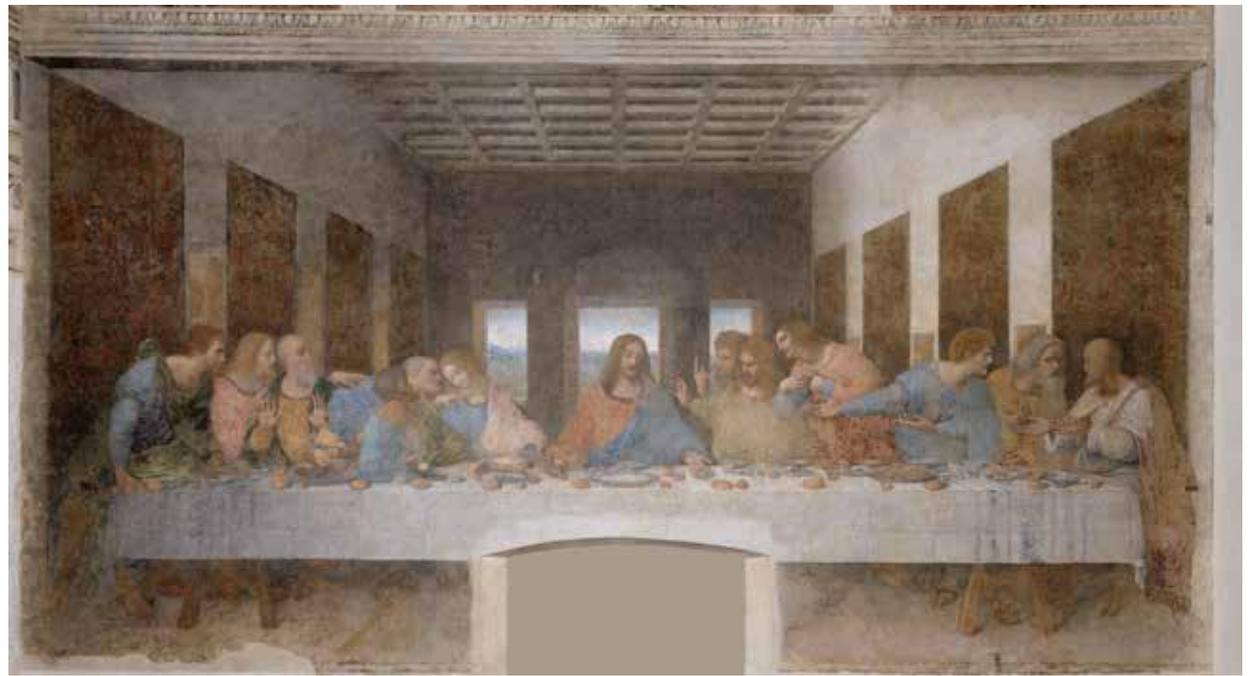


Basics of composition

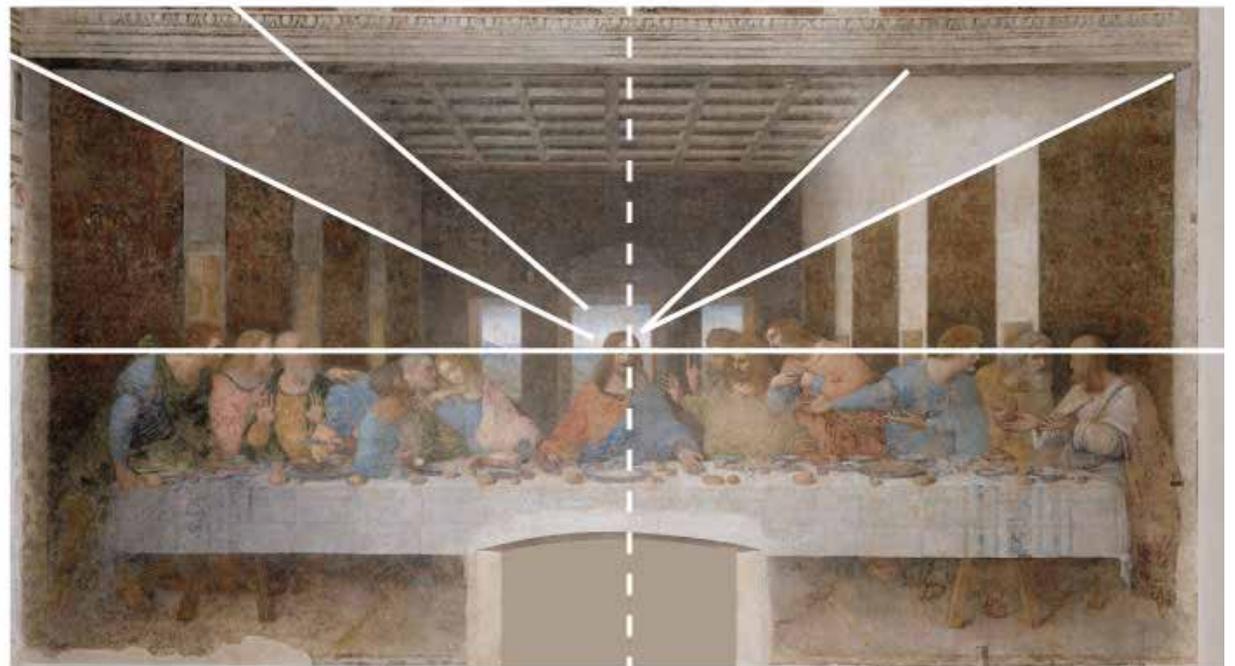
The tools for building print documents — or web documents for that matter— have been around for centuries.

Whether you are creating a logo, a magazine layout, a brochure or a book, you should know the principles of:

- Dots and lines
- Design axis
- Shapes
- Proportion
- Balance
- Space



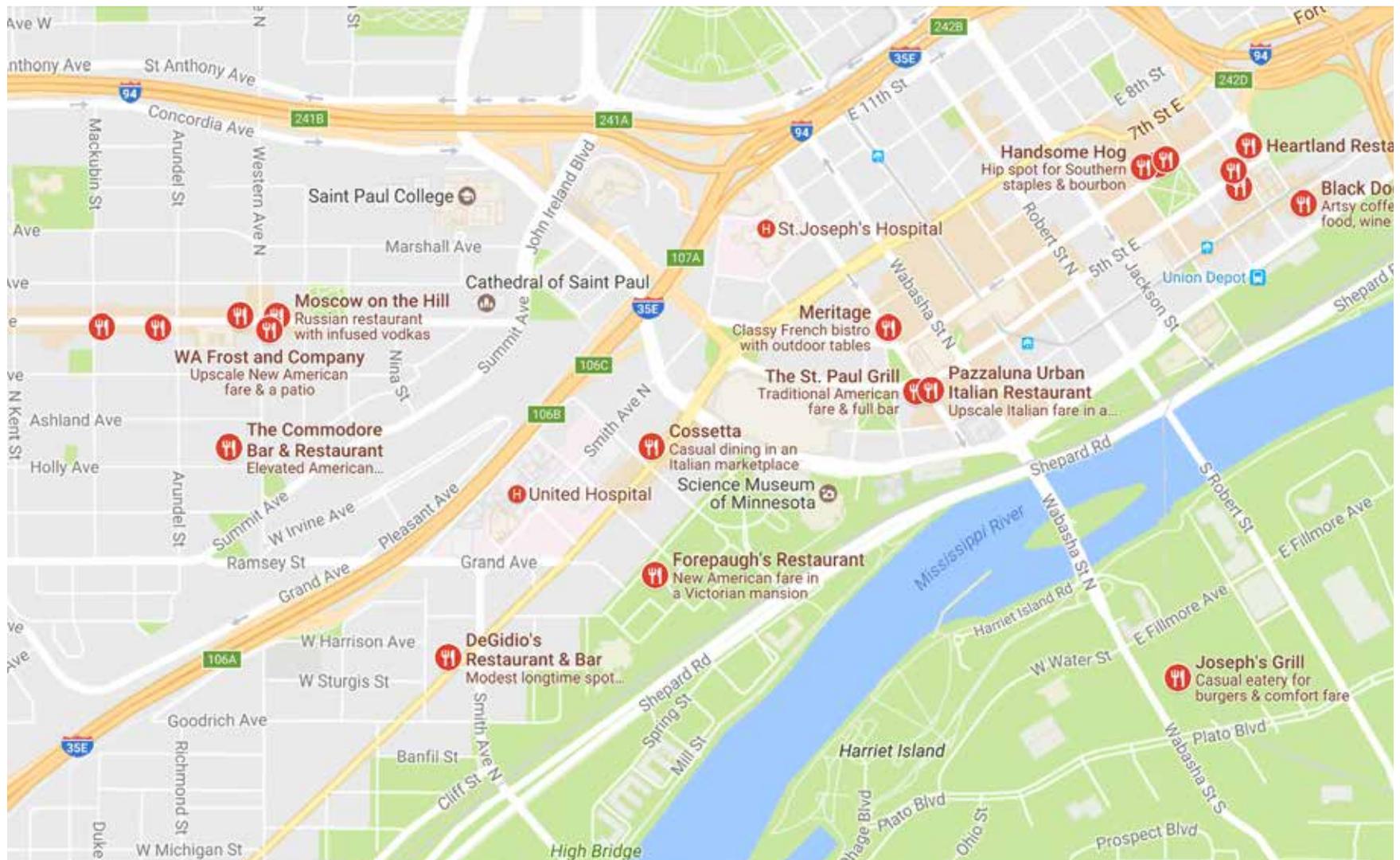
Leonardo da Vinci, *The Last Supper* (c. 1495) Da Vinci's mural is a masterpiece of composition, using formal balance. Christ sits at the center, his head at eye level. Lines of perspective converge on him.



- 
- **THE WHITE SURFACE** of the paper is “empty” as we usually see it, an **INACTIVE SURFACE.**



- **A DOT**, a small, point in space, is the basic element of composition.
- With the appearance of the dot the surface is **ACTIVATED**.
- The white paper is light; the dot is the removal of light.
- All 2-dimensional compositions are basically **LIGHT AND SHADOW**.



- **A DOT** indicates a precise location, a meaning or intersection.
- We speak of meeting points, crossing points, points of interest, also sore points.



© 1982 VOLKSWAGEN OF AMERICA, INC.

Think small.

Our little car isn't so much of a novelty any more.

A couple of dozen college kids don't try to squeeze inside it.

The guy at the gas station doesn't ask where the gas goes.

Nobody even stares at our shape.

In fact, some people who drive our little

fliiver don't even think 32 miles to the gallon is going any great guns.

Or using five pints of oil instead of five quarts.

Or never needing anti-freeze.

Or racking up 40,000 miles on a set of tires.

That's because once you get used to

some of our economies, you don't even think about them any more.

Except when you squeeze into a small parking spot. Or renew your small insurance. Or pay a small repair bill.

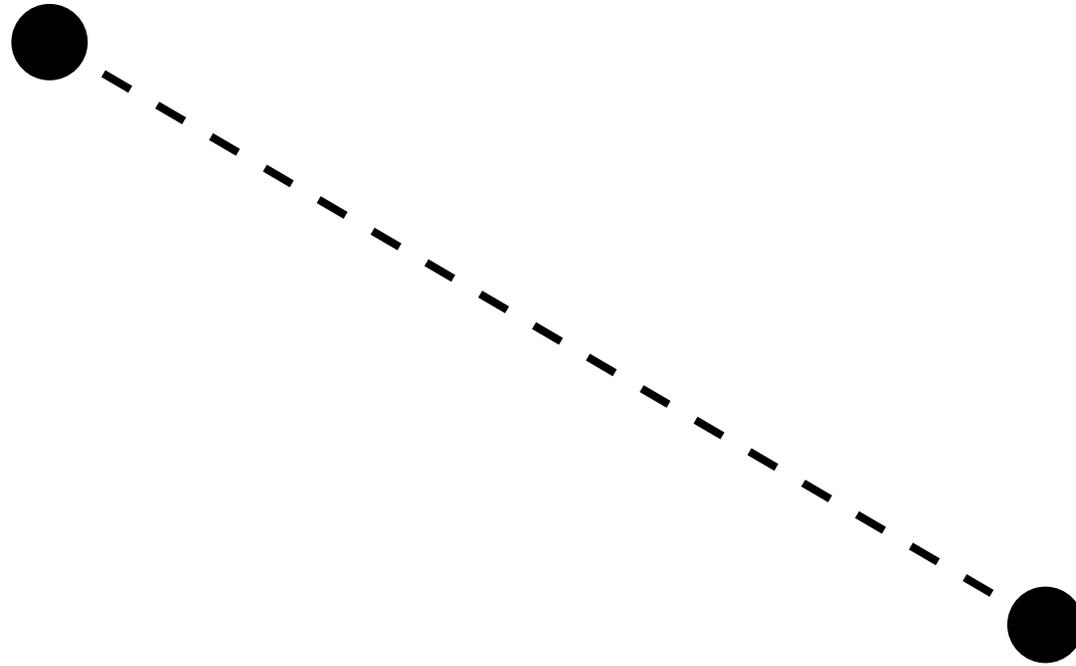
Or trade in your old VW for a new one.



Think it over.



- **TWO DOTS** create competition for the eye.
- The viewer draws an imaginary line from dot to dot, forming an **AXIS**.
- When we have two dots, we have the beginning of a composition.
- From a semiotic standpoint, we have created meaning.



- An **AXIS** is a line between two points.
- **AXES** are an important visual element; we organize other elements around axes, and we use axes to divide space.
- An axis is often implied through arrangement of visual elements.



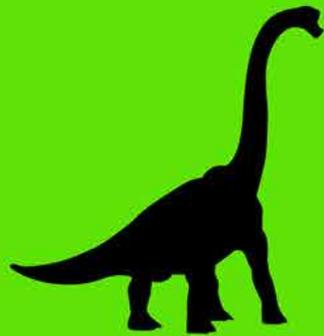
LEGO

imagine...

The LEGO logo is positioned in the bottom-left corner of the advertisement. It consists of the word "LEGO" in a bold, white, sans-serif font, set against a red rectangular background. The letters are slightly shadowed to give a three-dimensional appearance.

imagine...





Evolution always compacts.



 smart

open your mind.

► Test drive a smart and find out what it's able to do.
smart center rio de janeiro - av. das américas, 645 (21) 2493-1500

AGO



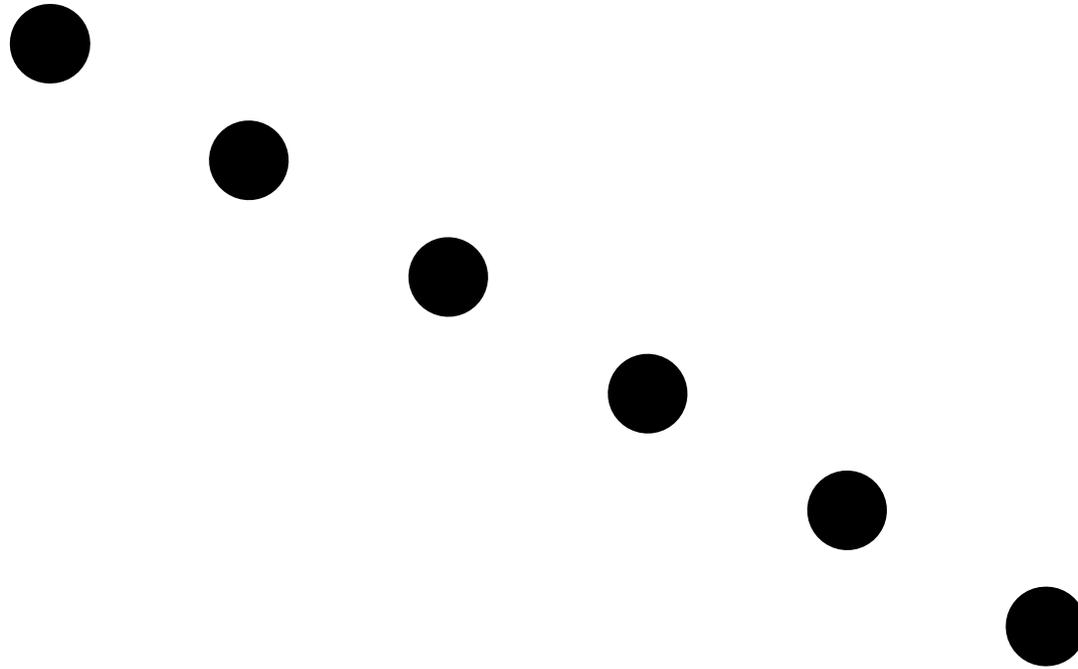
- When we see more than two dots not in a straight line, we try to form a **SHAPE**, a thought process Gestalt theorists call **CLOSURE**.
- We also create movement from dot to dot.
- Designers exploit this sense of movement.

- Renoir uses red to create a **TRIANGULAR COMPOSITION**.
- Red attracts the eye, so he spreads out the color to soften the effect.

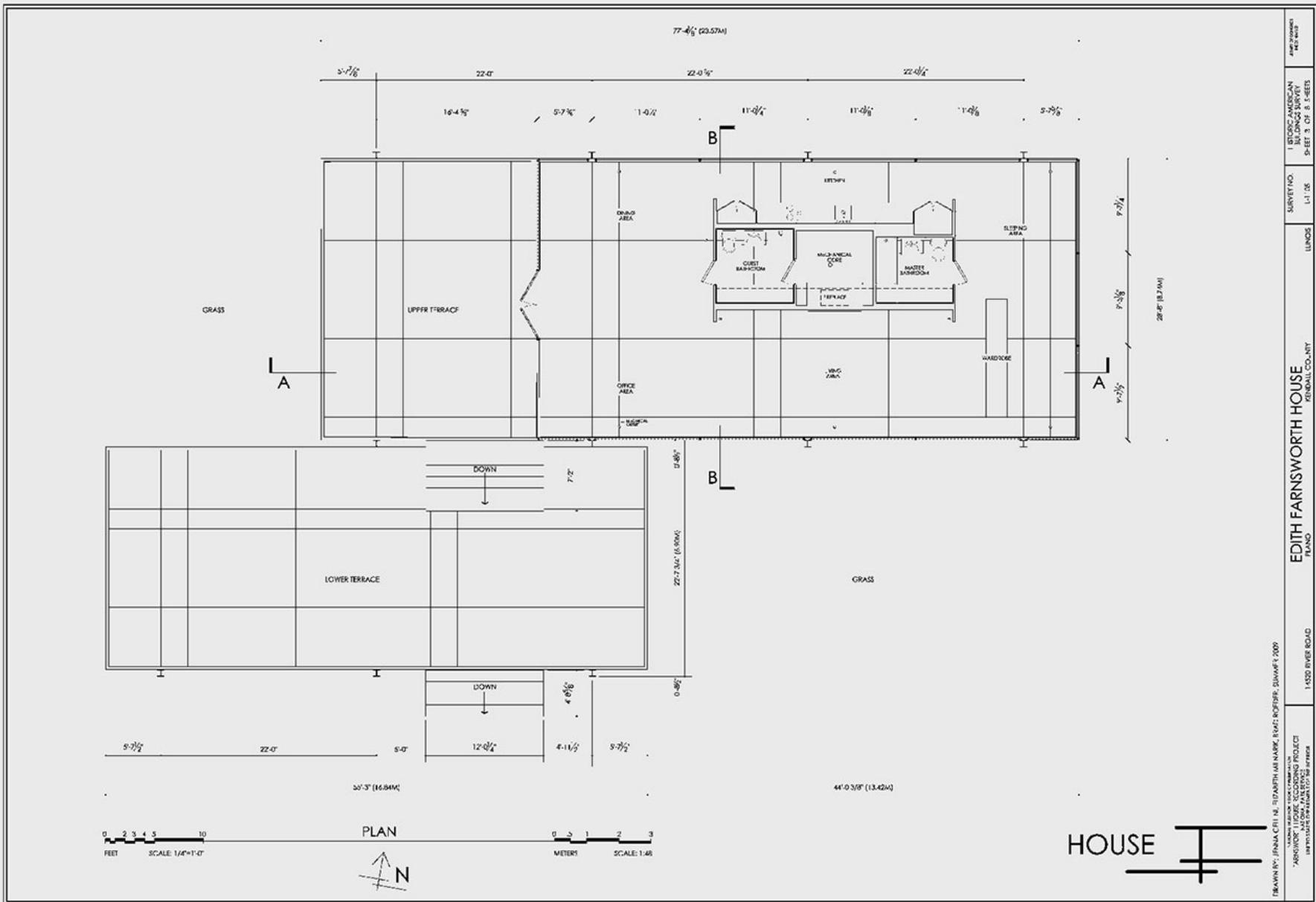


Pierre-Auguste Renoir, *On the Terrace* (1881)

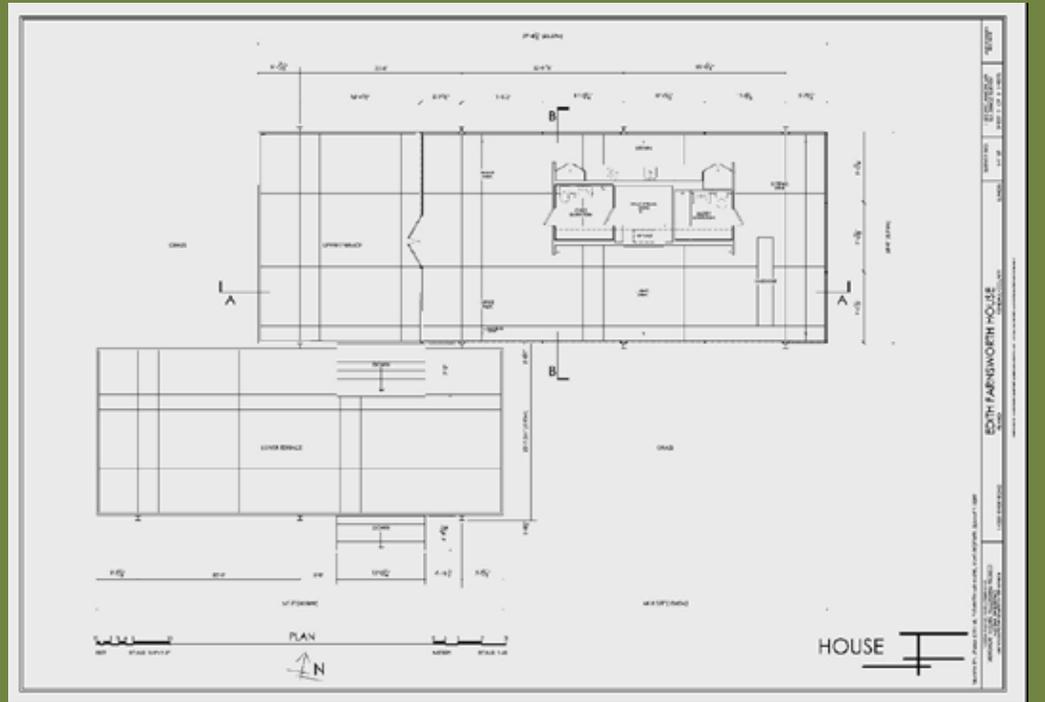




- A **LINE** can be thought of as a series of dots, or as “a dot that went for a walk.”
- A line by its nature separates things on either side of it. Or it can connect two things at either end.



- Lines stated or implied are elements in the **DIVISION OF SPACE**.
- How we deploy lines to divide space has meaning.
- **ARCHITECTURE** can be defined as the division of space.





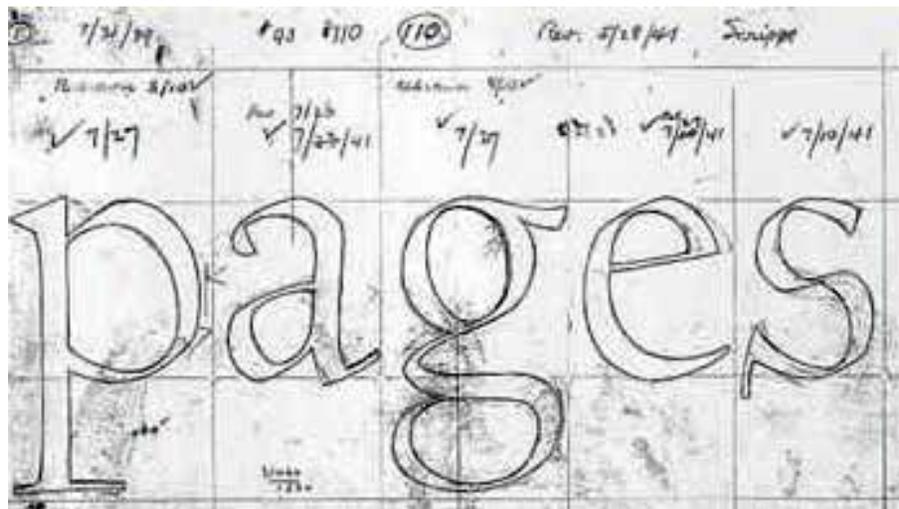
- A **VERTICAL LINE** has the characteristics of alertness, action.
- When we stand at attention, we stand straight up.



- A **HORIZONTAL LINE** suggests repose, relaxation.
- When we sleep, we are in a horizontal position.
- The horizon also suggests stability, solid ground.



- **DIAGONAL LINES** are dynamic.
- They suggest that something is about to happen.



Frederic Goudy, drawings for Scripps College Old Style typeface (1941)



Giambattista Bodoni, *Typography manual* (1817)

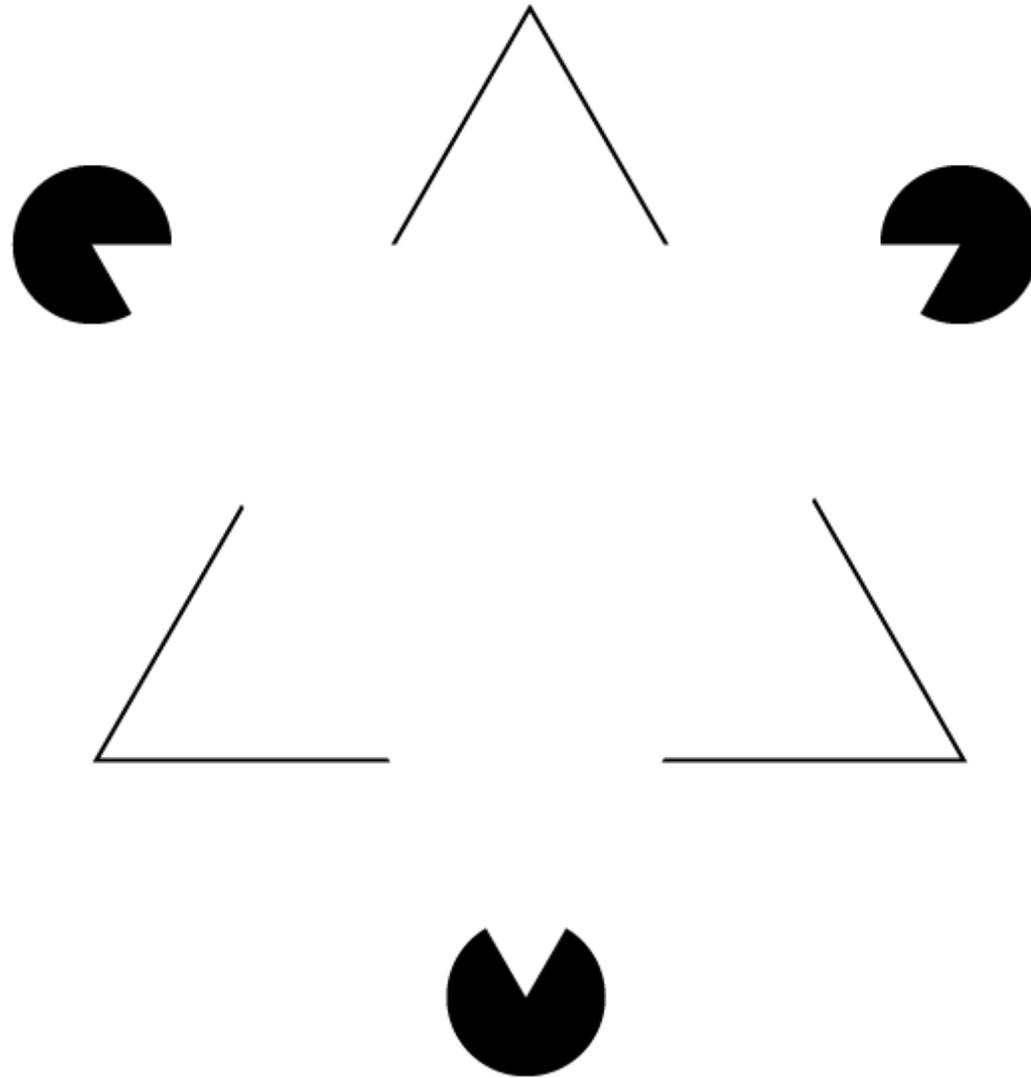
- Lines convey meaning through **WEIGHT, CONTOUR, ANGLE, COLOR** and **TEXTURE**. Scott McCloud writes that “all lines carry with them an expressive potential.”
- Typographers use the thickness of letter strokes and contrast between thick and thin to express mood and style.



Vincent van Gogh, The Starry Night (1889)



**THE EXPRESSIVE LINES THAT
MAKE GRAFFITI GRAFFITI
HAVE BEEN TURNED INTO FONTS**



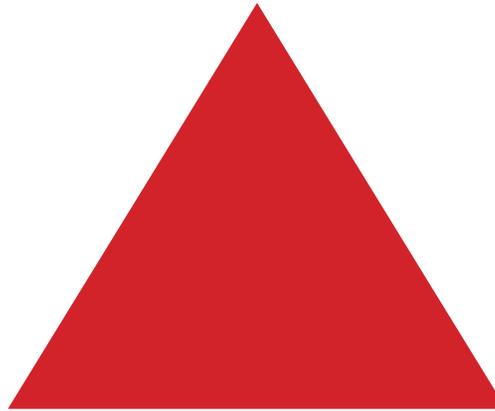
- We seek out **SHAPES** when we see lines.
- In this diagram, most of us would see a triangle rather than three independent angles, according to the Gestalt principles of **GOOD CONTINUITY AND CLOSURE**.

Shapes have meaning



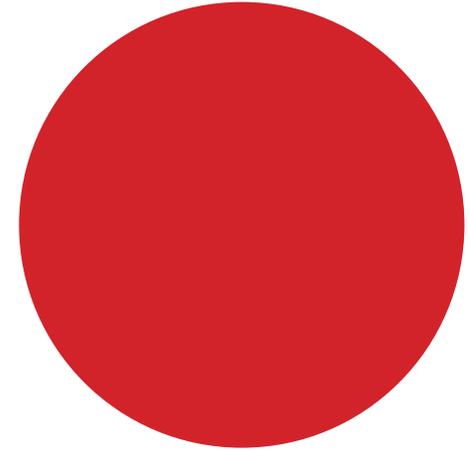
THE SQUARE

- Conservative
- Honest
- Straight



THE TRIANGLE

- Dynamic
- Risky
- Exciting



THE CIRCLE

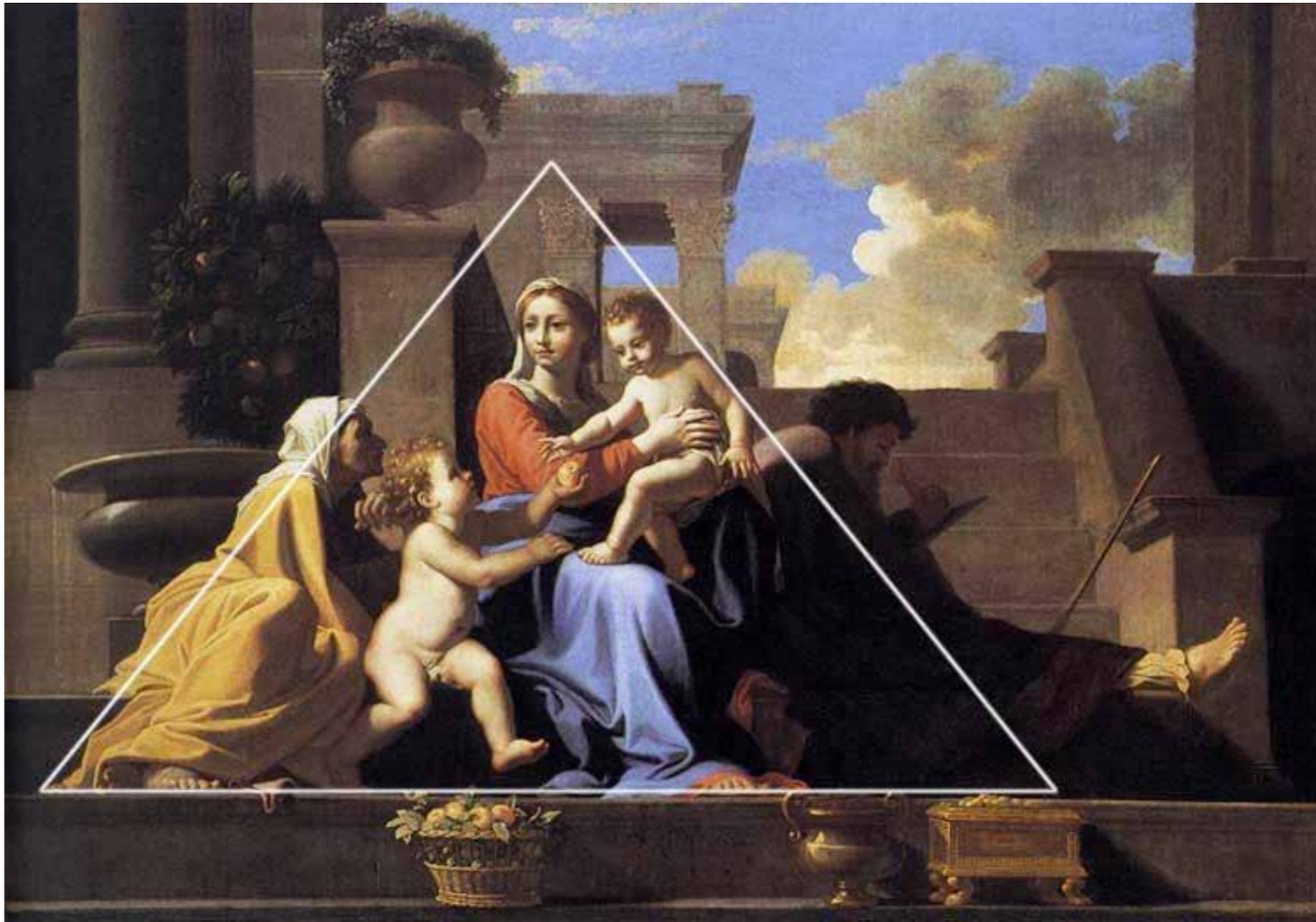
- Endlessness
- Warmth
- Protection

These are the three basic shapes. All others are derived from them.



Clockwise from top left: Native American **dream catcher**; the **Earth** seen from space; the **Ouroboros**, an ancient symbol representing self-reflexivity or cyclicity; a **mandala**, a spiritual and ritual symbol in Hinduism; Armenian **khachkar** depicting a solar disc; **yin yang**, traditional Chinese symbol of Taoism.

- The everlasting **CIRCLE** is a common symbol in many cultures, from Native American to the Chinese.
- The circle appears in nature everything from the sun and moon to the ripples from dropping a stone into water.



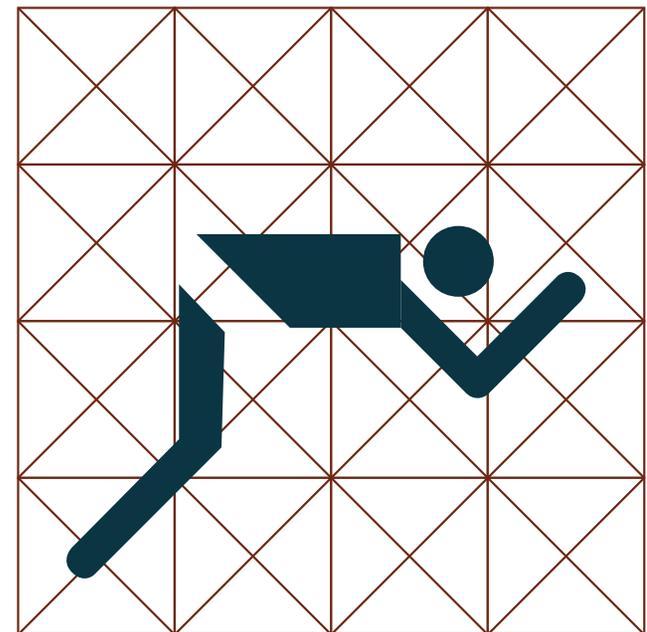
Nicolas Poussin,
*Holy Family on
the Steps* (1648)

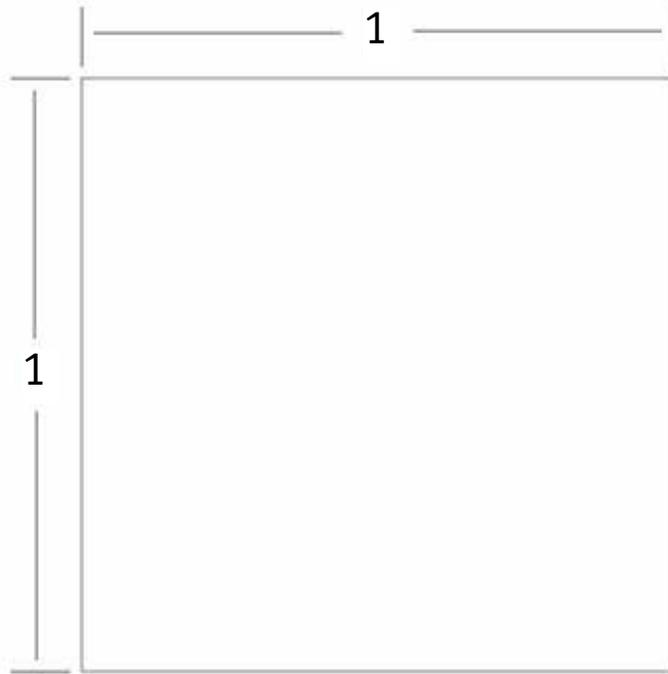
- Triangular composition is commonly used in art and design.
- In the Western tradition, the **TRIANGLE** also symbolizes the sacred meaning of the trinity.



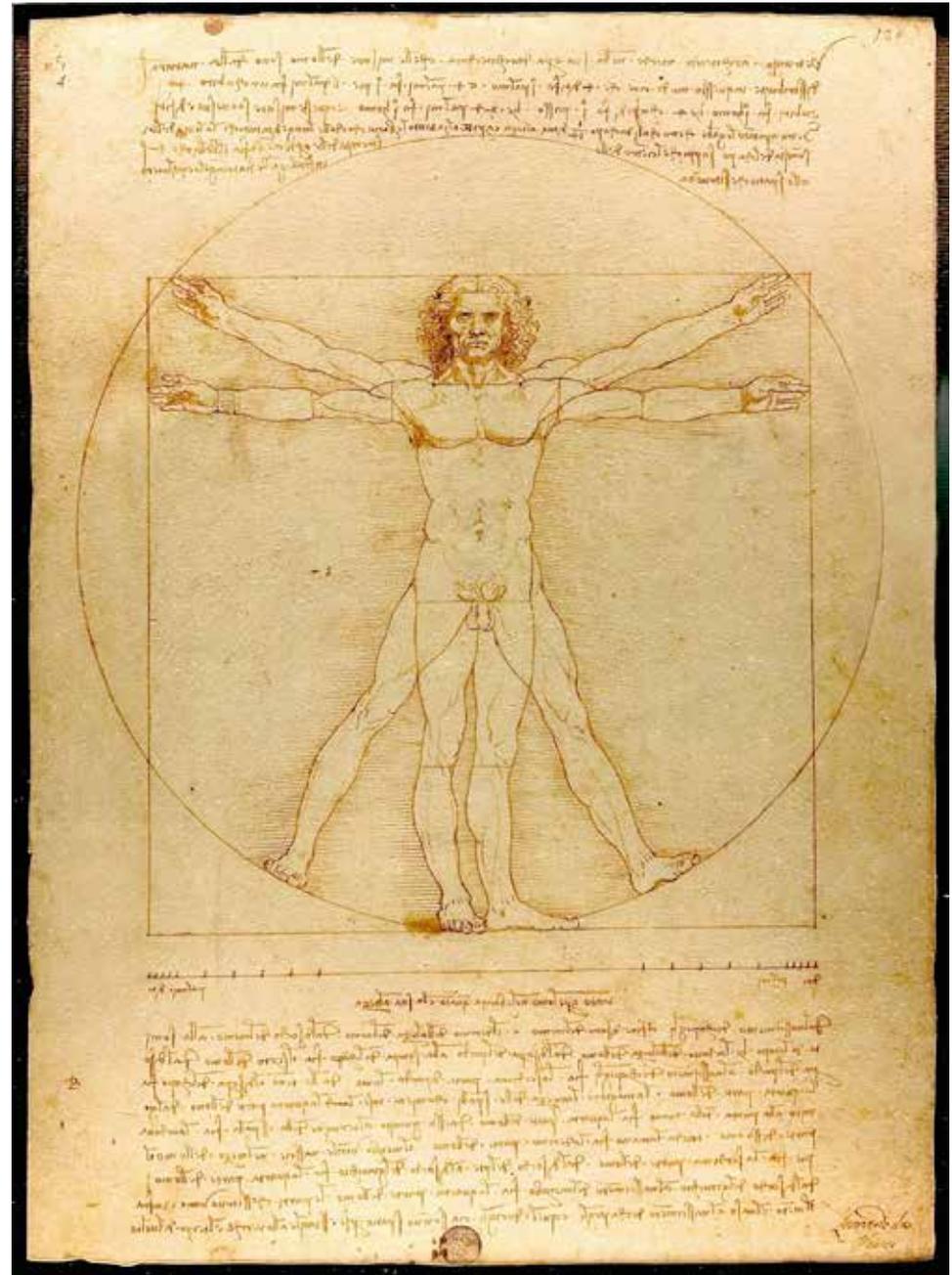
- The **SQUARE** is not the most desirable shape for a photo or a painting.
- Grids used in design are based on the square, such as Otl Aicher's work for the 1972 Munich Olympics.

A major figure in 20th century graphic design's International Style and co-founder of the Ulm School of Design (Hochschule für Gestaltung Ulm), Aicher (1922–1991) was a man of order and planning.





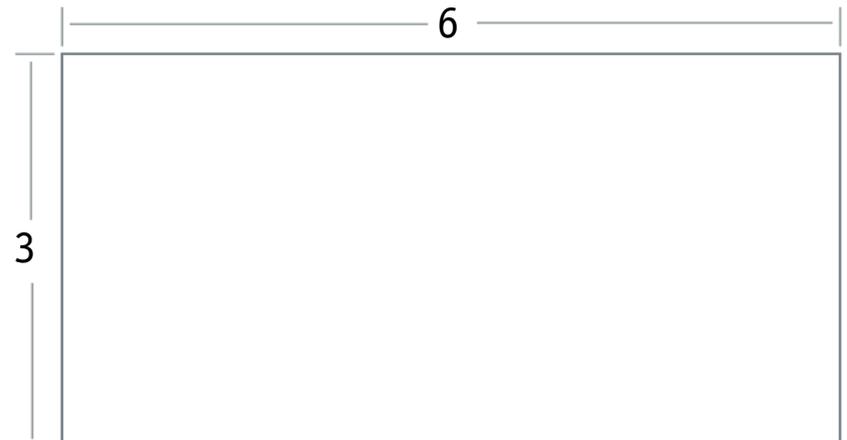
- **PROPORTION** is the relationship of width to height in any shape or composition.
- Proportion usually is stated as a ratio, width:height.
- A **SQUARE**, then, would have the proportion of **1:1**.



Leonardo da Vinci, *Vitruvian Man* (c. 1490). DaVinci uses the human body to derive the shapes of the circle and square.



- **DOUBLE SQUARE** proportion is **1:2**.
- Traditional Japanese Tatami mats are based on a double square of 3 feet by 6 feet.





4:3 Academy ratio: *Citizen Kane*



2.39:1 Ultra-wide screen: *Bladerunner*

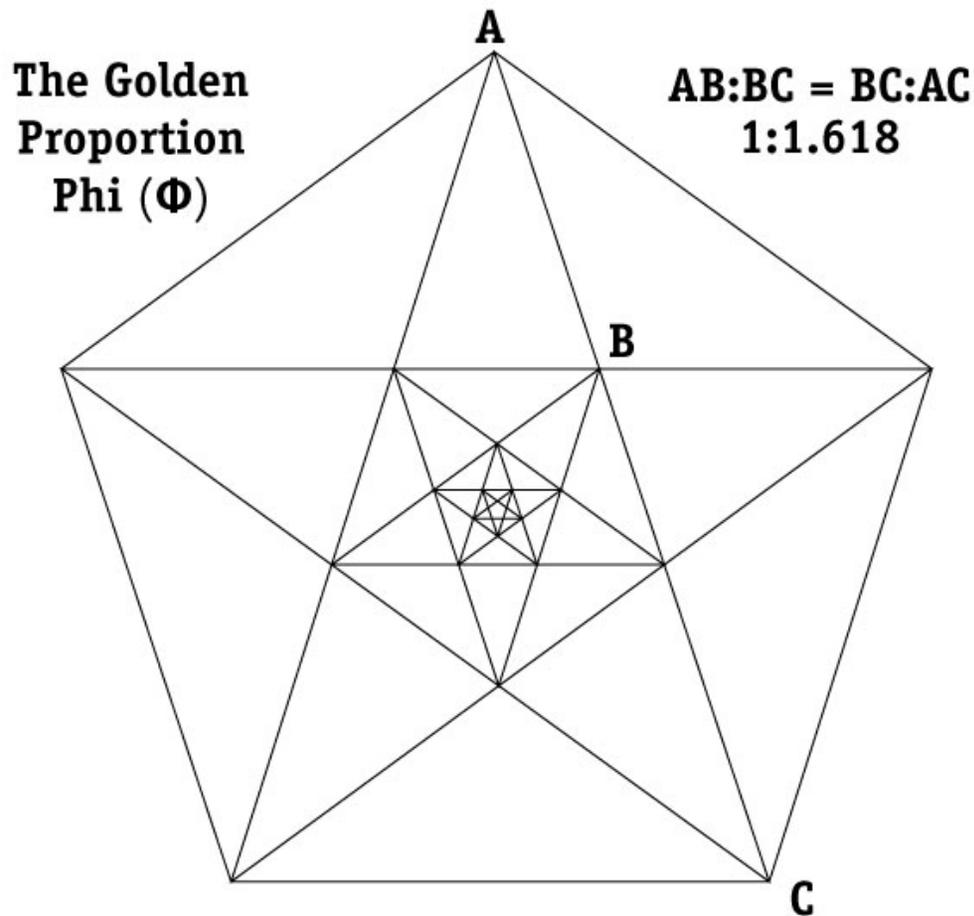


1.85:1 Wide screen: *Children of Men*



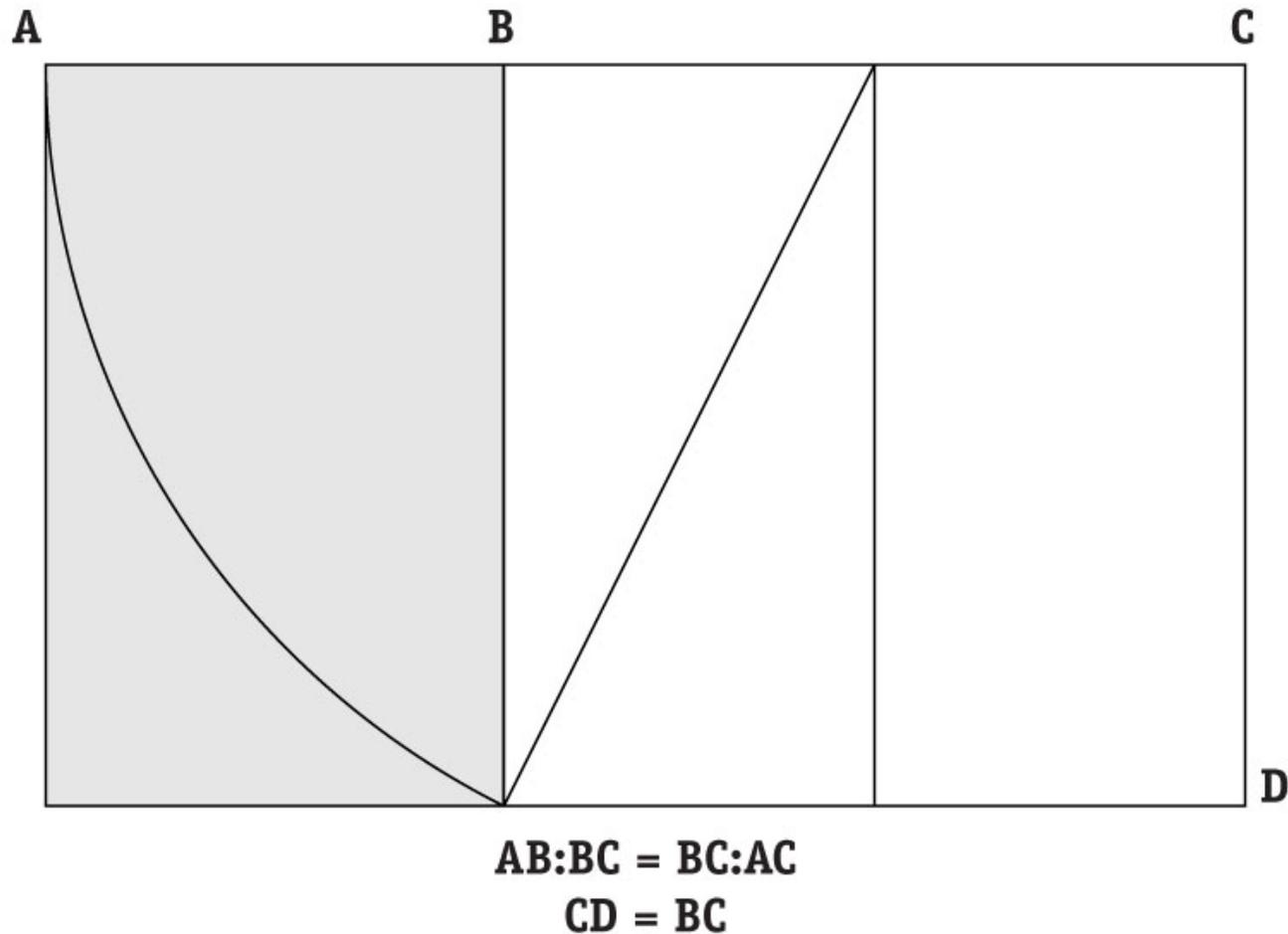
16:9 HDTV: *The Sopranos*

- **Aspect ratio** is a category of proportion dealing with images, especially movies and television.
- The aspect ratio greatly affects the look and feel of a film or video.

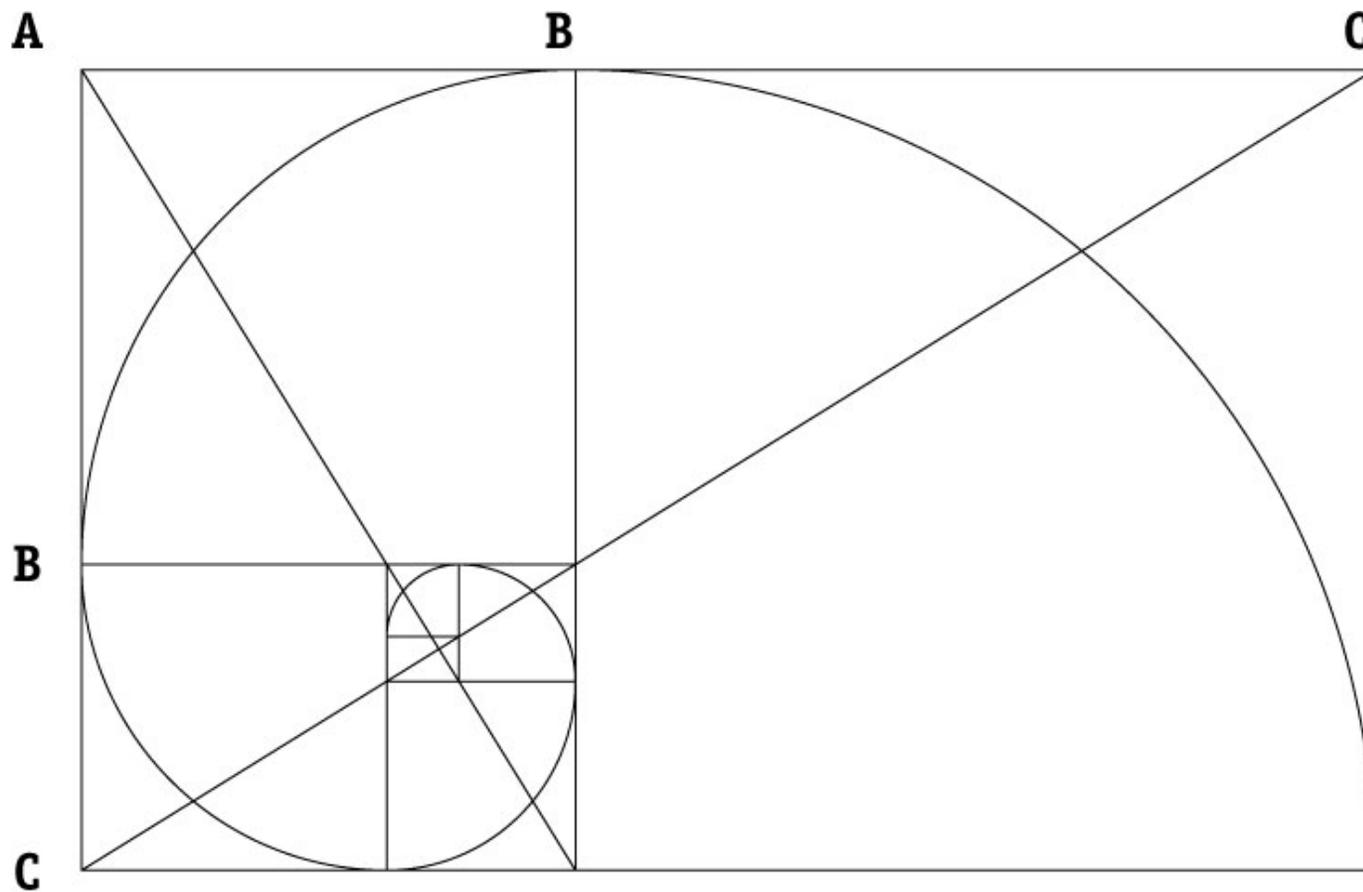


The Golden Proportion

- Mathematicians such as Pythagoras and Euclid in Greece, the Italian mathematician Leonardo of Pisa (Fibonacci) and Oxford physicist Roger Penrose have studied the Golden Proportion and its properties.
- It is manifested in art and architecture, ancient and modern.
- The ratio arises naturally from the pentagram.

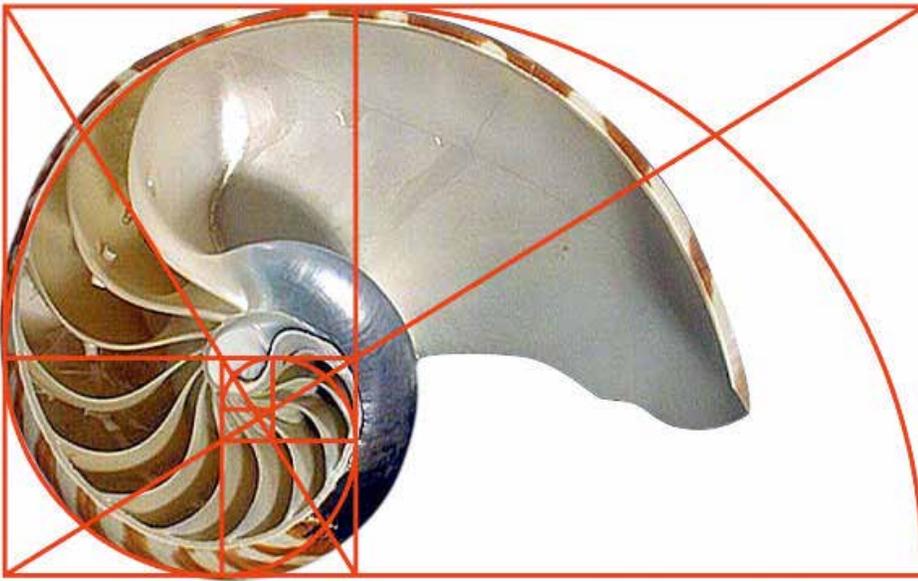


- The Golden Proportion, like pi, is an **IRRATIONAL NUMBER**; its decimal place can be carried out to infinity.
- To form an accurate Golden Rectangle, divide a square in half. Draw a diagonal across one half, then swing that line around to align with the top of the square. Now complete the rectangle.

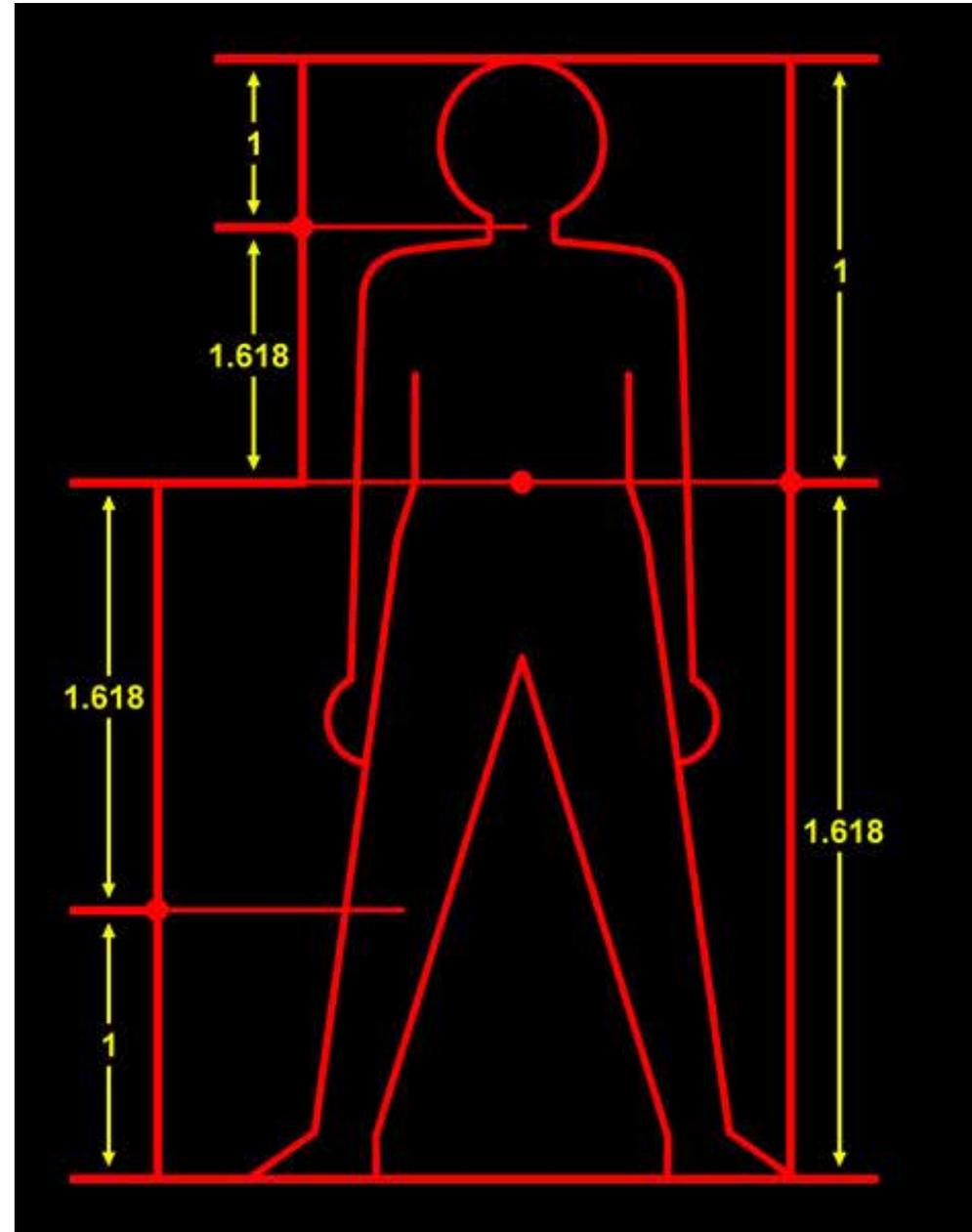


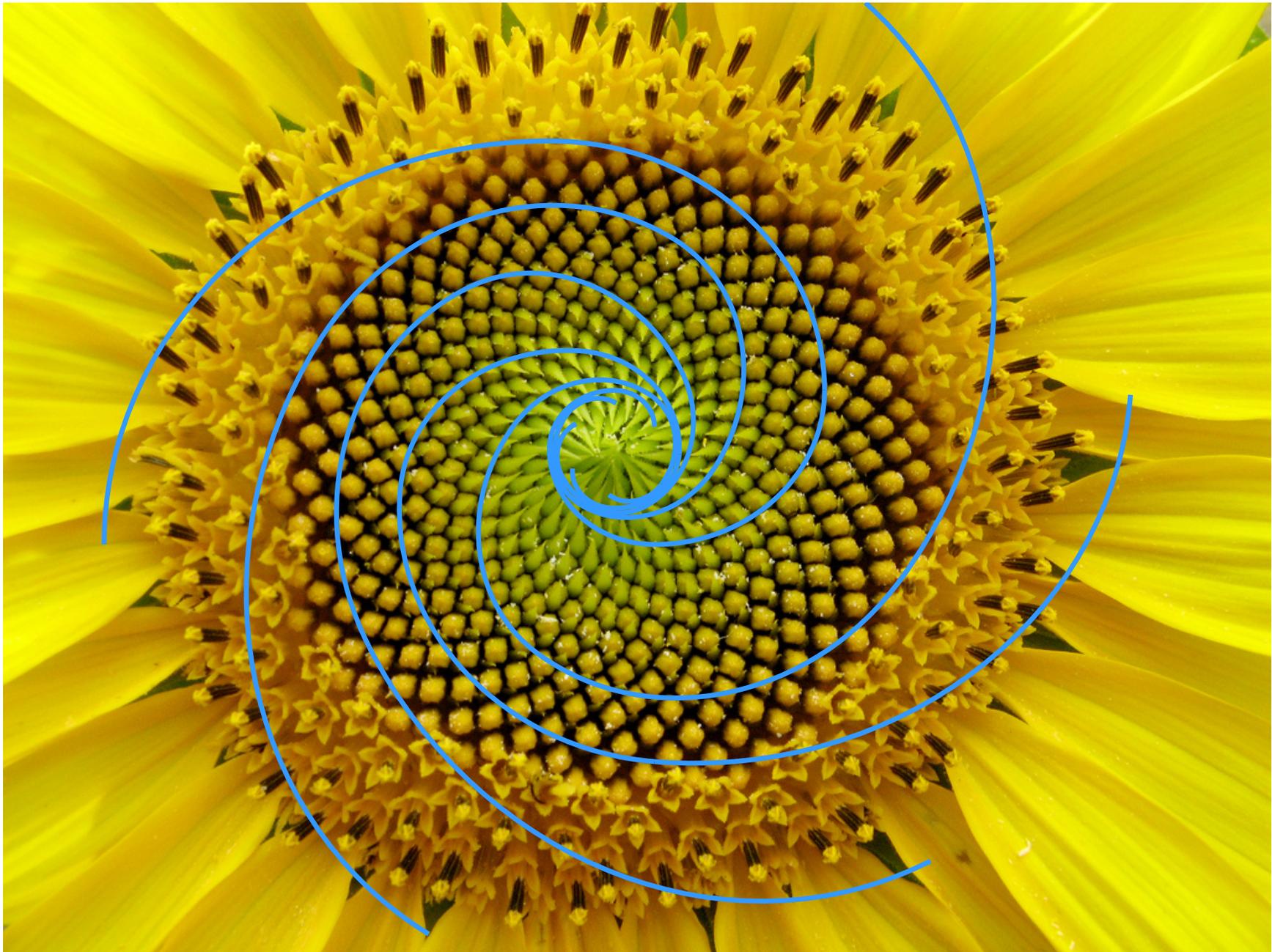
$$AB:BC = BC:AC$$

- If you add a Golden Rectangle to a square, you get another Golden Rectangle.
- This is related to the **FIBONACCI SERIES**, in which each number after the first two is the sum of the previous two: 1, 2, 3, 5, 8, 13, 21 ...
- By adding an arc to each square, this characteristic spiral is formed.

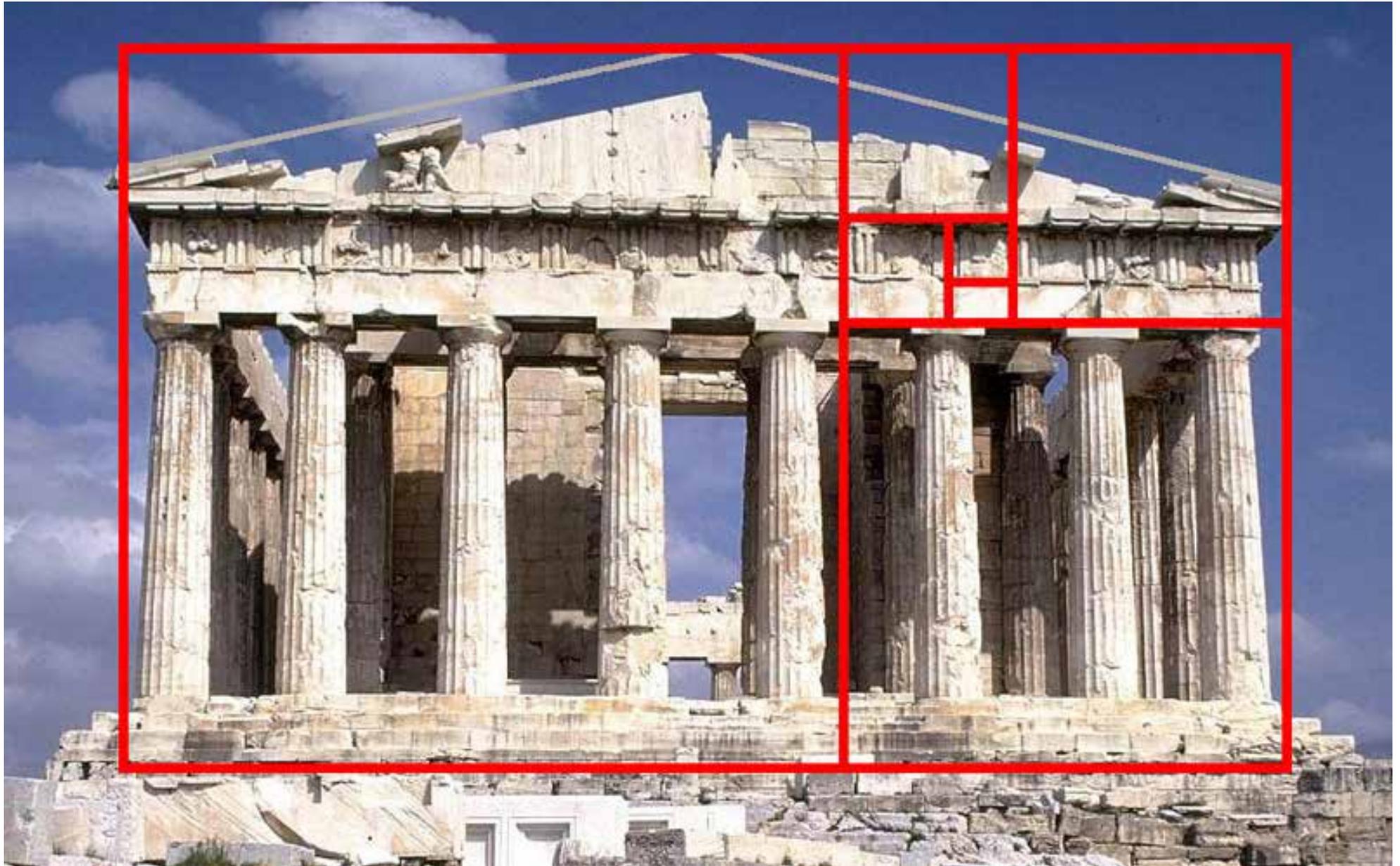


- The Golden Proportion has fascinated scientists and philosophers in part because it can be seen many places in nature, such as in the structure of the chambered nautilus.
- The Swiss-French architect Charles-Édouard Jeanneret-Gris, known as Le Corbusier, plotted the human form using the Golden Proportion.





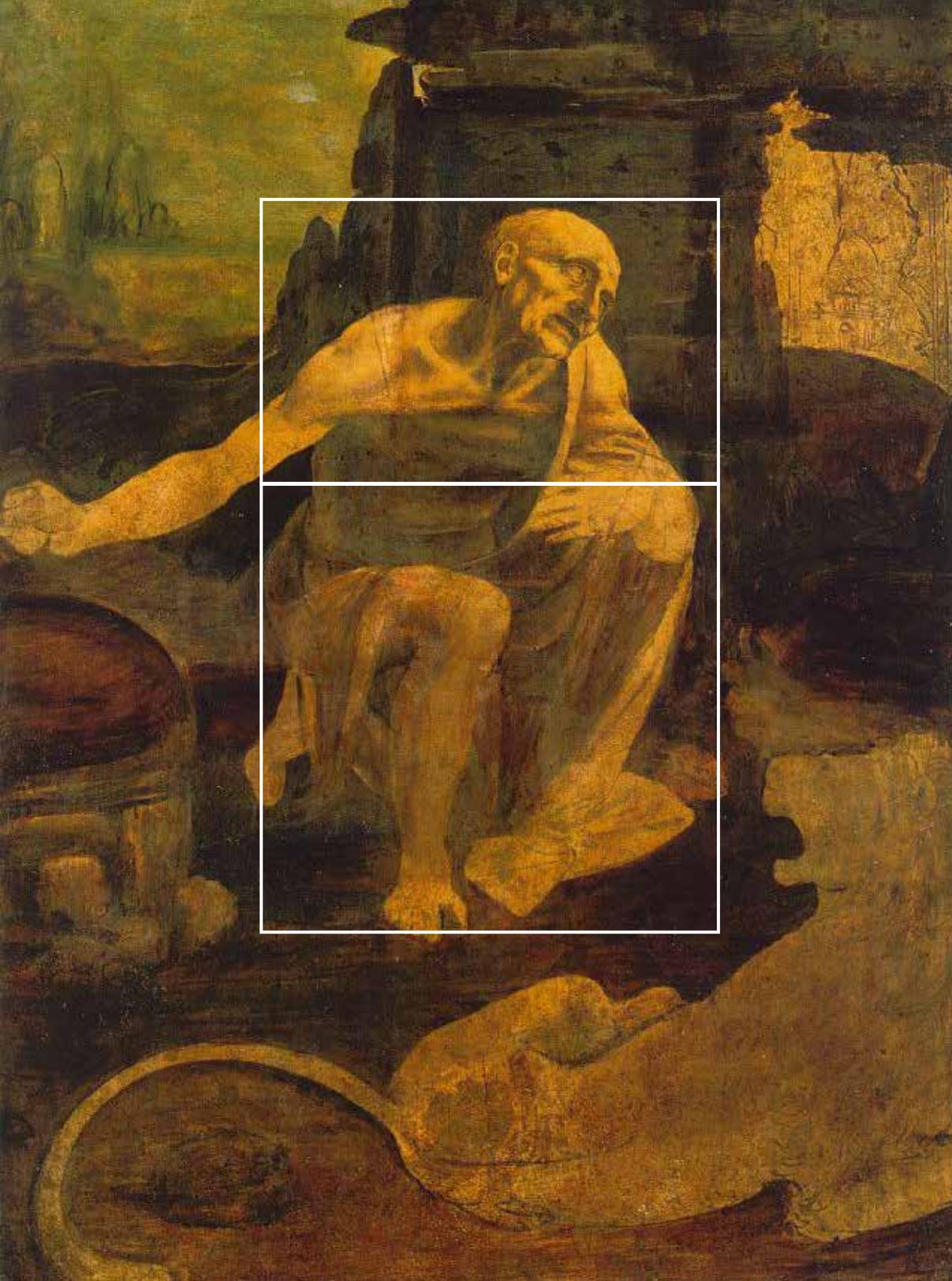
The Golden Proportion and its properties can be found in nature.



The Golden Proportion is used in many works of art and architecture.



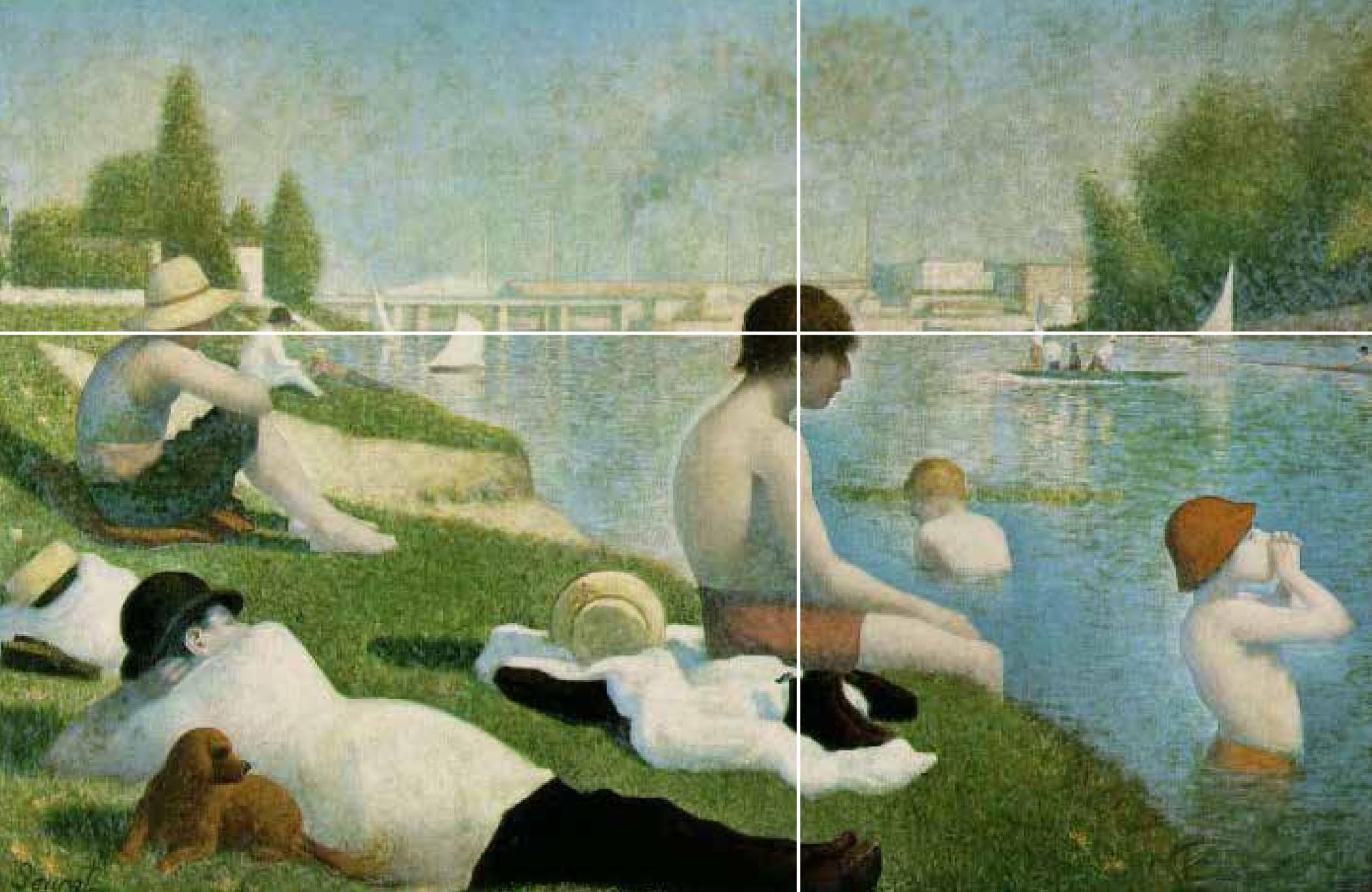
Leonardo da Vinci, *St. Jerome* (c. 1480)



Leonardo da Vinci, *St. Jerome* (c. 1480)



Georges Seurat, *Bathers at Asnières* (1884)



Georges Seurat, *Bathers at Asnières* (1884)



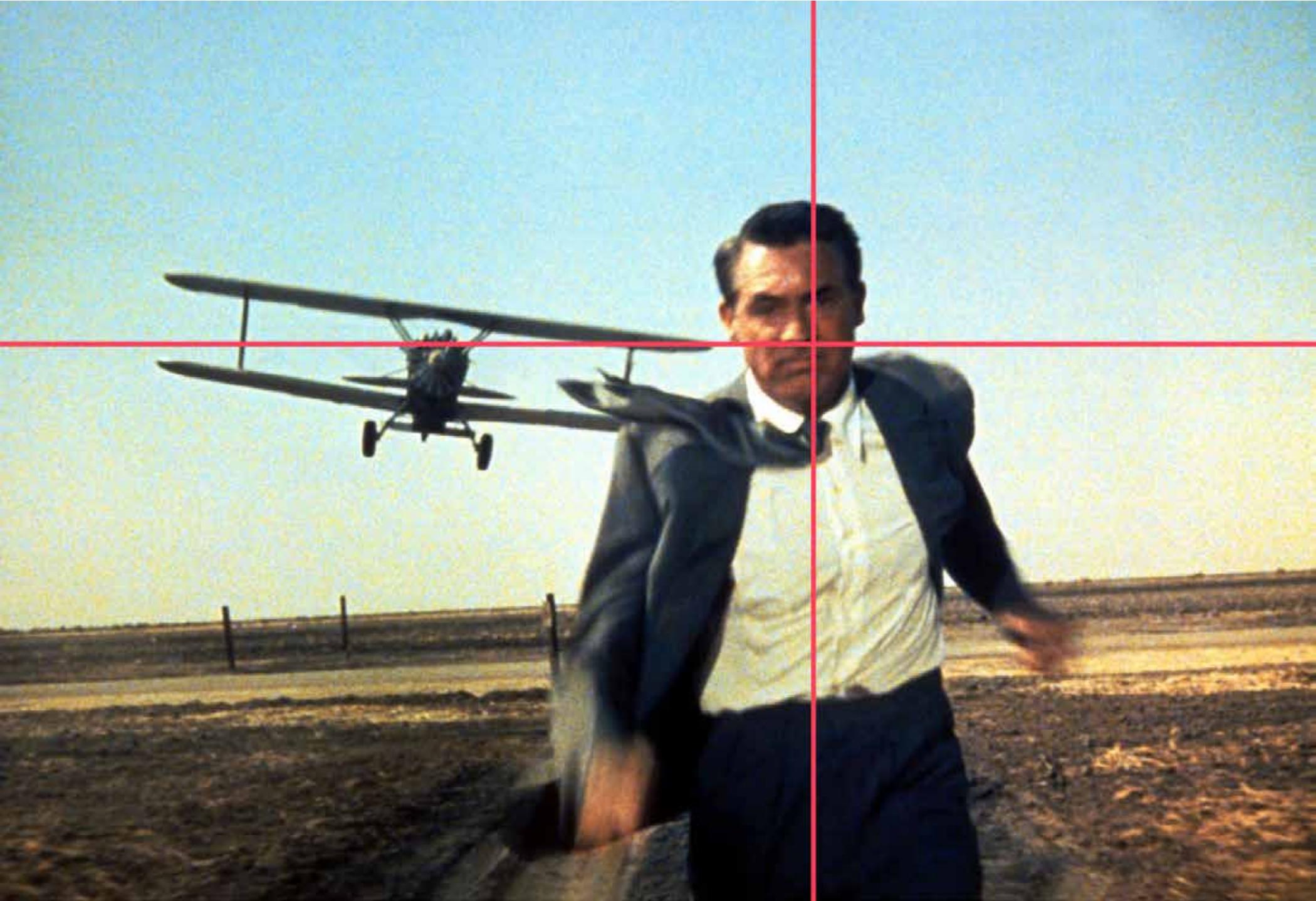
Joseph Mallord William Turner, *Norham Castle at Sunrise* (1835-40)



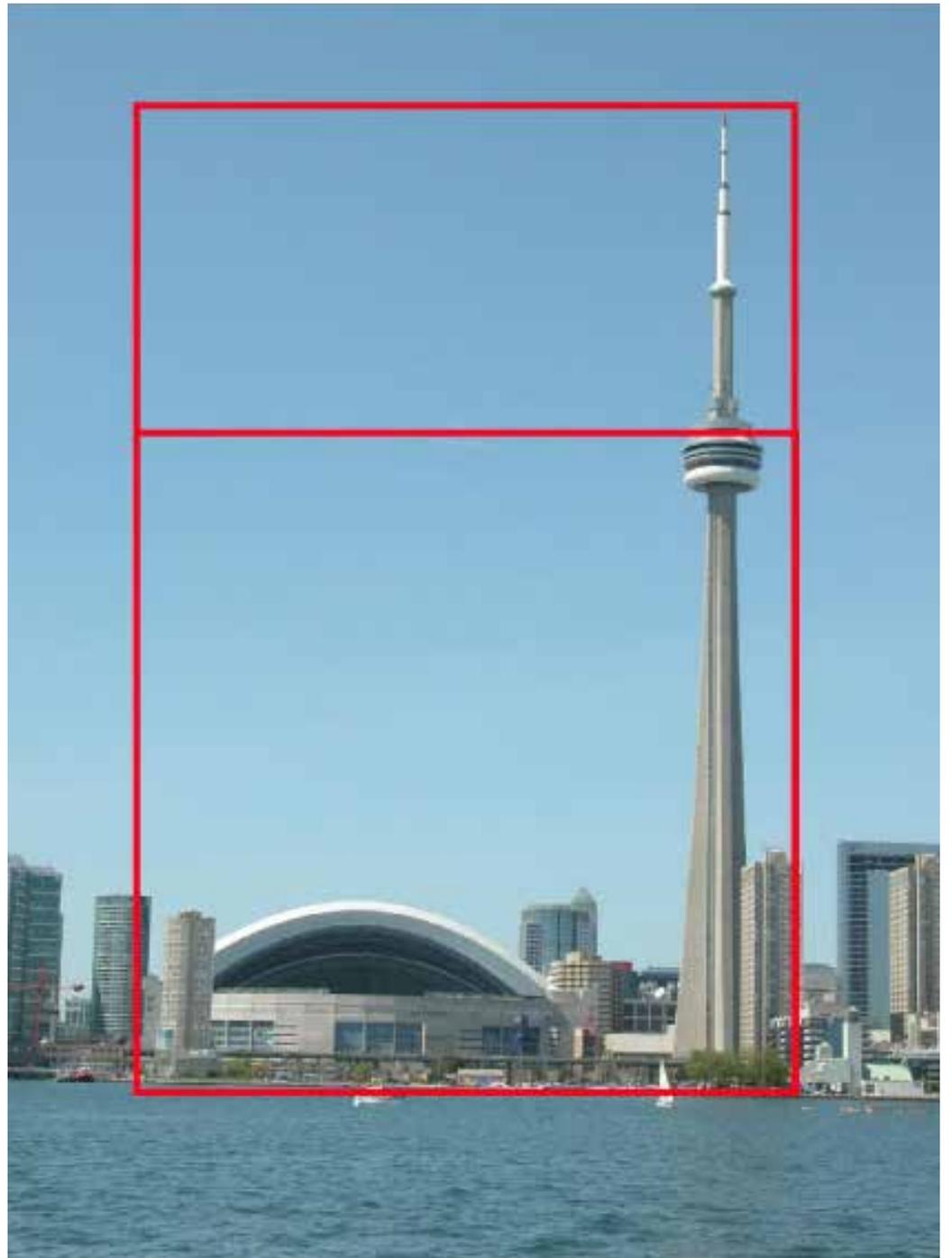
Joseph Mallord William Turner, *Norham Castle at Sunrise* (1835-40)

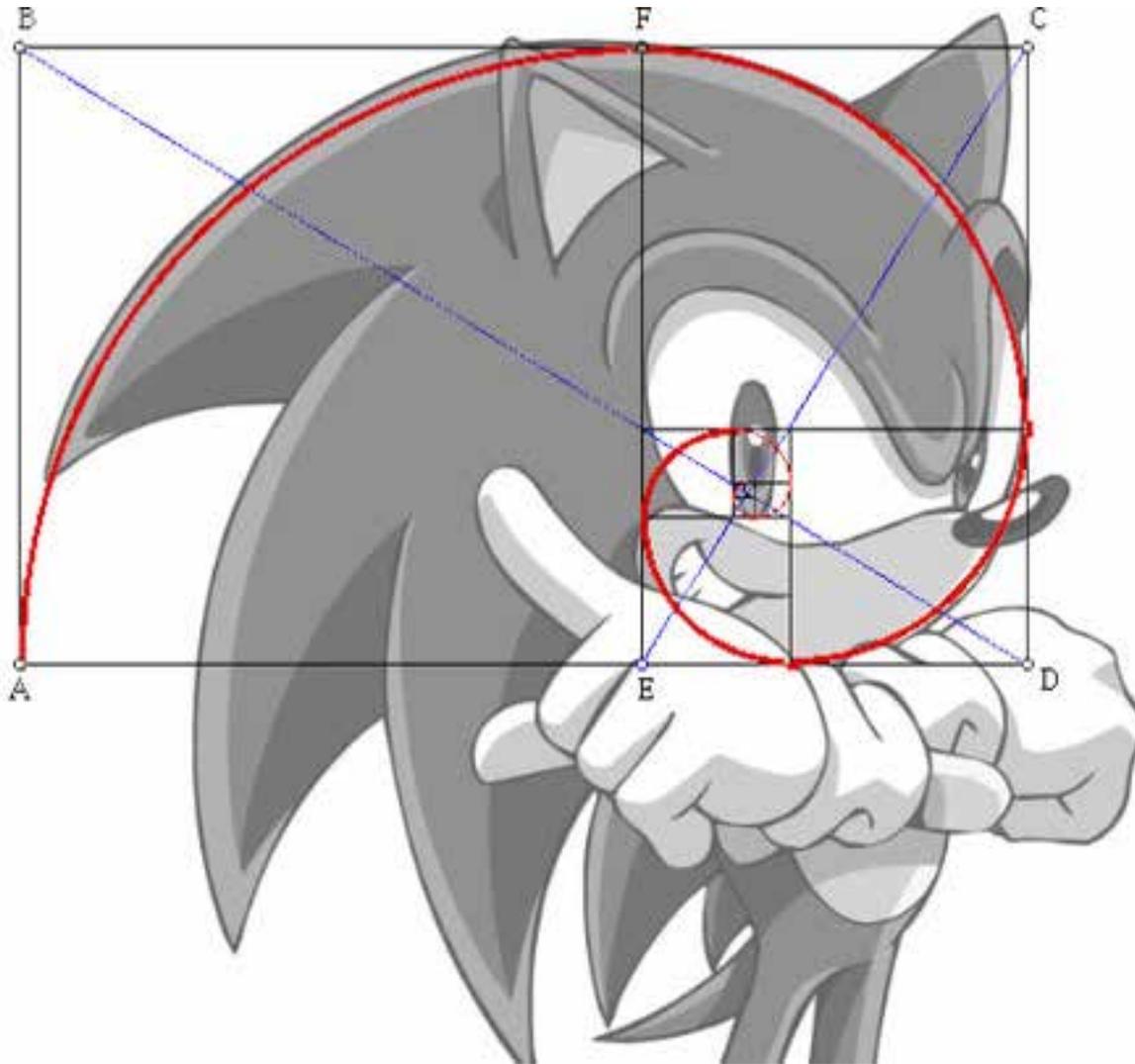


Cary Grant in Alfred Hitchcock's *North by Northwest* (1959)

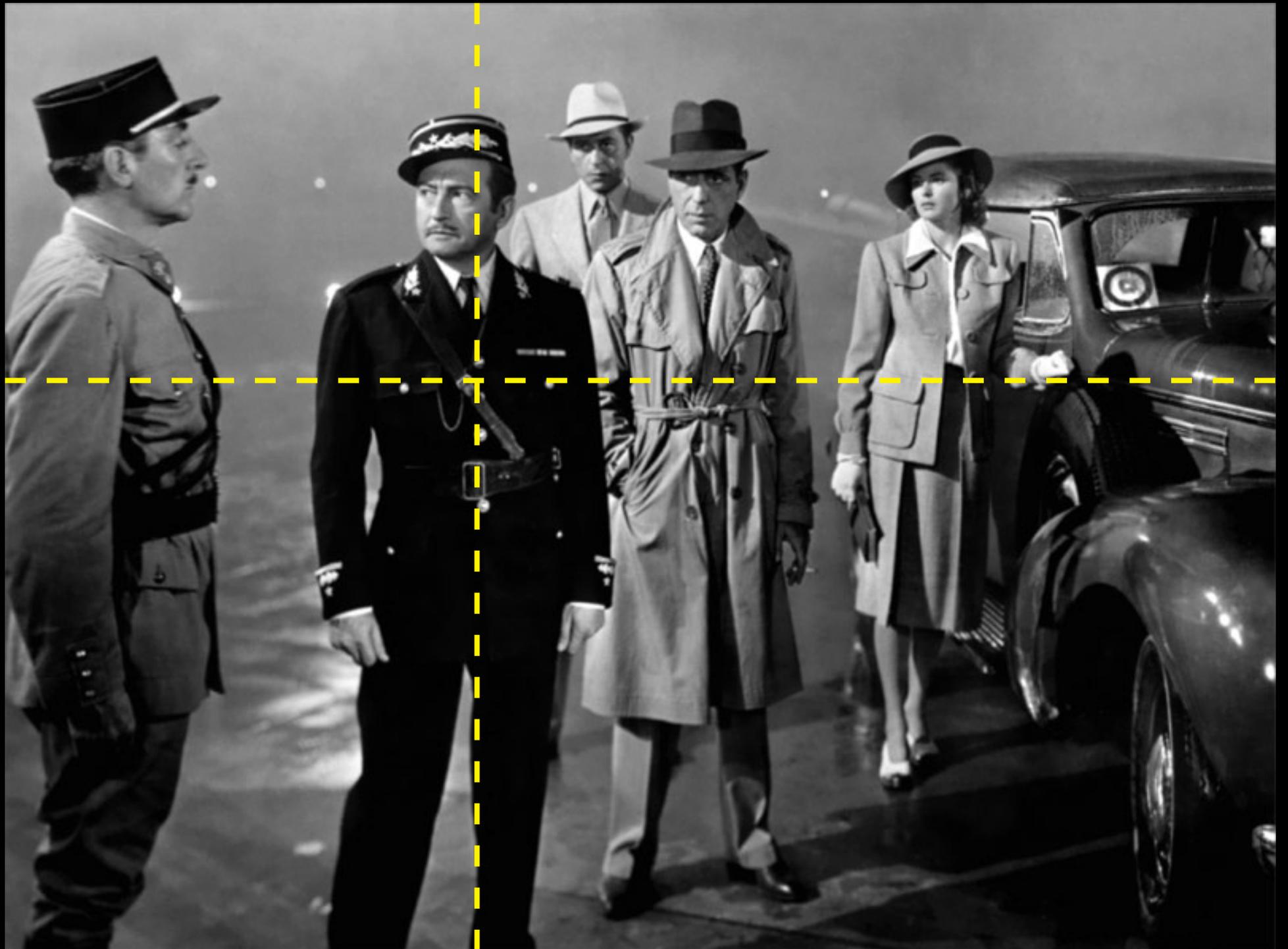


Cary Grant in Alfred Hitchcock's *North by Northwest* (1959)



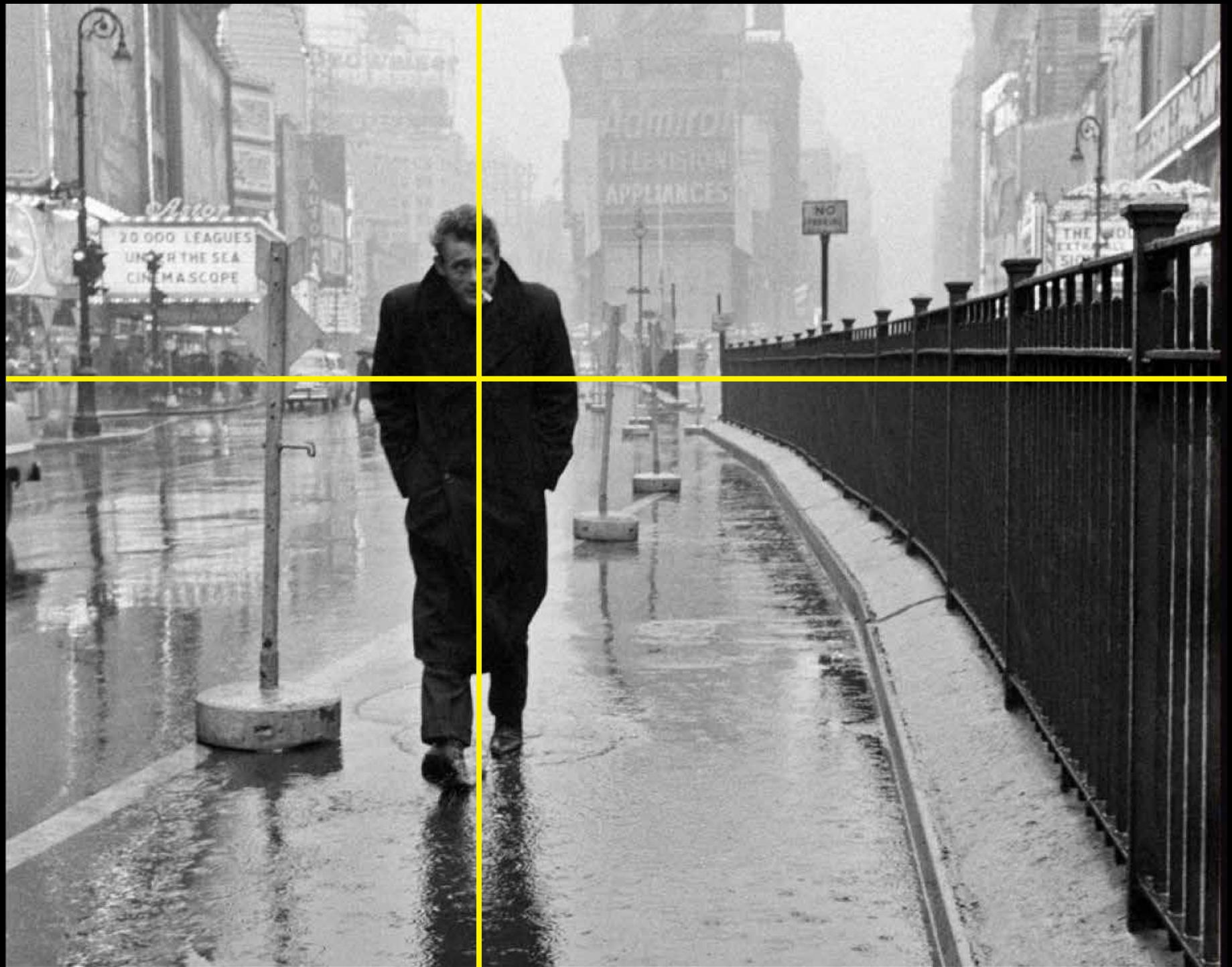




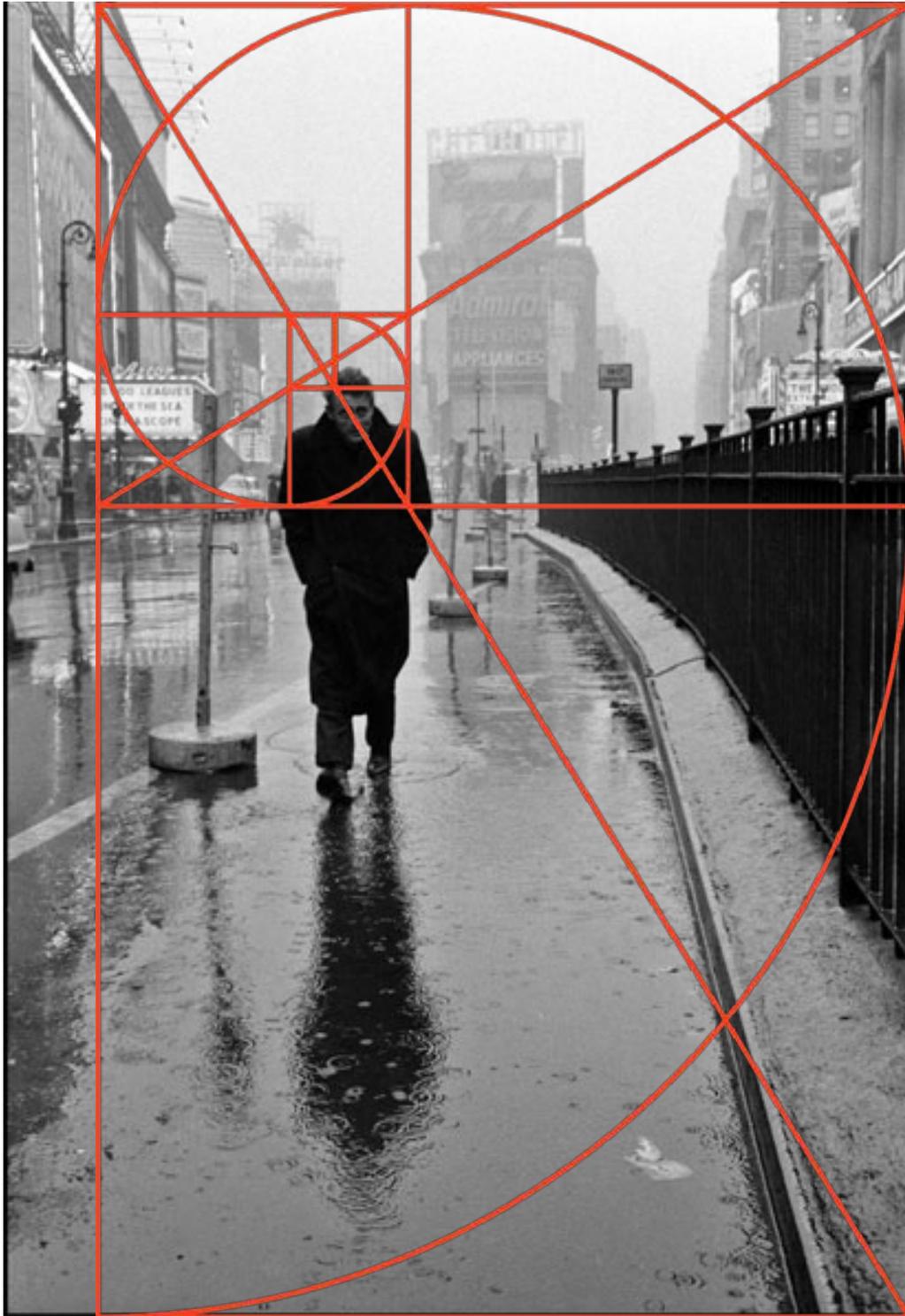




Dennis Stock, *James Dean, Times Square* (1955)



Dennis Stock, *James Dean, Times Square* (1955)



Dennis Stock, *James Dean, Times Square* (1955)



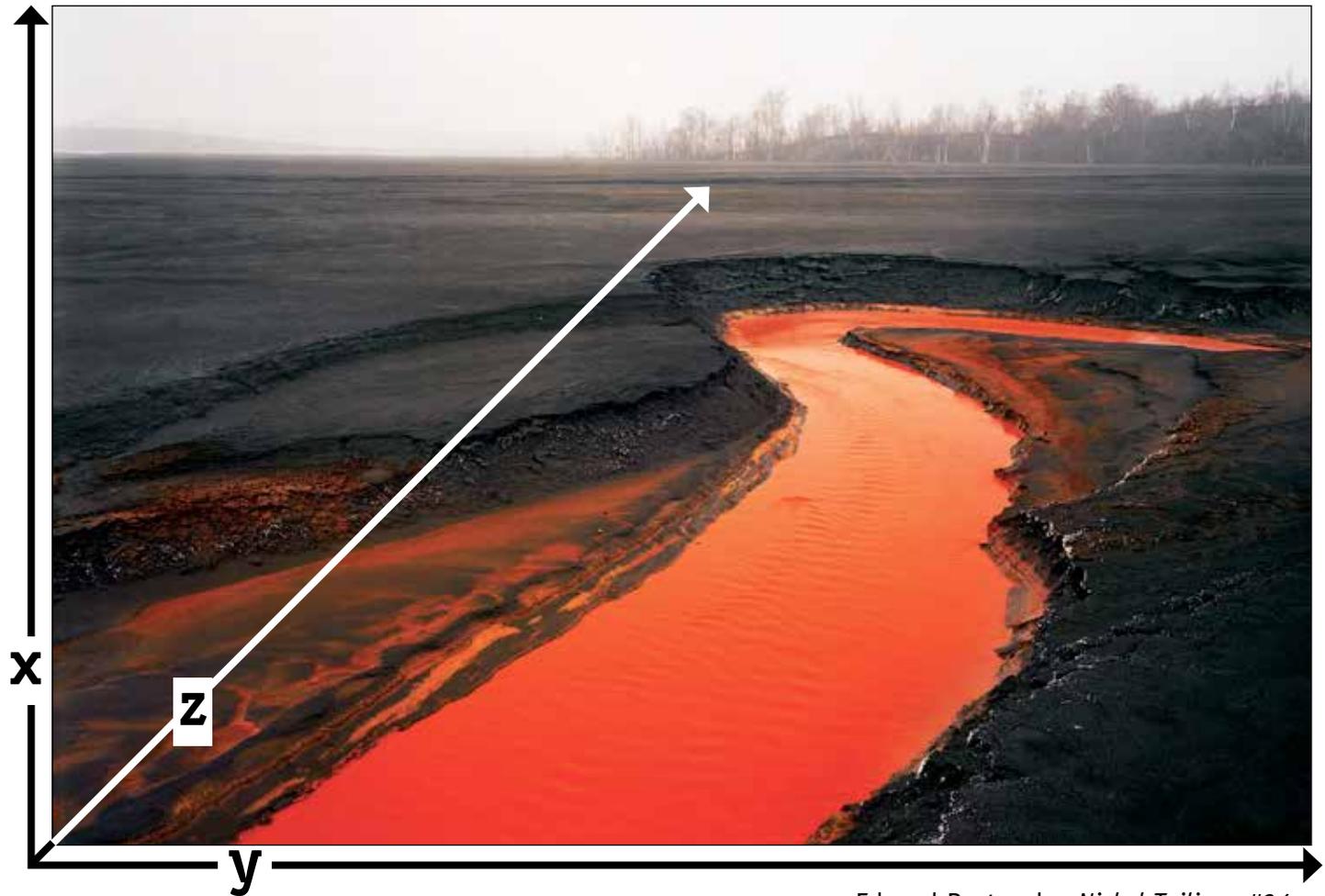
Spatiality

- Space affects our actions and interactions. It is a powerful cultural signifier.
- People use **PROXIMITY** to show intimacy or emotional distance, or a person might face someone or turn away.
- Dennis Stock's photo of James Dean in Times Square isolates the subject and make a powerful statement about loneliness and the city.

Dennis Stock, *James Dean, Times Square* (1955)

Space and axes

- Compositions are built within a **FRAME**.
- The proportion of the frame is crucial to the character of a composition.
- The sides of the frame form the **X AXIS** (vertical) and **Y AXIS** (horizontal).
- Artists and photographers use perspective to exploit the **Z AXIS**, creating the illusion of three dimensions. A gentle **S-CURVE** achieves this.
- Film makers exploit the z axis through perspective, but also by moving the camera to move into the frame.



Edward Burtynsky, *Nickel Tailings #34*



Ansel Adams, *The Tetons and the Snake River* (1942)



Ansel Adams, *Farm, farm workers, Mt. Williamson in background*, Manzanar Relocation Center, California.

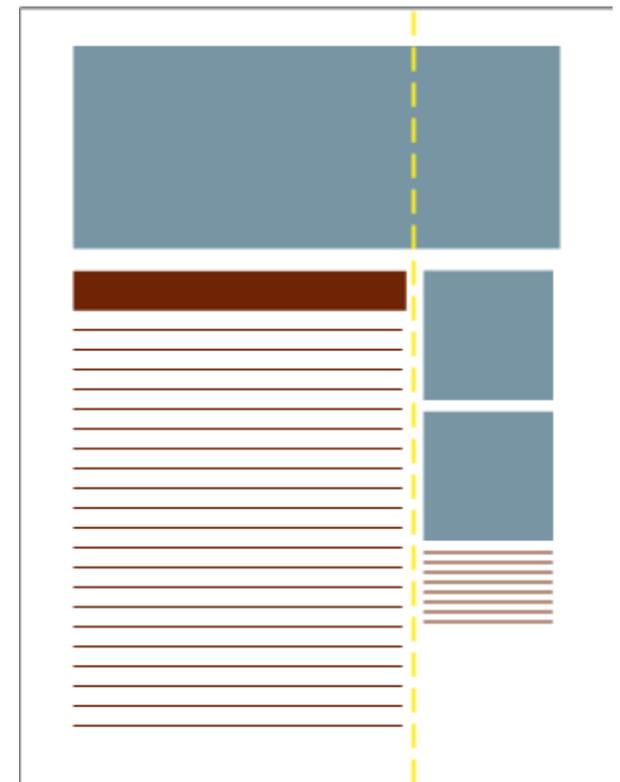
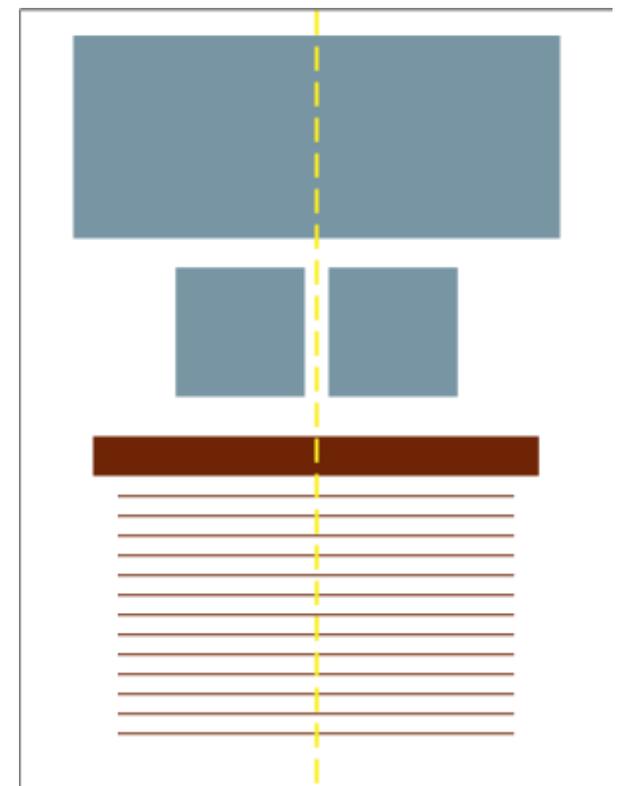


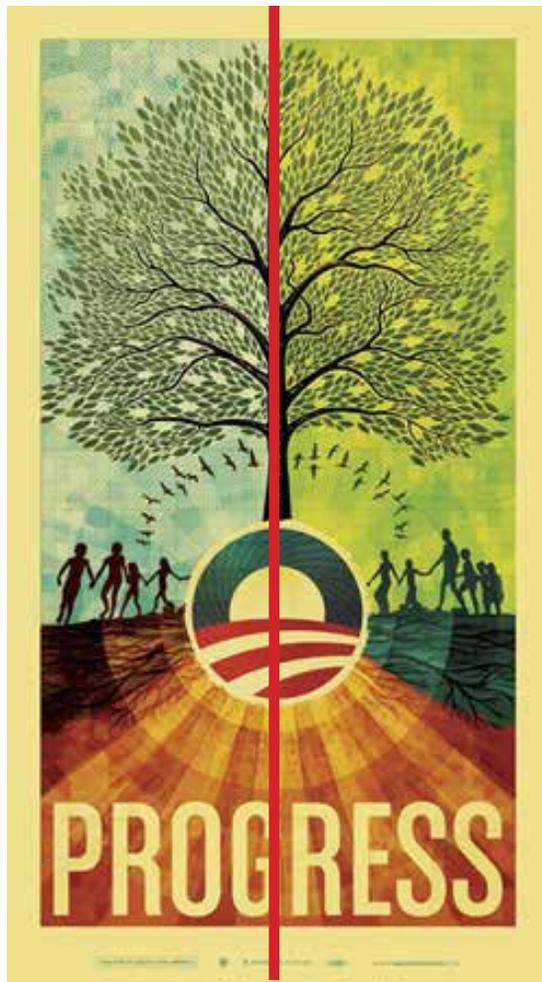
Ansel Adams, *Church and Road*,
Bodega, California (c. 1953)

Balance

Designers arrange visual elements around a **DESIGN AXIS** using the principles of balance, formal and informal. **BALANCE** is the sense that a composition hangs together well and is at rest with itself.

- **FORMAL BALANCE** (top), also called symmetrical or axial balance, arranges equivalent shapes and forms on either side of a vertical design axis in the center of the composition. Each side is a mirror image of the other in shape and form.
- **INFORMAL BALANCE** moves the design axis off center and arranges visual elements in an asymmetrical design. The composition still feels balanced.





FORMAL BALANCE conveys a strong sense of unity and formality. It can seem conventional, but in the right hands, it can be exciting.

An advertisement for M&M's Valentine's Day. At the top, a red ribbon banner reads "LIFE IS SWEETER ON M&M'S". Below it, two M&M's characters, Red and Green, are shown from behind on a beach at sunset. The Red character has "U melt my heart" on its back, and the Green character has "U crack me up" on its back. Below the characters, the text reads: "This Valentine's Day, get a little personal. Personalized M&M'S® make the day sweeter." There are three circular icons: "I Love U Brian" with a photo of a couple, "My Heart Skips 4U" with a photo of a couple, and the M&M's logo. Below the icons, the text says: "Show off your sweet side with words and faces on MY M&M'S®. Go to mymms.com and upload a photo, write your personal message of love, and watch their heart melt. Only online at mymms.com/cupid9". At the bottom, there is a "FREE BONUS BAG" offer for personalized M&M'S orders. The M&M's logo is in the bottom right corner.







INFORMAL BALANCE adds a dynamic quality to a composition, but it can be elegant, too.

