

the method of doubt

skepticism about the external world

Moore's proof

The rules of belief









Today we begin a new topic. For the next few weeks, we will be investigating the question, What should I believe?

This is different than all of the questions we've asked so far. It is not a question about how the world is — like the questions about whether God exists, about whether we have free will, and about what we are. Instead, it is a **practical** question — a question about what we ought to do.

Moreover, I think that this is a kind of question about which most of us have lots of opinions. Let's look at some examples.









One kind of interesting case to think about is belief in conspiracy theories.

Some of these are silly and, perhaps, harmless. Examples might include the belief that moon landing was faked, or that the earth is flat. Believers in these kinds of conspiracy theories typically discount evidence which seems to count against their theories. (For example, the fact that ~400,000 people worked toward the Apollo moon landing, and none have admitted that it was faked, or photographs of the earth from space which seem to show it to be spherical.)

It seems pretty clear that people who believe conspiracy theories of this kind are making a mistake of a certain kind; they are believing something that they should not believe. Let's call these cases of bad belief.

And this is not just because the conspiracy theories are false. Intuitively, sometimes you can have very good reason to form a belief which turns out to be false (say, if you have misleading evidence). The mistake that conspiracy theorists are making is a different kind of mistake.

What are some other examples of people making mistakes of this kind — people believing things that they should not believe?









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One very common kind of example comes from cases of wishful thinking. Example: me, every August, thinking about the upcoming Notre Dame football season.

Another kind of example: people who form beliefs about their future on the basis of the horoscopes published in the *Observer*.

These are all examples of people believing things they should not believe. What are some examples of the opposite phenomenon — people forming beliefs as they should form them?









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The easiest examples are people who seem to weigh, and respond appropriately to, their evidence. Examples: Sherlock Holmes; responsible scientists; careful jurors.

Notice that none of these people are infallible; even responsible scientists make mistakes. But intuitively they are going about belief formation in the right way.

There are also plenty of simple and everyday examples of this kind of thing. Suppose that you see people walking around outside with umbrellas open over their heads, and form the belief that it is raining. Could your belief be false? Of course. But intuitively, given your experience of the world, you are forming the belief that you should form.

Let's call these cases of good belief.









These are all easy cases. But there are plenty of hard cases too — and, in fact, you might think, philosophy is a kind of machine for generating hard cases! Haven't we already seen lots of cases in which there are arguments on both sides of an issue, and where it is hard to tell which argument is better?

Here is a hard case of interest:

The Believer

I've always believed that there is a God. I never really thought about what my evidence is for this claim. But now I wonder whether I have good reason for my beliefs. Some of the arguments for God's existence sound good, but all face objections that I am not sure how to answer. Still, I continue to believe that God exists.

Is The Believer forming the beliefs he or she should form, or not? Is it a case of good belief, or a case of bad belief? What do you think?









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It is worth emphasizing that **all** of us are like The Believer on some issues. Most of us have moral beliefs, or political beliefs, which we hold strongly but which we might find it difficult to argue for in a persuasive way.

Here's a way in which we might try to answer our question about whether The Believer should believe as s/he does. When we think about examples of good belief, and bad belief, the following thought seems very plausible: It isn't just an inexplicable fact that horoscope beliefs are bad beliefs, and that responsible scientist beliefs are good beliefs. Instead, there are general principles which determine whether someone should, in a certain circumstance, form a certain belief, or not.

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These rules might come in two flavors. One kind of rule might be a rule which tells you that in certain circumstances you should form a belief. Let's call these positive rules. A second kind of rule might tell you that in certain circumstances you should not form a belief. Let's call these negative rules.

It seems very plausible that there must be rules of this kind which explain the difference between cases of good belief and cases of bad belief.

And it also seems plausible that, if we can figure out what these rules are, we'll be able to figure out whether The Believer should believe what s/he does.









I now want to contrast two very different approaches one might have to coming up with rules of belief.

One is best introduced by the following quote from Rene Descartes:

"Some years ago I was struck by the large number of falsehoods which I had accepted as true in my childhood, and by the highly doubtful nature of the whole edifice that I had subsequently based on them. I realized that it was necessary, once in the course of my life, to demolish everything completely and start again right from the foundations if I wanted to establish anything at all ... that was stable and likely to last."

I think that this is a thought which many of us have had at some point. We recognize that many of our beliefs are based on uncertain foundations -- like things we were told as a child -- and that this calls into question all of the beliefs that we have subsequently based on those.









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Can you think of any examples?

This suggests a certain general approach to formulating the rules of belief:

The start from scratch approach

We have all gotten our beliefs about the world from a variety of sources. Some are based on serious thought and investigation. Some are based on what our parents told us. Some are based on what our friends told us. Some are probably based on nothing at all. If we want to really figure out what we should and should not believe, we need to avoid taking anything for granted. Instead, we should assume nothing, and test all of our beliefs against some standard to see which ones we should keep, and which ones we should get rid of.









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The natural next question is: what is the standard by which we should decide which of our beliefs to keep, and which to discard?

Here again Descartes gives us an answer.

"Reason now leads me to believe that I should hold back my assent from opinions which are not completely certain and indubitable just as carefully as I do from those which are patently false. So, for the purpose of rejecting my opinions, it will be enough if I find in each of them some reason for doubt."









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What would it mean for you to find in some belief a reason for doubt?

It seems that to find a reason for doubting a belief would be to be less than certain that the belief is true. But what things can we be certain of? One natural thought is that we can be certain only of those things that we can **prove**.

This suggests the following rule of belief:

No Proof \rightarrow No Belief
If you can't prove P, don't believe P.









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This is a negative rule of belief. It says that if you can't prove that a belief is true, you should ditch it. If, like Descartes, you are anxious to avoid relying on beliefs for which you have no good reason, this seems like a pretty good rule.

While intuitively appealing, this rule of belief faces two serious objections.









If you can't prove P, don't believe P.

The first is that the principle seems to imply that we shouldn't believe anything.

Suppose (for *reductio*) that I should believe some claim P1. It follows from our rule that I must be able to prove P1; so it follows from our rule that there must be some other claims — call them P2 and P3 — which I should believe and from which P1 follows.

Let's focus on P2. If I know it, then from our rule it follows that I must be able to prove it. But then there must be some other claims — call them P4 and P5 — which I should believe and from which P2 follows.

Let's now focus on P4.

Actually, let's not. Can you see a pattern here?









If you can't prove P, don't believe P.

No Proof → No Belief says that, for every claim I should believe, there must be some other claims which I should believe which can be used to prove the first one.

But then one of two things must be true.

First option: this process never comes to an end. For any claim I should believe, there are infinitely many others that I believe and should believe. But I don't believe infinitely many things. So, if we take this first option, I shouldn't believe anything.

Second option: the process goes in a circle, so that (for example) P is used to prove Q, and Q is used to prove R, and R is used to prove P. But it does not seem as though this sort of circular reasoning can be a good reason to form a belief.









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God exists.

There are miracles.

If God exists, then there are miracles, then God exists.

Therefore, God exists.

This might remind you a bit of Aquinas' first cause argument. Just like a chain of causes, every chain of reasoning must either be infinite, circular, or have some unproven premise. But the first two can't explain why I should believe anything, and, if No Proof → No Belief is true, the last one can't either. So, if No Proof → No Belief is true, I shouldn't believe anything.









If you can't prove P, don't believe P.

Here is the second problem with No Proof → No Belief. It seems that one can legitimately use this principle in an argument only if one should believe it.

But if we should believe No Proof → No Belief, then (by No Proof → No Belief itself) one must have a proof of it.

But we have no proof of it.

So, in a way, No Proof → No Belief is a principle which implies that we should not believe it. That is not a good quality for a principle to have!









"Reason now leads me to believe that I should hold back my assent from opinions which are not completely certain and indubitable just as carefully as I do from those which are patently false. So, for the purpose of rejecting my opinions, it will be enough if I find in each of them some reason for doubt."

Given the problems with No Doubt → No Belief, it looks like we need to find a better way of understanding Descartes' idea that we should abandon the beliefs that we find a reason to doubt.

Here's an example. Suppose that I introduce you to my dog, which is a small black and white dog with curly hair. Suppose you form the belief that my dog is a poodle.

But now suppose that you find out that there are small back and white dogs with curly hair which are not poodles. In particular, Havenese dogs are quite popular in the area, and also of that size with those markings.

It looks like you would now have found a reason for doubting your initial belief.









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More precisely, it looks like you would have realized that there is a possibility of your belief being false which you are **unable to rule out**.

And, as the quote from Descartes suggests, it seems reasonable for you now to stop believing that my dog is a poodle, and instead to suspend judgement about whether it is a poodle, or a Havanese, or perhaps some other small back and white type of dog.









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And, as the quote from Descartes suggests, it seems reasonable for you now to stop believing that my dog is a poodle, and instead to suspend judgement about whether it is a poodle, or a Havanese, or perhaps some other small back and white type of dog.

This suggests the following rule of belief:

Doubt \rightarrow No Belief

If you cannot rule out a situation which would make P false, do not believe P.

In the example of my dog, you could not rule out the situation in which my dog is a Havanese. Because that would make your belief that my dog is a poodle false, you should not have that belief.









Doubt → No Belief

If you cannot rule out a situation which would make P false, do not believe P.

It seems like we implicitly rely on this rule of belief all of the time.

Often if someone points out some overlooked way in which a certain belief could be false, that's reason enough to stop holding the belief.

But, as Descartes notices, this rule of belief seems to call into question one of our most important kinds of beliefs: beliefs formed on the basis of sense experience.









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But, as Descartes notices, this rule of belief seems to call into question one of our most important kinds of beliefs: beliefs formed on the basis of sense experience.

He comments:

"As I think about this more carefully, I see plainly that there are never any sure signs by means of which being awake can be distinguished from being asleep."









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In fact, there is nothing special about the example of being asleep. The basic point Descartes is making here is that there are never any sure signs by means of which I can distinguish between having an accurate sense experience of the world around me and (on the other hand) having an experience which does **not** reflect the way that the world around me really is.

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Some are every day experiences.







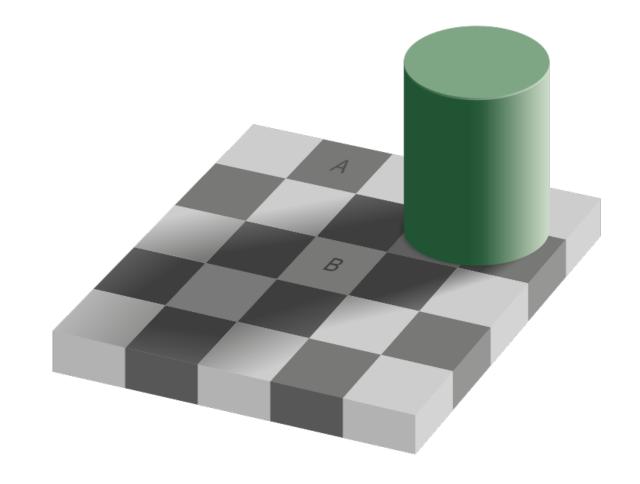




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Others are intentionally constructed illusions which are used in vision science to study our mechanisms for representing the world around us.





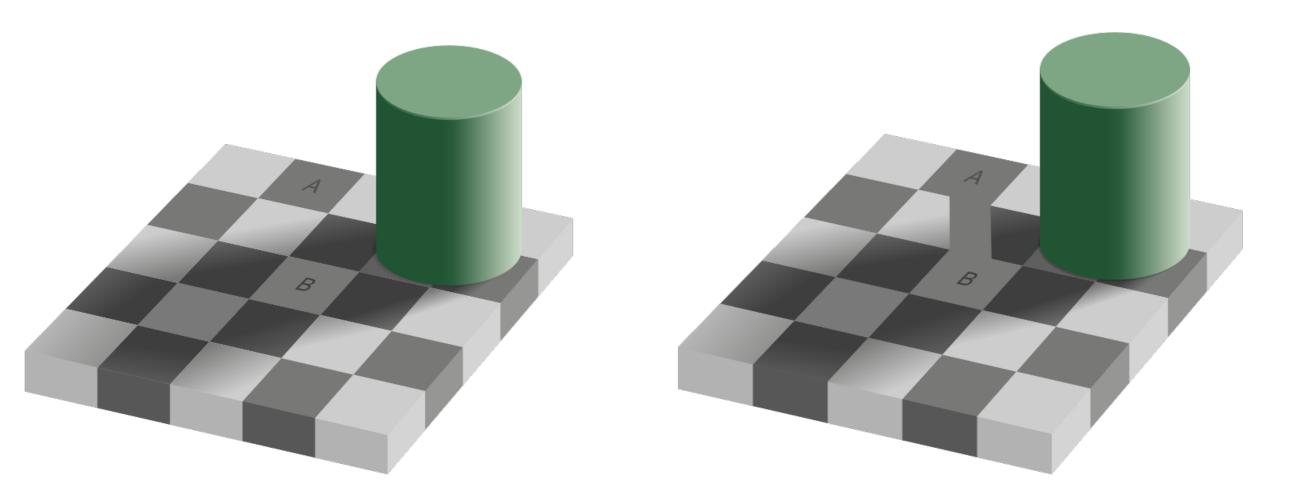






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The basic point is that, for any experience, we have no particular guarantee that the experience is accurate. It could be a dream, or a hallucination, or an illusion. Are these possibilities which we can rule out?

One might worry that we cannot, for just Descartes' reason that "there are never any sure signs" by which I can distinguish an accurate sense experience from an inaccurate one. Descartes' assumption here might be put as follows:

The matching hallucination assumption

For any accurate sense experience, I can imagine a situation which is indistinguishable from that sense experience but in which my environment is not as the experience says it is.

Once we notice this, though, this point can be used to generate a powerful argument for the conclusion that we should not believe anything about the world around us on the basis of sense experience.









The matching hallucination assumption

For any accurate sense experience, I can imagine a situation which is indistinguishable from that sense experience but in which my environment is not as the experience says it is.

Doubt → No Belief

If you cannot rule out a situation which would make P false, do not believe P.

There are situations which I cannot rule out which would make beliefs formed on the basis of sense experience false.

Sense experience is your only source of information about the world outside of you.

You should not form beliefs on the basis of sense experience.

You should not form any beliefs about the world outside of you.









The case against beliefs about the external world

- 1. For any accurate sense experience, I can imagine a situation which is indistinguishable from that sense experience but in which my environment is not as the experience says it is.
- 2. There are situations which I cannot rule out which would make beliefs formed on the basis of sense experience false. (1)
- 3. If you cannot rule out a situation which would make P false, you should not believe P.
- 4. You should not form beliefs on the basis of sense experience. (2,3)
- 5. Sense experience is your only source of information about the world outside of you.

C. You should not form any beliefs about the world outside of you. (4,5)

The conclusion of this argument is quite surprising. Can it really be true that all beliefs about the world around us are bad beliefs?









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Skepticism about some domain is the claim that one cannot have knowledge about that domain. An argument closely related to this one seems to show that skepticism about the external world is true.





skepticism about the external world



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- 2. There are situations which I cannot rule out which would make beliefs formed on the basis of sense experience false. (1)
- 3. If you cannot rule out a situation which would make P false, you do not know P.
- 4. Beliefs on the basis of sense experience are not knowledge. (2,3)
- 5. Sense experience is your only source of information about the world outside of you.

C. You do not know anything about the world outside of you. (4,5)









It is tempting to think that we should be able to respond to these arguments by finding some way to show that certain experiences are not illusions.

For example, one might argue that, since our sense experiences are usually accurate, it is reasonable to form beliefs about the external world on their basis.

But how do we know that our sense experiences are usually accurate? Presumably on the basis of past sense experiences. And those experiences can be doubted just as much as our present experiences. Any attempt to respond to Descartes seems to assume the very thing we are trying to show.

If you think about it, it seems like any attempt to reply to Descartes' argument is going to face this kind of problem.

The seeming impossibility of replying to Descartes' argument — and hence the seeming impossibility of providing a satisfactory proof of an external world — was seen by the great German philosopher Immanuel Kant as a "scandal to philosophy."









Doubt → No Belief

If you cannot distinguish between a situation in which P and a situation in which not-P, do not believe P.

Our second reading for today is from someone who has a very different perspective on our beliefs about the external world than Descartes did.

According to G.E. Moore, it is no "scandal to philosophy" that we cannot prove the existence of the external world — for in fact, he thought, proofs of this kind are extremely easy to give.

We can think of Moore as endorsing the following positive rule of belief:

Proof → Belief
If you can prove P, believe P.

At first glance, our two rules look perfectly consistent. Moore tries to show that they are not.







Moore's proo

He presents his proof of an external world in the following passage:

"I can now give a large number of different proofs, each of which is a perfectly rigorous proof; and at many other times I have been in a position to give many others. I can prove now, for instance, that two human hands exist. How? By holding up my two hands and saying, as I make a certain gesture with the right hand, "Here is one hand," and adding, as I make a certain gesture with the left, "and here is another." And if, by doing this, I have proved the existence of external things, you will all see that I can also do it now in numbers of other ways; there is no need to multiply examples."











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Moore's proof can be laid out as follows:

- 1. Here is one hand.
- 2. Here is another hand.
- C. There are two hands. (1,2)









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It is, I think, safe to say that this is not the sort of proof that Moore's audience was expecting. We might ask: what does Moore mean when he says that this is a proof?

Moore tells us. He says that an argument is a proof if it satisfies three conditions:

Moore's definition of a proof

- (1) Its premises are distinct from its conclusion.
- (2) Its premises are known to be true.
- (3) Its conclusion follows from its premises.

It is natural to find Moore's proof a little bit puzzling — and unsatisfying. But let's separate out two different questions which we can ask about his proof.









2. Here is another hand.

C. There are two hands. (1,2)

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If an argument meets Moore's definition of a proof, does it provide knowledge of its conclusion?

Does Moore's argument meet his definition of a proof?

The answer to the first question seems to be "yes" -- at least if we stipulate that the person in question **knows** that the conclusion follows from the premises.

So let's turn to the question of whether Moore's argument does in fact meet his definition of a proof.









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Does Moore's argument meet his definition of a proof?

It obviously meets condition (1); and also pretty obviously meets condition (3). So our question boils down to this one: does Moore really know the premises of his argument?









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It is pretty easy to adapt our earlier argument for skepticism about the external world to make an argument that Moore does not know the premises of his argument. After all, there does not seem to be any way Moore can rule out the possibility that his sense experience of his hands is not accurate, and so that the premises of his argument are false.









Moore anticipates the objection that he does not know the premises of his argument, and responds as follows:

"I certainly did at the moment know that which I expressed by the combination of certain gestures with saying the words 'There is one hand and here is another.' ... How absurd it would be to suggest that I did not know it, but only believed it, and that perhaps it was not the case! You might as well suggest that I do not know that I am now standing up and talking - that perhaps after all I'm not, and that it's not quite certain that I am."

Moore is emphasizing the fact that, in ordinary life, we do take ourselves to know claims like the premises of his argument. So why should we now, once we start doing philosophy, discard these beliefs?









Here is a different way to put the same point. We have, it seems, a conflict between the following two claims:

2. If you cannot rule out a situation which would make P false, you do not know P.

I know that I have hands.

One can think of Moore as asking the proponent of our skeptical argument: which of these do you feel more sure of? Which, if you had to, would you bet your life on?

Moore thinks that we are, and should be, more sure of the second of these. But then why shouldn't we take his proof of an external world to demonstrate the unsoundness of the argument for skepticism about the external world, rather than the other way around?









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This connects back to our starting point in this lecture. Remember that we began with one approach to finding the rules of belief:

The start from scratch approach

We have all gotten our beliefs about the world from a variety of sources. Some are based on serious thought and investigation. Some are based on what our parents told us. Some are based on what our friends told us. Some are probably based on nothing at all. If we want to really figure out what we should and should not believe, we need to avoid taking anything for granted. Instead, we should assume nothing, and test all of our beliefs against some standard to see which ones we should keep, and which ones we should get rid of.

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One can think of Moore as calling into question this approach.

If you like the start from scratch approach, then you need to find an appropriate standard. Presumably you pick that standard because you believe that it is correct. But then you are -- contra the spirit of the approach -- taking one of your own beliefs for granted.

Once you realize this, that raises the question of why we should only take beliefs in **this** domain for granted. Why should we think that our beliefs about the rules of belief are likely to be more reliable than our beliefs about other things?









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Moore thinks that they are not, and so that there is no reason to privilege this particular kind of belief.

What might be an alternative to the start from scratch approach?









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What might be an alternative to the start from scratch approach?

The start from where you are approach

We have all have a variety of beliefs. Some are true, and some are false; some are good beliefs, and some are bad beliefs. But there is no external standard, which is itself immune from doubt, which we can use to tell which of our beliefs we should keep and which ones we should get rid of. Our belief in any such standard is just one belief among others, and no less fallible than others.

This does not mean that there is no way of evaluating our own beliefs.

The idea is that rather that the belief in the relevant standard of evaluation is just one belief among others, and so is itself in principle open to doubt. Whenever a standard conflicts with a strongly held belief, we can always raise the question of whether it is the standard or the strongly held belief which should go.