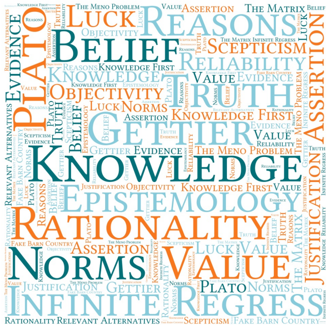

Knowledge, Individuals & Society

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Evidence and the Law - Responses

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Responding to the puzzle

Types of response

- So what is wrong with using only base rate statistics that isn't wrong with using only trace evidence?
- Revisionistic responses: nothing is wrong with either
- Rationale:
  - Both types of evidence are comparable in relation to achieving the goal of reaching true judgments with sufficient but possibly imperfect probability
  - Our bias towards eyewitness testimony, etc., is an outdated historical legacy
- We'll set these responses aside here

Types of response (ctd)

- Non-revisionistic responses: something is wrong with using only base rate statistics, for either
  - (1) epistemic reasons, connected with the goal of forming true or rational beliefs (reasons unrelated to legal context)
  - (2) ethical or practical reasons, connected with the goal of treating people morally or incentivising lawful behaviour
- In what follows: 2 non-revisionistic responses (1 epistemic; 1 instrumental), borrowing substantially from Enoch *et al* (2012) and Enoch & Fisher (2015)
- First let's set aside some less promising ideas

Some non-starters

- Suggestion #1: We would be guaranteeing a wrongful conviction in some cases, e.g. in GATECRASHER or PRISONER

  Response: True, but any evidence that falls short of guaranteeing correctness will sometimes yield wrongful convictions (see trace evidence counterparts)
- Suggestion #2: We would be punishing for belonging to a demographic

  Response: No, we'd be punishing people for committing offences; our evidence that they committed them would be their belonging to a certain demographic

Some non-starters (ctd)

- Suggestion #3: We would be offensively denying "autonomy" or "free will" to people

  Response: Even if that were sometimes true (and relevant when so), it doesn't seem to apply when the defendant is a corporate entity like Red Taxi Co.
- Suggestion #4: We would be failing to have knowledge of the defendant's responsibility

  Response: True but

  (a) arguably, so too would we in many of the trace evidence cases

  (b) while this may be plausible for "beyond certain doubt", it isn't plausible for the lower standards

INSENSITIVITY

Insensitivity

- Recall the SENSITIVITY condition on *knowledge*

  > SENSITIVITY: Had it been the case that $\neg P$, S wouldn't have believed that P

- We saw that requiring that court evidence should provide knowledge might be too much
- But perhaps requiring that it provides justified belief is OK?
- Some have proposed a related condition for *justified belief* (Enoch *et al* 2012; Enoch & Fisher 2015), requiring the latter to be based on evidence E that is probabilistically sensitive:

  > SENSITIVITY OF EVIDENCE: Had it been the case that $\neg P$, it would probably have been the case that $\neg E$

Insensitivity & lotteries

- Recall

  LOTTERY: John buys a ticket to a lottery. You read that this lottery has 1M tickets and 1 guaranteed winner. On the basis of these statistics, you believe that his ticket will lose, since there is after all a 99.9999 chance that it will.

- We have seen: given certain assumptions, your belief that his ticket will lose isn't justified
- Many philosophers agree with this verdict
- If we grant MONOTONICITY, the same then applies to believing the defendant responsible in the trace evidence cases
- But many philosophers would *disagree* with *this* verdict (and reject MONOTONICITY)

Insensitivity & lotteries

- How do these people account for a difference between LOTTERY and the trace evidence cases?
- E-SENSITIVITY fails in in lottery cases

  LOTTERY: Had it been the case that John's ticket was going to win, there would have still been 1M tickets

- E-SENSITIVITY holds for trace evidence

  RED TAXI*: Had the taxi that hit Jeanette not been red, she probably wouldn't have said it was red

Insensitivity and our cases

- E-SENSITIVITY fails for base rate statistics (or close enough: innocence would yield either the very same or at best relevantly similar base rate statistics)

  RED TAXI: Had the taxi that hit Jeanette not been red, Red Taxi Co. would *still* have owned 80% of the taxis

  GATECRASHER: Had Jay paid, it would *still* have been the case that 90% of punters failed to pay (or at least 89%)

  PRISONER: Had Prisoner 37 been innocent, it would *still* have been the case that 99% of prisoners rioted (or at least 98%)

- Could this be the solution to our puzzle?

Insensitivity (ctd)

- Grant for sake of argument that E-SENSITIVITY is an appropriate condition for justification
- Why should courts care about justification, so defined?

  From the point of view of finding out the truth, why disregard insensitive evidence? Why care about counterfactual situations in which we would have different evidence to the evidence we actually have?

Incentives

Character evidence

- Another type of evidence:

  character evidence: evidence about the general dispositions of a person, beyond the situation of interest

- Like base rate statistics, character evidence treated with caution:

  It generally can't be introduced by prosecution to support a claim that a defendant acted in accordance with that character

- This is puzzling, if we *only* aim to maximise chances of finding out the truth
- Suggestion: we have other goals too!

Character evidence (ctd)

- In a paper on this topic, Sanchirico (2001) writes:

  "[R]ules governing what happens inside the courtroom can be understood adequately only in the context of the state's central project of regulating behavior outside the courtroom"

- Specifically, legal rules of inference have a dual aspect of (a) determining blame *and* (b) incentivising lawful behaviour
- Sanchirico reasons:
  - Both character and trace evidence allow us to infer conduct
  - But conduct only effects trace evidence
  - Hence, if we want to influence conduct through punishment, we have to key this to trace but not solely character evidence

Character evidence (ctd)

- The legal situation for character evidence is more complicated than for base rate statistics:
  - Good character evidence *can* be introduced by the *defence* (and then rebutted by the prosecution)
  - Character evidence can be later taken into account in determining *sentencing*
- See Sanchirico (2001) for how he tries to address these issues

Back to base rate statistics

- Enoch & colleagues (*ibid*) carry this line over to base rate statistics
- The idea:
  (1) Relying on base rate stats can reduce the difference between Pr(Punished | Offend) and Pr(Punished | ¬Offend)
  (2) Reducing this difference reduces the incentive to not offend
- I'll explain (2), then (1)...

A decision table

Where p = punishment and r = reward:

	Punished	¬ Punished
Offend	$r-p$	r
¬Offend	$-p$	0

EU(Offend) > EU(¬Offend)

iff $(r-p)\times$ Pr(Punished | Offend) + $r\times$ Pr(¬Punished | Offend) > $-p\times$ Pr(Punished | ¬Offend)

iff $r > p\times$ (Pr(Punished | Offend) – Pr(Punished | ¬Offend))

The case of Prisoner

- Regarding (1), note:

  If, whether or not one offends, one is guaranteed to
  (a) have one's responsibility assessed and
  (b) assessed on the sole basis of base rate stats,

  then Pr(Punished | Offend) = Pr(Punished | ¬Offend)
- This is the case in Prisoner:

  The inmates are suspects whether or not they offend and are punished regardless

The more general case

- But the above conditions don't generally hold
  (a) Refraining from behaving badly might lower the chance that your blame would even be assessed (e.g. murdering a stranger on the street)
  (b) The verdict reached might end up depending on additional factors on top of base rate stats
- These considerations will attenuate the pernicious effect of using base rate stats

Our cases of interest (ctd)

- Enoch & Fisher (2015) claim that in case (a) there is no justification for not judging on the basis of base rates alone:

  > "The incentive story thus has different implications across the two categories of cases: those in which the act would likely be performed by others regardless of whether the would-be perpetrator decides not to engage in it, and personal-context cases, in which the act will not likely be carried out by anyone else. In the latter type of case, the statistical evidence against the defendant ought to be admissible at trial."

- Gardiner (2018) claims that, unfortunately, the latter type of case "includes most crimes and liabilities"
- Did Enoch *et al* concede too much? Is Gardiner's claim correct?

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