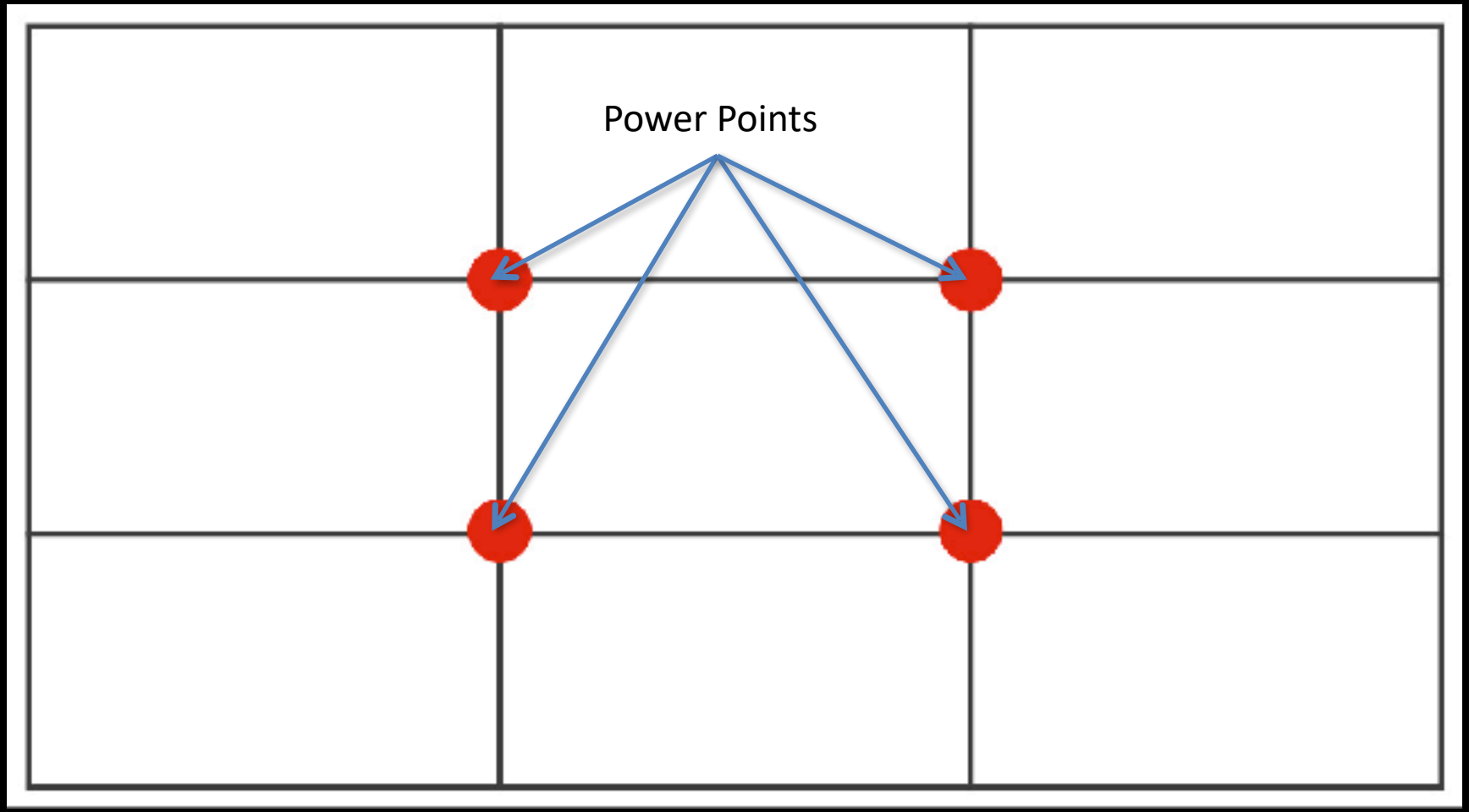
Beyond the Rule of Thirds

Chris Dixon


Power Points

Pros and Cons

Pros	Cons
Easy to use	Weak compositional guideline
It creates visual harmony and equal weighting in an image.	Can become repetitive
The “sweet spots” are a little larger and easy to find and align.	It can feel too divided in some instances – depending on the image – or too perfect, because of the forced symmetry.
Good for simple compositions, i.e. a single object or portrait	It tends to be used by default stopping us thinking about other compositional elements

But don’t forget it’s not a Rule

So where did it come from?

First reference is by John Thomas Smith in 1797

In his book Remarks on Rural Scenery, Smith quotes a 1783 work by Sir Joshua Reynolds, in which Reynolds discusses, in unquantified terms, the balance of dark and light in a painting. John Thomas Smith then continues with an expansion on the idea, naming it the "Rule of thirds"

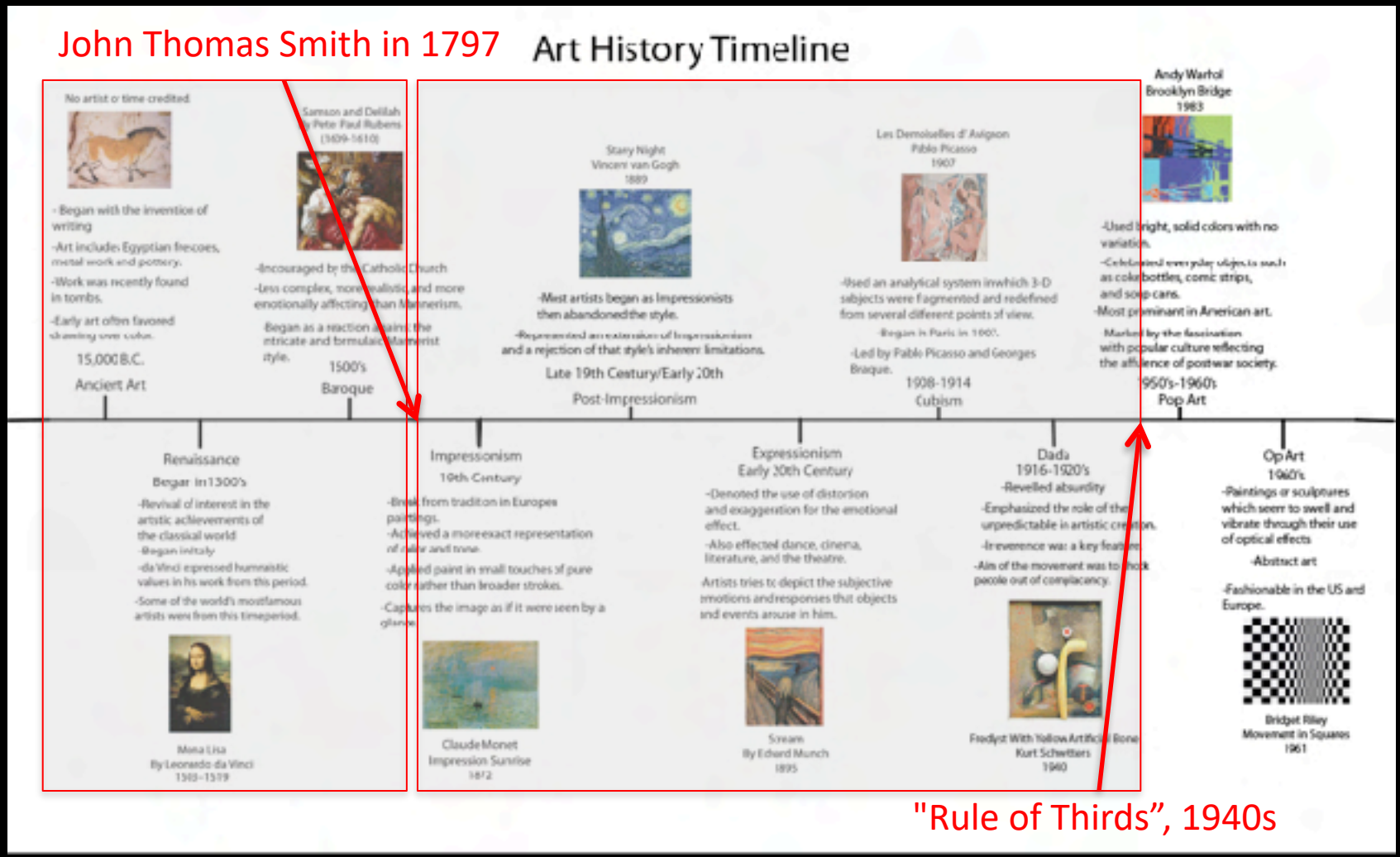
Smith talked about proportion in all aspects of an image, not just the division of the overall space as we know the current rule, and he never indicated strong or focal points or suggested the use of a grid to determine placement.

In fact, the term "Rule of Thirds", as used today, doesn't reappear until the 1940's and then only in amateur photographic literature.

The Rule of Thirds was pushed by Kodak to simplify the Golden Section for Americans.

But what did Art teach us?

John Thomas Smith in 1797



"Rule of Thirds", 1940s

Cave Art

Types of animals to hunt?

Instructional?

Ug was here?

Egyptian Art

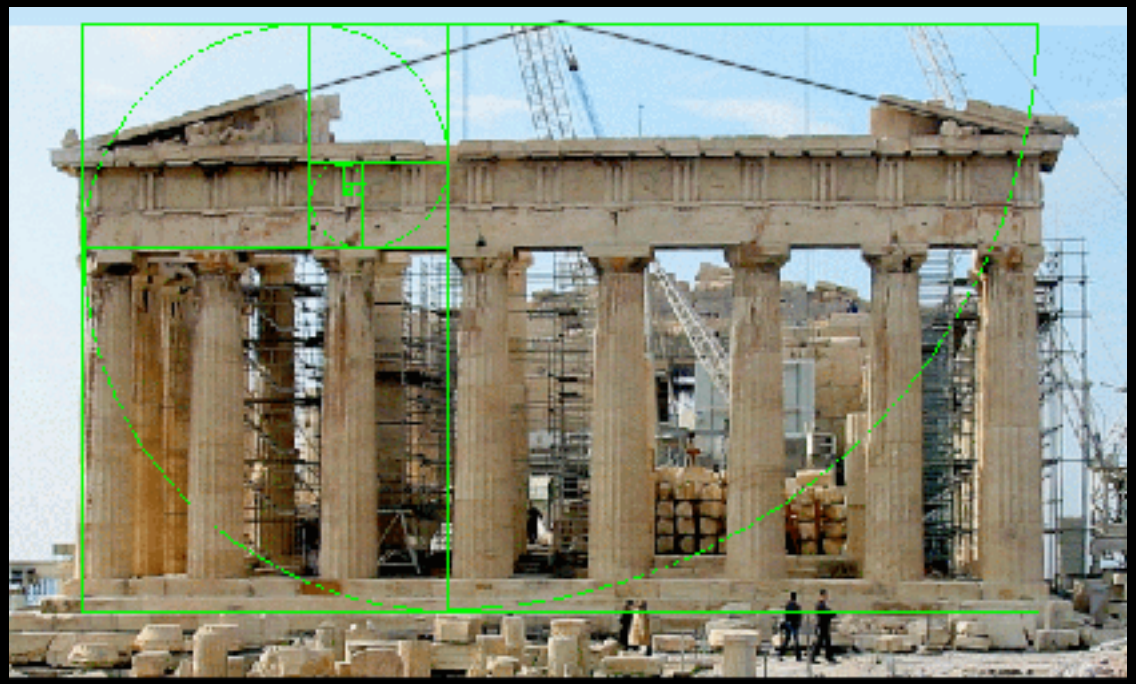
To render a subject in art was to give it permanence. Hence, ancient Egyptian art portrayed an idealised, non realistic, view of the world.

Greek Art

The main goal for Ancient Greek artists was to depict ultimate beauty and harmony.

What the Greeks did for us

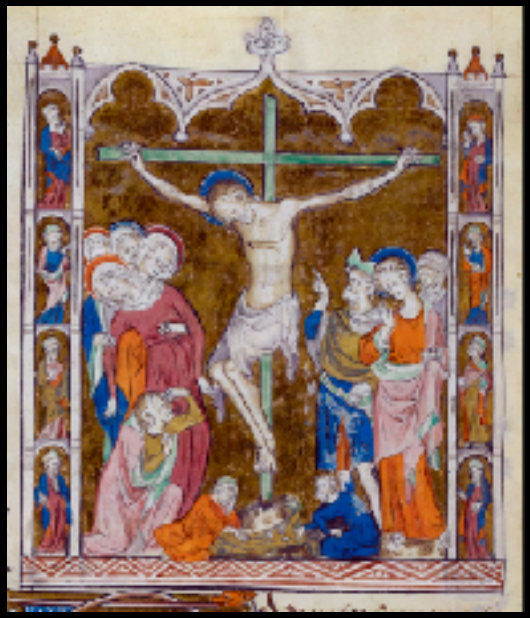
Phidias (500 B.C. - 432 B.C.) was a Greek sculptor and mathematician who is thought to have applied phi to the design of sculptures for the Parthenon. Plato (428 B.C. - 347 B.C.) considered the Golden ratio to be the most universally binding of mathematical relationships. Later, Euclid (365 B.C. - 300 B.C.) linked the Golden ratio to the construction of a pentagram.



Roman Art

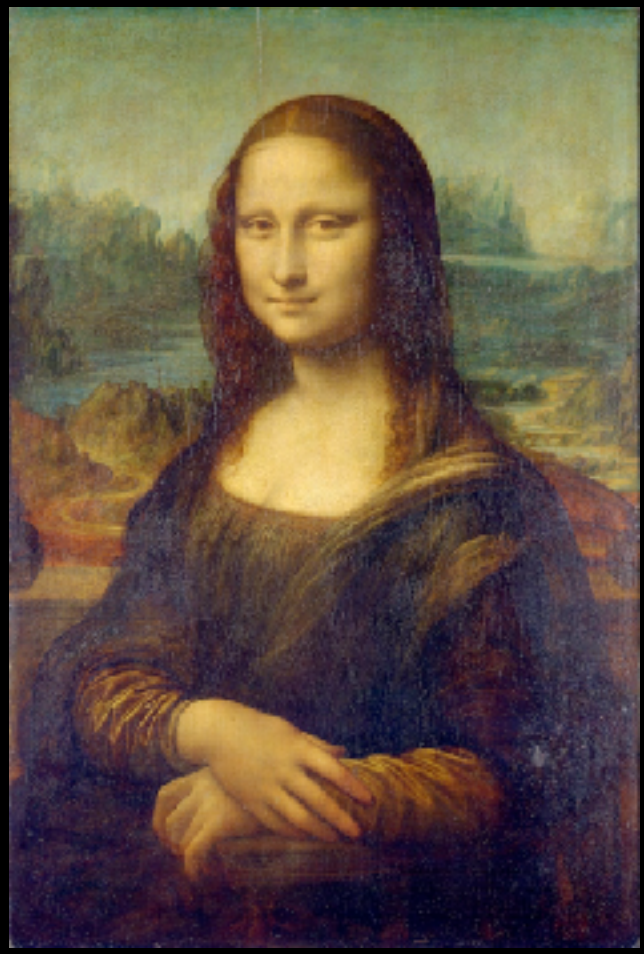
The main difference between Greek and Roman art was the purpose the art was meant to serve; the Greeks had a great appreciation for aesthetic beauty and the philosophical theory behind it. Whereas Roman art was used to illustrate wealth and so were more decorative.

Medieval Art



Medieval artists did not utilise linear perspective in their paintings not only because of a lack of mastery, but also because they placed less emphasis on realism. Their paintings were primarily religious and the focus was on glorifying religious figures.

Renaissance



Renaissance art was produced during the 14th, 15th, and 16th centuries in Europe under the combined influences of an increased awareness of nature, a revival of classical learning, and a more individualistic view of man.

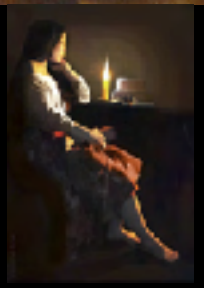
What the Renaissance brought to art

- **The use of perspective** – The first major treatment of the painting as a window into space appeared in the work of Giotto di Bondone, at the beginning of the 14th century.

- **Foreshortening** –Creating an illusion of depth.

- **Sfumato** – A fine art painting technique of blurring or softening of sharp outlines by subtle and gradual blending of one tone into another.

- **Chiaroscuro** – The effect of using a strong contrast between light and dark to give the illusion of depth or three-dimensionality.



Impressionism

- Open composition
- Emphasis on accurate depiction of light
- Ordinary subject matter
- Inclusion of movement
- Unusual visual angles.

Impressionism vs. Photography

The development of Impressionism can be considered partly as a reaction by artists to the challenge presented by photography.

Photography actually inspired artists to pursue other means of creative expression.

The Impressionists sought to express their perceptions of nature, rather than create exact representations.

Modernism

Modernism refers to a global movement in society and culture that from the early decades of the twentieth century sought a new alignment with the experience and values of modern industrial life.

A rejection of history and conservative values (such as realistic depiction of subjects); innovation and experimentation with form (the shapes, colours and lines that make up the work) with a tendency to abstraction; and an emphasis on materials, techniques and processes. Modernism has also been driven by various social and political agendas.

Umberto Boccioni

Elements of Composition

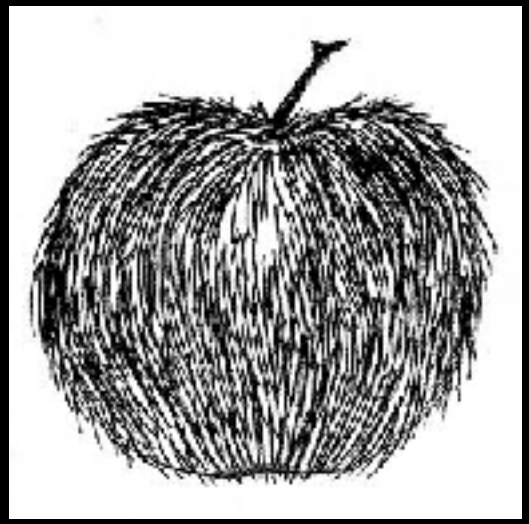
- **Line**
- **Shape**
- **Colour**
- **Texture**
- **Value**
- **Form**
- **Space**

Line — the visual path that directs the eye, enables it to move within the piece or creates movement

Shape — areas defined by edges within the piece, whether geometric or organic

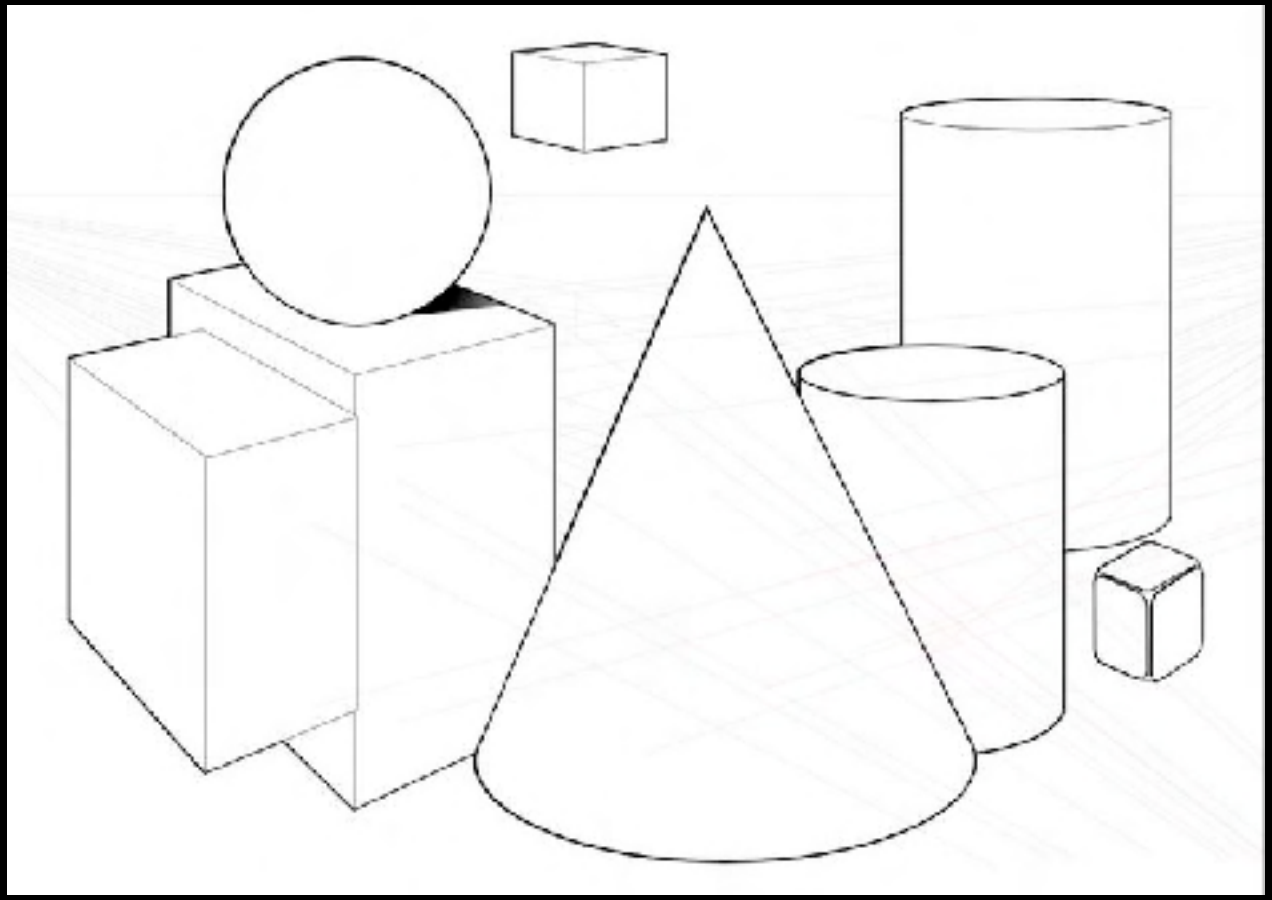
Colour — hues with their various values and intensities

Texture — surface qualities which translate into tactile illusions



Value — Shading used to emphasise form (**Chiaroscuro)**

Form — 3-D length, width, or depth

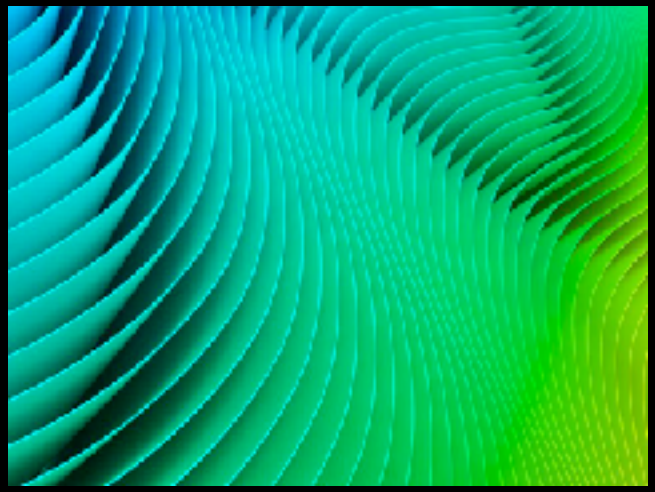


Space — the space taken up by (positive) or in between (negative) objects

Principles of Art

- **Rhythm**
- **Balance**
- **Emphasis** (contrast)
- **Proportion**
- **Gradation**
- **Harmony**
- **Variety**
- **Movement**

Rhythm — indicates movement, created by the careful placement of repeated elements in a work of art to cause a visual tempo or beat.



Balance — A way of combining elements to add a feeling of equilibrium or stability to a work of art. Major types are symmetrical and asymmetrical.

Whistler's Mother – an example of asymmetrical balance of tones

Cimabue, *Santa Trinita Madonna* – symmetrical balance

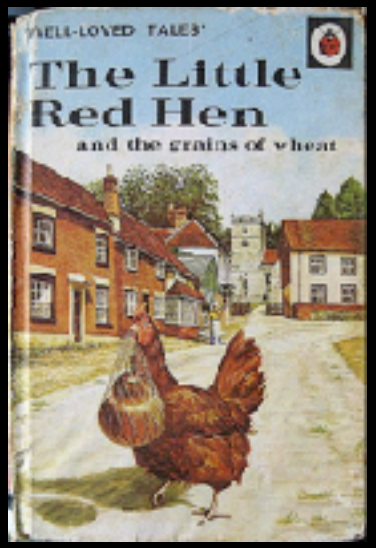
“Girl reading a Letter at an Open Window” by Jan Vermeer van Delft.
Harmonious balance of light/dark quantities

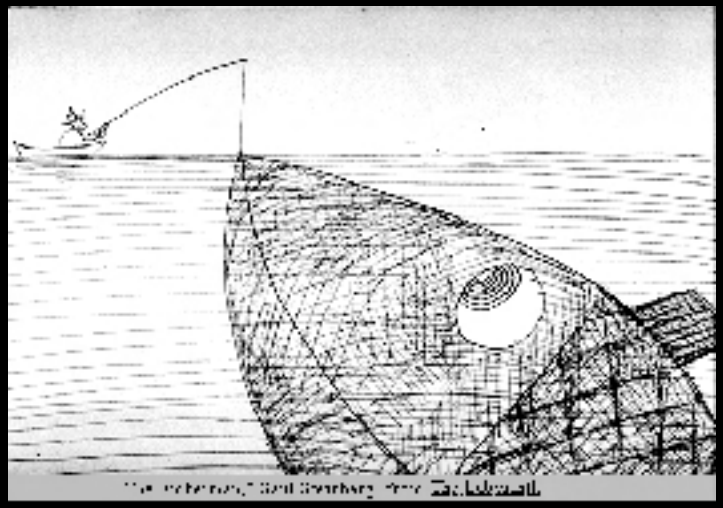
Emphasis (contrast) — A way of combining elements to stress the differences between those elements.

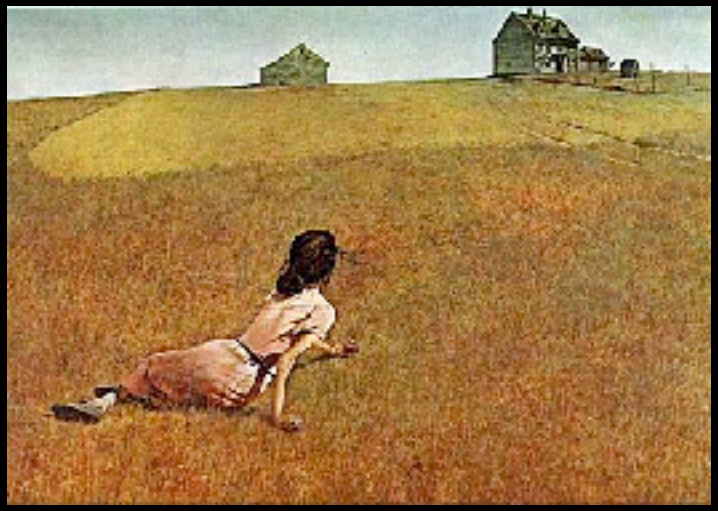
Jean-Honoré Fragonard, The Swing

Edouard Manet, Boating

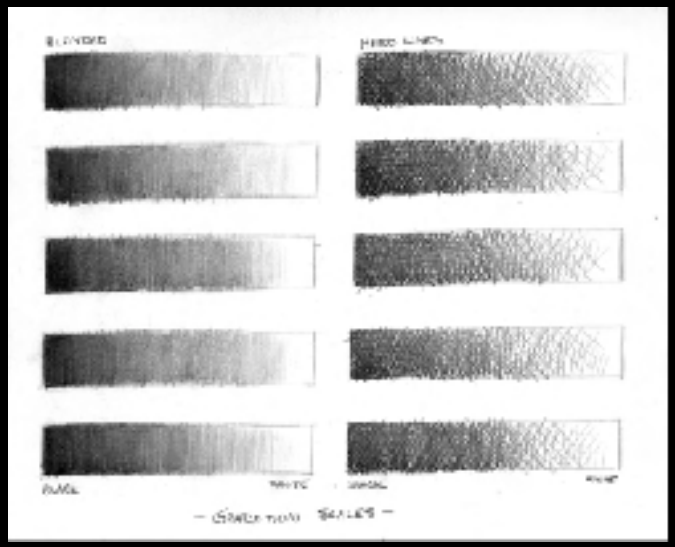
Proportion — refers to the relationship of certain elements to the whole and to each other.





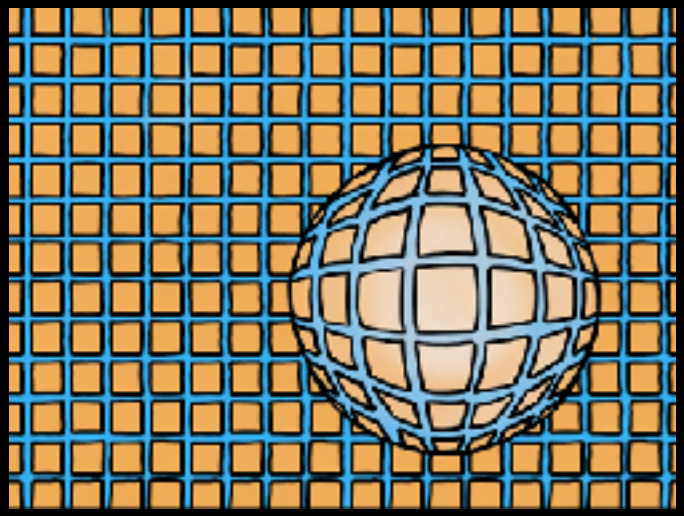


Gradation — using a series of gradual changes in those elements. (large shapes to small shapes, dark hue to light hue, etc.)

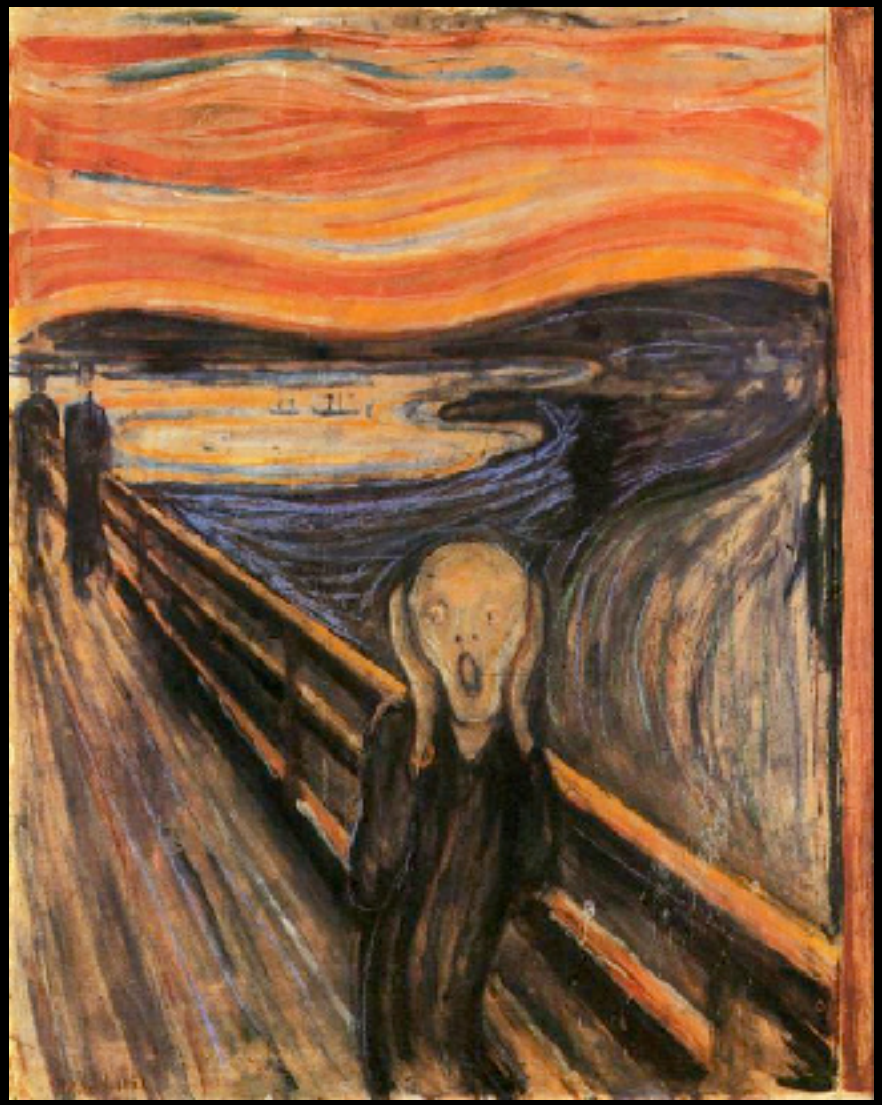


Harmony — A way of combining similar elements in an artwork to accent their similarities (achieved through use of repetitions and subtle gradual changes)

Variety — concerned with diversity or contrast. Variety is achieved by using different shapes, sizes, and/or colours in a work of art.



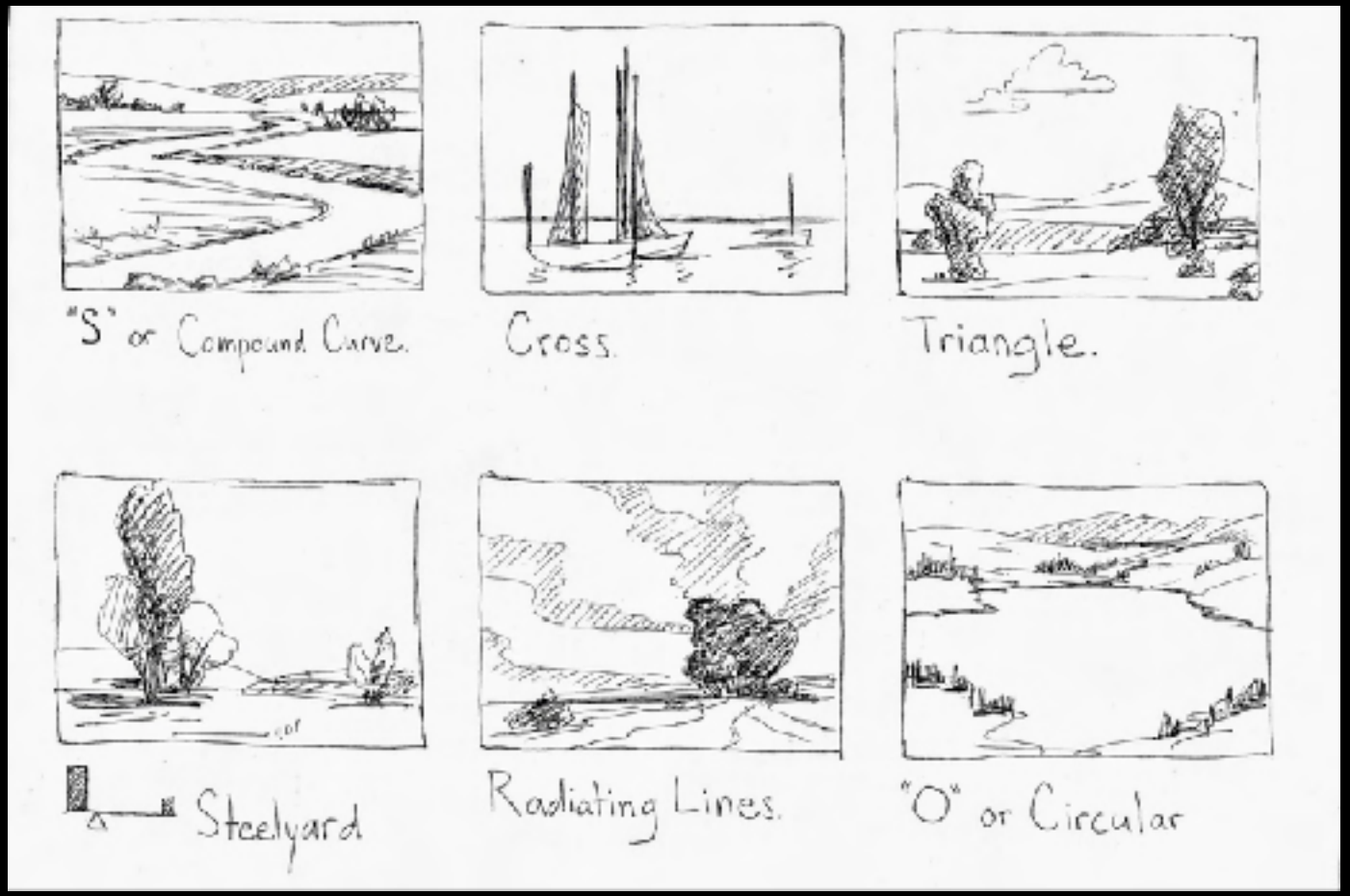
Movement — creating the look and feeling of action and to guide the viewer's eye throughout the work of art.



So what is composition?

- Composition is a harmonious (balanced) combination of elements in the frame.
- Composition is the harmony of light and shadow.
- Composition is the attitude and understanding of the world expressed with the help of light lines, spots and forms. It is like harmony of notes in music, like rhyme in poetry and rhythm in dance.
- The visualisation of a composition determines the personality of the artist.

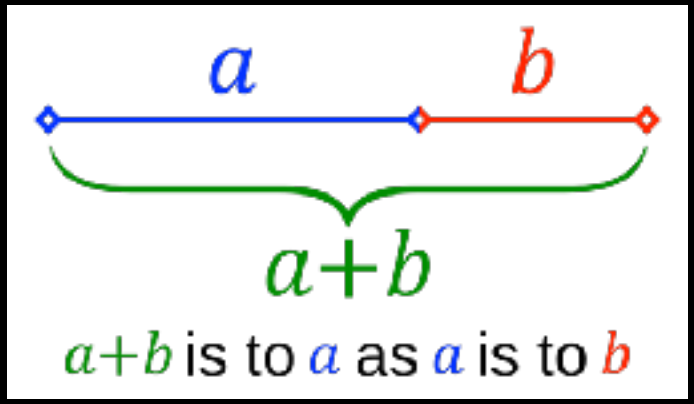
Some examples of composition



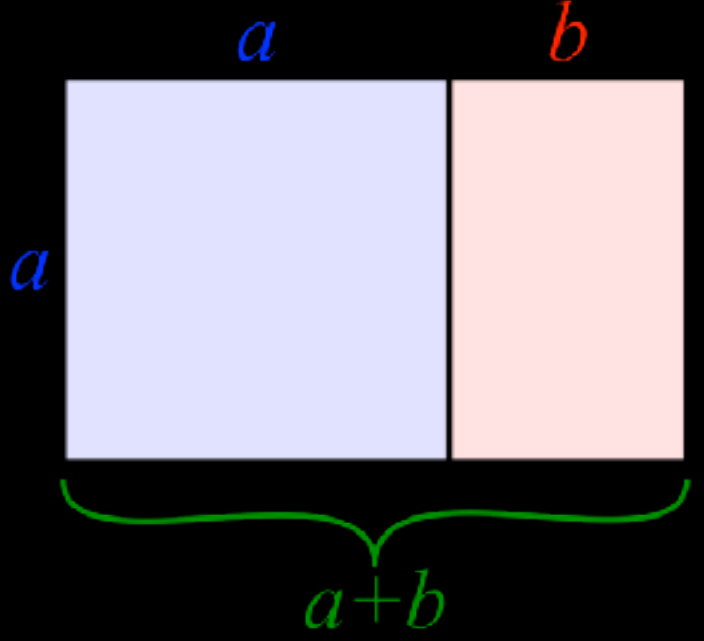
Some other compositional aids that art taught us

Golden Ratio 1.6180339887…..

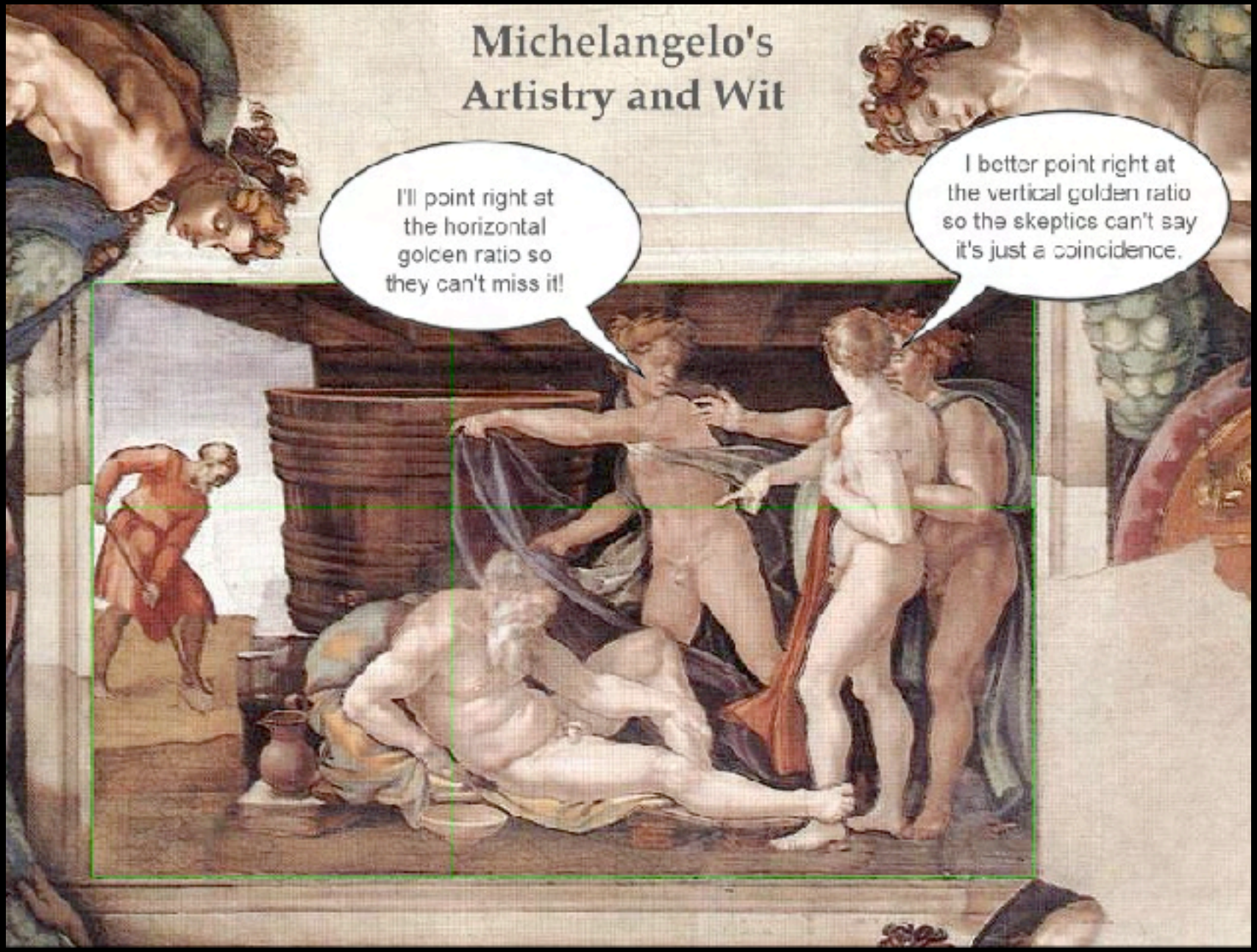
The golden ratio has been claimed to have held a special fascination for at least 2,400 years, although without reliable evidence.



A golden rectangle with longer side a and shorter side b, when placed adjacent to a square with sides of length a, will produce a similar golden rectangle with longer side a + b and shorter side a. This illustrates the relationship .

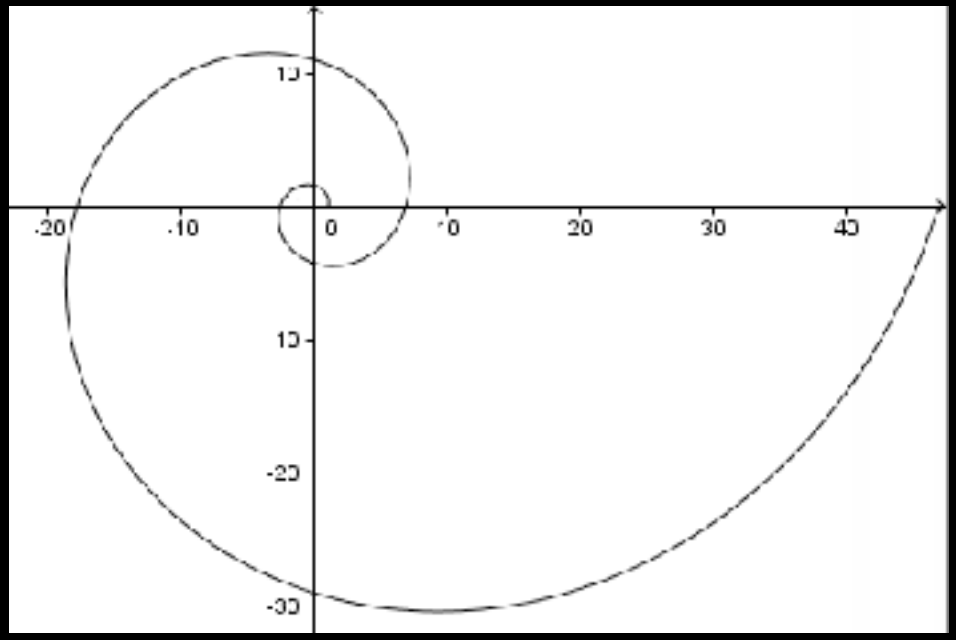


Michelangelo's Artistry and Wit



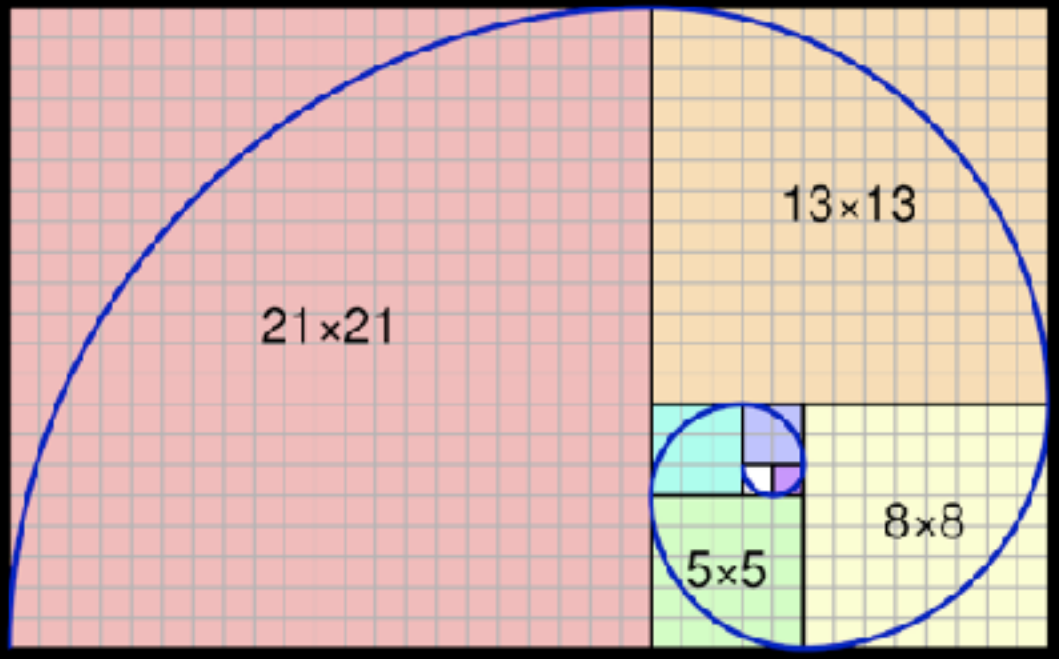
Golden Spiral

The Golden Spiral is a special case of the logarithmic spiral.
We can write the general logarithmic spiral as a function in polar coordinates using t as follows:
$r(t) = ae^{t \cot b}$



Fibonacci Spiral (1,1,2,3,5,8,13,21….)

The Fibonacci spiral: an approximation of the golden spiral created by drawing circular arcs connecting the opposite corners of squares in the Fibonacci tiling; this one uses squares of sizes 1, 1, 2, 3, 5, 8, 13 and 21.



Golden Spiral vs Fibonacci Spiral

The mathematics of the golden ratio and of the Fibonacci sequence are intimately interconnected. The Fibonacci sequence is:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, ...

A closed form expression for the Fibonacci sequence involves the golden ratio:

$$F(n) = \frac{\varphi^n - (1-\varphi)^n}{\sqrt{5}} = \frac{\varphi^n - (-\varphi)^{-n}}{\sqrt{5}}.$$

The golden ratio is the limit of the ratios of successive terms of the Fibonacci sequence (or any Fibonacci-like sequence), as shown by Kepler:[80]

$$\lim_{n\to\infty} \frac{F_{n+1}}{F_n} = \varphi.$$

In other words, if a Fibonacci number is divided by its immediate predecessor in the sequence, the quotient approximates φ; e.g., 987/610 ≈ 1.6180327868852. These approximations are alternately lower and higher than φ, and converge to φ as the Fibonacci numbers increase, and:

$$\sum_{n=1}^{\infty} |F_n\varphi - F_{n+1}| = \varphi.$$

More generally:

$$\lim_{n\to\infty} \frac{F_{n+a}}{F_n} = \varphi^a,$$

where above, the ratio of consecutive terms of the Fibonacci sequence, a a case when $a = 1$.

Furthermore, the successive powers of φ obey the Fibonacci recurrence:

$$\varphi^{n+1} = \varphi^n + \varphi^{n-1}.$$

This identity allows any polynomial in φ to be reduced to a linear expression. For example:

$$\begin{aligned} 3\varphi^3 - 5\varphi^2 + 4 &= 3(\varphi^2 + \varphi) - 5\varphi^2 + 4 \\ &= 3[(\varphi - 1) + \varphi] - 5(\varphi + 1) + 4 \\ &= \varphi + 2 \approx 3.618. \end{aligned}$$

The reduction to a linear expression can be accomplished in one step by using the relationship

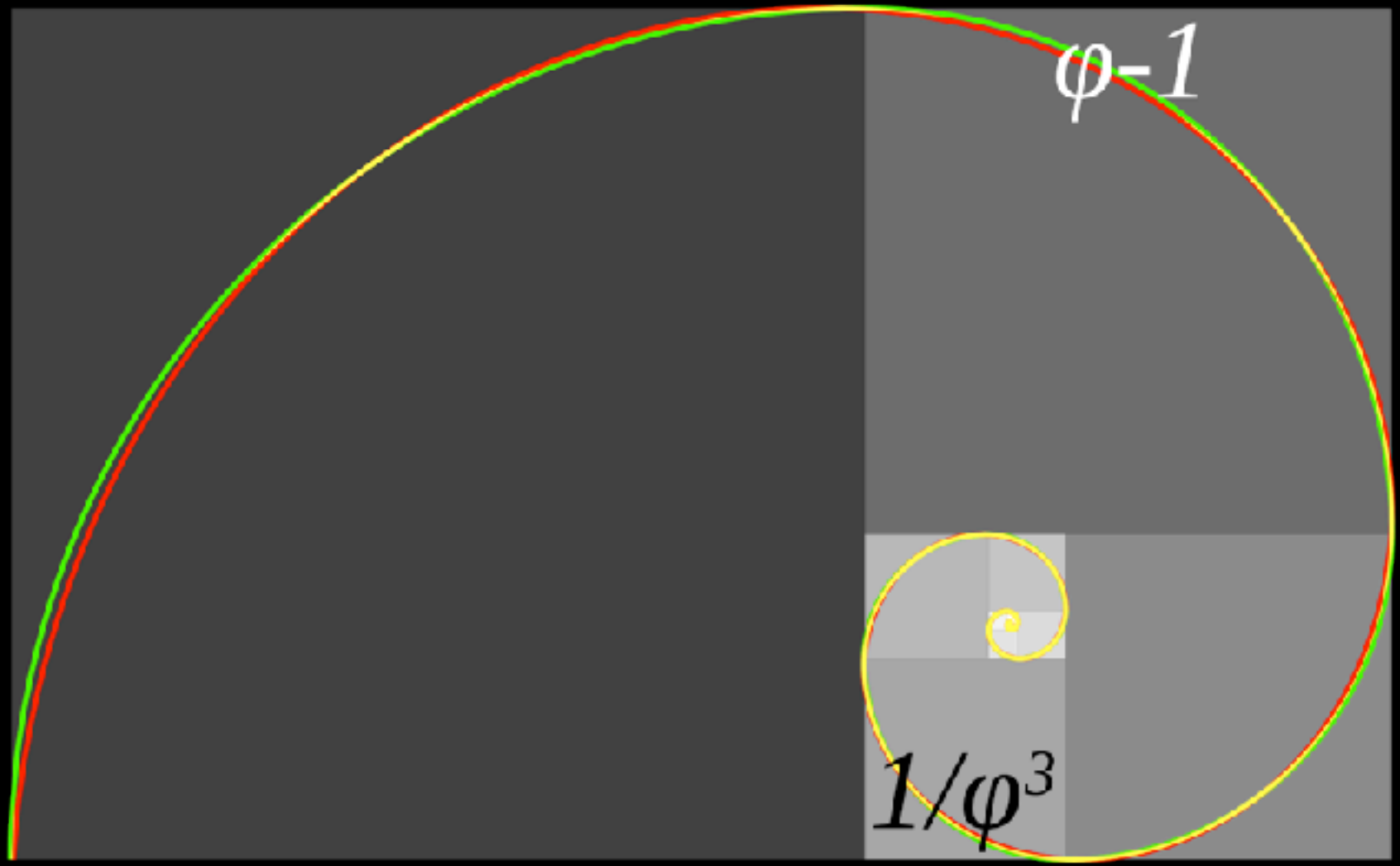
$$\varphi^k = F_k\varphi + F_{k-1},$$

where F_k is the kth Fibonacci number.

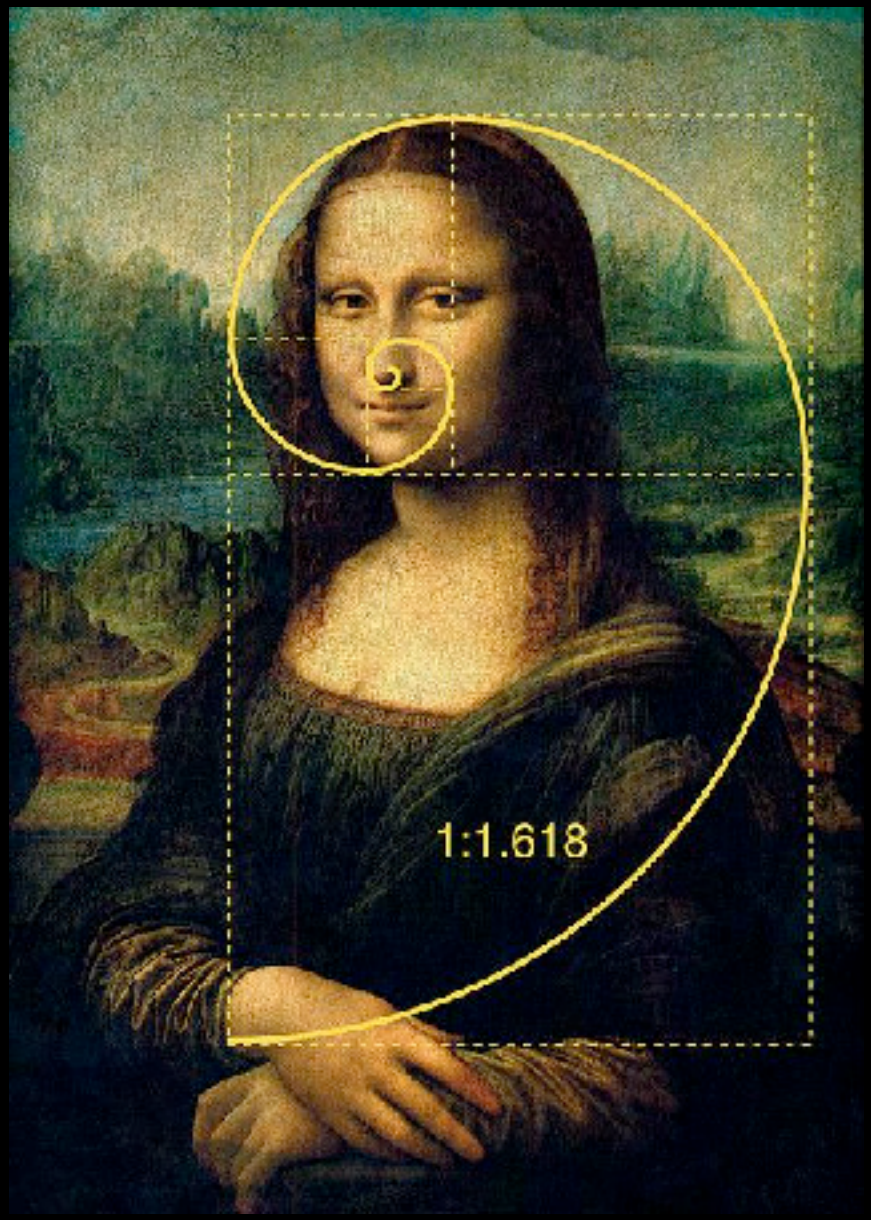
However, this is no special property of φ, because polynomials in any solution x to a quadratic equation can be reduced in an analogous manner, by applying

$$x^2 = ax - b$$

for given coefficients a, b such that x satisfies the equation. Even more generally, any rational function (with rational coefficients) of the root of an irreducible nth-degree polynomial over the rationals can be reduced to a polynomial of degree $n - 1$. Phrased in terms of field theory, if α is a root of an irreducible nth-degree polynomial, then $\mathbb{Q}(\alpha)$ has degree n over $\mathbb{Q}$, with basis $\{1, \alpha, \ldots, \alpha^{n-1}\}$.

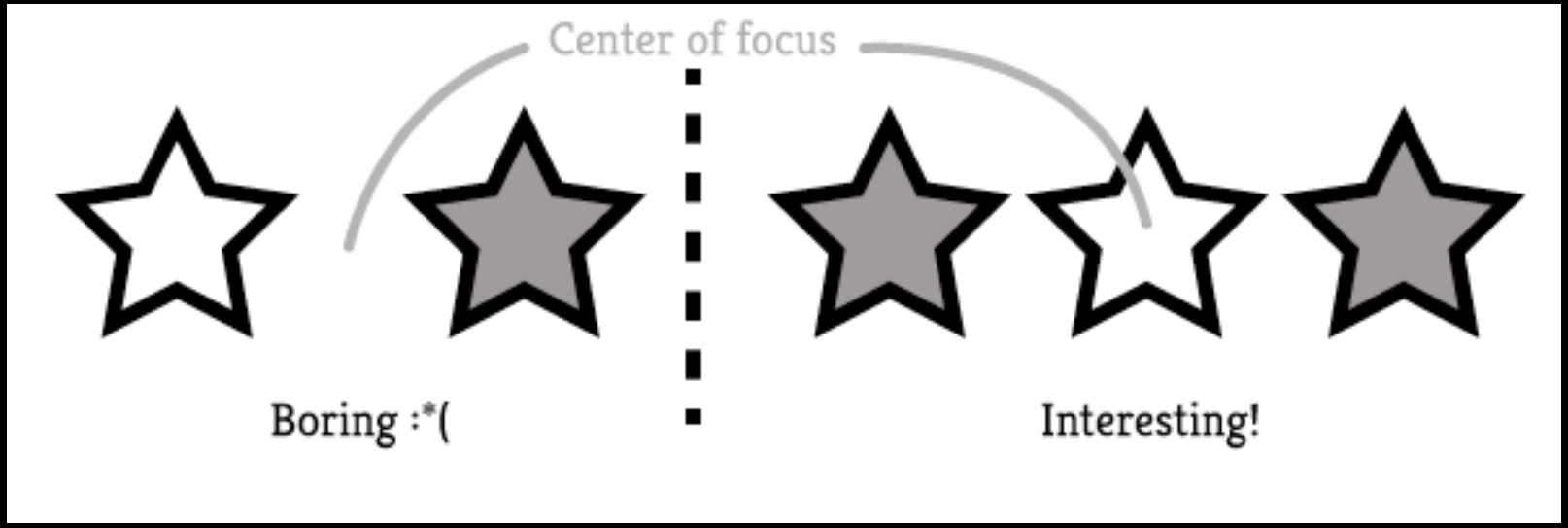


Approximate and true golden spirals: the green spiral is made from quarter-circles tangent to the interior of each square, while the red spiral is a golden spiral, a special type of logarithmic spiral. Overlapping portions appear yellow.


1:1.618

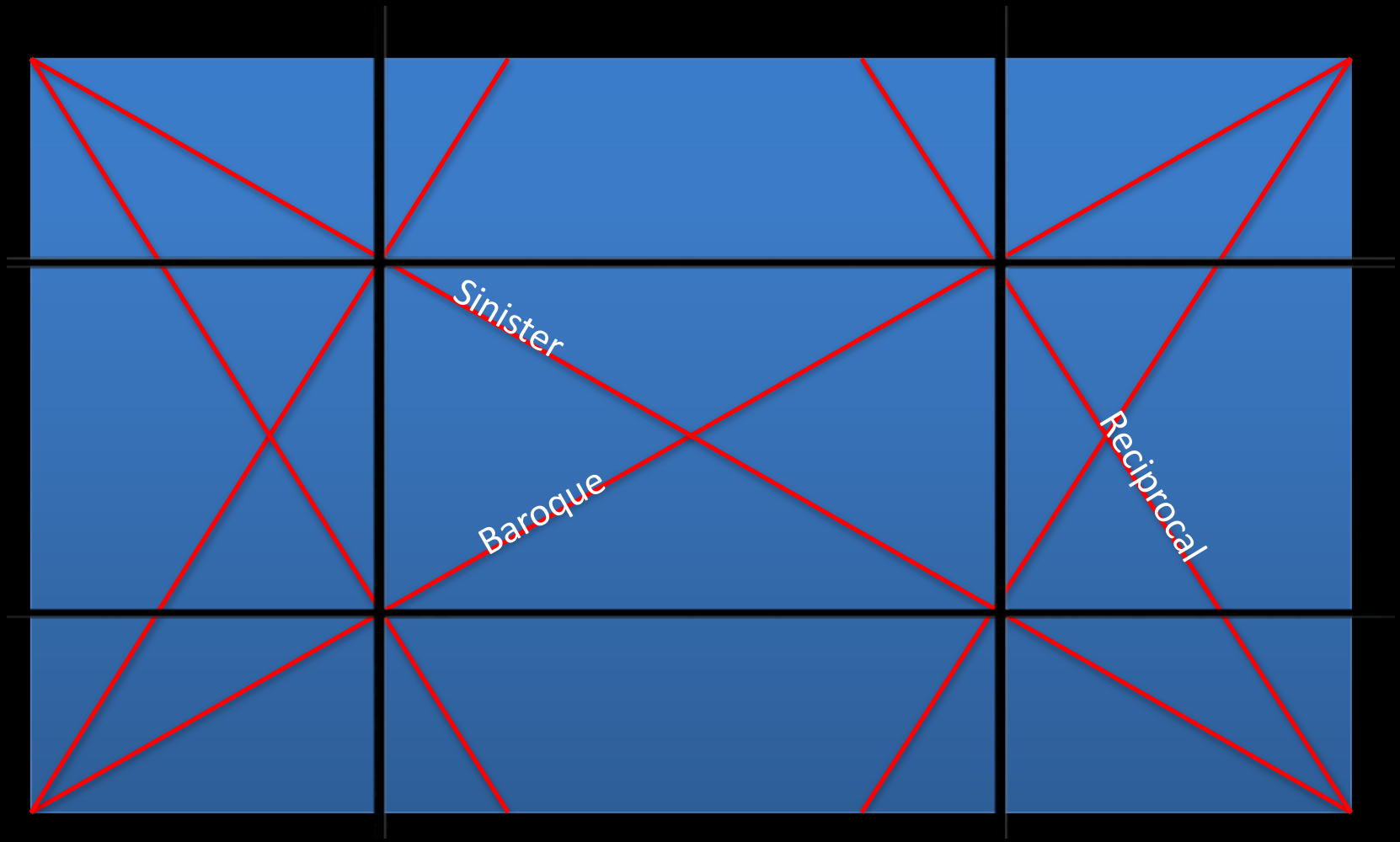
Rule of Odds

The Rule of Odds states that scenes composed of odd number of subjects are more visually pleasing than scenes composed of even numbers.



3 is a magic number

Dynamic Symmetry

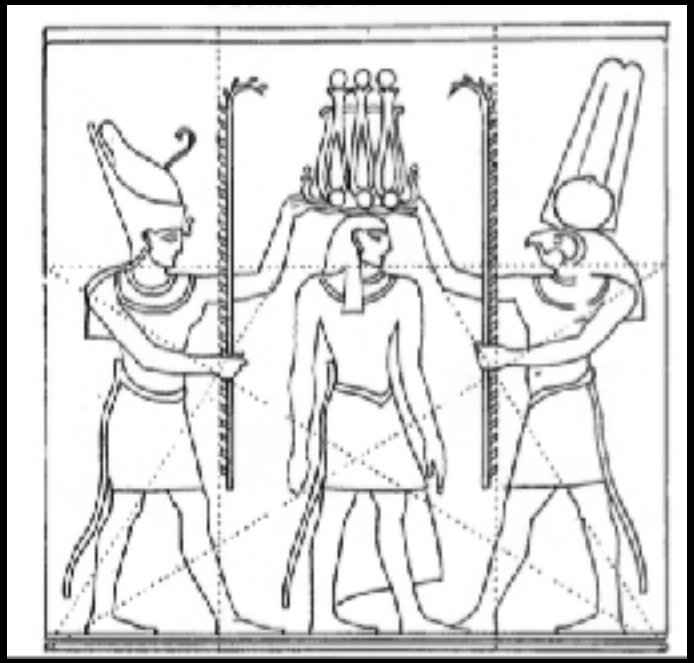


History of Dynamic Symmetry

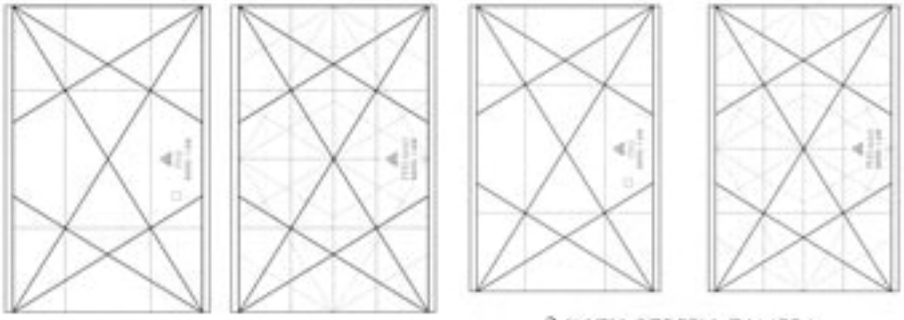
- **Jay Hambidge** (1867–1924) was a Canadian-born American artist who formulated the theory of "dynamic symmetry", a system defining compositional rules, which was adopted by several notable American and Canadian artists in the early 20th century.

- Careful examination and measurements of classical buildings in Greece, among them the Parthenon, the temple of Apollo at Bassæ, of Zeus at Olympia and Athenæ at Ægina, prompted him to formulate the theory of "dynamic symmetry" as demonstrated in his works *Dynamic Symmetry: The Greek Vase* (1920)

- Art historian Michael Quick says Blake and Carpenter "used different methods to expose the basic fallacy of Hambidge's use of his system on Greek art—that in its more complicated constructions, the system could describe any shape at all.

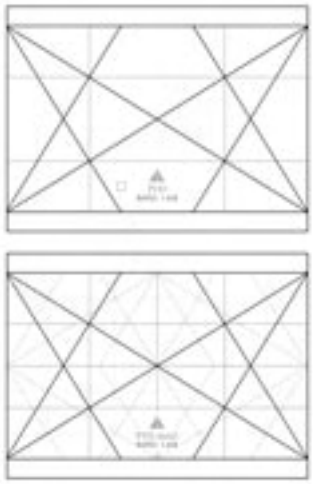


CANON OF DESIGN



3.2 INCH SCREEN CAMERA

3 INCH SCREEN CAMERA



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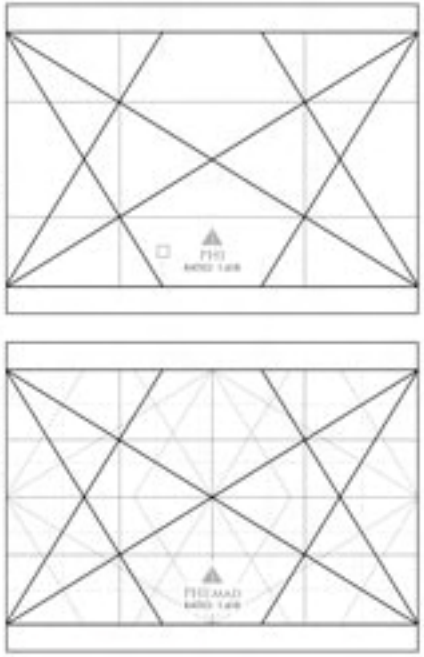
IPHONE 7 PLUS-4INCH SCREEN



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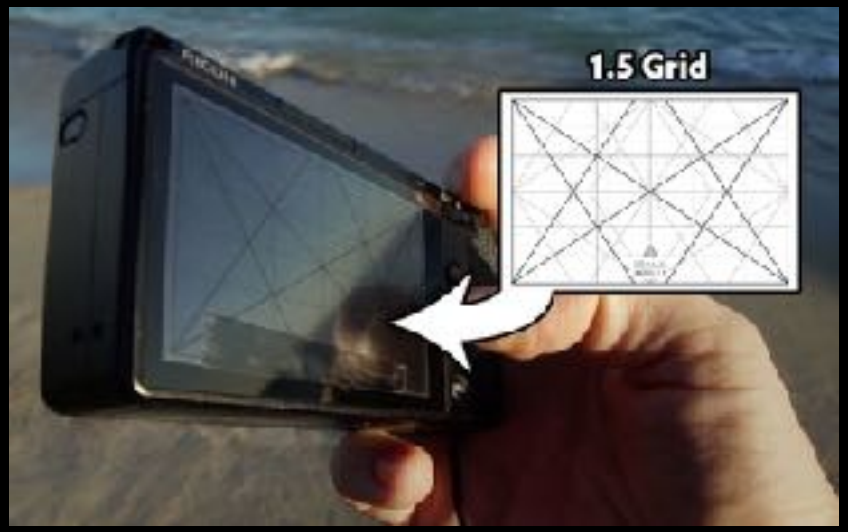
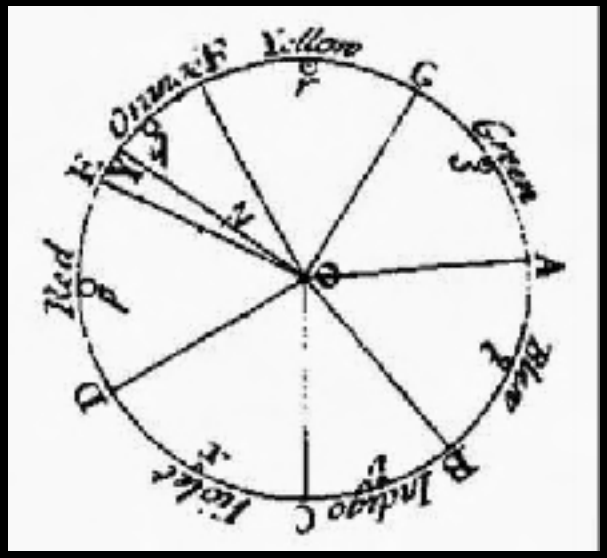
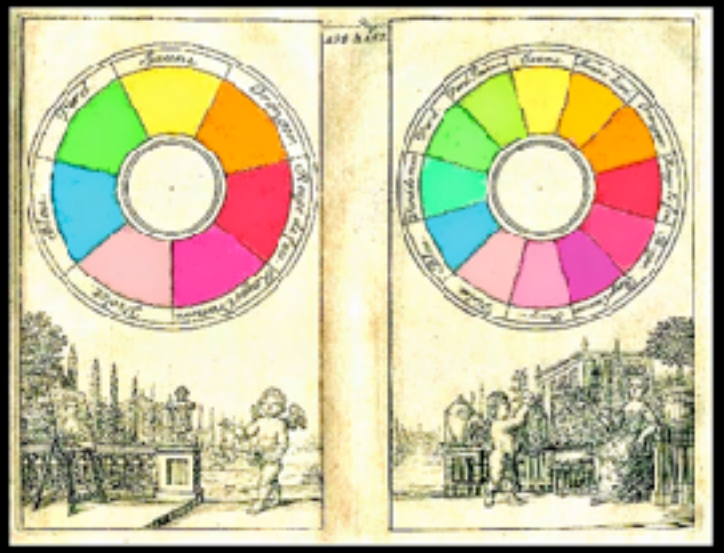


Colour wheel

1611, Aron Sigfrid Forsius's Colour Wheel

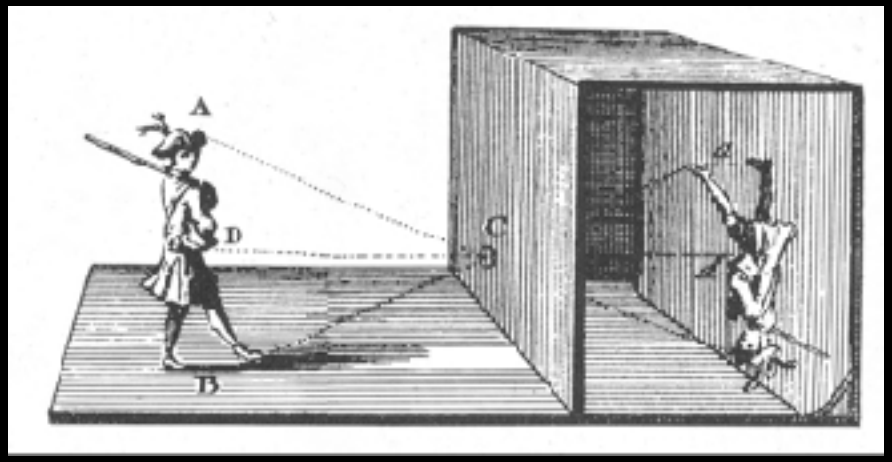


1672, Newton's Colour Wheel



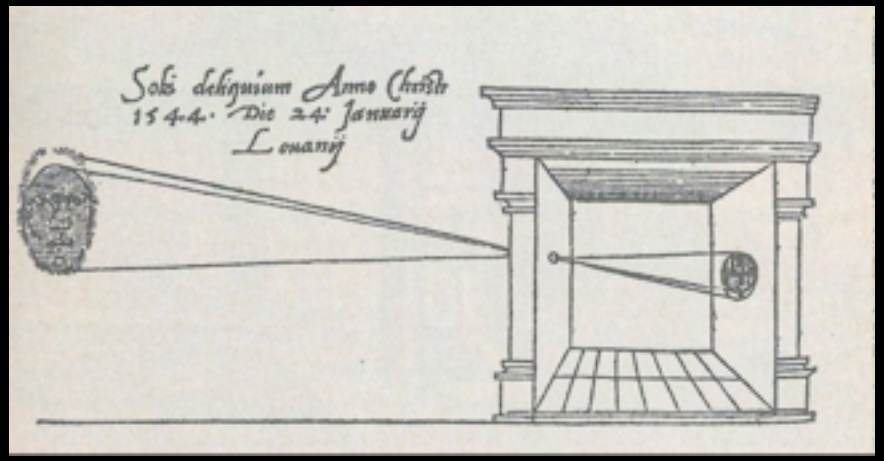
1708 Claude Boutet, Colour Wheel

Camera Obscura

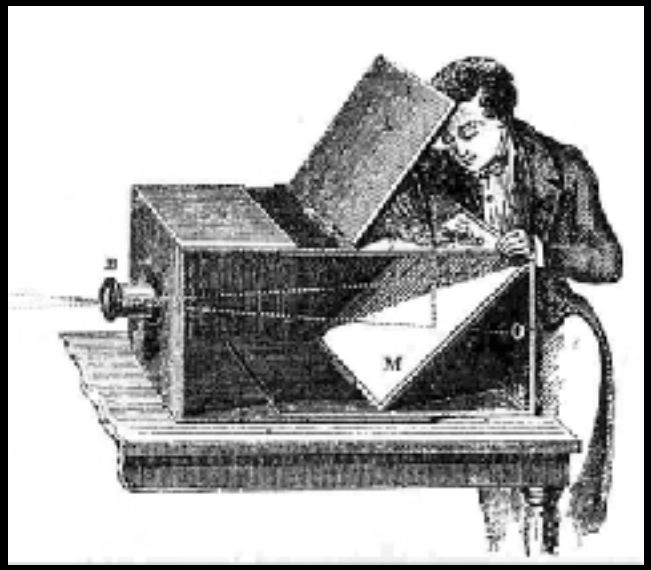


The earliest known written record of the camera obscura is to be found in Chinese writings called Mozi and dated to the 4th century BC

First published picture of camera obscura in Gemma Frisius' 1545 book De Radio Astronomica et Geometrica



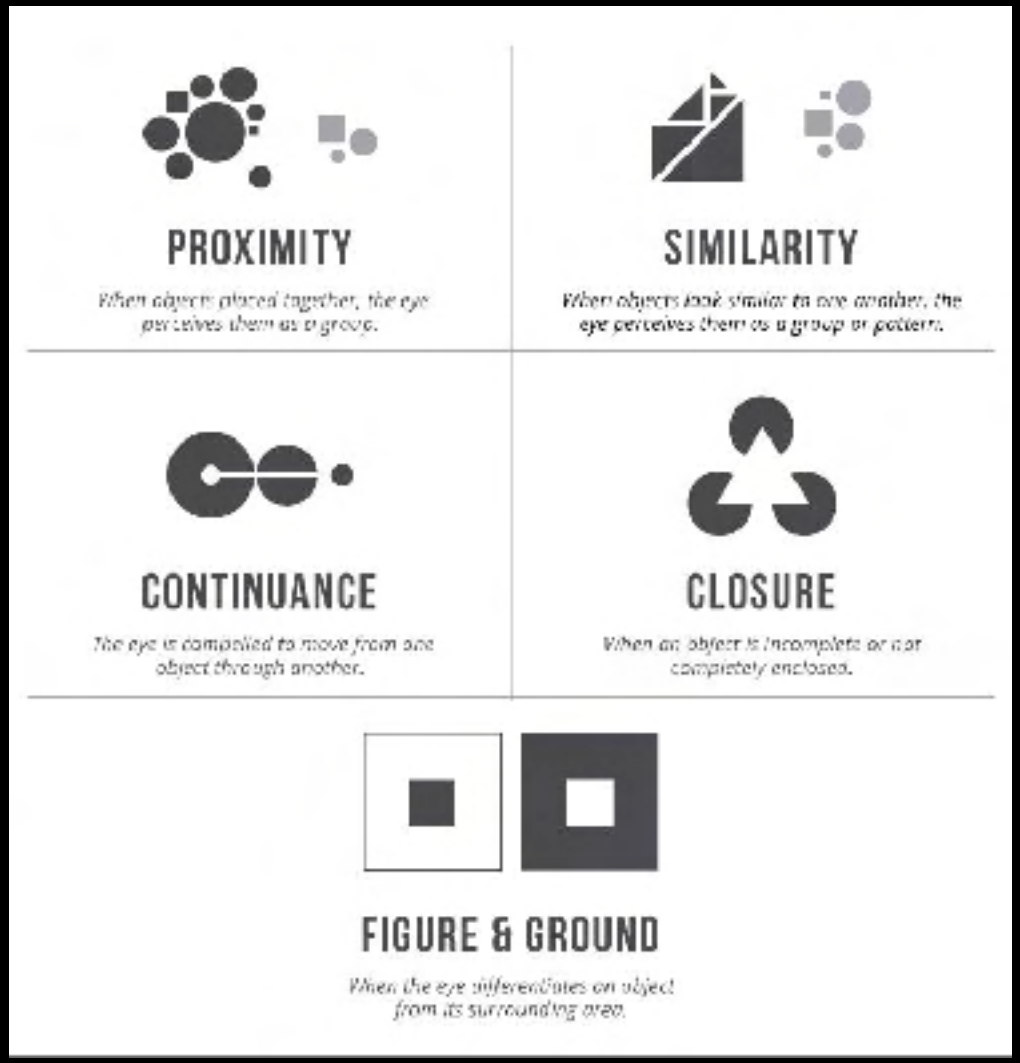
A 19th-century artist using a camera obscura to outline his subject



One what I took

Gestalt

Gestalt refers to theories of visual perception developed by German psychologists in the 1920s. These theories attempt to describe how people tend to organise visual elements into groups or unified wholes when certain principles are applied.



- *Principle of Similarity*
  The human eye finds that objects sharing visual characteristics such as shape, size, colour and texture, belong together. Patterns appear to create harmony, and a break in a pattern introduces a sense of dissonance.

- *Principle of Focal Points*
  Areas in a composition with points of interest, emphasis or difference will hold the viewers' attention better than if they were absent.

- *Principle of Parallelism*
  Elements that are parallel to each other appear to be more related to each other than other elements that are not.

- *Principle of Continuation*
  Our eyes follow things that have the least amount of interruption along paths, lines and curves, perceiving elements arranged along the way as being related to each other.

- *Principle of Symmetry and Order*
  Symmetry in a composition creates a sense of solidarity, order and balance, and we tend to seek out areas of symmetrical shapes.

- *Principle of Closure*
  The human eye and brain tend to see things as a whole, filling in missing information and gaps in an attempt to get closure. (We all remember that we are able to make sense of sentences that are written without vowels).

- *Principle of Proximity*
  Elements that are placed close together in a composition are seen as belonging together, creating a sense of warmth.

- *Principle of Common Fate*
  Elements that move, or appear to move, or even appear to be looking in the same direction, are perceived as related to each other. If there are two people looking in one direction and one in a different direction, the single person will be perceived as an outsider.

- *Principle of Uniform Connectedness*
  Elements of a composition that are visually connected in some way (by lines or curves) are seen to be more related to each other than to other elements. They also appear to be part of a group if they appear to be enclosed within a closed region.

- *Principle of Multi-stability (or Figure/ Ground)*

  The human eye tries to isolate figures from their backgrounds. If subjects are allowed to stand out from their backgrounds through silhouetting, using empty spaces or simple backgrounds, then they are clearly seen.

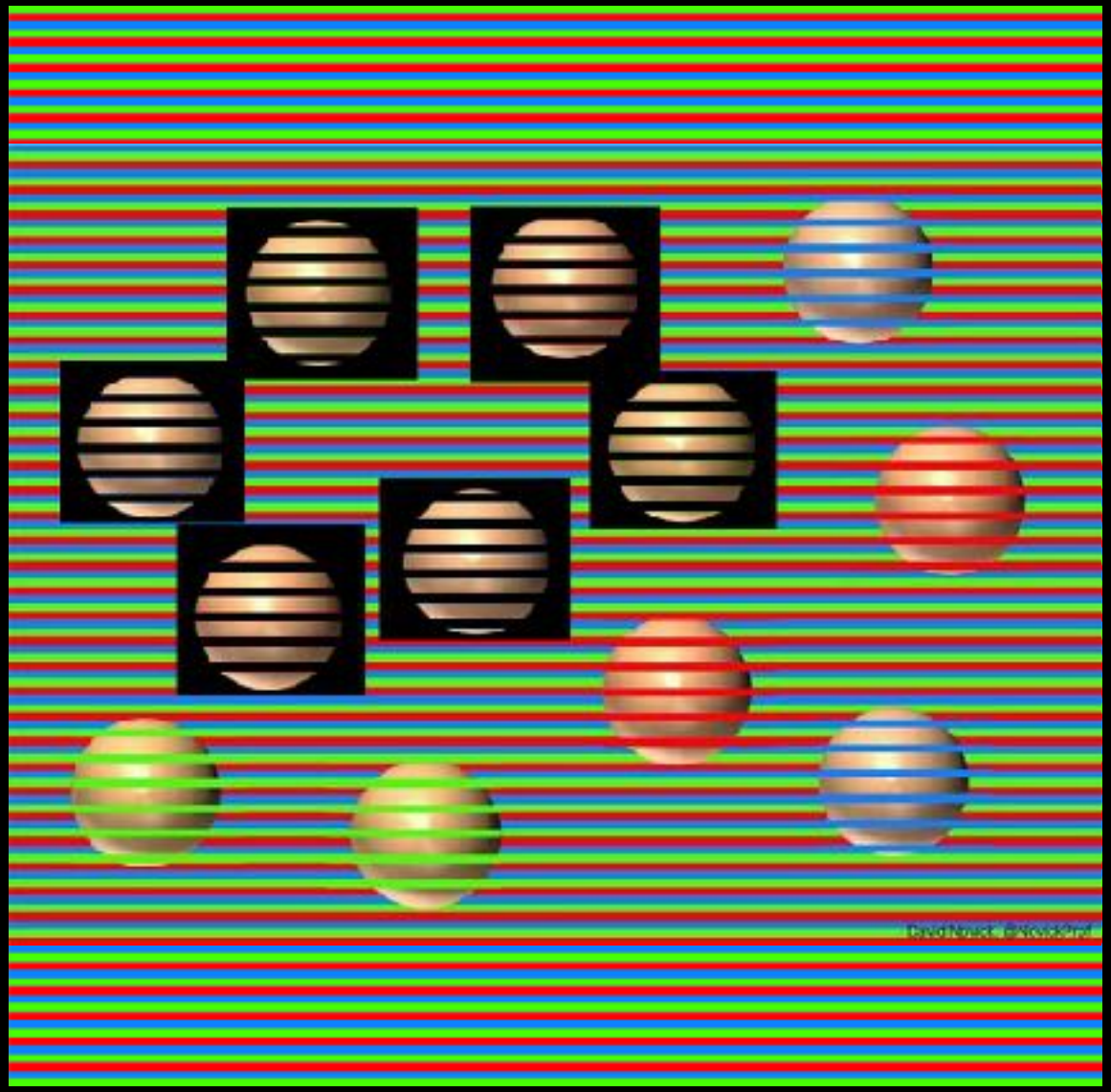
  If, as in some illusions (like the familiar vase/ face illusion) the figure and the background both depict a complimentary shape, the brain moves in an unstable fashion from seeing one or the other to interpret the shapes – it cannot see both at the same time.

Tea/Coffee

But the brain can play some tricks!

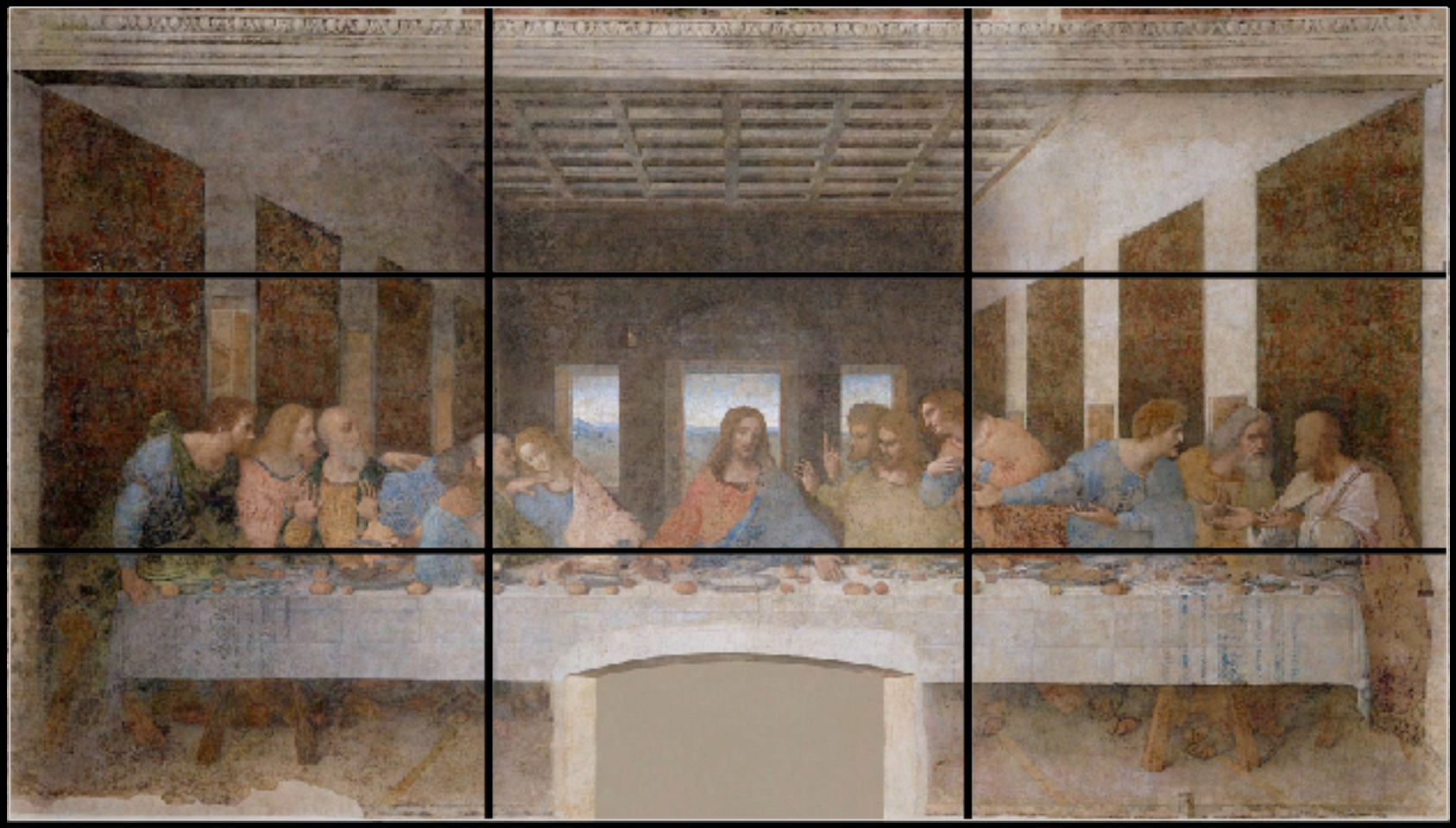

VisualFunHouse.com

These spheres are all the same colour

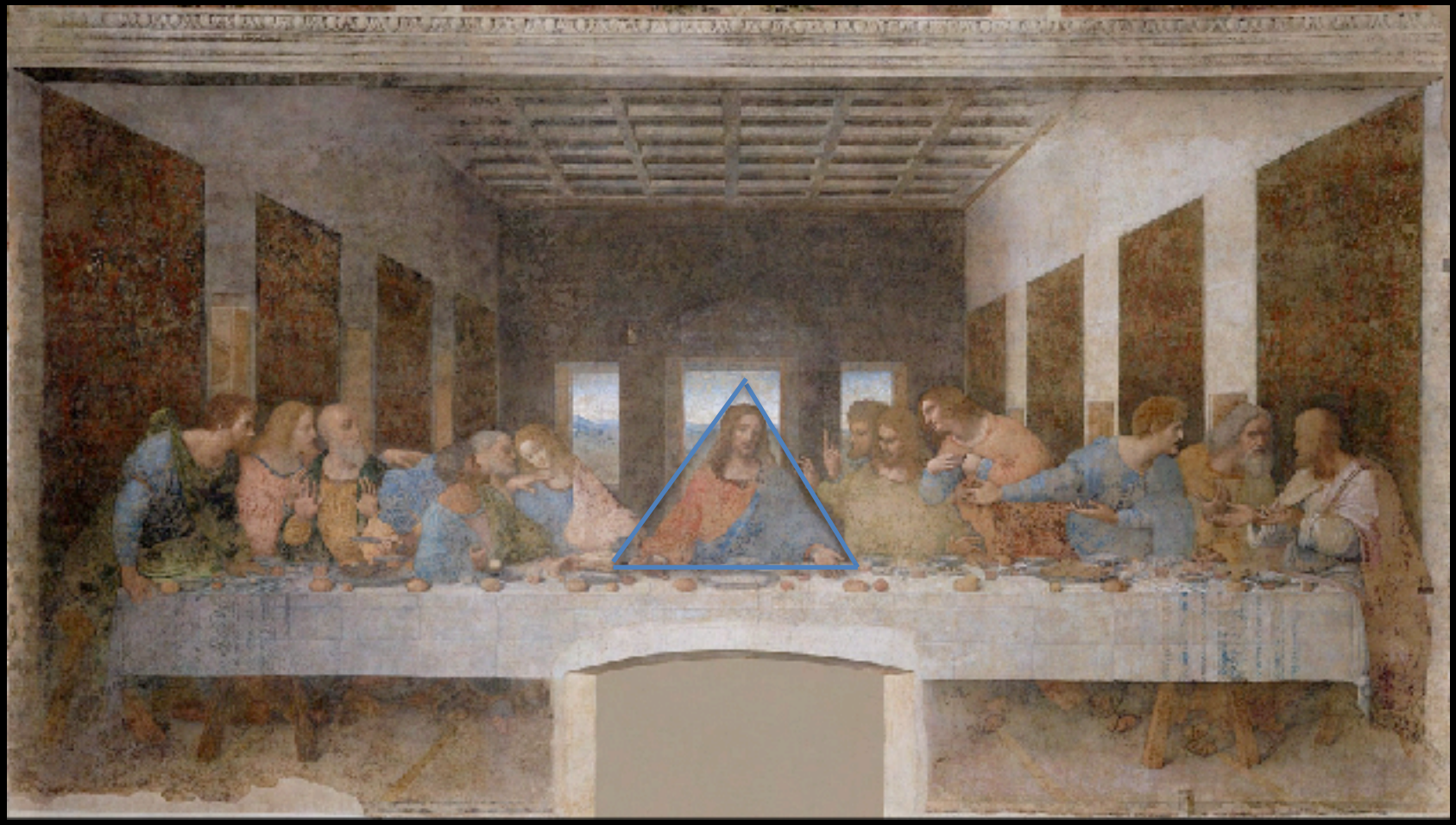



"2011-07-12-Railway People" by Chuwa (Francis) is licensed under CC BY-SA 2.0, color illusion remix by http://pippin.gimp.org/

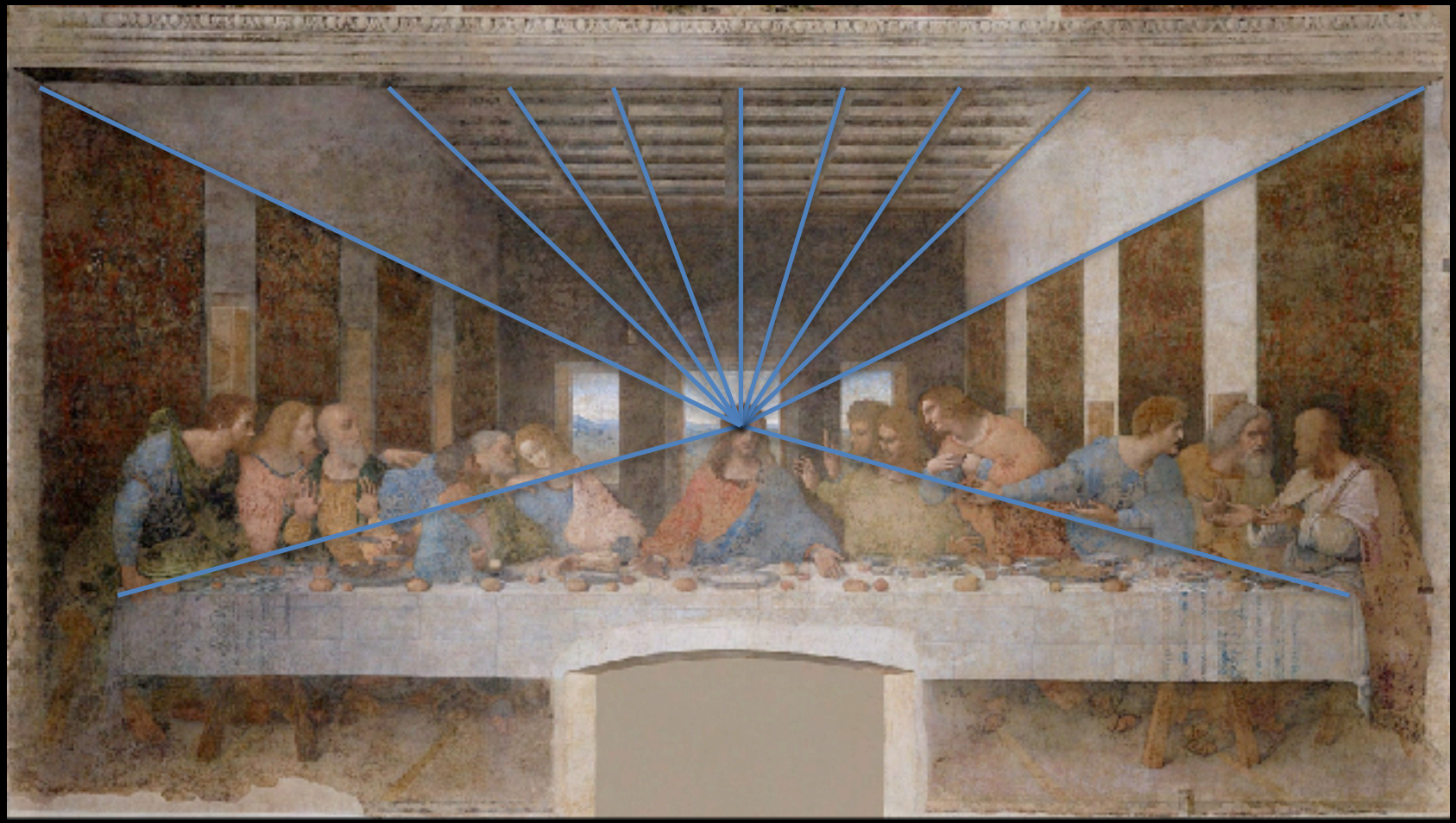
Putting some of it into practice



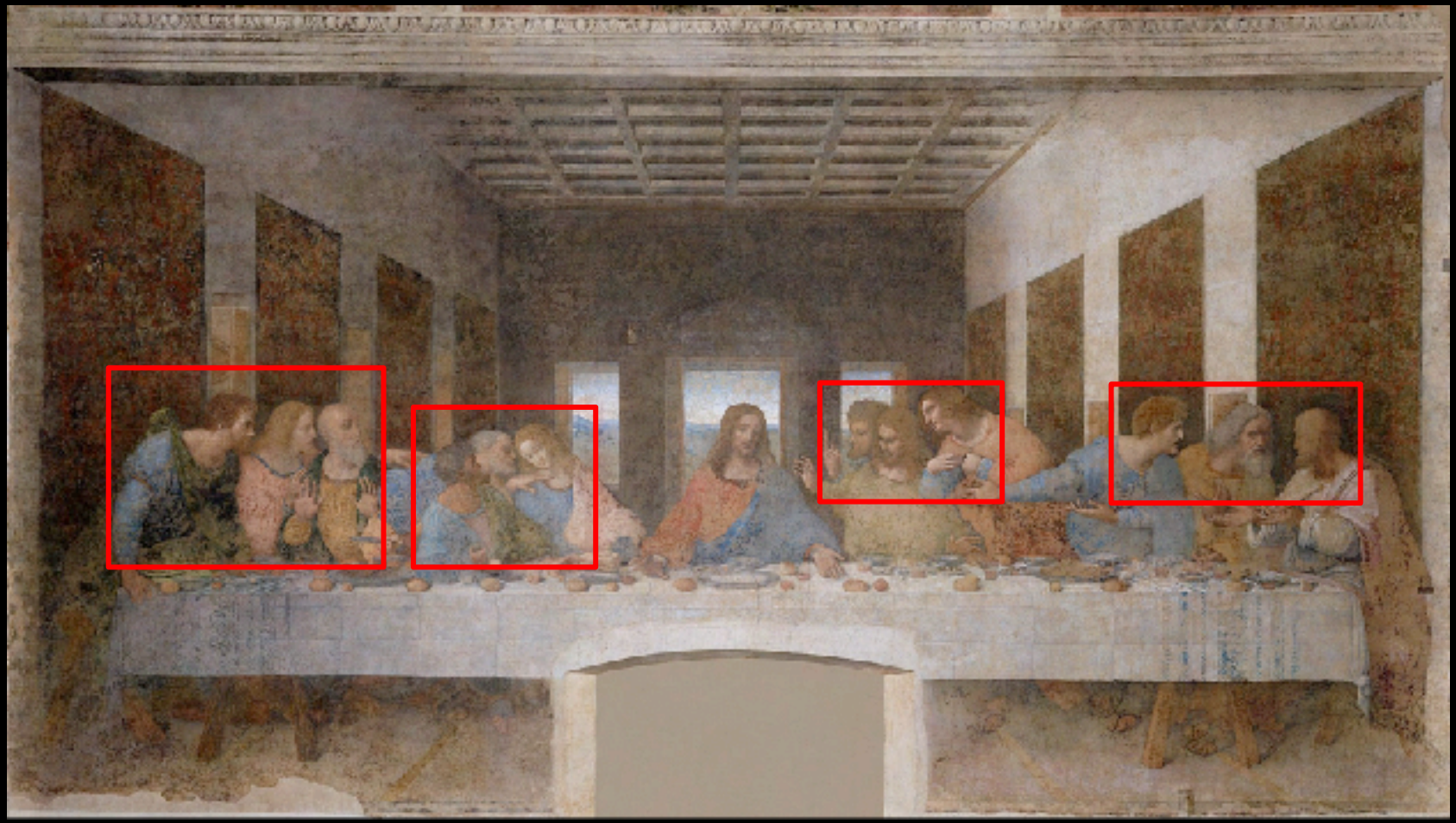
Leonardo da Vinci – The Last Supper - 1495–1498



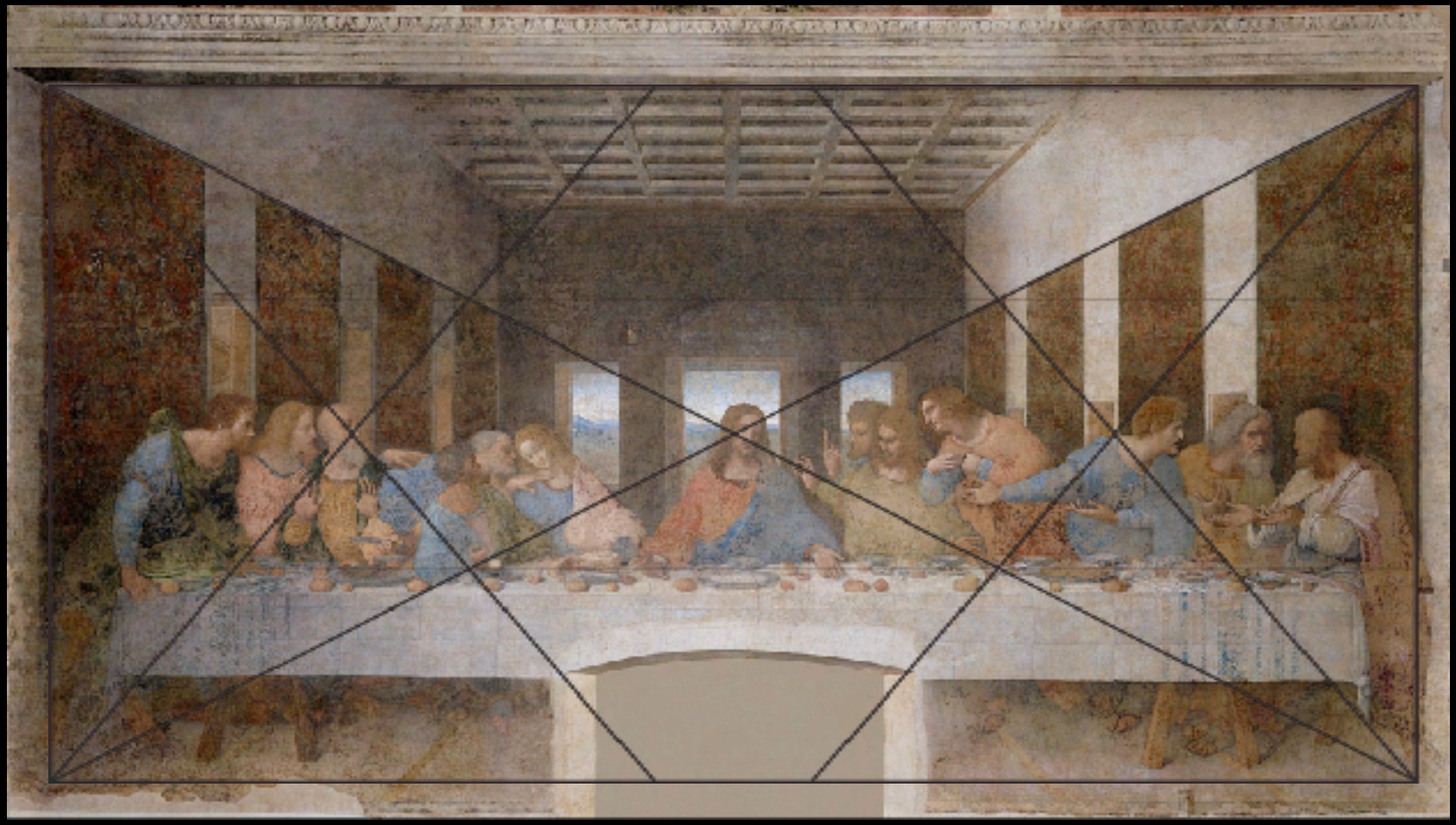
Stable Triangle



Perspective directs the eye



Groups of 3



Dynamic Symmetry

How can this be related to your photography?

Elements of Composition

- **Line**
- **Shape**
- **Colour**
- **Texture**
- **Value**
- **Form**
- **Space**

Lines

The human eye is drawn into visual art along lines, and so we need to provide these leading lines in the shape of roads, paths, colours, light or shade, normally from left to right. These lines can also be used to create the illusion of depth.

Shape

Regular shapes such as circles, squares and triangles with even sides convey a sense of order and stability. Irregular shapes such as rectangles, skewed triangles, parallelograms and ovals can give a photograph the illusion of motion or simply make it seem more dynamic.

More examples of shape in Street

Colour hues with their various values and intensities

Texture surface qualities which translate into tactile illusions

Value

Shading used to emphasise form

Form 3-D length, width, or depth

Space

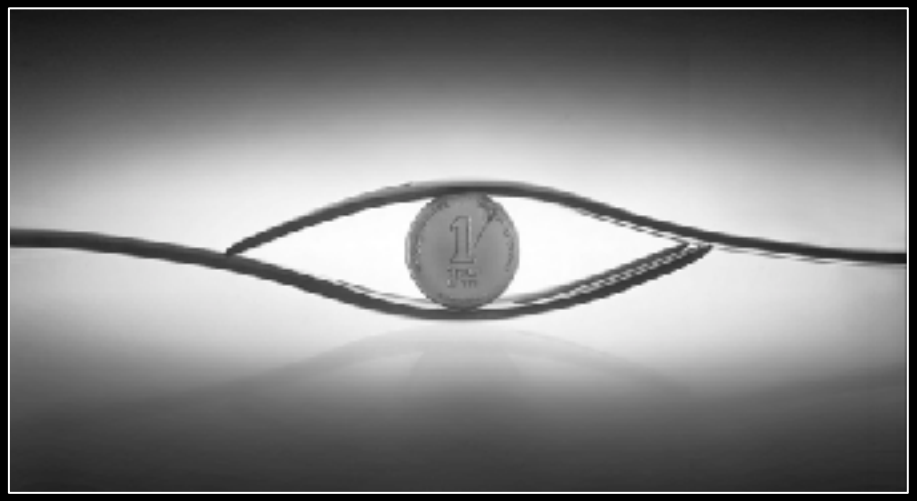
the space taken up by (positive) or in between (negative) objects

Principles of Art

- **Rhythm**
- **Balance**
- **Emphasis** (contrast)
- **Proportion**
- **Gradation**
- **Harmony**
- **Variety**
- **Movement**

Rhythm created by the careful placement of repeated elements to cause a visual tempo or beat

Balance A way of combining elements to add a feeling of equilibrium



Emphasis A way of combining elements to stress the differences between those elements

Proportion the relationship of certain elements to the whole and to each other

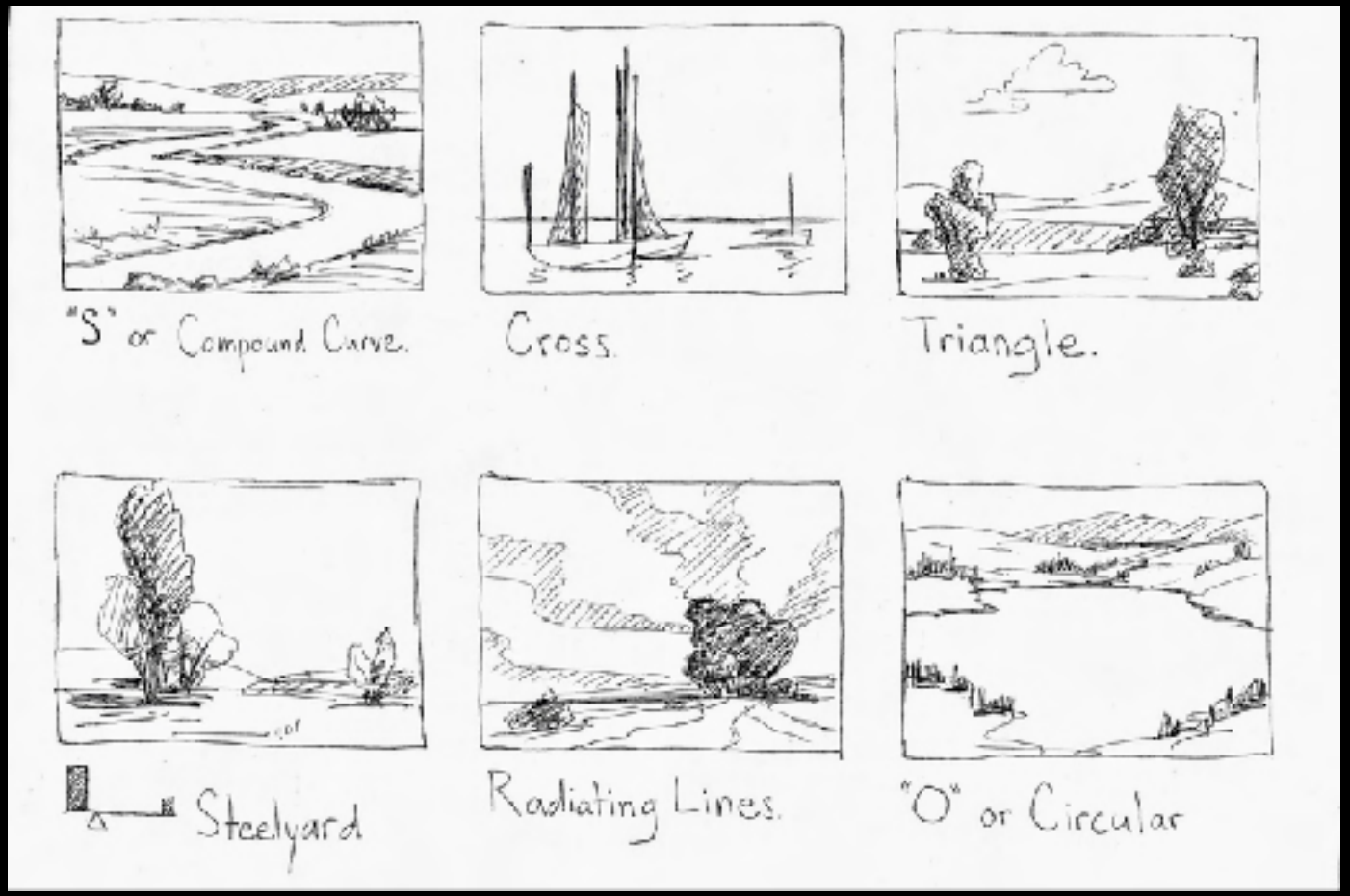
Gradation A way of combining elements by using a series of gradual changes in those elements

Harmony combining similar elements in an artwork to accent their similarities

Variety Visual diversity to avoid an unintended monotonous composition and to hold the viewers interest

Movement the look and feeling of action

Some composition examples



S Curve

Cross

combines the dignity, height and strength of the vertical line with the calmness and tranquillity of the horizontal line. It is often used in landscapes to depict peace and serenity.

The triangle

representing strength and stability, and can be repeated throughout the picture.

Steelyard

Radiating Lines

Circular

V shape

commonly used in landscapes to create depth, with a background of distant mountains held within the V.

Diagonals

useful in capturing drama

Diagonals

If diagonal lines are made to converge, they create a sense of depth

Rhythm and Pattern

an underlying beat of repeated elements and shapes or colours

Focus

the composer wants the viewer's eye to rest on something, rather than wandering around

Contrast

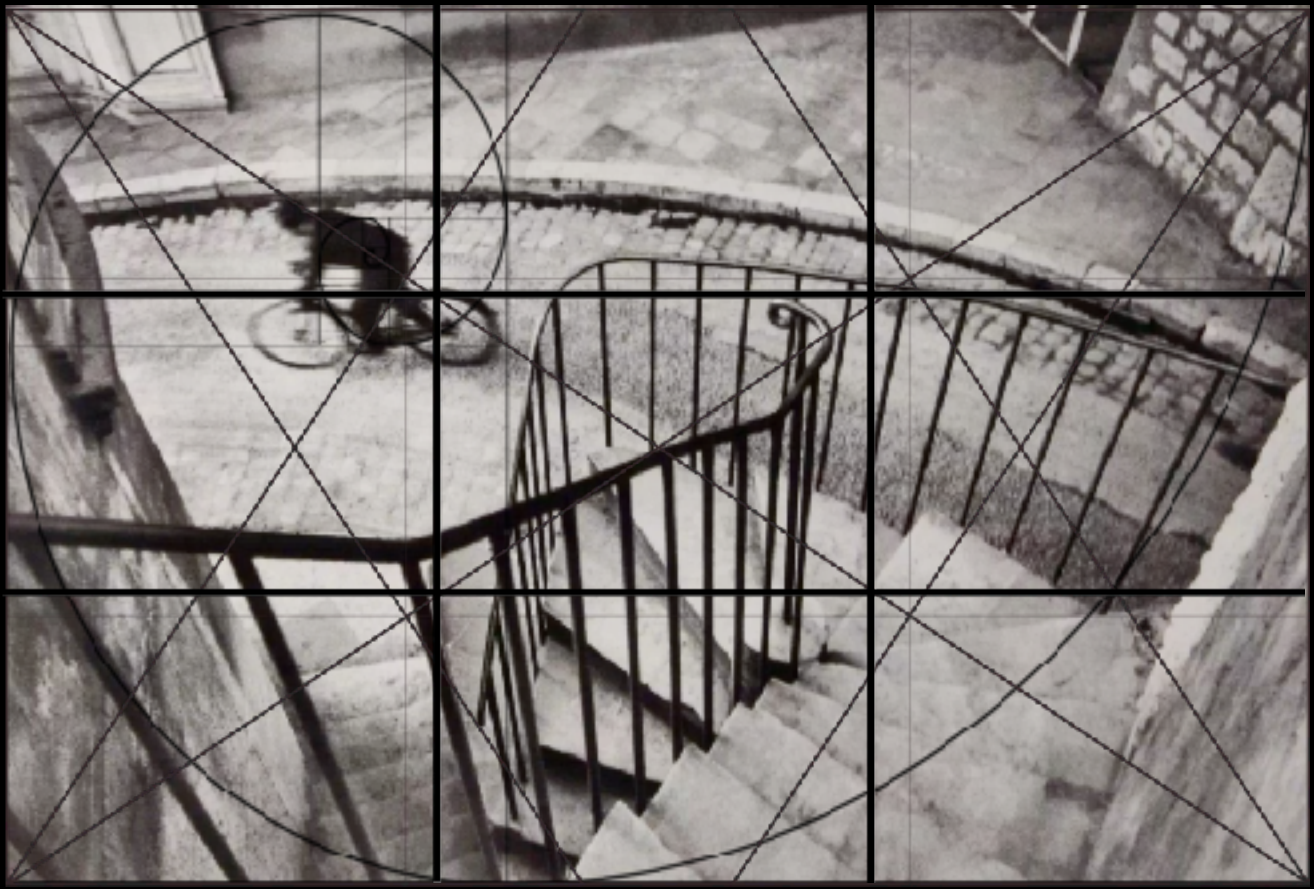
high or low, depending on colour, light and shade, rough and smooth textures, round and angular shapes

Compositional aids


© Chris Dixon


© Chris Dixon

Henri Cartier-Bresson



Dynamic Symmetry

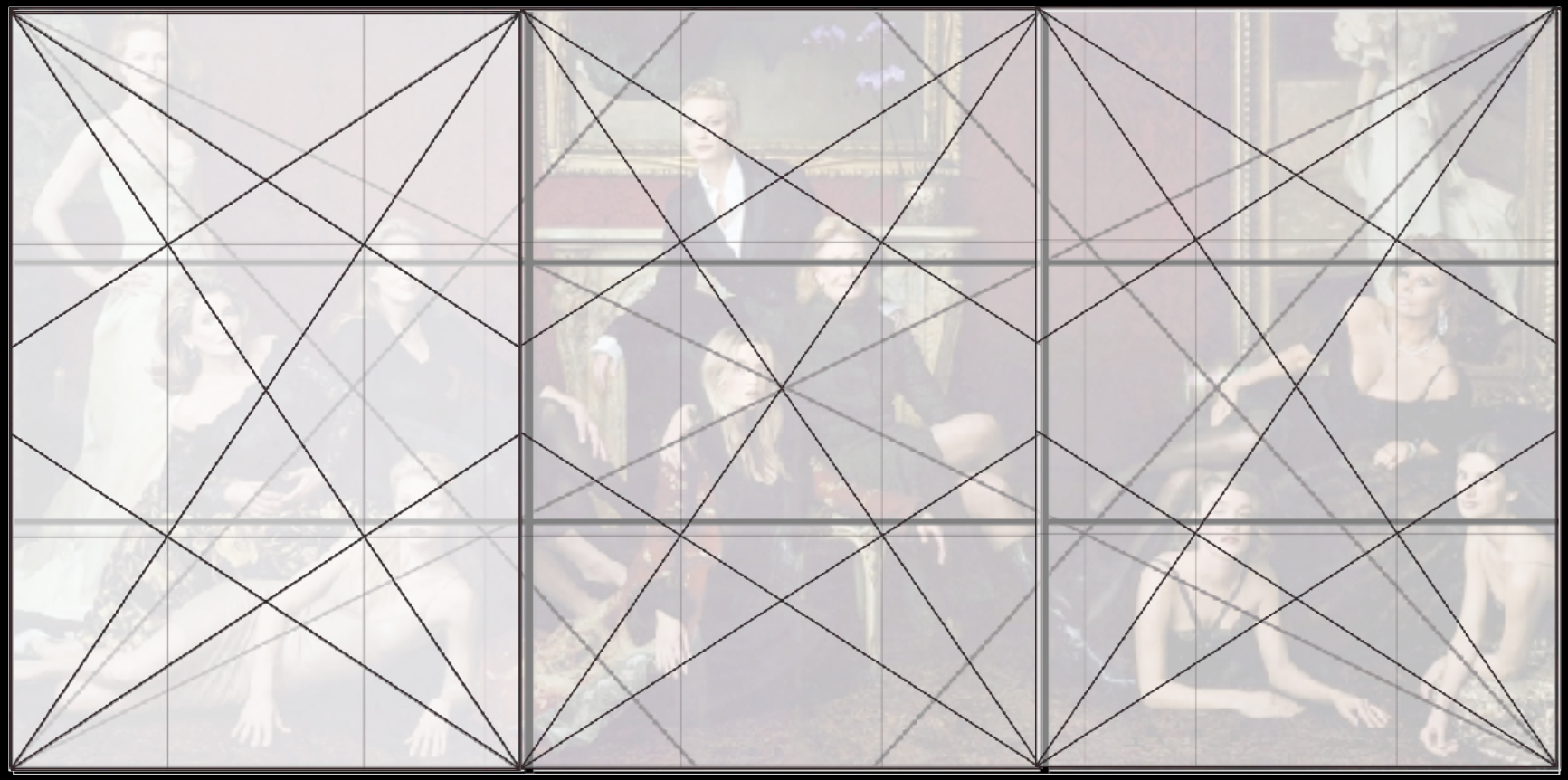
Fibonacci

Rule of Thirds

“Rule of odds”

Photographs of elements in threes or fives, rather than twos or fours, appeal better to the eye, because the eye and the brain tends to wander towards the centre of a group and, if it cannot find it, the photo appears to be out of balance.

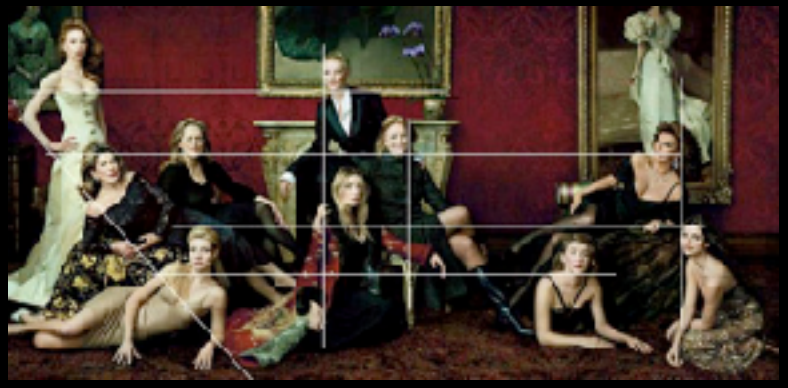
Annie Leibovitz



Ellipses can be used to unite subjects or objects in the image

Arabesque moves the eye in an image

Enclosures are made up of simple geometric objects (triangle, circle, square) used to group objects and unite them



Coincidences, use these to create a movement from side to side, top to bottom, and on diagonals

…and finally some food for thought....

Studium

This is the interest in a photograph, what makes the image attractive. We can recognise the intention of the photographer.

Punctum

A surprising element within the image that makes the photograph something special, it breaks the studium, it's what creates the story, its personal to the viewer.

Roland Barthes: *Camera Lucida* (1980)

Studium – girls playing outside

Punctum – why is she smoking? Is it a real cigarette or as the title says a Candy Cigarette?

Sally Mann, Candy Cigarette, silver print, 1989.

Studium – the multiple graves

Punctum – the man looking for someone

“Never again” Marcel Rolli


LORD
SIVA
© Chris Dixon

“Lord Siva deals with the cosmos, meditates most of the time, likes to mind his own business, has a crazy mix of anger and calm, and is someone whose stories have managed to appeal to every generation of people”.

He is auspicious, propitious, gracious, benign, kind, benevolent, and friendly.


LORD
SIVA
© Chris Dixon


© Chris Dixon


RESTAURANT
© Chris Dixon

Studium, Punctum or just fun?

I'll let you decide……

The old masters of painting understood the elements of art and the principles of design. We can use the tools that they taught us to help us in our photography……

As a reminder…..

- **Balance**: the photo feels right and not lopsided or awkward

- **Unity**: all the parts feel as though they should be there

- **Movement**: suggested by the position of elements, leading lines, or actual movement

- **Rhythm and Pattern**: an underlying beat of repeated elements and shapes or colours

- **Focus**: the photographer wants the viewer's eye to rest on something, rather than wandering around

- **Contrast**: high or low, depending on colour, light and shade, rough and smooth textures, round and angular shapes

….and don’t forget your Punctum


"That's all Folks!"