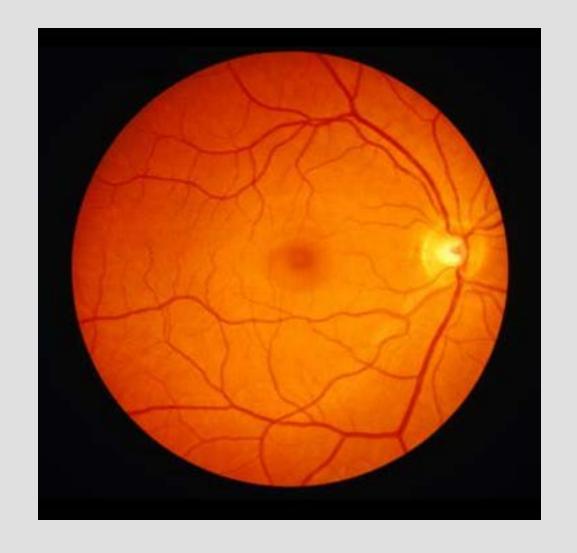
# VISUALIZATION IN ART AND DESIGN

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#### Visualization

- Vision
- The brain and vision
- Visual perception: Figure and form
- Visual cognition
- Context, cognition, and art

#### Visualization

- Two meanings of visualization
  - To form a mental image of; envisage: trying to visualize the scene as it was described.
  - To make visible.

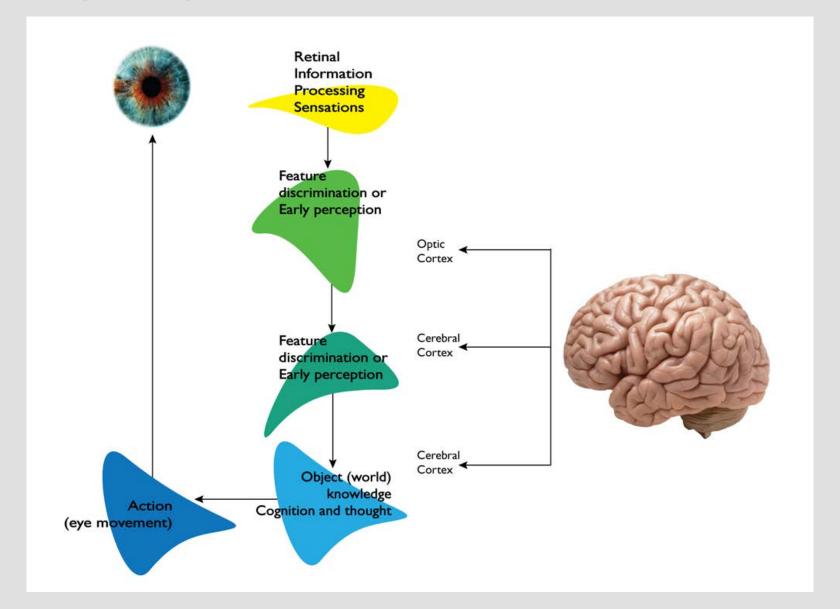
# Tafel VIII Kahn, Leben bes Menichen IV

# Vision

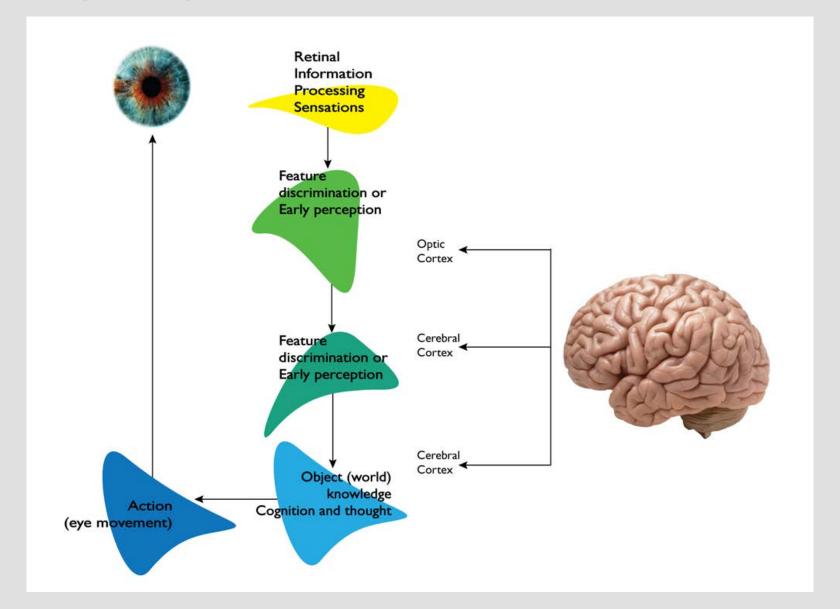
# Information Processing Paradigm

- INFOPRO
- Information is processed through a series of stages, each of which performs unique operations.

### **INFOPRO**



### **INFOPRO**



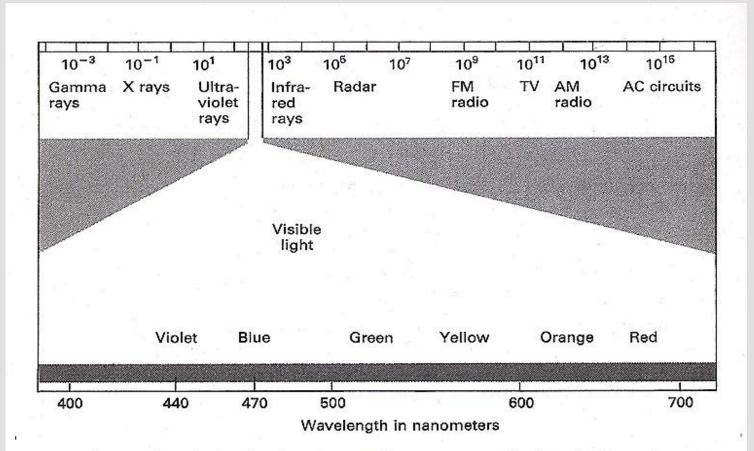
#### Visual INFOPRO

- Hierarchical
- Progressively more 'complex'.

# Light

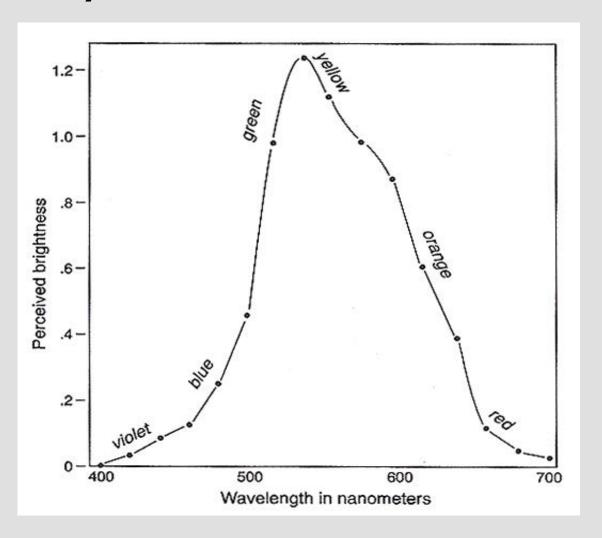
- Speed of light = aprox. 300,000 km per second.
- Instantaneous percept
- Light has physical characteristics that can be describes in wavelengths, defined as the length of one complete cycle of a wave.

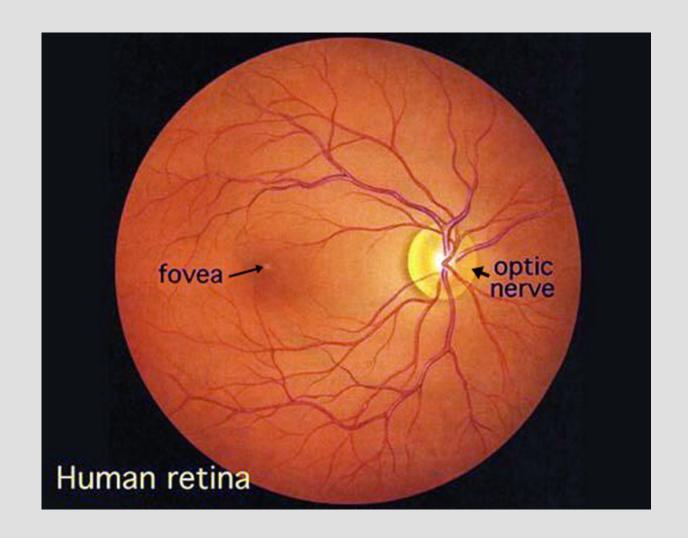
# Human Visual Spectrum



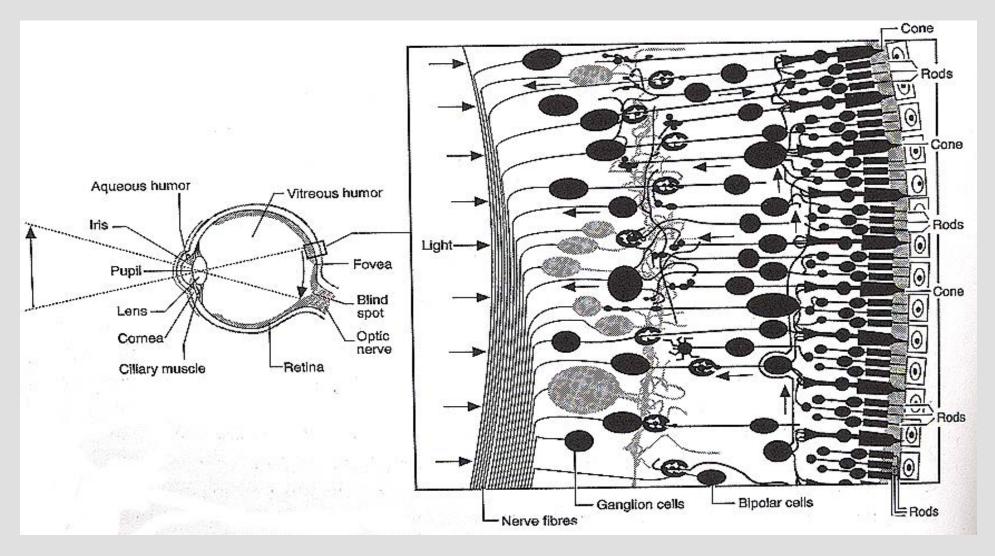
1.6 The wavelengths in the electromagnetic spectrum, with the visual spectrum enlarged and labeled. From Solso (1991).

# Luminosity

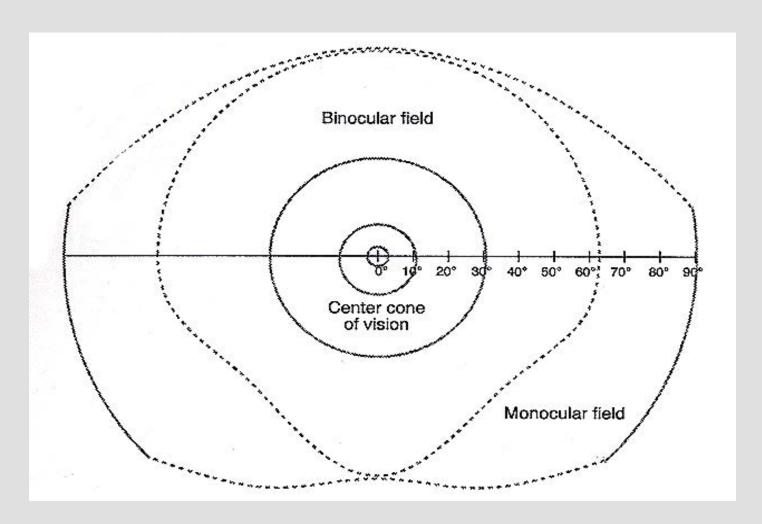




# The Eye

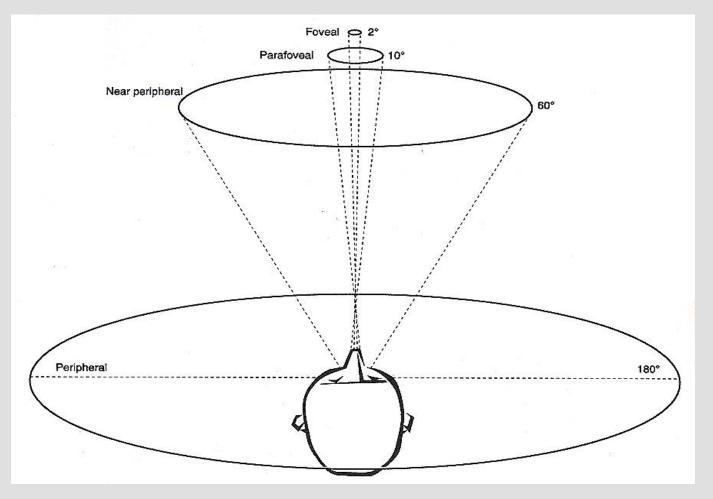


# Visual field





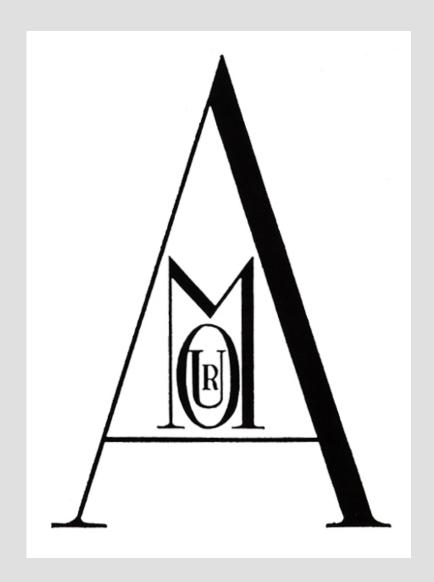
## Cone of vision

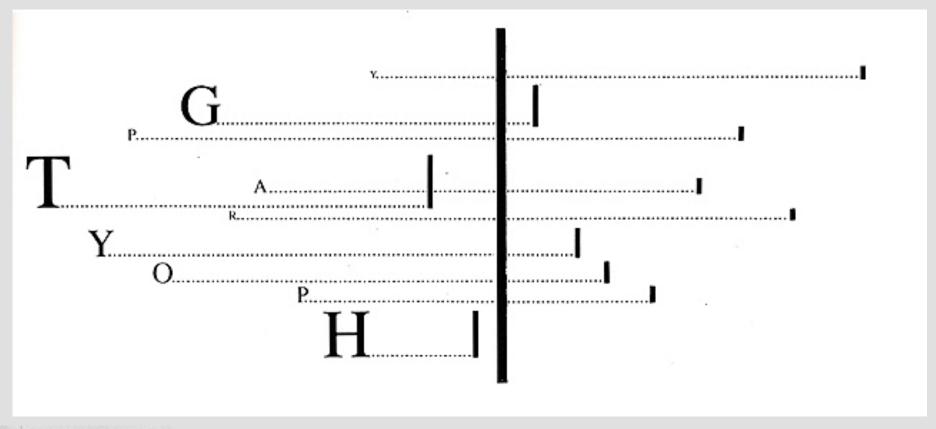


L. Díaz, Introduction to Visualization

#### Vision

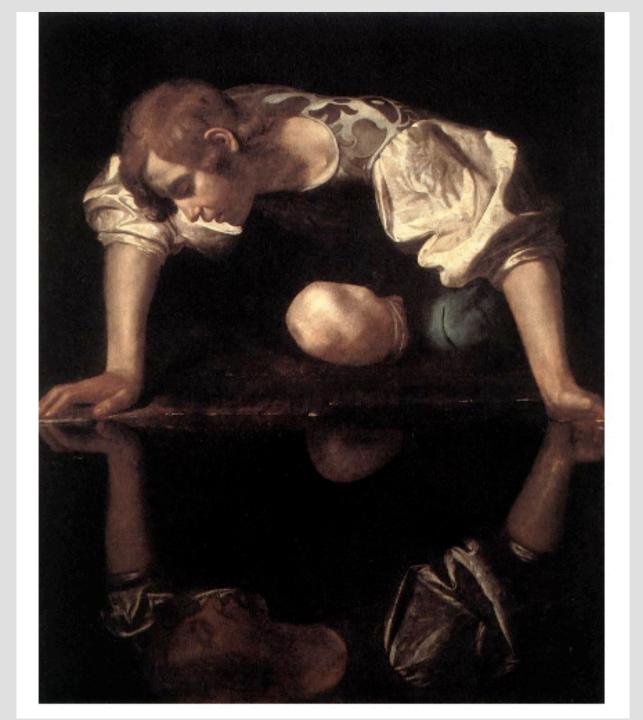
- Is not a static operation, but a dynamic process involving the muscles of the eyes, as well as the rest of the body, including the brain.
- Saccades







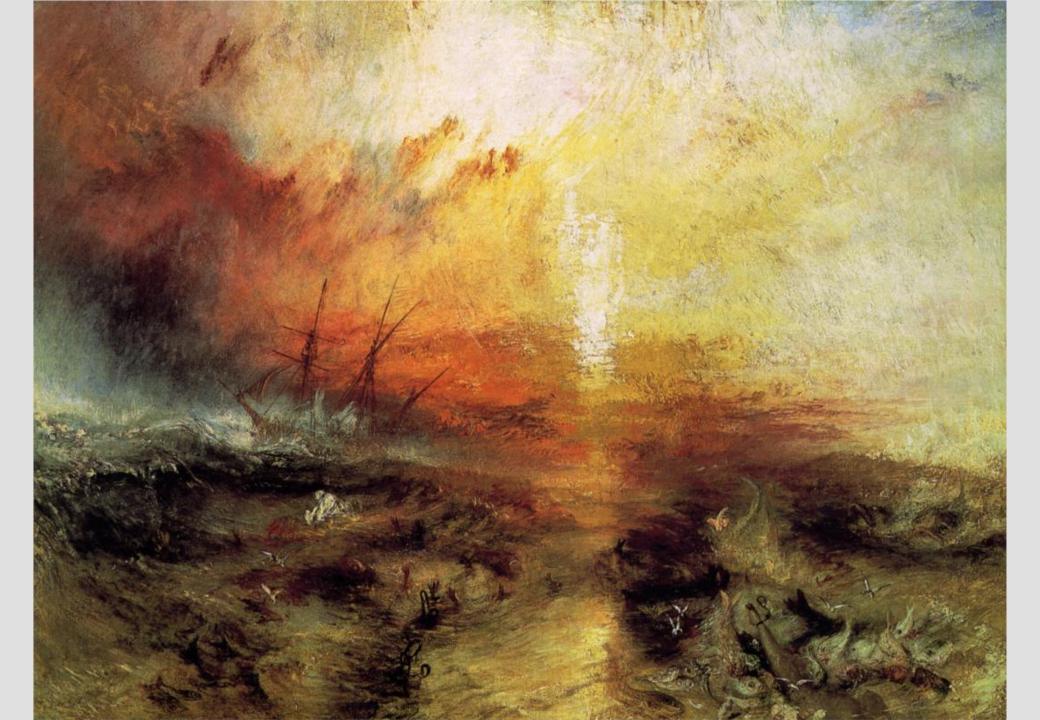
Martin Solomon



Narcisus 1597 - 1599

Michelangelo Caravaggio The Slave Ship, 1840

Joseph Mallord William Turner



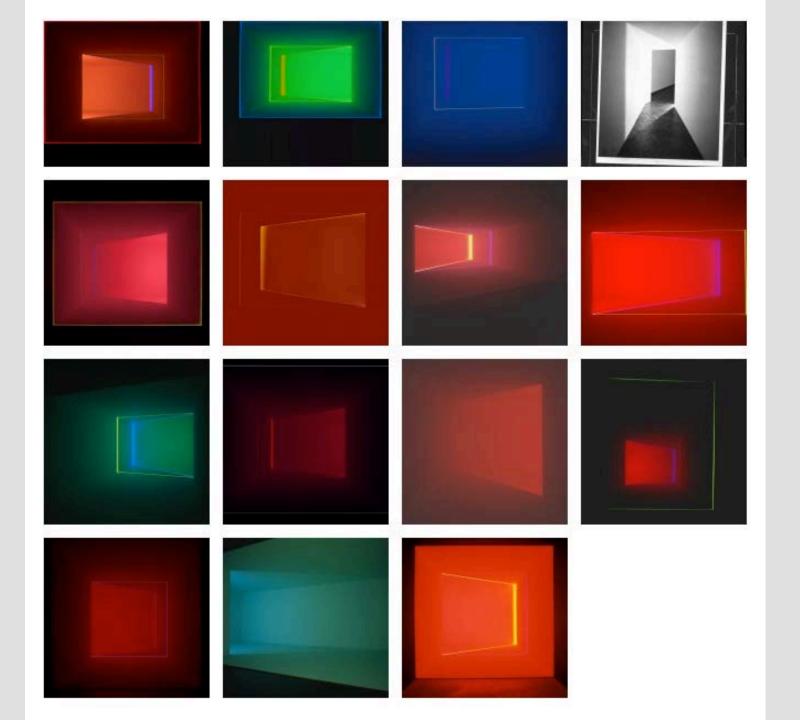
#### Turrell Projection, 1968

James Turrell



#### Turrell Wedgework, 1968

James Turrell



#### Turrell Wedgework, 1968

James Turrell



#### Communication

#### Ecological approach

- Biosphere natural environment.
- Technosphere built in environment. Now includes digital culture.
- Semiosphere Includes all semiotic space outside of which communication cannot exist.



The Whale Hunt - Jonathan Harris, 2007



BEGIN THE WHALE HUNT

statement highlights interface credits faq



Thank you! Kiitos! ¡Gracias!