

Day 2: Descartes' Discourse (cont'd), Rules, and Meditations 1 and 2

I. The need for a method of acquiring knowledge, evaluating beliefs

analogy between origins of buildings, laws, and knowledge:

buildings patched together over time by many : buildings built from scratch by a single architect ::

laws developed occasionally for convenience by many : laws laid fundamentally by legislator/God ::

learning developed gradually from opinions of many : learning guided by individual's reasoning from birth

subjects of the analogy have in common:

they are arts or methods that are judged by norms

left-hand members have imperfect, random, disorganized effects

1. buildings: unattractive; variation in size; crooked, uneven streets
2. laws: merely for convenience; forced on citizens by exigencies
3. learning: merely probable; from conflicting authorities

right-hand members have more perfect, organized, effects

1. buildings: more attractive; solid foundations; planned in advance
2. laws: more consistent; drawn from a basic principle; given in advance
3. learning: less contradiction; built from "foundations"; planned in advance

Descartes' four rules of method for forming true judgments in the Discourse:

<i>quote</i>	<ol style="list-style-type: none">1. ...never. . . accept anything as true that I did not plainly know to be such; that is to say, carefully . . . avoid hasty judgment and prejudice; and . . . include nothing more in my judgments than what presented itself to my mind <i>so clearly and so distinctly that I had not occasion to call it into doubt.</i>2. ...divide each of the difficulties I would examine into as many parts as possible, and as was required in order better to resolve them.3. ...conduct my thoughts in an orderly fashion, by commencing with those objects that are simplest and easiest to know, in order to ascent little by little...to the knowledge of the most composite things.4. ...everywhere . . . make enumerations so complete and reviews so general that I was assured of having omitted nothing.
	<i>Discourse, p. 11</i>

Rule 1 reformulated:

We are **justified in believing** only what we **know**.

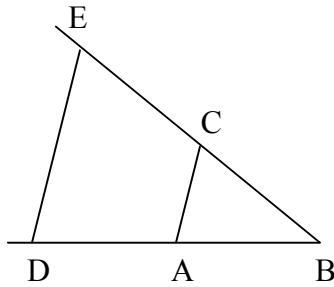
Rule 3 reformulated:

We acquire **complex knowledge** by deriving it from **simple knowledge**.

Descartes' view about the structure of justification

<i>def</i>	Foundationalism: a doctrine according to which higher-level knowledge and/or justified belief derive from basic (non-inferential) knowledge.
------------	---

Example of Descartes' method in mathematics (implied in the Discourse, detailed in the Geometrie)



For any BD and BC, find the product of their lengths by constructing the [Simple!] diagram to the left, such that:

1. Let $BA = 1$ unit.
2. Construct DE parallel to AC .
3. $BD/BE = AB/BC$ [The triangles are similar]
4. $\underline{BD/BE = 1/BC}$ [BA = 1]
5. Therefore $BD \times BC = BE$ [Complex conclusion!]

II. A definition of knowledge

Descartes' definition of knowledge and two types of knowledge:

<i>def</i>	<p>All knowledge (<i>scientia</i>) is certain and evident cognition (<i>cognitio</i>). <i>Rules</i>, p. 1</p> <p>Intuition is the indubitable conception of a clear and attentive mind...[proceeding] solely from the light of reason.</p> <p>Deduction...[is the] inference of something as following necessarily from some other propositions which are known with certainty [ultimately, by intuition]. <i>Rules</i>, p. 3</p>
------------	--

example of certain cognition reached by deduction from intuition (clear and distinct perception)

- $1+3 = 4$ [intuitive judgment: certain because elements clearly and distinctly perceived to be related]
 $\underline{2+2 = 4}$ [intuitive judgment: certain because elements clearly and distinctly perceived to be related]
 $\therefore 1+3 = 2+2$ [deduced conclusion: certain because it intuitively follows from premises]

III. Doubts about our knowledge of the external world

Descartes' most fundamental skeptical argument

1. If I know that I sit by the fire, then I know that I am not being deceived by an evil genius.
2. I do not know that I am not being deceived by an evil genius.
3. I do not know that I sit by the fire.

A little bit of logic

<i>def</i>	<p>An argument is valid just in case its <i>form</i> is such that its conclusion cannot be false <i>if</i> its premises are true.</p>
------------	--

Descartes' argument has this valid form:

1. If A, then B
2. Not B
3. \therefore Not A ("modus tollens")

Example of an invalid logical form:

1. If A, then B.
2. Not A.
3. \therefore Not B.

Another instance of that valid form:

1. If something is a swan, then it is white.
2. This is not white.
3. \therefore This is not a swan.

An instance of this argument form:

1. If something is a swan, then it is white.
2. This is not a swan
3. \therefore This is not white.
(Invalid because both 1 and 2 can be true even if 3 is false—polar bears are white.)

def

An argument is **sound** just in case it is valid and all of its premises are true.

Descartes' argument is valid, but is it sound?

1. If I know that I sit by the fire, then I know that I am not being deceived by an evil demon.
2. I don't know that I am not being deceived by an evil demon.
3. ∴ I don't know that I sit by the fire.

Premise 1 is very plausibly true

Premise 2 is plausible only if we accept that

Our experience of the world could be identical to that created by the evil demon.

which presupposes:

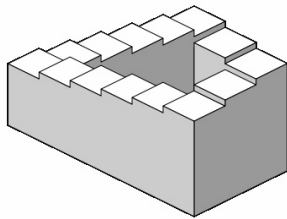
Experiences are identical regardless of their cause, and therefore self-contained.

Descartes' argument recast to reflect these presuppositions:

1. If I know that I sit by the fire, then I know that I am not a self-contained consciousness.
2. I don't know that I am not a self-contained consciousness.
3. ∴ I don't know that I sit by the fire.

Challenges to Premise 2 (and soundness of Descartes' argument):

- What is the reason for assuming we don't know we're not being deceived? Do we have to rule out every possibility we can imagine?



- Can there be a self that is conscious of itself but conscious of nothing else? What is this thinking thing thinking about? Can we have thoughts about something when there is nothing to think about?
- Could we simply use a different but logically valid form of argument in the reverse direction?

Using Premise 1, why couldn't someone also argue this?:

1. If I know that I sit by the fire, then I know that I am not being deceived by an evil demon.
2. I know that I sit by the fire.
3. ∴ I know that I am not being deceived by an evil demon.

This argument follows another valid form:

1. If A, then B
2. A
3. ∴ B ("modus ponens")

So which premise 2 is more obviously true?:

"I don't know that I am not being deceived by an evil demon" or

"I know that I sit by the fire"

(Remember, we can't use Descartes' skeptical argument to tell us, because we need to decide which is more obvious before we advance his argument.)

IV. A foundation of our knowledge identified

A proposition that cannot be doubted

I feel the heat of an apparent fire.

I doubt that there is a physical world.

I imagine an evil genius.

I am persuaded of skepticism.

I am being deceived about the world.

I deny that bodies exist.

I, the feeler, exist.

I, the doubter, exist.

I, the imaginer, exist.

I, the persuaded, exist.

I, the deceived, exist.

I, the denier, exist

I exist.