



# Lecture 7: Descartes' Methodological Doubt

## A solid foundation of science

Descartes thought of philosophy and metaphysics (ontology) as the foundation of science. In his book *Meditations on First Philosophy*, he sets out to develop a foundation that is so solid that it cannot be doubted. Opening paragraph:

*Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood, and by the highly doubtful nature of the whole edifice that I had subsequently based on them. I realized that it was necessary, once in the course of my life, to demolish everything completely and start again right from the foundations if I wanted to establish anything at all in the sciences that was stable and likely to last.*

## Methodological Doubt: doubt everything that can be doubted

Truths from authority: Descartes saw that most of our knowledge is based on opinions, either our own or of our teachers. Very few things we know is something we have studied ourselves.

Truths from sense experience: Our senses can deceive us. Things look small from a distance, a spoon "breaks" in water. Colours, light, sound, texture: these are not what they appear to be.

How about immediate sensations, surely I can trust them. But what if I am psychotic, or simply asleep, dreaming that I am sitting here, writing this. How can I know these are not delusions?

Truth from reason: Whether I dream or am awake,  $2+3=5$  and a square has four sides. How can I possibly doubt this!

The existence of an omnipotent God: God is supremely good and the source of truth, and He would never deceive me like this. But: *what if everything said about God is a fiction?*

## Someone might deceive me: the evil demon

Descartes next imagines that there is an evil, powerful demon, who has used all his power and energy to deceive him.

*I shall think that the sky, the air, the earth, colours, shapes, sounds and all external things are merely a delusion of dreams which he has devised to ensnare my judgement. I shall consider myself as not having hands or eyes, or flesh, or blood or senses, but as falsely believing that I have all these things. (§22-23)*

Descartes imagines himself as a prisoner who is enjoying imaginary freedom while asleep. This is also known as the "brain in a vat" problem. Am I simply a brain in a vat in a mad scientist's lab experiment, messing with my brain?

## A certain foundation: the cogito argument

Descartes sums up that he has doubted the existence of the whole physical reality, including his own body. No knowledge seems to be certain. Must he then also doubt his own existence?

No. If an evil demon deceives me, there must anyway be something that is deceived. As long as I think that I am deceived, at least I think and I exist. I cannot doubt that I doubt, so something must be doubting. If I doubt, I must be thinking. *I think, therefore I am. Cogito, ergo sum.*

## What is the "I" that exists? A mind without a body?

Descartes has doubted the whole of the material world. Now what!

This means that the subjective 'I' in 'I think, therefore I am' only exists as a thinking thing or substance, a *res cogitans*.

*But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions.*

This idea that our minds might be manipulated to think that we experience things that we are not, has led to the problems of Scepticism and Solipsism (solo = alone): how can we know that the external world exists, that we are not totally alone in the world, and that everything we experience is an illusion?

## If only God is good and reliable: a proof of God's existence

Some ideas are *clear and distinct*, such as the *cogito*-sentence. I will accept all ideas that are equally clear and distinct. But what are the sources of these ideas? They must come from something, and must have a cause. Am I the cause?

Causation: If I have these beliefs, they must come from something that is at least equally real. This is because there cannot be more reality in the effect than in its cause.

I have an idea of a perfect, infinite, omnipotent, supreme intelligence. This cannot come from myself, since I am none of those things. It must be God who is the source and such a God would not deceive me, since he is infinitely good.

The existence of God is the turning point in Descartes' *Meditations*. This is what gives him back the faith in the material world and in his own senses and reason. He has a body, the external world exists and mathematical truths can be trusted.

But just because God would not deceive him, it doesn't mean that he cannot make mistakes. We still need to be critical of what we accept as truths.

## Some challenges: the mind – body dualism

In the *cogito*-argument, Descartes made a clear separation between mind and body. The world thus gets divided into two substances: consciousness (*res cogitans*) and the material world (*res extensa*). We can refer to these as a thinking existence versus a physically extended existence.

With this distinction, Descartes splits the human being into two. This two-division, or Dualism, has affected the way we think of ourselves. The physical versus the mental, medicine versus psychology, brain versus thought. (Medicine: placebo effect)

A famous argument against his dualism was raised by Princess Elizabeth of Bohemia. She pointed out that his mechanistic causality cannot explain how the immaterial mind acts upon the material body. How do they connect? This problem remains unsolved today, and dualism is still a major discussion in philosophy, science and medicine.

Descartes thought that animals lack consciousness, and were like machines, only *appearing* to have feelings. This idea inspired the philosophical problem of Behaviourism: How do we know whether others have feelings, or only *appear* to have feelings?

Another view inspired by Descartes is Reductionism: that all things, events and processes are ultimately explained on the level of physics. Mind = brain. A reductionist thinker looks only for material causes. Cognitive and behavioural neuroscience reduces all behaviour and feelings to neuron signals.

**Discussion questions**

What did Descartes think that is possible to doubt? Why did he want to doubt all these things?

What could he *not* doubt?

What is solipsism?

What is behaviourism?

What kind of dualist is Descartes?

Plato and Descartes were both rationalists. How? *What similarities can you find between their ideas?*

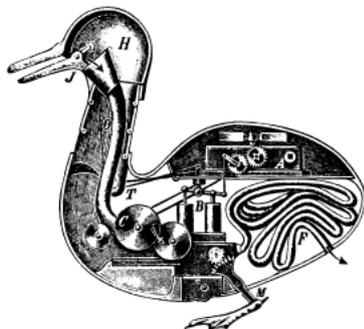
Compare Descartes' and Plato's dualisms.

*Can you think of ways that such dualism is expressed in our everyday lives or in science?*

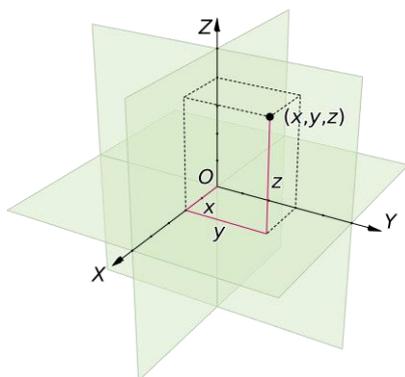
*An alternative to dualism is to say that only one of the two really exist. Reductionism is one such idea. What is it?*



René Descartes (1596-1650)

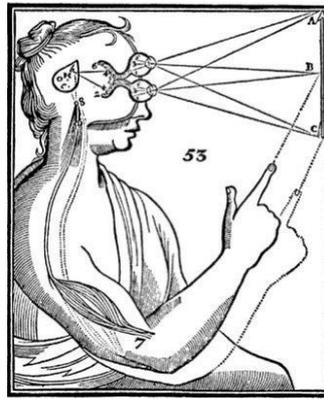


Descartes' idea of an animal, being a pure material, mechanical thing without sensations. What would Aristotle say about this? The image shows Vaucanson's famous duck. *Photo Credit: Wikimedia Commons*



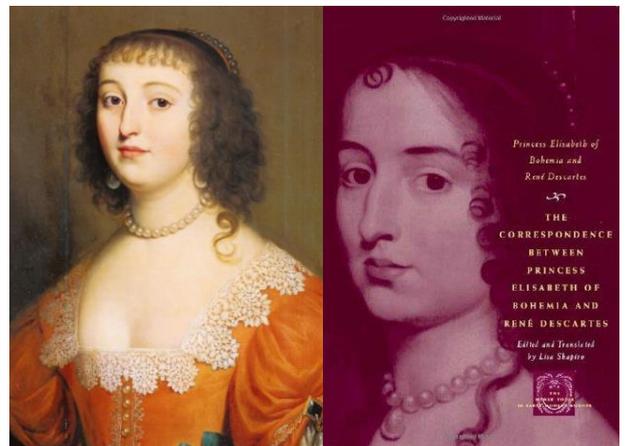
The Cartesian Coordinate System. Illustration by Jorge Stolfi

THE MECHANICAL PHILOSOPHY



**Dualism explained:** Descartes thought that the link between the mind and body was a gland in our brain, called the pineal gland. Our sense organs would send signals to the brain, which sends signals to the mind to have certain experiences. Drawing from Descartes' in "Treatise of Man". *Photo Credit: Wikimedia Commons*

**Princess Elizabeth of Bohemia (1618-1680)**



- Eldest daughter of Prince Friedrich V of Bohemia and Elisabeth Stuart (a granddaughter of Maria Stuart).
- Elizabeth was tutored in various languages (French, German, English, Greek, & Latin), as well as music, painting and dancing. Her writing suggests she was also taught logic, mathematics, politics, philosophy and the sciences.
- She corresponded extensively with Descartes, Gottfried Wilhelm Leibniz, and other famous intellectuals and her letters reveal a great philosophical talent.
- The objection to Descartes' dualism was originally raised by Elizabeth in her letters to Descartes.
- In those letters, Elisabeth questions Descartes on his explanation about the relation between the two distinct substances of mind and body, and in particular the possibility of their causal interaction and the nature of their union.
- Elizabeth and Descartes also corresponded about the nature of virtue and the greatest good, human freedom of the will and its compatibility with divine causal determination, the passions and their regulation, political philosophy, and Descartes's physics.

**Text box by Maritza Ilich Mauseth**