

A Little Philosophy of Mind

(with the caveat that we do not necessarily agree what
we mean by “mind”)

Rationalism and Empiricism

Cognition is concerned with **knowing**.

There is a centuries old discussion about the roles of

- * the senses and experience
- * direct observation

versus

- * reason, logic, and certainty
- * abstraction from particulars

Rationalism and Empiricism

Empiricism

- Knowledge arises from direct experience and observation
- Experimental science is empirical at heart
- Knowledge obtained through the senses or by experiment is never 100% certain, and may be revised in light of new experience
- The empirical status of mathematics is contested (what, if anything, is maths about?)

Rationalism

- Knowledge is arrived at through the application of reason or logic
- Mathematical truth illustrates optimally certain knowledge
- Ideally, knowledge should be completely certain
- Sense experience does not produce certainty and is a poor basis for reasoning
- Insists that “true” knowledge is justified

René Descartes (1596-1650)

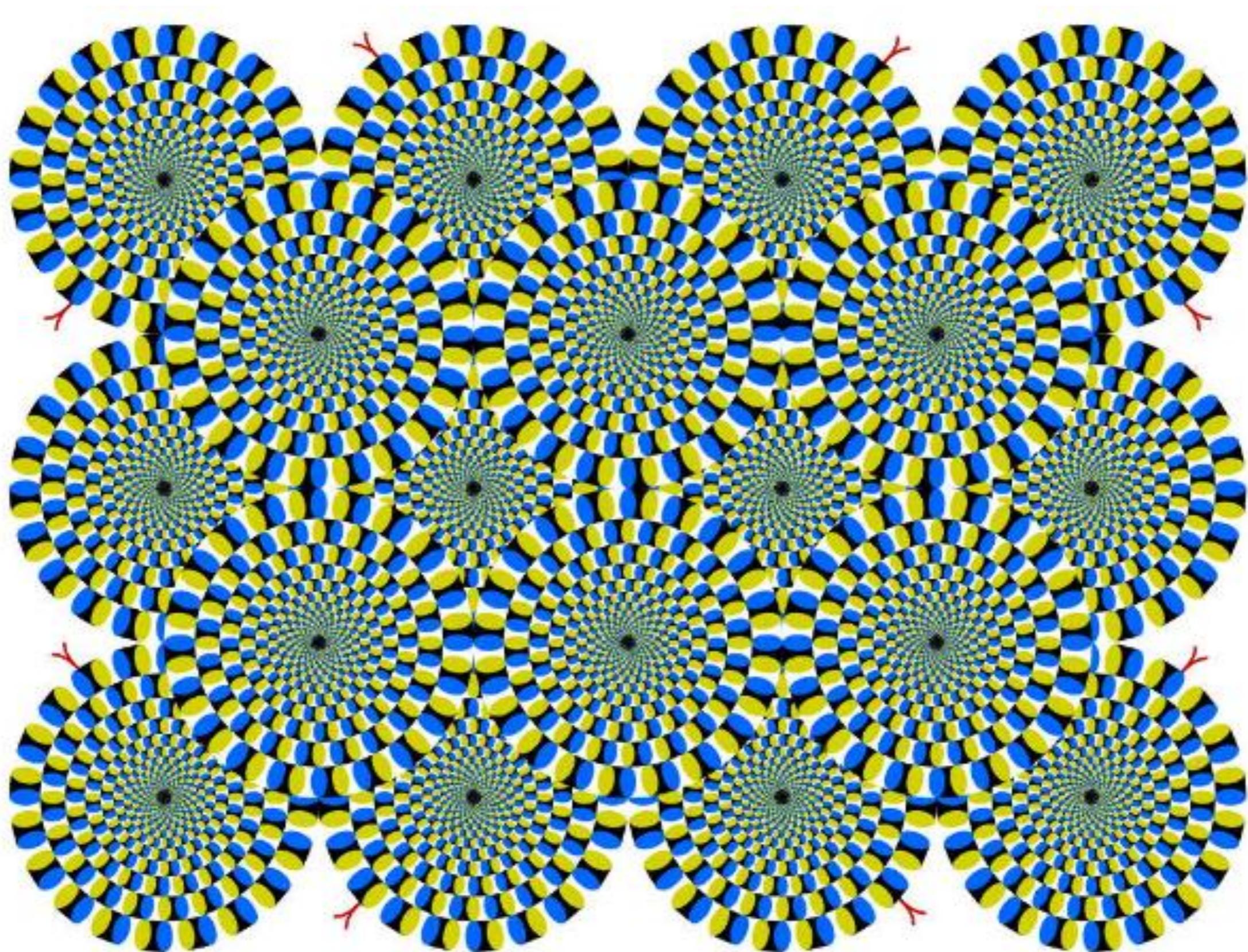


No figure looms larger in the rationalist camp than René Descartes.

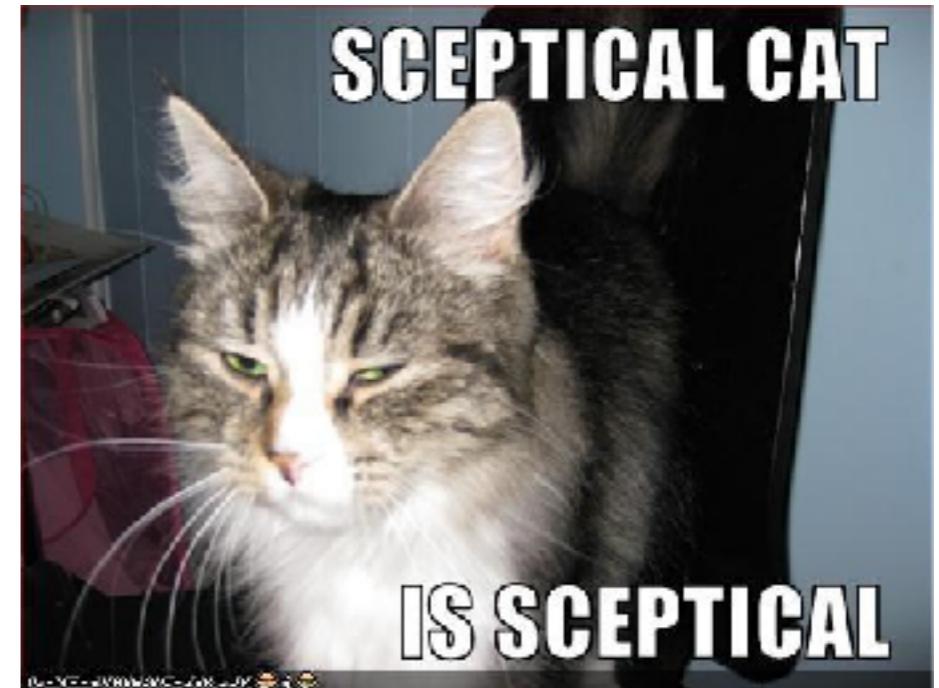
As a rationalist, he wanted to find a basis for certain knowledge.

How can we know anything for sure?

Descartes knew about hallucinations and illusions



If the senses can be fooled, how can knowledge obtained through the senses be certain?



Like many before him, Descartes was convinced that REASON was a more trustworthy source of certainty than the senses.

Here is Descartes' scepticism at work:

[Suppose for the sake of argument that] I have convinced myself that there is absolutely nothing in the world, no sky, no earth, no minds, no bodies. Does it now follow that I too do not exist? No: if I convinced myself of something then I certainly existed. But there is a deceiver of supreme power and cunning who is deliberately and constantly deceiving me. In that case I too undoubtedly exist, if he is deceiving me; and let him deceive me as much as he can, he will never bring it about that I am nothing so long as I think that I am something. So after considering everything very thoroughly, I must finally conclude that this proposition, I am, I exist, is necessarily true whenever it is put forward by me or conceived in my mind. (Med. 2, AT 7:25)

Hence: I think, therefore I am.

Cogito, ergo sum....

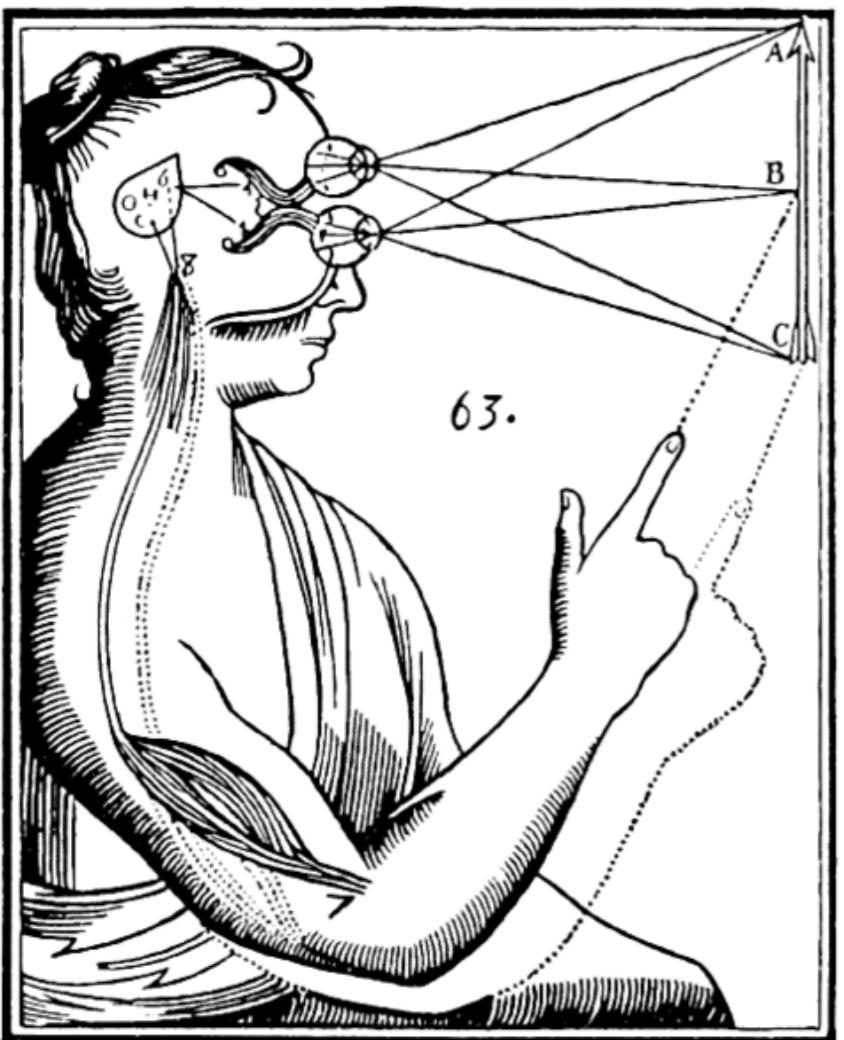
“The further the mind is taken away from its proper objects – logic and pure reason – the more likely it is to fall into error.”

“The purpose of philosophy is to direct the mind away from the confusing images of the senses towards the indubitable truths contained within the mind itself.”

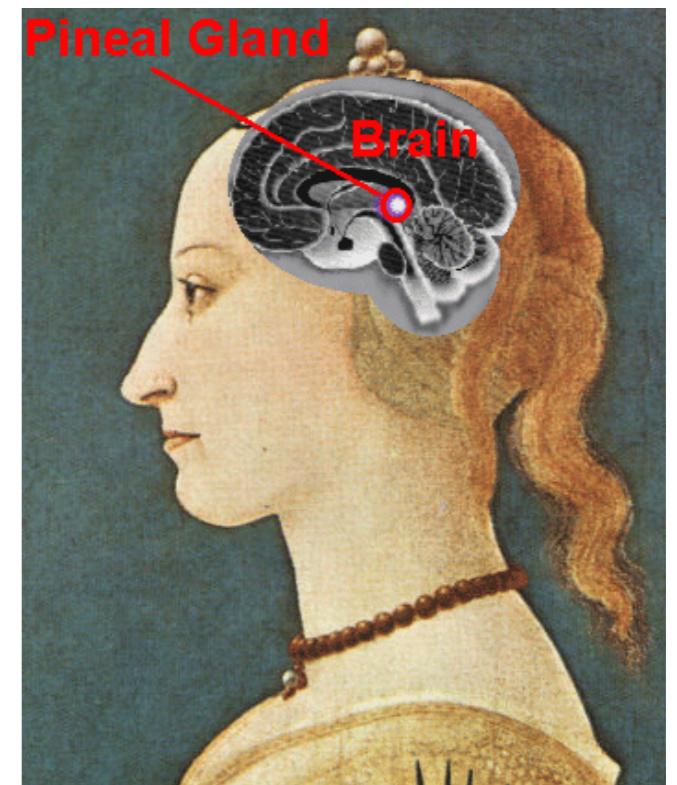
This project led Descartes to conclude that the mind was a completely distinct substance from matter....It is invisible, without dimensions, immaterial, unchanging, indivisible and without limit.

This also had a religious agenda....

Sources: www.philosophyonline.co.uk

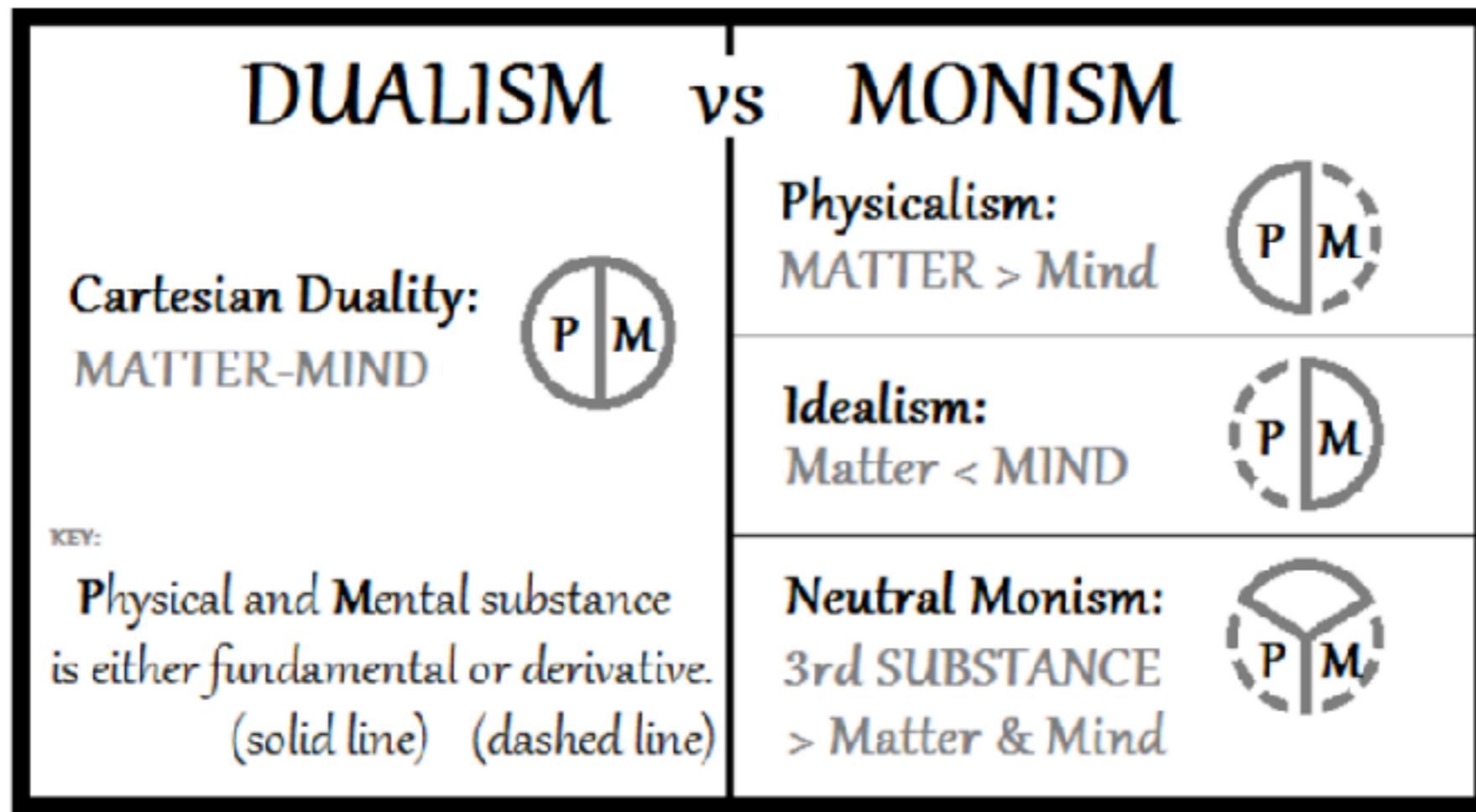


The **mental** and the **physical** are seen as different kinds of things. How they interact is one big problem for “***substance dualism***”. Descartes suggested the pineal gland was where the two domains intersected



That didn't really work out

There are many possible *metaphysical* positions



Metaphysics: what exists? What kinds of stuff exist?

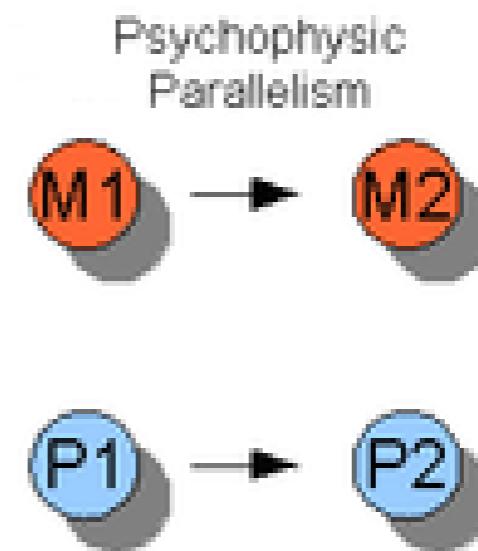
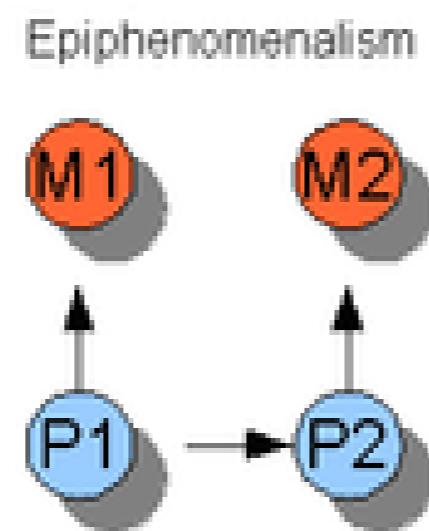
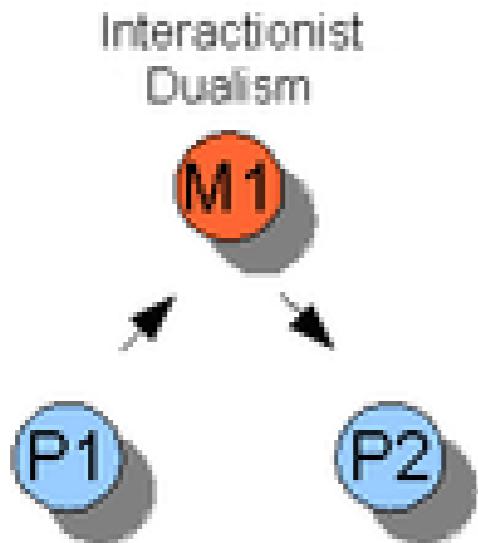
Epistemology: what is knowledge? How do we know?

Cognitive Science is practical epistemology, but it cannot be blind to metaphysical questions.

Shades of Dualism

Here are some ways that have been suggested in which dual realms of mental and physical could interact:

- Interactionism
- Epiphenomenalism
- Psychophysic Parallelism

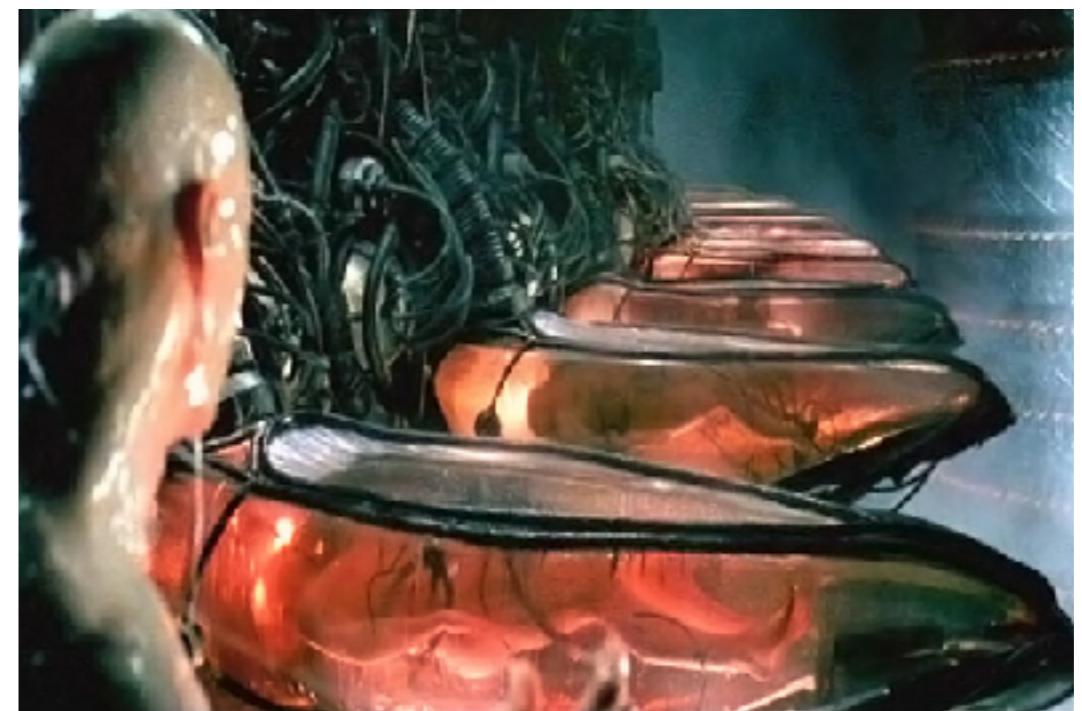
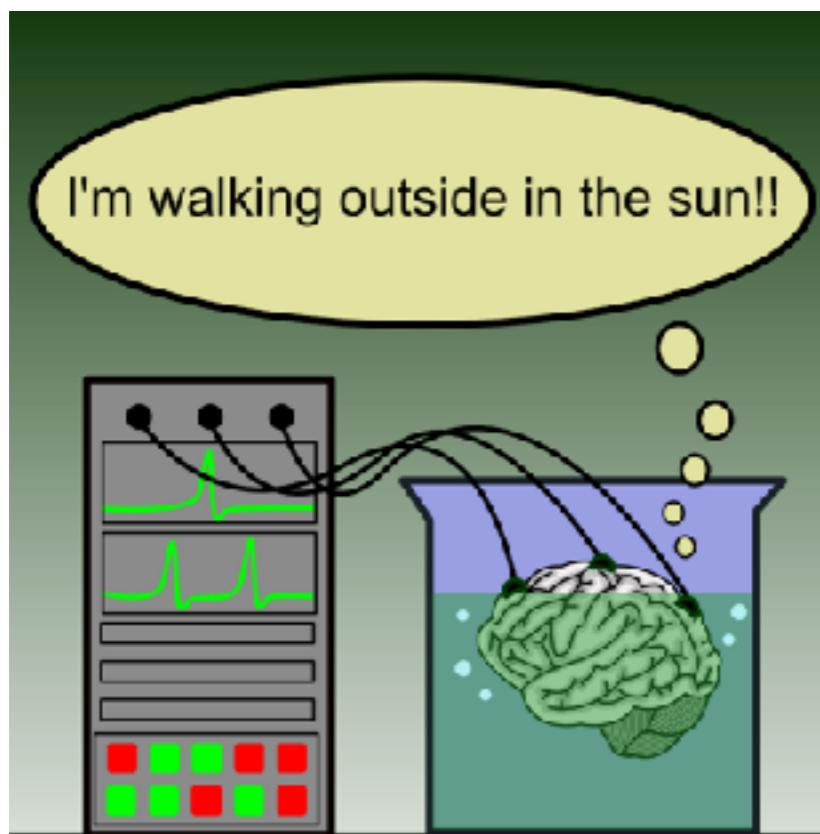


Source: wikipedia

One interesting possibility suggested by Cartesian dualism, and scepticism, is that you are the subject of a big delusion. This has become known as the Brain in a Vat thought experiment.

Exercise: make the “brain in a vat” thought experiment explicit.

Do you think it is plausible?



Consider the plot of the Matrix from this perspective . . .

Here is the dirty little secret of cognitive science (and psychology):

Nobody believes that Cartesian Dualism is an accurate or believable picture of the universe.

But most scientific practice acts as if it were.

Mind is treated in opposition to matter.

Everybody likes to bash Cartesian Dualism, and call the other guys ‘dualists’. But we have inherited a view of the person that is largely built on this (incredible) foundation.

Let's take a moment to think.

How convincing is Descartes' assertion

"I think, therefore I am" or

"I am! I exist!"

Does it open a door to solipsism?

Solipsism: the (highly unlikely) belief that your mind is the only mind that exists (based on the idea that it is the only one you have any direct knowledge of)

Solipsism is not a position anybody wants to argue for.

If introspection on one's own tends to encourage a solipsistic view,

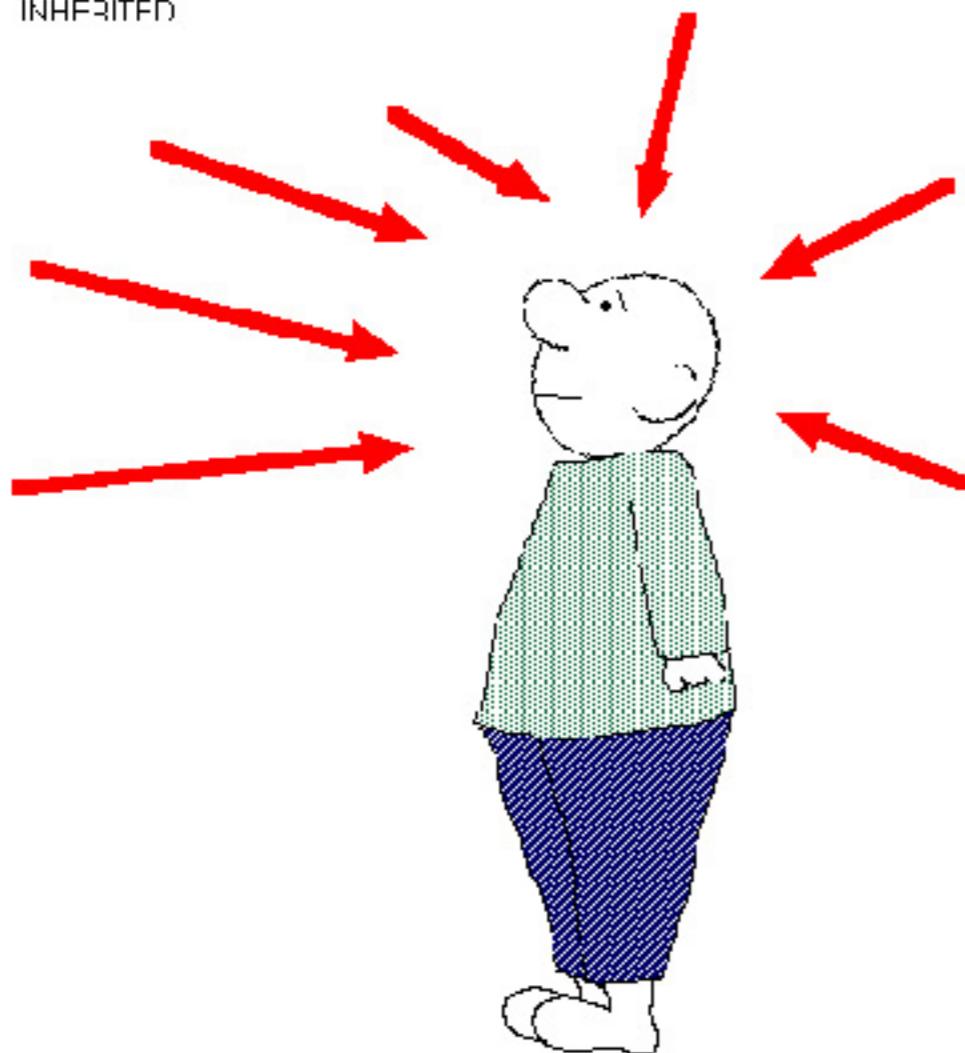
does that apply to your thoughts when you are in the company of others, discussing things?

Empiricism

VIP: David Hume
(Scotland, 1711 - 1776)

EMPIRICISM

ALL KNOWLEDGE OBTAINED
THROUGH SENSES - NOT
INHERITED



Emphasizes the role of
evidence

and

the possibility of being
wrong

The Rationalist and Empiricist perspectives differ when it comes to how infants learn:

Rationalist position: infants come with some stuff built in: they are ready to learn language, they may have some innate concepts

Empiricist position: newly born infants are a blank slate (*tabula rasa*).

You may have met this distinction as the “nature/nurture” debate

In the history of ideas, it is conventional to outline extreme points so as to help us to discuss complex matters. No self-respecting philosopher or scientist adopts any such position without a whole lot of qualification, and we are not in the business of “proving” one position right or wrong. These are terms that help us distinguish many different positions.

Could mind and brain be identical?

This seems to be the default position taken by popular discussion of minds

It is a popular view in Artificial Intelligence (ca 1980)

It may be the view taken by some neuroscientists
(but by no means all)

See also **required reading**: Minsky “Minds are simply what brains do”