Kevin v Kunal Monty Hall under uncertainty of host policy

List of Debates   Hide notes   Side: None ⌄   Phase: **Answer Questions** Remaining: **< -1:00:00**

At root

0 Q (H) A car is behind 1 of 3 doors, with a goat behind the other two. You choose a door at random. The host opens one of the other doors to reveal a goat. What's the probability of winning if you switch to the unopened door?

H Unsure, but probably between 1/2 and 2/3 depending on host policy

D Certainly 2/3

Notes

[Debaters know that the host must open one of the other doors, but they do not know the host's policy to do so.]

Maybe H is too computationally constrained to enumerate all possible host policies, and thus has to qualify answer with "probably"

DH: Personally, DH believes that it is easier to argue for "uncertainty" given that a judge would be able to wrap their heads around that concept more (as is seen by the misconceptions in the Monty Hall Problem), but we are doing it out for posterity.

Q Do we know what the host's policy for selecting the door to open is?

H No

D In this situation, yes

1 Payment: H ○ D ○ None ◉   Recurse

Notes

Q Do we know that the host will open a door?

H Yes

D Yes

2 Payment: H ○ D ○ None ◉   Recurse

Notes

Q Are two possible valid options for the host policy:

1. The host always picks a door with a goat
2. The host just picks a door at random (and it just so happened to contain a goat this time)

H Yes

D Possibly, but the given situation considers a door with a goat behind

3 Payment: H ◉ D ○ None ○   Recurse

Q If you kept on letting the host pick a door with a goat behind it, then wouldn't the probability of winning when you switched be 2/3?

H No, because it depends each time on host

D Yes

6 Payment: H ○ D ○ None ◉   Recurse

Notes

Q Since the problem states that the other door reveals a goat behind it, isn't it true that you would have a 2/3 probability of winning by

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8   To: 6.question

Does that mean we take the set of all worlds where the host opens a goat door and calculate the probability of winning after switching? (The host may have different policies in different worlds)

H

D It takes into account the set of all worlds where the host opens a goat door and does calculate the probability of the door being opened and having a goat behind it as given in the question.

H: This feels pretty unwinnable from D's side, so I think it may be true that the uncertainty in the answer makes H's side easier to argue for here.

Notes

DH: Open to seeing if there are any ways to obfuscate or make a circular argument that makes dishonest seem winnable? Seems like the only way is to argue that the policies don't exist, but that seems less probable in the rational judge's viewpoint.

H: Maybe, but it depends on the host policy

D: Yes

7 Payment: H ○ D ○ None ◉   (Recurse)

Notes

Q: With policy #1, is the probability of winning by switching 2/3?

H: Yes

D: Yes

4 Payment: H ○ D ○ None ◉   (Recurse)

Notes

Q: With policy #2, is the probability of winning by switching 1/2?

H: Yes

D: Yes

5 Payment: H ○ D ○ None ◉   (Recurse)

Notes