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LARRY LAUDAN, THE PURSUIT OF TRUTH, AND THE MEANINGLESSNESS OF BURDENS OF PERSUASION

Ronald J Allen

ABSTRACT: Inspired by the work of Larry Laudan, the meaninglessness of current conventional understandings and discussions of burdens of persuasion is demonstrated. The conventional view is that burdens of persuasion are a mechanism to fine tune error distribution at trial. To the contrary, it is demonstrated that one can have no idea what the effect will be of any instruction to the jury or direction to the trial judge on burdens of persuasion but ironically one knows to certainty that those effects will differ country to country, state to state, and event courtroom to courtroom.

KEYWORDS: Larry Laudan; naturalized epistemology; philosophy of law; burdens of persuasion; error distribution.

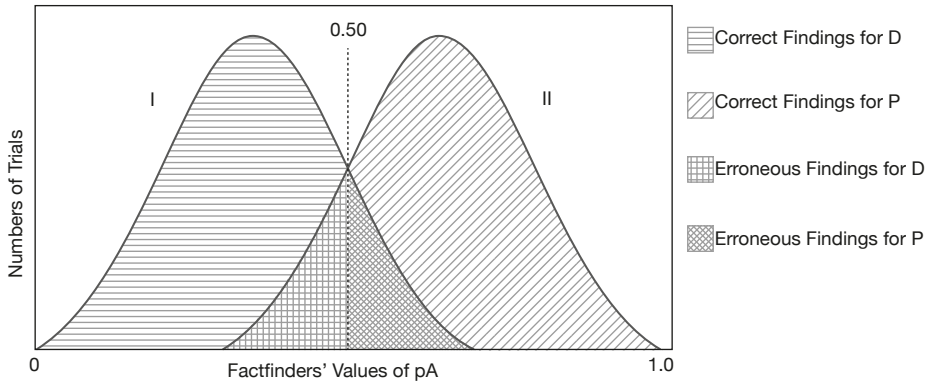
Larry Laudan was a special person. He enhanced every interaction he had with others. He was the quintessential embodiment of the first principle an educated person should embrace that one can disagree without being disagreeable. I was privileged to be invited by Larry to a number of workshops at Universidad Nacional Autónoma de México, where he was on the faculty. Although a number of participants, including me, were rather vigorous defenders of our various and conflicting points of view, Larry never once raised his voice or interrupted, waiting calmly until whoever was speaking was finished, before proceeding to provide his incisive response.

These workshops led to a deep friendship between us, which led in turn to co-authoring a series of papers—the Deadly Dilemma articles[1]—which displayed for me his gifts as a scholar and his indefatigable, laser-like focus on the truth no matter what conventional beliefs stood in the way. Those articles, like much of Larry's work, slayed more than one sacred cow. He was not indifferent to the effect of slaying sacred cows on those who believe in them, but he held truth as the highest standard and his guiding light. It was really quite remarkable to observe and to be a part of it.

The commitment to truth was unqualified and extended to critiques of his own work as well. He undoubtedly liked to be right, but he also took great pleasure in being the grain of sand that produces a pearl. As an example, he stimulated my research program knowing full well that it was going to end up contradicting aspects of his own. Let me explain.

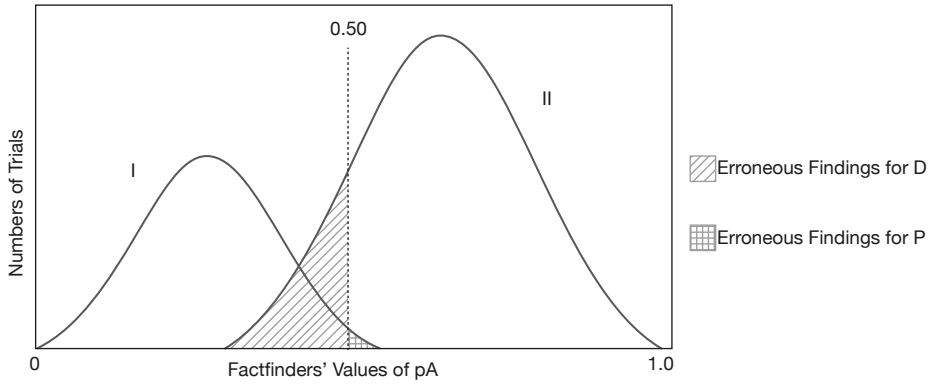
A substantial part of my early career was spent on burdens of proof, a topic that also interested Larry, although in the criminal context. One of the points it established was that the effect of burdens of persuasion was somewhat unpredictable. The standard theory in civil cases is that the preponderance standard is designed to minimize and allocate error more or less equally over the parties, thus treating them as identical in the eyes of the law. If one assumes that the number of deserving plaintiffs and defendants that go to trial is roughly equal, and jury assessments of the probability of liability are more or less rational, everything should work out just fine.

The graph below shows how this supposedly works. In this graph and the ones to follow, the X axis plots the probability assigned by the fact finder to cases and the Y axis the number of cases assigned that probability. Curve I is the set of cases in which defendants factually deserve to win and Curve II is the set of cases in which plaintiffs factually deserve to win:

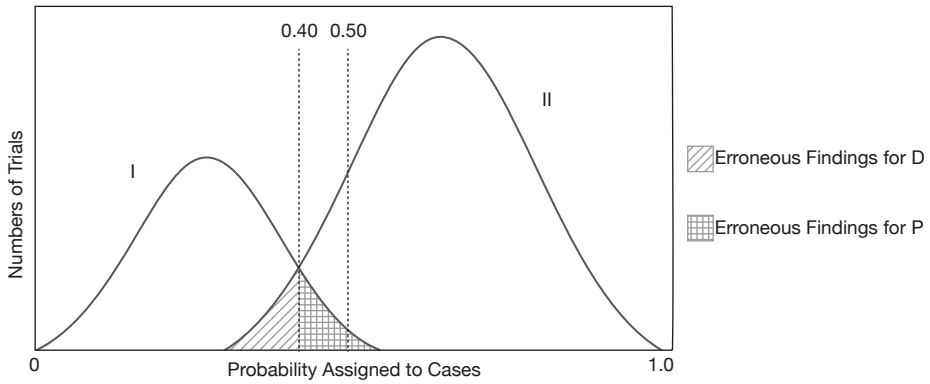


[1] Allen and Laudan (2008); Allen and Laudan (2010); Allen and Laudan (2011). These papers were inspired in part by. Allen and Shavell (2005).

If this is how the world actually is, then one can see from inspection that placing the burden of persuasion anywhere but at 0.50 will increase errors. But why would anyone think this is how the world actually is? Decisions to go to trial are complicated and made for a whole host of reasons. Suppose for example that defendants are more risk averse than plaintiffs, in which case deserving defendants would be less likely to go to trial. The graph below demonstrates what that empirical reality might be:



Here one can see from inspection that the twin aims of reducing errors and treating the parties equivalently are not satisfied, but they would be furthered by lowering the burden of persuasion to perhaps 0.40 as demonstrated in the graph below. This work also pointed out, but did not develop, that even this was a simplified picture. One would predict that any change in the burden of persuasion would precipitate changes in party behavior: [2]



[2] For an elaboration of this point, see Allen (2014).

Now the story changes. Another part of my early corpus involved the articulation of a unified constitutional theory of evidentiary devices in criminal cases[3]. Virtually all evidentiary devices manipulate the burden of persuasion, which was at the heart of the unified theory. Most do so more or less directly, but one problem for a unified theory was comment on the evidence. Comment on the evidence does not explicitly manipulate the burden of persuasion, but it does manipulate it implicitly by changing what I characterized as the relative burden of persuasion. If the judge comments favorably on either parties' case, the opposing party will have a more difficult time persuading the fact find that they deserve to win. This meant that all evidentiary devices in criminal cases could be judged by whether they lowered the prosecution's actual standard of proof (nor the formal standard) on a necessary element.

These two findings existed more or less independently of each other in my thinking for decades, and that is where Larry and his attack on proof beyond reasonable doubt come into the picture. Larry famously demonstrated the incoherence and intellectual vacuousness of the phrase "proof beyond reasonable doubt" as it is applied in American juridical proof[4]. This is what explains why almost literally no one agrees on what the phrase does or should mean[5]. Larry then proposed two solutions to clear up the mess. The first, in the spirit of his work on scientific theories, was that the prosecution should show that their explanation predicted and was consistent with newly discovered and surprising evidence. Trials do not involve discovering and explaining surprising evidence, and there is nothing equivalent to measuring whether light bends around the sun as predicted by general relativity theory[6]. The second was to define beyond reasonable doubt as the ratio of false positives and false negatives. But this simply recapitulates one of the central problems of a probabilistic interpretation of the phrase, which is that no such data ever exists[7].

He and I were discussing all of this one evening, an evening shortly after he had read the unified theory article. The thought emerged in that conversation that perhaps the two ideas—the contingency of the proof process and relative burdens of persuasion—might together yield some insight into the meaning of proof beyond reasonable doubt, which turned out to be the case. Generalize the point that comment on the evidence affects the relative burden of persuasion. So, too, does both every other evidentiary ruling, as well as the decisions of the parties to litigate.

Compare two jurisdictions, one with much more robust privilege rules than another. If those privileges favor the criminal defendant, the prosecution's task is more difficult in the jurisdiction with robust privileges than in the alternative.

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[3] Allen (1980).

[4] *See generally* Laudan (2008).

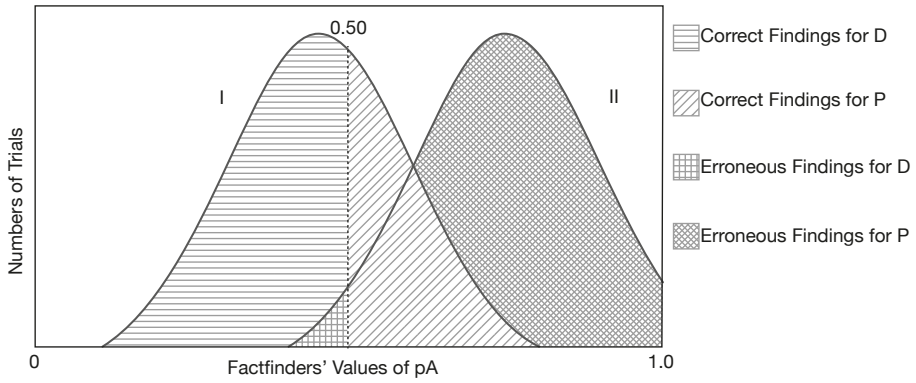
[5] For a discussion of this phenomenon, see Allen and Elliott-Smith (2025).

[6] For a discussion of this, see id. For the results of the experiment see Dyson, Eddington, and Davidson (1920).

[7] For a discussion of this, see. Allen (2010).

Although the formal burden of persuasion remains the same, the relative burden shifts, as outcomes will as well. This led to the somewhat surprising (to use Larry's phrase) conclusion that "proof beyond reasonable doubt" does not exist in any knowable form except as the emergent property of a complex adaptive system[8]. The effect of any instruction to juries or trial judges sitting as fact finders on proof beyond reasonable doubt is unknowable and will vary courtroom to courtroom, let alone state to state. Or country to country. The irony here is clear: We know that we cannot know the effect of an instruction on proof beyond reasonable doubt but we know to certainty that the effect will vary in unknowable ways. This in turn means that much traditional legal scholarship has to be retooled to deal with the criminal justice process as dynamic rather than static with knowable parameters.

And now the punchline: this is true of civil cases as well. As with criminal cases, every evidentiary ruling will affect the distribution of correct and erroneous decisions at trial, making the effect of any instruction on the civil burden of persuasion as unknowable as the effect of an instruction on proof beyond reasonable doubt. Suppose one trial judge is more lenient than another in allowing plaintiffs to prove their case. Assume the distribution of cases before the less lenient judge mirrors the ideal noted above. The distribution of cases before the more lenient judge could be something like the next graph demonstrates:



Even though the judge's interpretation of the rules governing relevancy have not, in this depiction, affected the choices to go to trial, it has affected who wins or loses.

And so, standing alone, burdens of persuasion in all cases and in all instances are largely meaningless. Although this finding is in tension with Larry's earlier arguments about how to straighten out proof beyond reasonable doubt, not only would he have embraced it, he would have co-authored this article, and for that matter the

[8] Allen and Elliott-Smith (2025).

one dealing with the criminal burden of persuasion. He would have relished being part of advancing understanding in whatever form it might take. Larry did not believe in sacred cows. He believed in uncovering the truth and in his unassuming way set an example of what it means to be a scholar. I was privileged to be his friend and colleague, and miss him dearly.

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