

MEDP 150, Lecture Design Basics 2

Topics

Visual Communication

A. Scale

B. Movement

C. Expression

In Camera Lucida, the French literary theorist and semiotician, Roland Barthes develops the twin concepts of **studium** and **punctum**.

The **studium** denoting the cultural, linguistic, and political interpretation of a photograph, the obvious symbolic meaning of a photograph and the desire to study and understand what the meanings are in a photograph.

The **punctum** (a Latin word derived from the Greek word for trauma) denoting the wounding, personally touching detail which establishes a direct relationship with the object or person within it - that which pierces the viewer.

Photos taken in Aleppo by photojournalist Niclas Hammarstrom

<http://niclashammarstrom.com/stories/aleppo/>

Photography captures reality, illustration (from illuminate or enlighten) may freely employ symbolism and visual metaphor, fantasy, abstraction...

Example: The RSA (Royal Society for the encouragement of Arts, Manufactures and Commerce): an enlightenment organization committed to finding innovative practical solutions to today's social challenges. RSA Animates have revolutionized the field of knowledge visualization whilst spreading the most important ideas of our time.

Literal - school teacher; contract torn; poster, iphone - massive information

Representational - hand - two; coin, money; candle enlightenment; machine - industry; macbeth - arts; gene, chromosomes - culture; Einstein for genius.

Metaphoric - grid - economy; clouds questions uncertainty; past - path; thinking - imagining; school as factory; ruler conformity; teacher as dragon; laborer as unintelligent

Abstract - divergent thinking - arrows

In photography and film, the rule of thirds presents a quick and effective way to frame an image as it is captured or to reframe digitally in postproduction. With the rule of thirds, create two vertical and two horizontal lines to create nine smaller rectangles and four points where the lines intersect. By placing objects over these intersections a pleasing and balanced arrangement tends to result that is also more dynamic than a subject in the center. When more than one object is placed at intersection a counter point is established. Proponents of the technique claim that aligning a subject with these points creates more tension, energy and interest in the composition than simply centering the subject would. The human brain processes images extremely fast. If the focal point is in the dead center the brain registers the whole image within a fraction of a second. With the focal point offset to one of the intersections you are placing a minor road block in the brains mapping system. The eyes have to work their way around the image in order to spot the focal point. The whole process is rather quick but yields about 2 to 3 seconds of attention.

As the creation of illustration is not immediate, the illustrator may use more complex formulas to plan an illustration and the way it visually communicates to the viewer.

Recall that

Scale refers to the size of an object as a whole in relationship to another object as a whole.

Proportion refers to the relative size of parts of a whole (elements within an object).

Scale refers to the size and proportion refers to the relative size.

Artists/Media Makers may play with scale to create works that disrupt expectation and play with perception. Designers use proportion to create a sense of hierarchy.

Slides

MOVEMENT (ch 9) - "in static visual compositions movement that is change of place may be implied or suggested. In visual communication movement should force the viewer's eyes to move from one visual element to another. Elements employed for movement of the eye include bright colors that our eyes are attracted to, scale to present a sense of hierarchy... the designers job is to create a rhythm in movement that is directed rather than random."

Basic visual communication elements are used to create movement - line, shape, form and texture. These should be used collectively to create a unified composition that moves the viewer's eyes.

Slide

Rhythm or the repetition and alternation of compositional elements with defined intervals to establish a sense of movement and pattern. Types of visual rhythm are commonly defined by

Regular - a similarity of size, length, weight and visual character through visual elements – consistency of pattern.

Flowing - an organic sense of movement in its visual character.

Progressive - a defined progression of steps is reflected in the composition.

Movement and rhythm should be transparent in a cohesive design.

PROPORTION

Slide

Josef Muller-Brockman

Layout - please deconstruct this image - is there a system at play? Squint at it, where are your eyes drawn? Lights should stand out, the yellow serves to anchor the image and the exaggerated perspective creates movement.

Slide

The Pythagorean theorem: In a right triangle, the sum of the areas of the two squares on the legs (a and b) equals the area of the square on the hypotenuse (c) – the long side opposite the right angle. “Everything is arranged according to number and mathematical shape.” – Pythagoras (6th BCE)

Slide

21st letter of the Greek alphabet used as a symbol for the golden ratio, either upper or lower case. Also known as the Divine Proportion, Golden Section, and Golden Rectangle is the proportional relationship defined as the whole compared to a larger part in exactly the same way that the larger part is compared to a smaller one; its mathematical expression is the number 1.618. This ratio may serve as a tool for graphics layout and image composition. It is a formula historically used to create a well proportioned composition with a sense of unity.

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Mathematicians since Pythagoras and Euclid have studied the properties of the golden ratio, including its appearance in the dimensions of a regular pentagon and pentagram. The golden ratio has also been used to analyze the proportions of natural objects as well as man-made systems. Ancient Greek mathematicians first studied what we now call the golden ratio because of its frequent appearance in geometry.

Slide

Euclid's Elements provides the first known written definition of what is now called the golden ratio: "A straight line is said to have been cut in extreme and mean ratio when, as the whole line is to the greater segment, so is the greater to the less."

Euclid explains a construction for cutting (sectioning) a line "in extreme and mean ratio", i.e. the golden ratio.

http://en.wikipedia.org/wiki/Golden_ratio

Slide

Josef Muller-Brockman

Slide

Folies-Bergere Poster (famous cabaret music hall in Paris), Jules Cheret, 1877
Engaging and dynamic work that captures the movement of a group of dancers. The three figures are embraced first by a circle then a pentagon, next by a star pentagram and golden rectangle and finally by a pentagon with the center as a pivot point from the female dancer's hip. Even the small figure at the bottom plays in the structure as the head meets the circle and pentagon bottom.

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The pentagon and star pentagram have golden section proportions. Each corner is a golden triangle (i.e. sublime triangle or isosceles triangle). The ratios of the sides of the triangles in a star pentagram are 1:1.618. Each color represents the four different lengths making up the star pentagram. The purple has a ratio to the blue of 1:1.618, blue to green and green to red. If I draw a line from one corner to another, I create a larger golden triangle.

Slide

If I draw a line from one corner to another, I create a larger golden triangle.

Slide

Folies-Bergere Poster (famous cabaret music hall in Paris), Jules Cheret, 1877

Slide

After studying with leading Arab mathematicians throughout the Mediterranean, Fibonacci wrote the Book of Calculation in 1202 and introduced the Fibonacci number to Europe.

Slide

A Fibonacci spiral created by drawing circular arcs connecting the opposite corners of squares in the Fibonacci tiling.

Slide

Not only in human aesthetics, approximations can be found in nature. In each growth phase characterized by a spiral, the new spiral is very close to the proportion of a golden section square larger than the previous one. The growth patterns of the nautilus and other shells are never exact golden section proportions, but in appearance are very close.

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Pinecone, broccoli, cauliflower, sunflower, daisy... many succulents.

Slide

The Fibonacci spiral may be created by drawing an arc from the points of the central side to the third point of a golden or isosceles triangle.

Slide

Designer and writer Kimberly Elam authored "Geometry of Design" which delves into the Golden Section as she effectively dissects famous pieces of architecture, art and design according to the golden section rectangle with a proportion of 1:1.618 from Stonehenge to ancient Greek architecture, Renaissance artists and architecture and modern design.

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Pythagoras, Euclid (Greek) Vitruvius (Roman), Fibonacci (Italian)

The Vitruvian Man is a drawing created by Leonardo da Vinci circa 1490. Da Vinci's drawing "Man Inscribed in a Circle" reflects the golden section proportions as described by Roman scholar and architect Vitruvius. "Vitruvius advised that the architecture of temples should be based on the likeness of the perfectly proportioned human body where a harmony exists among all parts. Vitruvius described this proportion and explained that the height of a well-proportioned human is equal to the length of his outstretched arms. Within this system the human form is divided in half at the groin and by the golden section at the navel.

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Leonardo da Vinci, Mona Lisa, c. 1503–1519

Slide

International Swiss Style - design based on formulas.

Slide

Combines golden proportions with Dutch Angle - a type of camera shot where the camera is tilted off to one side so that the shot is composed with vertical lines at an angle to the side of the frame.

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Geometry employing the Golden Ratio has become such a common tool in visual communication that Photoshop has built in overlays that include the Golden Ratio and the Golden Triangle.

Slide

1937 poster for an exhibition of Constructivist art. By 1937 Tschichold had fled Nazi Germany, where such art was characterized as degenerate, and was living in Switzerland where he influenced the International Swiss School. Poster created at a time when the Constructivist movement had declined, the circle and line can be interpreted as a setting sun. **The Constructivist art movement mechanized fine**

art and graphic design via mathematical placement of abstracted geometric elements as a functional expression of industrial culture. Constructivist idealized geometric abstraction, mathematical visual organization, asymmetric typography.

Constructivism was an artistic and architectural philosophy that originated in Russia beginning in 1919, which was a rejection of the idea of autonomous art. The movement was in favor of art as a practice for social purposes. Constructivism had a great effect on modern art movements of the 20th century, influencing major trends such as Bauhaus and the De Stijl movement. Its influence was pervasive, with major impacts upon architecture, graphic and industrial design, theatre, film, dance, fashion and to some extent music.

There was a shift from the illustrator-as-creator to the constructor-as-creator or nonlinear-narrator-as-creator. In the visual language of the constructor or Constructivist, the Stenbergs and other graphic designers and artists assembled images, such as portions of photographs and preprinted paper, that had been created by others. Thus, the Stenbergs and others realized wholly new images (or compositions) that were no longer about realism. Hence, **graphic design as a modern expression eschewing traditional fine art was born in the form of the printed reproductions of collage or assemblage.** One of the causes of the avant-garde artists in the new Russia, who considered fine art to be useless, was served when the Stenbergs and others as constructors-as-creators produced posters that had a use, particularly to serve the state. **Stenberg posters included a distortion of perspective, elements from Dada photomontage, an exaggerated scale, a sense of movement, and a dynamic use of color and typography**—eventually all were to be imitated by others. The Stenberg artwork was frequently based on stills from the films. Radical even today, the posters by the brothers working together were realized within the nine-year period from 1924 to 1933.

Slide

Which of the Two, 1927

The Traitor, 1926

The Last Flight, 1929

Man with the Movie Camera, 1929 Vertov

Slide

EXPRESSION - "Visually and psychologically perceived connotations of the artist/designer's subjective ideas and emotional reflection of the world. Expression is experiential - it is the visual communication of that which is learned through personal experience and reflection of these experiences to define ones character. Expression made public is successful when it transcends the subjectivity of the maker and stirs emotional reaction in the viewer."

Slides

Current unemployment rate in Spain is around 18%, down from of 2013 when it was approximately 27%. The 15-M Movement has been a youth lead protest against political corruption, mismanagement of the Spain's finance and high unemployment - "*we are not goods in the hands of politicians and bankers*"

Eva Vazques, contemporary Spanish Illustrator for newspapers, magazines and books - <http://evavazquezblog.blogspot.com/>

Many of the images relate to 15-M Movement, Los Indignados, and Take the Square #spanishrevolution (Plaza del Sol). The protests started on 15 May 2011 with an initial call in 58 Spanish cities. In February the number of people in Spain without a job rose by 60,000 workers to reach 5 million jobless.