



Knowledge, Reason & Belief

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5. *The value of knowledge (ctd) +
Rational belief
& practical interests*



INTRODUCTION

Last week

- An overview of some key ideas from the 'value of knowledge' debate
 - The idea that knowledge is valuable
 - The possibility of grounding the value of knowledge in the instrumental value of truth
 - The Meno Problem (accounting for the value of knowledge over and above that of true belief) and a possible source of added value for justification
 - The 'Secondary Value' problem (accounting for the value of knowledge over and above that of anything that falls short of it)

This week

- Briefly finishing off the value of knowledge:
 - More on Williamson on the Secondary Value problem (knowledge as valuable because stable) and criticisms thereof
 - A possible social spin on Williamson's suggestion
- New topic: Can practical considerations mandate our holding beliefs that 'go beyond' our evidence?
- Bonus: a digression on rational *action*

THE VALUE OF KNOWLEDGE: FINISHING OFF

Value in stability?

- Recall the comment made by Plato's Socrates:

S: Acquiring an untied work of Daedalus is not worth much; it's like a runaway slave—or it won't stay put. A statue that is tied down, though, is very valuable, because the man's works are very beautiful.... True opinions, for as long as they remain, are fine things and do nothing but good. But they don't hang around for long; they escape from a man's mind, so that they are not worth much until one tethers them with chains of reasons why... After opinions are tied down, in the first place they become knowledge; secondly, they remain in place. That is why knowledge is prized more highly than correct opinion; knowledge differs from correct opinion in being tied down.

Value in stability? (ctd)

- This prompted Williamson to suggest:

'What does Plato mean? Surely he recognized that mere true beliefs can be held with dogmatic confidence, and knowledge lost through forgetting. But belief can also be sensitive to evidence. One can lose a mere true belief by discovering the falsity of further beliefs on which it had been essentially based; quite often, the truth will out. One cannot lose knowledge that way, because a true belief essentially based on false beliefs does not constitute knowledge... In other cases, a true belief not essentially based on false beliefs still fails to constitute knowledge, because misleading evidence against that true belief is rife in one's environment, although one happens to be unaware of it oneself...'

Value in stability? (ctd)

- In a nutshell:

Knowledge is more valuable than true belief because the true belief it entails is more likely to persist, other things being equal

(‘other things being equal’, because some dogmatically held merely true beliefs might be more persistent than some true beliefs that qualify as knowledge)

Kvanvig and Fricker's response

- Kvanvig (2003) complains:
 - 'When we compare knowledge with true beliefs fixed by evidence that do not count as knowledge, we find no obvious pattern favoring the retention of the former over the latter'
- Fricker (2009) concurs, telling us that the kinds of cases which Williamson bases his claim on (violations of NO DEFEATERS) suggest 'mirror image examples of circumstances in which knowledge is more readily lost than mere true belief'

Hyman's response

- Hyman (2010) offers some different objections:
 - **Unlikely undermining**: Mere true belief is supposedly less valuable due to the in principle possibility of rational undermining. But the actual probability of this happening could be vanishingly small
 - **Limited shelf life**: Knowledge is supposedly more valuable because it promotes the future maintenance of true beliefs. But some true beliefs have 'limited shelf life':
 - 'For example, it is important for me to have a true belief now about the time I am due to meet a visitor this afternoon...But by next Wednesday, it probably won't matter whether I have retained [this belief].'
- Rejoinder: then so be it; knowledge sometimes has little value over mere true belief, just as true belief sometimes has little value over false belief

Kvanvig and Fricker's response (ctd)

- Fricker's example:
 - GORDON BROWN**: 'A visitor to the U.K. forms the true belief that Gordon Brown is a powerful figure in British politics on the basis that Gordon Brown is Chancellor of the Exchequer. But then when (shortly after the visitor has left, and unbeknownst to her) Gordon Brown stops being Chancellor to become Prime Minister, her knowledge is lost—yet her true belief remains.'
- What do you make of the rejoinder?

Added social value?

- Here is another way of putting NO DEFEATERS to work (loosely inspired by Olsson's (2011) reading of Kant)
- The idea is that it is not the potential undermining of the true belief *in the believer* that matters so much as the potential undermining of the belief *in others*
- If my true belief satisfies NO DEFEATERS, then any grounds that I could provide to back it up should be found persuasive by any rational individual who does not hold certain relevant false beliefs (e.g. in the *non*-Gettiered clock case, falsely believing that the clock has stopped)
- Knowledge is then true belief with a certain power of persuasion: it adds **social value** to something already valuable

Two questions

PRACTICAL REASONS FOR BELIEF

- We have focused so far on *epistemic* justification for beliefs (e.g. a belief's being supported by some evidence)
- I flagged out the possibility of *purely pragmatic* justification
- Is this indeed a genuine possibility?
- Two questions:
 - (1) Is it rationally (and morally) *permissible* to hold beliefs that our evidence doesn't support?
(Call '**PERMISSIVISM**' the view that the answer is 'yes')
 - (2) If so, might further (e.g. practical) considerations sometimes even *obligate* us to do so?

Three classic texts

- Up next, 3 famous texts that address these questions:
 - An excerpt from Pascal's *Pensées* (1688)
 - Clifford's 'The Ethics of Belief' (1879)
 - James' 'The Will to Believe' (1896)
- The second author rejects PERMISSIVISM; the other two endorse it
- Note that all 3 authors arguably agree on two things:
 - Evidence supports a belief just in case it guarantees that it is true (INFALLIBILISM)
 - Though it's sometimes permissible to believe P when our evidence doesn't support P , it *isn't* permissible to do so when it supports $\neg P$
- Upshot: If it is at all permissible to believe P , then our evidence must not entail that $\Pr(\neg P) = 1$ (equiv.: $\Pr(P) = 0$)

PASCAL

Introducing the Wager

- Pascal offers a purely practical justification to believe in cases in which '[r]eason can decide nothing' (here: whether or not to believe in God)
- Aware that one's beliefs are arguably not under one's direct control (**doxastic involuntarism**), Pascal notes that the argument would also provide justification for *taking steps to end up believing*
- He urges:
 - 'Learn of those who...know the way which you would follow, and who are cured of an ill of which you would be cured. Follow the way by which they began; by acting as if they believed, taking the holy water, having masses said, ...'
- Pascal's '**wagering for**' = 'believing in' / 'taking steps to believe in'

Decision theory

- A **decision problem** consists in:
 - a set of **acts**,
 - a set of **states** of nature (standardly chosen so as to be **independent** of the acts),
 - a set of **values** assigned to act/state pairs
- These are standardly presented in a **decision table**, e.g.:

| | It rains (R) | It doesn't rain ($\neg R$) |
|-------------------------------|------------------|------------------------------|
| Book city tour (C) | 2 | 4 |
| Book nature spot trip (N) | 0 | 8 |

Introducing the Wager

- Pascal is not the first to offer this general kind of pragmatic argument (antecedents: Plato, Arnobius,...).
- His novelty:
 - use of the apparatus of **decision theory**, a framework for choosing between acts in circumstances in which the evidence can fail to determine all relevant facts
- Note: The original is hard to follow. I'll run with the standard reading (Hacking 1972), which finds 2 main argument variants

Risk vs uncertainty

- A standard distinction
 - (1) decisions under **risk**: the probabilities of the states are known (e.g. playing with fair dice, visiting a destination for which we have meteorological data)
 - (2) decisions under **uncertainty**: the probabilities of the states are not known (e.g. playing with dice with an unknown bias, visiting a destination for which we have no meteo. data)
- In the case of risk, the standard line is to choose one of the acts with the highest **expected value**

Risk vs uncertainty (ctd)

- The expected value is given by
The sum of the values of the different act/state pairs, weighted by the probabilities of the relevant states

- Recall our example:

| | | |
|-----|-----|----------|
| | R | $\neg R$ |
| C | 2 | 4 |
| N | 0 | 8 |

- So assume that our meteorological data suggests $\Pr(R) = 0.5$
- This yields

$$EV(C) = 2 \times 0.5 + 4 \times 0.5 = 3 < EV(N) = 0 \times 0.5 + 8 \times 0.5 = 4$$

Pascal's Argument from Dominance

- The relevant passage:

'You have two things to lose, the true and the good; and two things to stake, your reason and your will, your knowledge and your happiness; and your nature has two things to shun, error and misery...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.'

Risk vs uncertainty (ctd)

- In the case of uncertainty, things are much less clear. Two popular treatments:
 - **INDIFFERENCE**: Treat uncertainty as the special case of risk in which the states are equiprobable
 - **MAXIMIN**: Chose one of the acts with the best worst consequence
- Note: Of these two, MAXIMIN best predicts some of the psychological data (Ellsberg-style experiments)
- On the first option, the recommendation is obviously, as before, to book the visit to the nature spot
- But on the second option, the recommendation is to book the city tour (worst outcome of 2, as opposed to 0)

Pascal's Argument from Dominance (ctd)

- The decision table:

| | | |
|--------------------------------|--------------------|--------------------------------|
| | God exists (G) | God doesn't exist ($\neg G$) |
| Wager for (W_G) | a | b |
| Wager against ($W_{\neg G}$) | c | d |

- Formally, here are Pascal's claim regarding payoffs:
 - $a > c$ ('If you gain, you gain all')
 - $b \geq d$ ('If you lose, you lose nothing')
- Jargon: wagering for 'weakly dominates' wagering against

Weak dominance and fervent atheism

- Technically, however, weak dominance isn't *by itself* sufficient to secure rationality of wagering for (Hajek 2012)
- Assume, say, that $b = d$ (this is consistent with weak dominance): in case God doesn't exist, it makes no difference to me whether I wager for or against him
- Assume further that my evidence entails that I should be 100% certain that God doesn't exist ($\Pr(G) = 0$)
- The fact that $a > c$ becomes irrelevant: I should be indifferent between wagering for and wagering against
- So Pascal does indeed need to assume that **our evidence does not entail that $\Pr(G) = 0$** (i.e. doesn't support $\neg G$)

Risk vs Uncertainty

- Is the assumption sufficient?
- The following *would* certainly be sufficient:
 - (a) Our evidence entails that $\Pr(G) > 0$
- It is easy to show that, given (a), weak dominance suffices for W_G to be the unique act that maximises expected utility
- But our assumption that
 - (b) Our evidence doesn't entail that $\Pr(G) = 0$falls short of this: our evidence may be insufficient to sensibly assign *any* probability to G at all

Risk vs Uncertainty (ctd)

- If we only assume (b), the validity of Pascal's argument hinges on whether we opt for INDIFFERENCE or MAXIMIN
 - INDIFFERENCE: The argument goes through
 - MAXIMIN: The argument doesn't go through. Counterexample:

| | | |
|--------------|-----|----------|
| | G | $\neg G$ |
| W_G | 5 | 2 |
| $W_{\neg G}$ | 2 | 2 |

If an act weakly dominates, then it has the best worst outcomes, but not vice versa

So weak domination isn't sufficient to *mandate* choice

Next week: class discussion

- Please review the key arguments discussed during this 1st half of the course and **note any queries, comments or suggestions that you may have** in relation to them

Week after next

- Topic: 'Rational belief and practical interests' (ctd)
- Reading: Same as for this week; just make sure you've read the Clifford and James pieces

References

- Fricker, M. 2009. The value of knowledge and the test of time. *Royal Institute of Philosophy Supplement* 84(64).
- Hacking, I. 1972. The Logic of Pascal's Wager. *American Philosophical Quarterly*, 9(2), pp. 186–92.
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- Kvanvig, J. (2003). *The value of Knowledge and the Pursuit of Understanding*. Cambridge: Cambridge University Press.
- Olsson, E.J. 2011: The Value of Knowledge. *Philosophy Compass* 6(12): 874–883. (Available in course reader)