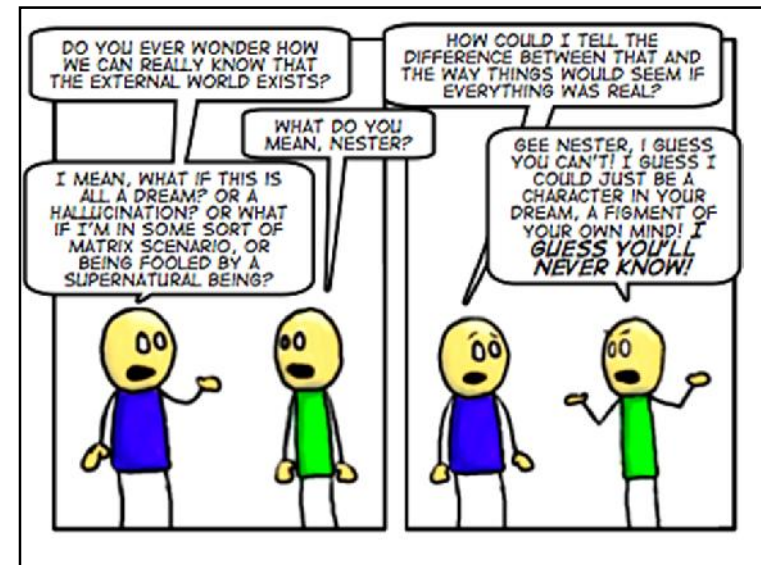# PHIL 1305

Cartesian Foundationalism

Justin C. Fisher

Epistemology (Theory of Knowledge)

What is knowledge (as opposed to mere belief)?

How can a belief be "strongly supported by evidence"?

How can we be "justified" in believing something?

When is a claim "well confirmed" by evidence?

How should we go about acquiring beliefs?

KNOWLEDGE

Descartes' Method of Doubt

[A]s well as withholding assent from propositions that are obviously false, I should also withhold it from ones that are not completely certain and indubitable.

So all I need, for the purpose of rejecting all my opinions, is to find in each of them at least some reason for doubt.

To *really know* whether a quarter is genuine, you'd need to be able to rule out the hypothesis that it is counterfeit – if you can't distinguish between these, then you don't know it's genuine.

Descartes' Plan

I realized that if I wanted to establish anything in the sciences that was stable and likely to last, I needed —just once in my life— to demolish everything completely and start again from the foundations.

Any suitable foundation for our knowledge must be immune to doubt – i.e., we must be able to tell for sure that it is true.

So, we should bulldoze away any beliefs whose truth we can doubt, find a firm foundation, and rebuild new beliefs on this foundation.

Descartes' Meditations

#1. Use the method of doubt to bull-doze away all beliefs that are too uncertain to use as a foundation.

#2. Identify a suitable foundation.

#3-#6. Rebuild ordinary knowledge firmly on this foundation.

Bulldozer #1: Senses.

Whatever I have accepted until now as most true has come to me through my senses.

But occasionally I have found that they have deceived me, and it is unwise to trust completely those who have deceived us even once.

[But] that doesn't apply to my belief that I am here, sitting by the fire, wearing a winter dressing-gown, holding this piece of paper in my hands, and so on. It seems to be quite impossible to doubt beliefs like these, which come from the senses.

Bulldozer #2: Dreams.

Often in my dreams I am convinced of just such familiar events—that I am sitting by the fire in my dressing-gown—when in fact I am lying undressed in bed!

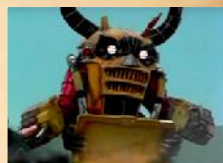[T]here is never any reliable way of distinguishing being awake from being asleep.

[But] whether I am awake or asleep, two plus three makes five, and a square has only four sides. It seems impossible to suspect that such obvious truths might be false.

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Bulldozer #3: The Evil Demon.

[Perhaps] some malicious, powerful, cunning demon has done all he can to deceive me…

[Perhaps] the sky, the air, the earth, colours, shapes, sounds and all external things are merely dreams that the demon has contrived as traps for my judgment.
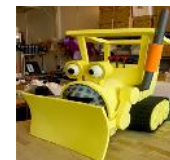
Descartes' Bulldozers

#1. My senses might deceive me.
But sometimes I do have a clear view…

#2. I might be dreaming.
But, even in a dream…
"2 + 3 = 5"
"Squares have four sides"

#3. There might be an Evil Demon who could intervene in *any* inference, and keep me from noticing my mistakes.
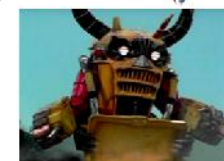
Is there a foundation?

Are there any beliefs that we can be absolutely certain are true, beyond any possible doubt?

A foundation?

"I THINK, THEREFORE I AM"

[An evil demon can] never bring it about that I am nothing while I think I am something.

I conclude that this proposition, *I am, I exist*, must be true whenever I assert it or think it true.

Descartes thinks you can also be certain what's happening in your own mind.

"I <u>seem to</u> smell a rat"

"I want not to sleep with my mother"

"I believe all races are equal"

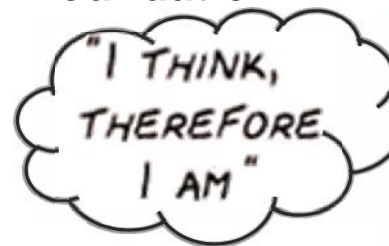"I feel pain"

"I am in love"
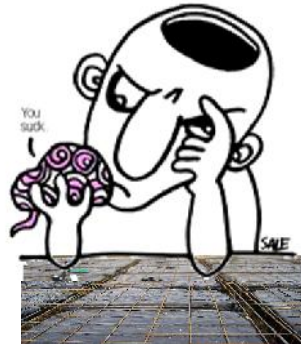
Are beliefs about emotions foundational?

People sometimes seem to be mistaken about what emotions they're actually experiencing.

Have you ever thought you were in love, but then decided you weren't?

Can you be sure of your current emotions?

I'M NOT ANGRY!

African American or Bad

European American or Good

Many people *who think they aren't* at all racist are much faster at using categories that lump Black and Bad together than they are at dealing with categories that lump Black and Good together.
Is this evidence these people are a bit racist afterall?

Are feelings of pain foundational?

"I feel pain"

When the bully initially presses the iron against your face, you might think you're feeling agonizing pain.

But once you realize the iron is cool, you might conclude you weren't feeling pain afterall.

Are these really foundational?

"I seem to smell a rat"

"I want not to sleep with my mother"

"I believe all races are equal"

"I feel pain"

"I am in love"

Many contemporary psychologists hold that beliefs, desires and emotions that we won't admit to ourselves can be revealed in behaviors, reaction times, free associations, etc…

An argument is a set of claims (called "premises") offered in support of a conclusion.

I said you should go to bed.
I'm your mother.

So, you should go to bed.

Premises

Conclusion

To build up again, Descartes will need arguments based on foundational premises.

Smoothie-Master 2000

Guarantee:

"If you put only edible ingredients in, then you'll get an edible smoothie out."

To sue Smoothie-Master, you'd need to find a combination of edible ingredients that yields an inedible smoothie.

If you put any inedible ingredients in, all bets are off – maybe you'll get an edible smoothie, maybe you won't.

Deductively valid arguments come with a similar guarantee: "if all the premises are true, then the conclusion must be true."

All A's are B's.
All B's are C's

So all A's are C's.

Note: you can decide whether an argument is valid without knowing whether its premises actually are true.

Obama is a democrat.
Many democrats are black.

Obama is black.

The premises in this argument are true, and the conclusion is true.

But, the premises, by themselves, do not <u>guarantee</u> that the conclusion would have to be true.

So this argument isn't valid.

Obama is a martian.
Obama has X-ray vision.

So at least one martian
    has X-ray vision.

The premises in this argument aren't true.

But, <u>if they were true</u>, then the conclusion would have to be true also.

So this argument <u>is</u> deductively valid.

George flurbs.
George is a rogon.

So at least one rogon flurbs.

Even though we don't know who George is, what a rogon is, or what it is to flurb, we can still tell that, *if the premises are true*, then the conclusion must be true.

So this argument is valid.

Test #1 for invalidity: Try to imagine a possible way that the premises could be true while the conclusion is false.

1. All great singers look great.
2. Britney looks great.

C. So Britney is a great singer.

Make 1 true: Kill off any ugly singers.
Make 2 true: (Not too hard.)
Make C false: remove Britney's vocal cords.

Since the premises could be true while the conclusion is false, this argument is Invalid.

Test #2 for invalidity: Pick a name/adjective in the argument and substitute in some new name/adjective everywhere it appeared.

         male strippers
1. All ~~great singers~~ look great.

2. Britney looks great.

----
         male stripper
C. So Britney is a ~~great singer~~.

Substitute "great singer"→"male stripper"

The resulting argument obviously isn't valid.
So the original argument wasn't valid either.

A1. If our trial subjects get sick, then our new drug isn't safe.

A2. No trial subjects get sick.

A3. So our new drug is safe.

Make A1 true: Suppose our subjects are all normal men; if they were to get sick, that would indeed indicate that our drug isn't safe.
Make A2 true: Suppose our subjects stay well.
Make A3 false: Suppose our drug harms women.

These premises aren't enough to guarantee the drug is safe for everyone → *Invalid!*

A1. If our trial subjects get sick, then our new drug isn't safe.

A2. No trial subjects get sick.

A3. So our new drug is safe.

Make A3 false: Suppose our drug is arsenic.
Make A1 true: Yep, if they get sick, that would indeed indicate that arsenic is unsafe.
Make A2 true: Kill all our trial subjects right as they take the drug – they won't get sick!

These premises aren't enough to guarantee the truth of the conclusion → *Invalid!*

Substitute "safe"→"going to make us rich"

A1. If our trial subjects get sick, then our new drug isn't ~~safe~~.
         ^*going to make us rich.*

A2. No trial subjects get sick.

A3. So our new drug is ~~safe~~.
         ^*going to make us rich.*

The resulting premises don't <u>guarantee</u> that people will spend a lot of money on our drug → *Invalid*

(Just because our trial can detect <u>one</u> way that our drug could fail to be safe or profitable, that doesn't guarantee it would detect <u>all</u> ways our drug could fail.)

Substitute "cheetahs"→"trees" and "60"→"600"

D1. No animal can run ~~60mph~~. *600 mph*

D2. ~~Cheetahs~~ *Trees* aren't animals.

D3. So ~~cheetahs~~ *trees* can run ~~60mph~~. *600 mph*.

The premises don't say anything about the capabilities of non-animals, so they can't <u>guarantee</u> that non-animals can run fast. → *Invalid*

Deductive Arguments Can Be Useful

P1. Every natural event has a preceding cause.

P2. There can't be an infinite chain of causes.

C. So there must have been some event whose cause was super-natural.

Once somebody puts forward an argument like this, we have just three choices:

(1) Say the argument isn't valid.

(2) Reject one (or more) of the premises, or

(3) Accept the conclusion.

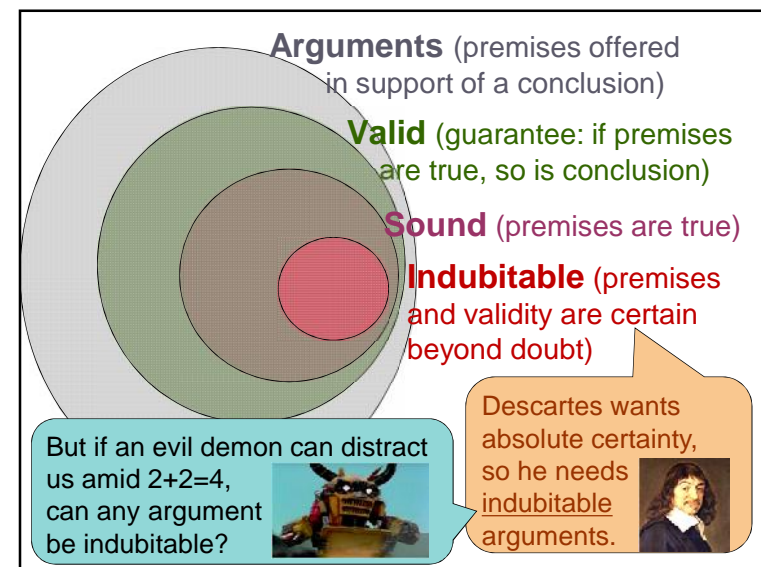(If we accept that it's valid and has true premises, that would guarantee its conclusion is true.)

A big limitation on valid arguments

A valid argument typically can't include any concepts in the conclusion that aren't in the premises.

Suppose we want to convince someone that electrons exist.

– Skeptics about electrons probably won't accept any premises about electrons.

– But without premises about electrons, a valid argument can't yield conclusions about electrons.

(This limitation poses problems for Descartes.)

Arguments (premises offered in support of a conclusion)

Valid (guarantee: if premises are true, so is conclusion)

Sound (premises are true)

Indubitable (premises and validity are certain beyond doubt)

But if an evil demon can distract us amid 2+2=4, can any argument be indubitable?

Descartes wants absolute certainty, so he needs <u>indubitable</u> arguments.

Building up?

I _seem to_ see a dagger before me.

God exists

God's such a nice guy, He wouldn't let me get this wrong

There is a dagger before

> Descartes needs _deductive_ arguments based on _indubitable_ premises!
> So, e.g., Paley is of no use here (for two reasons).

Descartes' Argument for God

(1) I have an idea of a perfect God.

(2) Each idea must be caused by something at least as perfect as what it's an idea of.

Hence, God exists.

> But, I can have an idea of a car more perfect than any I've seen even if there is no such car – so this premise is _not_ indubitable.

Descartes' Argument for God

(1) I have an idea of a perfect God.

(2) Each idea must be caused by something at least as perfect as what it's an idea of.

Hence, God exists.

> How can we be sure no Evil Demon mucks with this inference?
> (Saying "God wouldn't allow it", puts you in 'the Cartesian circle')

The Cartesian Circle

God Exists.

↑

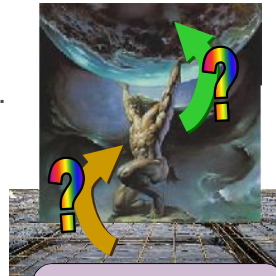My fancy argument shows me so.

↑

I can trust my fancy argument.

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Building up?

I <u>seem to</u> see a dagger before me.

God exists

God's such a nice guy, He wouldn't let me get this wrong.

There <u>actually is</u> a dagger before me

But don't we often get things wrong in dreams?

Link to problem of evil: If God doesn't prevent <u>horrible</u> <u>suffering</u>, how can we be <u>sure</u> he'd prevent minor errors?
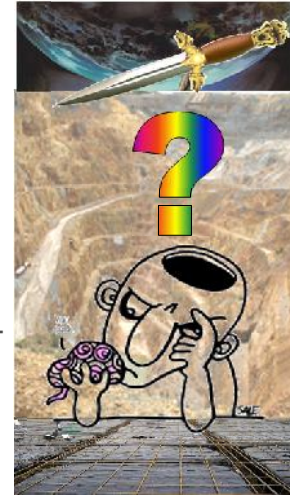
Descartes was bound to fail

His premises were about only his own mind.

His conclusions were about other things (e.g., actual daggers).

Premises about one thing <u>can't</u> <u>guarantee</u> that conclusions about other things are true.

So, his premises can't guarantee that his conclusions are true.

Back in the Pit of Doubt

Most people agree that Descartes failed to build a way out of the pit he created.

Is there another way out?
(See options on the next slide)

Or must we live with uncertainty about the world outside our minds?

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1. Fix Descartes' argument?
   - Better argument involving God?
   - Seek certainty without God?
2. Find a bigger foundation?
3. Use "abductive" arguments that are <u>probable</u>, but not <u>certain</u>.
   - We aren't <u>certain</u> electrons are why lights turn on and motors spin, but it's reasonable to believe in electrons as the <u>most probable</u> explanation for these events.
   - Maybe our belief in daggers is reasonable as the most <u>probable</u> explanation for all our dagger-seemings.
4. Settle for a <u>prudential</u> argument?
   - If we're in the grip of an evil demon, it doesn't matter what we believe; so maybe the <u>safest bet</u> is to believe in daggers. (Compare: Pascal's Wager)