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Two Types of Conditionals

Like many other natural languages, English has a nice way of tracking the distinction between probabilistic and causal dependence.

Indicative conditionals are conditionals of the form *if A, then B*, and they track probabilistic dependence. More specifically: the probability of *if A, then B* is always the probability of *B* conditional on *A*. Consider, for example, the indicative conditional:

If people are using their umbrellas, it's raining.

The probability of rain conditional on people using their umbrellas is high. So we should be fairly confident that this conditional is true.

Subjunctive conditionals are conditionals of the form *if it were that A, it would be that B*. Unlike indicative conditionals, subjunctive conditionals do not track probabilistic dependence. To see this, suppose that it's sunny outside. Then, unlike its indicative counterpart, the following subjunctive conditional is false:

If people were to use their umbrellas, there would be rain.

For if it's sunny outside and people to start opening their umbrellas, it will remain just as sunny.

Subjunctive conditionals are interesting because they track an important aspect of causal dependence. Simplifying a bit: if A causes B, then the subjunctive conditional "if it were that A, it would be that B" is true. For example, the fact that rain causes umbrella use means that the following subjunctive conditional is true:

If it were to rain, people would use their umbrellas.

Subjunctive conditionals can also be used to keep track of causal independence. For example, one can capture the fact that umbrella use has no causal effect on rain by noting that the following subjunctive conditionals are both true, assuming it's sunny outside:

If people were to use their umbrellas, it would (still) be sunny outside.

If people were to refrain from using their umbrellas, it would (still) be sunny outside.

(Although I have tried to keep things relatively simple for the purposes of the present discussion, conditionals are fairly perplexing. My MIT colleague <u>Justin Khoo</u> gives an excellent introduction to the weird world of conditionals in this series of WiPhi videos.)

Problem 1

1/1 point (ungraded)

Here is a famous pair of conditionals, due to philosopher Ernest Adams:

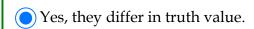
[Didn't]

If Oswald didn't kill Kennedy, somebody else did.

[Hadn't]

If Oswald hadn't killed Kennedy, somebody else would have.

Do these conditionals differ in truth value? (In thinking about your answer, assume that Kennedy was shot, but that there was no conspiracy: Oswald acted alone.)



No, they don't.



Explanation

[Didn't] is definitely true, because somebody definitely killed Kennedy. So if it wasn't Oswald, it must have been someone else.

In contrast, we have every reason to think that [Hadn't] is false. For we are assuming that there was no conspiracy theory, and therefore that nobody was waiting in the wings to kill Kennedy had Oswald failed to act.

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1 Answers are displayed within the problem

Problem 2

1/1 point (ungraded)

Recall the <u>"Death in Damascus" story</u> from Lecture 4. Imagine the merchant's situation just after Death has warned her that they will meet tomorrow, and suppose she says to herself "If I stay in Damascus, Death will meet me in Damascus".

Is this indicative conditional true? (Assume that Death is completely reliable.)

Yes, it's true.
No, it isn't.
✓
Explanation
The indicative conditional is true. For if what Death says is completely reliable, then one way
or another, the merchant is going to meet Death tomorrow. So the probability of meeting
Death in Damascus conditional of being in Damascus is high.

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1 Answers are displayed within the problem

Problem 3

1/1 point (ungraded)

Now consider the merchant's situation after she wakes up to find Death in Aleppo, and suppose she says to herself "Had I stayed in Damascus, Death would have met me in Damascus".

Is this counterfactual conditional definitely true?

Yes, it's true.			



Explanation

No, it isn't.

Here is an argument that the counterfactual conditional isn't true. Yes, Death was certainly going to meet the merchant at the appointed date. That's because, as a matter of fact, the merchant was going to go to Aleppo, and Death was going to meet her there. But given that Death was headed to Aleppo to meet the merchant, the merchant would have missed death, had she stayed in Damascus. (Not all philosophers agree with this argument, though.)

Submit **1** Answers are displayed within the problem Discussion **Hide Discussion Topic:** Week 5 / Two Types of Conditionals Add a Post **≮** All Posts Problem 3: Counterfactual Conditions discussion posted 8 days ago by denisos Problem 3 asks: Now consider the merchant's situation after she wakes up to find Death in Aleppo, and suppose she says to herself "Had I stayed in Damascus, Death would have met me in Damascus". Is this counterfactual conditional definitely true? I do not see why this isn't definitely true (as per your answer). Surely if death is reliable, death would have found her in Damascus. Can you point out any other solution in which: 1) she stays in Damascus and 2) she dies on the appropriate date, but 3) she does not die in Damascus? Or is the assumption that death is reliable not valid for this question - in which case it is of course false, but not very interesting. This post is visible to everyone. 2 responses Add a Response <u>joanvilaltella</u> 7 days ago I agree with denisos.

It has been stated that Death is completely reliable. I don't see how the negative answer could be correct, and I am definitely not surprised that not all philosophers agree with the argument given.

I suppose I understand why philosophers disagree with the argument, but I also think I understand where it's coming from: perhaps there's some relationship with the free will question about whether your New York friend acted freely in not going to Alaska the night before, given that you know the next morning that she stayed in NY (because she's having breakfast with you).

The fact that you know how your friend's story is going to end doesn't entail that she didn't act freely when she failed to go to Alaska last night, and the fact that the merchant was almost certainly not going to stay in Damascus doesn't mean Death could not have missed him had he actually stayed. So maybe there is room to say that the statement isn't definitively true: if the merchant had stayed in Damascus (which we know, as well as Death, he wasn't going to), then there is a chance he might have missed Death.

and btw I failed this question on my first attempt @

posted 7 days ago by themidget

If the meeting was between two ordinary people who had agreed to meet in Aleppo and one decided to remain in Damascus without telling the other then they would not meet in Damascus. However the character Death has the ability to see into the future which is why he is reliable and knows that the death will occur the next day. If he knows that then he will also know that the person did not go to Aleppo but remained in Damascus. One can not escape the inevitability of one's death by hiding in a closet.

posted 5 days ago by Ninguem

Add a comment

<u>Jimbof</u>

4 days ago

As I have commented in my post here: <u>Death: "... it is written that our final meeting is in Aleppo."</u>

When the problem states "Assume that Death is completely reliable.", I consider the story as told in the provided link. And there we read:

"No, I was merely shopping in Damascus," said Death. "That's why I was surprised to see you: it is written that our final meeting is in Aleppo."

So the answer to the problem is completely different if you consider Death reliable in what she says instead on reliable on what she does.

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The problem was then introduced, IMHO, with an ambiguity.

Alice and Bob have an edgy relationship, and agree their next meeting, in the cafeteria next day, should be their last. However they accidentally meet up at the Paradox & Infinity lecture that afternoon.

Bob decides he's going to stick to their agreement that they'll meet at the cafeteria next day, and duly turns up there at the appointed time. Alice decides she's going to stick to their agreement that their next meeting should be their last, and doesn't turn up.

Who's being reliable or unreliable, and how? Do they differ?

What about the other three possibilities: they both turn up at the cafeteria, Alice turns up, Bob doesn't; neither turn up

posted 4 days ago by Chris G2

Thanks Chris.

As I understand your example Bob was reliable, but I also see some ambiguity in the way the question is introduced, so I can't affirm Alice is unreliable.

However, Just with a litle change in your sentence, by removing a ",": "... and agree their next meeting in the cafeteria next day, should be their last." Would make me think whoever doesn't show up in the cafeteria is unreliable.

Do you think the same?.

posted 3 days ago by Jimbof

They agreed two things:

1) their next meeting would be the last 2) that meeting would take place in the cafeteria

After their unplanned meeting at the lecture, Bob decides to stick with 2 but not 1, so he shows up at the cafeteria. Alice however decides to stick with 1 but not 2, which means the meeting at the lecture *was* their next meeting and therefore should be their last, so she doesn't show up at the cafeteria.

Here I'd say they are equally reliable and equally unreliable, it's simply a matter of which clause of the agreement each decides to run with, and which to discard. Just because Alice doesn't show up in the cafeteria doesn't make her more unreliable than Bob.

However If Alice does show up at the cafeteria and meets Bob there, so they both show up, she's being kind of more reliable than she need be, or reliable in your two ways when Bob was reliable only in one. This seems to correspond more to the Death in Aleppo story.

posted 3 days ago by Chris G2

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I thank Chris and everybody else in this thread for clarifying the "Death in Aleppo" question, specially with the example of Alice and Bob.	
I understand Problem 3 better now, and see why the negative answer could be considered correct, even if I still don't consider it clear enough to be a definitive answer. I think there is an ambiguity problem, as Jimbof points out. I guess that's why there is a discrepancy among philosophers about this.	
posted 3 days ago by joanvilaltella	
	•••
Glad you like my Alice and Bob story, Joan. I don't think it quite captures Death in Aleppo, though. You don't make an agreement with Death as personified in that story, though there have no doubt been some intriguing medieval tales where that does happen.	
In fact a closer but also more realistic scenario to my mind isn't death deliberately stalking and lying in wait for us, but two objects A and D moving randomly about on a screen, stopping for a while each time. If D happens to meet with A when A got there first, then A and D can move off. But if A happens upon D like that, then that's it for A, only D can move off. Maybe there's a whole bunch of As but only one D. One by one the A's would stop till only D was left. But what if the As could have kids when they meet up?	
posted 3 days ago by <u>Chris_G2</u>	
The Seventh Seal (1957), a movie by Ingmar Bergman.	•••
https://www.imdb.com/title/tt0050976/	
A knight makes a deal with Death.	
posted a day ago by j<u>oanvilaltella</u>	
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