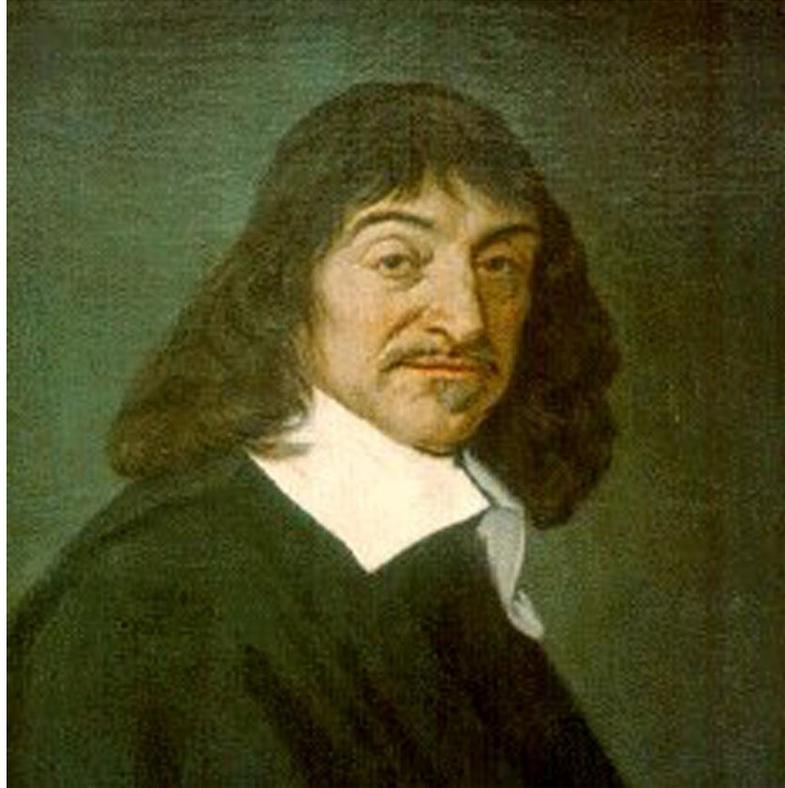


# Rationalism

Rene Descartes, "Meditations I"

# Descartes (1596-1650)

- Highly influential to this day
- Father of modern epistemology, philosophy of mind
- Mathematician: optics, Cartesian geometry
- A devout Catholic



# Rationalism vs. Empiricism

## Rationalism

- T1: We can have a priori knowledge about the external world
- T2: Some of our ideas are innate
- E.g. Descartes, Leibniz, Kant

## Empiricism

- T1: We cannot have a priori knowledge about the external world; only a posteriori knowledge
- T2: There are no innate ideas: all of our ideas are derived from experience
- E.g. Locke, Hume, Berkeley

# Descartes against Skepticism and Empiricism

- **The Problem of Skepticism:** our senses are deceptive; or we have no knowledge at all
  - Illusions (ruler), Ambiguous perceptions (duck or rabbit?), Pyrrho scepticism
  - How do we answer the sceptic?
- **Empiricism:** all knowledge about the world derives from sense perceptions only
  - Realism (Locke): problem with objects as things-in-themselves and primary qualities
- **Descartes was a rationalist (not empiricist):** at least some of our knowledge about the world does NOT derive from sense perceptions
- In the *Meditations*, Descartes proposes
  - i) to answer the skeptic!
  - ii) avoid the kind of problems Locke about empiricism

# Descartes on his Project

- SEVERAL years have now elapsed since I first became aware that I had accepted, even from my youth, many false opinions for true, and that consequently what I afterward based on such principles was highly doubtful; and from that time I was convinced of the necessity of undertaking once in my life to rid myself of all the opinions I had adopted, and of commencing anew the work of building from the foundation, if I desired to establish a firm and abiding superstructure in the sciences. But as this enterprise appeared to me to be one of great magnitude, I waited until I had attained an age so mature as to leave me no hope that at any stage of life more advanced I should be better able to execute my design. On this account, I have delayed so long that I should henceforth consider I was doing wrong were I still to consume in deliberation any of the time that now remains for action. To-day, then, since I have opportunely freed my mind from all cares [and am happily disturbed by no passions], and since I am in the secure possession of leisure in a peaceable retirement, I will at length apply myself earnestly and freely to the general overthrow of all my former opinions.

- But, to this end, it will not be necessary for me to show that the whole of these are false--a point, perhaps, which I shall never reach; but as even now my reason convinces me that I ought not the less carefully to withhold belief from what is not entirely certain and indubitable, than from what is manifestly false, it will be sufficient to justify the rejection of the whole if I shall find in each some ground for doubt. Nor for this purpose will it be necessary even to deal with each belief individually, which would be truly an endless labor; but, as the removal from below of the foundation necessarily involves the downfall

# Method of Doubt

- Step 1: in order to assess every belief, assess general reasons for each belief
  - Step 2: reject all beliefs which can doubt
  - Step 3: find beliefs which cannot be doubted (firm foundation)
  - Step 4: derive all knowledge from indubitable beliefs
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- Very Ambitious! Derive all mathematical, scientific and everyday knowledge
  - Descartes himself is NOT a sceptic; what he does is takes on the sceptic tries to reject him in the most convincing way

# Analogy: Geometry

- Descartes' project is analogous to the axiomatic method in Geometry
- Start with indubitable axioms, and proceed to prove further knowledge
- Example (Euclid's Geometry):
  - **Axiom 1.** A line segment is defined by two points.
  - **Axiom 2.** A line segment is a part of line and can be extended indefinitely along the line.
  - ....
  - **Theorems (proven from axioms):**
  - **Theorem 1.** (Pythagorean Theorem)  $a^2 + b^2 = c^2$

# Illusion and Dream Argument

- D: Knowledge is possible on the basis of sense experience.
- Skeptic: But perception of small and distant objects is fallible.
- D: Nonetheless, perception of close, medium-sized objects is veridical.
- Skeptic: What of the possibility that you are mad?
- Skeptic: In the past you have mistaken dreams, which turned out false, for veridical perceptions. There are no sure signs by means of which dream perceptions can be distinguished from waking ones

# Dreaming

- How can we tell that we are dreaming?
  - If we experienced unusually events we might think that we are dreaming:
    - If we were flying, or doing anything else that was physically impossible
    - If we noticed gaps in our experience
    - If we couldn't remember how we got the place that we are now at?
    - If our experiences are not very detailed
    - If any one of these experiences occurred, we would start to suspect that we are dreaming
- But, how can we tell that we are not dreaming i.e. in reality?
  - Suppose that none of these occurrences are happening and we are having a lucid dream, how can we tell that we are not dreaming?
  - It look like we cannot tell.
  - So, it is possible that we are in reality
  - And, it is possible that we are dreaming

# The Evil Demon

- D: What about mathematical notions of extension, quantity, and magnitude – they express truths ( $2+2=4$ , things have an extension) even if they do not refer to anything in nature
- Skeptic: Still, there is the possibility of an Evil Demon, who created you and could have given you a mind such that even what you think you know most perfectly is actually false.

# The Cogito

- “Cogito ergo sum!”; “I think; therefore, I am”
- That “I exist” is a belief that cannot be doubted, because I am thinking
  - All my perceptions may be illusions, I may be dreaming, there may even be evil demon manipulating me into thinking false thoughts
  - but it is impossible for me to be under an illusion that I exist, since I am the one thinkgs
  - Similarly, it is impossible for me to be dreaming that I exist when I don’t; if I am dreaming then I exist ( because I am thinking)
- The cogito then is a partial answer to the sceptic
  - It is one belief that I know is true and the sceptic cannot persuade me that I am wrong about it
  - It does not show

# The Rest of the Foundation

- How does Descartes go beyond the Cogito? How do we know that other things in the world also exist and are we think they are?
- The rest of the Meditations III-VI is about this.
- "once I perceived that there is a God, and also understood . . . that everything else depends on him, and that he is not a deceiver, I then concluded that everything that I clearly and distinctly perceive is necessarily true." (M5)
- Shows that God's Exists, and God is not a deceiver, God wouldn't make us in a way where we had clear and distinct ideas that were false. So, we have knowledge of all clear and distinct ideas

# What am I?

- I know with certainty **THAT** “I” exist (*Cogito ergo sum*), but **WHAT** am “I”?
- Am “I” my body? No, because I can doubt the existence of my body, whereas I cannot doubt the existence of myself (the “I”).
- “I” am a **thinking thing**, a thing that doubts, understands, affirms, denies, wills, refuses, imagines, and has sensations.
  
- What has Descartes Shown?
  - That a non-physical thing, the “I” exists
  - Hasn’t shown that anything physical exists
  - What about the rest of knowledge? How could we come to have all the knowledge in the world from this piece of foundational knowledge?
  - Answer in Meditation III-VI

# Clear and Distinct Ideas

- Logical Laws: “it is either raining or it isn’t” is true
- Mathematical Laws:  $1+1 = 2$ , Laws of Geometry
- Philosophical Claims: there is an external world
- Physical laws:  $F=M*a$ 
  - He doesn’t develop this in the Meditations but with more reflection we can establish physical laws of nature that are clear and distinct
- Primary Qualities of Things: that things have mass, shape, size