the rules of belief

belief and proof

belief and doubt

Moore's proof

Should I believe without

certainty?

Today we begin a new topic. For the next few weeks, we will be investigating this 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.

This is a good time in the class to raise this question. For we've now considered an array of arguments for and against the existence of God, freedom of the will, and your own nature. You may well be asking yourself: what should I now believe about these questions? That is itself a philosophical question, and it will occupy us for the next few weeks.

This is a kind of question about which most of us have lots of opinions. We all know people who are excessively credulous — they will believe anything. You may also know people who are excessively skeptical — they refuse to believe things which they should believe. Most of us are probably a blend of these — there are probably domains about which we are too credulous, and domains about which we are too skeptical.

What should I believe?

If you think about it, our initial question really breaks down into two subquestions.

When should I form a new belief?

When should I discard one of my beliefs?

It is very natural to think that these questions should have general answers. Suppose, for example, that your friend typically forms beliefs about his future based on his horoscope. It seems plausible that he should not be forming beliefs in this way. But surely there is some general rule which explains **why** this is the case. When should I form a new belief?

When should I discard one of my beliefs?

It is very natural to think that these questions should have general answers. Suppose, for example, that your friend typically forms beliefs about his future based on his horoscope. It seems plausible that he should not be forming beliefs in this way. But surely there is some general rule which explains **why** this is the case.

To have a name for them, let's call these general rules rules rules of belief.

Corresponding to our two questions will be two different kinds of rules of belief.

Positive rules of belief will tell you when you should form a certain belief.

Negative rules of belief will tell you when you should not have a certain belief. When should I form a new belief?

When should I discard one of my beliefs?

Positive rules of belief will tell you when you should form a certain belief.

Negative rules of belief will tell you when you should not have a certain belief.

It might at first seem extremely easy to formulate the rules of belief. The following would seem to be plausible candidates, respectively, for positive and negative rules of belief.

Truth \rightarrow Belief If P is true, you should believe P.

Falsity → No Belief If P is false, you should not believe P.

The problem with these rules of belief is not that they are incorrect; the problem is that in many cases they won't be of much practical use, since in many cases we don't know for sure whether the claim in question is true or false. (If we did, there would be no serious question about whether to form the belief.)

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We'll be trying, for the next three classes, to improve upon these two rules by trying to formulate rules of belief which we could actually put to use.

Why would we want to do this? We all face cases where it is not clear what we should believe. What are some cases like this?

It is genuinely hard to know what to do in this kind of situation. And it is hard to see how to figure it out other than by trying to figure out what the rules of belief are. Let's start with what looks like a pretty good candidate to be a positive rule of belief. This rule says that, if you can give a good argument for something, you should believe it.

Well, what's a good argument?

Part of the answer is that a good argument should be **valid**.

But that's not demanding enough; there are plenty of valid arguments whose conclusions you should not believe. After all, some valid arguments have obviously false premises.

A better idea is that a good argument should be valid and have premises which you should believe.

Good Argument → Belief If there is a valid argument for P and you should believe each of that argument's premises, you should believe P. A better idea is that a good argument should be valid and have premises which you should believe.

Good Argument \rightarrow Belief

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The following rule of belief also seems plausible:

Good Argument Against → No Belief If there is a valid argument against P and you should believe each of that argument's premises, you should not believe P. Good Argument → Belief If there is a valid argument for P and you should believe each of that argument's premises, you should believe P.

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These rules of belief seem plausible. But they don't answer every question we want answered.

Suppose that I am trying to put the first rule of belief into practice, and am trying to decide whether to believe the conclusion of some argument. To do this, I will have to decide whether I should believe the premises of the argument. But how do I do that?

The above rule of belief does not tell me.

Here's a possible answer. Maybe you should **only** believe things that you have a good argument for. This suggests a negative rule of belief:

No Good Argument → No Belief If you can't give a good argument for P, don't believe P.

Something like this idea lies behind the thought that we can demand that someone give a proof for something they believe. The idea is that without a proof — which is just a kind of argument — we should not believe.

The problem is that it is very hard to see how you could give good arguments for **all** of your beliefs.

Suppose that you try to give a good argument that some belief of yours is true. The argument is going to involve some premises. No Good Argument → No Belief If you can't give a good argument for P, don't believe P.

Suppose that you try to give a good argument that some belief of yours is true. The argument is going to involve some premises.

For this to be a good argument, it has to be true that you should believe the premises. So, by our rule, we know that you also have to give arguments for the premises of your argument.

But when you try to do this, you are just going to introduce new arguments with new premises — and, by our rule, you are now going to have to give arguments for **those**.

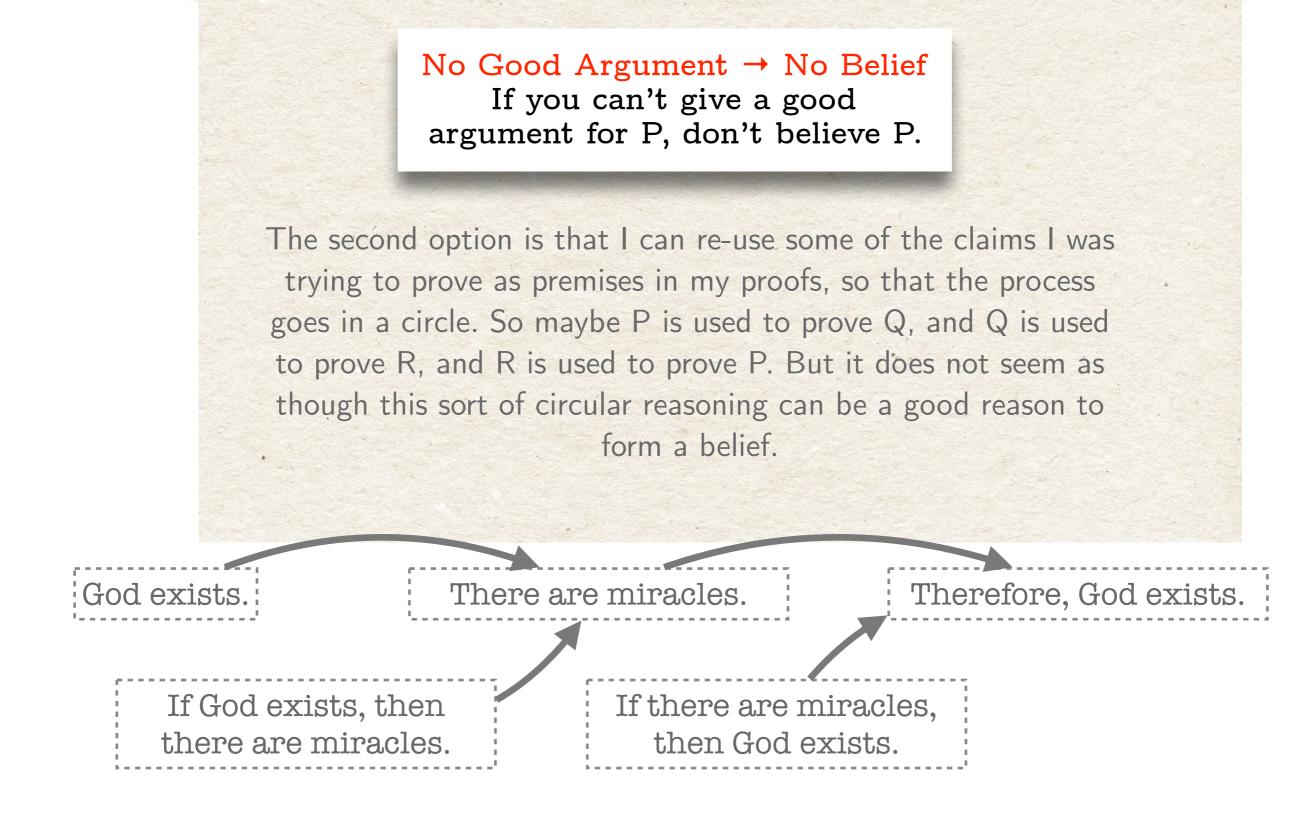
But it looks like this process is never going to end. So one of two things is going to have to be true.

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The first option is that I have to simply keep on constructing new proofs, with new premises. But because this process is never going to end — since I have to prove all of my beliefs — it looks like I will have to provide infinitely many proofs. But that is impossible, at least for beings like us!

The second option is that I can re-use some of the claims I was trying to prove as premises in my proofs, so that the process goes in a circle. So maybe 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.

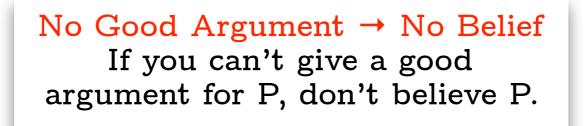


Would this chain of reasoning be a good reason to believe that God exists?

No Good Argument → No Belief If you can't give a good argument for P, don't believe P.

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 premise for which I have no good argument. But the first two can't explain why I should believe anything, and, if No Good Argument→ No Belief is true, the last one can't either. So, if No Good Argument→ No Belief is true, I shouldn't believe anything.

But of course there are some things we should believe. So, No Good Argument \rightarrow No Belief is false.



Suppose we agree that No Good Argument → No Belief is false. What does this mean?

It means that there are some beliefs which we should have, even if we have no good argument for them.

Let's call beliefs which we have, but don't have any argument for, **basic beliefs**.

Then the key question seems to be: which basic beliefs should we have?

Once we answer this question, then we'll know how to decide what to believe. We can use the basic beliefs which we have to form arguments for other beliefs — and if those arguments are valid, it looks like our positive Good Argument → Belief rule tells us that we should believe their conclusion. Similarly, we can form valid arguments against certain beliefs — and if we should believe the premises of these arguments, Good Argument Against → No Belief tells us to discard that belief.

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We all have a great number of basic beliefs: things that we believe about the world, but, if pressed, could not give good arguments for. Can you think of any examples?

One way to approach the question about which basic beliefs we should have is to ask how we can test our existing basic beliefs. Under what conditions should we discard one of these?

When should I discard one of my beliefs?

This is a question which most people face at some point in their lives. Often, people face it in an especially sharp way at exactly the age you are now.Going to college, where you encounter new ideas and new people, is a natural time to wonder whether you still really accept the views that you used to believe.

The 17th century philosopher Rene Descartes gave a famous statement of this idea:

"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." "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."

Your system of beliefs is like a web. Once you form a new belief, that belief typically combines with your other beliefs to give you yet more beliefs. So forming even one belief which you should not form is likely to lead to a whole series of mistakes.

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Here again Descartes gives an idea about how to do this.

"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."

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

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What would it mean for you to find in some belief a **reason for 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, Havanese dogs are quite popular in the area, and are also of that size with those markings.

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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. 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**.

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This suggests the following rule of belief:

Doubt \rightarrow No Belief

If you cannot rule out a situation which would make P false, you should 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.

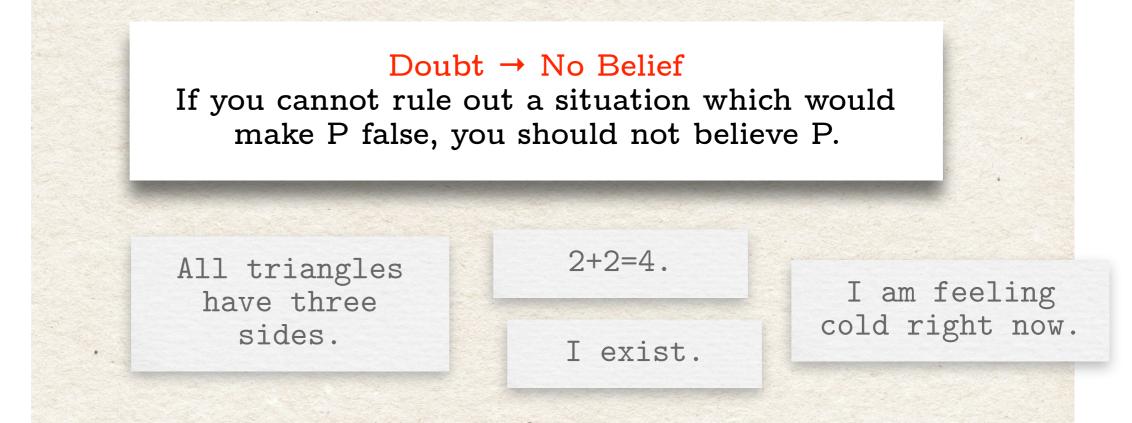
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It seems like we implicitly rely on this rule of belief all of the time. Often if someone points out some overlooked way in which a certain belief could be false, that's reason enough to stop holding the belief.

Would this rule out all basic beliefs? It seems like it would not. Consider these beliefs that I have.

I exist. 2+2=4. All triangles have three I am feeling cold right now. sides.

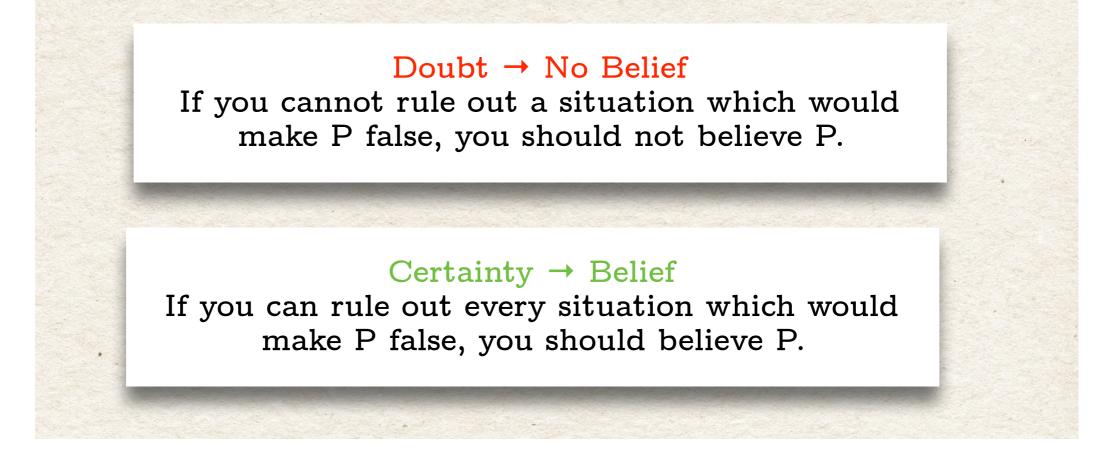
Imagine that I don't have proofs of any of these. It still seems like, just by thinking about them, I can be certain that each is true. There's no possibility of any of them being false which I can't rule out.



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Cases like these, in fact, suggest a positive rule of belief which Descartes would have accepted:

Certainty → Belief If you can rule out every situation which would make P false, you should believe P.



Together, these principles seem to combine to give us an appealing picture of how we could critically examine our system of beliefs to see which beliefs we should keep.

First, we should keep all of the basic beliefs of which we can be certain — i.e., the ones whose falsity we can rule out.

Second, we should keep all of the non-basic beliefs which we can give arguments for using only the basic beliefs we can be certain of.

Last — and this is what Doubt → No Belief says — we should discard any other beliefs. After all, we have no way to be sure that they are true!

Doubt → No Belief If you cannot rule out a situation which would make P false, you should not believe P.

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

Here's what he says about this:

"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." "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."

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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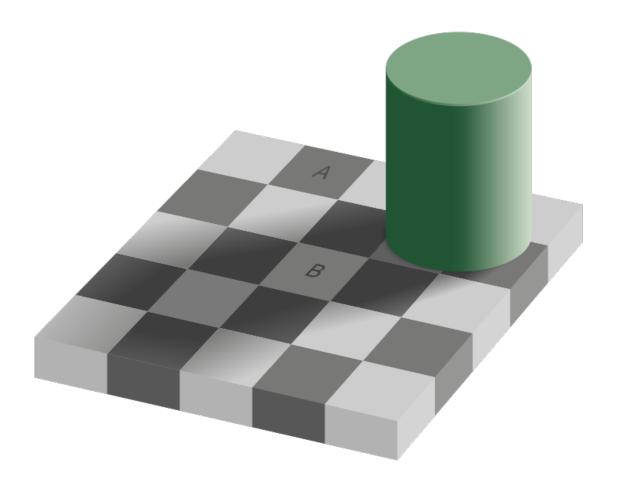
Some are every day experiences.



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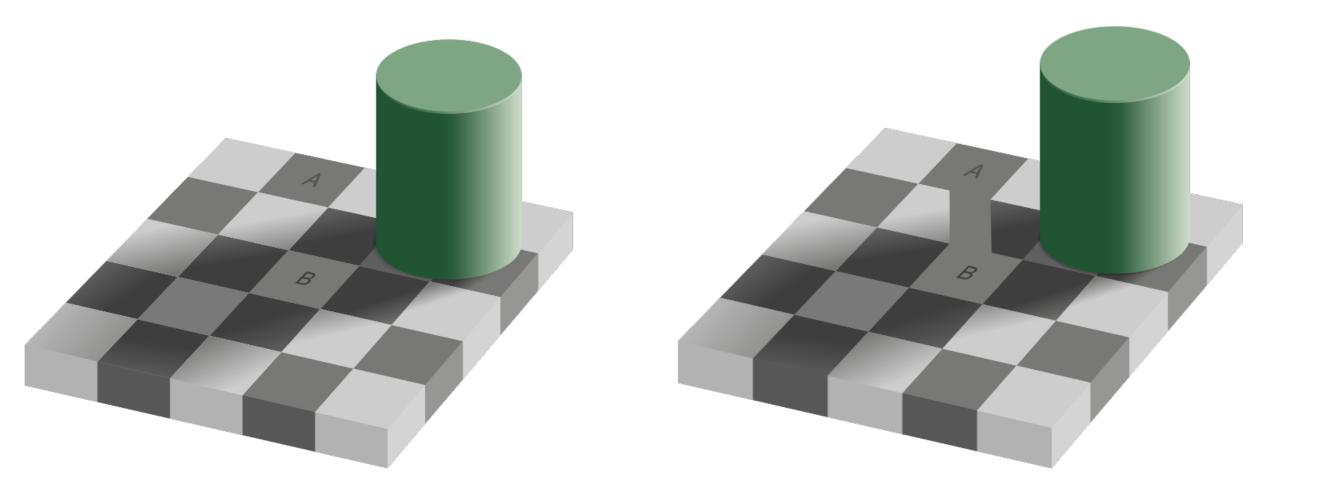
A dream is one example of the second kind of experience; but there are plenty of others.

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. This suggests the following principle:

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

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.

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

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

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

Doubt \rightarrow No Belief

If you cannot rule out a

situation which would make P

false, you should not believe P.

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

AN ARGUMENT FOR SKEPTICISM ABOUT THE EXTERNAL WORLD

| There are situations which I cannot rule out which would make beliefs formed on the basis of sense experience false. If you cannot rule out a situation which would make P false, you should not believe P. (Doubt → No Belief) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. You should not form beliefs on the basis of sense experience. (1,2) |
| 4. 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. (3,4) |

The conclusion of this argument is quite surprising. Can it really be true that we should withhold forming any beliefs about the world around us?

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It is tempting to think that we should be able to respond to these arguments by constructing an **argument** which would show that our sense experiences are reliable.

But it turns out that this is very hard to do.

We might try to construct an argument based on science. For example, science tells us that our visual experiences are caused by light reflecting off of the surface of physical objects and interacting with our eye, causing effects in our visual cortex. Given this, don't the existence of our sense experiences show that there must be physical objects around us to reflect light?

But there's an immediate problem here. The scientific theories on which this reply relies are themselves based on sense experience. So if we rely on those theories, we are tacitly relying on the very thing — the reliability of our sense experiences — which we were trying to establish.

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If you think about it, it looks like any attempt to reply to our argument for skepticism is going to involve this kind of circular reasoning.

This is a very unsettling argument. And notice that it is not limited to our beliefs about tables and chairs; our beliefs about other people are also based on sense experience. So it looks like you have no reason to believe that anyone besides you exists.

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Notice that this does not imply that you should believe that you are the only thing that exists. (That view is called **solipsism**.) We also lack reason to believe that. It looks like our line of reasoning to this point shows that we should simply be agnostic about the existence of anything outside of ourselves.

And we can push the same point even further. Memories, like sense experiences, can be doubted. (After all, one can have a seeming memory without the thing you seem to remember having really happened.) But that means that you should also withhold any beliefs about whether you existed five minutes ago. After all, your only reason for believing that is your memories, and simply having a memory is not enough to rule out the possibility of that memory being false.

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."

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The next philosopher we'll discuss is 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.

Moore endorses a positive rule of belief which we have already discussed:

Good Argument → Belief If there is a valid argument for P and you should believe each of that argument's premises, you should believe P.

Let's now hold that up against the rule of belief which figured in our argument for skepticism.

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Doubt → No Belief If you cannot rule out a situation which would make P false, you should not believe P.

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

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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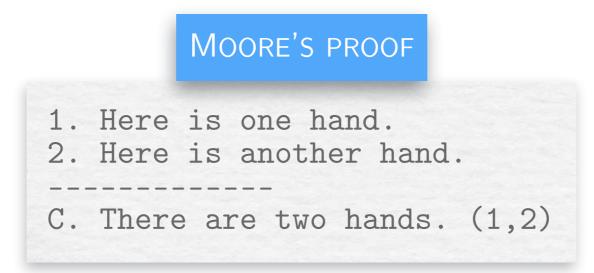
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Moore's proof can be laid out as follows:

MOORE'S PROOF

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

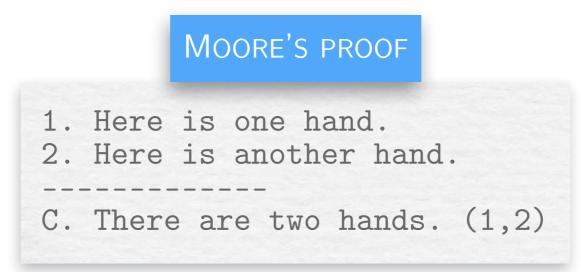


It is, I think, safe to say that this is not the sort of proof that Moore's audience was expecting. It is natural to find Moore's proof a little bit puzzling — and unsatisfying. (I am sure that his audience did.) Let's ask: what does Moore mean when he says that this is a **proof**?

Above I suggested that an argument is a good argument just in case (i) it is valid and (ii) you should believe the premises.

Moore's proof pretty clearly meets condition (i).

But it is very natural to object: it does not meet condition (ii)! After all, we have just been discussing an argument for the conclusion that you should not form beliefs on the basis of sense experience, and surely sense experience is Moore's basis for believing the premises of his "proof."



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AN ARGUMENT FOR SKEPTICISM ABOUT HANDS

- 1. There are situations which I cannot rule out which would make beliefs formed on the basis of sense experience false.
- 2. If you cannot rule out a situation which would make P false, you should not believe P. (Doubt → No Belief)
- 3. You should not form beliefs on the basis of sense experience. (1,2)
- 4. Sense experience is your only source of information about hands.

C. You should not form any beliefs about hands. (3,4

So the worry arises that Moore's proof is circular in just the ways that our attempts to argue for the reliability of sense experience were. But surely he knew this. What was Moore thinking?

Moore anticipates the objection that he should not believe 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:

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

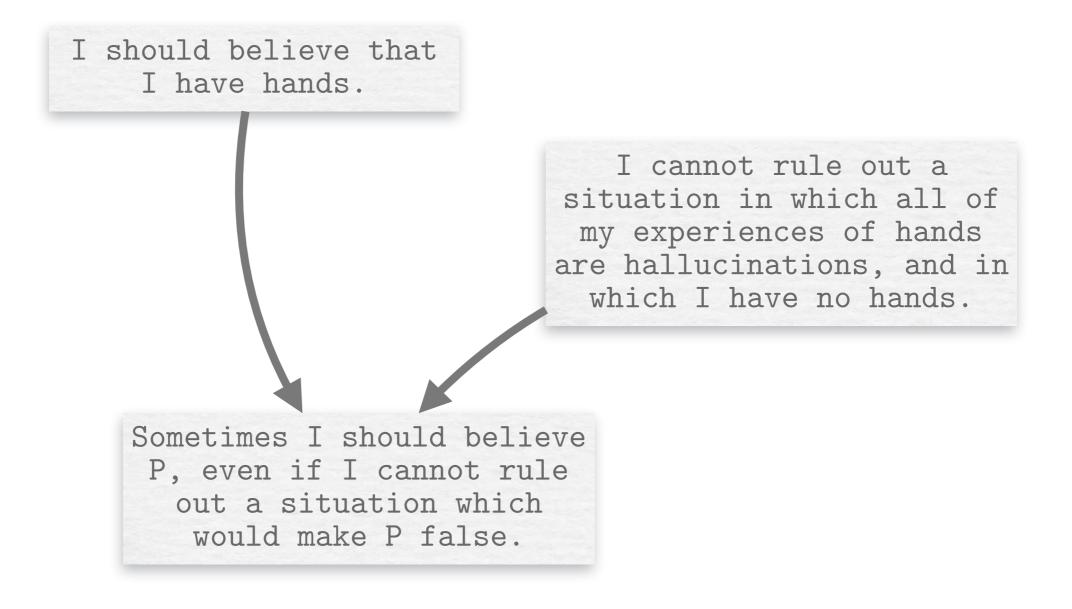
I should believe that I have hands.

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?

Indeed, we can construct a simple argument against the Doubt → No Belief rule which was central in the argument for skepticism.

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THE MOOREAN ANTI-SKEPTICAL ARGUMENT

 I should believe that I have hands.
 I cannot rule out a situation in which all of my experiences of hands are hallucinations, and in which I have no hands.

C. Sometimes I should believe P, even if I cannot rule out a situation which would make P false. (1,2)

We can now put our two arguments side by side.

AN ARGUMENT FOR SKEPTICISM ABOUT HANDS

- There are situations which I cannot rule out which would make beliefs formed on the basis of sense experience false.
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Both arguments can't be sound. If the conclusion of the skeptical argument is true, then (1) of the Moorean argument is false. If the conclusion of the Moorean argument is true, (2) of the skeptical argument is false.

So we have to choose.

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And, as mentioned above, it is plausible that the choice comes down to these two premises:

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

I should believe that I have hands.

Suppose that we agree with Moore that we are, and should be, more confident in the second of these. What follows?

It seems to follow that we should have some basic beliefs even when we cannot rule out some situations in which those beliefs would be false.

But this raises the question: when is this ok? What are the conditions under which I should believe something without having a good argument for it?