## Comments on Epstein: "Rethinking Decision Theory's Foundation"

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- Epstein's Basic Idea: Suppose I have only ordinal preferences, and that A>B>C. We don't yet have enough structure to require sufficiently strong constraints on my preferences over lotteries involving A, B, and C needed for standard decision theory. That is, if at the basic level, we can't appeal to strength of preferences directly, then it's hard to see how rationality could demand that the structure of my preferences over lotteries be sufficiently constrained by other preferences.
- My primary concern: What's the interplay here between psychological claims about how we actually are and normative claims about rational requirements?
- Two kinds of Weak Operationalists:
  - WO<sub>1</sub>: As a matter of psychological fact, we only have ordinal preferences at the basic level.
  - **WO**<sub>2</sub>: For the axioms of decision theory to have normative bite, we only need agents to have enough ordinal preferences at the basic level. We can then treat strength of preferences as derivative entities regardless of their metaphysical status.
- Main target is  $WO_2$ , but many of the arguments seem directed at  $WO_1$ .
  - Suppose I have the following ordinal preference structure:
    - \*  $S_1$ : World Peace (W)> Apple (A)> Status Quo (S)
    - \*  $S_2$ : Banana (B)> Apple (A) > Status Quo (S)
    - \* In different between  $[\alpha_{S_1}, W, S]$  and A and between  $[\alpha_{S_2}, B, S]$  and A.
    - \* Epstein's challenge: Weak operationalist can't explain why  $\alpha_{S_1} >> \alpha_{S_2}$ .
      - · Good intuitive challenge against WO<sub>1</sub>. Seems like there is a psychological explanation for this.
      - · Proponent of WO<sub>2</sub> will just claim that's what's at issue. Dispute over order of explanation.

- In section on Humeanism, Epstein claims that we should distinguish simple preferences between simple outcomes like eating an apple and eating a pear from preferences between lotteries involving consumption of apples and pears.
  - \* Argument appeals to (alleged) facts about our actual psychologies.
  - \* But unless we want to go Savage, ideal agents arguably should have preferences over lotteries as basic.
    - · Worlds where I get apple partitioned into worlds with apple & food poisoning and worlds with apple & no food poisoning. So my preference for apple ought to take my subjective probabilities over these possibilities into account.
  - \* This line might help the weak operationalist get a handle on how to explain why we should obey Continuity:
    - · Nearly every choice we make is between lotteries involving some chance of death, eternal torture, etc. It's only because of certain less than ideal facts about our psychologies that it seems like we're choosing between simple outcomes.
    - · Obviously, not a full reply. But, tu quoque.