

René Descartes (1596-1650)

- Many important contributions to physics, physiology, mathematics, as well as philosophy
- Famous for founding (with Galileo) the discipline now known as *analytic geometry*



The Foundations of Science

- “Several years have now passed since I first realized how numerous were the false opinions that in my youth I had taken to be true, and thus how doubtful were all those that I had subsequently built upon them.”
- The upshot of scientific inquiry is supposed to be **knowledge**. But if the foundations of scientific inquiry are **weak** (i.e., presuppose falsehoods), then knowledge cannot be obtained.

- Descartes aims to, at least tentatively, withhold judgment on all matters, excepting those which can be believed with *absolute certainty*.
- And from these latter *foundational beliefs*, he will build the rest of his belief system regarding the nature of the world, incl. the nature of mind and matter, and their relation to one another.
 - **Foundational (or Basic) beliefs** = self-justifying beliefs; beliefs that cannot rationally be doubted.

The Method

- Descartes subjects his beliefs (or the justification for them) to various waves of skeptical doubt; those that survive this doubt are the basic beliefs, which will serve as the foundation for the rest of his knowledge.
- But since he can't doubt each belief individually, he groups them according to the way in which they are purportedly justified.

The 1st Wave of Doubt

“The senses are sometimes deceptive.”

- Ex.: optical illusions, mirages, dimly-lit objects, distant objects, etc.
- Our senses sometimes “tell” us things that aren’t true.

“...and it is a mark of prudence never to place our complete trust in those who have deceived us even once.”

The 2nd Wave of Doubt

- Sometimes my dreams are so vivid—so much like the experiences had while awake—that I take them at face value and thus come to believe many things about the world on the basis of them.
 - Ex.: I may dream that I'm awake and sitting near my fireplace and come to believe this, even though I'm really asleep and in bed.

- For any moment that I'm actually awake, can I tell **with certainty** at that moment that I am awake and not having one of these vivid dreams?
- I determine that I cannot.

- But, if I do know anything on the basis of my experience at a given moment, then I must know whether I am vividly dreaming or awake at that moment.
 - Dreams aren't a good way to come to be justified in believing things about the world (even if they happen to be true).
- So, I can't know anything on the basis of my current experience.

The Dreaming Argument

P1. If I know that I'm standing, then I know that I'm not dreaming.

P2. I don't know that I'm not dreaming.

C. So, I don't know that I'm standing.

The argument is valid; it has the logical form of *modus tollens*.

The Scope of the 2nd Wave of Doubt

- For “I’m standing,” I may substitute any proposition that I believe *on the basis of my current perceptual experience*. Ex.: that I’m sitting, that I’m listening to the instructor, that I have hands, that there’s an apple in front of me, etc.
 - So, the argument generalizes in a way that threatens every one of my beliefs that is based on my current perceptual experience.

Question: which of my beliefs may still be justified even if the dreaming argument is sound?

- All of my beliefs that are justified *a priori* may be justified, and perhaps some others as well.

Examples *might* include:

- my beliefs that $2+2=4$, that *modus tollens* is a valid form of inference, that every square has only four sides
- my belief that there is an external world
- my belief that all bachelors are unmarried males

The 3rd Wave of Doubt

- Suppose that there exists not an all-powerful and all-loving, omnibenevolent god, but an all-powerful, **evil god**. (Call this god **the Evil Genius**.)

- Suppose further that the *only* things that exist are my mind and the Evil Genius.
 - The Evil Genius deceives me into thinking that there is a mind-independent material world, that I have a body, that there are other people around me, that I'm reading words off of a screen in SH 1431, etc.

- Suppose now that he also deceives me about things which I do not believe on the basis of my experience.
 - As a result of this deception, I come to believe that $2 + 2 = 4$, that $6 \times 8 = 48$, that every square has only four sides, etc.

Question: Even if it were true that I am *not* being deceived by the Evil Genius, as I do believe, could I tell **with certainty** that I'm not?

--Perhaps I couldn't: *by hypothesis*, everything would seem to me the way it does whether I am or am not being so deceived.

The Evil Genius Argument

P1. If I know that $2 + 2 = 4$, then I know that I'm not being deceived by the Evil Genius.

P2. I don't know that I'm not being deceived by the Evil Genius.

C. So, I don't know that $2 + 2 = 4$.

The argument is valid; another instance of *modus tollens*.

The Scope of the 3rd Wave of Doubt

- For “ $2 + 2 = 4$,” I may substitute any proposition that I believe on the basis of my perceptual experience *as well as* any of my mathematical beliefs or other kinds of *a priori* justified beliefs.
- So, the argument generalizes to threaten the justification of (perhaps) all of my beliefs, such that, if the argument is sound, I may not know anything at all.

The General Form of the Skeptic's Argument

- P1. If I know that P, then I know that Not-SK.
- P2. I don't know that Not-SK.
- C. So, I don't know that P.

- Where 'SK' is some *skeptical scenario* (like dreaming, or being deceived by the Evil Genius) and 'P' is some *belief* the justification for which is threatened by SK.

The Aftermath of the 3rd Wave

- *If* the Evil Genius argument is sound, are any of my beliefs still justified?
- Descartes: If so, then these will be among my *foundational* (or *basic*) beliefs.

Do I know that I exist?

- Descartes: *even if* I am being deceived by the Evil Genius into thinking all sorts of things that are not true, the Evil Genius cannot deceive me into thinking that I exist.
- I cannot rationally doubt my own existence. Why? Because doubting is a way of thinking, and thinking requires existence.

The Cogito Judgment

- **Question:** so, is Descartes making the following inference?
- I doubt, therefore I think, therefore I am. (*Dubito, ergo cogito, ergo sum*)
- He doesn't explicitly say: *Cogito, ergo sum*.
- What he actually says is: *Cogito, sum*.
- He refers to "I think, I am" as a *statement*, one that is true on every occasion on which he considers it.