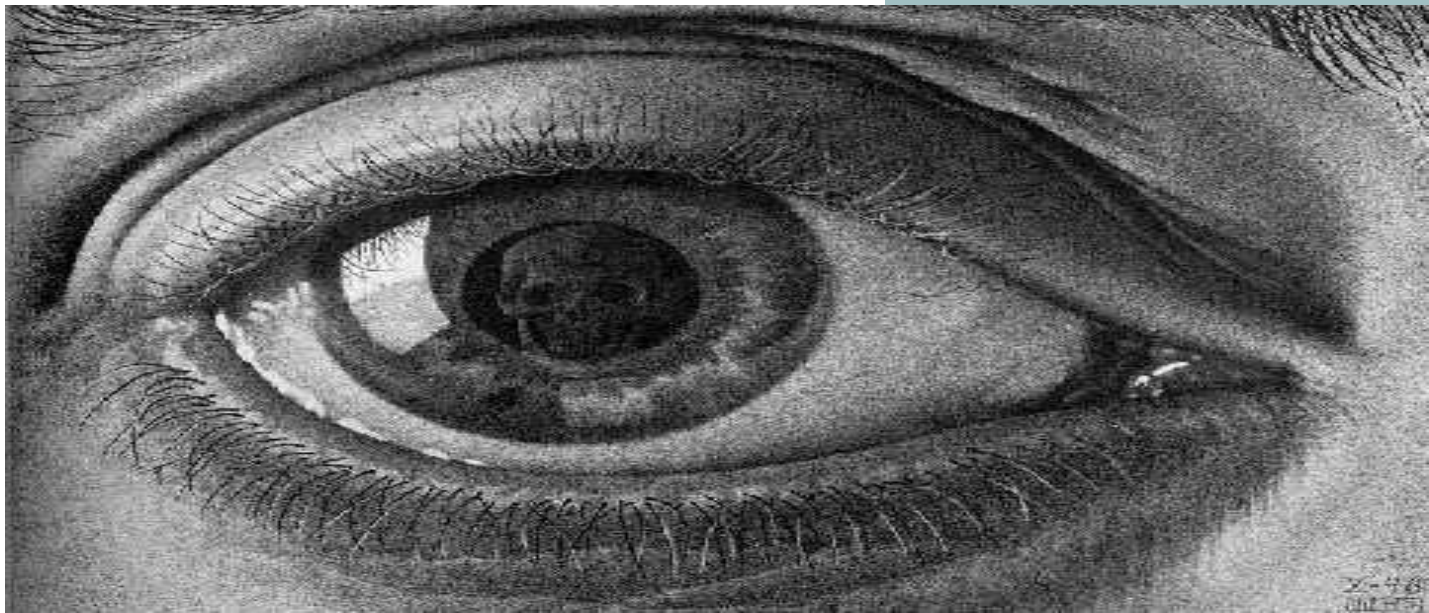


Visual Perception Theories



Sensory and Perceptual

- Sensory (Gestalt and Constructivism)
- Direct or mediated images are composed of light objects that attract or repel us.
- The brain sees – the visual cues of color, form, depth, and movement – but not how the mind considers them.
- Perceptual (Semiotics and Cognitive)
- Concerned with the meaning that humans attach or associate with the images they see.

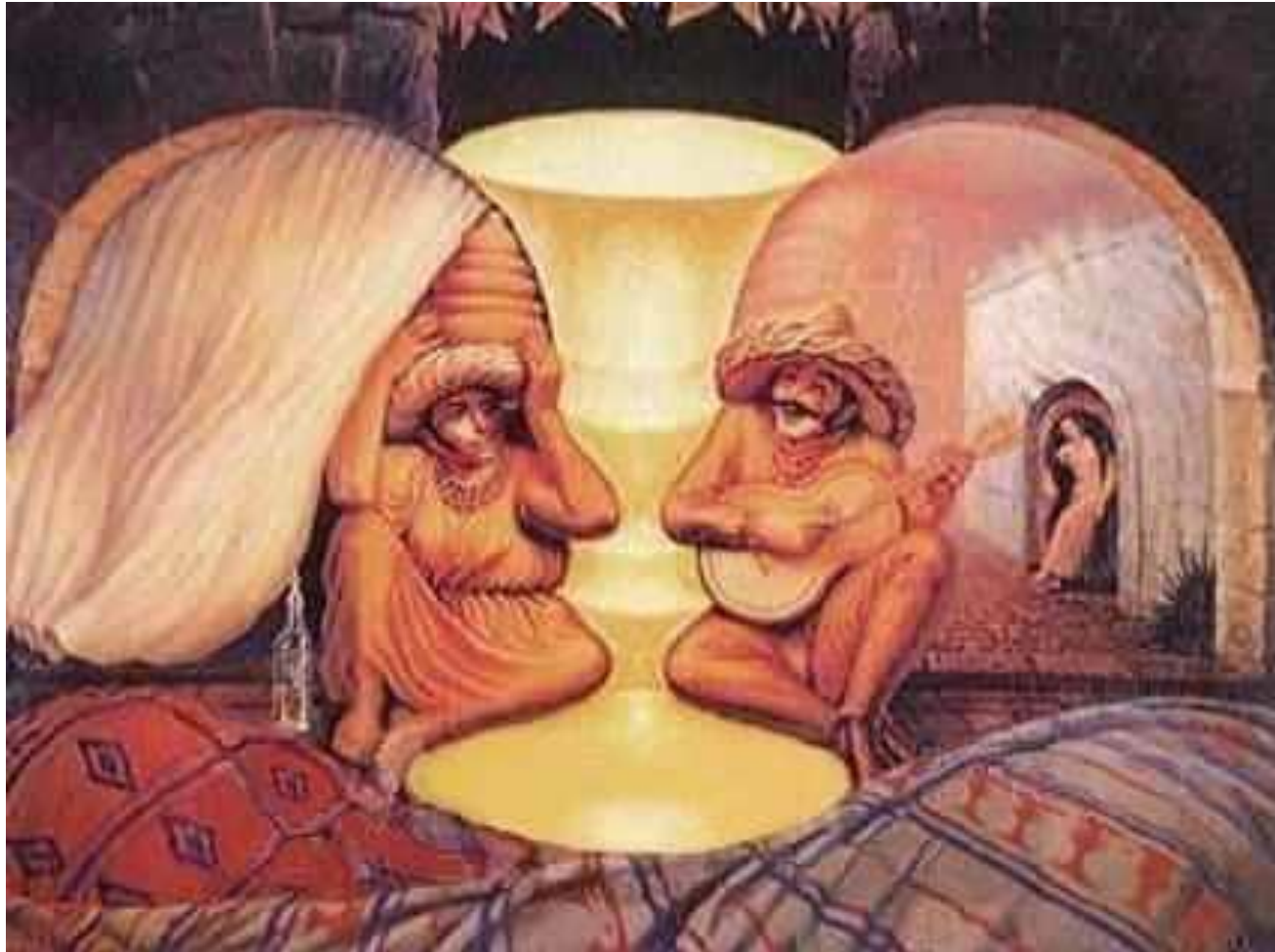
Sensual Theories of Visual Communication

▫ Gestalt & Constructivism

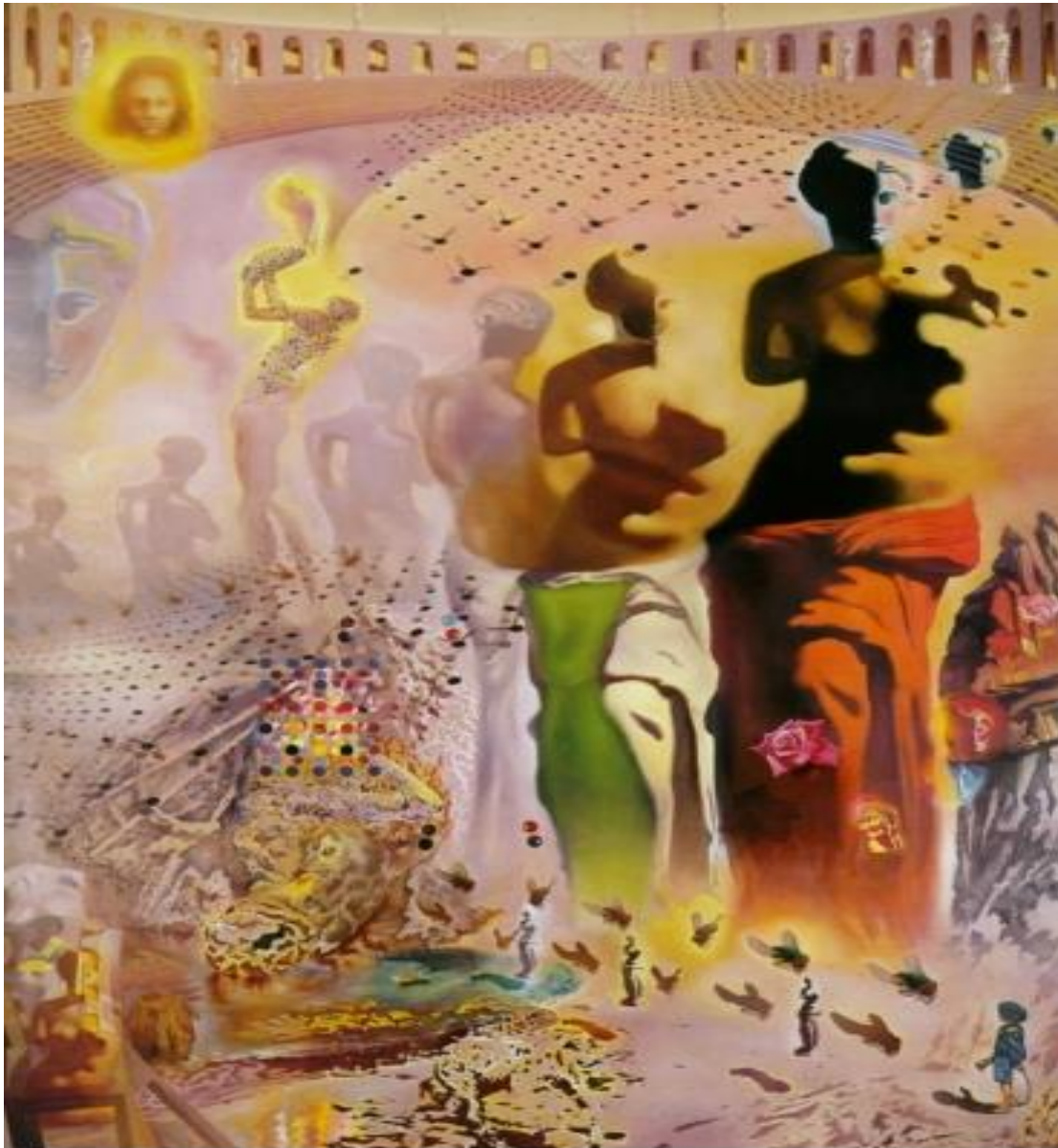
Gestalt=form or shape

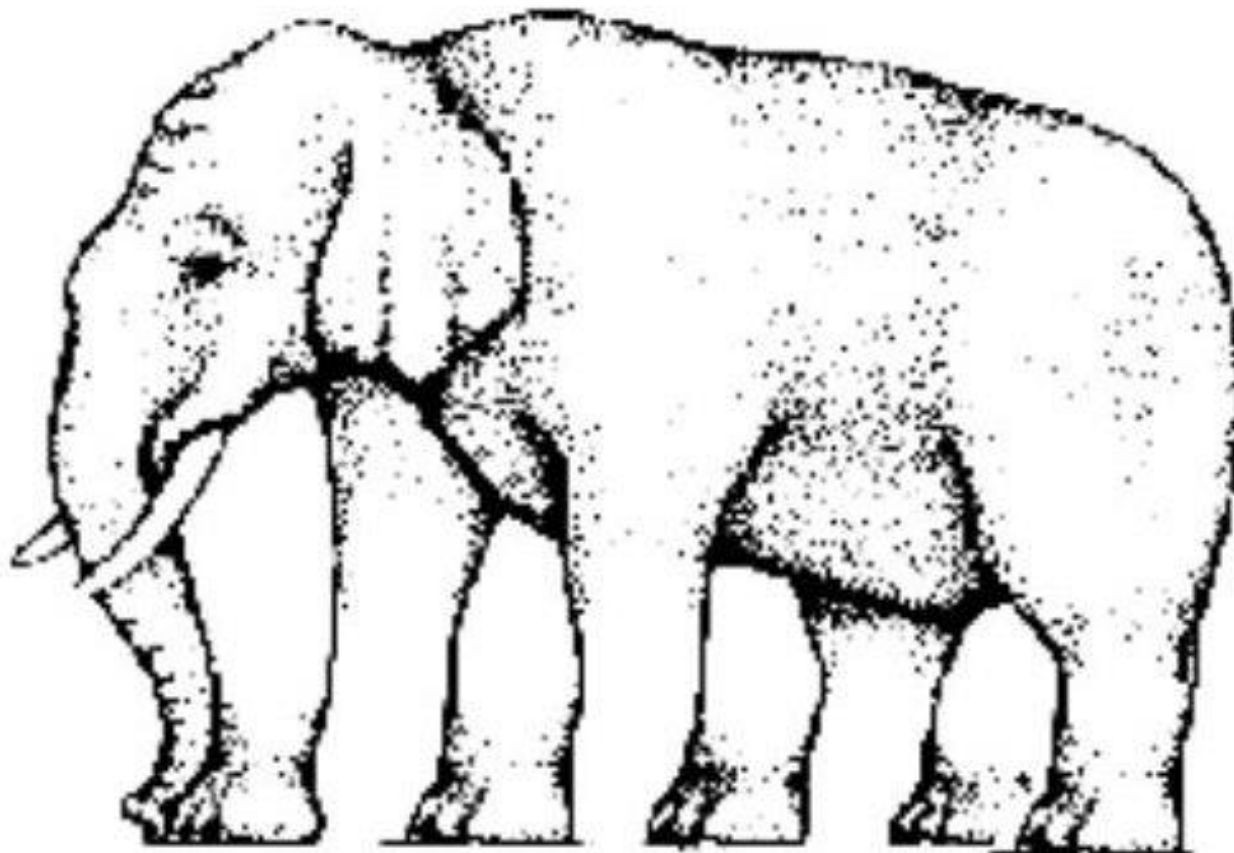


- Max Wertheimer (1910)
- Perception is a result of a combination of sensations and not of individual sensory elements – visual perception is a result of organizing sensory elements or forms into various groups.
- “the whole is different from the sum of its parts”
- The eye merely takes in all the visual stimuli and the brain arranges the sensations into a coherent image









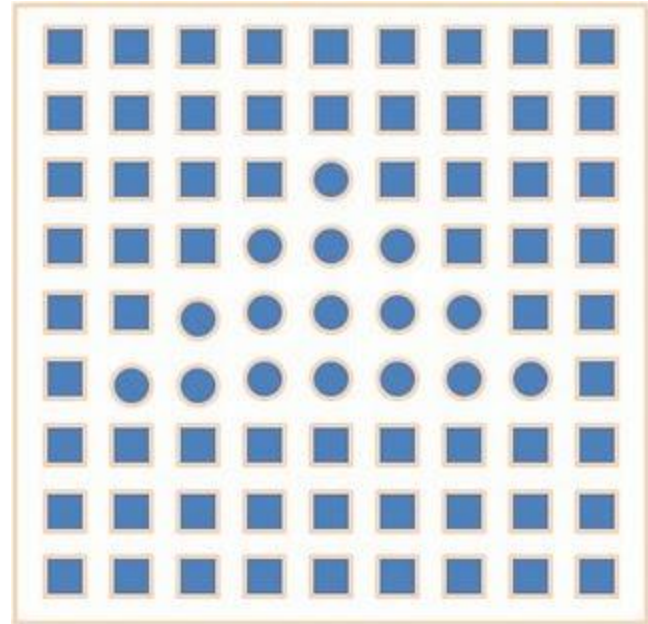
How many legs does this elephant have?

4 Fundamental Groupings or Laws

- Discrete elements within a scene are combined and understood by the brain through a series of four fundamental principles or groupings.
- Similarity
- Proximity
- Continuation
- Common Fate

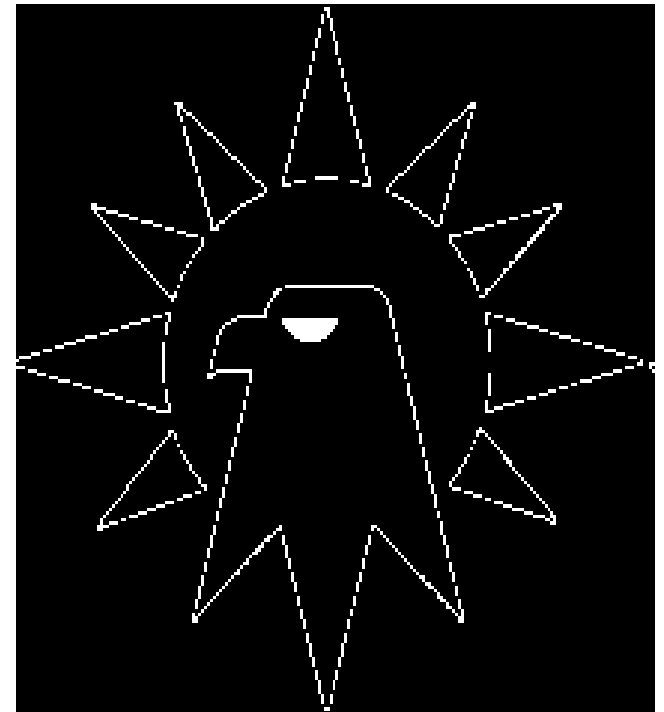
Similarity

- – states that, given a choice by the brain, you will select the simplest and most stable form to concentrate
 - Squares, circles and triangles

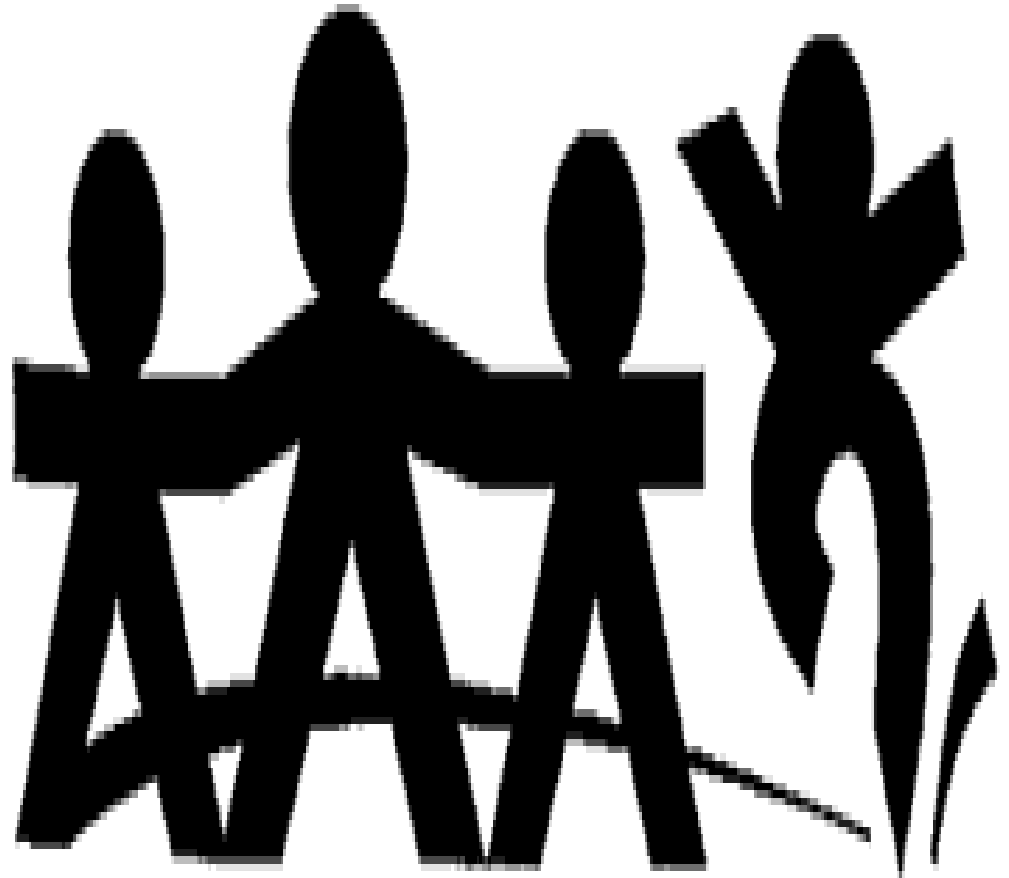


Similarity

- *Similarity* occurs when **objects look similar** to one another. People often perceive them as a group or pattern.
- The example (containing 11 distinct objects) appears as **single unit** because all of the shapes have **similarity**.
 - Unity occurs because the triangular shapes at the bottom of the eagle symbol **look similar** to the shapes that form the sunburst.

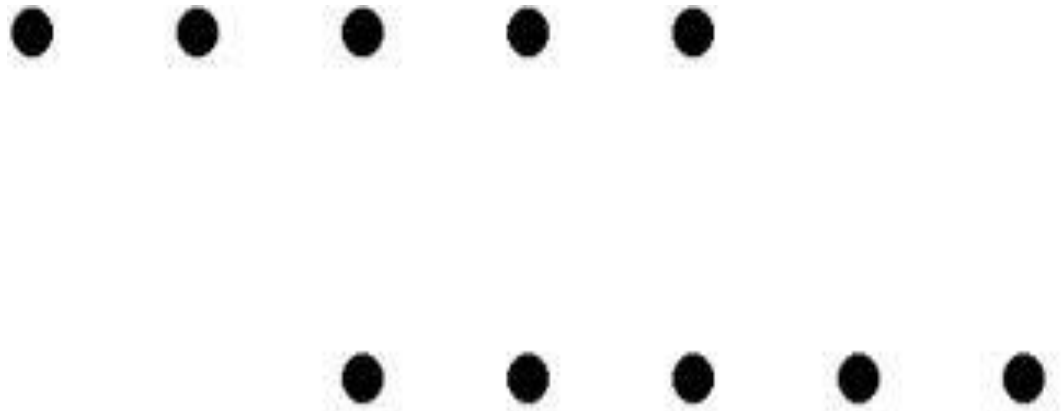


- When similarity occurs, an object can be emphasized if it is *dissimilar* to the others. This is called **anomaly**.



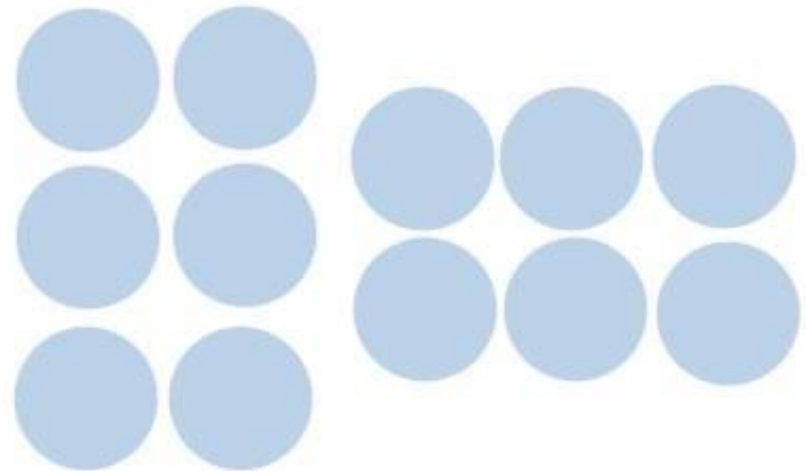
Proximity

- States that the brain more closely associates objects close to each other than it does two objects that are far apart



Elements that are closer together will be perceived as an object. In this example the same dots are used, but their proximity creates two lines.

- *Proximity* occurs when elements are placed close together. They tend to be perceived as a group.



Law of Proximity:

Objects near each other tend to be grouped together.

The circles on the left appear to be grouped in vertical columns, while those on the right appear to be grouped in horizontal rows.

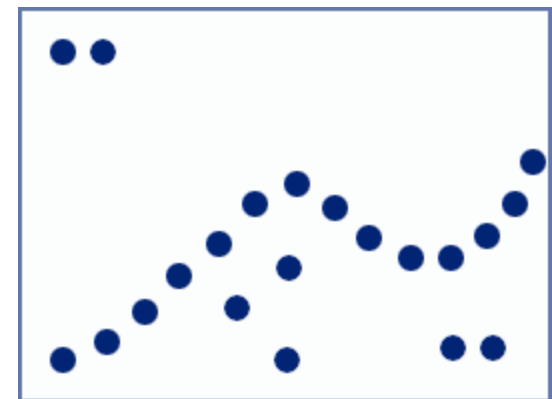
- The fifteen figures on the right form a *unified whole* (the shape of a tree) because of their **proximity**.



Continuation

- The brain does not prefer sudden or unusual changes in movement of a line – it seeks as much as possible a smooth continuation of a line
- Continuation occurs when the eye is compelled to **move through** one object and **continue** to another object.

- Continuation occurs in the example, because the viewer's eye will naturally follow a line or curve. The smooth flowing crossbar of the "H" leads the eye directly to the maple leaf.
- We tend to assign objects to an entity that is defined by smooth lines or curves

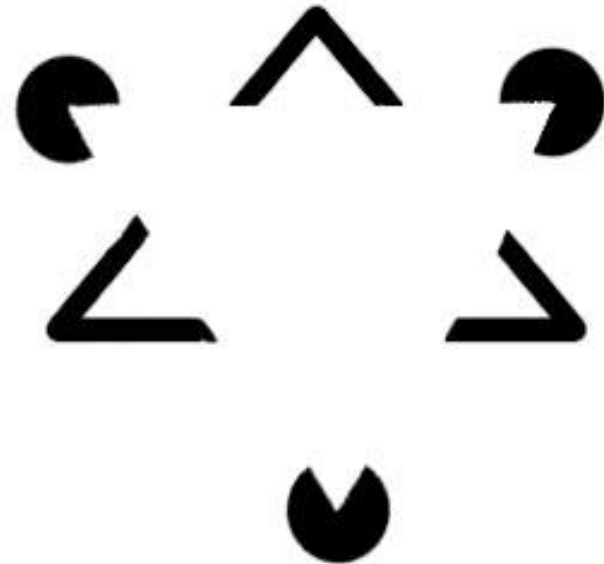


Common Fate or Closure

- The brain will mentally group items all pointing in the same direction – items pointing in a different direction than most of the whole create tension
- *Closure* occurs when an object is *incomplete* or a space is not *completely enclosed*. If enough of the shape is indicated, people perceive the whole by filling in the missing information



- Although the panda is not complete, enough is present for the eye to complete the shape. When the *viewer's perception completes a shape*, **closure** occurs



Law of Closure:

Objects grouped together are seen as a whole.

We tend to ignore gaps and complete contour lines. In the image above, there are no triangles or circles, but our minds fill in the missing information to create familiar shapes and images.

- The brain classifies visual material in discrete groups.
- What we see when looking at a picture is modified by what we have seen in the past and what we want to see

Constructivism

- The viewer constructs the scene with short-lived eye fixations that the mind combines into a whole picture
 - Researchers found that the content, size, and placement of photos on a newspaper page are more important than whether the image is printed in color

<http://www.youtube.com/watch?v=7QfcVGrar9E>

Perceptual Theories of Visual Communication

▫ Semiotics & Cognitive

Semiotics=study or science of signs

- A sign is simply anything that stands for something else
- What is not a sign?
 - Almost any action, object, or image will mean something to someone somewhere
 - For something to be sign, the viewer must understand its meaning

3 Types of Signs

- Iconic
- Indexical
- Symbolic

Iconic Signs

- To be like or to seem as something
- Iconic signs most closely resemble the thing they represent
- The most common examples are found in photographs and motion pictures – meant to be true representations of what they depict



Indexical Signs

- Have a logical, commonsense connection to the thing or idea they represent rather than a direct resemblance to the object





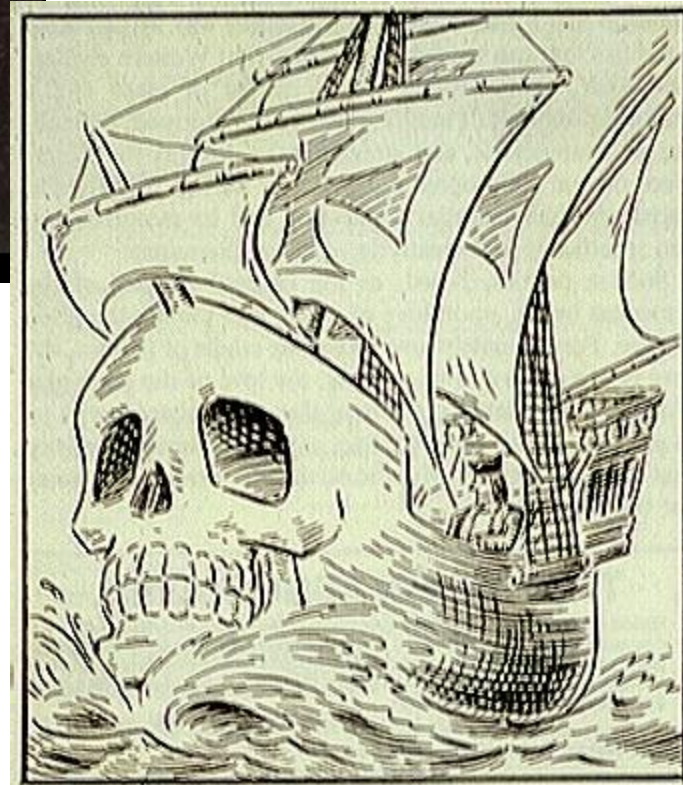
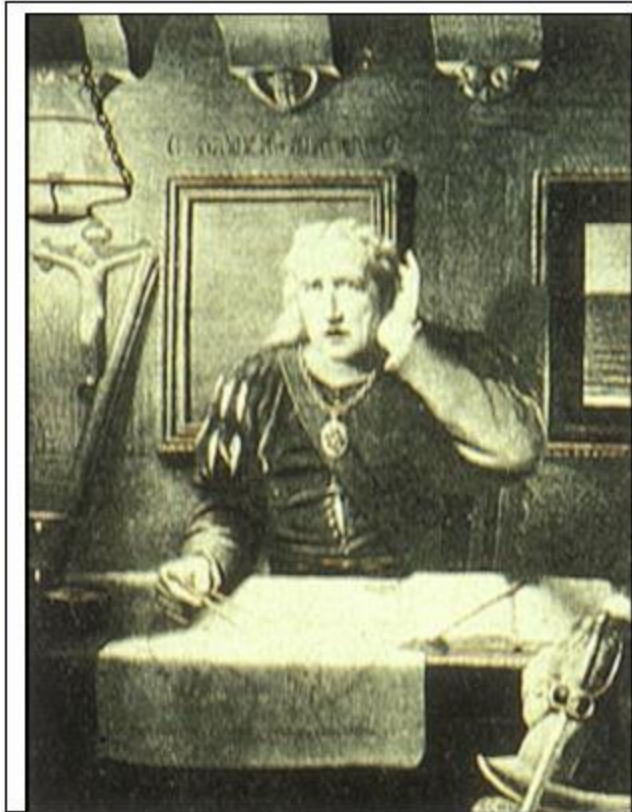
Symbolic Signs (most abstract)

- Symbols that have no logical or representational connection between them and the things they represent –
 - symbols more than the other types of signs, have to be taught





CRISTO: COLOMBO



Roland Barthe's - chain of association - signs that make up a picture's narrative

- 4 codes
- Metonymic
- Analogical
- Displaced
- Condensed



Metonymic

- Is a collection of signs that cause the viewer to make associations or assumptions





- The man who thinks for himself knows...
Only Viceroy has a think man's filter...
a smoking man's taste!
- Metonymic code is expressed in this design because of the assumptions the viewer might make when viewing the ad. For example, someone looking at the ad might think that if they smoke Viceroy they will appear more intelligent or obtain more intelligence.



IT JUST
TASTES
BETTER



**IT'LL BLOW
YOUR MIND AWAY**



BK SUPER SEVEN INCHER

Fill your desire for something long, juicy and flame-grilled with the **NEW BK SUPER SEVEN INCHER**. Yearn for more after you taste the mind-blowing burger that comes with a single beef patty, topped with American cheese, crispy onions and the A.1.[®] Thick & Hearty Steak Sauce.

Analogical

- A group of signs that cause the viewer to make mental comparisons





A musical score for piano, consisting of two staves: a treble staff (top) and a bass staff (bottom). The score is written in a key signature of one flat (B-flat) and a common time signature (C). The music is organized into three measures, each marked with a vertical bar line. The first measure contains a triad of notes (F4, A4, Bb4) in the treble staff and a dyad (F3, A3) in the bass staff. The second measure contains a dyad (F4, A4) in the treble staff and a dyad (F3, A3) in the bass staff. The third measure contains a triad of notes (F4, A4, Bb4) in the treble staff and a dyad (F3, A3) in the bass staff. The notes are represented by black dots on the staff lines, with stems pointing downwards. The treble staff has a treble clef and a key signature of one flat. The bass staff has a bass clef and a key signature of one flat. The two staves are connected by a brace on the left side.

Displaced

- Those that transfer meaning from one set of signs to another





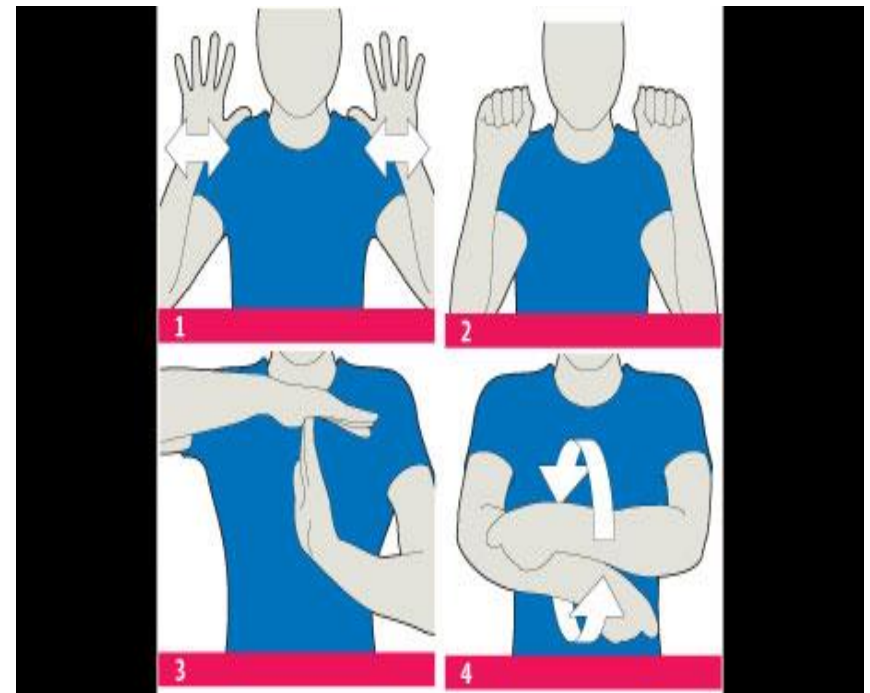


Condensed

- Several signs that combine to form a new, composite sign
 - Within the culture the message is intended for, the condensed code has relevant meaning. But for those outside that culture, the images often are confusing, random and without purpose

Quaker Meetings

- Four common protest signs and what they mean.
- 1. Raised hands wagging: 'I agree';
- 2. Fists raised: 'I need to speak urgently';
- 3. T-sign: 'I'd like to raise a technical point';
- 4. Rolling arms: 'I'm bored'.



Cognitive Theory

- A viewer does not simply witness a light-structure object – but actively arrives at a conclusion about the perception through a mental process

Mental Activities that affect visual perception - Carolyn Bloomer

- Memory
- Projection
- Expectation
- Selectivity
- Habituation
- Saliency
- Dissonance

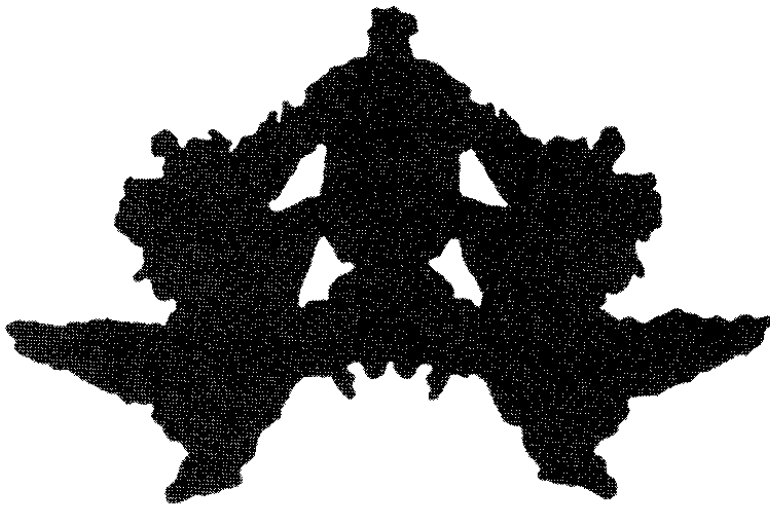
Memory

- Is basically our personal link with all the images we have ever seen
 - mnemonics



Projection

- A person's mental state of mind is thus "projected" onto an inanimate object – projecting personal interpretation and meaning



Courtesy of Paul Martin Lester





The ultimate attraction.

Expectation

- Having preconceived expectations about how a scene should appear – often leading to false or missed visual perceptions





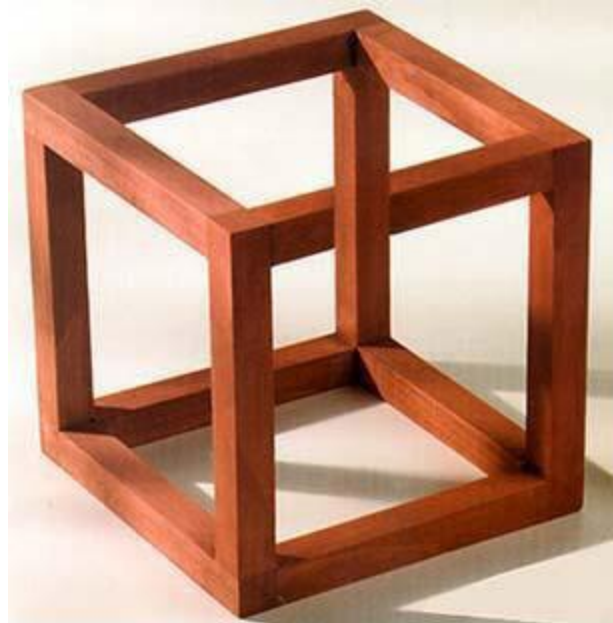
Selectivity

- Unconscious, automatic act by which large numbers of images enter and leave the mind without being processed – the mind focuses only on significant details within a scene



Habituation

- To protect itself from over stimulation and unnecessary pictures, the mind tends to ignore visual stimuli that are a part of a person's everyday, habitual activities



Salience

- A stimulus will be noticed more if it has meaning for the individual



Dissonance

- Conflicting imagery – television programs that combine written and spoken words, multiple images, and music run the risk of creating visual messages that the viewer cannot understand because of all the competing formats





Culture

- Images which span ethnicity, economic situation, place of work, gender, age, sexual orientation, physical disability, geographic location, and the entire composite of a person's life



