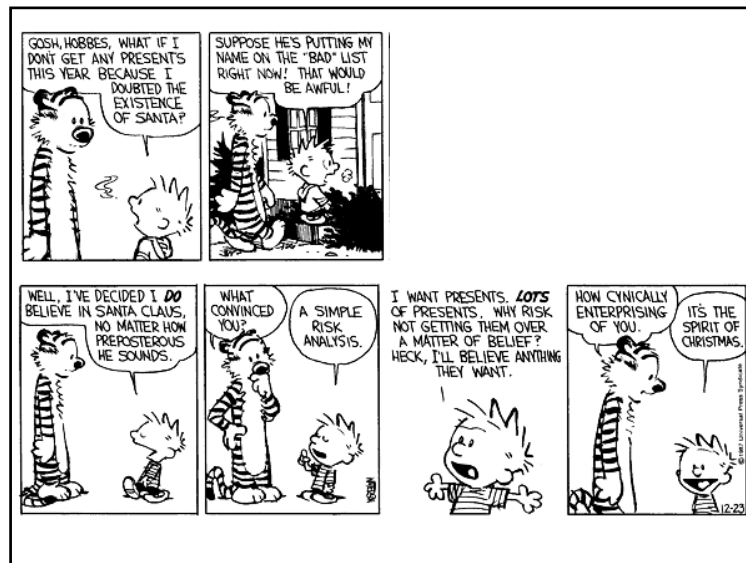
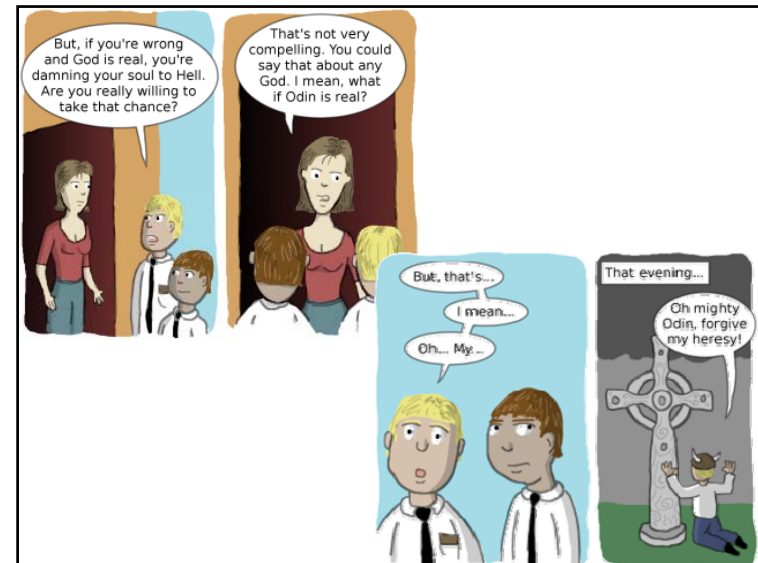


PHIL 1305

Pascal's Wager

Justin C. Fisher

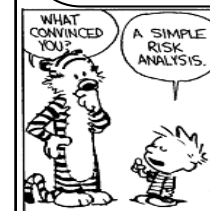


"God is, or He is not." But to which side shall we incline? **[Evidential] Reason** can decide nothing here...

Let us **weigh the gain and the loss** in wagering that God is...

- If you gain, you gain all;
- If you lose, you lose nothing.

Wager, then, without hesitation that He is.



Pascal's Wager

Evidential vs. Prudential Reasons

Suppose Ben Stein offers you a million dollars to believe that he is a beautiful woman.

Should you believe that Ben Stein is a beautiful woman?



Your evidence strongly suggests that Ben Stein isn't even a woman – so you have **evidential reason** to believe he's not a beautiful woman.

But the million dollars sure would be nice, so you have **prudential reason** to believe he is a beautiful woman.

How does Pascal's Wager differ?

The bribe is (allegedly) offered by God, not Ben Stein – God might be harder to trick.



The bribe is an eternity in heaven – apparently an infinite value.

There is uncertainty about whether God actually exists to offer the bribe, whereas there was no uncertainty in our simple case about whether Ben Stein was actually offering the bribe.

How to deal with uncertainty?

Suppose you can flip a coin. You'll win \$24 if it flips heads, but you'll lose \$36 if it flips tails. Should you?

$$\frac{1}{2} (\text{chance you'll lose}) \times -\$36 + \frac{1}{2} (\text{chance you'll win}) \times +\$24$$

$$= -\$6$$



"expected value"

You have prudential reason to perform whichever available option has the highest expected value.

Probabilities and payoffs both matter.

Suppose you can flip a coin. You'll win \$24 if it flips heads, but you'll lose \$36 if it flips tails. Should you?

The coin is weighted: it flips Heads 2/3 of the time.

$$\frac{1}{3} (\text{chance you'll lose}) \times -\$36 + \frac{2}{3} (\text{chance you'll win}) \times +\$24$$

$$= +\$4$$



"expected value"

If the payoff is small, the probability of winning has to be really high for it to be a good gamble.

High Payoffs with Low Probability

Suppose you can **pay \$1** to win \$1,000,000 if the ace of hearts is randomly drawn from a deck of cards.

$$51/52 \text{ (chance you'll lose) } \times -\$1 \\ + 1/52 \text{ (chance you'll win) } \times \$1,000,000$$

=

\$18

"expected value"



If the potential payoff is high enough, it can be a good gamble even if you're very unlikely to win.

A lottery with an infinite jackpot?

99.99% (chance you'll lose) \times **-\$1,000** (cost of a ticket)

+ 0.01% (chance you'll win) \times **$+\infty$** (an infinite jackpot)

=

$+\infty$



If the **jackpot is infinite**, then it doesn't matter **how small your chance of winning** (as long as it's more than zero), nor **how much the ticket costs** (as long as it's finite), the expected value of playing will still be infinite.

Is anything infinitely valuable?

An infinite amount of money?

- But this can't buy any more than some large finite amount!

Immortality?

- Would the years eventually start to drag on?
- Or could each successive year add new value?

All Pascal needs is a chance heaven might be infinitely good: a chance at infinite value has infinite expected value.



Pascal's Wager



What's the expected payoff if you believe in God?

99% (chance you're wrong) \times -10 (church... boring)

+ 1% (chance you're right) \times **$+\infty$** (heaven... yay!)

=

$+\infty$

What if you don't believe in God?

99% (chance you're right) \times +10 (sleeping in... mmmh!)

+ 1% (chance you're wrong) \times **$-\infty$** (hell... ouch!)

=

$-\infty$

Pascal's Wager

What's the expected payoff if you believe in God?

99% (chance you're wrong) x -10 (church... boring)

+ 1% (chance you're right) x $+\infty$ (heaven... yay!)

= $+\infty$

What if the chance of God existing is 99%? Pascal thinks his argument can convince even the atheist who thinks there's only a slight chance (like 1%) that God exists. As long as this probability is bigger than 0 the expected value will still be $+\infty$.

= $-\infty$

Pascal's Wager



P1. There's at least a small chance that God exists.

P2. If God exists, then theists will receive infinite rewards in heaven.

C1. So, the expected value of theism is infinite.

C2. So we have prudential reason to be theists.

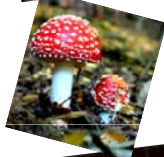
Can we really just choose to believe something without any evidence?



Pascal: Choose to go to church – it might lead to religious conversion, so it has infinite expected payoff.



Al Hajek: This equally justifies any pursuit that has a chance of causing a religious conversion, as it would have infinite expected payoff too.



What's the expected payoff if you believe in God?

99% (chance you're wrong) x -10 (church... boring)

+ 1% (chance you're right) x $+\infty$ (heaven... yay!)

If the value of heaven were only finite, then the other numbers would matter in the cost/benefit analysis.

But not if heaven is infinitely good.

$+\infty$

Moral: If you think wearing a burka gives you a chance to get infinite rewards, then you have prudential reason to wear a burka, however (finitely) uncomfortable it might be.



The big problem: What will be rewarded?

Might God punish people who believe for selfish reasons?



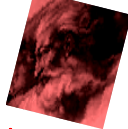
I WANT PRESENTS. LOTS OF PRESENTS. WHY RISK NOT GETTING THEM OVER A MATTER OF BELIEF? HECK, I'LL BELIEVE ANYTHING THEY WANT.



Since different hypothetical deities would infinitely reward all sorts of different beliefs, there are equally good arguments for all sorts of different beliefs (even atheism!)

~~Atheist's~~ ~~Pascal's~~ Wager

P1. There's at least a small chance that ~~God~~ exists.



P2. If ~~God~~ exists, then ~~theists~~ will receive infinite rewards in heaven.

C1. So, the expected value of ~~theism~~ is infinite.

C2. So we have prudential reason to be ~~theists~~.

Atheist version of Pascal's Wager



What's the expected payoff if you believe in God?

99% (chance Nahweh doesn't exist) x -10 (church...)

+ 1% (chance Nahweh punishes theists) x $-\infty$ (real HELL...)

=

$-\infty$

What if you don't believe in God?

99% (chance Nahweh doesn't exist) x +10 (sleeping in...)

+ 1% (chance Nahweh rewards atheists) x $+\infty$ (heaven!!!)

=

So, should we all be atheists?

$+\infty$

No matter what you do or believe:

- You open yourself to a slight possibility that you might get infinite rewards from a deity who approves.
- You open yourself to a slight risk that you might get infinite punishment from a deity who disapproves.



To have prudential reason to believe something based on the hope for infinite rewards, you need evidential reason to rule out a lot of possible deities.

The Big Problem – Summary

Without knowing what deities might exist, and what they would reward, we can't calculate the expected value of different beliefs.



To have prudential reason to believe in God, we would first need evidential reason that

- (a) God would reward selfish theism (rather than, say, selfless love).
- (b) Odin and Nahweh don't exist.



Prudential reasoning can't completely sidestep our need to consider evidence about what sorts of gods might exist and about what they might reward.