

# LEGAL PROBABILISM

MARCELLO DI BELLO – ASU - SEPTEMBER 26, 2024

## NOTES ON GARDINER'S THE REASONABLE AND THE RELEVANT

1. If legal probabilism is right, the defendant should be found (criminally or civilly) liable if the probability of their liability is above a threshold probability, say  $> 95\%$  in criminal cases and  $> 50\%$  in civil cases. And yet, sometimes a lower probability can make one firmer in their belief that the defendant did it if the supporting is larger in quantity.
2. Gardiner uses a non-legal example about elections to illustrate this point. Can you think of a legal example? The more general point was made by Keynes:

“As the relevant evidence at our disposal increases, the magnitude of the probability of the argument may either decrease or increase, according as the new knowledge strengthens the unfavourable or the favourable evidence; but something seems to have increased in either case,—we have a more substantial basis upon which to rest our conclusion. I express this by saying that an accession of new evidence increases the weight of an argument. New evidence will sometimes decrease the probability of an argument, but it will always increase its ‘weight’.” (Keynes, John Maynard, 1921, *A Treatise on Probability*, MacMillan, p.71)

3. So the probability of a hypothesis  $H$  based on evidence  $E$  and the weight of evidence  $E$  are distinct. The probability of  $H$  (what Keynes calls ‘balance’) may decrease after taking  $E$  into account, even though the weight of the available evidence, after adding  $E$  to it, will increase.
4. Standards of proof should take into account both balance and weight, but legal probabilism only takes balance into account. That is a problem.
5. Gardiner proposes an alternative, non-probabilistic theory of standards of proof. Her theory borrows from the relevant alternative account of knowledge:

“Relevant alternatives condition for knowledge: S knows that  $p$  only if S can rule out relevant alternatives to  $p$ .” (p. 3)

6. This account of knowledge has three main components:
  - (a) Alternatives (or error possibilities)
  - (b) Relevant alternatives
  - (c) Ruling out (or addressing) relevant alternatives
7. Turning now to legal standards, three are often distinguished: proof beyond a reasonable doubt; clear and convincing evidence; preponderance of the evidence. What do they require? Here is Gardiner:

“Claim  $p$  is established to a preponderance of the evidence only if the evidence adduced rules out preponderant error possibilities.”

“Claim  $p$  is established to the ‘clear and convincing evidence’ standard only if the evidence adduced rules out the error possibilities relevant to the clear and convincing evidence standard.”

“Claim p is established beyond reasonable doubt only if the evidence adduced rules out the reasonable error possibilities.” (p. 8)

8. Error possibilities are organized concentrically, some more remote than others, with three cutoff points corresponding to the three standards of proof:

“The framework posits that error possibilities are increasingly remote. Those that are sufficiently typical must be taken seriously by the court. If they cannot be addressed by the evidence, the standard of proof is not met. An error possibility is addressed if every sub-possibility is either eliminated by the evidence or lies beyond the threshold of normality and so need not be taken seriously by the court. There are three cut-off thresholds, corresponding to the increasingly demanding standards of proof.” (p. 10)

9. How can we tell when an error possibilities must be eliminated by the evidence to meet the legal standard of proof? Gardiner does not give a straight answer:

“Many sources inform this question, including legal practice, legal training, explicit laws, court records, precedent, convention, and legal practitioners’ reflective judgements about cases.” ... The thresholds might be determined by norms of action. Norms describe the epistemic requirements for legitimating state actions such as assertion of guilt, criminal punishment, holding responsible, imposing fines, and determining life paths such as involuntary institutional confinement, child custody, and so on.” (p. 11)

10. Gardiner notes that what counts as a relevant error possibility may change over time:

“...which error possibilities are nearby or farfetched is determined, at least in large part, by what society is actually like and what tends to occur ... And these possibilities can change over time. If defendants and witnesses tend to fake X, then faking X is a nearby possibility. If police officers plant guns and drugs on unarmed citizens, then this possibility is a source of reasonable doubt.” (p. 11)

11. A virtue of Gardiner’s account is that it can solve the puzzle of naked statistical evidence. In the Blue-bus company case, for example,

“... the error possibility ‘the bus in question [was] operated by someone other than the defendant’ was preponderant. And Smith’s [statistical] evidence ... does nothing to address this error possibility ... Those who debate whether the ruling was correct ... should ... focus on whether this error possibility is significant enough to qualify as preponderant ... or remote enough to properly ignore. Statistical likelihoods inform, but do not resolve, this question.” (p. 16)

12. Let’s finally return to the distinction between weight and balance. How does Gardiner’s account of standards of proof make sense of the distinction?

“Even if the evidence considered renders culpability likely, it cannot underwrite an affirmative verdict if that evidence leaves relevant error possibilities unaddressed. High evidential balance is not enough—sometimes more evidence is needed.” (p. 17)