# Rationalism



### the Rationalist tradition

What Descartes got right acceptance of innate ideas / faculties

primacy of reason as source of knowledge

how do we arrive at truth?

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## rationalism v. empiricism

active mind

rational reasons for behavior

appeals to axioms (endowed)

passive mind

mechanistic causes of behavior

appeals to generalizations



**Spinoza**"Ethics: Demonstrated in Geometrical Order"

what Descartes got wrong: dualism

instead double aspectism

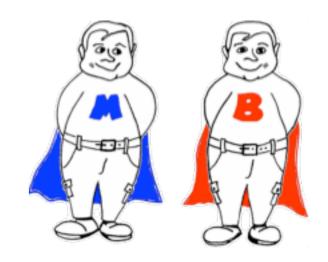


"Ethics: Demonstrated in Geometrical Order"

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mind, matter, God are all parts of the same substance (indistinguishable and inseparable)

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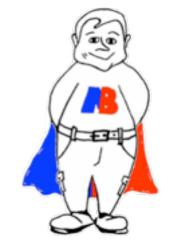


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what the empiricists got right: determinism

Nature (God) is lawful and human nature subscribes to laws

**Hume: ignorance of cause** 

ideas from observation are inadequate (limited in scope)



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pleasure = clarity of ideas poverty of Stimulus (mind resolves to bring pleasure)

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emotions v. passions

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#### emotions interact and transfer

if an object is first loved and then hated... if an object causes pain...



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how does it do it?

psychophysical parallelism

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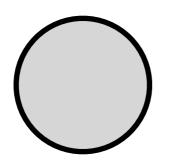
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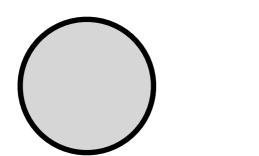
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Aristotle: scalae naturae and final cause (monads seek clarity)

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law of continuity

perception exists along a continuum awareness (limen)

key question in early psychology: characterizing the limen

### **Thomas Reid**

what Descartes got wrong: trust thru benevolence

what Hume got wrong: Skepticism

### commonsense philosophy

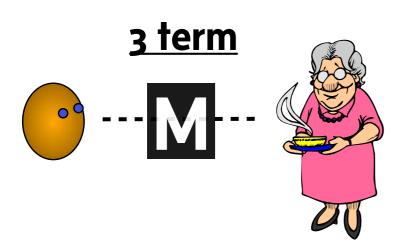
"there is no basis, but we experience (have knowledge) anyway"

group hallucinations?



I resolve not to believe my senses. I break my nose against a post that comes in my way; I step into a dirty kennel; and after twenty such wise and rational actions I am taken up and clapped into a madhouse.

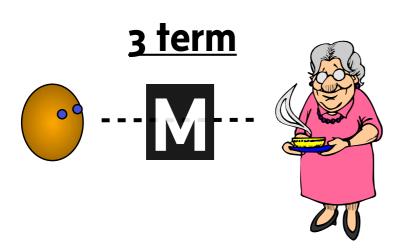
## on direct realism



#### **Hume on indirect realism**

"The table, which we see, seems to diminish, as we remove farther from it: but the real table, which exists independent of us, suffers no alteration: it was, therefore, nothing but its image, which was present to the mind. These are the obvious dictates of reason; and no man, who reflects, ever doubted, that the existences, which we consider, when we say, this house and that tree, are nothing but perceptions in the mind, and fleeting copies or representations of other existences, which remain uniform and independent."

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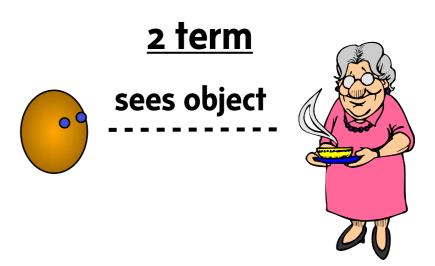
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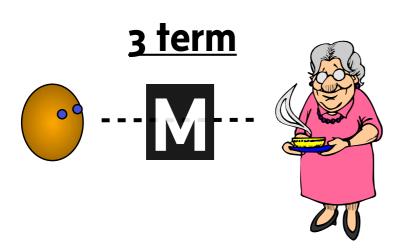
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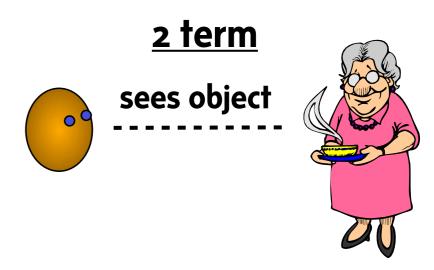
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Kant, Gestalt, Ecological Psychology



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instead we are designed to experience the world the way we do

## ideas and rules

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Locke & Berkeley: theories of truth

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scientific facts result from observations made by prepared and organized mind.

### flip Locke on its head

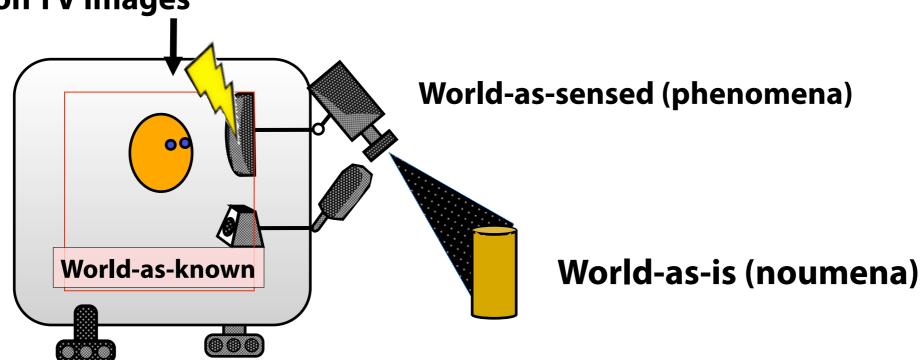


### take space...

- 1. not derived from, but is presupposed by sensory experience
- 2. space is independent of objects / "no space" not conceivable
- 3. space is unitary and infinite

synchronizing currents of inner room impose structure on TV images

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Transcendental Argument: independent of experience, but constrains experience

We could not have X if Y were not the case; we do have X, therefore, Y must necessarily be the case.

Necessary truths originate outside experience.

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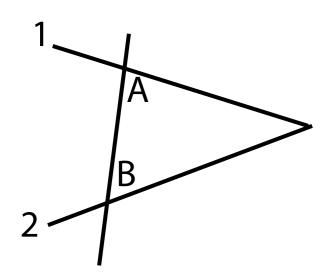
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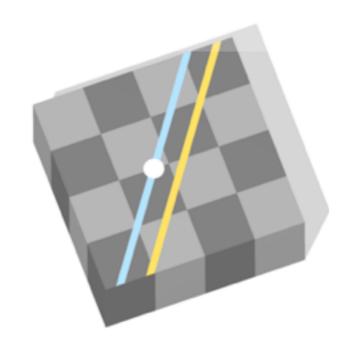
Euclidean geometry is synthetic a priori. Therefore, space is mathematical. Euclidean geometry <u>is</u> space, not a characterization.

#### **Euclid's Fifth Postulate:**

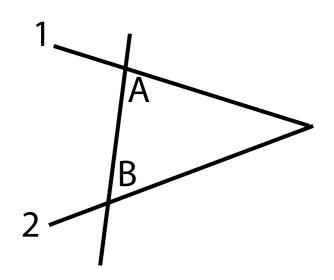


If a straight line falling on two straight lines makes the interior angles on the same side less than two right angles, then the two straight lines if extended will meet on that side of the straight line on which the angles are less than two right angles.

# For any line there is only one other that travels thru point P that remains parallel to it.



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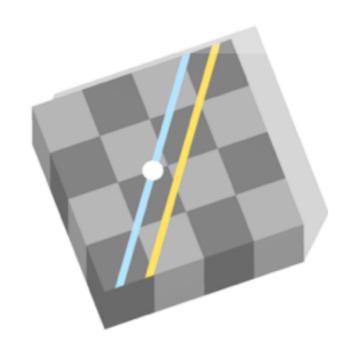


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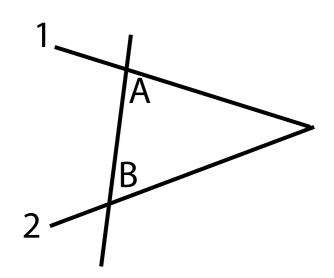
Simply:

If  $A + B < 180^{\circ}$  then 1 and 2 will eventually meet If  $A + B = 180^{\circ}$ , then 1 and 2 will never meet.

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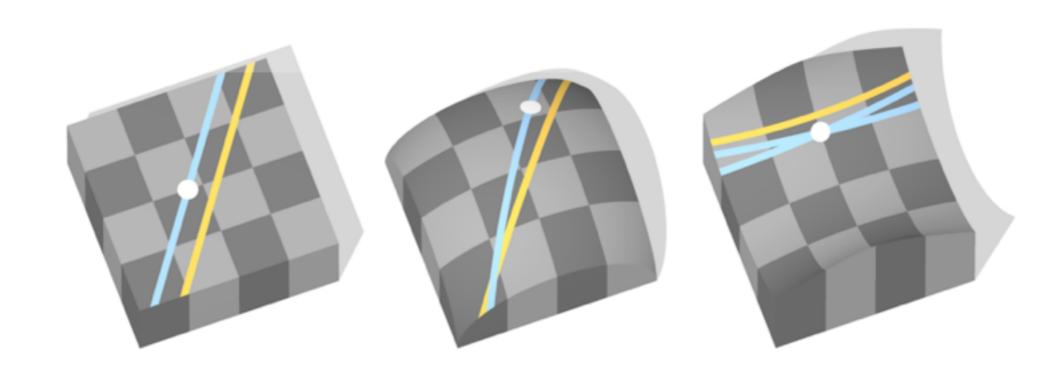
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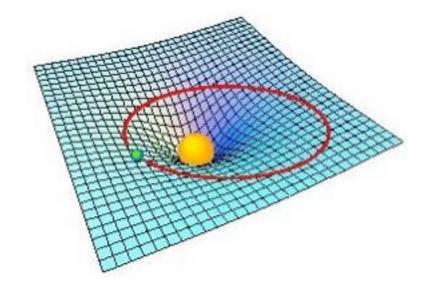


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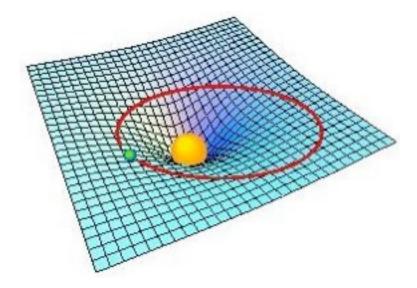
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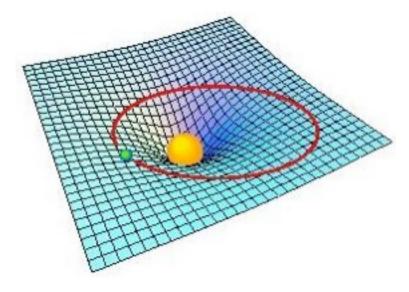


Space not *a priori*. Change distribution of mass ... change the space ... change the geometry.

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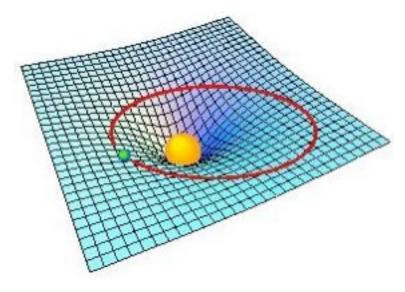
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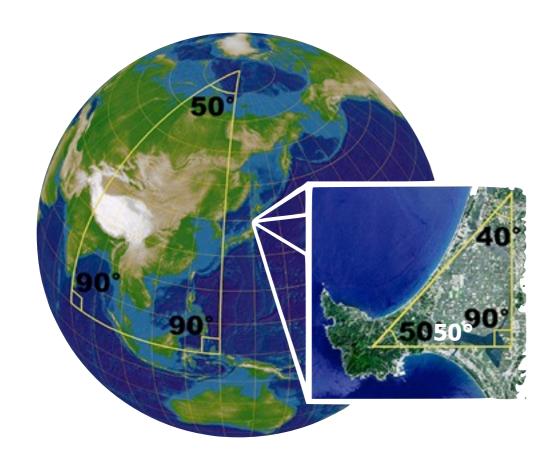
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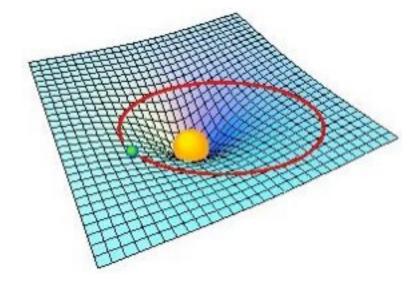


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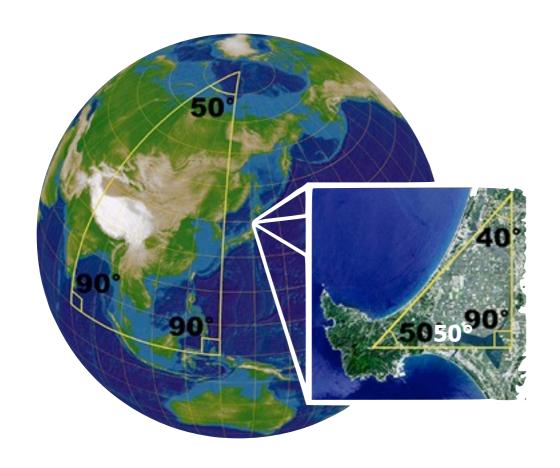
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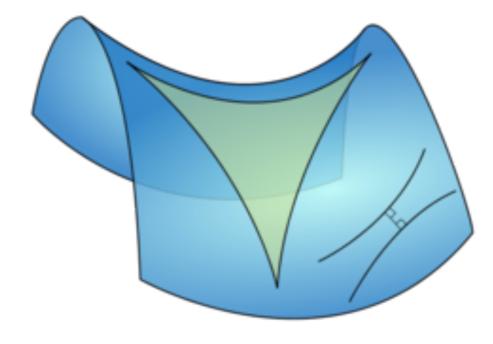
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### Kant on practical reason and conclusions

goal is to make moral decisions independent of empirical world; free of relativism and hedonism where behavior operates of pleasure seeking principles (associations)

reasons for behavior v. causes of

hypothetical imperative: "if you don't want to fail you should study"

categorical imperative: "I should never act except in such a way that I can also will that my maxim should become a universal law"

exists outside of empirical world / allows for free will

\* indeterminacy: psychology as science?

is there any sense in turning up lights to see what darkness looks like?

more modern, palpable nativism: human beings have modes of operation. Anticipated Gestalt psychology.

## is psychology a science?

cannot be an experimental science

problems w/ introspection
issues with assumption of superposition

but can be a **mathematical science** what can we explore??



**Herbart** 

relationships between ideas, how they are attracted to one another and how they rise to consciousness

apperceptive mass, attention, repression, and conflict

use these tools to shape pedagogy

Free will versus determinism (behavior)

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Nature versus nurture

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Rationalism versus empiricism - a priori v. a posteriori

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Mind versus body