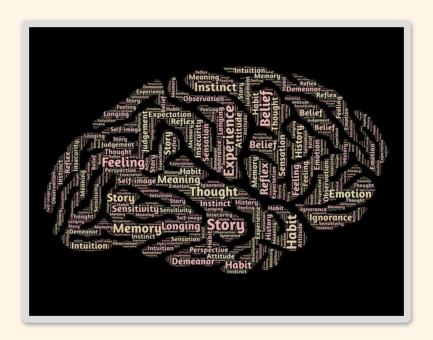
# Philosophy of Mind

#### minds in a material world



George Matthews, Pennsylvania College of Technology

2020

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- In this slideshow we examine the major ways of addressing this problem that have been arisen since the scientific revolution first challenged the ancient belief in the existence of the soul.
- We'll do this by looking at major theoretical approaches and what might be said both in favor of and against them.

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- Mind/Brain Identity Theory: minds are collections of states of the physical brain.
- Functionalism: minds are the software or sets of functions, carried out by the components of physical brains.

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Descartes 1596-1650

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- Mental and physical things seem to share no features in common, so he argues that they must belong to entirely different "worlds."
- Physical things are publicly observable, take up space and interact according to the laws of physics, while none of this is true of "mental things" like thoughts, dreams or feelings.

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- Princess Elizabeth of Bohemia exchanged many letters with Descartes in which she stressed what has come to be known as "the interaction problem."
- Clearly my mind interacts with my body, yet dualism seems to rule this out as even a possibility.

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Gilbert Ryle 1900-1976

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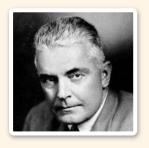
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- Gilbert Ryle offers a diagnosis of where Descartes went wrong. Descartes, in Ryle's view wrongly views the mind as a "thing" and not as a "higher-order" description of what those creatures with minds do.
- Just like we'd be wrong to seek "the desert" alongside of all the cactus, lizards and sand in Nevada, we are mistaken to look for a "mind" alongside our bodily parts.

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- Behaviorists claimed that rather than "looking inside" and observing our minds we should study how creatures with minds behave -- proof of understanding would be the ability to predict and control their behavior.

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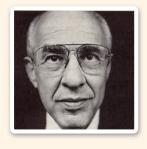
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- Behaviorists claimed that rather than "looking inside" and observing our minds we should study how creatures with minds behave -- proof of understanding would be the ability to predict and control their behavior.
- This led to the philosophical view that minds just were certain kinds of behavior.

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- Can we predict and control human behavior like we can predict and control things in the physical world? The American philosopher Hilary Putnam had his doubts.

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- J.J.C. Smart and other "physicalists" have argued that minds must be identical with brains since physical reality is all that there is.
- Recent advances in brain imaging technology would seem to finally give us a way of peering into other people's minds in real time.

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- While brains are clearly relevant for minds,
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- After all our brains are all very different in their details and yet we can all think similar thoughts.
- Thus while brain imaging technology can show exactly what my brain is doing, that doesn't mean it can be used to read my mind.

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- So, for example, a visually impaired scientist with no color vision might know all of the facts about human color vision, but there would be something else she would learn about it should her color vision be restored.

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- This view of the nature of the mind as a set of "information processing functions" carried out by the physical machinery of the brain and nervous system is widely shared by cognitive scientists.

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- If we imagined all one billion citizens of China playing the roles of individual neurons in the human brain and passing signals back and forth just as neurons do we'd never say that somehow the citizens of China *really are* something with a mind.
- Thus, minds must be something more than sets of functions carried out by brains.

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- David Chalmers also asks us to imagine a fictional scenario in his attack on functionalism.
- We can imagine a "philosophical zombie" processing all of the information we process while being empty of any conscious experience.
- Such a mythical creature shows that minds are more than information processing.

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Alan Turing 1912-1954

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- Computer pioneer Alan Turing saw this in the 1930's when he proved that it was possible to build a "universal machine" which could carry out any possible set of instructions thus giving rise to the age of computers.

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- Contemporary research into Artificial Intelligence is seeking ways to capture the complexity of human thinking in equally complex computer programs.

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- John Searle is an American philosopher who argues that Artificial Intelligence is just not possible.
- He argues that since all computers can ever do is manipulate symbols according to rules with no understanding of the meaning of those symbols, they will always fail to grasp meaning as human being can.
- Thus while we may produce convincing "fake" intelligence, the prospect of computers actually having minds that grasp meanings is forever beyond our reach.

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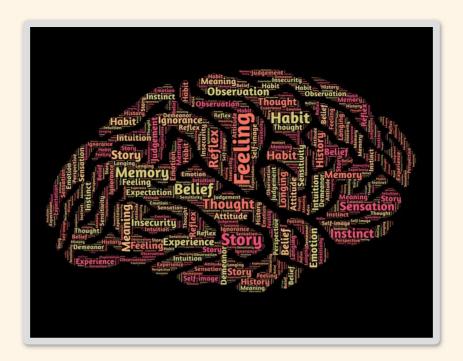
? Can we build a machine that can really count as truly intelligent?

#### Find out more

Where does your mind reside? This Crash Course video briefly explains the Mind/Body problem.

Artificial Intelligence and Personhood: another great Crash Course video on philosophical problems related to the concept of Artificial Intelligence.

Artificial Intelligence: this School of Life video describes three different concepts of Artificial Intelligence and the prospects for building a mind in the real world.



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