

## The Golden Age



## Know thyself...

"an unexamined life is not worth living"

### Socratic method: deduction and induction

#### Deduction:

Rule: All men are mortal.

Fact: Socrates is a man.

Result: Socrates is mortal

#### Induction:

Fact: Socrates is a man.

Result: Socrates is mortal.

Rule: All men are mortal.

#### Abduction:

Result: Socrates is mortal.

Rule: All men are mortal.

Fact: Socrates is a man.

**inductive definition:** what do all instances of something have in common?

**Essence:**

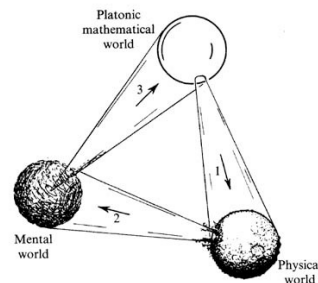
**modern theories of memory, concepts, prototypes, object recognition**



"there are a lot of my ideas in that book"

## The Platonic Tradition

synthesis of Pythagoras and Socrates



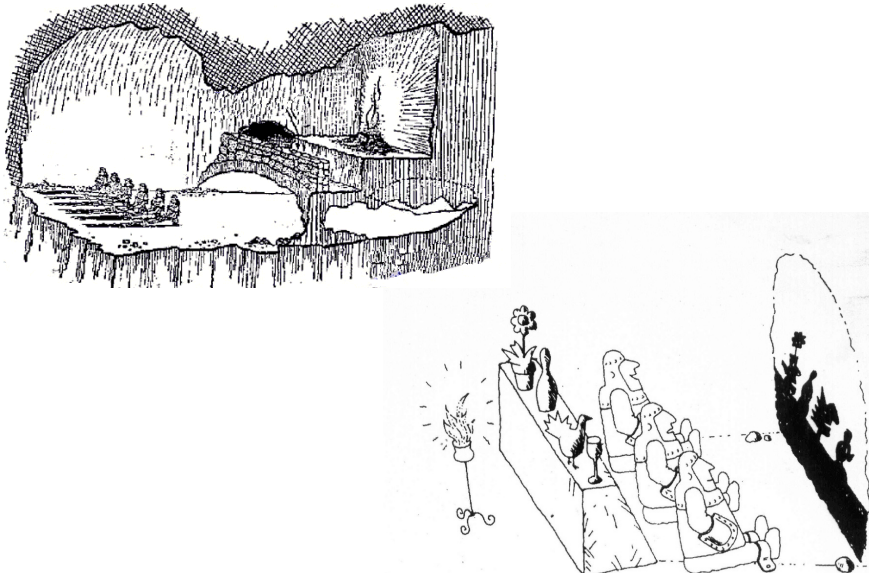
## the divided line

### Objects

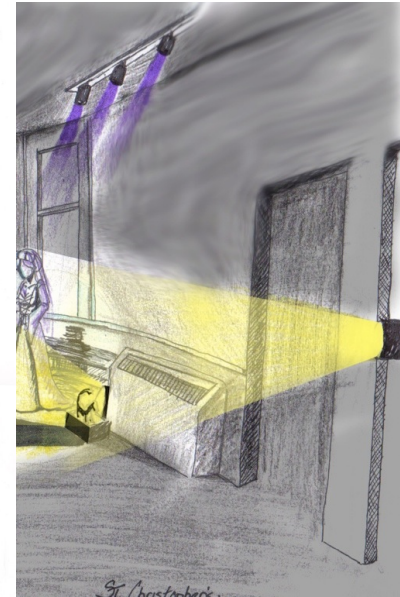
### Ideas

| The Sun<br>The light and power of<br>The Sun:<br>the world of sight and<br>of things seen |  | The Good<br>Offspring or Influence of<br>The Good<br>the world of mind and of things thought |   |
|---|--|--|---|
| A   | B  | C  | D   |
| Images such<br>as shadows<br>and<br>reflections   | objects such<br>as animals,<br>trees and<br>manufactured<br>things | thought-images,<br>ideas, such as<br>Ideal Squares and<br>Cubes                              | <b>Ideas or Ideals</b><br>such as Perfect Beauty,<br>Justice and Goodness |
| The changing world of the Senses  |  | mathematical<br>thought  | dialectic thought   |
| conjecture  |  | understanding  | exercise of reason  |
| ← OPINION →   |  | ← KNOWLEDGE →  |   |

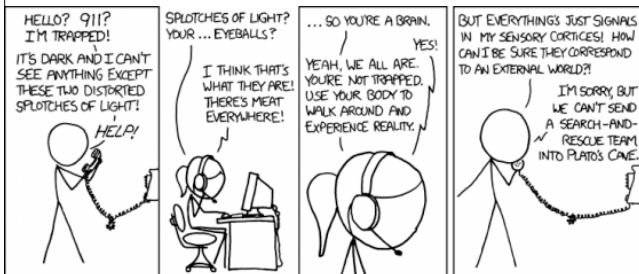
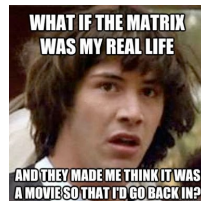
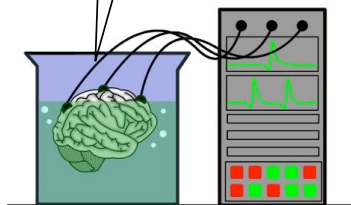
## the allegory of the cave



Plato, The Allegory of the Cave



I'm stuck in History and Systems



## the nature of the soul

tri-partite theory: rational, courageous, appetitive

### Reminiscence theory of knowledge

transmigration of the soul: soul is your perfect form; trapped in body. Upon death the soul returns to realm of forms.

nativist account for learning

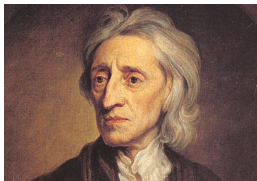


**"first psychologist":** memory, sensation, sleep, dreams, learning.

## The Aristotelian Tradition

"scratch an empiricist..."

empiricism - rationalism go hand in hand



British empiricism



inference



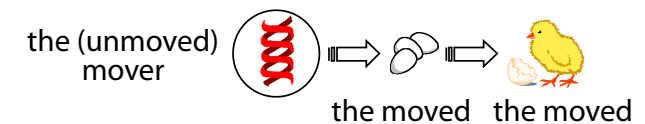
neuro-computation

## on logic

considered founder of logic

something cannot cause itself

unmoved mover



## on politics

disagreed with Plato on the ideal form of gov't

## on biology usually wrong

animals governed by **nutritive**, **perceptive**, and **locomotor** functions

scala naturae:



## on sensation...

the importance of of the five senses

- Descartes, Müller, von Helmholtz

## on reason...

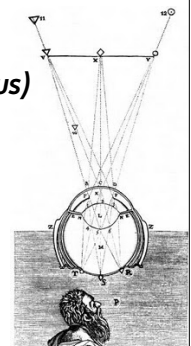
sensation necessary but not sufficient (*poverty of stimulus*)

•common sense:

•passive reason:

•

active reason:



## on memory...

laws of association:

## on causation

four causes

material  
formal  
efficient  
final

entelechy



## **a brief digression to 20th century learning**

associationism a major mechanism of learning

Four Causes to 20th century theories of learning

Lashley:

Hull:

Tolman:

Skinner:

## **everything after...**

Western philosophy (in particular pertaining to issues of psychology) can be viewed as a reaction to Plato & Aristotle...

**dualism v. monism**

**idealism v. materialism**

**sensory v. rational ideas**

**role of mind and body**

**what type of universe?**