

Theorising Evidence Law[†]

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Abstract—What does it mean for a specialist department of legal studies, such as the Law of Evidence, to have, or to acquire, ‘philosophical foundations’? In what sense are the theoretical foundations of procedural scholarship and teaching distinctively or uniquely *philosophical*? The publication of *Philosophical Foundations of Evidence Law* (OUP, 2021), edited by Christian Dahlman, Alex Stein and Giovanni Tuzet, presents a valuable opportunity to reflect on these existential questions of disciplinary constitution, methodology and design. This review article critically examines the volume’s idiosyncratic selection of topics, structural taxonomy, epistemological priorities, and enigmatic thesis that modern evidence law is turning from rules to reasons as its organising intellectual framework. Whilst the volume is impressively interdisciplinary and cosmopolitan in authorship and outlook, some doubts are expressed about its implicit US orientation, limited engagement with institutional or doctrinal details, and marginalisation of normative criminal jurisprudence.

Keywords: evidence law, criminal jurisprudence, evidence and proof, philosophical foundations

1. *Philosophical Treatment:*

‘You get an’ology, you’re a scientist!’¹

To the extent that philosophical theorising is a mark of disciplinary sophistication, self-confidence and growing maturity, Evidence specialists should welcome the appearance of *Philosophical Foundations of Evidence Law* (PFoEL), edited by Christian Dahlman, Alex Stein and Giovanni Tuzet. This is, by my count, the nineteenth instalment of OUP’s *Philosophical Foundations of Law* series, published since 2009, and already elevating topics considerably newer and more

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[†] A review of Christian Dahlman, Alex Stein and Giovanni Tuzet (eds), *Philosophical Foundations of Evidence Law* (OUP 2021).

¹ With apologies to Maureen Lipman: www.youtube.com/watch?v=NK5-2fPyCjA.

niche than the Law of Evidence to its pantheon of philosophical self-consciousness.² Let us not be churlish: late is better than never.

The series ‘aims to develop work at the intersection of legal philosophy and doctrinal law ... provid[ing] a roadmap of current philosophical work in the field to lawyers and philosophers looking for high quality new work and ... a stimulus for further research’. The editors explain in their—regrettably brief—Introduction that ‘The principal idea of this project was to assemble and present the major philosophical and interdisciplinary insights that define evidence theory, as related to law’.³ Any aspiration to *define* must confront terminological nuances that are more than merely semantic. ‘Evidence theory’, on any competent definition, is plainly not isomorphic with substantive evidence law, nor does it replicate that slice of common law education conventionally styled Law of Evidence. Scholars conceptualising ‘evidence and proof’ move expansively tend to regard fixation on ‘law’ as unhelpfully narrow or distracting.⁴ The uses—and abuses—of evidence in legal contexts is only a small, institutionally differentiated and somewhat specialised department of the social uses of evidence (aka ‘data’ or ‘information’) more generally.⁵ Evidence Law in the classroom can be a ‘multidisciplinary subject’ in ways that evidence law in litigation practice cannot, indeed should not, be.⁶

The editors’ reference to ‘philosophical and interdisciplinary insights’ implies, correctly in my view, both that some philosophising is internal to the discipline of law (and thus not strictly *interdisciplinary*) and that some salient interdisciplinary insights are not necessarily philosophical. Threshold questions that may play on Evidence scholars’ minds include: how is the ‘philosophy of evidence law’ related to ‘evidence theory’, and what can either or both contribute to the prosaic activities of analysing, criticising and applying evidence law in academic scholarship, university teaching and legal practice? The editors situate their project both temporally and intellectually as a continuation of 1980s⁷ New Evidence Scholarship,⁸ prior to which ‘Evidence theory as related to law stayed mostly dormant’.⁹ *Dormant* is apt, because the New Evidence Scholarship was partly a revivalist rediscovery of older programmatic texts.¹⁰ Plausibly enough, the editors

² See eg Dennis Patterson and Michael S Pardo (eds), *Philosophical Foundations of Law and Neuroscience* (OUP 2016); Andrew S Gold and Paul B Miller (eds), *Philosophical Foundations of Fiduciary Law* (OUP 2014); Andrei Marmor and Scott Soames (eds), *Philosophical Foundations of Language in the Law* (2nd edn, CUP 2005).

³ PFoEL 1.

⁴ Cf Terrence Anderson, David Schum and William Twining, *Analysis of Evidence* (CUP, 2/e 2005).

⁵ Frederick Schauer, *The Proof: Uses of Evidence in Law, Politics, and Everything Else* (Harvard UP 2022); Susan Haack, *Evidence Matters: Science, Proof, and Truth in the Law* (CUP 2014); Philip Dawid, William Twining and Mimi Vasilaki (eds), *Evidence, Inference and Enquiry* (OUP 2011).

⁶ See eg Donald Nicolson, *Evidence and Proof in Scotland: Context and Critique* (Edinburgh UP 2019); Paul Roberts and Mike Redmayne (eds), *Innovations in Evidence and Proof* (Hart Publishing 2007); Peter Murphy, *Evidence, Proof and Facts: A Book of Sources* (OUP 1993).

⁷ Or 1970s’, for those with longer memories. See (standing the test of time) Laurence H Tribe, ‘Trial by Mathematics: Precision and Ritual in the Legal Process’ (1971) 84 Harv L Rev 1329.

⁸ Richard Lempert, ‘The New Evidence Scholarship: Analyzing the Process of Proof’ (1986) 66 BUL Rev 439; John D Jackson, ‘Analysing the New Evidence Scholarship: Towards a New Conception of the Law of Evidence’ (1996) 16 OJLS 309.

⁹ PFoEL 1.

¹⁰ See especially John H Wigmore, ‘The Problem of Proof’ (1913) 8 Illinois Law Review 77; John Henry Wigmore, *The Principles of Judicial Proof as Given by Logic, Psychology, and General Experience and Illustrated in Judicial Trials* (1st edn, Little, Brown & Co 1913).

single out Twining's *Theories of Evidence*¹¹ and a *Boston University Law Review* symposium on 'Probability and Inference in the Law of Evidence'¹² as watershed moments in Evidence law theory's evolution: 'These publications have irreversibly changed the direction of the study of evidence by shifting evidence scholars' focus from rules to reasons.'¹³ This is an intriguing but largely unelaborated claim, which could only be vindicated (or not) by individual chapters in the volume.¹⁴

The proposition that modern evidence law has become progressively less rule-focused resonates with experience in England and Wales: some old evidentiary rules have been abolished; others have been reformed in ways that afford more latitude to general principles and judicial discretion in their application; still other norms are not evidentiary 'rules' in the traditional legal sense.¹⁵ Whether or how the pivot away from rules has been accompanied by a newfound interest in 'reasons' as an organising intellectual framework is harder to judge. Notwithstanding scattered signposts in specialist literature,¹⁶ one might suppose that traditional concepts such as 'fact-finding', 'inference', 'proof', 'litigation' or 'legal process' remain more intuitive and intelligible to legal scholars. According to the editors, 'The shift from rules to reasons was transformative along two dimensions: interdisciplinarity and internationalization':

The realization that reasons moving the factfinding process forward are antecedent to, and consequently more important than, evidentiary rules has opened up new paths of inquiry that connected adjudicative factfinding to epistemology, mathematics, economics, psychology, sociology, political morality, and linguistics and led to further and richer explorations of how theories of probability and induction affect the understanding and reform of the law of evidence. The primacy of reasons has also created a sizable common ground for theorizing for evidence scholars from different countries. With a focus on reasons rather than rules, the differences between factfinding in the more regulated Anglo-American systems vis-à-vis the freer European systems—once understood as dramatic—became less important.¹⁷

That a landmark publication written in English should be edited by a Swede, an Israeli and an Italian is a powerful testament to Evidence scholarship's cosmopolitan aspirations. The volume's contributors are 'spread across three continents and domiciled in twelve different countries',¹⁸ and include numerous voices from beyond the common law orbit. Nonetheless, a third of the 32 contributors is

¹¹ William Twining, *Theories of Evidence: Bentham and Wigmore* (Weidenfeld & Nicolson 1985).

¹² Eric D Green, 'Boston University Law Review Symposium: Foreword' (1986) 66 BUL Rev 377 (comprising 580 pages).

¹³ PFoEL 1.

¹⁴ Indeed, in his own single-authored contribution, Stein simply announces that 'Evidence law is a system of rules that regulate the process of factfinding in the courts of law': *ibid* 96. The plot thickens.

¹⁵ I call this miscellany 'Hard-working soft law', notably embracing: the Criminal Procedure Rules and Practice Directions; statutory codes of practice; the *Crown Court Compendium* (as it now is); and a variety of official guidance and professional training materials and resources.

¹⁶ See eg Peter Tillers, 'Discussion Paper: The Structure and the Logic of Proof in Trials' (2011) 10 Law, Probability & Risk 1; Mike Redmayne, 'Appeals to Reason' (2002) 65 MLR 19.

¹⁷ PFoEL 1.

¹⁸ *ibid*.

US-based; plus Alex Stein taught in US law schools for 20 years before being appointed to the Israeli Supreme Court. This geographical concentration intimates a version of anglophone Evidence theory skewed towards *Anglo-American* Evidence theory, with a pronounced New World accent.

2. *Structural Taxonomy: The Disciplinary Ins and Outs*

After its terse Introduction, PFoEL comprises 26 chapters divided into seven parts, each containing between two and six chapters. The overall page count is 417, bulky for a monograph but relatively slim for a ‘handbook’-style Cook’s Tour of disciplinary highlights. Part I has four chapters addressing ‘Evidence, Truth, and Knowledge’. Part II, on ‘Law and Factfinding’, is the longest subdivision, numbering six chapters. Part III contains three essays on ‘Evidence, Language, and Argumentation’, linking directly into Part IV’s trio of chapters on ‘Evidence and Explanation’. Part V moves the discussion on to ‘Evidence and Probability’, with four entries, followed by the shortest subdivision, Part VI, comprising a pair of essays on ‘Proof Paradoxes’. Finally, Part VII returns to somewhat more tangible practical concerns with four chapters on the theme of ‘Biases and Epistemic Injustice’. The rationale for this selection and taxonomic arrangement are not always readily apparent. The chapter by Lena Wahlberg and Christian Dahlman on ‘The Role of the Expert Witness’, for example, concludes Part I’s epistemological discussion but is largely an exercise in institutional jurisprudence,¹⁹ supposedly the topic of Part II. Then again, ‘Law and Factfinding’ is so generalised that virtually any chapter in the book could plausibly appear there. Why is Part IV framed in terms of ‘Explanation’ rather than ‘Proof’? Does this terminology reflect the disciplinary assumptions of argumentation theorists in preference to concepts more familiar to lawyers and legal practice? Forensic probability is undeniably prominent in modern scholarship and legal practice, but the space it occupies in this volume feels indulgent. Affording ‘Paradoxes of Proof’ its own—albeit short—part seems positively eccentric, when these puzzles have previously attracted minute dissection for dubious explanatory profit.²⁰

Evidence teachers might be puzzled by some notable absences. Only one of the seven parts expressly mentions ‘law’ (or any related juridical concept), and most of the material in this part is actually concerned with forensic process and the evaluation of evidence rather than addressing normative, doctrinal or jurisprudential questions. With a handful of exceptions,²¹ individual chapters largely

¹⁹ As the authors themselves observe, ‘we have discussed the expert witness’s role in the legal factfinding process’ (64), before concluding with a summary of normative prescriptions that could have been lifted directly from English law: cf Michael Stockdale, ‘Reliability by Procedural Rule Reform? Expert Evidence and the Civil-Criminal-Family Procedure Rules Trichotomy’ in Paul Roberts and Michael Stockdale (eds), *Forensic Science Evidence and Expert Witness Testimony: Reliability Through Reform?* (Edward Elgar 2018).

²⁰ Cf Mike Redmayne, ‘Exploring the Proof Paradoxes’ (2008) 14 *Legal Theory* 281. Epistemologists will notice an obvious parallel in endlessly dissected ‘Gettier problems’: Michael S Pardo, ‘The Gettier Problem and Legal Proof’ (2010) 16 *Legal Theory* 37.

²¹ Emily Spottswood tackles ‘Burdens of Proof’; Laurence Solan extends linguistic analysis to hearsay doctrine; and Julia Simon-Kerr reconsiders relevance from a feminist perspective. Franco Taroni, Alex Biedermann and Silvia Bozza address scientific evidence, but largely in general terms of rational inference rather than evidentiary regulation.

eschew common law textbook staples. There is nothing substantial on presumptions, character evidence, witness competence, testimonial privileges, public interest immunity, rape shield, special measures for vulnerable or intimidated witnesses, memory refreshing, judicial notice, previous judgments as evidence, fair trials, confessions, privilege against self-incrimination, eyewitness identification evidence or corroboration, and little discussion of broader procedural or institutional contexts. Gabriel Broughton and Brian Leiter in their chapter caution that ‘accurate adjudication depends on more than evidence law. It depends, for example, on civil and criminal procedure ... The study of evidence law thus falls into place as one component of the broader project of studying *adjudication*’.²² Contributors across the volume freely help themselves to illustrations and examples drawn from litigation process—typically concerning contested trials—so it cannot be said that the editors’ or authors’ conceptions of ‘evidence’ or the disciplinary field of ‘Evidence’ systematically exclude ‘procedure’. Those who like to credit Bentham as the father of modern Evidence studies²³ might be well advised to follow his lead in conceptualising judicial evidence as a subpart of legal procedure, inviting further reflection on nuances of institutional practices and traditions.

Rather than the traditional textbook fare, chapter titles serve up ‘cost–benefit analysis’, ‘scenario theory’, ‘reference classes’, ‘Bayesianism’, ‘naked statistical evidence’, ‘de-biasing’, ‘epistemic injustice’ and ‘the problem of the prior’. Unless these choices are completely arbitrary or idiosyncratic, they should be related to disciplinary objectives—which require articulation and defence. Assuming some general relation between Evidence theory and Evidence Law/evidence law, such that the former is, in some sense (philosophical or more broadly theoretical) *foundational* for the latter, Evidence scholars and teachers are entitled to ask how these connections are being forged.²⁴ Bluntly, if theorists’ analyses and solutions are mainly concerned with addressing theorists’ problems, why should that theoretical activity exert any claim on the time and attention of legal practitioners or (doctrinal) evidence scholars? In the absence of more explicit editorial elucidation, initial puzzlement is predictable and some potential readers’ motivation might expire before enlightenment strikes.

²² PFoEL 26 (original emphasis).

²³ Talia Fisher muses that ‘A direct line can be drawn from Bentham’s “principle of utility” to cost-benefit analysis (CBA) so it would seem only natural that the realms of evidence law and judicial factfinding would harbor this type of reasoning’: 137 (footnote omitted). But since Bentham was a perpetual outsider to the legal establishment, which cheerfully shunned him in return, there is no reason to think that either evidence law or the Law of Evidence would be constructed in Bentham’s image any more than, say, academic philosophy is constructed in Nietzsche’s. Fred Schauer’s contribution to the volume provides some biographical context for Bentham’s ideas.

²⁴ As Stein says of the ‘statistical method’ orientated at minimising costs and error avoidance, this ‘pays no regard to the ultimate object of adjudicative factfinding’ and thus ‘exists only in the academic literature, where it serves most successfully as a tool for evaluating the overall performance of the legal system in terms of social welfare’: 106 (footnote omitted). This sounds to me like a very particular brand of (economic) political theory, with tenuous links to evidence scholarship as I understand it.

3. Epistemology Rules

Part I trumpets the primacy of epistemological concerns. First up, Hock Lai Ho's precise and considered essay on 'Evidence and Truth' argues that trials aim at 'truth' in the ordinary sense, dispensing with adjectival qualifiers such as 'legal truth', 'formal truth' or 'procedural truth' as unhelpful. Although 'the trial is vastly different from a scientific or historical inquiry',²⁵ nonetheless, Ho insists, 'adjudication of factual disputes, which is the definitive business of the trial, is aimed at ascertaining the truth'.²⁶ In the following chapter, Gabriel Broughton and Brian Leiter present the case for 'The Naturalized Epistemology Approach to Evidence', which takes truth-finding goals for granted and sets out to test existing institutional performance employing empirical social science research methods. For example, psychologists conduct mock jury studies to interrogate evidentiary doctrines, identify practical shortcomings and propose institutional reforms to enhance evidence law's 'veritistic' (truth-conducive) qualities. Advocating scientific investigation over normative theorists' armchair speculation, Broughton and Leiter insist that—sometimes exaggerated—problems of ecological validity and other methodological limitations can, in general, be overcome through superior research designs. Their own illustrations of naturalised approaches to eyewitness testimony and character evidence are thoughtful and modestly circumspect in their recommendations. The discussion, however, proceeds on the footing that evidence law means the US Federal Rules of Evidence, and does not seem to have any specifically philosophical content. Charitably, the point is that philosophical analysis is required to clarify the concepts employed in framing empirical inquiries,²⁷ though this is not expressly stated.²⁸

In 'Proven Facts, Beliefs, and Reasoned Verdicts', Jordi Ferrer takes aim at the 'subjectivist' conception of factfinder belief. His reading of American legal sources leads him to conclude that common lawyers' probabilistic conceptions of standards of proof are no less subjectivist than the classical *intime conviction* prevalent in modern continental European legal systems. Subjectivism in decision standards is bad epistemology,²⁹ and moreover, Ferrer argues, it is incompatible with giving reasons for adjudicative determinations as required by procedural due process and (European) human rights law. This chapter vindicates the editors' promise of an Evidence (theory) scholarship invigorated by comparative

²⁵ PFoEL 16.

²⁶ *ibid* 14. According to the Introduction, 'Ho defends the classical—yet not universally accepted—proposition that trials aim primarily at determining the truth of disputed propositions of fact': *ibid* 2 (original emphasis). In fact, Ho examines this claim without explicit endorsement: cf Hock Lai Ho, *A Philosophy of Evidence Law—Justice in the Search for Truth* (OUP 2008) 48–9. The question of *primacy* goes to the heart of the debate, a point not lost on Amaya: 'it is critical to notice that truth is a momentous, but hardly a unique, value in adjudication. The adequacy of justificatory standards for legal factfinding should be accordingly assessed against the plurality of values (epistemic and otherwise) that trials are meant to serve, rather than, exclusively, on their truth-conduciveness': 242.

²⁷ Exemplified by Michael S Pardo and Dennis Patterson, *Minds, Brains, and Law: The Conceptual Foundations of Law and Neuroscience* (OUP 2013).

²⁸ The philosophical connection is clearer in Ronald J Allen and Brian Leiter, 'Naturalized Epistemology and the Law of Evidence' (2001) 87 Va L Rev 1491.

²⁹ Larry Laudan, 'Is Reasonable Doubt Reasonable?' (2003) 9 Legal Theory 295.

jurisprudence, and does more than most to illuminate the somewhat enigmatic claim that Evidence law has shifted, or should shift, its primary focus from rules to reasons. Ferrer's central argument is restricted to adjudicative contexts, such as civil litigation, in which the duty to give reasons prevails, and therefore does not encompass criminal jury trials in England and Wales. Ferrer ventures that 'in English-speaking countries ... the current discussion is not so much about whether or not reasons should be given for decisions as about how far this duty extends'.³⁰ Mandating juries to deliver reasoned verdicts is an interesting thought experiment with credible proponents,³¹ but there are telling grounds for scepticism³² and no proximate likelihood of reform. Whilst Ferrer tends to assimilate 'English-speaking literature' to US jurisprudence and commentary, the standard of proof now officially endorsed in English criminal trials is not even superficially probabilistic.³³ Moreover, it is difficult to see how an entity like a jury, charged with rendering its collective decision,³⁴ could have 'subjective beliefs' akin to an individual mind.

Wahlberg and Dahlman's essay on 'The Role of the Expert Witness' completes Part I's quartet. Cutting through abstruse theoretical controversies, it engages directly with the epistemological credentials of institutional practices. Legal scholars and practitioners will already know that expert witnesses should assist the factfinder, stick to the question(s) assigned and avoid expressing views on either questions of law or ultimate issues of fact.³⁵ Interdisciplinary conversation works in both (or multiple) directions, however, and these juridical axioms may be less widely appreciated by expert witnesses and other non-lawyers. Operating within a broadly 'Bayesian' intellectual framework, Wahlberg and Dahlman contend that 'The role of the expert witness in the evaluation of evidence is limited to how strongly the evidence supports the hypothesis ... To speak on the likelihood ratio and be silent on the posterior probability'.³⁶ Accepting (as one should) that Bayesianism is *logically* sound, practical jurisprudence is always mediated by institutional realities, calling for granular engagement with particular legal jurisdictions and regulatory structures. For example, there is at least a fighting

³⁰ PFoEL 41.

³¹ John D Jackson, 'Unbecoming Jurors and Unreasoned Verdicts: Realising Integrity in the Jury Room' in Jill Hunter, Paul Roberts, Simon NM Young and David Dixon (eds), *The Integrity of Criminal Process* (Hart Publishing 2016). The general argument for reason-giving in adjudication is undeniably compelling: see HL Ho, 'The Judicial Duty to Give Reasons' (2000) 20 LS 42.

³² Paul Roberts, 'Does Article 6 of the European Convention on Human Rights Require Reasoned Verdicts in Criminal Trials?' (2011) 11 Human Rights Law Review 213. See also Kayla A Burd and Valerie P Hans, 'Reasoned Verdicts: Oversold?' (2018) 51 Cornell Int'l LJ 319, 359–60 ('requiring reasons may disrupt juror decision making in unanticipated ways ... [and] will undermine the independence of jurors and juries').

³³ Criminal trial juries in England and Wales are directed to be 'sure' of guilt, or otherwise acquit: Judicial College, *The Crown Court Compendium—Part I: Jury and Trial Management and Summing Up* (August 2021) 5-2, [8]; *R v Smith (Scott)* [2012] EWCA Crim 702; *R v Majid* [2009] EWCA Crim 2563; *R v Blackford* [2009] EWCA Crim 1684 (rejecting 'beyond reasonable doubt' in favour of the standard articulated by Goddard CJ in *R v Summers* [1952] 1 All ER 1059, CCA).

³⁴ Some researchers wrongly assume that jurors decide by personal (subjective) vote, when in fact they are instructed to deliberate together in order to produce a single (objective, or for those with objectivity-phobia, 'inter-subjective') jury verdict.

³⁵ Paul Roberts, *Roberts and Zuckerman on Criminal Evidence* (3rd edn, OUP 2022) ch 11.

³⁶ PFoEL 59.

chance of trying to explain to professional judges why they should not confuse the probability of the evidence assuming the truth of the hypothesis (assessing ‘weight of evidence’, as expressed by the likelihood ratio)³⁷ with the probability of the hypothesis in light of the evidence (the disputed facts in the litigation),³⁸ but there is virtually no chance of trying to explain this to a lay jury during a contested criminal trial.³⁹ Lay factfinders must be insulated from illegitimately ‘transposing the conditional’⁴⁰ by other procedural safeguards. Lurking complexities are magnified by comparative lenses,⁴¹ and cannot always be resolved simply by appealing to general (epistemic) principles.

With epistemology as its guiding principle and method, Evidence law theory can be simultaneously philosophical, interdisciplinary and cosmopolitan, but this methodological polymorphism comes at a price. Common law orthodoxy, as reflected in successive editions of *Cross on Evidence* and the US Federal Rules of Evidence (FRE), presupposes a ‘trans-substantive’ epistemic disciplinary foundation, but modern English law does not.⁴² Rather, criminal procedure and evidence in England and Wales is effectively a different disciplinary specialism to civil procedure,⁴³ and the doctrinal bridge which traditionally linked the two parts is increasingly slender and rickety. When epistemology supplies the primary analytical lens and organising taxonomy, the gap between Evidence Law theorising in the classroom and applied evidence law in the courtroom almost inevitably widens. This fissure risks alienating law teachers aiming to inculcate professional skills and provide students with a sociologically realistic picture of litigation practice in their own jurisdiction. For all that comparative studies are invariably enriching, theorising indexed to local doctrine will, in a world of opportunity costs, predictably trump theories adapted to foreign law and practice.

4. Looking for Law

The orthodox ‘Thayerite’ conception of evidence law has long been criticised for its obsession with questions of admissibility, or ‘exclusionary rules’, to the neglect

³⁷ See eg Anders Nordgaard and Birgitta Rasmusson, ‘The Likelihood Ratio as Value of Evidence: More than a Question of Numbers’ (2012) 11 Law, Probability & Risk 303. But cf Charles EH Berger and Klaas Slooten, ‘The LR Does Not Exist’ (2016) 56 Science and Justice 388.

³⁸ Popularly, ‘the prosecutor’s fallacy’: see *R v Doherty and Adams* [1997] 1 Cr App R 369, CA; William C Thompson and Edward L Schumann, ‘Interpretation of Statistical Evidence in Criminal Trials: The Prosecutor’s Fallacy and the Defense Attorney’s Fallacy’ (1987) 11 Law and Human Behavior 167.

³⁹ As English law is well aware: *R v Adams (No 2)* [1998] 1 Cr App R 377, CA; *R v Adams* [1996] 2 Cr App R 467, CA.

⁴⁰ That is to say, illegitimately substituting the probability of the evidence assuming an hypothesis, $p(E | H)$, with the probability of the hypothesis assuming the evidence, $p(H | E)$. See Colin Aitken, Paul Roberts and Graham Jackson, *Fundamentals of Probability and Statistical Evidence in Criminal Proceedings*, RSS Practitioner Manual No 1 (Royal Statistical Society 2010).

⁴¹ Consider eg the observation that ‘Whether the hypothesis is proven or not is an issue of law that should be decided by the factfinder’: PfoEL 59. Wahlberg and Dahlman plainly mean that the issue is one for resolution by *the tribunal*. But a common lawyer would call this disputed factual hypothesis a question of fact, not law.

⁴² According to rule 1.1 of the Criminal Procedure Rules, ‘The overriding objective ... is that criminal cases be dealt with justly’, further particularised with both epistemic and non-epistemic components.

⁴³ Paul Roberts, *Roberts and Zuckerman’s Criminal Evidence* (3rd edn, OUP 2022); cf Adrian Zuckerman, *Zuckerman on Civil Procedure: Principles of Practice* (4th edn, Sweet & Maxwell 2021).

of broader issues of relevancy, inference, proof and fact-finding.⁴⁴ Featuring only two chapters (out of 26) taking exclusionary rules as their primary theme, PFoEL might be suspected of a rather dramatic over-correction.

'Jeremy Bentham, one of history's great haters, hated many things, and among them was the law of evidence',⁴⁵ writes Frederick Schauer in his entertaining chapter on 'The Role of Rules in the Law of Evidence'. Schauer poses the question why, despite the apparent common sense of Bentham's 'free proof' anti-nomianism, 'the law of evidence ... remains substantially an affair of rules'.⁴⁶ Schauer is unpersuaded by standard rationalisations implying that jurors cannot be trusted with problematic evidence.⁴⁷ After all, professional judges may be no less susceptible to rationality lapses and cognitive biases, potentially inverting the Benthamite logic: perhaps we need *more* exclusionary rules to neutralise the infirmities of judicial reasoning. More fundamentally, Schauer argues, untrammelled official discretion in adjudication is incompatible with the rule of law,⁴⁸ and this foundational normative commitment should shift the burden of argument to modern-day proponents of Bentham's 'natural system' of common sense inference. To the contrary, 'perhaps it is the free proof tradition rather than the rule-based tradition that is in need of serious reconsideration'.⁴⁹

In the following chapter, Jules Holroyd and Federico Picinali explore 'whether integrity plays a meaningful role as a standard of conduct for the criminal justice authorities, with specific regard to the gathering and the use of evidence'.⁵⁰ Aligning themselves with sceptical sentiment⁵¹ and to 'curb the growing enthusiasm for integrity',⁵² they develop their intuition⁵³ that appeals to 'integrity' in evidentiary discourse are superfluous and obfuscating. Meticulous conceptual analysis yields no definitive conclusion: 'Our aim is not to claim that integrity is a useless tool in theorizing about, and in implementing, criminal procedure; rather,

⁴⁴ William Twining, *Rethinking Evidence: Exploratory Essays* (Blackwell 1990). More recently, John Jackson and Paul Roberts, 'Beyond Common Law Evidence: Reimagining, and Reinvigorating, Evidence Law as Forensic Science' in Darryl K Brown, Jenia Iontcheva Turner and Bettina Weisser (eds), *The Oxford Handbook of Criminal Process* (OUP 2019).

⁴⁵ PFoEL 69.

⁴⁶ *ibid.*

⁴⁷ See also Frederick Schauer, 'On the Supposed Jury-Dependence of Evidence Law' (2006) 155 U Pa L Rev 165.

⁴⁸ As Schauer memorably puts it, with a nod to Spike Lee: "Do the right thing" may work well as the title of a movie, but no society has yet come to the conclusion that it works well as the best approach to social organization and institutional design': *ibid* 78 (footnotes omitted). On the virtues of legal formalism, see Frederick Schauer, 'Formalism' (1988) 97 Yale LJ 509; Neil McCormick, *Institutions of Law* (OUP 2008); Robert S Summers, 'How Law Is Formal and Why It Matters' (1997) 82 Cornell L Rev 1165.

⁴⁹ PFoEL 79.

⁵⁰ *ibid* 85.

⁵¹ Cf Andrew Ashworth, 'Exploring the Integrity Principle in Evidence and Procedure' in Peter Mirfield and Roger Smith (eds), *Essays for Colin Tapper* (OUP 2003). More optimistically, see Paul Roberts and others, 'Introduction: Re-examining Criminal Process through the Lens of Integrity' in Hunter and others (n 31).

⁵² PFoEL 97.

⁵³ With their casual reference to an 'intuition pump' (*ibid* 85), we have a rare sighting of a *bona fide* philosophical construct. See Daniel C Dennett, *Intuition Pumps and Other Tools for Thinking* (Penguin 2014); Peter S Fosl and Julian Baggini, *The Philosopher's Toolkit: A Compendium of Philosophical Concepts and Methods* (3rd edn, Wiley 2020) §2.6.

it is to show the challenges faced, and as yet unmet, by proponents of integrity.⁵⁴ As it happens, I anticipate that this challenge *can* be met, by conceptualising ‘integrity’ as an integrative ideal⁵⁵ and practical attitude rather than as another freestanding exclusionary rationale. Holroyd and Picinali acknowledge that this conception, which they associate with ‘balancing’, is not vulnerable to their main conceptual critique, but add, reasonably enough, that further implications ‘would require careful scrutiny’.⁵⁶

Alongside several other excellent contributions of which space precludes discussion,⁵⁷ these two chapters distinguish themselves as genuine efforts to connect legal doctrine with its philosophical foundations.⁵⁸ They exemplify and intimate the further possibilities of a distinctively *jurisprudential* reconstruction of (criminal) evidence and procedure.

5. Arguments, Reasons and Proof

Parts III and IV are devoted to argumentation theory, a somewhat arcane sub-field of philosophy, which originally grew out of a reaction against the strictures of formal logic⁵⁹ and subsequently developed its own interdisciplinary debates with contributions from computer science, AI, cognitive psychology, rhetoric, linguistics and narratology, amongst others.⁶⁰ Overlapping with Part V’s exploration of (Bayesian) probability and the logic puzzles dissected in Part VI, fully 12 of the book’s 26 chapters focus on arguments.

Floris Bex’s refreshingly non-technical essay on ‘Argumentation and Evidence’ affords an exemplary introduction to this literature.⁶¹ Proceeding from the truism that ‘Argumentation is central to legal and evidential reasoning’,⁶² Bex outlines ‘how arguments based on evidence to conclusions in a case can be built, how these arguments can be attacked and defended against counterarguments, and how generalizations can be used and analyzed in argumentation’. He concludes by briefly considering some methodological limitations. One problem is that arguments tend to be linear and schematic (as their graphical representations vividly show),⁶³ at least compared to the more richly articulated ‘stories’ or

⁵⁴ PFoEL 84.

⁵⁵ Cf Ronald Dworkin, *Law’s Empire* (Fontana 1986); Gerald J Postema, ‘Integrity: Justice in Workclothes’ (1997) 82 Iowa L Rev 821.

⁵⁶ PFoEL 90.

⁵⁷ Including Dale A Nance, ‘Weight of Evidence’; a taster for Dale A Nance, *The Burdens of Proof: Discriminatory Powers, Weight of Evidence, and Tenacity of Belief* (CUP 2016).

⁵⁸ Stein’s chapter, on ‘Second-Personal Evidence’, is also jurisprudential in style and Hohfeldian inspiration, but its intended audience is unclear. The opening sentence seemingly implies that the argument is old hat to lawyers: ‘Before Hohfeld, legal insiders intuited that law is second-personal in all of its operations. After Hohfeld, they knew it’: PFoEL 96.

⁵⁹ Stephen E Toulmin, *The Uses of Argument* (1958; updated edn CUP 2003).

⁶⁰ Argumentation theory is closely associated with the work of Douglas Walton, who died in January 2020: see Katie Atkinson and others, ‘In Memoriam Douglas N Walton: The Influence of Doug Walton on AI and Law’ (2020) 28 Artificial Intelligence and Law 281.

⁶¹ See also Henry Prakken, ‘Analysing Reasoning About Evidence with Formal Models of Argumentation’ (2004) 3 Law, Probability & Risk 33.

⁶² PFoEL 183.

⁶³ Wigmore is, once more, the pioneer and inspiration: see Peter Tillers and David Schum, ‘Charting New Territory in Juridical Proof: Beyond Wigmore’ (1988) 9 Cardozo L Rev 907; Terrence Anderson, David Schum and William Twining, *Analysis of Evidence* (2nd edn, CUP 2005).

‘narratives’ that human reasoners find naturally appealing.⁶⁴ This theme is developed by Anne Ruth Mackor and Peter van Koppen in their chapter on ‘The Scenario Theory about Evidence in Criminal Law’.⁶⁵ A second, well-rehearsed criticism of argumentation analysis is that it does not directly generate criteria of probative value or ‘weight’ of evidence, prioritising logical relations above the *quality* of inferential conclusions. Argumentation theory insists that inductive inferential reasoning is not automatically fallacious simply because its conclusions are defeasible.⁶⁶ All empirical propositions are vulnerable to sceptical doubt and any belief about empirical facts may be mistaken, which is just another way of saying that all empirical inference is probabilistic. Forthwith to the topic of Part V, ‘Evidence and Probability’.

In ‘The Logic of Inference and Decision for Scientific Evidence’, Franco Taroni, Silvia Bozza and Alex Biedermann clarify the problem of reasoning under uncertainty in legal proceedings employing the tools of probability, especially subjective Bayesianism, as a framework for rational inference in forensic science. This commendably accessible contribution highlights the distinction between inference and decision, the conflation of which has traditionally bedevilled scientific evidence and expert witness testimony.⁶⁷ ‘The role of probability’, they explain, ‘is nothing less than to ensure logical reasoning’.⁶⁸

Bayes’ theorem specifies how to re-organize one’s state of mind based on new data, that is how to update initial beliefs (i.e., prior to data acquisition) about propositions of interest. This idea of updating beliefs in the light of new information is conceptualized in terms of the likelihood ratio, a rigorous concept for a balanced measure of the degree to which particular evidence is capable of discriminating between competing propositions put forward by parties at trial.⁶⁹

This chapter promotes critical understanding of the conceptual foundations and logic of probabilistic reasoning by way of antidote to rote learning of formal axioms and parroting mindless mantras. Forensic scientists are not necessarily any more proficient in probability or statistics than lawyers. Clarifying institutional roles and responsibilities in legal proceedings (already stressed by Wahlberg and

⁶⁴ Nancy Pennington and Reid Hastie, ‘A Cognitive Theory of Juror Decision Making: The Story Model’ (1991) 13 Cardozo L. Rev 519; Emma Cunliffe, ‘Judging, Fast and Slow: Using Decision-Making Theory to Explore Judicial Fact Determination’ (2014) 16 E & P 139.

⁶⁵ See also Peter J van Koppen and Anne Ruth Mackor, ‘A Scenario Approach to the Simonshaven Case’ (2020) 12 Topics in Cognitive Science 1132; Paul Roberts, ‘Scenarios, Probability and Evidence Scholarship, Old and New’ (2020) 12 Topics in Cognitive Science 1213.

⁶⁶ Douglas Walton, ‘Nonfallacious Arguments from Ignorance’ (1992) 29 American Philosophical Quarterly 381. Formal logic obeys the ‘principle of monotony’, entailing that established truths are impervious to more information—they are *indefeasible*; or else they are not true. See Igor Douven, ‘Abduction’ in *The Stanford Encyclopedia of Philosophy* (Spring edn, 2011).

⁶⁷ Alex Biedermann, Franco Taroni and Colin Aitken, ‘Liberties and Constraints of the Normative Approach to Evaluation and Decision in Forensic Science: A Discussion towards Overcoming Some Common Misconceptions’ (2014) 13 Law, Probability & Risk 181.

⁶⁸ PfoEL 255.

⁶⁹ *ibid* 254.

Dahlman) helps to explain why ‘claims by scientists regarding the use of formal methods of reasoning cannot easily be carried over to the conceptual problems encountered by lawyers and, hence, are met with skepticism’.⁷⁰ In ‘Bayesianism: Objections and Rebuttals’, Norman Fenton and David Lagnado expound more technical features of subjective Bayesian reasoning and advocate formal modelling of likelihood ratios through Bayesian networks employing computational algorithms.⁷¹ They urge that ‘Proper use of Bayesian reasoning has the potential to improve the efficiency, transparency, and fairness of criminal and civil justice systems’,⁷² not least by neutralising pervasive reasoning errors, including the notorious ‘prosecutor’s fallacy’.⁷³ The Bayesians do not have it all their own way. Having catalogued the errors of ‘probability theorists’ (who would be wrong even if they were right⁷⁴) in the previous part, Mike Pardo and Ron Allen conclude Part V, with their second contribution, on ‘Generalizations and Reference Classes’, by larding on further criticism: ‘Due to the epistemological limitations flowing from the reference-class issue, mathematical models do not very well capture the probative value of evidence.’⁷⁵

Without becoming embroiled in complex and long-running controversies, four brief observations are pertinent. First, whilst probability undoubtedly merits discussion in a book on the philosophical/theoretical foundations of evidence law, the extent of the coverage relative to other topics foreshortened or omitted entirely feels unbalanced. Secondly, to the extent that some theoretical debates or ‘paradoxes’⁷⁶ are *purely theoretical*, their claims to foundational status for evidence law appear dubious.⁷⁷ It strikes me, for example, that the so-called ‘problem of the prior’⁷⁸ is only a ‘problem’ for committed legal Bayesians, leaving conventional jurisprudential wisdom untroubled.⁷⁹ Thus, Dahlman and Kolflaath’s solution

⁷⁰ *ibid* 262. The American accent extends to spelling!

⁷¹ See also Franco Taroni and others, *Bayesian Networks for Probabilistic Inference and Decision Analysis in Forensic Science* (2nd edn, Wiley 2014); Graham Jackson, Colin Aitken and Paul Roberts, *Case Assessment and Interpretation of Expert Evidence*, RSS Practitioner Manual No 4 (Royal Statistical Society 2014); Bernard Robertson, GAVignaux and Charles Berger, *Interpreting Evidence: Evaluating Forensic Science in the Courtroom* (2nd edn, Wiley 2016); Ron Allen and Mike Redmayne (eds), *Special Issue on Bayesianism and Juridical Proof* (1997) 1(5) E & P 253.

⁷² PFoEL 283.

⁷³ Thompson and Schumann (n 38); David J Balding and Peter Donnelly, ‘The Prosecutor’s Fallacy and DNA Evidence’ [1994] Crim LR 711.

⁷⁴ That is to say, even if it were true that ‘probability theory in the guise of likelihood ratios gives purchase on the concept of probative value’, this would still be a false account of adjudication practice as it actually exists in common law jurisdictions: ‘were the probability theorists right, they would obviously be wrong as an explanation of juridical proof ... Thus, the probability argument would amount to a criticism of trial practice rather than an explanation of it’: PFoEL 212.

⁷⁵ *ibid* 312.

⁷⁶ Or so-called paradoxes: cf Roy Sorensen, *A Brief History of the Paradox: Philosophy of the Labyrinths of the Mind* (OUP 2005).

⁷⁷ Cf Taroni, Bozza and Biedermann’s caution that ‘largely theoretical topics such as “naked statistical evidence” ... are based on peculiar sets of assumptions that hardly ever map suitably onto problems encountered by legal systems in operation, not least because the problem in the first place is not one of probability, but decision’: PFoEL 262.

⁷⁸ For Christian Dahlman and Eivind Kolflaath, ‘The Problem of the Prior in Criminal Trials’, the motivating question is ‘If a legal factfinder uses Bayesian updating to assess the evidence in a criminal trial, what prior probability should the factfinder start out with?’: *ibid* 287. If any legal factfinder truly were this kind of Bayesian updater, somebody would presumably have noticed by now. But this chapter’s masthead joke (no spoilers) is worth the price of admission.

⁷⁹ Richard D Friedman, ‘A Presumption of Innocence, Not of Even Odds’ (2000) 52 Stan L Rev 873.

resembles the logic of undergoing eye surgery to compensate for wearing dark glasses. Why not simply ditch the theoretical spectacles and pre-empt excruciating correctives?

Thirdly, however, it does not follow from the fact that terms such as ‘subjective Bayesianism’,⁸⁰ ‘likelihood ratio’,⁸¹ ‘reference class’⁸² or, indeed, ‘probability’ are not common currency in criminal litigation or doctrinal evidence law scholarship that they are irrelevant to practical institutional concerns. In fact, forensic scientists and other expert witnesses are already routinely employing these concepts and formulae in their casework, so lawyers and judges must educate themselves and strive to keep up. Probabilistic thinking and reference class problems are inherent features of human rationality, cognition, inferential reasoning and decision making, springing notorious traps on the unwary. These banana skins of thought do not vanish just because we choose to ignore them.

A fourth observation further interrogates the vaunted priority of ‘reasons’ over rules in theorising evidence law. Argumentation theorists and epistemologists⁸³ distinguish between contexts of inquiry and contexts of justification, roughly, between looking for, gathering, organising and analysing evidence on the one hand and evaluating, forming beliefs or making decisions on the basis of evidence—evidence-based beliefs or decisions—on the other.⁸⁴ For decisions to be rational, they must be reasoned. So contexts of justification are fundamentally concerned with *reasons*. If the question is straightforwardly one of belief, then rationality demands that one should believe what one has most reason to believe; and for many (admittedly not all) questions, the best evidence will give the best reasons, or ‘epistemic warrant’, for belief (*evidentialism*). If, on the totality of evidence, it looks like *p* is true,⁸⁵ you should (rationally) believe *p*. In the context of legal adjudication, the best epistemic warrant for the tribunal’s decision is the best evidence, or at any rate sufficient evidence to satisfy the applicable proof threshold—in legal parlance, the burden and standard of proof.⁸⁶ When legal fact-finders are called on to explain the reasons for their decisions, they are enjoined to explain what evidence they found compelling in supporting particular factual

⁸⁰ Mike Redmayne, ‘Bayesianism and Proof’ in Michael Freeman and Helen Reece (eds), *Science in Court* (Ashgate 1998).

⁸¹ Anders Nordgaard and Birgitta Rasmussen, ‘The Likelihood Ratio as Value of Evidence: More than a Question of Numbers’ (2012) 11 *Law, Probability & Risk* 303.

⁸² Ron Allen and Paul Roberts (eds), *Special Issue on the Reference Class Problem* (2007) 11(4) *E & P* 243.

⁸³ See also ‘Coherence in Legal Evidence’ by Amalia Amaya, which expounds and defends a theory of ‘virtue coherentism’ as the best solution ‘to the problem of the coherence bias that cuts off coherence from justification’ (PFoEL 243), and lays out an agenda for further interdisciplinary research in social epistemology and related fields. This chapter emphatically ticks the ‘philosophy’ box, but says little about ‘legal evidence’.

⁸⁴ ‘In philosophy’, it has been observed, rather dauntingly, ‘the distinction between justification and discovery has vexed scholars for millennia’: David Schum, ‘Marshaling Thoughts and Evidence during Fact Investigation’ (1999) 40 *S Tex L Rev* 401, 417.

⁸⁵ Equivalently, ‘*p* is the case’; or simply *p*.

⁸⁶ Cf Emily Spottswood’s contribution on ‘Burdens of Proof’, conceptualising ‘Burdens of proof ... as functions that map a measure of case strength onto variations in the level of applicable sanctions’ (PFoEL 121). The gulf between legal theory and evidentiary doctrine could hardly be more apparent. Like the chapter by Talia Fisher on ‘Cost–Benefit Analysis of Evidence Law and Factfinding’, this style of theorising—reflecting broader path dependencies in anglophone research programmes—is alien to British evidence law scholarship: *two nations divided by a common (law) language*.

inferences, ultimately leading to the resolution of litigated claims or allegations—Wigmore’s ‘ultimate probandum’.

If we focus on contexts of justification, and more specifically on the evidential adequacy of trial verdicts, ‘reasons’ can be theorised as more fundamental in legal adjudication than (doctrinal) rules. Practising lawyers and legal scholars, however, currently think in terms of ‘proof’ rather than ‘reasons’, requiring an effort of translation from orthodox terminology and intellectual frameworks. But if, as it seems, these alternative conceptual schemas are linguistically fungible, ‘Evidence and Proof’ would be a more transparent and intelligible theoretical framing than ‘Evidence and Reasons’. Moreover, Evidence law as traditionally understood in UK jurisdictions is not much concerned with contexts of justification, because jury verdicts are not publicly reasoned⁸⁷ and, even post-Human Rights Act 1998, magistrates’ courts’ decisions are sparsely reasoned and of limited doctrinal interest. Justification in orthodox common law evidentiary thinking mostly relates to judicial rationales for the development and application of evidentiary rules, not to the rationality of fact-finding. Justification in the common law world, in other words, traditionally concerns law, not facts. Relatedly, legal argumentation in relation to evidence is generally conceived as referring to arguments addressed to judges about the law, nowadays addressing forensic reasoning rules as well as questions of admissibility.⁸⁸ If the philosophical/theoretical foundations of Evidence Law are primarily orientated to contexts of justification, it remains unclear how they can be foundational for common law evidence.

6. *More Institutional Bias*

Part VII extends the volume’s epistemological framing into more concrete applications. Reprising the naturalised approach championed by Broughton and Leiter, Justin Sevier suggests that ‘Empirical psychology is a natural fit for understanding the law of evidence but is also substantially at odds with it’,⁸⁹ giving rise to ‘methodological and philosophical challenges’.⁹⁰ Empirical psychology is a ‘scientific discipline [whose] goal is to discover truth’. Trial rules of evidence, by contrast, ‘routinely balance the factfinder’s quest for the truth with other policy considerations, including the procedural rights of criminal defendants and the protection of important societal relationships’, leading to the exclusion of ‘otherwise highly probative information ... potentially at the expense of decision accuracy’.⁹¹ The ‘disconnect’⁹² that Sevier is describing is only elliptically ‘philosophical’. A more straightforward jurisprudential analysis is that adjudication serves *normative* ends, to which accurate fact-finding is a (major) functional contributor rather

⁸⁷ I stress the lack of publicity, as opposed to the absence of reasons. We assuredly want juries to have convincing reasons for their decisions, but we do not necessarily want (or need) to know what those reasons were. Cf JC Smith, ‘Is Ignorance Bliss? Could Jury Trial Survive Investigation?’ (1998) 38 *Medicine, Science and the Law* 98.

⁸⁸ *Roberts and Zuckerman’s Criminal Evidence*, ch 15.

⁸⁹ PFoEL 349.

⁹⁰ *ibid* 350.

⁹¹ *ibid*.

⁹² *ibid*.

than a dominant purpose. The point of adjudication is to do justice according to law. This ordering of priorities is obscured by assuming the centrality of accurate fact-finding and treating all other ‘policy’ factors as side-constraints potentially detracting from (‘at the expense of’) factual rectitude, in the manner of traditional Law of Evidence scholarship and its US FRE iteration in particular.⁹³ Important normative and jurisprudential questions that, to my mind, ought to be central to theorising about judicial evidence are mostly absent from the relentless truth-instrumentalism of epistemic priority.⁹⁴ Traditional common law Evidence scholarship gravitated towards rules with obvious epistemological salience, such as the hearsay prohibition,⁹⁵ whilst neglecting foundational features of criminal procedure, including the presumption of innocence, the privilege against self-incrimination and the right to a fair trial. A more comprehensively normative theoretical framework, still incorporating significant epistemological components, could claim greater fidelity to evidence law as practised (at least in my jurisdiction) and cast Evidence law theory in a substantially different light.

None of which directly contradicts Sevier’s (or Broughton and Leiter’s) project of investigating the adequacy of evidence law’s empirical assumptions utilising the tools of experimental psychology and social science,⁹⁶ or denigrates reformist aspirations to improve verdict inaccuracy *insofar as data and proposals legitimately relate to epistemic objectives*. Conversely, ‘scientific’ methods cannot displace or circumvent normative (jurisprudential or political morality) arguments on pain of naturalistic fallacy. Sevier assumes the FRE and US adversarial litigation as the default referents of ‘evidence law’ and legal process. I am sceptical about his assertion that ‘evidence law is, at its core, deeply rooted in psychology’,⁹⁷ but it is hard to quibble with Sevier’s balanced evaluations of the accumulating corpus of psychological research bearing on eg character evidence, hearsay, witness impeachment and scientific evidence, or with his cautious advice for policy makers. ‘Whether those rule-makers will (or should) listen is a complex question’,⁹⁸ he volunteers, disarmingly. Furthermore, given ‘current issues in psychology—including a renewed interest in the replicability of prior studies’:

⁹³ Thus, Schauer characterises ‘exclusionary rules that serve functions extrinsic to the factfinding process’ as a ‘digression’ from the main business of Evidence Law: *ibid* 73. With these ‘exceptions’ acknowledged, the *conceptually* exclusionary stipulation is complete: ‘Such extrinsic exclusionary rules apart ... most of the rules of evidence, and the ones that represent the stark contrast with the free proof tradition, are intrinsic in the sense of being aimed at the goal of increasing the accuracy of the factfinding process.’

⁹⁴ Cf Larry Laudan, *Truth, Error and Criminal Law: An Essay in Legal Epistemology* (CUP 2006); Daniel Epps, ‘The Consequences of Error in Criminal Justice’ (2015) 128 Harv L Rev 1065.

⁹⁵ In his chapter on ‘linguistic evidentials’ (bits of language signalling epistemic warrants for asserted or reported propositions), Lawrence Solan confidently announces that ‘The most significant rule concerning the reliability of evidence is the rule against hearsay’: PFoEL 158.

⁹⁶ See also Michael J Saks and Barbara A Spellman, *The Psychological Foundations of Evidence Law* (NYU Press 2016); Paul Roberts, ‘The New Interdisciplinary Forensic Science’ (2016) 43 *Journal of Law and Society* 647.

⁹⁷ PFoEL 360. It seems to me both closer to the truth and more conducive to clear thinking to say that evidence law ‘at its core’ is deeply rooted in humanity, society, culture, procedural tradition and justice.

⁹⁸ *ibid* 360.

evidence rule-makers may be cautious even of the clear conclusions from this body of work. It may behoove psychologists to consider supplementing these findings with field research, including data collected from real trials.⁹⁹

Where Sevier is cautiously optimistic about the prospects for psychologists informing ‘legal policy-makers about the wisdom of many evidentiary rules’,¹⁰⁰ the tone of Frank Zenker’s contribution on ‘De-biasing Legal Factfinders’—the book’s final chapter—is pessimistic. Perplexity regarding ‘unconscious bias’ has lately generated widespread public debate and the search for effective remedial measures in many areas of public, employment and social life, including legal process.¹⁰¹ Zenker is chiefly concerned with conceptual clarification of ‘bias’ and ‘debiasing’, an essential—but too often neglected—precondition for successful experimental research in psychology or social science. Notably, this chapter takes a genuinely *philosophical* approach to foundational issues—reflecting Zenker’s own background and disciplinary affiliation—though ‘debiasing’ is not strictly a philosophical or jurisprudential term, but rather part of a broader, interdisciplinary project of theorising Evidence law. Unfortunately, the harvest, thus far, is meagre: ‘empirical research results are both scant and mixed ... [and] may seem to deliver less than what one would have hoped for’.¹⁰² Zenker’s main conclusions are analytical rather than practical or reformist: ‘effective de-biasing measures must simultaneously address aspects of *cognition*, *motivation*, and *technology*, perhaps in ways more similar to personalized medicine than to a typical form of instruction. Being personally de-biasable, whatever this means, also presupposes a conducive institutional environment’.¹⁰³

Sandwiched between these sunny and darker sides of empirical psychology are two chapters engaging directly with evidence law and criminal process in the United States. Julia Simon-Kerr reconsiders ‘Relevance through a Feminist Lens’, starting from the question ‘what does it mean to apply “feminist” theory in the context of an evidentiary system designed by men?’¹⁰⁴ At least part of the answer to that question must contend with the thought that, insofar as evidence law is a product of historically evolved procedural traditions, it is doubtful whether *anybody* can be credited with its design.¹⁰⁵ This essay touches on significant issues and themes forced onto the law school agenda by feminist scholars

⁹⁹ *ibid* 361 (footnote omitted). On the ‘replicability crisis’ in behavioural sciences, see Jason M Chin, Bethany Grown and David T Mellor, ‘Improving Expert Evidence: The Role of Open Science and Transparency’ (2019) 50 *Ottawa L Rev* 365; Jason M Chin, ‘Psychological Science’s Replicability Crisis and What It Means for Science in the Courtroom’ (2014) 20 *Psychology, Public Policy, and Law* 225.

¹⁰⁰ PFoEL 360.

¹⁰¹ Jeffrey J Rachlinski, Sheri Lynn Johnson, Andrew J Wistrich and Chris Guthrie, ‘Does Unconscious Racial Bias Affect Trial Judges?’ (2009) 84 *Notre Dame L Rev* 1195; Itiel E Dror, ‘Practical Solutions to Cognitive and Human Factor Challenges in Forensic Science’ (2013) 4 *Forensic Science Policy and Management* 1.

¹⁰² PFoEL 405.

¹⁰³ *ibid* (original emphasis).

¹⁰⁴ *ibid* 364.

¹⁰⁵ cf Ronald J Allen, ‘The Simpson Affair, Reform of the Criminal Justice Process, and Magic Bullets’ (1996) 67 *U Colo L Rev* 989.

and activists since the 1980s,¹⁰⁶ but many of them concern issues of substantive law with only derivatively evidentiary implications, as Simon-Kerr herself intermittently acknowledges.¹⁰⁷ If the applicable substantive law is sexist, this will inevitably skew evidential judgments of materiality and relevance, but it does not follow that the *concept of relevance* is itself discriminatory. In fact, what Simon-Kerr characterises as ‘theories of relevance’ are more properly culturally specific ‘common sense’ generalisations, some of which are indubitably still distorted by prejudice and bias,¹⁰⁸ and were even more brazenly disfigured within historical living memory. Normative legal standards infected by sexism, whether procedural or substantive, are in principle remediable through targeted law reform. More comprehensive feminist objectives to include formerly ‘silence[d] voices and narratives’ and ‘pivot the center’ in the ‘human struggle over which “social realities are better” or more real’¹⁰⁹ imply more radical social reform and cultural transformation, in which law would presumably be a supporting bit player; and evidence law, within that, a fleeting walk-on part. Generally speaking, the most obvious targets of institutional reform are litigation practice, such as the conduct of witness examination or the management of fact-finding, rather than evidence law as such. Besides, I doubt whether ‘rational logic’ or the Thayerite conception of relevance are in any way to blame for evidentiary practices that have ‘subtly or overtly privileged the perspective of white men to the exclusion of other voices’.¹¹⁰

In the book’s penultimate chapter, Jasmine Gonzales Rose investigates ‘Race, Evidence, and Epistemic Injustice’ by exploring ‘what makes racist evidence wrong as a matter of proof and truth’.¹¹¹ This is an intriguing question, since one might have assumed that racist evidence is self-evidently wrong because and for the same reasons that racism is wrong. Paralleling Simon-Kerr’s critique of gender bias, Gonzales Rose is concerned that ‘evidence rules, doctrines, practices, and policy rationales are employed or even more frequently overlooked to quiet, if not silence, the testimony, knowledge, and perspectives of people of color in the courtroom’.¹¹² Specifically, using previous convictions to impeach the accused’s testimony is racist because having criminal convictions ‘has become a racialized trait in the United States’;¹¹³ eyewitness identification is racist because, ‘due to white privilege, white witnesses’ identifications of suspects are more likely to be believed by jurors than witnesses of color even though white witnesses are statistically less reliable’;¹¹⁴ evidence of police violence is racist because prosecutors,

¹⁰⁶ eg Nicola Lacey, *Unspeakable Subjects: Feminist Essays in Legal and Social Theory* (Hart Publishing 1998); Carol Smart, *Feminism and the Power of Law* (Routledge 1989).

¹⁰⁷ In relation to sexual assault, for example, ‘viewing the problem from a feminist perspective focused on relevance reveals that *the substantive law* might have more work to do in this area’: PFoEL 373 (emphasis added).

¹⁰⁸ A point beautifully illustrated—show, don’t tell!—by Susan Glaspell, *A Jury of Her Peers* (1917, Digireads 2005). Generally, see Louise Ellison and Vanessa E Munro, “‘Telling Tales’: Exploring Narratives of Life and Law within the (Mock) Jury Room” (2015) 35 LS 201.

¹⁰⁹ PFoEL 377.

¹¹⁰ *ibid* 366.

¹¹¹ *ibid* 380.

¹¹² *ibid* 389.

¹¹³ *ibid* 383.

¹¹⁴ *ibid* 384.

grand juries and (white) trial judges refuse to credit or act on it; and evidence that a suspect evaded the police is racist owing to 'the white norm that only the guilty flee ... Under white racialized reality, police officers are protectors of the public and only guilty people would run from them'. The problem is compounded because, 'Unlike white people who do not have knowledge about the relationship between people of color and police, many Black people have vast evidence-based knowledge of how police officers treat Black people' and they know that 'law enforcement should be avoided at all costs'.¹¹⁵ These strike me as sweeping (empirical) generalisations that highlight significant social issues but also raise as many theoretical questions as they answer. Gonzales Rose's account would be more convincing if all the witnesses, police officers, judges and jurors in US criminal proceedings were white and all suspects and accused were Black: but that cannot be so. Like Simon-Kerr, Gonzales Rose tends to elide evidence doctrine, litigation process, inferential reasoning and fact-finding, but in a rather more totalising and reductive fashion. Her critique seems to amount to the proposition that, under 'white racialized reality', all judicial evidence is (potentially) racist, constituting distinctive forms of 'epistemic injustice'.¹¹⁶ She does not say what, if anything, could be done to ameliorate the situation. Perhaps having Evidence students read, and discuss, her chapter would be a start?

Taking these two chapters as fair evaluation of contemporary US evidence law and legal process (I am patently unqualified to second-guess insiders), I am left wondering what, if any, more general ('foundational') lessons might be extrapolated from what are, on the face of it, intensely parochial discussions. Trait-based discrimination is surely likely to play out differently in different societies, cultures and legal systems. To what extent, for example, does the critique of 'white privilege' extend to societies where virtually everybody is white, or where almost nobody is? Are legal proceedings in Saudi Arabia dominated by 'Arab racialised reality', are those in Iran dominated by 'Persian racialised reality', in China by 'Chinese racialised reality', etc? Or is 'racialised reality' a meaningful concept only in a multicultural society? And if so, what follows for evidence law or Evidence law theory from that methodologically significant qualification? Is there any valid analogy between discrimination based on skin colour or ethnicity and forms of sectarian, sexual preference or disability discrimination? What about good old-fashioned class bias?¹¹⁷ The particularism of legal doctrine is especially prominent in these chapters. In English law, there is no 'force or fraud' requirement for rape,¹¹⁸ bad character evidence has never been restricted to non-propensity uses¹¹⁹ and previous convictions are no longer automatically admitted to

¹¹⁵ *ibid* 386–7.

¹¹⁶ Following Miranda Fricker, *Epistemic Injustice: Power and the Ethics of Knowing* (OUP 2009).

¹¹⁷ Gonzales Rose relies on a study linking witness credibility to 'higher-status accents'. Whilst accent credibility may track ethnicity in the United States, I anticipate that in the UK accent is mainly a function of geography and socio-economic status.

¹¹⁸ Now by statute—Sexual Offences Act 2003, ss 1 and 74—formerly at common law: *R v Olugboja* [1982] QB 320, CA. Cf Stephen J Schulhofer, 'Reforming the Law of Rape' (2017) 35 Law & Ineq J 335.

¹¹⁹ Criminal Justice 2003, ss 101 and 103. Historically, the point is contentious, but vindicated by pre-Act case law: see Paul Roberts and Adrian Zuckerman, *Criminal Evidence* (1st edn, OUP 2004) 521–2.

credit.¹²⁰ Conversely, pre-trial silence—let alone ‘admissions by conduct’, such as trying to evade police pursuit and arrest—is routinely admissible in English criminal trials as a basis for adverse inferences,¹²¹ a practice that would be unconstitutional, and jurisprudentially scandalous, in the United States.¹²² Doctrinal details make a difference, even if they do not always show up in macroscopical snapshots of the bigger evidential picture.

Inasmuch as people are people, with similar cognitive capacities, affective attitudes and proclivities, everywhere on the planet, it is plausible to investigate, describe, critically evaluate and legislate for generic features of judicial evidence, proof and fact-finding that would be found in just about any modern legal system anywhere in the world. But this is a valid premiss only at a relatively high level of abstraction. Cognitive capacities and foibles shared by all human beings are inflected at the local level by contextual political, social and cultural factors, including—most pertinently for the present discussion—institutional features of legal processes that are highly variable, even as between jurisdictions that are geographically proximate, or even within a single territorial state. Sometimes, perhaps typically, local intersections between human cognition and institutional environments will be more interesting or consequential than universal capacities and generalisations. The implication is that Evidence theory needs to find productive ways, to engage with procedural traditions, institutional cultures and local jurisprudence to combine the generalities of human cognitive capacities and generic norms of social conflict resolution with the particularism of actual evidence law, in real-life legal proceedings, in existing legal systems. Comparative law offers extensive resources for this task,¹²³ largely untapped by Evidence scholars.¹²⁴

7. Concluding Criticism

Programmatic disciplinary (re)construction has a marketing dimension, as do the legal publications that are integral to it. PFoEL might have been titled ‘Theoretical Foundations of Evidence Law’ or simply ‘Evidence Law Theory’, but the virtues of literalism must be set against the opportunity to leverage disciplinary credibility through inclusion in a prestigious ‘philosophical foundations’

¹²⁰ In relation to the accused: Criminal Justice Act 2003, s 101; *R v Hanson* [2005] 2 Cr App R 21, [2005] EWCA Crim 824; *R v Campbell (Kenneth)* [2007] 1 WLR 2798, [2007] EWCA Crim 1472. In relation to witnesses: Criminal Justice 2003, s 100; *R v Jukes* [2018] 2 Cr App R 9, [2018] EWCA Crim 176.

¹²¹ Criminal Justice and Public Order Act 1994, ss 34, 36 and 37. For criticism, see Hannah Quirk, ‘Twenty Years On, The Right of Silence and Legal Advice: The Spiralling Costs of Unfair Exchange’ (2013) 64 NILQ 465; Di Birch, ‘Suffering in Silence: A Cost–Benefit Analysis of Section 34 of the Criminal Justice and Public Order Act 1994’ [1999] Crim LR 769.

¹²² *Miranda v Arizona* 384 US 436 (1966); *Mitchell v US* 119 S Ct 1307 (1999) (affirming ‘The rule against adverse inferences from a defendant’s silence in criminal proceedings’ as constitutionally mandated in all phases of criminal trial).

¹²³ One might start with H Patrick Glenn, *Legal Traditions of the World: Sustainable Diversity in Law* (5th edn, OUP 2014); Geoffrey Samuel, *An Introduction to Comparative Law Theory and Method* (Hart Publishing 2014); Esin Örüçü and David Nelken (eds), *Comparative Law—A Handbook* (Hart Publishing 2007).

¹²⁴ Somewhat ironically, in that Wigmore was also a pioneer in comparative legal studies: Annelle Riles, ‘Wigmore’s Treasure Box: Comparative Law in the Era of Information’ (1999) 40 Harv Int’l LJ 221.

series. The book is impressive in its range of topics, contributor expertise and cosmopolitan authorship. Individual chapters should be widely read and used in Evidence law teaching wherever English is one language of instruction. The chapters are relatively short and incisive, most running to around 15 pages, which enhances their pedagogical value as accessible introductions and topical overviews, but limits their potential as original contributions to scholarship. Some of them reproduce in conspectus what their authors have argued at far greater length elsewhere.¹²⁵ There is something redolent of encyclopaedia entries to this format, though the generality of much of the content should ensure a reasonable measure of longevity for this edition.

The editors have performed sterling service in conceiving, organising and producing this volume, but their industry did not extend to providing readers with a metatheoretical roadmap to the disciplinary field they have seeded. This review has endeavoured to sketch in some of the missing contour lines, dramatic vistas and topographical features populating this terrain. My 'jurisprudential' version of the philosophical foundations of evidence law would have been no less interdisciplinary but more philosophical, more normative in multiple senses (legal and moral), more institutionally contextualised, less fascinated by theoretical puzzles, more interested in doctrinal materials and empirical realities. It would have extended the volume's cosmopolitanism to include more regions of the world and different types of proceedings—including proceedings before international human rights courts¹²⁶ and international criminal tribunals.¹²⁷ It would have been less American, not in authorship necessarily, but in orientation and assumptions, not least because in many respects US evidence law is an unreliable representative of the extended common law family, exhibiting both positive and negative dimensions of US legal exceptionalism.¹²⁸ For a variety of interlocking reasons only gestured towards here, I favour a procedurally disaggregated model of evidence law conceptualised, in broader terms, as 'criminal jurisprudence'.¹²⁹

Theoretical choices in disciplinary mapping are always informed by subjective preferences. Any critical appraisal of PFoEL ultimately stands or falls to the

¹²⁵ Most emphatically in the case of Allen and Pardo's well-rehearsed showpiece 'Inference to the Best Explanation, Relative Plausibility, and Probability', encapsulating a wealth of previous scholarship, including Michael S Pardo and Ronald J Allen, 'Juridical Proof and the Best Explanation' (2008) 27 *Law and Philosophy* 223; Ronald J Allen and Michael S Pardo, 'The Problematic Value of Mathematical Models of Evidence' (2007) 36 *JLS* 107; Ronald J Allen, 'Factual Ambiguity and A Theory of Evidence' (1994) 88 *Northwestern University Law Review* 604.

¹²⁶ John D Jackson, 'Common Law Evidence and the Common Law of Human Rights: Towards a Harmonic Convergence?' (2019) 27 *William & Mary Bill of Rights Journal* 689; Dimitrios Giannouloupoulos, *Improperly Obtained Evidence in Anglo-American and Continental Law* (Hart Publishing 2019).

¹²⁷ Yvonne McDermott, *Fairness in International Criminal Trials* (OUP 2016); Paul Roberts, 'The Priority of Procedure and the Neglect of Evidence and Proof: Facing Facts in International Criminal Law' (2015) 13 *JICJ* 479; John D Jackson and Yassin M Brunger, 'Fragmentation and Harmonisation in the Development of Evidentiary Practices in International Criminal Tribunals' in Elies van Sliedregt and Sergey Vasiliev (eds), *Pluralism in International Criminal Law* (OUP 2014).

¹²⁸ Cf Carol Brook and others, 'A Comparative Examination of Police Interrogation of Criminal Suspects in Australia, Canada, England and Wales, New Zealand, and the United States' (2021) 29 *William & Mary Bill of Rights Journal* 909.

¹²⁹ Paul Roberts, 'Groundwork for a Jurisprudence of Criminal Procedure' in RA Duff and Stuart Green (eds), *Philosophical Foundations of Criminal Law* (OUP 2011).

extent that it resonates with the experience, expectations, research agendas and pedagogical requirements of Evidence Law teachers, scholars and intellectually curious practitioners. Every critic is presumptively a lazy or frustrated author with an inflated view of their own talents. Those who believe they could produce a superior account of the philosophical foundations of evidence law now have, in this timely addition to our formative literature, an exemplary benchmark against which to prove it.