

## Lecture 6.1 Descartes' Meditations I

### TOPIC:

Descartes' Foundationalism, Method of Doubt, and his famous Evil Demon thought experiment.

### KEY TERMS/ GOALS:

Skepticism

*A priori* and Empirical Justification

Empiricists

Rationalists

Foundationalism

Method of Doubt

Brain in the Vat thought experiment

### READING:

Descartes, Rene. Meditations on First Philosophy: 1 and 2 (Perry 136-141).

Optional: Grau, "Bad Dreams, Evil Demons and the Experience Machine: Philosophy and The Matrix." (Perry, 160-167).

Download :

Clip from the movie, "The Matrix" found at: <http://www.facebook.com/video/video.php?v=21974987472>

This is the longest version I could find, but unfortunately it's on Facebook. (The first 2.5 minutes are what is important, though it's cool to see what the matrix actually looks like when Neo wakes up).

Here's another site with a shorter video:

<http://www.youtube.com/watch?v=arcjksDgCOU>

If anyone finds a better site, then let me know.

### CONTENT:

Rene Descartes (1596-1649) was a French philosopher during the Enlightenment period. Descartes is one of the most important philosophers in the western philosophical tradition. He is sometimes called the father of Modern Philosophy (The most important Modern Philosophers are Locke, Leibniz, Descartes, and Hume). He lived slightly before Newton (1642-1727), so academia was on the verge of splitting between the sciences and humanities.

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Descartes was not just a philosopher, but also a great mathematician. He invented the Cartesian plane that we have all had so much fun with in our math classes. He thought that the value of philosophy is to create foundations in which all other fields can build their particular theories on. He said, "philosophy as a whole is like a tree whose roots are metaphysics, whose trunk is physics, and whose branches, which issue forth from this trunk are all the other sciences." Among his volumes of writings, he attempted to explain: God's attributes, freedom of the will, prejudice, the laws of motion, the laws of impact, planetary orbits, comets, rainbows, the motions of the moon, the formations of mountains, the tides, the nature of minerals, combustion, glass making, gravitation, the nature of magnets, and attraction in glass.

We will examine his contributions to epistemology. So far, we have introduced two basic kinds of knowledge: *A priori* which is "known independent of observation," and *Empirical evidence* which is known via our senses. *A priori* knowledge is justified by reason alone. For example, we KNOW that  $2+2=4$  because we do some reasoning. We do not look out into the world to see whether  $2+2=4$ . Empirical knowledge, on the other hand, is justified by finding facts about the world. We KNOW that cats are mammals because we investigate what cats look like. It may help you to distinguish the two kinds of knowledge by using Hume's framework of "Matters of fact" and "relations of ideas." Matters of fact are empirically known, by using your senses to gain knowledge about facts in the world. I know that my cat is eating lunch right now because I can see her eating. That is a matter of fact and my knowledge of it is empirically justified. On the other hand, I also know that triangles have 180 degrees. I don't look at the world to know this. Indeed, since there are no perfect triangles with exactly 180 degrees in the world, then I can't know this fact by looking at things. Rather, I reason about math and geometry in my head. I have a *a priori* justification of my knowledge that triangles are 180 degrees. We will continue to refer to *a priori* and empirical knowledge throughout our epistemology section, so be sure you understand the difference.

If you want to examine our knowledge, then you must, Descartes thought, do a bit of introspection to examine our IDEAS. Ideas are any thoughts in our minds. This can include pictures, sensations, feelings, beliefs, propositions, etc. that we can think about. Ideas are the contents of the mind, and they can come from the senses, pure reason, the imagination, or they can be innate

Although the debate about the sources of knowledge began with Plato, Descartes was concerned about where our ideas came from, and he was particularly concerned about whether we have innate ideas. He categorized two camps of epistemologists: Empiricists and Rationalists. He said that there are two main views about where our ideas come from. **Empiricism:** all our ideas come from the senses. Empirical data is more foundational/ justified. Ideas from the senses (*empirical*) include ideas of heat, loud noise, the color red, the color and sounds of a river and so on. *Empiricists, then, think that ALL our ideas come from the senses.* **Rationalists, on the other hand, think that SOME of our ideas are innate and are not produced by any corresponding sensation.** A rationalist focuses on ideas produced by reason alone (*a priori*) or by imagination. Such ideas include the ideas of my imaginary tiny friend, a dog with wings, mathematical reasoning, or an idea of a golden mountain (I imagine it, though I've never seen it). According to this definition, Descartes is a **rationalist**. He thinks that ideas that are formed by reason alone are foundational.

Descartes was concerned with providing arguments against *Skepticism, which is the view that we do not have knowledge*. Skeptics argue that either we don't actually KNOW (justified true belief) the things that we think we know, or that we are not *justified* in claiming to know those things. For example, Pyrrho was a post-Socratic skeptic who warned us that we should not claim to know things because we could never be certain. He went around waving his finger at anyone who claimed that they knew things. He was so extreme, that he doubted the existence of horses and cliffs. Consequently, he had to have his disciples follow him around so that he would not step into the street in front of horse carriages to prevent him from being run over.

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Descartes wanted to prove the skeptic wrong. In order to do that, he must form arguments for why we DO have knowledge, and are justified in claiming that we know things. He said there are kinds of knowledge which are more certain, solid, or foundational than other kinds, and we should trust foundational kinds of knowledge.

FOUNDATIONALISM and METHOD OF DOUBT (p. 136):

The epistemology Descartes tried to develop is called foundationalism. There are two ways to think about foundationalism: An architecture metaphor; or knowledge Modeled on Euclidean Geometry. The architecture metaphor makes us think of a building. What keeps a building from falling over? 1. A solid foundation. and 2. the rest of the building, which we will call the superstructure. Descartes wanted to show that many of our beliefs about the world are cases of *genuine* knowledge (again, to prove the skeptic wrong). To show this he broke up our beliefs into two categories. First, there are foundational beliefs which are perfectly solid. Second, there are superstructural beliefs, which count as knowledge because they *rest* securely on the foundation. That is, if you can prove that you know X, and A depends on X, then you can also be sure that you know A.

The second conception of foundationalism uses Geometry, which Descartes (and Plato and just about every philosopher) considered a window into the true nature of the universe. Most of you probably had a geometry class in high school. The geometry you studied was developed by Euclid, a Greek mathematician who lived from about 325 BCE to 265 BCE. Euclid divided propositions into two categories. Axioms and Theorems. Axioms are the simple and obvious truths (triangles are 180 degrees), and Theorems are true because they can be deduced or depend on from axioms. Descartes wanted to find foundational bits of knowledge or axioms of knowledge. He wanted to build a system of knowledge in the way that Euclid built a system of geometry.

In the first meditation Descartes proposes a way to find the axioms or foundations of knowledge. Descartes calls this the method of doubt: Try to doubt everything you believe. Whatever is left is indubitable and is therefore foundational. *The method of doubt is used to see whether it is possible to doubt a proposition. If it is possible to do this, you set the belief aside because it is not foundational. If it is not possible to doubt a proposition then you have identified a foundational item.* Note that failing the method of doubt test does not mean the belief is false. It just means that the belief is not absolutely certain. Descartes begins using this method in Meditation I of his work *Meditations on First Philosophy*.

Descartes wants to find indubitable (un-doubtable) beliefs that can act like axioms in a theory of knowledge. What is an axiom? They are simple and self-evident truths. If they are true, they cannot be doubted. The method of doubt aims to doubt everything that we think we know. Descartes is careful to explain that TYPES of ideas should be tested through his method of doubt. That is, you don't have to consider every single proposition to see if it can be doubted. Rather, you can find types of propositions and test those. The two TYPES of ideas or beliefs are those that are justified empirically, versus those that are justified *a priori*. We can break our ideas into two kinds: those that we acquired from our senses, versus those that we create via reason alone.

CAN WE DOUBT OUR SENSES?

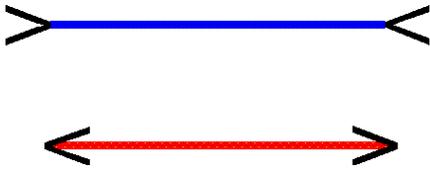
Descartes tests both kinds of knowledge. The first type of belief that he applies his method of doubt to is beliefs that we acquire through the senses. Descartes asks, can beliefs obtained through the senses be doubted? What do you think the answer is? Most of you will agree with Descartes that, yes, we can doubt beliefs that we acquire through the senses. Descartes examines three ways that our senses can give us faulty beliefs:

1). We can hallucinate. Hallucinations happen when the mind alone creates images that are not there.

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2). We can have visual illusions. Visual illusions occur when your mind/visual system “misreads” information that is obtained through the eyes. Mirages or optical illusions are good cases. I’m sure most of you have come across the Mueller-Lyer illusion, but it’s fun to look at it again.

Which of these lines (the blue or red) is longer?



The answer is that the lines have equal length, even though our eyes trick us to believe that the blue one is longer. If we believe that the lines are equal, we are mistaken. We obviously do not KNOW the lines are equal even though our senses led us to believe they are. Our senses fooled us.

3) The third way that our senses can deceive us is by dreaming. When we dream, we form images, we can “feel” things, “smell” things, “touch” things, and basically believe that we are doing real things even though we are not. Descartes explains:

How often a dream has convinced me that I was sitting here, sitting before the fire, wearing my dressing gown, when, in fact, I was undressed and between the covers of my bed! But now I am looking at this piece of paper with my eyes wide open, the head that I am shaking has not been lulled to sleep; I put my hand out consciously and deliberately; I feel the paper and see it. None of this would be as distinct if I were asleep. As if I can’t remember having been deluded by similar thoughts while asleep. When I think carefully about this, I can see so plainly that there are no reliable signs by which I can distinguish sleeping from waking that I am stupefied—and my stupor itself suggests that I am asleep! (137).

Descartes thinks that there are no clear signs that would tell him he is awake or asleep. Every sign comes from the senses, but he has been fooled before by thinking he is awake when he was in fact sleeping.

There are three kinds of indications that convince us that the kind of ideas we receive via our senses are doubtful. Our senses, therefore, can be doubted, and is NOT foundational.

### CAN WE DOUBT *A PRIORI* BELIEFS?

What about *a priori* beliefs? Can we doubt, for example, that  $2+2=4$ , or that “bachelors are unmarried males?” You might think that *a priori* beliefs are more foundational, since our senses cannot deceive us about mathematical knowledge or definitions of words. But alas, Descartes has found a way to doubt this kind of knowledge.

He offers us a thought experiment, which is a scenario which acts as a counterexample to a doctrine or idea. His thought experiment will illustrate how we can doubt *a priori* beliefs. Bear in mind that thought experiments are NOT always supposed to be taken literally, as if they provide real scenarios. Rather, the thought experiment presses our intuition that our conceptions might be wrong. In this case, we start out thinking that we cannot be wrong about whether  $2+2=4$ , but the thought experiment shows a way in which we can actually doubt whether that proposition is true.

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He says,

"I will suppose, then, not that there is a supremely good God who is the source of all truth, but that there is an evil demon, supremely powerful and cunning, who works as hard as he can to deceive me. I will say that sky, air, earth, water, color, shape, sound and other external things are just dreamed illusions which the demon uses to ensnare my judgment." p. 138

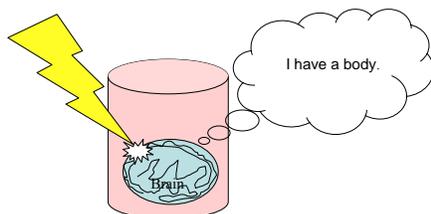
If there is an evil demon, he might surely offer all sorts of illusions to trick our senses and make us think that things exist when they don't. So, too, if he is powerful enough, he might give us thoughts which we think are true, but are not. Such thoughts might be that  $2+2=4$ , or that triangles have 180 degrees, or that squares have four sides of equal length, or any such *a priori* beliefs. The evil demon thought experiment, then, gives us a possible reason to doubt *a priori* beliefs. They are not foundational if an evil demon exists.

Now, before you panic, Descartes WILL offer arguments to show that we can indeed trust *a priori* reasoning, and that we can trust our senses as well (even though empirical beliefs are not as trustworthy as *a priori* beliefs). But before we hear his arguments for how we CAN trust this knowledge, we must consider why we should NOT trust either empirical or *a priori* reasoning.

I will explain a similar representation to the Evil Demon or Evil Genius thought experiment. The representation was given by a philosopher (a guy) named Hilary Putnam in 1981. According to this version, imagine that you have been subjected to an operation by an evil scientist. Your brain has been removed from your body and placed in a vat of nutrients which keeps it alive. The nerve endings have been connected to a super-computer which causes your brain to have the illusion that everything is perfectly normal. There seem to be people, objects, the sky etc., but really all that you are experiencing is the result of the electronic impulses traveling from the computer to the nerve endings. The computer is so clever that if you try to raise your hand, the feedback from the computer will cause you to "see" and "feel" the hand being raised. Moreover, by varying the program, the evil scientist can cause you to experience any situation or environment that he wishes. He can even make you believe with a feeling of certainty that  $2 + 2=5$ . This thought experiment shows that it is logically possible to doubt just about anything. Here is a graphic illustration of Putnam's thought experiment:

### The Brain in The Vat

A contemporary version of the Evil Genius argument:  
The Brain in the Vat argument.



The most popular analogous representation of the Evil Demon thought experiment comes from the movie, "The Matrix." The main character, Neo, meets another man who informs him that he (and almost everyone else) is living in the Matrix, a computer-generated complex that convinces people that what they are experiencing is real. Neo has the option of remaining in the Matrix where he can proceed to be deluded into thinking that he is

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actually eating steak, walking around, talking to people, feeling and smelling things, etc. Neo chooses, instead, to take a pill that will wake him up to reality—he will see that he has been hooked up to a machine, and he will have a chance to escape. The Matrix was directly influenced by Descartes Evil Demon thought experiment.

SUMMARY: Below is a box that summarizes three ways that you can doubt your beliefs/knowledge. I had separated the first way into hallucinations and visual illusions, but you can see that there are several reasons to doubt beliefs that arise from the senses, and there is a way that we can doubt *a priori* beliefs as well.

### Descartes' Method of Doubt

1. My senses can deceive me.

Hence, I should doubt knowledge gained from the senses.

2. I could be dreaming when I think that I am awake.

Hence, I can doubt my knowledge that I'm awake, that I have a body, etc.

This also deepens my doubt in knowledge gained from the senses.

3. An evil genius could be responsible for all my thoughts.

Hence, I should doubt math, and all my other knowledge, no matter what its source.

### ASSESSMENT:

Be able to explain Descartes' Foundationalism; Method of Doubt; three reasons to doubt the senses; and his Evil Demon thought experiment.

### DISCUSSION QUESTIONS

Are there any indications that would convince us that we are not (or are) awake and not sleeping?

Epistemic Foundationalism and the Method of Doubt has been criticized for being too strict of a condition in order to claim we have knowledge. Do you think that we must be absolutely certain (with no doubts) in order to say we know things? Think about how we claim to know all sorts of things daily, and yet we probably are not deeply certain that they are true. We say, for example, that we "know" that the Tower Theater is on 9<sup>th</sup> and 9<sup>th</sup>, but for all we know, the theater might have closed down last night or moved location. Since there is reason to doubt this claim to knowledge, then, Descartes might say that we DON'T know where the Tower Theater is. Does this seem right to you? Do you think that we can say that we KNOW the sun will rise tomorrow, even if we do not, strictly speaking, know that this is a true fact?

In the Matrix, Neo has a choice to take the blue pill, which will keep him in the Matrix (living his daily life, enjoying his steaks, etc.), or to take the red pill which will wake him up to reality. Which pill would you take, and why?