Pascal's Mugging

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Background: Pascal's Wager

Pascal argues that we rationally ought to believe in God. This is known as **Pascal's Wager**.

Really, Pascal gives *several* different arguments for this conclusion. One is a *Dominance Argument*: Whether God exists or not, things will go better for you if you believe He does.
We will focus, instead, on his *expected value argument.*

Expected Value Argument. Believing in God has higher *expected value* than not believing, so you should choose to believe.

PASCAL'S WAGER (EXPECTED VALUE)

	God Exists	*God Doesn't Exist*
B	∞	f_1
$\neg$**B**	f_2	f_3

Expected Value of Believing:

$$EU(\mathbf{B}) = \Pr(\text{God Is}) \cdot \infty + \Pr(\text{God Isn't}) \cdot f_1 = \infty$$

Expected Value of Not Believing:

$$EU(\neg\mathbf{B}) = \Pr(\text{God Is}) \cdot f_2 + \Pr(\text{God Isn't}) \cdot f_3 = \text{finite}$$

∞ is (obviously) larger than any finite value, so $EU(\mathbf{B}) > EU(\neg\mathbf{B})$. So, you should choose to believe in God.

Roughly, the argument goes like this.

PASCAL'S ARGUMENT

P1 If you're rational, you should assign some non-zero probability to God existing ($Pr(God\ Is) > 0$).

P2 If you assign some non-zero probability to God existing, then believing in God (**B**) has higher expected value than not believing in God ($\neg$**B**).

P3 You rationally ought to maximize expected value.

C You rationally ought to believe in God.

Note: The argument give us a *practical* reason to believe in God, not an *epistemic* reason.

One popular way to respond to *Pascal's Argument* is to question **P2**. There are a couple ways of doing so.

Many Gods Objection. If you're rational, you should assign some non-zero credence to God existing. But what might God be like? If you assign some non-zero credence to the possibilities below, it's not clear that believing in God has higher expected value than not believing in God.

MANY GODS WAGER

	Generous God	*Rewarding God*	*Weird God*	*No God*
B	∞	∞	f_2	f_1
$\neg$**B**	∞	f_2	∞	f_3

$$EU(\mathbf{B}) = \Pr(\text{GG}) \cdot \infty + \Pr(\text{RG}) \cdot \infty + \Pr(\text{WG}) \cdot f_2 + \Pr(\text{No God}) \cdot f_1$$
$$EU(\neg\mathbf{B}) = \Pr(\text{GG}) \cdot \infty + \Pr(\text{RG}) \cdot f_2 + \Pr(\text{WG}) \cdot \infty + \Pr(\text{No God}) \cdot f_3$$

How could Pascal respond to this problem?

***An Eternity of Bliss* $\neq \infty$.** The argument for **P2** relies crucially on the claim that an eternity in heaven has infinite value for you. But perhaps that's wrong. Perhaps it only has a finite value.

A (Bad) Argument that Heaven has ∞ *Value.* For any number of days n spent in heaven, it is better to spend $n+1$ days instead. You will spend an *eternity* in heaven. So, doing so must have infinite value for you.

This is a bad argument. Can you see why?

Is there a better argument in the neighborhood?

Pascal's Mugging

Pascal's Mugger convinces (the fictional) Pascal to hand over the contents of his wallet by promising him a much much much greater reward iff he does.

PASCAL'S MUGGING

P1 If you're rational, you should assign some non-zero probability (p) to the Mugger keeping his word.

P2 If you assign probability p to the Mugger keeping his word, then, for a large enough reward, handing over your wallet will have greater expected value than not doing so.

P3 You rationally ought to maximize expected value.

C You rationally ought to hand over your wallet to the Mugger.

But this seems absurd! Clearly, you shouldn't.

In general, the problem appears to be that Expected Value Theory (plus an unbounded value function) is *reckless*.

> **Recklessness:** For any finite payoff n (no matter how good), and for any positive probability p (no matter how small), there's a finite payoff N such that getting N with probability p is better than getting n for sure.

Is this a problem?