SlideShare—*www.slideshare.net/aid-enyeh/layouts*

Behance—*www.behance.net/gallery/14774035/Types-of-Ad-Layout*

SDG

Product Highlights

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