MUNI
FI

Introduction to Visual Communication

PV 123

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1. REPRESENTATION

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1 - 11

Representation

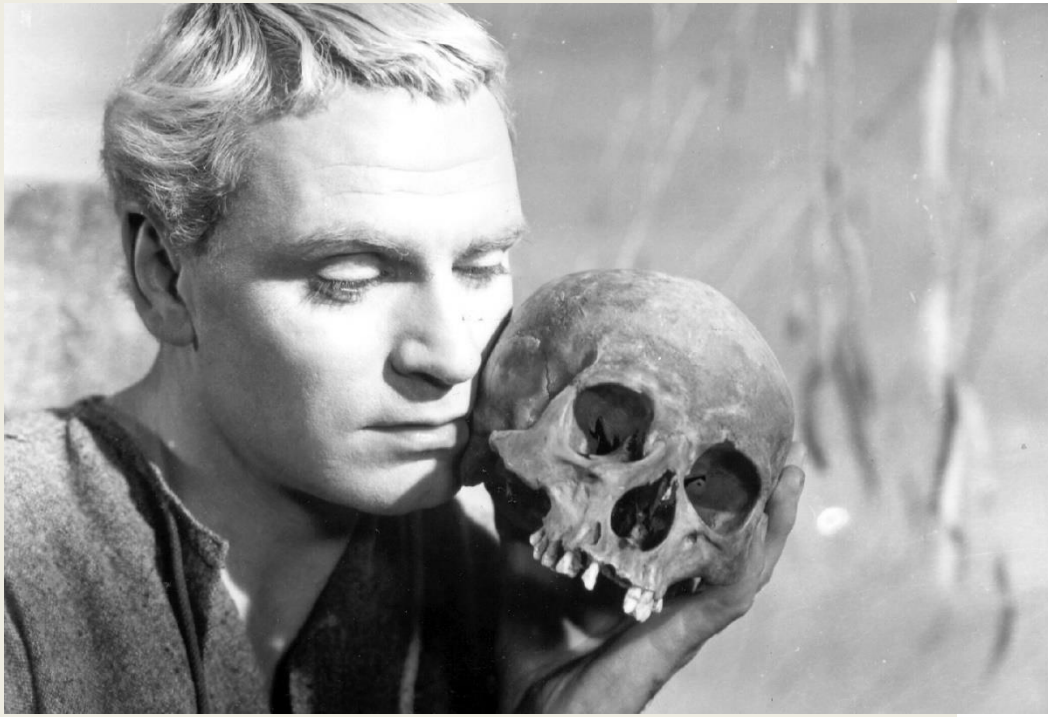
Word origin in latin– preasenes – to be

Presence

Conditioned by place and time

Presentation

To present ourself or something to others.



Representation

The act of evoking an image (mental image - representative) subject, experience, phenomenon, etc. for its re - experience or for transmission of the description.

Re-presentation – present again

We can represent (re-present) anything with anything. It is about passing information that elicits a correct interpretation in the recipient that is tied to the communicated information.

Representation is the use of characters (mental images, imprints in consciousness, concepts, simplifications) that represent something else

Through representations, people classify the world and reality, through the act of naming their elements.

Representation – Angle of View

Information can be represented in a way which does not correspond to reality

Representation – Angle of View

Nick Ut: Napalm Girl, 1972

Uncropped photography is ambiguous, distracting from the central characters of the image, the girl and the intended meaning - depictions of the horrors of war. The eye attracts the cameraman on the right side, we see his impartiality in the story he is witnessing. Instead of helping, a group of children is just an object of documentation for him. Manifestation of cynicism? So what was the role of soldiers in relation to the civilian population?

Representation and Meaning

Stuart Hall

Especially in the media, one cannot speak of a real representation of people or events, but there are many ways to represent them. Thus, producers try to "correct" (interpret) the meaning (or way of understanding) of people or events in their texts.

Meaning, therefore, is created in the process of representation

Stuart Hall

More about Stuart Hall's theory:
https://www.youtube.com/watch?v=yJr0gO_-w_Q

Stereotype

Stereotype - original meaning - metal plate for newspaper printing (Edinburg, 1725)

Stereotype - a habit (template) helps us to process common situations quickly. We relate to new situations and information the usual ways of interpretation.

Social stereotypes - a company creates a set of ideas about a person or a group..

Czech contributions to humanity starter pack

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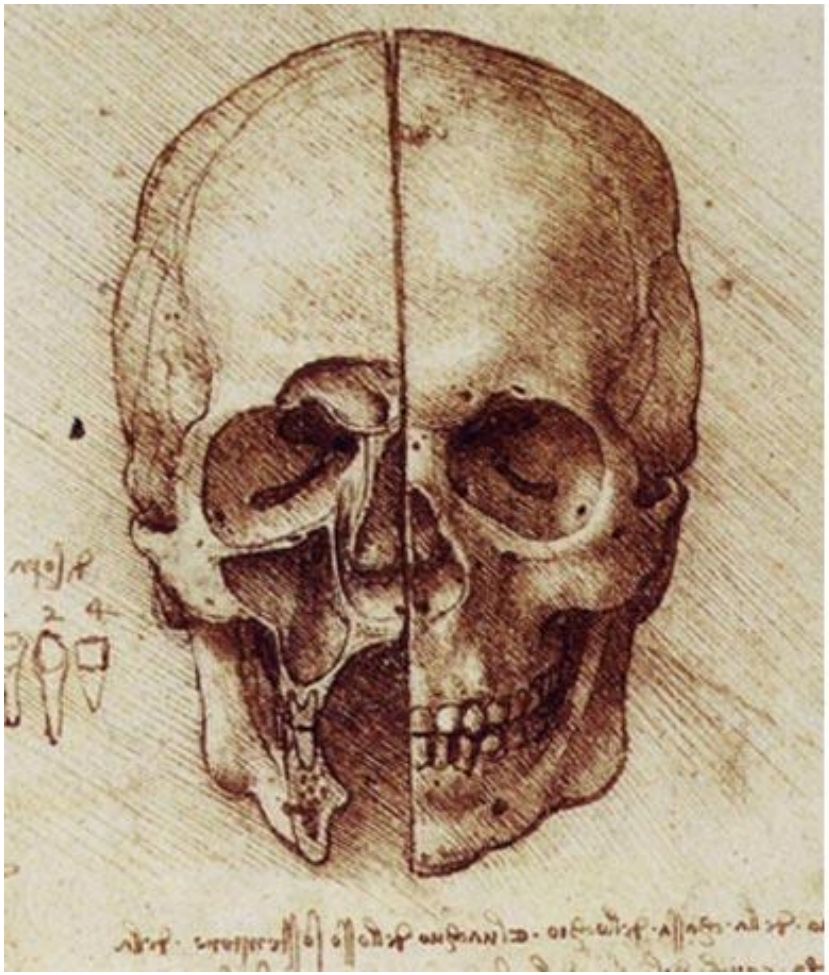
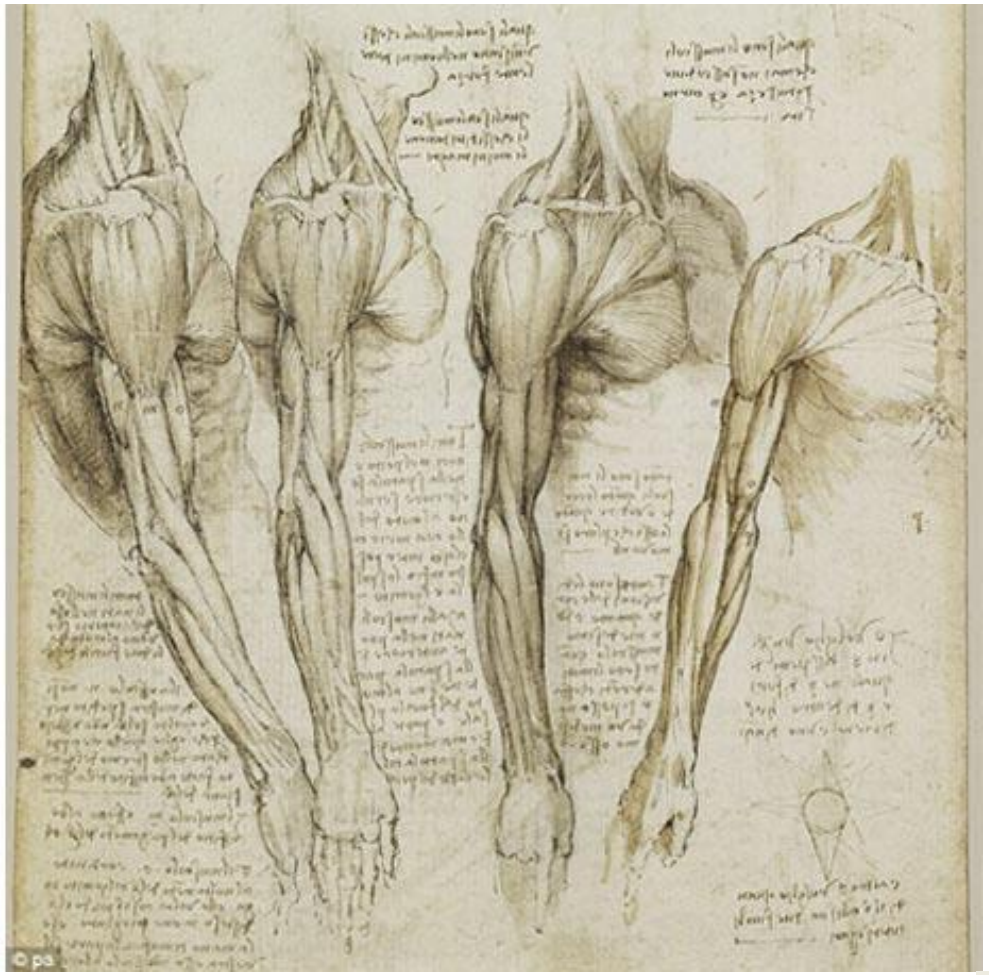
Example of exact representation

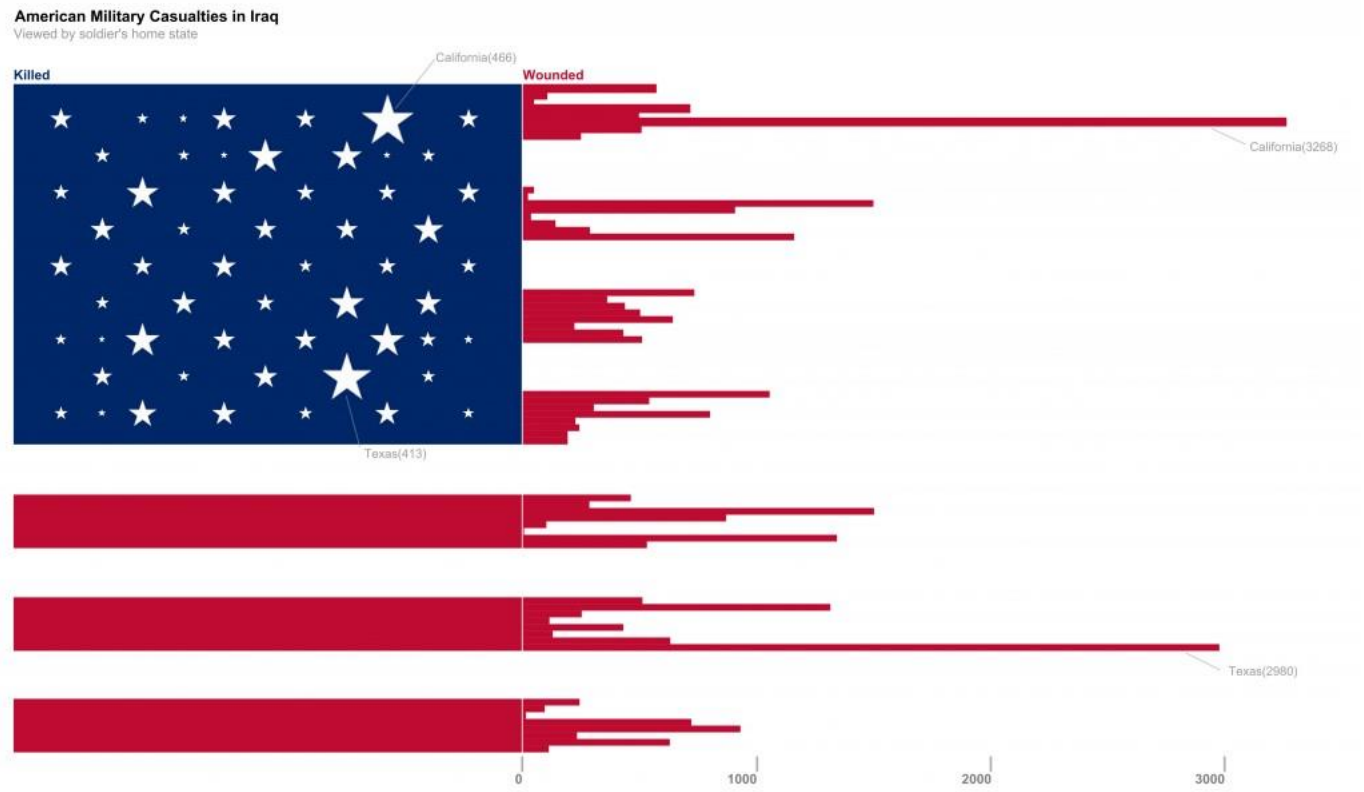
The need for a faithful representation of the seen reality to describe the anatomy.
The maximum displayed corresponds to the seen original.





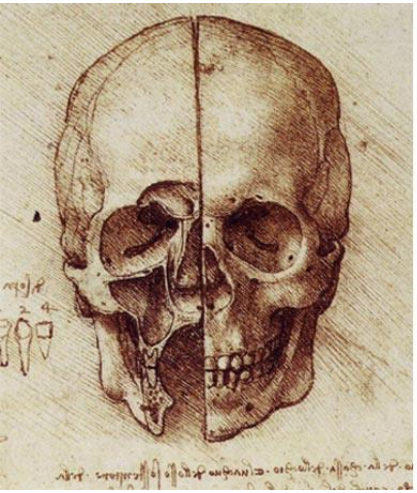
Example of Data Representation

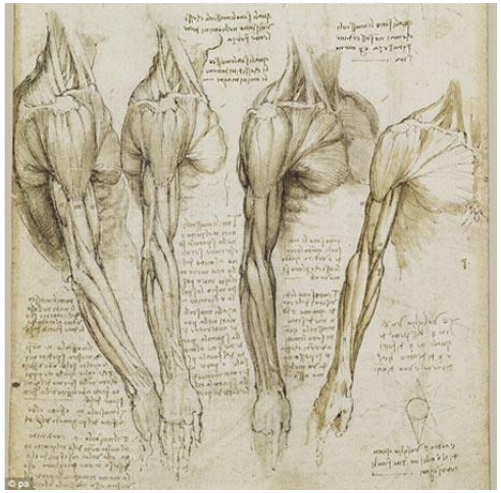
The data itself is "invisible". If we want to represent them, they must be interpreted in numbers, visualized in graphs, etc. misinterpretation and distorted understanding can happen if the data representation is misleading, erroneous, etc. There are very limited possibilities to evaluate the accuracy of data interpretation for the user.

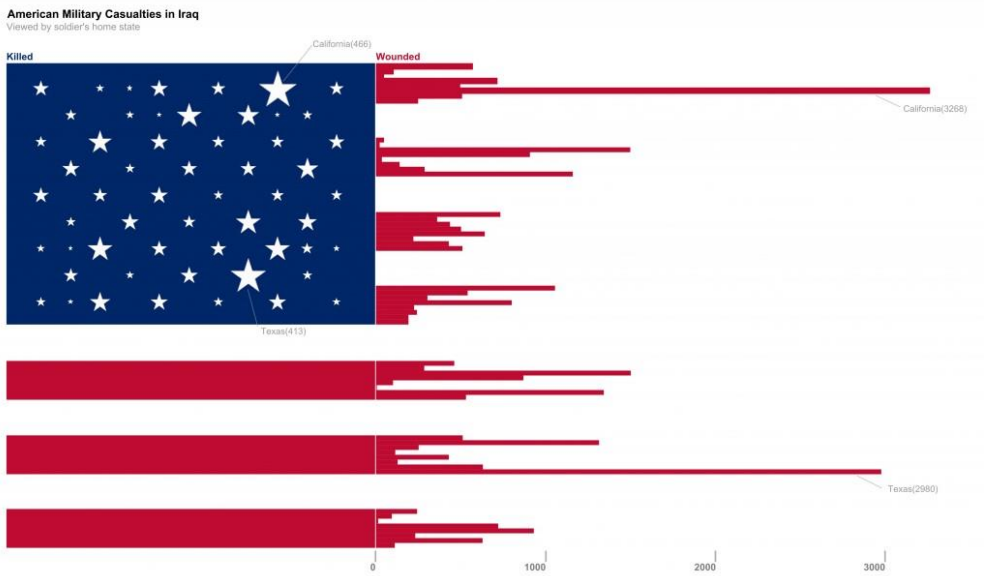


Different methods of representation

The manner of appropriate representation depends on the nature of what is represented. Represented it must be understandable to the recipient and coincide with reality.







2. MIMESIS

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13 - 27

MIMESIS

imitation of the representation of reality

In this dialogue, Socrates argues that in order for an image to be an image, it must not reproduce everything that the original has to offer. If the gods created a perfect image of Kratil, it would not be his image, but his double.

(Platon - Dialogue Kratylos, 432 př.Kr.)

Representation, then it will always be only incomplete image.

Mimesis

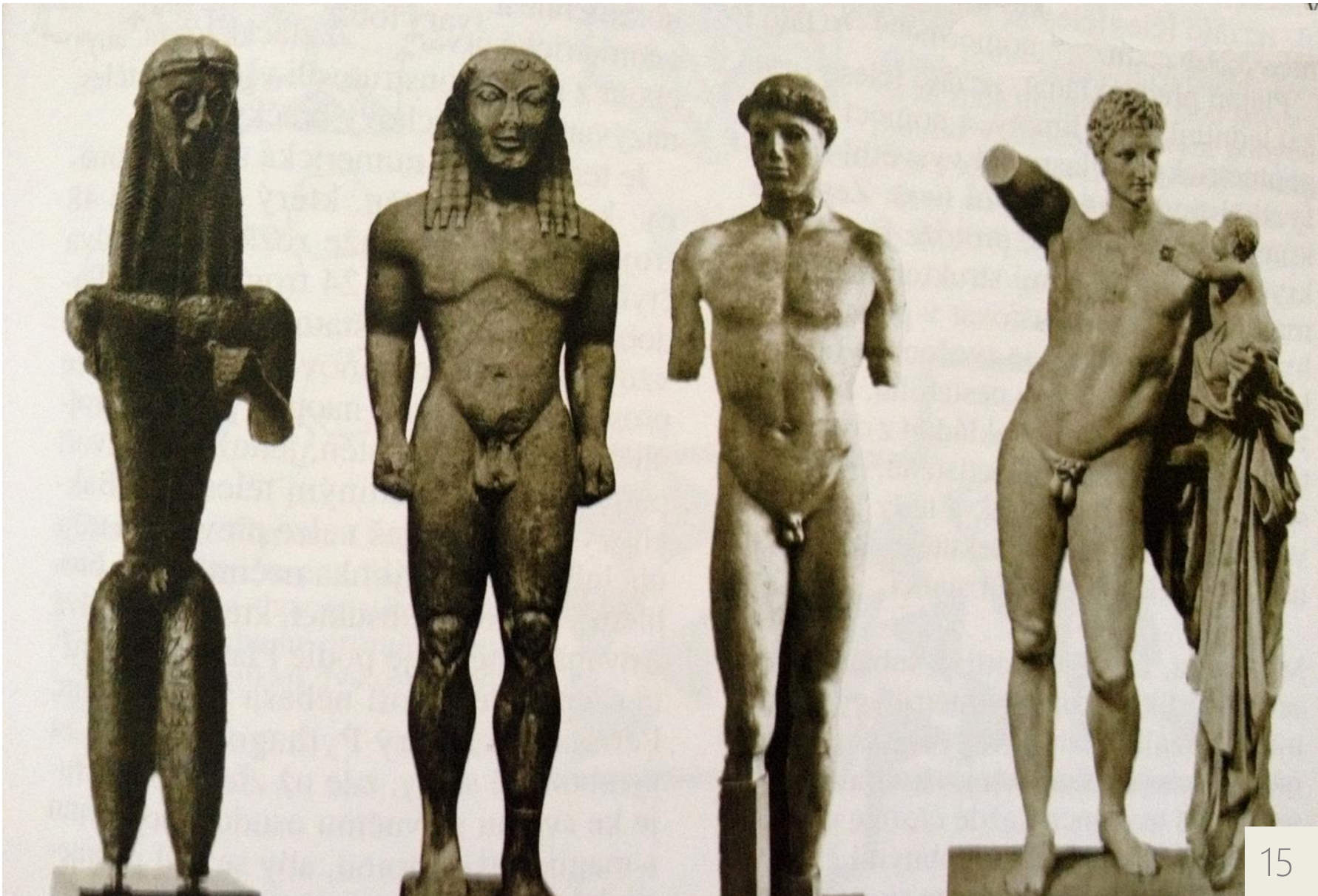
From Greek / mimeisthai - imitate

Trying to visually interpret the concrete seen object based on external appearance.

In ancient Greece, mimesis was the idea that guided the creation of a work of art

In Western culture, importance has always been attached ability to interpret the seen world

Greek Art / Towards the Realism



Plato a Aristle

Both Plato and Aristotle perceived MIMESIS as imitation of nature, which for them is the embodiment of beauty and truth.

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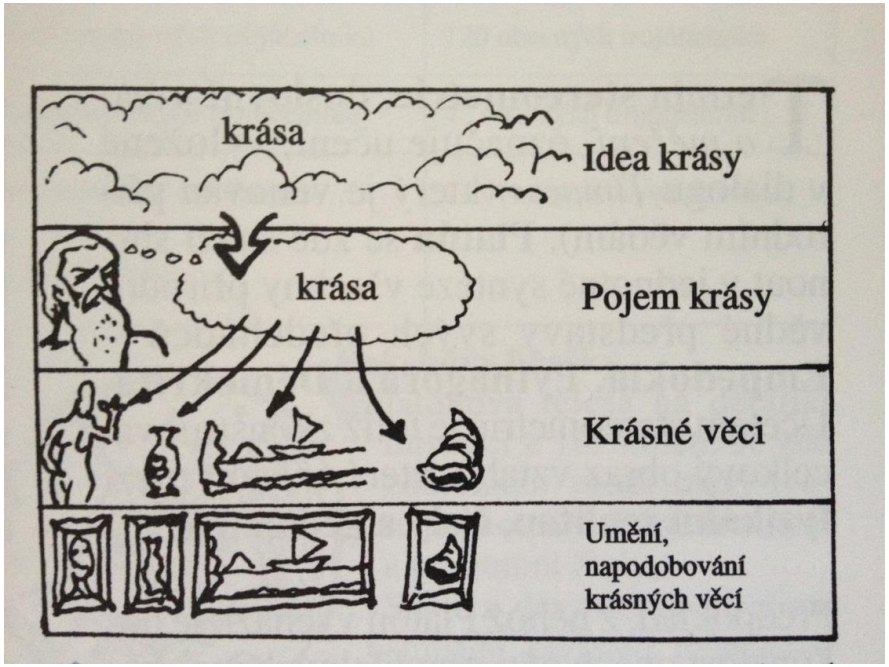
Plato

Every art form is a mimesis. However, these are just another copy of the world seen, which is a copy of perfect ideas. Art is therefore a confusion. This applies to both fine arts and literature and theater



Platon

Aristotle

The artist must work with a specific artistic object the rendering then affects the essence of the object, its idea.

Aristoteles

Aristotle

Mimesis is human nature. It allows him to describe the world and communicate about it thanks to his ability to create representations. We owe the ability to remember and represent the non-existent to the imagination (imagination) = the ability to represent in our own souls mental images that can initiate the imprints that we have stored in our consciousness.

Painted characters are not human images, but their features (generalizing simplifications). The viewer complements them with features that are accessible in other forms of experience.
(Poetica)

Aristotle

Concept of Mimesis in Magic

Homeopathic magic is also called imitative or mimetic because it is based on imitation

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Female voodoo figurine tied and pierced with thirteen pins, found in a ceramic vase with lead table with magic formula (katadesmos) 4 century

In effigie

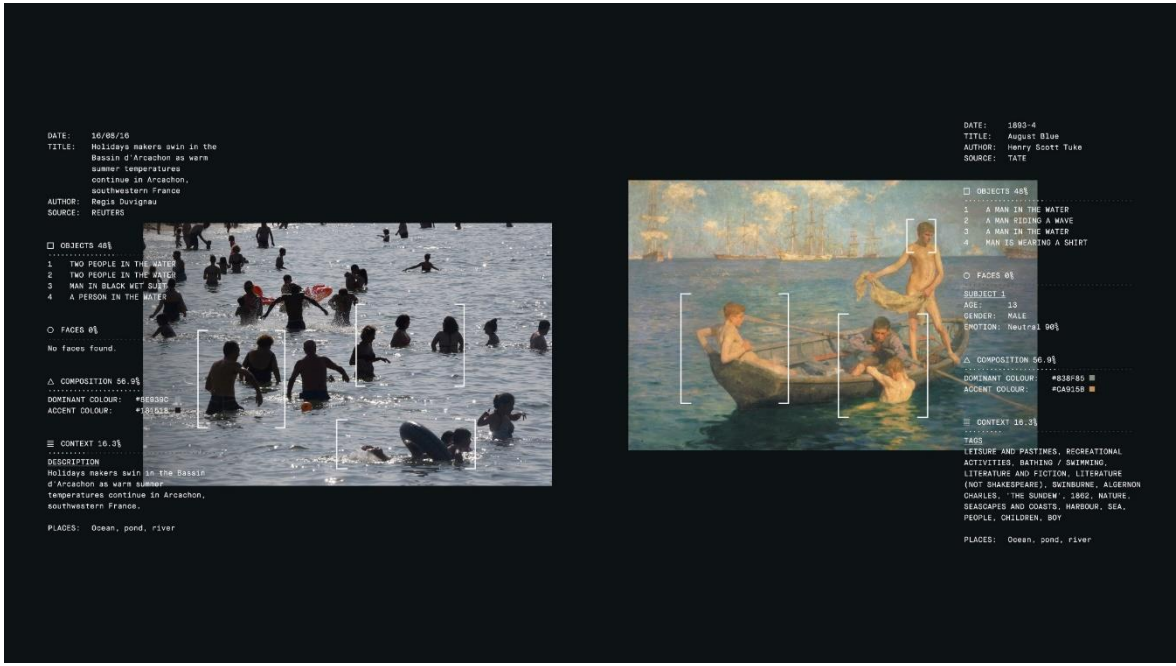
Visually, ie in place: to hang a criminal instead of a criminal, to hang (burn) his image. This possibility took them back in the Middle Ages

Burning image of cyclist Lance Armstrong burned in Kent, 2012

Jean Pierre Norblin: Hanging Traitors in Effigie, 1794 The scene depicts an event from the same year, from an uprising led by Tadeas Kosciuszko against the Russians during the Polish - Russian War.

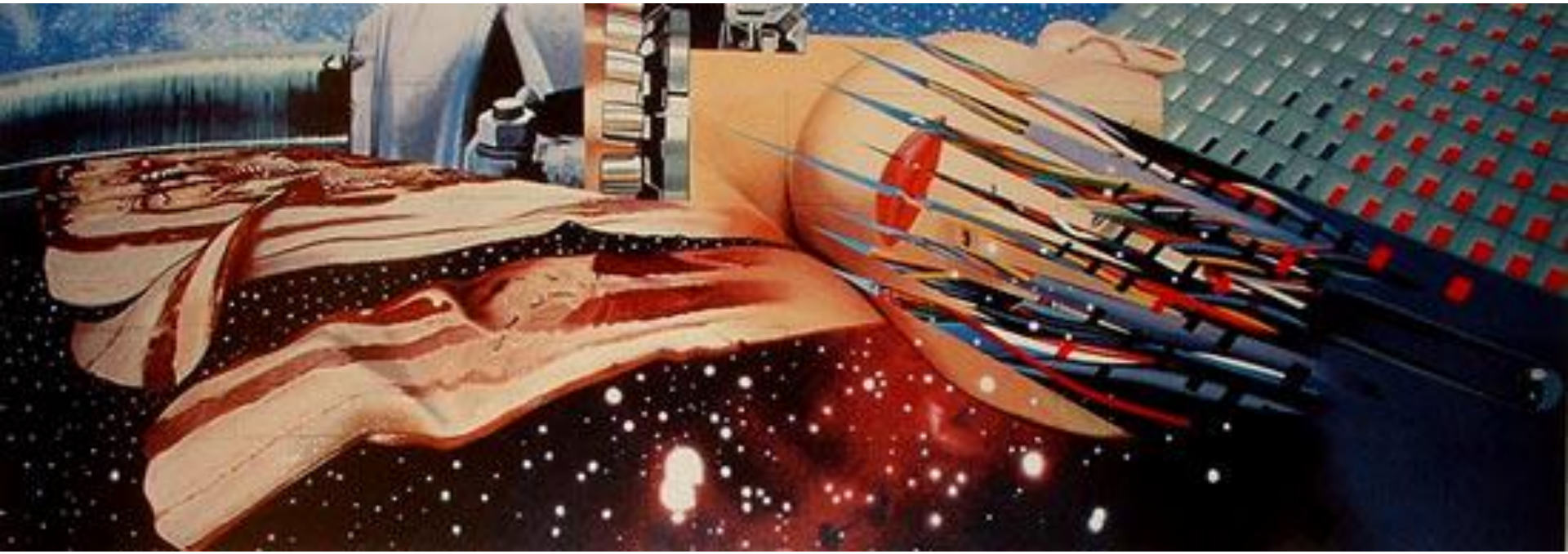
Computer Vision + AI

Machine learning, AI in cooperation with computer vision it can look for similarities between images. This can be used to find relationships that can expose unexpected relationships. E.g. dissemination of certain themes between cultural areas, detection of deviations in the painting of a certain author, which may point to forgery, etc.



Tate Britain: Recognition. AI looks for similar scenes among images and photographs of photojournalists

Where are the limits of Mimesis?



Star Thief, James Rosenquist, 1980

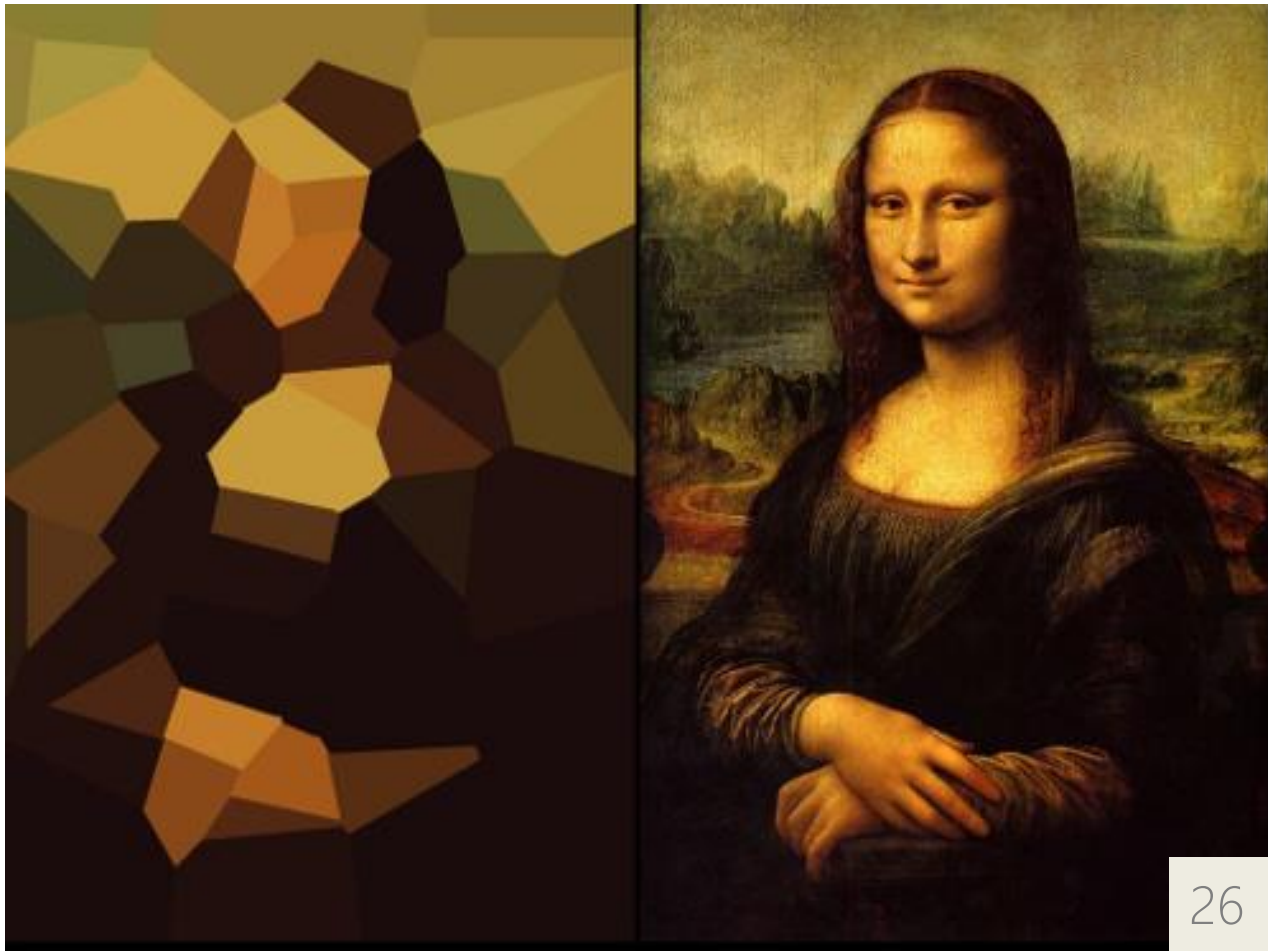
In 1981, the state of Florida wanted to purchase this painting for the Dade County Airport hall. Easter Airline President and Cosmonaut Frank Borman reversed the decision, for in his opinion, there was no visual connection between image and space

Where are the limits of Mimesis?

How far can we simplify the representation given on the basis of mimesis so that it does not lose its connection to its model

Where are the limits of Mimesis?

The sign can be more simplistic the more its model is codified (anchored, rooted) in the general consciousness (culture).



Where are the Limits of Mimesis?

In 1926, this work arrived together with other ships to New York for an exhibition. The customs officer refused to acknowledge that this work was what his name Bird in Space suggests, and demanded payment of import duties, which did not otherwise apply to works of art at the time. The conflict went to court. Until a decision was made, the work was classified by customs officers and kept in a column - kitchen and hospital goods. The court ruled that an abstract work (non-repressentional) can be considered art.

This work is testing boundaries of a representative display.

Constantin Brancusi
Bird in the Space
1923

EIDETIC REDUCTION

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29 - 32

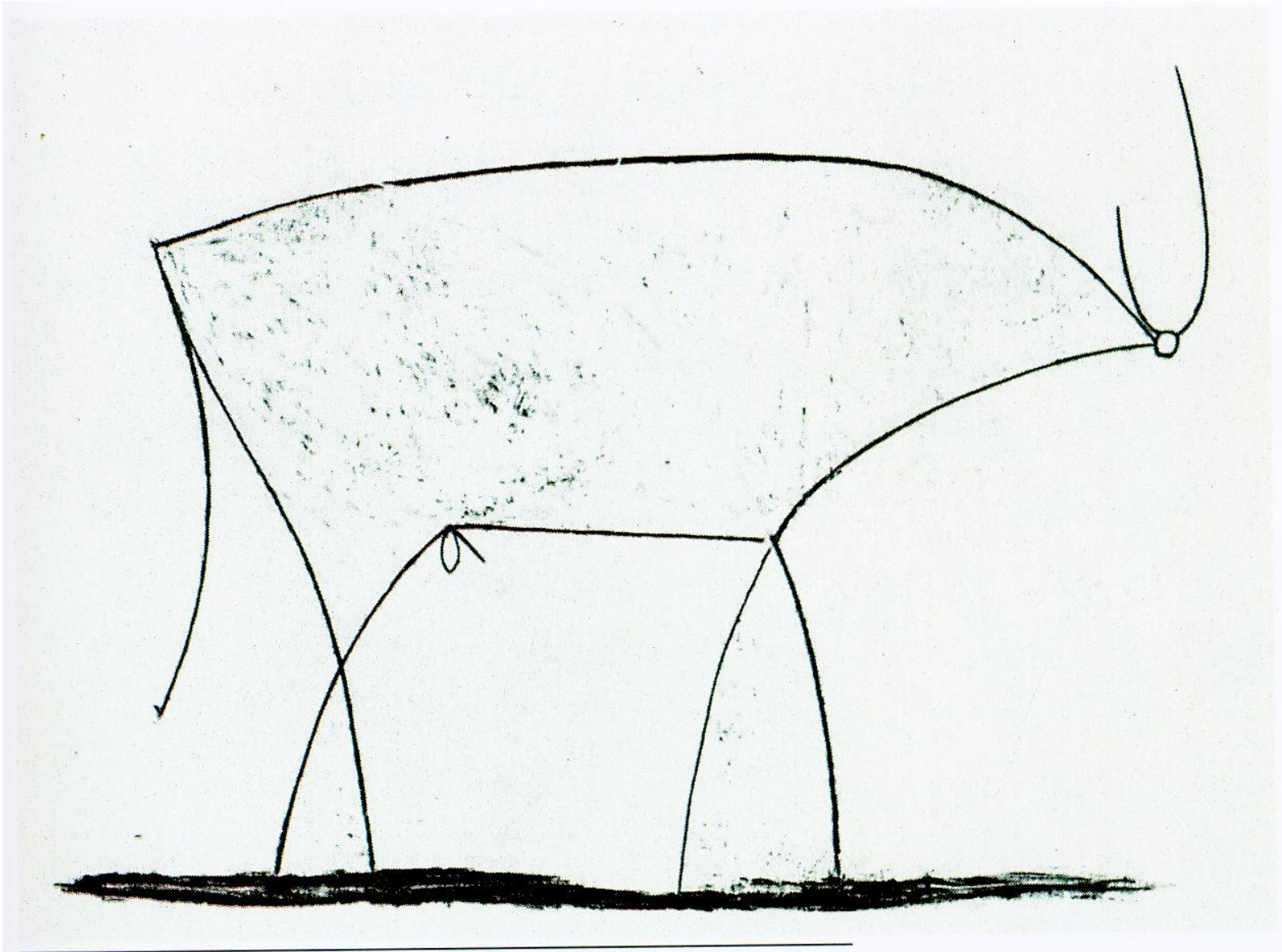
Eidos – The Essence

Eidetic reduction is an imaginative variation, whose goal is to reduce the phenomenon to its essence

Edmund Husserl (1859-1938), representative of the philosophical Direction of Phenomenology (study of what appears). It does not deal with the changing contents of thought, but with the search for their general background.

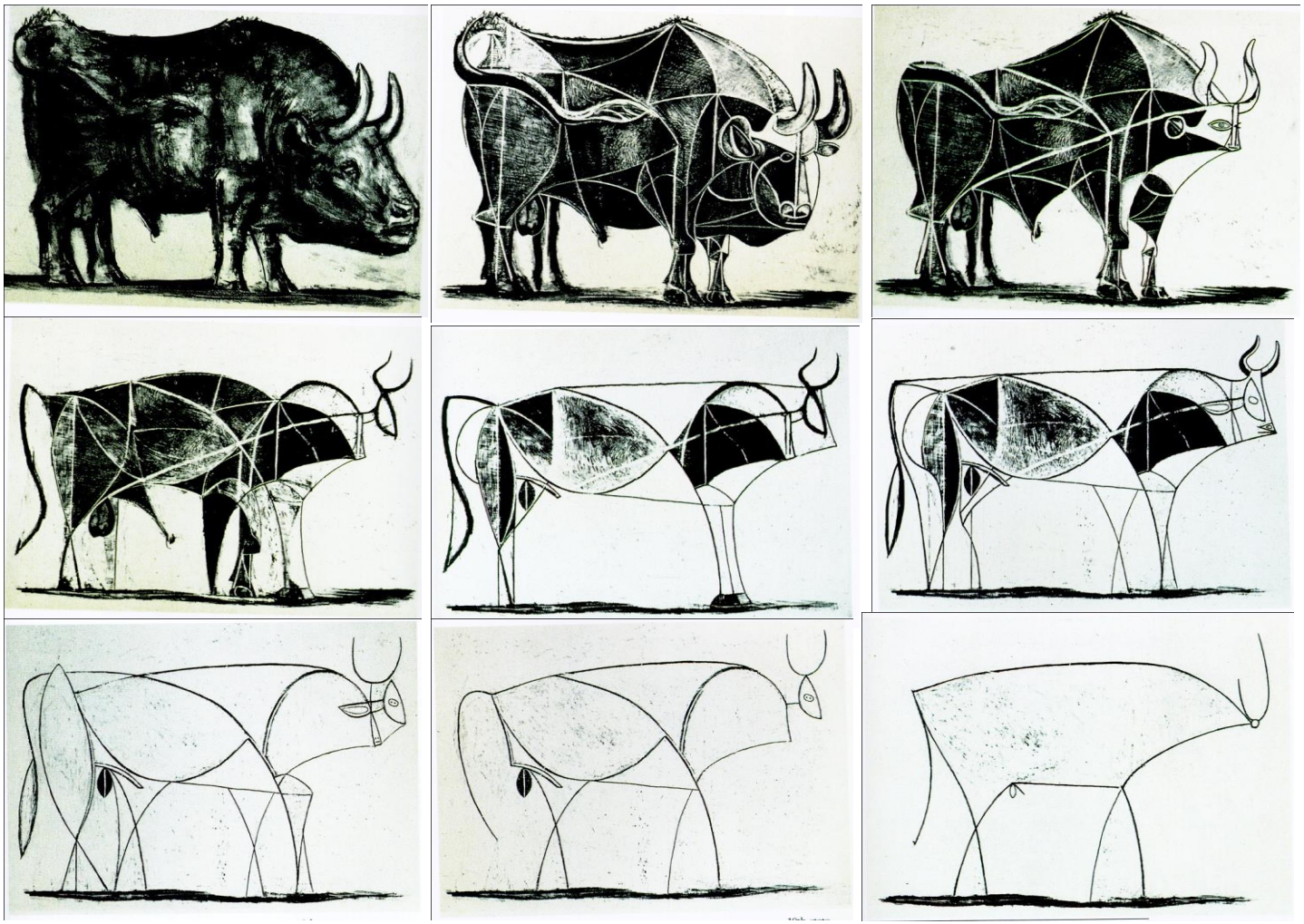
His proposed method of eidetic reduction can be used to examine concepts, mental images, etc.

Eidos – The Essence



Eidetic Reduction

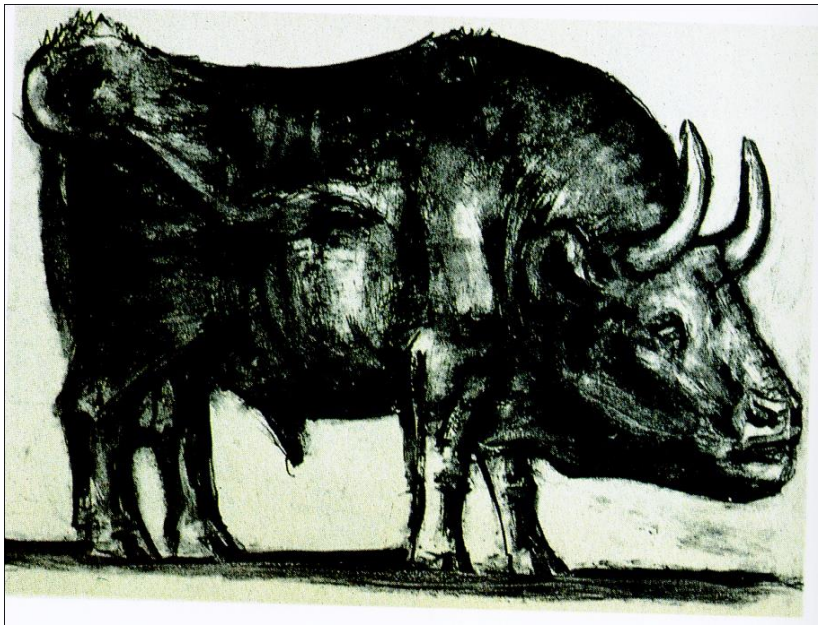
In this lithographic series, Pablo Picasso deconstructs the depiction of the bull to its basic features



Pablo Picasso: Bull , 1945 , lithography

Eidetic Reduction - Pictogram

Picasso visually dissects the image of the bull and seeks its essence through gradual analysis of its form. The goal is to find the "spirit" of the animal



Eidetic reduction applied to the visual form. The resulting reduction must be legible - basic features and proportions.

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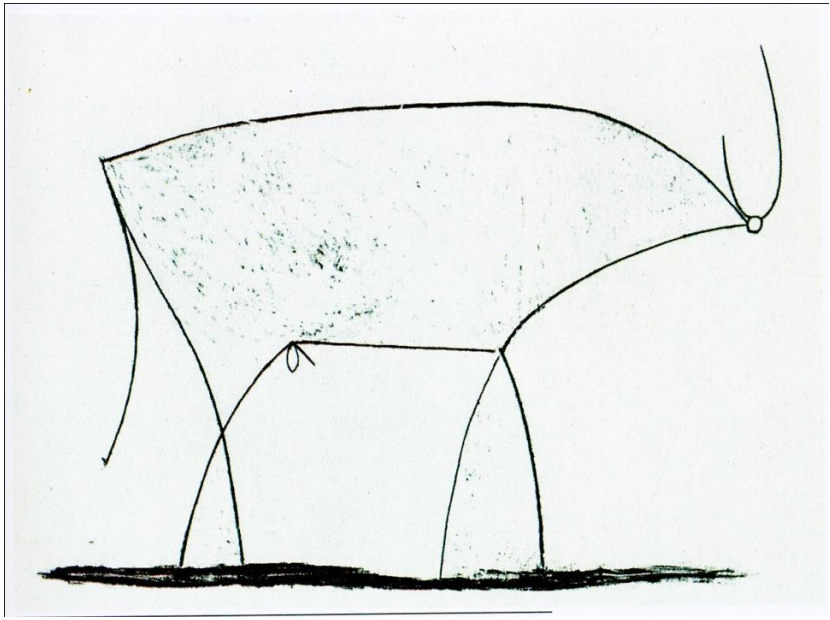

Phenomenological residue eidetic essence - every variable and subjective element was eliminated

PROBLEMS WITH DEPICTION

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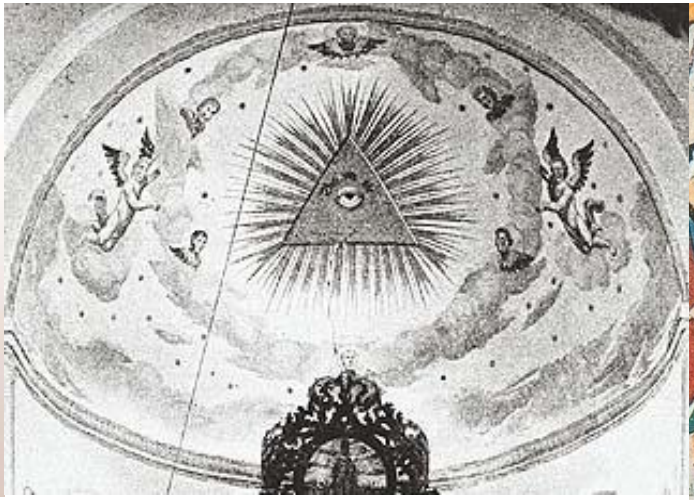
34 - 38

Depiction of Invisible

How do I view something that doesn't have a visible template? You must create - symbols that must be generally known - learned - for their understanding. It concerns ideas, properties, feelings, concepts of world order, etc..

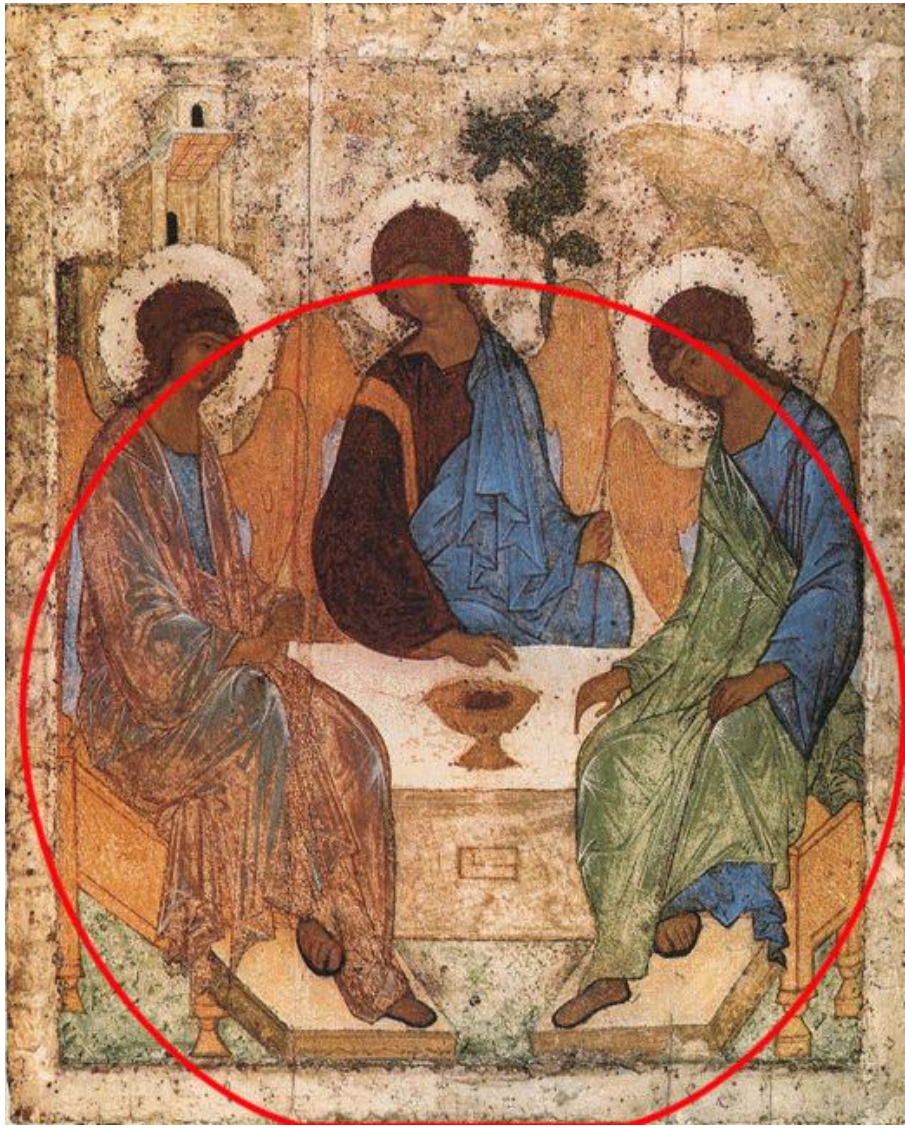
Depiction of Invisible

In religions where God is characterized as a transcendent entity there is a problem displaying it. Idolatry threatens! This means that there is a risk of worshiping images and sculptures without understanding them symbolic meaning.



Rejection of Realism

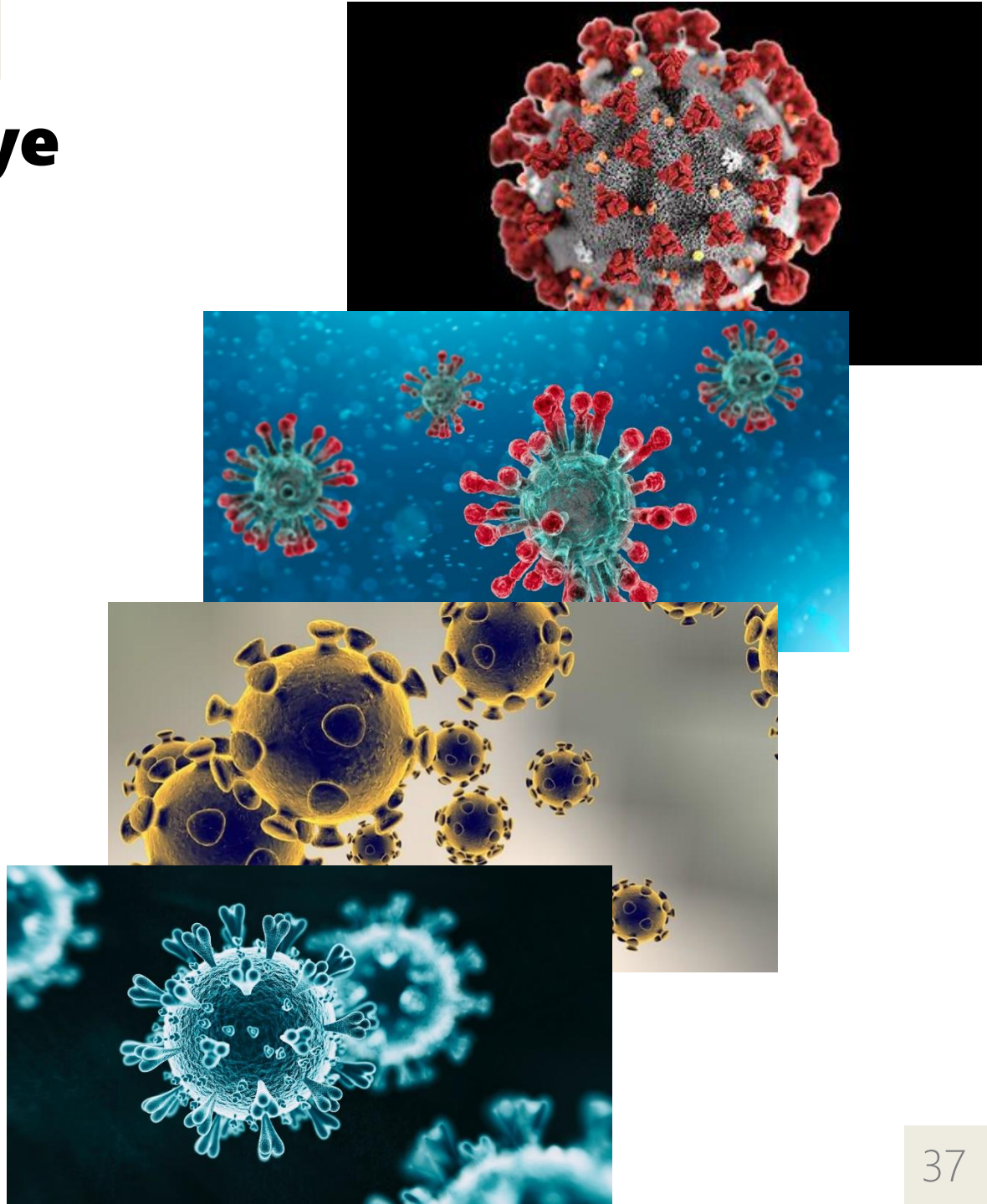
Early Christian art refused to follow the legacy of depicting antiquity because they considered this culture pagan, primarily because of the worship of the gods. in the form of man. In Byzantine art (art of the Eastern Roman Empire) - the rejection of realistic depiction. The image must be clearly different from the relationship with the real world. It is an emphasis on the spiritual dimension and symbolic meaning. Consciously rejected proportion and description of space.



Andrej Rublev: Icon of the Holiest Trinity , 15th century

Invisile to the Eye

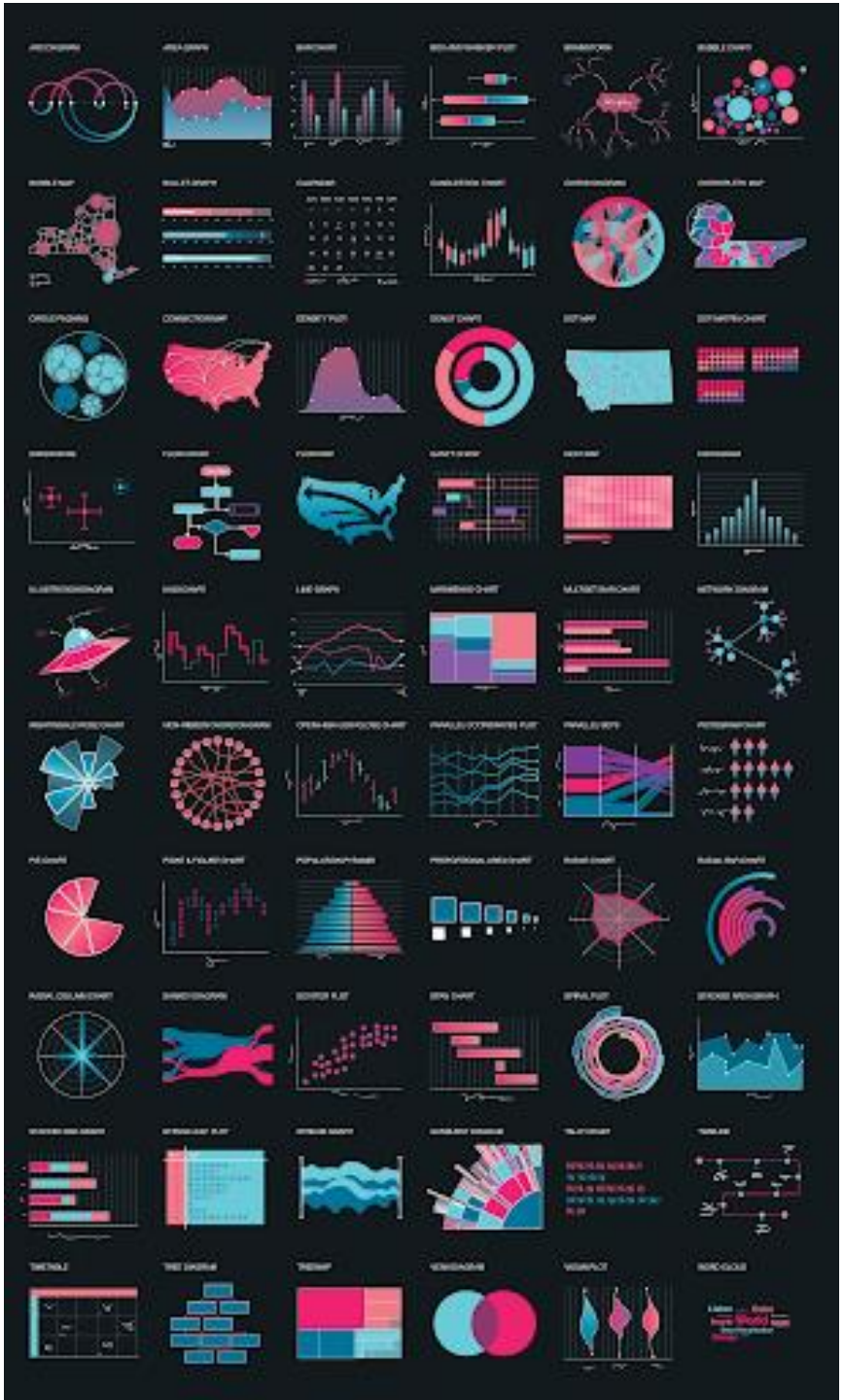
How to display what exists but is not accessible to the eye? Aids - binoculars, microscopes, CT scans, X-rays, MRI, ultrasound, etc. Even so, it is necessary to somehow represent the findings - visualize.



Various representation of Corona virus

Data Visualization

To understand abstract values, their visual representation is suitable - visualization. With the development of digital technologies, visualizations can be much more comprehensively presented and updated



CONCEPT OF THE WORLD

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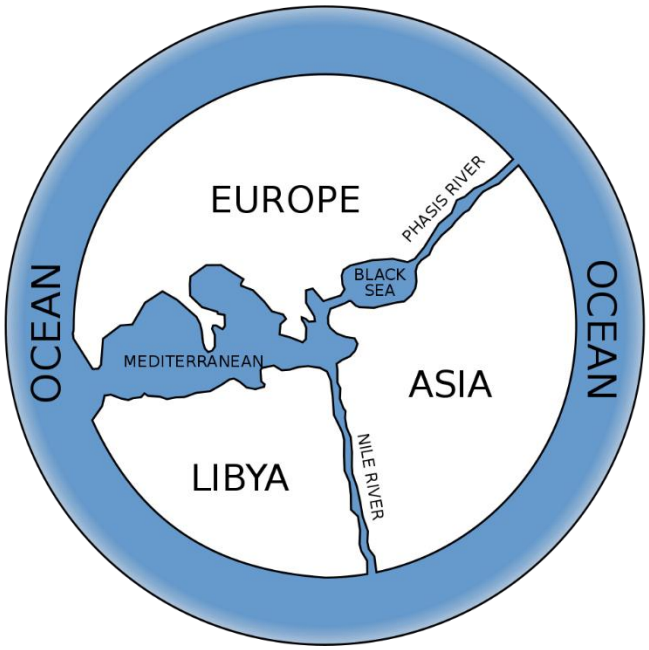
40 - 59

Greek Philosophers

Surprisingly, Greek philosophers believed that the Earth was round. Pythagoras He was of the opinion that the sphere is a perfect shape, and therefore the Earth will be of this shape. Aristotle The earth attracts objects to its Center, which has formed it into a sphere. During a lunar eclipse, when the Earth casts a shadow on the moon, that shadow is always rounded. This means that the Earth must also be round. What other body could cast a round shadow, if not a sphere? The earth is the Center of the Universe.

Borders of the known World

The first maps always showed only the explored areas, they could not understand what was beyond these borders. This led to the search for the Center.



The oldest "map" of the Babylonian Empire, 600 BC. - clay fragment and its interpretation

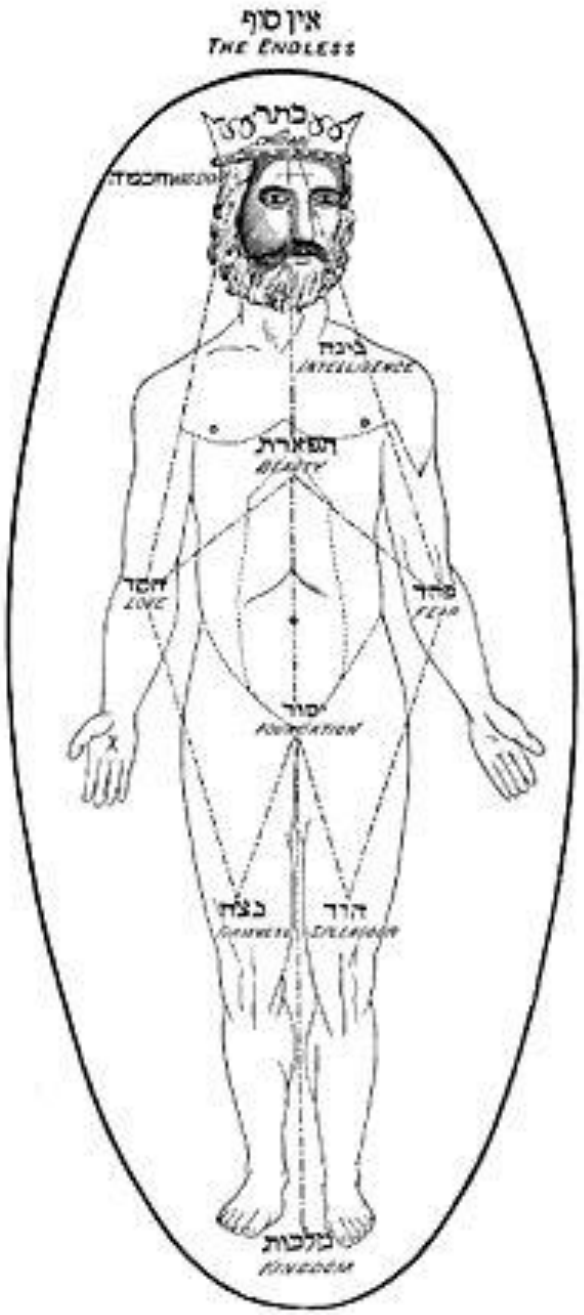
The Center of the World - Omfalos

Omphalos (Greek navel) is literally used for the "navel of the world", usually a stone pillar, which in ancient shrines called the "center of the world", the place where the earth is connected to heaven. On this according to ancient ideas, it is also possible to communicate with the gods in a sacred place.

Omphalos from Delfy

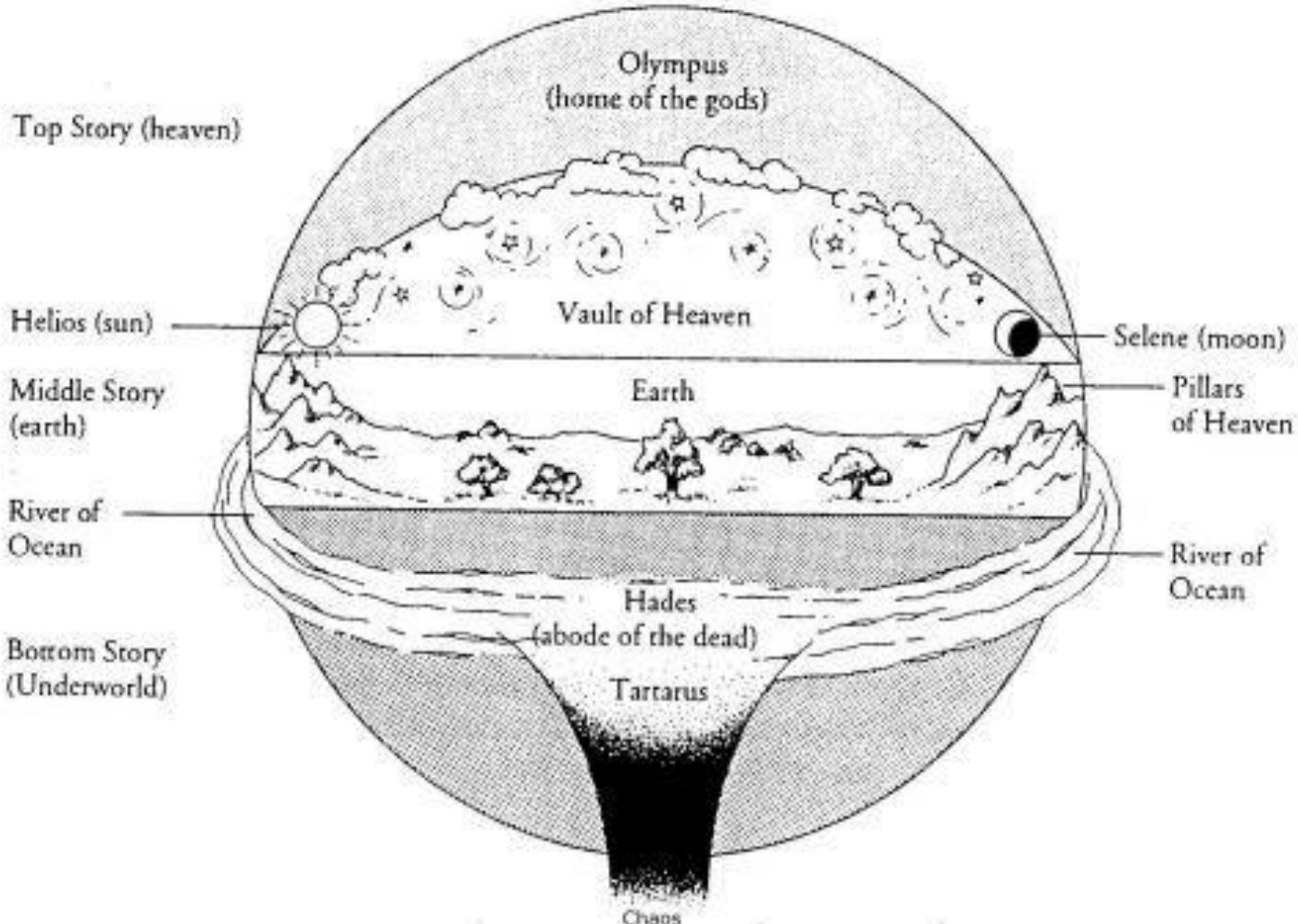
Antropomorfization Of the Universe

Adam Kadmon The cosmic man - the realm of infinite light, contains millions of worlds - the spiritual domains controlled by the sefirot. (safar - count). It includes all possible creatures. This description of the Universe is part of Kabbalah - the Jewish mystical teaching



Model of the World in Greece

This model was adopted by **Claudius Ptolemy (1.century b.c.)**

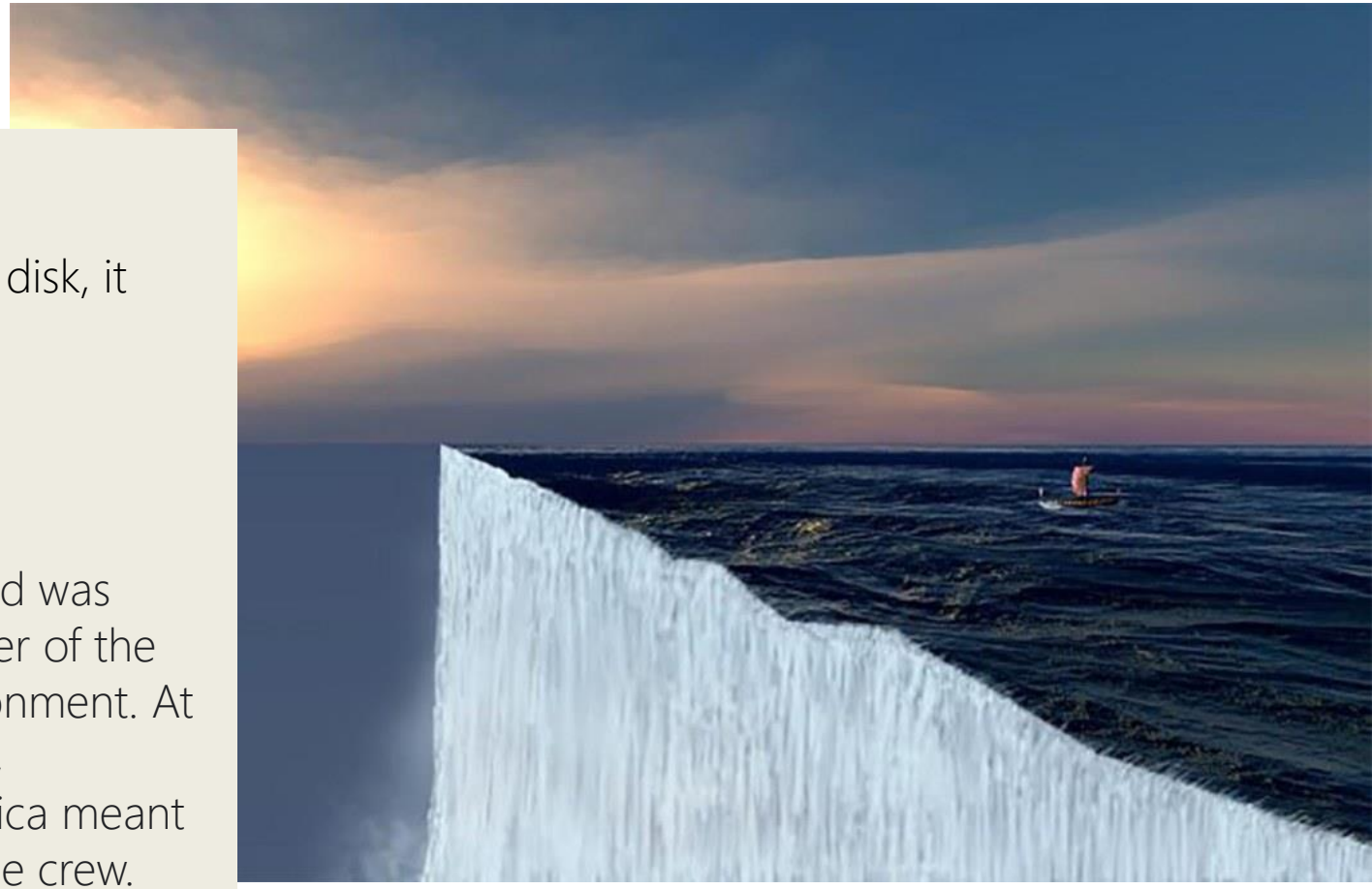


Ptolemaic Concept

Ptolemy created a model of the world based on the ancient concept. This model lasted throughout the Middle Ages until the time of astronomers who denied this model - Gallileo, Kepler, Copernicus.

Hieronymus Bosch, 15.st.

Ptolemaic Concept



If the Earth is a large disk, it must have an edge.

The edge of the world was situated on the border of the known African environment. At the time of seafaring, circumnavigating Africa meant "certain death" for the crew.

Claudius Ptolemy

(90 – 160)

He was an Alexandrian librarian. He summarized all the mathematical and astronomical knowledge of the time in the work Megalé syntaxis (The Great System - 13 books). He is considered the creator of three cartographic representations, especially the trapezoidal and conical. He also introduced a mound image of the relief, then determined the zero (Ferrian) meridian. As the western frontier of the known world, he divided the degrees into minutes and seconds. He is also referred to as the author of the words geography and topography.

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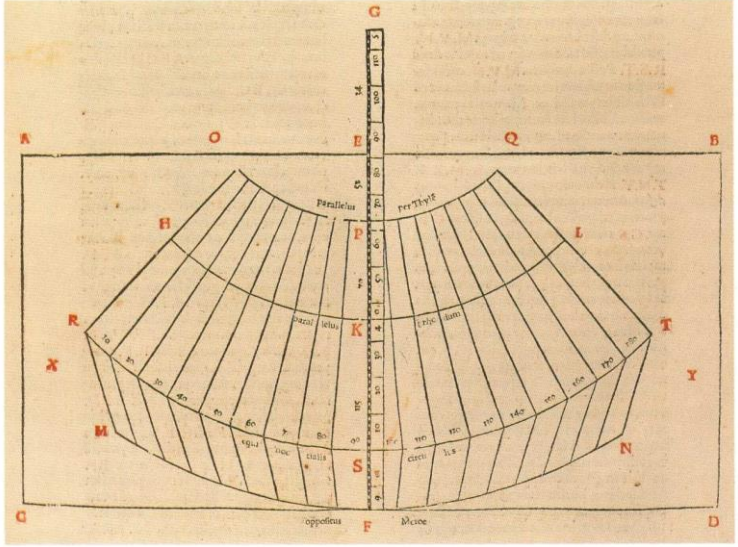
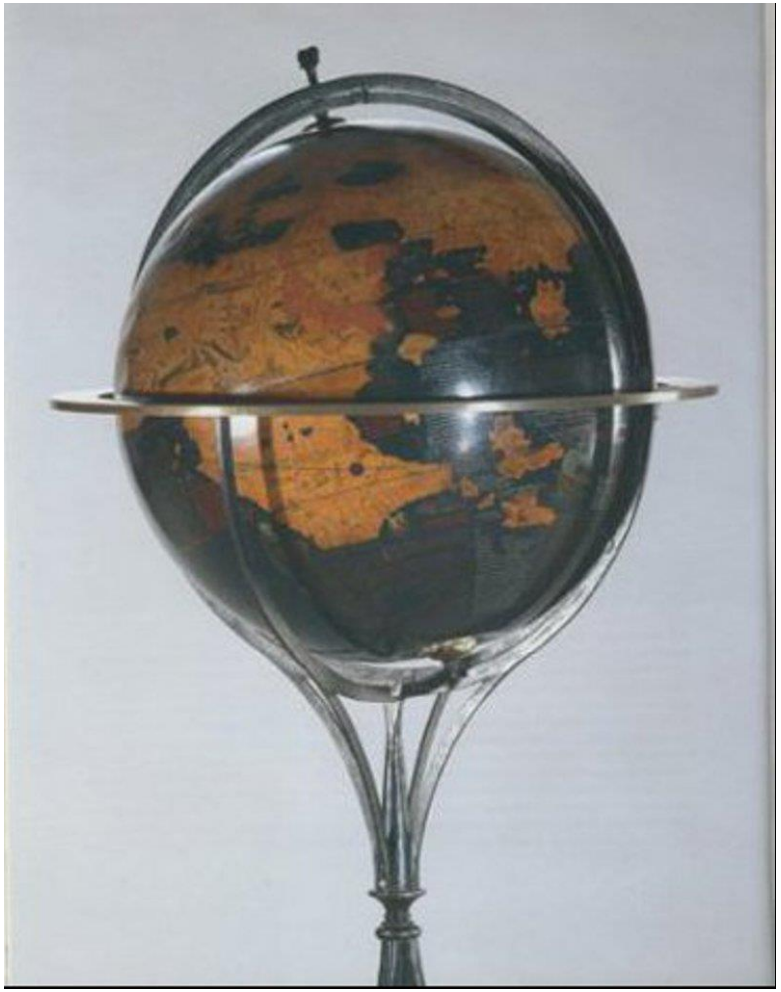


Ptolemy's conical projection

Ptolemy's map from the Strasbourg edition of Geography by Martin Waldseemüller (1513)

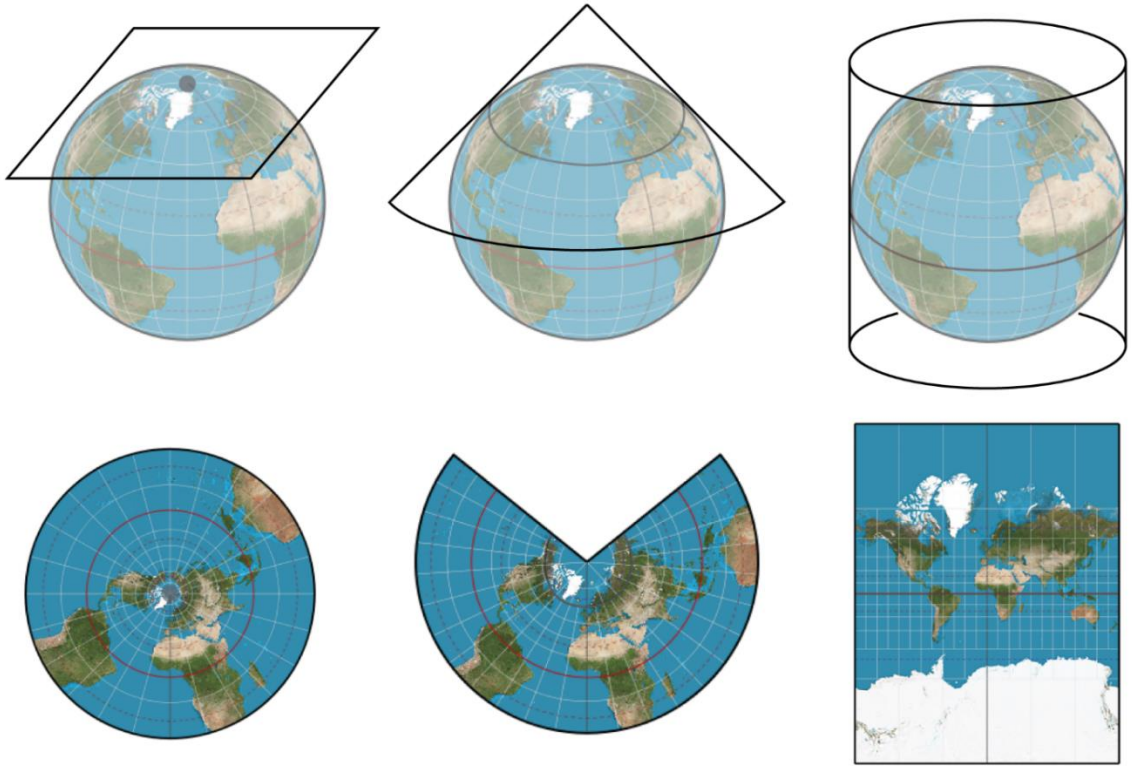
Depiction of World

The oldest surviving globe dates from 1492 from the hands of Martin Behaim and depicts the world before the discovery of America.



Maps – problems with the projection of a sphere on the desktop

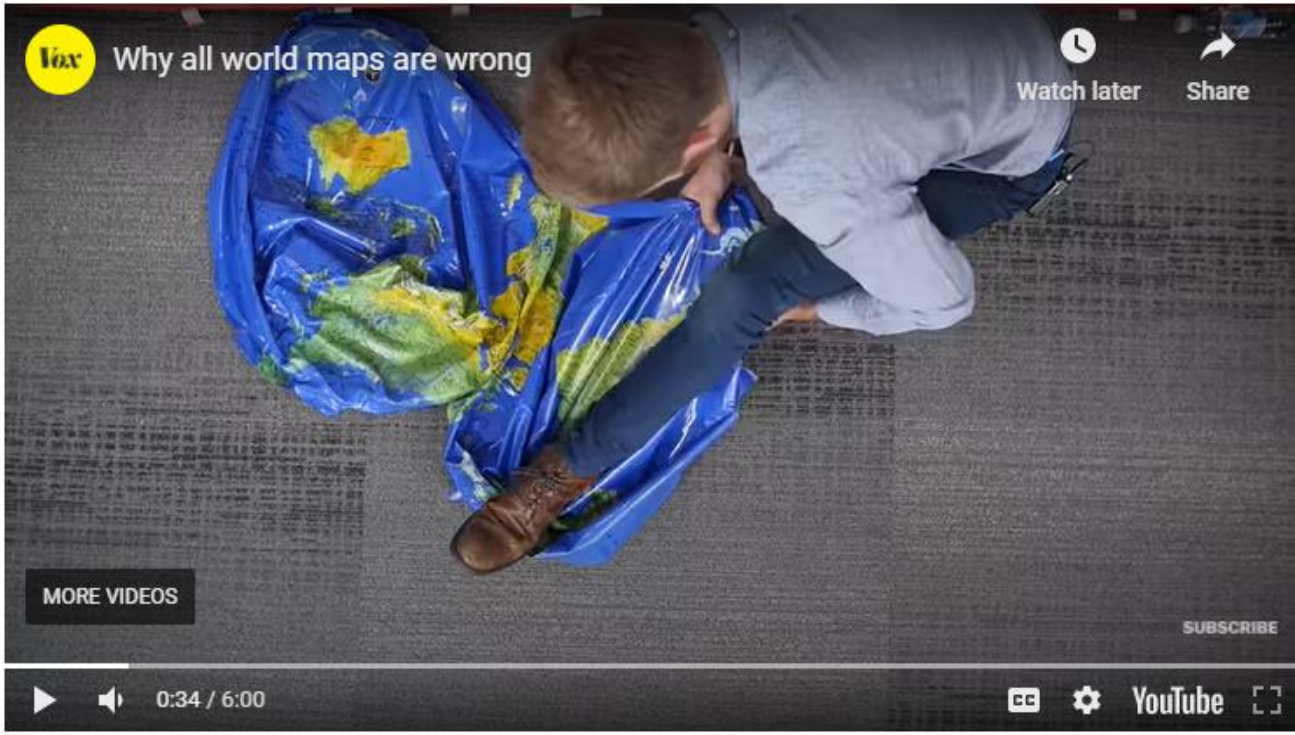
Creating a two-dimensional image - maps is a problem, there is a distortion of the surface and to proportional deformations



https://gistbok.ucgis.org/bok-topics/map-projections

Map – Problems with Projection of the Sphere on the Plane

Creating a two-dimensional image - maps is a problem, there is surface distortion and disproportionate relationships of continents.

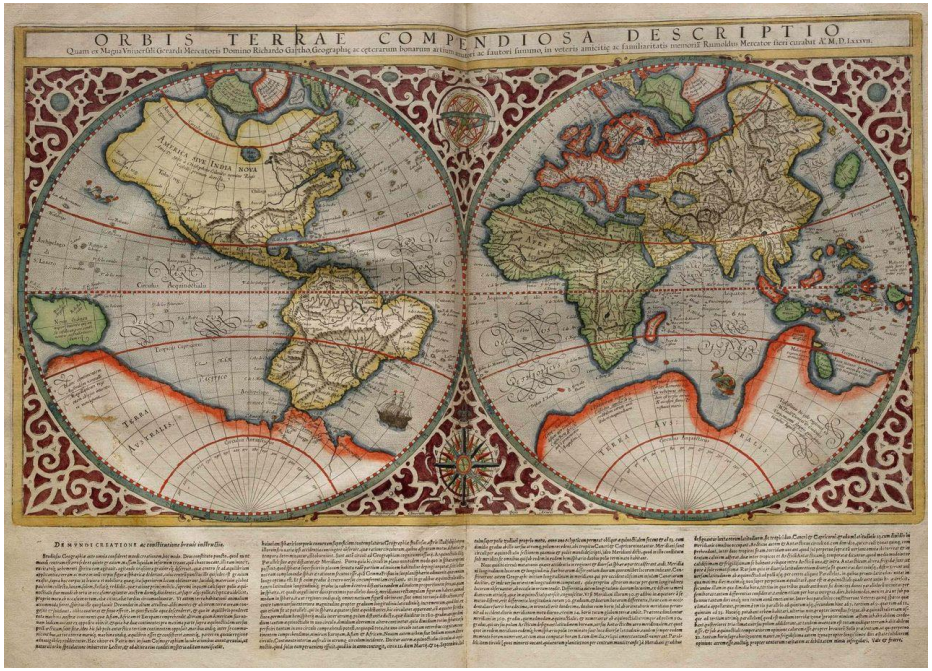


https://www.vox.com/world/2016/12/2/13817712/map-projection-mercator-globe

Map – Problems with Projection of the Sphere on the Plane

Creating a two-dimensional image - maps is a problem, there is surface distortion and disproportionate relationships of continents.

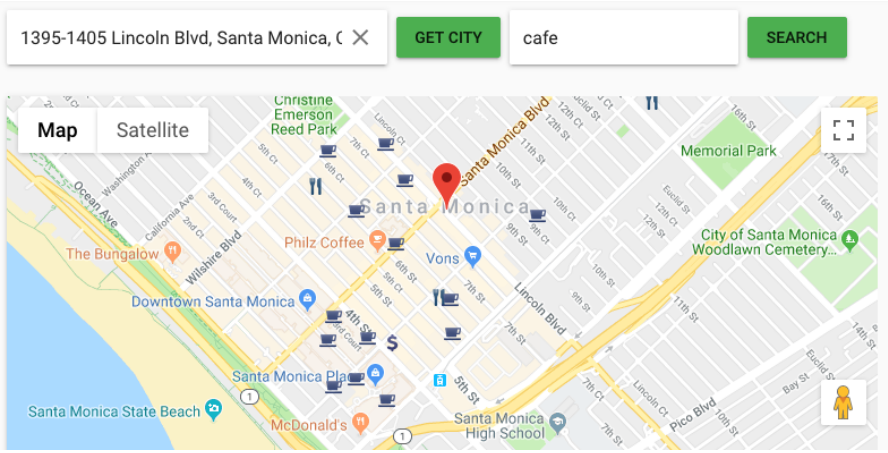
Gerardus Mercator created a map of the world, divided it into a network of horizontal and vertical (meridians, parallels). The map is clear, but the closer to the poles, the larger the area shown (Greenland is really not as big as Africa).



Gerardus Mercator, 1569

Mercator Map

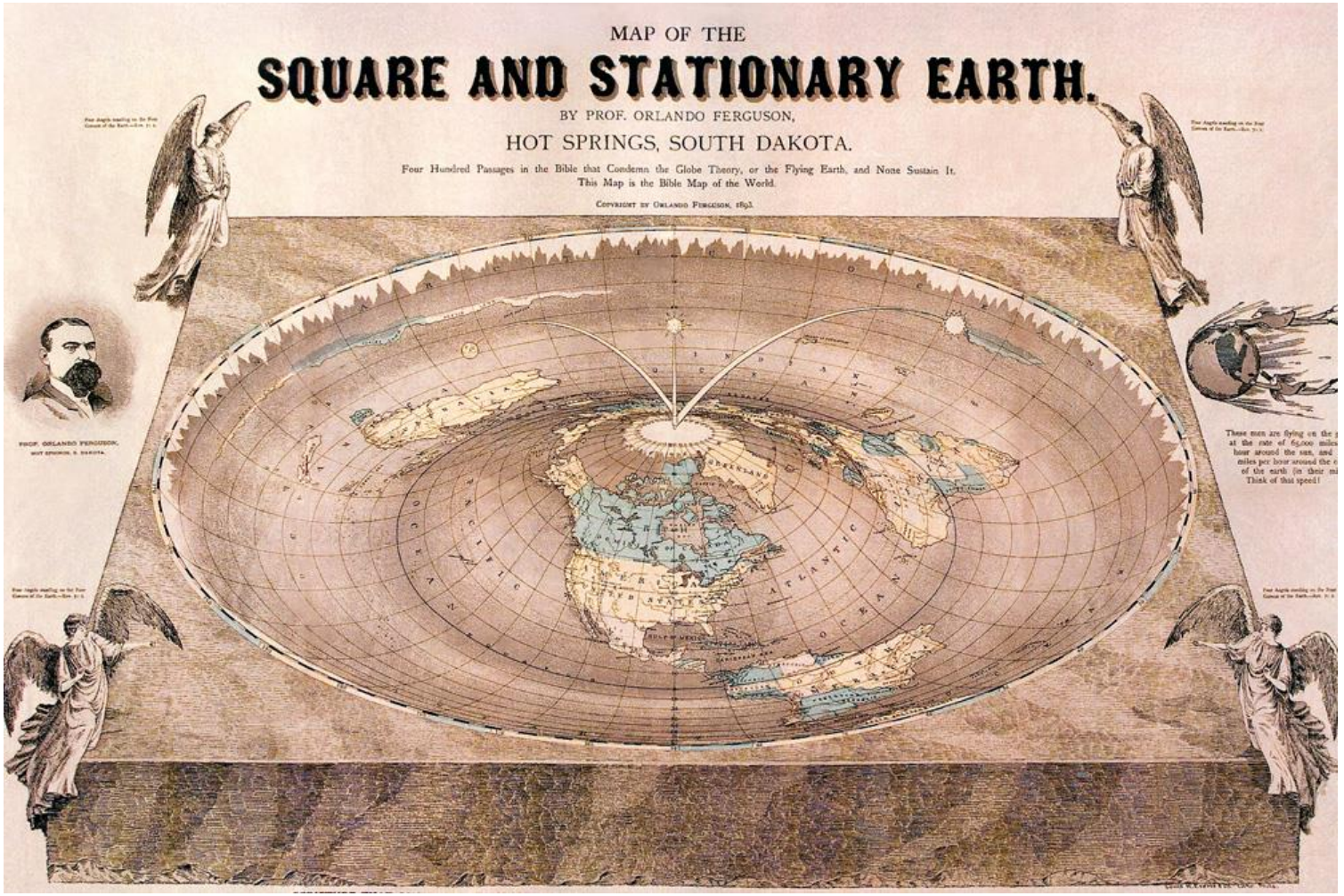
The map according to Mercator is a model for display in Google Maps. One reason is that the streets display very well and the angles that the streets make correspond to reality (significantly smaller scale compared to the view of the whole world).



Gerardus Mercator, 1569

The night and day are shown on the map here. It is possible to meet this map on intercontinental flights

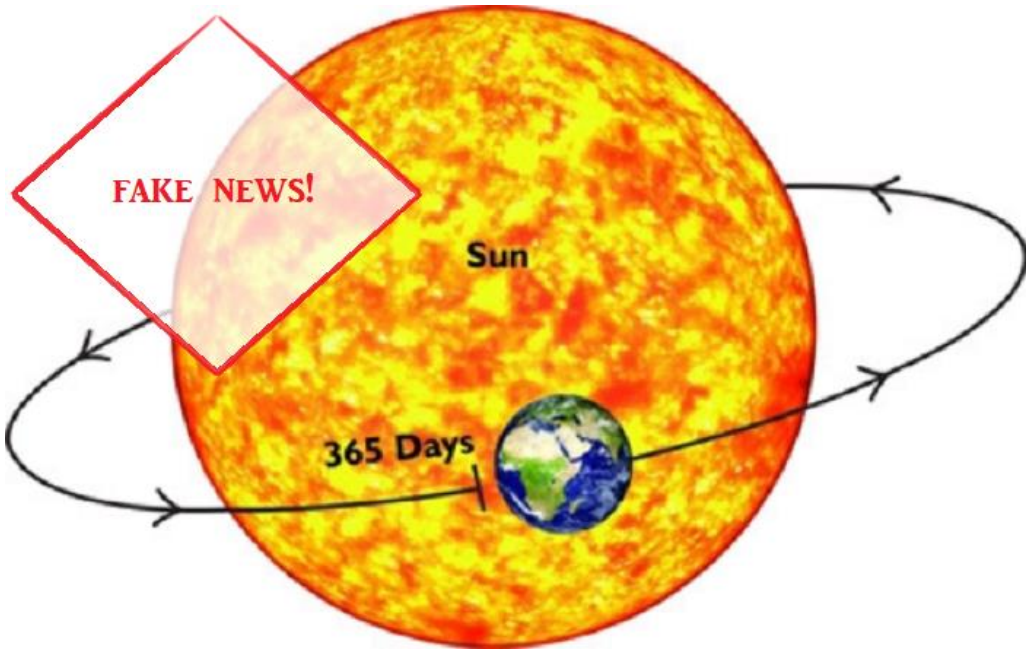
Rejection of scientific knowledge



Orlando Ferguson (1893)

Flat Earth Movement

This movement is currently gaining momentum very quickly. Scientists fear that the theory of the shape of the Earth may happen political issues such as climate change, vaccination or evolution



http://www.illinoishomepage.net/news/local-news/flat-earth-conspiracy-theorists-on-the-rise/848659399

Flat Earth Movement

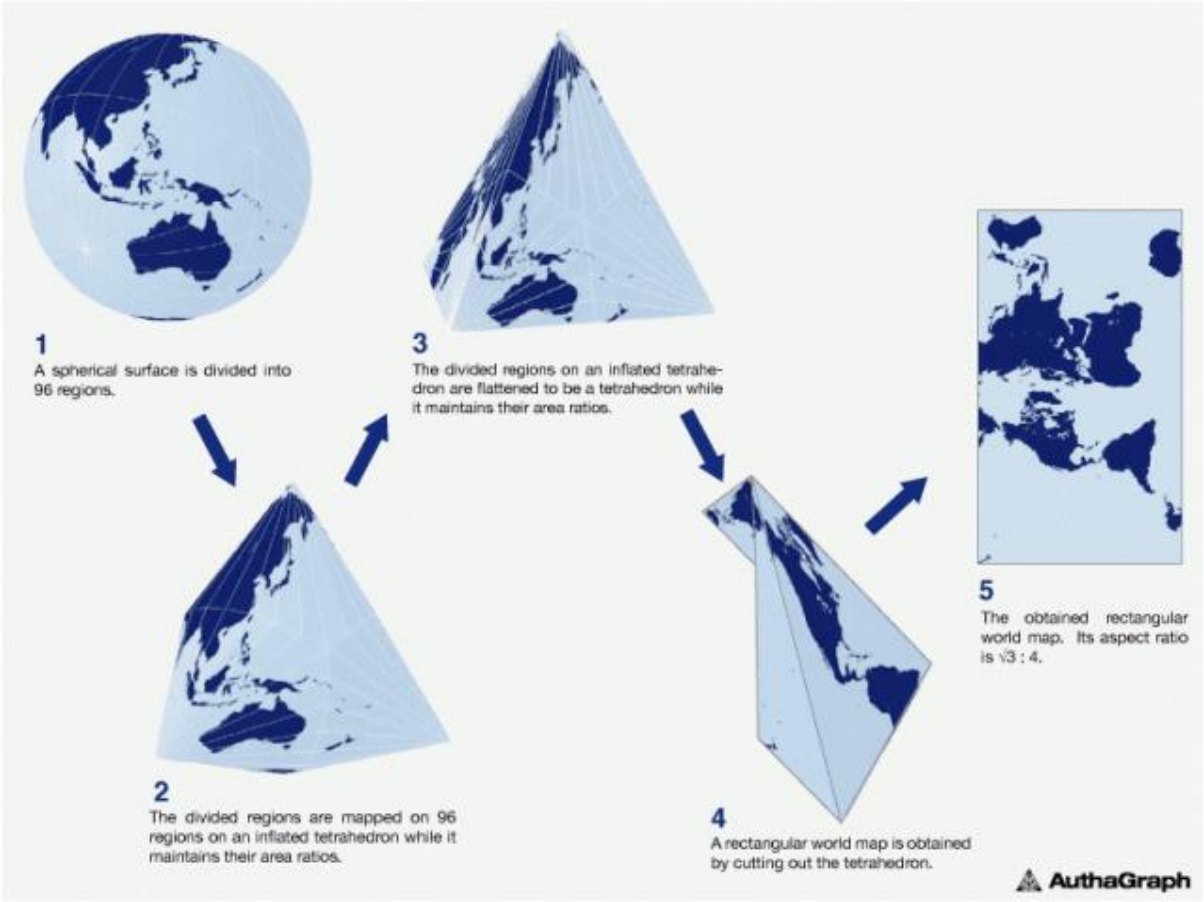
The Earth is a flat disk with a diameter of 40,000 km. At its center is the North Pole. The South Pole does not really exist. What is called Antarctica is actually a giant ice wall that surrounds the edges of the Earth's disk.

The Sun, Moon and planets revolve above the earth's surface around the North Pole. Earth photos from space are a hoax. We are victims of the conspiracy of the cosmic powers. During the Cold War, the USSR and the US deliberately falsified their own results in the quest for victory in order to keep up with the envisaged successes of the enemy. And when it turned out that both sides were lying, it was too late - the cosmic "successes" became the object of national pride.

Landing Americans on the Moon is a scam filmed in Hollywood.

https://www.placata-zeme.cz/

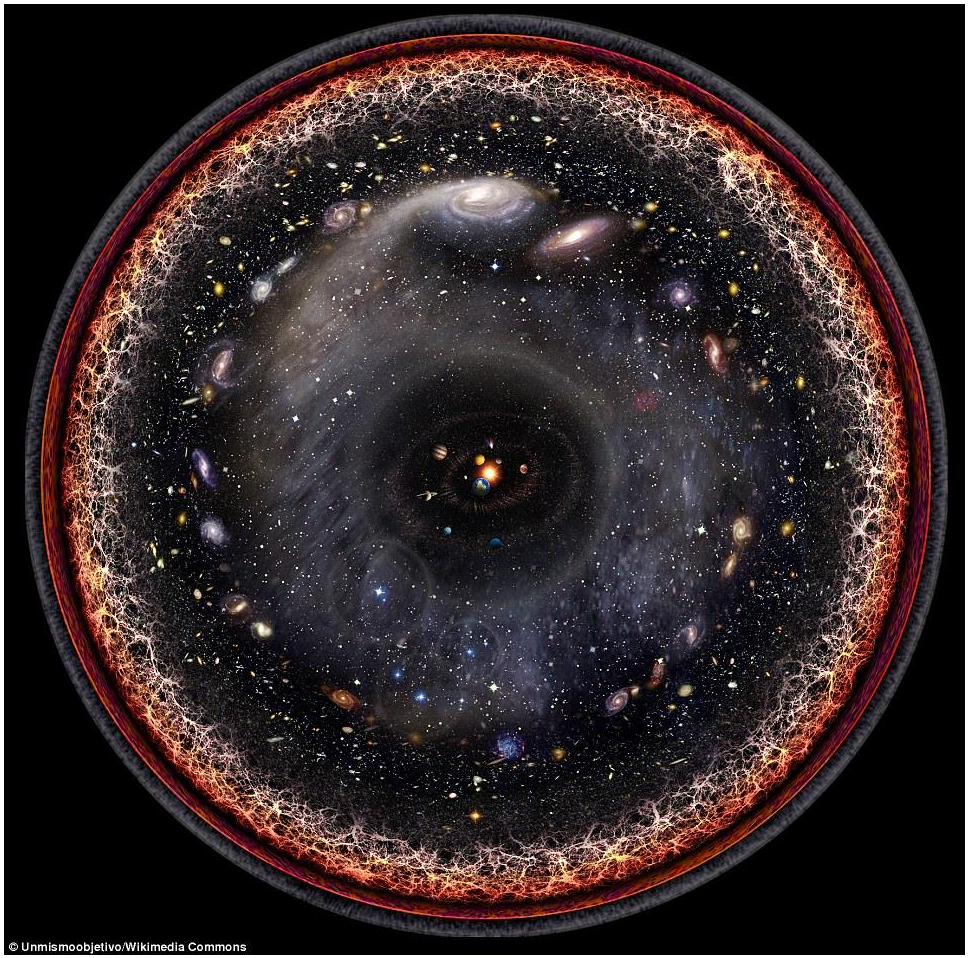
Authagraph map from 2016 is a way of projecting the globe on a tetrahedron (pyramid). This projection does not distort the proportions of the continents.



https://bigthink.com/design-for-good/award-winning-map-shows-a-more-accurate-world
Video: https://vimeo.com/15432252

Earth in the Middle of the Space Map

LOGARITHMIC MAP OF SPACE Pablo Carlos Budassi, 2016: This design composed of slides distant space. Unlike common maps where points are separated from each other located at the same distance, is on this representation of a logarithmic map increases the scale along the axes exponentially by tens, or by what the farther from the Earth the smaller the space for illustration. This view assumes a transformation scale depending on the distance. This is a new display concept.



http://www.dailymail.co.uk/sciencetech/article-3385768/Our-universe-single-image-Artist-

…to be continued