

Decision: Impossible

Toby C.P. Solomon

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School of Philosophy
Australian National University

Slides available at tcpsolomon.com on the papers page (paper available soon).

A Little Context

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- The idea that we must *act under the idea of freedom* has a long history. But little argument has been offered in its favour, and it is often unclear what it specifically means.
- Here I will suggest that CDT faces a problem arising from the possibility that our decisions are deterministic.
- My favoured solution to this problem is a variation, I take it, on the idea that we must act under the idea of freedom. It provides a principled reason for that claim, and makes clear what it means to do so.
- Simply assuming CDT is the correct and complete account of rational decision-making here.

A Case and The Problem

In my pocket Billy says I have a slip on which is written a proposition, P . You must choose between two bets. Bet 1 is a bet which pays \$10 if P is true and costs \$1 if P is false. Bet 2 is a bet which pays \$1 if P is true and costs \$10 if P is false. Before you choose whether to take bet 1 or bet 2, I should tell you what P is. It is the proposition that the state of the world yesterday was such as to determine that you now take bet 2 (Ahmed 2014, 666)
[Edited for Clarity]

	I am now determined to take bet 2 (P)	I am now determined to take bet 1 ($\neg P$)	This decision is not deterministic ($\neg P$)
Take bet 1		-\$1	-\$1
Take bet 2	\$1		-\$10

- The blank boxes are *impossible* worlds/states.
- CDT is silent here!

- Problem will occur in any case where:
 1. It is an epistemic possibility for the decision-maker that their current decision is already determined.
 2. Whether or not it is already determined is relevant to something the decision-maker cares about (including, possibly, the truth of propositions about whether that decision is already determined).

- Global determinism implies that my current decision is determined, but not vice versa.
- Not interested in intuitions about the right action in this case, interested in principles of rational decision-making.
- Assuming Necessitarian account of the laws.
- Rational credence greater than zero is all we need.

Outline

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**Can We Rationally Believe We Are
Faced With Such Cases?**

- It is not a problem that CDT does not tell you what to do if, for example, someone offers you a bet on the contradiction $P \wedge \neg P$ and you take that to be a live possibility—no rational agent can believe that they are faced with such a situation.
- Similarly it would not be a problem that CDT was silent here if we could not rationally believe that we are faced with this kind of situation.
- But the case is prima facie possible.

- Suggestion: we can only rationally value those things we can experience, and both my current decision being deterministic and indeterministic are compatible with every possible course of experience.
- The main claim just seems implausible: wills, climate change, scientific theory choice, moral responsibility.
- Conflicts with Humeanism about basic desires.

- Weaker suggestion: we cannot rationally value anything that cannot make a difference to the arrangement of intrinsic properties at time-space points.

- Possibly more plausible, but still fails the test on moral responsibility, scientific theory choice, etc. and Humeanism about basic desires.

Is The Decision Matrix Properly Specified?

Acts

- Nothing prima facie wrong with the acts as specified.
- They appear to both be available to us.
- Problem can be reformulated for whatever acts are suggested.

States

- Prima facie relevant states.
- Nothing obviously inconsistent or incoherent about them.
- No particular difficulties of feasibility etc. for considering these states.
- Suggestion: it is illegitimate to include information about what acts we will perform within the states.

States

- A similar restriction would be reasonable for indeterministic states.
- But in indeterministic cases *performing act A will cause me to be in the state where I perform act A.*
- Probabilities of the problematic outcomes are zero.
- Restriction will make no difference in the indeterministic case.
- Simplicity speaks in favour of the restriction.

States

- Won't work for deterministic states.
- Causal independence guarantees probabilities of problematic outcomes are not zero.
- Cannot give up the link between causal independence and probability without giving up CDT.
- Even if the *motivation* were right, it might support the interventionist claim anyway.

Probabilities

- CDT commits us to the claim that causally independent outcomes must have unconditional probability (or, in other words, their causal probability is equal to their unconditional probability).
- States are all have unconditional probabilities greater than zero for some rational agent.
- Cannot give up the claim that the past is causally independent of your acts (at least in normal cases) without giving up the result in Newcomb's problem that motivates CDT in the first place.

Utilities

- Prima facie impossible to assign utilities to *impossible* worlds.
- Suggestion: use some account of counterfactuals to assign possible worlds to these outcomes and then assess the utility as normal for those worlds.
- Essentially proposes we ask “what would happen if I was determined to do A and I did B?” instead of “what *will* happen if I am determined to do A and I do B?”

Utilities

- Any such worlds will require that (1) there are miracles, (2) the past is different, or (3) the laws of nature are different.
- Any such world is *epistemically impossible* for the decision-maker.
- Why should we care about what outcomes an act would have in a world which we are rationally certain cannot be the actual world?

Solving the Problem with Meta-Decision-Making

- We now have a problem: CDT seems to be unable to give us an answer in some possible decision situations.
- The obvious way to solve the problem is to use meta-decision-making: we can use CDT to decide how we should best deal with this problem.
- Suggestion: we can pick up on the common idea that we must *act under the idea of freedom* and suggest that we should represent our current decision as an *intervention* by excluding the possibility of its being deterministic from our decision.

- Dominance argument for excluding deterministic possibilities from our decision-making:
 1. If my first-order decision is indeterministic then excluding the deterministic possibilities makes my probability function more accurate than not doing so, which is a point in favour of doing so.
 2. If my first-order decision is deterministic in a fatalist way then it doesn't matter whether or not I include the deterministic states.
 3. If my first-order decision is deterministic in a deliberation-dependent manner then my *second-order* decision must be deterministic.

- But now we need to make a third-order decision about how to represent this second-order decision given the possibility that it is deterministic.
- We have the beginning of an infinite regress.
- The only way to stop this regress would be to assume that none of the decisions is deterministic in the deliberation-dependent manner.
- Then excluding the possibility of determinism (of either kind) from our first-order decision dominates not doing so.

Connection with Deliberation-Incompatibilism

- Deliberation-Incompatibilism: an agent cannot rationally deliberate about some option set if she believes that her decision over that option set is already determined.
- Supported by the consequence argument (van Inwagen 1983) and the plausible claim that one cannot deliberate about what one doesn't believe one has a choice about.
- The interventionist solution to our problem brings CDT into line with deliberation-incompatibilism.
- Might also help to explain the DARC thesis: the claim that one cannot, rationally, assign any credence to their own actions while engaged in decision-making about them.

Conclusion

- CDT has a problem if (1) it is epistemically possible that my current decision might be deterministic and (2) whether or not my decision is deterministic is relevant to the outcomes of my current decision.
- Prima facie we might rationally believe we were in such a situation, and we would not have way of modeling it properly within CDT that avoids the problem.
- If we take the problem seriously and turn to meta-decision-making to solve it then we can see that treating our current choices as interventions, i.e. not deterministic, is the best response.

Further Questions

- Does this commitment of practical rationality have any bearing on what we should epistemically do?

- What about chancy cases?

References

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