## What should I believe?

# What should I believe when people disagree with me?

Imagine that you are at a horse track with a friend. Two horses, Whitey and Blacky, are competing for the lead down the stretch. At the finish, it is extremely close, but it seems clear to you that Blacky won.

Your friend turns to you, and says, "I can't believe that Whitey won at the finish."

Should you decrease your confidence that Blacky won the race?

Here's another example. You are in a restaurant with some friends, and the bill comes. You've agreed to split the bill equally. You think that everyone owes \$19.

Your friend says, "OK, everybody chip in \$18."

Should you decrease your confidence that everyone owes \$19?

These are simple cases of disagreement. Many people have the intuition that, in cases like these, disagreement should lead us to revise our beliefs.

Here is one way to state this view:

#### The Equal Weight View

In cases of disagreement, you should give equal weight to your own opinion and the opinion of the person with whom you disagree.

There are two (related) ways to understand what exactly this view implies about the above cases.

#### The Equal Weight View

In cases of disagreement, you should give equal weight to your own opinion and the opinion of the person with whom you disagree.

Here is the first, and simplest:

The judgement suspension rule If you believe P, and then come across someone who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).

This seems to explain our intuitive judgements about the horse race and check splitting cases.

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respond by suspending judgement over whether P or not-P is true (and so should they). But this can't handle all of the cases of disagreement we might want to think about. Suppose that you believe P, and you come across someone who has suspended belief in P. What should you do?

The natural answer to this question introduces the fact that, in ordinary life, we don't just believe or disbelieve things; we also take them to have a certain probability of being true. The probability that you take P to have is called your credence in P. Credence can be expressed as a percentage, or as a number between 0 and 1 (1 means that you are sure that P is true, 0 that you are sure that P is false).

#### The Equal Weight View

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If we take this fact about credence into account, it is natural for the proponent of the Equal Weight View to adopt the 'probability splitting rule.'

Suppose that both you and your friend have credence of 0.9 in your initial views about the winner of the horse race. This rule says that, on learning of your disagreement, you should both adjust your credence to 0.5. The probability splitting rule If you assign P credence N, and come across someone who assigns P credence M, then you should assign as P's credence the average of N and M. Here is a different case which, many think, the Probability Splitting Rule says just the right thing about. The probability splitting rule If you assign P credence N, and come across someone who assigns P credence M, then you should assign as P's credence the average of N and M.

Imagine that I put an argument on the board, and conduct a poll, asking you to say whether the argument is valid or invalid. You confidently answer "Valid." When the poll results show up, you find to your surprise that 199 students answered "Invalid," and one (you) answered "Valid."

Many have the intuition that in this case, you should do more than simply suspend judgement about the validity of the argument; you should be quite confident that, contra your original judgement, the argument is invalid.

Why? We can think of this as a case in which you have 199 simultaneous disagreements. Supposing for simplicity that everyone initially has credence 1 in her answer, the Probability Splitting Rule would suggest that you should lower your credence in your initial answer to 0.5, then to 0.25, then to 0.125, then to .... a small number. The Equal Weight View is not the only view you might take. Here is the opposite view:

The No Weight View In cases of disagreement, you should give no weight to the opinion of the person with whom you disagree, and should maintain your initial view.

There are also "in between" positions that one might take, but the Equal Weight View and the No Weight View will be enough to get us started. Here is a different sort of case of disagreement, which shows that our discussion to this point has been in one key respect oversimplified.

Astrology is the view that we can predict the events in ordinary people's lives by the time of their birth and the relative locations of the stars and planets. I have the view that astrology is completely unscientific; there's just no evidence to show that it works. But I recently read an article showing that 45% of Americans (62% between the ages of 18 and 24!) think that astrology is either "scientific" or "sort of scientific." So, following the advice of The Equal Weight View, I significantly increase my credence in the scientific status of astrology.

Other, similar examples are easy to come by. 20% of Americans think Obama was born in Kenya; 30% think global warming is a hoax; etc. Should any of these facts lead me to revise my views on these topics?

It seems not. Is this a problem for The Equal Weight View?

It seems not. Is this a problem for The Equal Weight View?

As we have stated it, Yes. But there is natural way to modify the view to avoid this sort of objection.

Let's say that someone is an epistemic peer of mine with respect to some question just in case we have the same evidence, the same intellectual virtues, and the same reliability in deciding these sorts of questions. Then it is natural for the Proponent of the Equal Weight View to say that her thesis is a thesis only about disagreement between epistemic peers or, for short, peer disagreement.

This sort of restriction was already implicit in our original examples. If your friend at the racetrack was drunk, or was looking down at his phone during the race, we would not feel at all inclined to modify our views in response to his. And is because, in those situations, he would not be an epistemic peer. The Equal Weight View In cases of disagreement, you should give equal weight to your own opinion and the opinion of the person with whom you disagree. The No Weight View In cases of disagreement, you should give no weight to the opinion of the person with whom you disagree, and should maintain your initial view.

The choice between The Equal Weight View and The No Weight View has immediate practical implications. For most of us have beliefs about religious, ethical, and political issues. But on most of these issues, there would seem to be epistemic peers who disagree with us. Does this mean that we should suspend, or weaken, belief about all of these topics? Let's look in particular at the case of religious belief, which was the topic of today's readings. A natural starting point for thinking about this topic is the wide diversity of religious beliefs across people in different parts of the world. Consider the following point made by the theologian John Hick (quoted in the reading from Plantinga):

For it is evident that in some ninety-nine percent of cases the religion which an individual professes and to which he or she adheres depends upon the accidents of birth. Someone born to Buddhist parents in Thailand is very likely to be a Buddhist, someone born to Muslim parents in Saudi Arabia to be a Muslim, someone born to Christian parents in Mexico to be a Christian, and so on.

Should this fact make us all less sure of our religious beliefs than we are? (For present purposes, we can count atheism and agnosticism as religious beliefs.)

There are two ways to argue that it should.

### We can put Hick's claim like this:

But once we have that claim on the table, it can seem pretty plausible that if I discover that some belief of mine is just an "accident of my birth," I should abandon the belief. Why hold on to a belief that I have just because of where I happened to be born? If I had been born in a different environment, I would have had different religious beliefs than the ones I actually have.

> For any claim P, if I would have failed to believe P if I had been born in a different environment, then I should suspend belief in P.

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C. I should suspend all of my religious beliefs. (1,2)

This is the form of argument that Plantinga considers in the reading for today.

One of his central arguments against it is that the second premise of the argument is in a certain sense self-refuting.

The sense in which Plantinga thinks that this premise is selfrefuting is that if this premise is true, we can use this fact to show that one cannot rationally believe it. So anyone who endorses (2) is doing so irrationally. 2. For any claim P, if I would have failed to believe P if I had been born in a different environment, then I should suspend belief in P.

So, one might think, the following is true:

If I had been born in a different environment, then I would have failed to believe that premise (2) is true.

Plantinga points out that in many parts of the world, this premise would not be endorsed. Indeed, it seems that most people in the world would not endorse this claim, for most people in the world are well aware of the fact that others disagree with their religious views, and yet do not for that reason give up those views.

I should suspend belief in premise (2). 2. For any claim P, if I would have failed to believe P if I had been born in a different environment, then I should suspend belief in P. This is a genuine problem for the believer in premise (2). But it does not directly show that the premise is false — just that it can't be rationally believed. Can we show that the premise is false?

It would appear so. For consider the following claims:



I trust that these are all things which each of us believes. But premise (2) would seem to show that we should suspend all of these beliefs. This does not seem especially plausible. 2. For any claim P, if I would have failed to believe P if I had been born in a different environment, then I should suspend belief in P.

Our first argument from religious disagreement, therefore, seems to be a failure. If you find this argument attractive, you might want to think about how you could modify the troublesome premise (2) in a way which would yield the desired conclusion but avoid the problems just discussed.

Let's turn to our second, and more challenging argument.

This one uses The Equal Weight View as a premise. For simplicity, I will set credence to the side and focus on the judgement suspension rule (modified to restrict relevant disagree-ers to epistemic peers).

The judgement suspension rule If you believe P, and then come across an epistemic peer who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).

Now take any religious belief which you hold. It could be something specific about the specific religion to which you belong, or simply the general claim that God exists. Call this 'The Belief.' Then I claim that the following is true:

There is an epistemic peer of yours who thinks that The Belief is false.

You should suspend judgement in The Belief. 1. If you believe P, and then come across an epistemic peer who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).

 There is an epistemic peer of yours who thinks that The Belief is false.

C. You should suspend judgement in The Belief. (1,2)

## Excerpt from Hume, 'Of miracles', part II

This is the sort of argument which Hume seems to have had in mind in the reading for today.



in matters of religion, whatever is different is contrary; and that it is impossible the religions of ancient ROME, of TURKEY, of SIAM, and of CHINA should, all of them, be established on any solid foundation. Every miracle, therefore, pretended to have been wrought in any of these religions (and all of them abound in miracles), as its direct scope is to establish the particular system to which it is attributed; so has it the same force, though more indirectly, to overthrow every other system. In destroying a rival system, it likewise destroys the credit of those miracles, on which that system was established; so that all the prodigies of different religions are to be regarded as contrary facts, and the evidences of these prodigies, whether weak or strong, as opposite to each other. 1. If you believe P, and then come across an epistemic peer who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).

 There is an epistemic peer of yours who thinks that The Belief is false.

C. You should suspend judgement in The Belief. (1,2) Is premise (2) plausible?

If it is, then we seem to have a very simple argument, whose only contentious premise is the Proponent of the Equal Weight View view which many of you found plausible, for the conclusion that we ought to abandon all of our religious beliefs.

The scope of this form of argument would seem to be disturbingly broad. Many of you have a view about who ought to be our next president. Is there an epistemic peer of yours who disagrees with you?

Or consider any ethical, aesthetic, or philosophical view that you have — the same would seem to apply.

We could modify this argument by replacing premise 1 with the principle about credences discussed earlier:

The probability splitting rule

If you assign P credence N, and come across someone who assigns P credence M, then you should assign as P's credence the average of N and M.

Then the conclusion of the argument would be that you should dramatically lower your credence in The Belief. (And keep on lowering if it we can produce lots of epistemic peers, as in the example of the valid/ invalid poll.)  If you believe P, and then come across an epistemic peer who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).
There is an epistemic peer of yours who thinks that The Belief is false.

C. You should suspend judgement in The Belief. (1,2)

The judgement suspension rule If you believe P, and then come across an epistemic peer who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).

The key to this argument is our assumption that The Equal Weight View — in either of the above forms — is correct.

This assumption seems plausible, given the examples we discussed at the outset. But it can be called into question. Let's look at two arguments which aim to do just that.

The judgement suspension rule If you believe P, and then come across an epistemic peer who believes not-P, you should respond by suspending judgement over whether P or not-P is true (and so should they).

The first is a descendant of Plantinga's argument, and is most easily presented if we focus on the judgement suspension rule.

The problem is simple: not everyone — not even everyone who has thought about these issues at great length believes the judgement suspension rule. Indeed, some think that it is false.

Given this, the judgement suspension rule seems to imply that we should not believe it — it, so to speak, says of itself that it should not be believed. So it seems to be selfrefuting in the sense discussed above.

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A parallel point could be made about the probabilistic version: there the consequence would be that the probability splitting rule implies that one should lower our credence in that very rule.

As before, this sort of argument seems to show that it is irrational to believe the Equal Weight View. But it does not tell us whether this view is true or false.

A second argument (due to Tom Kelly) aims to do just this.

The argument is best presented by focusing on an example.

Suppose that we have a pair of epistemic peers, Mike and Mary, trying to decide who will be the next president of the United States. They look at all sorts of evidence: the polls, early voting data, economic projections, favorability ratings, etc. Let's call this large collection of evidence "E."

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They then consider two hypotheses, which we can call "Hilary" and "Trump." (Note that these are hypotheses about who will be president, not about who would make a better president.)

Now, there is presumably some fact of the matter about what credence it is rational to assign to these two hypotheses given evidence E. Suppose that it is rational to assign Hilary credence 0.8 and Trump credence 0.2. (So it is rational, given E, to think that Hilary has a 80% chance of winning.)

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But Mike and Mary are not perfect, and as it happens both badly misinterpret the data. So suppose that at time t1 Mike assigns Hilary credence 0.4, and Mary assigns Hilary credence 0.2. At time t1, then, both Mike and Mary are irrational.

Now Mike and Mary get together (at later time t2) and compare credences. They know that they are epistemic peers, so the probability splitting rule tells them what to do: they should average their credences. So they both assign Hilary credence 0.3. But Mike and Mary are not perfect, and as it happens both badly misinterpret the data. So suppose that at time t1 Mike assigns Hilary credence 0.4, and Mary assigns Hilary credence 0.2. At time t1, then, both Mike and Mary are irrational.

Now Mike and Mary get together (at later time t2) and compare credences. They know that they are epistemic peers, so the probability splitting rule tells them what to do: they should average their credences. So they both assign Hilary credence 0.3.

Here is the weird thing. Intuitively, it appears that both Mike and Mary are still irrational. But the Equal Weight View implies that, at t2, both are rational in their belief. After all, at t2 both have responded as they should have to their evidence, according to that view. But that seems wrong. It does not seem that one can form a rational belief about some subject matter by first mis-evaluating the evidence and then averaging one's view with someone else who did the same. Intuitively, the problem here is that when you assign a credence to some claim P on the basis of evidence E, and then come across an epistemic peer, the belief that it is then rational for you to form depends only on the credence that you and your peer have assigned to P. E — the original evidence — drops out of the picture.

The proponent of the Equal Weight view might reply as follows: Mike and Mary are still irrational. The Equal Weight view just tells us how to react to peer disagreement; to be rational in one's belief, one must both respond correctly to the initial evidence E, and respond correctly to the disagreement. The proponent of the Equal Weight view might reply as follows: Mike and Mary are still irrational. The Equal Weight view just tells us how to react to peer disagreement; to be rational in one's belief, one must both respond correctly to the initial evidence E, and respond correctly to the disagreement.

But this leads to other problems. Suppose now that Mike evaluates E, and correctly assigns Hilary a credence of 0.8, and Mary assigns it a credence of 0.2. They then encounter each other, and average their credences to arrive at a credence of 0.5.

Mike has done everything right. He evaluated the initial evidence E correctly, and responded to the disagreement by following the probability-splitting rule. So presumably his belief is rational (even though incorrect). But Mary's belief is (we are supposing) not, since she originally mis-evaluated the evidence E.

But this is bizarre. Mike and Mary have evaluated the same evidence, and have assigned Hilary the same credence. How could one be irrational and the other not?

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We have now seen some reason to doubt the Equal Weight View. Does this mean that we should switch to the No Weight View?

This would be a tough pill to swallow, for two reasons.

First, it seems to yield wildly implausible views about the sorts of cases discussed at the outset.

Second, it seems to ignore the fact that when I learn how someone else has responded to a certain bit of evidence, I have gotten information about what this evidence is evidence for. In slogan form: evidence of evidence is evidence. There is a middle ground available.

#### The Some Weight View When an epistemic peer disagrees

with you, that is some evidence that your belief is false. To be rational, you must take this evidence into account; but it is just one piece of evidence among others.

So stated, this does not tell us much; a more useful principle would be more specific, and would tell us how to adjust our views in the light of peer disagreement.

But it is worth noting that a principle of this sort may not license the sort of widespread changes to our beliefs which are required by the Equal Weight View.

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But it is worth noting that a principle of this sort may not license the sort of widespread changes to our beliefs which are required by the Equal Weight View.

Imagine, for example, that I have evaluated the electoral evidence E and have assigned Hillary a credence of 0.8. Suppose that we now have a discussion, and I know that you are my epistemic peer with respect to this question. I learn that you assign Hillary a credence of 0.6.

According to the Some Weight View, this should affect my beliefs. I should now think it more likely that I am mis-evaluating E than before, and this should likely make me lower my credence in Hillary. But there is no requirement that I simply average my credence with yours; I now have a new piece of evidence that I am mis-evaluating E, but this is just one piece of evidence alongside many many others. Here is an analogy. Suppose that I take a drug which I am told, in rare cases, causes hallucinations of small mammals. Then, while walking home, I see a chipmunk run across the road.

Clearly, I should be less confident that the chipmunk is real than I would usually be. But do I have to suspend belief in the chipmunk, or lower my credence to 0.5? It does not seem so, at least if the side effects are rare enough.

On the Some Evidence View, finding disagreement with an epistemic peer is a bit like being told that a drug you have taken may cause illusions. It should make you think that it is more likely than otherwise that you are misevaluating your evidence. But this (depending on the details of the case) might not lead to suspension of belief.

One thing you may want to think about is: how can a more specific version of the Some Weight View be formulated which delivers the intuitively correct results in the case of the examples we discussed at the outset, without leading to some of the less plausible consequences of the Equal Weight View?