24.118: Paradox and Infinity, Spring 2024
Response Set 5: Newcomb's Problem and the Prisoner's Dilemma

Please include your name and list all of your collaborators on the last page of your response set, preferably a separate page so that no one sees it till the end. *Failing to list collaborators constitutes a violation of academic integrity.*

How your answers will be graded:

- There is no quiz this week so all answers are to be submitted by PDF.

- Each response should be a maximum of 250 words.

- Responses will be evaluated by the clarity, concision, and the degree to which they reflect careful reading and comprehension of the text. Begin by working out your thoughts separately as you might with a problem set, writing up your response only once you have a good sense of what you want to say and how you want to say it.

- You are encouraged to read critically rather than accepting every word of a text as true. At the same time, it is important to be charitable to what the author intends. When something in the text is less than clear, it is important to do your best to get clarity about what the author intends to express, assuming the best interpretation consistent with the text before delivering any criticisms. For instance, saying that something in the text is not clear is not a good criticism even if it is true.

- You may consult published literature and the web, but you must credit all sources where failure to do so constitutes plagiarism and can have serious consequences. For advice about how and when to credit sources see `https://integrity.mit.edu/`. Note that merely citing a source does *not* count as a good justification.

- Reading old texts is hard! So don't worry if you struggle to understand every point. Instead, do your best to learn what the author is trying to express, using this as a chance to sharpen your close reading skills.

All submissions must be in PDF format. Type-written submissions may be strongly preferred by your TA; handwritten submissions are acceptable only if:

1. Your handwriting is easily legible (as judged by your TA);

2. You produce a clean version of the document (as opposed to the sheet of paper you used to work out the problems); and

3. Your manuscript has been scanned to high enough standards (as judged by your TA). Consider using, e.g. *Scannable* or *Adobe Scan.*

1. Provide a detailed outline of Lewis' (1979) argument that Newcomb's problem is a prisoner's dilemma. Do you find Lewis' argument convincing? If so, describe what you find convincing, and if not, say why you think the argument fails.

2. Explain what Lewis' reasons are for making the following claims.

> As Newcomb's Problem is usually told, the predictive process involved is extremely reliable. But that is inessential. The disagreement between conceptions of rationality that gives the problem its interest arises even when the reliability of the process, as estimated by the agent, is quite poor-indeed, even when the agent judges that the predictive process will do little better than chance. (p. 238)

Present Lewis' reasoning as clearly and succinctly, commenting on why Lewis makes this point (what role it plays in his argument overall).

3. In response to Lewis' (1979) paper, Bermúdez (2013) writes the following:

> What matters in Newcomb's problem is not simply that there be a two-way dependence between my receiving $1,000,000 and it being predicted that I not take the $1,000. That two-way dependence only generates a problem because I know that the contingency holds. (p. 427)

Explain the point that Bermúdez is making here (and goes on to further elaborates in his paper). Do you find this point convincing?

4. Bermúdez concludes by writing:

> [T]he considerations that Lewis brings to bear to show that the game he starts with is an NP equally show that the game is not a PD. (p. 428-9)

Do you agree? Say why or why not, presenting Bermúdez's argument in support of your evaluation of his conclusion.

References

Bermúdez, José Luis. 2013. "Prisoner's Dilemma and Newcomb's Problem: Why Lewis's Argument Fails." *Analysis* 73:423–429. ISSN 0003-2638. doi: 10.1093/analys/ant034.

Lewis, David. 1979. "Prisoners' Dilemma Is a Newcomb Problem." *Philosophy & Public Affairs* 8:235–240. ISSN 0048-3915.