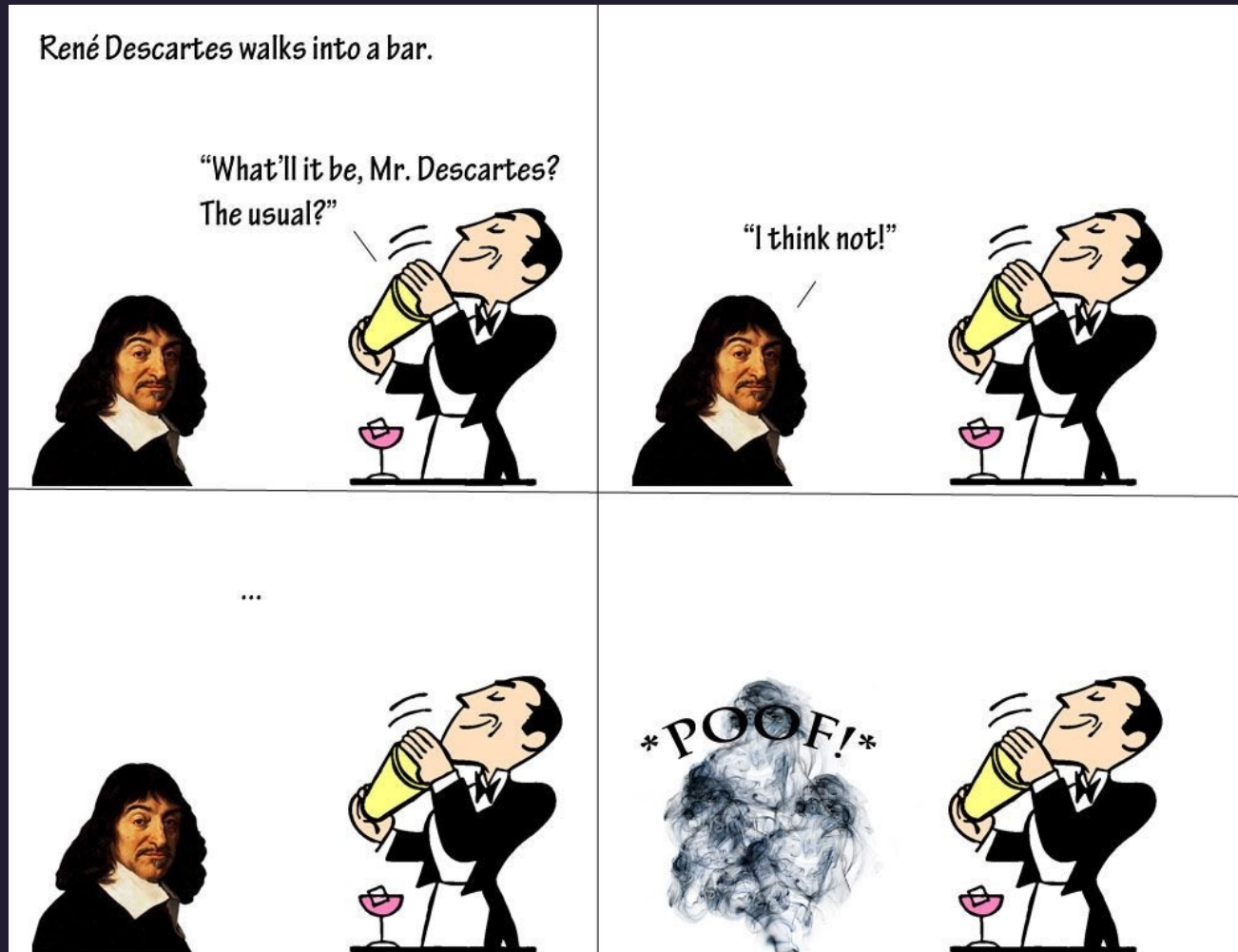


# Sources of knowledge



Rationalism:  
Descartes

# Lecture Overview



1

Cogito – the first building block

2

Clear & Distinct ideas – further building blocks

3

Strengths

4

God and Cause & Effect

# Descartes

- Another key figure of Rationalism, Founder of Modern Philosophy
- Saw Reason as the way to counter Scepticism
- Approach: **discover** infallible building blocks which cannot be doubted – this is the foundation
- Then use the infallible 'glue' of deduction to **derive** other beliefs, especially of the external world





# Cogito – the first building block

- One key block: the Cogito
- Properly Basic: not based on any prior belief and thus self-validating
- “In the very act of doubting, my existence is revealed: even if I am deceived, I must exist in order to be deceived; even if I am dreaming, I must exist in order to dream. In fact, I can be certain of my existence only so long as I’m thinking. I can’t possibly conceive my non-existence here and now, for to conceive is to exist. However, if I ceased to think, I couldn’t assert my existence; I couldn’t know that I exist, though I possibly might exist even then. Finally, I know that I’m conscious because my consciousness is directly presented to me; it’s not represented to me by an idea. Descartes referred to such self-evident truths as *simple intuitions* – and he said that such particular truths lead us to more general truths (Tlumak, *Classical Modern Philosophy*, 23)

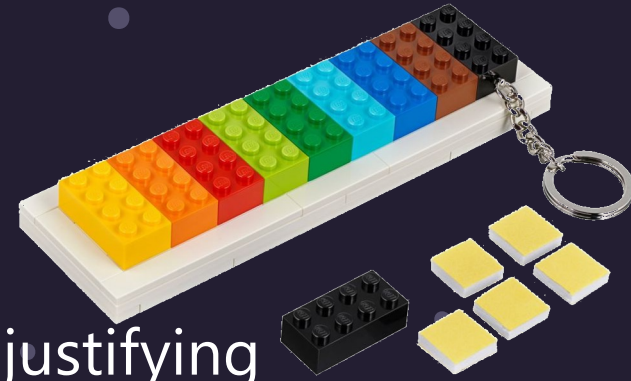


# But how to recover the rest of our knowledge?



- Even if we were to accept the Cogito (setting aside Stroud's objection), **how** do we recover our body of knowledge from just that one proposition?
- Hard to see how the Cogito (or even TAs in general) can give us knowledge of the external world
- E.g. I exist. And then? How to know that the external world exists? Think Evil Demon!

# More Building Blocks



- Upshot: Descartes has to find more of such infallible, self-justifying beliefs
- How? With the Cogito, Descartes believes he has found the key to find these other beliefs
- Descartes: I know some things, for e.g. that I exist and that I am a thinking thing
- If so, then I must **already know** how to identify infallible knowledge; I only need to make this means of identification **explicit**
- Key: "everything which we conceive very clearly and very distinctly is wholly true"
- Essentially, it is an idea that we cannot but accept as true.

# The indubitability of Clear and Distinct Ideas

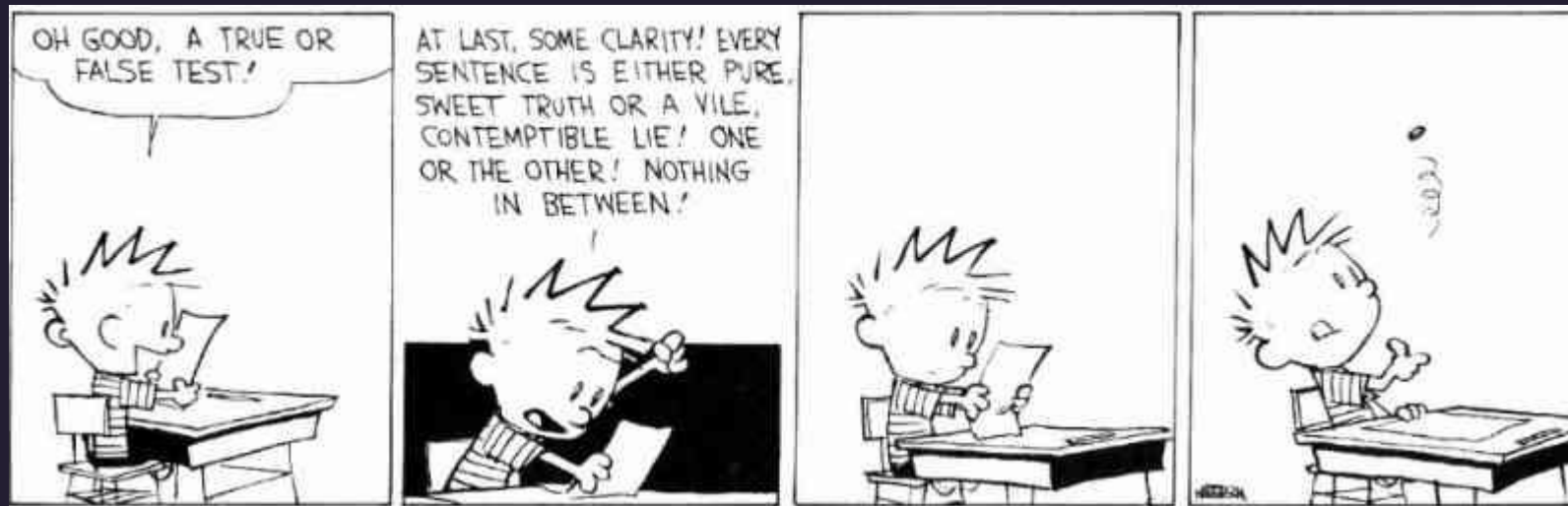
- But why trust C&D ideas?
- Because they are the results of mental intuition and leave **no room** for doubt

By 'intuition' I do not mean the fluctuating testimony of the senses or the deceptive judgement of the imagination as it botches things together, but the conception of a clear and attentive mind, which is **so easy and distinct that there can be no room for doubt about what we are understanding**. Alternatively, and this comes to the same thing, intuition is the indubitable conception of a clear and attentive mind which **proceeds solely from the light of reason** ... Thus everyone can mentally intuit that he exists, that he is thinking, that a triangle is bounded by just three lines, and a sphere by a single surface

Descartes, *Rules for the Direction of the Mind*; emphasis added

# Examples of C&D ideas

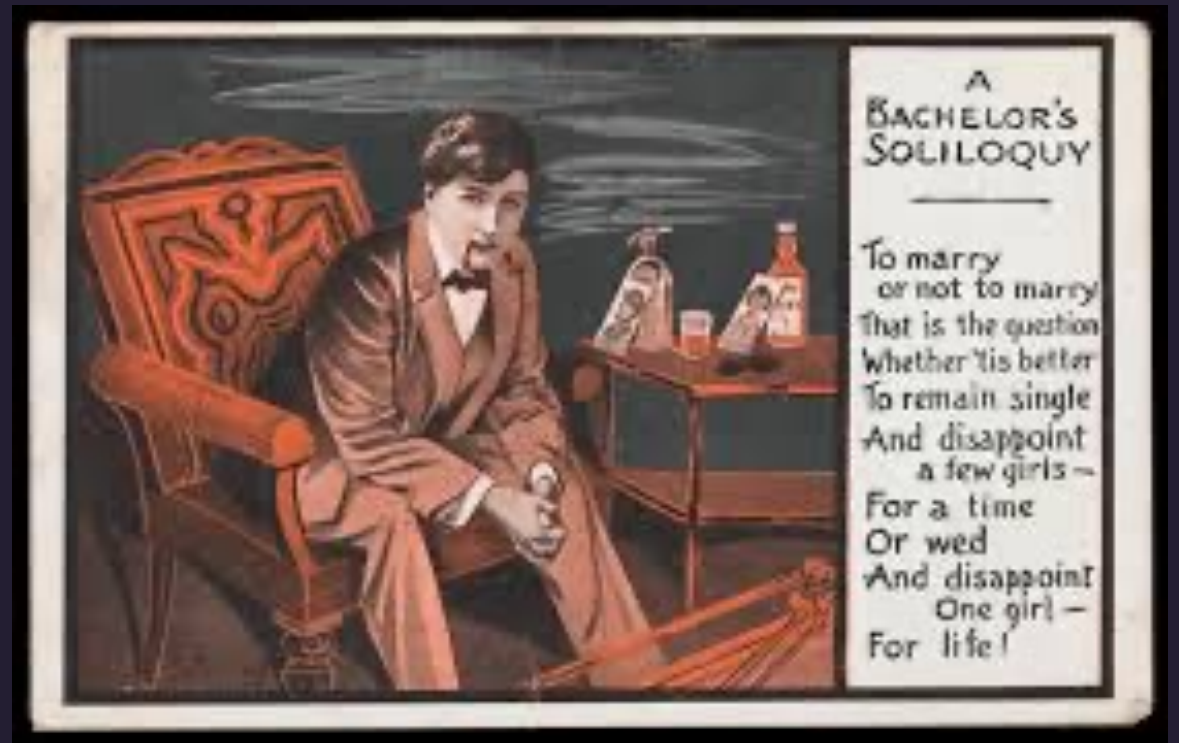
- Basic claims of logic:
  - Law of non-contradiction: it is impossible for both  $p$  and  $\sim p$  to be true at the same time (I cannot be both intelligent and stupid at the same time)
  - Law of excluded middle: Either  $p$  or  $\sim p$  must be true, i.e. a proposition is either true or false (either it is true that I am beautiful or it is false)
  - Law of identity: each thing is identical with itself (I am me)
- Basic claims of arithmetic:  $2+3=5$
- Basic claims of geometry: a triangle has 3 sides





# Examples of C&D ideas

- Analytic a priori propositions: where the predicate is contained within the subject
  - E.g. "A bachelor is an unmarried man"
  - As opposed to "Mr Lee is wearing a yellow shirt"
- Importantly, these are all **a priori** propositions, i.e. they can be known prior to experience



# Moving beyond the foundation

- With these basic building blocks, it appears that we can get more complicated a priori claims
- Example: all of mathematics!

Knowing the requisite axioms, we can arrive at proofs such as “the sum of two odd numbers is even”

Even number =  $2n$ , Odd number =  $2n + 1$ , where  $n$  is whole number; Laws of arithmetic apply

Let the odd numbers be  $a$  and  $b$

Then  $a = 2n+1$

$b = 2m+1$  for whole numbers  $n$  and  $m$

$a+b = 2n+1+2m+1$

$= 2m+2n+2$

$= 2(m+n+1)$

$= 2p$  where  $p$  is whole no.

But this is of the form  $2n$  and hence even (QED)

# What of the external world?

- But what of more substantive, more meaningful, claims like those relating to the external world?
- E.g: "Water boils at 100 degrees Celsius"  
"There is a computer in front of me"  
"I am awake now"  
"Singapore was invaded by the Japanese on 15 Feb 1942"?
- How to reason from the basic beliefs of math and analytic a priori propositions to these more substantive beliefs of the external world?



↑ ???

hi. i exist.

- Descartes: God enables us to move beyond the Cogito and our subjective self-awareness to knowledge of the external world and reality
- Two ways:
- 1) God – being all-good – would guarantee that when I turn my mind to ponder on other C&D ideas, the previous C&D idea is in fact true
  - When I'm clearly and distinctly perceiving that X, no one, not even the Evil Demon, can fool me
  - But once I turn my mind to perceive that Y, I have to depend on my **memory** of me clearly and distinctly perceiving that X
  - Important! Otherwise, we are stuck with only one piece of knowledge at any one time.
- 2) God being all-good means that he is not a deceiver (i.e. evil demon) which in turn means that He will not allow us to be in error in cases in which (i) we have a natural propensity to believe and (ii) God provided me no faculty by which to correct a false such belief.
  - But we have a natural propensity to believe our senses and that these sensations are produced by corporeal things, i.e. that the external world exists, and we only can rely on our senses to know that the external world exists

TOG



# God-> Cause and Effect

- Cause and Effect can take the place of God
- Here, truths of the external world are necessary, i.e. things *have* to be the way they are
- Hence, truths of the world can be arrived at via reasoning alone.
- For example, I have to be wearing a blue shirt today because of the series of decisions made since the last time I did laundry



- The reason why it *seems* to me that I cannot arrive at such truths is that my mind is too finite. If I were God/a supercomputer, then I can!
- TB pp.46-49 (Leibniz and Spinoza)

# Strengths of Rationalism (in general)

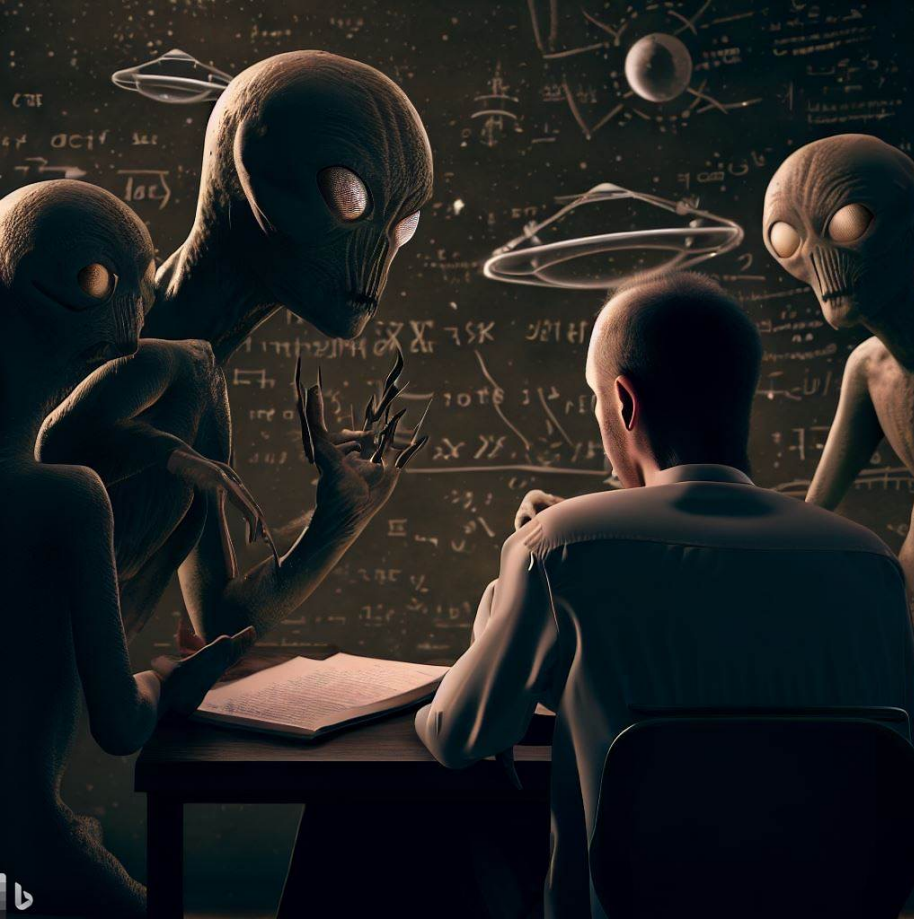
- 1) Absolutely certain knowledge gained
- 2) Accounts for the special nature of Math



# Absolutely certain knowledge gained

- Reason alone can give us knowledge of Analytic A Priori propositions which are **indubitable**
- Example: "A bachelor is an unmarried man"
- Negating the predicate – "unmarried man" – results in a contradiction
- So the original statement must be true, i.e. **necessarily true**
- **No need for experience** to determine the truth of the statement
- In fact, trying to gain such knowledge via experience leaves it open to doubt because of problems like sense deception
- We can even use such statements in combination with each other to arrive at equally certain statements via **deduction**
- Example 1: "A bachelor is a man" and "A bachelor is unmarried" give us "A bachelor is an unmarried man"
- Example 2: "2 is '1+1'" and "4 is '2+2'" so "4 is '1+1+1+1'"

# Accounts for the special nature of Math



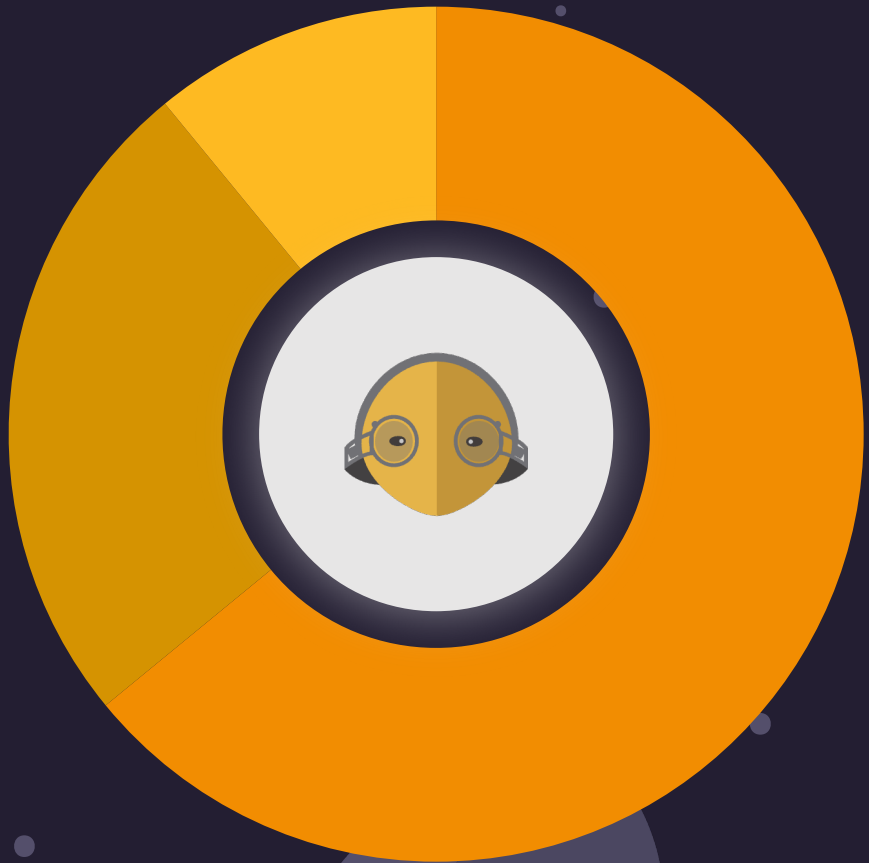
- Math, unlike many of our other knowledge enterprises, seems special
- The knowledge we get from it appears pure, absolutely certain and eternally true
- The a priori nature of Math is the reason behind this
- If Math were to be a posteriori, then Math would lose this special status - unintuitive



# Online Discussion

- 1) What are some weaknesses of Descartes' arguments and why?

# Summary



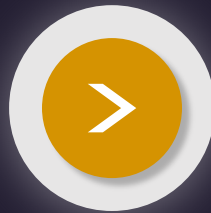
Descartes offers us an updated attempt at Rationalism

---



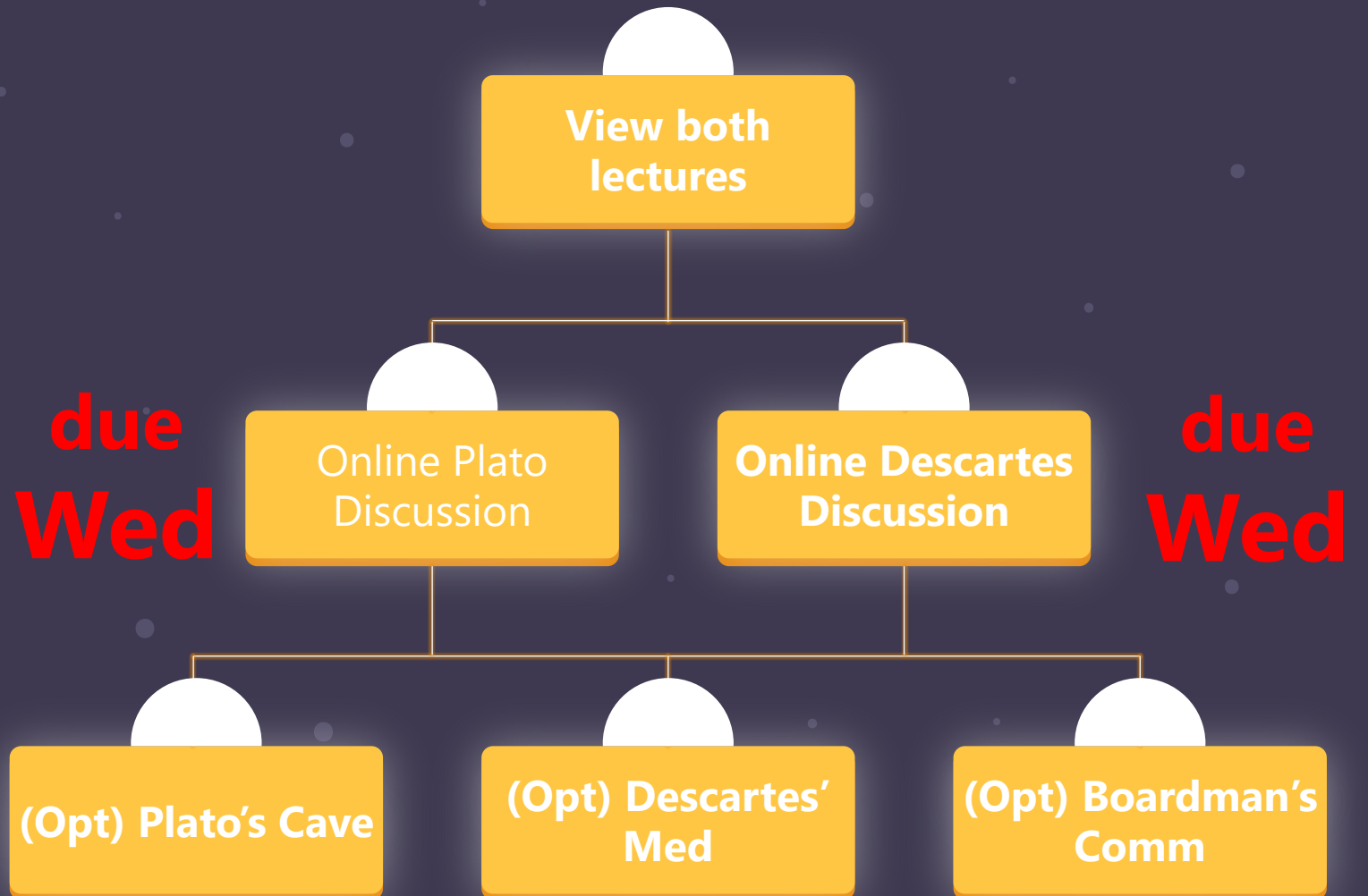
Basic building blocks: the Cogito, C&D ideas

---



His attempt to recover knowledge of the external world with God (C&E as a possible substitute)

# Homework



# *THANK YOU*

**Lorem Ipsum**

24Slides

*Presented by :*  
**Lorem Ipsum**

