

TWO PUZZLES OF JURIDICAL PROOF

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This article analyzes two jurisprudential puzzles of proof at trial. The first involves the controversy over the obligation of trial judges to give reasons underlying their findings of fact. Naturally suspicious of decisions unaccompanied by reasons, commentators and judges have called for a requirement that trial judges explain their decisions, but the Supreme Court has consistently rejected this demand. Why that is so, and whether it should be so, is the first puzzle. The second puzzle involves the extent to which proof at trial is comparative. Do burdens of persuasion require the party bearing the burden to establish the material propositions to a predetermined level, such as a preponderance of evidence in civil cases and proof beyond reasonable doubt in criminal cases, or is proof comparative, so that in a civil case the more plausible story wins (which is what "proof to a preponderance" means) and in a criminal case the prosecution must demonstrate a plausible story of guilt and no plausible story of innocence (which is what "proof beyond reasonable doubt" means)? This article argues that connecting these two puzzles is the information and cognitive demands presented by the issues; the article then examines the implications of those demands.

Cet article se penche sur deux casse-tête de la jurisprudence en matière de preuve lors du procès. Le premier concerne la controverse entourant l'obligation des juges de première instance de donner les motifs à l'appui de leurs décisions sur les faits. Ayant naturellement des soupçons à l'égard de décisions non motivées, des auteurs et des juges ont demandé qu'on exige des juges de première instance qu'ils justifient leurs décisions, mais la Cour suprême a systématiquement rejeté cette demande. Pourquoi en est-il ainsi, et devrait-il en être ainsi, tel est le premier casse-tête. Le second casse-tête consiste à savoir jusqu'à quel point la preuve est comparative. Est-ce que les fardeaux de preuve exigent, de la partie qui a le fardeau, qu'elle établisse ses propositions de fait à un niveau prédéterminé, telles la prépondérance de la preuve dans les affaires civiles et la preuve au-delà du doute raisonnable dans les affaires criminelles? Ou bien la preuve est-elle comparative, de sorte que, dans un procès civil, l'histoire la plus plausible l'emporte (ce que veut dire «preuve prépondérante») et, dans un procès criminel, la poursuite doit démontrer une histoire plausible de culpabilité et l'absence d'histoire plausible d'innocence (ce que veut dire «preuve au-delà du doute raisonnable»)? Selon cet article, les exigences d'information et de connaissance que soulèvent ces questions constituent le lien entre ces deux casse-tête; l'article examine ensuite les implications de ces exigences.

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Introduction

Recent Canadian cases and commentary have focused attention on two enduring puzzles of proof at trial. The first involves the controversy over the obligation of trial judges to give reasons underlying their findings of fact. Courts are entrusted with the resolution of disputes primarily on the assumption that they will bring dispassionate reason to the task. Decision is not to be reached capriciously, randomly or for personal gain, but rather by a disinterested fact finder on the basis of comprehensible reasons. The lack of an explanation creates space to question whether a decision rests on the wrong reasons, reasons that the law rules unacceptable whether as irrational or venal. Naturally suspicious of decisions unaccompanied by reasons, commentators and some judges have called for a requirement that trial judges explain their decisions, but the Supreme Court has consistently rejected this demand. Why that is so, and whether it should be so, is the first puzzle.

The second puzzle at first blush seems unrelated to the first, but we think at a deeper level that is not so. This puzzle involves the extent to which proof at trial is comparative. Do burdens of persuasion require the party bearing the burden to establish the material propositions to a predetermined level, such as a preponderance of evidence in civil cases and proof beyond reasonable doubt in criminal cases? Or is proof comparative, so that in a civil case the more plausible story wins (which is what "proof to a preponderance" means) and in a criminal case the prosecution must demonstrate a plausible story of guilt and no plausible story of innocence (which is what "proof beyond reasonable doubt" means)? Here the law favors the first alternative and understands proof as requiring the establishment of elements to predetermined levels. Why that is so, and whether it should be so, is the second puzzle.

What connects these two puzzles is the informational and cognitive demands presented by the issues. Curiously, the Supreme Court's resolution of the first puzzle can best be understood as an implicit recognition of the impossible demands of embracing a "reasons" regime, while the Court's resolution of the second puzzle can best be seen as a consequence of failing to understand the demands posed by a "predetermined level" regime. We discuss these two puzzles in turn. We attempt to explain, with regard to the first puzzle,

why we think the Court is correct in what it has done, while concomitantly explaining further the objections; with regard to the second, we try to describe what has not yet been perceived by the cases and commentary and point out the implications.

I. *The Curious Case of Reasons*

A trial, whether criminal or civil, can come down in the end to one word against another. A trier of fact can accept one word and reject the other, and on the strength of that belief an accused can be convicted or a defendant found liable. How do triers of fact accurately decide the truth in such cases? Concern has rightly been expressed that such decisions cannot be free of error and that "innocent men are convicted of crimes, and [possibly a blameless defendant] loses his life's savings, his livelihood, his job."¹

The jury is "the level of safety provided at the centre of the criminal process"² and the unanimity requirement particularly "reduces the risk that innocent people will be convicted by increasing the accuracy of jury fact-finding."³ But despite its significance in the legal system,⁴ the jury has its critics,⁵ its future is uncertain,⁶ and its use in common law countries is shrinking.⁷ Most civil trials in Canada are conducted by professional judges sitting without juries⁸ and, as found in an Ontario study, only a small fraction

¹ J. Frank, *Courts on Trial*, (Princeton University Press, 1949) at 35. See also Nova Scotia, *Report of the Royal Commission on the Donald Marshall, Jr. Prosecution* (Halifax: Queen's Printer, 1989).

² R. Dworkin, *A Matter of Principle* (Cambridge: Harvard University Press, 1985) at 91.

³ Law Reform Commission of Canada, *The Jury in Criminal Trials* (Ottawa: Law Reform Commission of Canada, 1980) at 28. See also at pages 6-17, the various reasons for this trust in the unanimous collective wisdom of the jury, especially in its fact-finding ability, where "ideas and arguments are tested, refined, confirmed or rejected."

⁴ Law Reform Commission of Canada, *The Jury* (Ottawa: Law Reform Commission of Canada, 1982) at 5 found in its consultations that "there was almost unanimous support for the jury system in criminal cases."

⁵ G. Williams, *The Proof of Guilt*, 3d ed. (London: Stevens & Sons, 1963) at 268, where the author notes that prohibitions against disclosure of a jury's deliberation (as in R.S.C. 1985, c. 46, s.649 of the *Criminal Code of Canada*) reflects a "desire to preserve public confidence in a system which more intimate knowledge might destroy."

⁶ R. Hastie, S.D. Penrod, N. Pennington, *Inside the Jury* (Cambridge: Harvard University Press, 1983) at 1.

⁷ J. Sopinka and S.N. Lederman, *The Law of Evidence in Civil Cases* (Toronto: Butterworths, 1974) at 6: "The history of the use of the jury in both Canada and England since the turn of the century has been one of decline." See also J.R. Saul, *Voltaire's Bastards-The Dictatorship of Reason in the West* (Toronto: Penguin, 1992) at 329.

⁸ Sopinka, *ibid.*

of civil cases are tried before a jury.⁹ Most criminal trials are also taken before a judge without a jury, partly because of inconsistent procedural restrictions¹⁰ and partly because of institutional disincentives.¹¹

Increasingly, there is concern that a trial before a single judge “provides no adequate safeguard against the vagaries of the individual.”¹² Strict safeguards of the past, such as corroboration rules, have been relaxed in the criminal law,¹³ bringing the test in criminal cases more in line with the traditional, more liberal test in civil law.¹⁴ However, the search for safeguards persists, and is reflected in the desire to have trial judges give reasons for their findings of fact — to explain why they believed one witness over another. This desire for articulated reasons also reflects the desire of appellate courts to provide a meaningful and fair review of the trial judges’ findings of fact.¹⁵

In this section, we discuss recent Canadian jurisprudence on this issue. While the call for reasons is laudatory, there are profound problems. Reasons eventually run out, and what is left is indefensible by reference to some other reason, or else there would be an infinite regress. Suppose, for example, that a judge asserted that she believed one witness because of his “demeanor.” What, though, does “demeanor” mean, and what was it about this witness’s demeanor

⁹ *Ibid.*, citing *The Ontario Law Reform Commission’s Report on the Administration of Ontario Courts* (1973), Part I at 335.

¹⁰ *Supra* footnote 3 at 3.

¹¹ O.E. Fitzgerald, *The Guilty Plea and Summary Justice* (Toronto: Carswell, 1990) at 13.

¹² *Supra* footnote 5 at 299.

¹³ G.T.G. Seniuk, “Judicial Fact-Finding and a Theory of Credit” (1992) 56 Sask. L. Rev. 79 (Reprinted in both official languages in (1994) Vol.18-No.3 Provincial Judges Journal) at 80. Also see *infra* footnote 14 at 893-925.

¹⁴ J. Sopinka, S.N. Lederman, A.W. Bryant, *The Law of Evidence in Canada* (Toronto: Butterworths, 1992) at 912. The authors outline the four main causes of action for which corroboration was mandatory in many provincial jurisdiction, but note at p. 901 that in Canada, “the corroboration requirement governing these causes of action resembles a checker-board since the provincial legislatures did not uniformly codify the rules of practice and some of the legislatures that did so, have now repealed their statutory provisions.

¹⁵ See for example, *R. v. Richardson* (1992), 74 C.C.C. (3d) 15 at 23 (Ont. C.A.), Carthy J.A.: “Nevertheless, if an accused is to be afforded a right of appeal it must not be an illusory right. An appellant must be in a position to look to the record and point to what are arguably legal errors or palpable and overriding errors of fact. If nothing is said on issues that might otherwise have brought about an acquittal, then a reviewing court simply cannot make an assessment, and justice is not afforded to the appellant.” See also, *Barrett* (Ont. C.A.), *infra* footnote 16 at 60-63 per Arbour J.A., and also see *Scherbrucker*, *infra* footnote 23 at 128, who observes that these two decisions “in no uncertain terms announce that a failure to give reasons may affect the fairness of the trial and undermine the accused’s right of appellate review to the point where a miscarriage of justice within the meaning of s. 686(1)(a)(iii) is made out.”

that led the trial judge to believe him? The supposed explanation, the "reason," does not dispose of the issue but instead generates a call for another reason, one justifying the first, and so on. The beguilingly simple call for reasons thus masks an enormously complex problem that, we suggest, defies any simple prescription, such as a rule requiring trial judges to give reasons. We explore this point and its implications in this section. We address explicitly the call for "reasons" explaining why the judge believes one witness rather than another, but our discussion applies to any aspect of fact finding except the determination of legal questions. Section A lays out the legal frame work; section B probes the latent puzzle.

A. Fact-finding, Reasons and Review

Conflicting testimony leading to a decision to believe one witness over another can arise in any case,¹⁶ but it is in the criminal law that the issue has most recently arisen in Canadian jurisprudence.¹⁷ In such trials, the Supreme Court of Canada unanimously and consistently has held that the failure to give reasons for believing one witness rather than another cannot be a ground for appellate review.¹⁸ The Court's most recent decisions on the issue¹⁹ re-affirmed what previous panels have held over the past 40 years.²⁰ Interestingly, during those years provincial appellate courts occasionally over-turned trial judges for not giving reasons for believing one witness over another.²¹ The Supreme Court has rejected these innovations, however, although it has been severely criticized for doing so. Indeed, while the Court's earlier rulings evoked comment,²² its most

¹⁶ *R. v. Barrett* (1993), 23 C.R. (4th) 49 at 62-63 (Ont. C.A.), Arbour J.A. outlines recent Ontario civil appeals dealing with an absence of reasons at the trial level, and notes "that in civil cases, appellate courts have responded to the absence of reasons by trial courts on a case-by-case basis." For the rule in civil cases, see *infra* footnote 45.

¹⁷ *Infra* footnote 23.

¹⁸ *R. v. Burns*, [1994] 1 S.C.R. 656, (cited as *R. v. B.(R.H.)*) 29 C.R.(4th) 113, 165 N.R. 374, 42 B.C.A.C. 161, 67 W.A.C. 161, 89 C.C.C. (3d) 193. All subsequent references to *R. v. B.(R.H.)* are to 29 C.R. (4th). See also *Barrett*, *infra* footnote 24.

¹⁹ *Ibid.* See also *R. v. C. (R.)* (1993), 81 C.C.C. (3d) 417 at 428; *R. v. Smith*, [1990] 1 S.C.R. 665, affirming (1989), 95 A.R. 394 (C.A.).

²⁰ *Lemay v. R.*, [1952] 1 S.C.R. 232 at 238, *Belzberg v. R.*, [1962] S.C.R. 254; *MacDonald v. R.*, [1977] 2 S.C.R. 665.

²¹ *R. v. Gun Ying*, [1930] 3 D.L.R. 925 (Ont. C.A.); *R. v. Tonelli* (1951), 13 C.R. 430, 3 W.W.R. (N.S.) 495, 99 C.C.C. 345 (B.C.C.A.); *R. v. Lemay*(no.2) (1951) 12 C.R. 81, 1 W.W.R.(N.S.) 843, 100 C.C.C. 365 at 88 in dissent (B.C.C.A.); *R. v. C.(R.)* (1993), 81 C.C.C. (3d) 417 (Q.A.C.); *R. v. Burns* (1992), 74 C.C.C.(3d) 124, 15 B.C.C.A. 264, 27 W.A.C. 264.

²² A. Hooper, "Comment" (1970) 48 Can. Bar Rev. 548.

recent rulings have been more controversial,²³ with its most recent decision²⁴ criticized as "stunning"²⁵ and "baffling".²⁶

Central to the criticism is that judges do not have extraordinary powers of discernment, particularly with respect to credibility or demeanor evidence.²⁷ No one believes, and rightly so, that judges have "a divine insight into the hearts and minds of witnesses [and] justice does not descend automatically upon the best actor in the witness box."²⁸ Psychological studies confirm that, in spotting liars, judges do no better than chance (like almost all other groups), but that they are not aware of their own limitations.²⁹ The discipline of articulating reasons is seen as a method of maintaining confidence in the decision in the face of such limitations in demeanor evidence. This position, stated in a civil case decision in 1952 and currently revived in the criminal law debate,³⁰ was put by O'Halloran J.A. as follows:

The credibility of interested witnesses, particularly in cases of conflict of evidence, cannot be gauged solely by the test of whether the personal demeanor of the particular witness carried conviction of the truth... The trial Judge ought to go further and say that

²³ See for example the annotation by Don Stuart to *Barrett* (S.C.C.) at *supra* footnote 24 at 2, and critical comments on *B.(R.H.)*, *supra* footnote 18, by G. Cournoyer at (1994), 29 C.R. (4th) 115, D. Schermbrucker, "Burning Bridges-The Shrinking Ground For Appeal Based on Lack of Reasons" (1994), 29 C.R. (4th) 126, E. Sangmuah, "After *B.(R.H.)*: Continuing Need to Give Adequate Reasons for Findings of Credibility" (1994), 29 C.R. (4th) 135 and M. Naeem Rauf, "Failure to Give Reasons: Further Criticism of *B.(R.H.)*" (1994), 31 C.R.(4th) 74.

²⁴ *R. v. Barrett* (1995), 38 C.R.(4th) 1 at 3: "The only issue was credibility. The trial judge's ruling demonstrated that he did not accept the evidence of the accused. In these circumstances, the failure of the trial judge to state the basis of his decision on the voir dire did not occasion an error of law or miscarriage of justice."

²⁵ *Ibid.* at 2, in an annotation by Don Stuart: "The message given by the Supreme Court to trial judges is to rest content with no reasons or the most minimal of reasons. We should expect more of judges. Allowing trial judges to avoid giving reasons makes them far less accountable and appears grossly unjust to the accused."

²⁶ *Supra* footnote 18, *R. v. B.(R.H.)* at 116, in an annotation by Guy Cournoyer: "The long-standing unwillingness of the Supreme Court to establish a principle of fundamental justice requiring that reasons be given before sending somebody to jail is baffling.... Except in cases involving jury trials, where an accused can be presumed to have waived the right to a reasoned verdict, it is counter-productive to adopt such general and overreaching principles as those enunciated by the court in *B.(R.H.)*."

²⁷ In civil cases, see for example *Brethour v. Law Society of B.C.* (1951), 2 D.L.R. 136 at 141-42; *infra* footnote 33. In criminal cases see *infra* footnote 28.

²⁸ *R. v. Pressley*, [1948] 7 C.R. 342 at 347, O'Halloran J.A.. See also, *R. v. Lemay* (No. 2) (1951) 12 C.R. 81, 1 W.W.R.(N.S.) 843, 100 C.C.C. 365 at 88 (in dissent).

²⁹ P. Ekman, *Telling Lies* (New York: W. W. Norton, 1992) at 285: "It is amazing to many people when they learn that all of the other professional groups concerned with lying-judges, trial attorneys, police, polygraphers who work for the C.I.A., F.B.I., or NSA (National Security Agency), the military services, and psychiatrists who do forensic work-did no better than chance. Equally astonishing, most of them didn't know they could not detect deceit from demeanor." In Dr. Ekman's testing, only one group, the U.S. Secret Service, did better than chance.

³⁰ See for example Sangmuah, *supra* footnote 23 at 138.

evidence of the witness he believes is in accordance with the preponderance of probabilities in the case and, if his view is to command confidence, also state his reasons for that conviction.³¹

Despite such arguments, triers of fact continue to have great freedom in deciding which witnesses to believe. Jurors are typically instructed (and judges trying cases without a jury instruct themselves) that they are "the sole judges of the truthfulness of the witnesses and of the weight to be given to the testimony of each of them...[and] you are entitled to believe all of the evidence given by a witness, part of that evidence or none of it."³² The Supreme Court accepts criminal convictions³³ and civil judgments³⁴ based on the strength of a trial judge's belief in the truthfulness of one witness over another. In this role of fact-finder, the trier of fact is the sole judge of truth or falsity,³⁵ and is free to believe even dubious and unsafe evidence.³⁶

Although the reasonableness of such verdicts can be tested on a criminal appeal³⁷ and while on the face of the different provincial statutes there are even wider powers of review on civil appeals,³⁸ the Supreme Court of Canada has insisted on the primacy of the findings of the trial judge. Furthermore, the panels have been unanimous in both civil and the criminal appeals on this issue. As Lamer C.J. stated in *Lensen*:

³¹ *Faryna v. Chorny*, [1952] 2 D.L.R. 354 at 356-357 (B.C.C.A.). As regards the use of "the preponderance of probabilities" as a decision-making tool in the face of uncertain evidence, O'Halloran J.A. is reflecting an ancient methodology of the common law. See for example *Newis et ux. v. Lark & Hunt* 2 Plowd. 403, 412 (1571); 75 E.R. 609, 621, where the justices are reported as having said: "...and which is the foundation whereupon the Court is to give judgment out to be certain, or else the party would be driven to answer to what he does not know, and the Court to give judgment upon that which is utterly uncertain. But where the matter is so far gone that the parties are at issue, or that the inquest is awarded by default, so that the jury is to give a verdict one way or other, there, if the matter is doubtful, they may found their verdict upon that which appears the most probable, and by the same reason that which is most probable shall be good evidence."

³² *Supra* footnote 13 at 91.

³³ *R. v. L. (D.O.)* (1994), 85 C.C.C. (3d) 289 at 325 (S.C.C.): "[The trial judge] believed the complainant, such as he had the right to do."

³⁴ *Lensen v. Lensen*, [1987] 2 S.C.R. 672 at 684: "[T]he trial judge was entitled to believe the defendant father's evidence and the evidence of his witnesses and reject the son's testimony and the testimony of his witnesses as to the existence of an oral contract between the parties."

³⁵ *United States of America (The) v. Sheppard*, [1977] 2 S.C.R. 1067.

³⁶ *Ibid.* at 225 per Spence J.: "In the present case, the evidence is dangerous and dubious because it was given by a witness who was quite evidently acting in hope of a reward which had been promised to him in detail." The witness was a self-confessed criminal conspirator who acted in the hope of a promised reward.

³⁷ See s. 686(1)(a)(i) to (iii) of the *Criminal Code*, R.S.C. 1985, c. C-46. Appellate courts discuss fact-finding when they reweigh and evaluate the evidence to determine if a verdict is unreasonable, or if it cannot be supported by that evidence. See, for example, *Yebes v. R.*, [1987] 2 S.C.R. 168.

³⁸ See, for example, s.8 of *The Court of Appeal Act*, R.S.S. 1978, c. C.42, which appears to confer not only the power, but a duty to "rehear" or "retry" a case.

It is a well-established principle that findings of fact made at trial based on the credibility of witnesses are not to be reversed on appeal unless it can be established that the trial judge made some "palpable and overriding error which affected his assessment of the facts"...While section 8 of the Saskatchewan Court of Appeal Act authorizes the Court of Appeal to "draw inferences of fact", this task must be performed in relation to facts as found by the trial judges.³⁹

And as McLachlin J. stated in *B.(R.H.)*:

The Court of Appeal's main concern was not that there was insufficient evidence to support the verdicts of guilty, nor that those verdicts were unreasonable, but that the trial judge's reasons failed to indicate that he had considered certain frailties in the complainant's evidence. Given the brevity of the trial judge's reasons, they could not be sure that he had properly considered all relevant matters.

Failure to indicate expressly that all relevant considerations have been taken into account into arriving at a verdict is not a basis for allowing an appeal under s.686(1)(a). This accords with the general rule that a trial judge does not err merely because he or she does not give reasons for deciding one way or the other on problematic points: see *R. v. Smith*, [1990] 1 S.C.R. 991, affirming (1989), 95 A.R. 304 (C.A.), and *MacDonald v. R.*, [1977] 2 S.C.R. 665. The judge is not required to demonstrate that he or she knows the law and has considered all aspects of the evidence. Nor is the judge required to explain why he or she does not entertain a reasonable doubt as to the accused's guilt. Failure to do any of these things does not, in itself, permit a court of appeal to set aside the verdict.... Trial judges are presumed to know the law with which they work day in and day out.⁴⁰

The appellate court can intervene in decisions based on credibility in situations "where the record, including the reasons for judgment, discloses a lack of appreciation of relevant evidence and more particularly the complete disregard of such evidence."⁴¹ Or the court of appeal can re-examine and reweigh the evidence "but only for the purpose of determining if it is reasonably capable of supporting the trial judge's conclusion; that is, determining whether the trier of fact could reasonably have reached the conclusion it did on the evidence before it: *R. v. Yebes*."⁴² But it should not intervene merely because it took a different view as to the facts established by the evidence,⁴³ not even if the appeal court had doubts about the trier of fact's conclusion.⁴⁴ The principle is the same in civil appeals, where "the rule is clear with regard to findings based on the credibility of witnesses: an appellate court should not intervene unless it is certain that its difference of opinion with the trial judge is the result of an error

³⁹ *Supra* footnote 34 at 683. Seven Supreme Court rulings from the previous 10 years were cited in support.

⁴⁰ *Supra* footnote 18 at 121.

⁴¹ *R. v. Harper*, [1982] 1 S.C.R. 2 at 14.

⁴² *Supra* footnote 18 at 120.

⁴³ *Ibid.* and see also, for the same application in summary procedure appeals, *R. v. Andres* (1980), 1 S.R. 96 at 99 (Sask. C.A.).

⁴⁴ *Ibid.*

by the latter.”⁴⁵ While the civil appeals in the Supreme Court have not dealt specifically with the issue of inadequate reasons, the test of when to interfere with findings of credibility are the same as in criminal appeals, namely: “[S]uch certainty of [reversible error] will only be possible if the appellate court can identify the reason for this difference of opinion, in order to be certain that it results from an error and not from his privileged position as a trier of fact. If the appellate court cannot thus identify the critical error it must refrain from intervening, unless of course the finding of fact cannot be attributed to this advantage enjoyed by the trial judge, because nothing could have justified the judge’s conclusion whatever he saw or heard; this latter category will be identified by the unreasonableness of the trial judge’s finding.”⁴⁶

B. The Puzzle

The first puzzle arises from an incomparability between the wide discretion allowed to triers of fact and the call for judges to give reasons for their choices. The first clue that there is something odd here lies in the fact trial judges do not routinely give satisfactory reasons. Why would responsible judges not do this as a matter of course? Judges see the desirability of giving reasons.⁴⁷ Canadian judges discharge their duties in a responsible and generally accepted manner,⁴⁸ and would surely judiciously avoid exposing themselves to criticism if it could be avoided. The fact that in the face of such strong criticism from the responsible bar⁴⁹ trial judges continue to risk condemnation by not providing adequate reasons may be a clue to a deeper, systemic problem rather than a reflection of any injudicious motive on the part of trial judges.

⁴⁵ *Beaudoin-Daigneault v. Richard*, [1984] 1 S.C.R. 2 at 8-9.

⁴⁶ *Ibid.* In a case relating to divorce matters, see also *Willick v. Willick*, [1994] 3 S.C.R. 670 at 746, L’Heureux-Dubé J.: “Since the chambers judge made no error in principle and considered all evidence, took into account all relevant factors, the Court of Appeal was not entitled to intervene and substitute its own view of the evidence.... Brief reasons are very often sufficient. Our Court has recently dealt with this issue in the context of criminal law in *R. v. Burns*.... The rule should not be different in matters such as the present one.” *Beaudoin-Daigneault* and subsequent cases were also applied in cases dealing with aboriginal rights. See *R. v. Van der Peet*, [1996] 1 S.C.R. The court there noted that appellate court deference applies not only when the credibility of witnesses is at issue, although it might be more strictly applied in such cases, but also to all conclusions of fact made by a trial judge, including assessing the credibility of the testimony of expert witnesses.

⁴⁷ See for example Rule 9.00 of the *Code of Judicial Conduct of the Provincial Court of British Columbia*, revised 1994: “Reasons for judgment should be given and if reserved should be rendered within a reasonable time.”

⁴⁸ M.A. Friedland, *A Place Apart: Judicial Independence and Accountability in Canada* (Ottawa: Canadian Judicial Council, 1995) at xiii: “Canadians are rightly proud of their judiciary. Foreign observers look with envy on the judiciary in Canada.”

⁴⁹ *Supra* footnotes 23, 25 and 26.

Supreme Court of Canada justices have consistently recognized the desirability of trial judges giving reasons for their findings,⁵⁰ but yet have resisted the strong pressure⁵¹ to make this into a rule. The Supreme Court has given practical and policy arguments for not requiring reasons of trial judges in these cases. In particular, the Court has pointed out how labor intensive such an

⁵⁰ In *MacDonald v. R.*, [1977] 2 S.C.R. 665, the court noted that the desirability of giving reasons is unquestionable. More recently, in the *Barrett* decision (*supra* footnote 18), Iacobucci J. stated at 3 that "it is clearly preferable to give reasons." Where there is evidence that the Supreme Court finds troubling, the court will find it to be an error of law if the trial judge convicts without addressing the troublesome evidence. See *R. v. R.(D.)*, [1996] 2 S.C.R. 291 at 388, Major J. for the majority: "It is my view that the trial judge erred in law by failing to address the confusing evidence, and failing to separate fact from fiction...McLachlin J. clearly set out the law regarding the requirement of trial judges to give reasons in *R. v. B.(R.H.)*. However, it should be remembered that *R. v. B.(R.H.)* dealt with a situation where the Court of Appeal agreed the trial judge had evidence before him to support the conclusion he reached, but overturned the verdict due to lack of reasons. The above-quoted passage does not stand for the proposition that trial judges are never required to give reasons. Nor does it mean that they are always required to give reasons. Depending on the circumstances of a particular case, it may be desirable that trial judges explain their conclusions. Where the reasons demonstrate that the trial judge has considered the important issues in a case, or where the record clearly reveals the trial judge's reasons, or where the evidence is such that no reasons are necessary, appellate courts will not interfere. Equally, in cases such as this, where there is confused and contradictory evidence, the trial judge should give reasons for his or her conclusions. The trial judge in this case did not do so...This is an error of law necessitating a new trial." L'Heureux-Dubé, in dissent, took issue on this point at 400-401: "Major J. would set aside the convictions of D.R. and H.R. for assault causing bodily harm, and order a new trial, on the ground that the trial judge failed to "address the confusing evidence" and to "separate fact from fiction", i.e., to state specifically which parts of the evidence were disbelieved. However, we have never held that a new trial can be ordered simply because the reasons do not deal with deficiencies in the evidence. My colleague's assertion contradicts our unanimous decision in *R. v. B.(R.H.)*....While we have often acknowledged the wisdom of providing reasons, we have never strayed from the proposition that the absence of reasons or an omission from the reasons are not in themselves an error of law...Major J. would derogate from this established rule by making the insufficiency of reasons a ground of appeal in cases where the evidence is "confused". There is irony in the fact that my colleague provides no reasons, let alone a compelling reason, for this change in the law....It has always been open to an appellate court to draw inferences about the validity of a verdict or order from the reasons given by the trial judge...In every such case, however, the only essential question is whether the verdict itself is sound, for "the issue is the reasonableness of the finding not an absence or insufficiency of reasons": *Barret*." This position of the court was presaged three months before in *R. v. McMaster* (1996), 46 C.R. (4th) 41, where, at 43, Don Stuart in an annotation discerned this coming change: "That the Supreme Court has changed course (without frank acknowledgement is evident....Although McMaster stops short of declaring an absolute duty on trial judges to justify decisions, there has been a welcome retreat from *B.(R.H.)*. There is clearly jurisdiction for intervention by appeal courts where the law was unsettled and the trial judge did not enunciate an acceptable basis for the decision."

⁵¹ There have even been calls for mandatory legislation if the courts fail to act. See *Hooper*, *supra* footnote 22 at 594: "If the courts are unwilling to make reasons for judgment obligatory, it is submitted that the legislature should do so. . ."

enterprise would be.⁵² We agree, but think that there are more fundamental considerations. For there to be "reasons" there must be some sort of standard that makes the reason effective. In the absence of such standards, any articulated "reason" merely calls for yet another level of "reasons" to be given to justify the first, and so on *ad infinitum*. In most fact finding, and obviously so in credibility matters, no criteria exist against which to objectively measure the truth. Thus, any given "reason" will soon cascade into a torrent of prior "reasons" none of which will prove more satisfactory than its predecessor.

Many judges have intuited our point, even if they have not seen it explicitly. In the realm of credibility assessment, for example, the absence of rules has been justified on the basis that "the issue of credibility is one of fact and cannot be determined by following a set of rules that it is suggested have the force of law."⁵³ Ultimately the question must be left to the 'common sense' of the trier of fact.⁵⁴ This argument at first glance appears circular: one cannot have rules because one cannot have rules; therefore one must rely on common sense. Nonetheless, there is a crucial insight here. One cannot have rules with the force of law because the reality to be governed is too complex and unruly to be captured by a set of rules.

Consider what a set of credibility rules might look like. To do that requires one to consider what variables are relevant to credibility. It immediately becomes obvious that the answer is "everything." Literally everything. All the testimony given that may tend to affirm or deny what a witness is saying is relevant. The internal consistency and coherence of the witness' testimony is relevant. Any evidence bearing on the truth-telling capacity of the witness is relevant, however obtained, as is "demeanor" evidence. But even demeanor evidence is impossibly complicated. Is squirming and sweating a sign of a liar or one nervous under the formidable pressure of the trial process? Does failure of eye contact indicate prevarication or is it this person's manner of interacting with authority figures such as judges and lawyers? If the witness is leaning 15 degrees to the right and wringing his hands, does that mean he is lying? And if so, what if the tilt is 5 degrees to the left? And so on.

⁵² *Supra* footnote 50 at 672, in *MacDonald* per Laskin C.J.C.: "These considerations and others that could be mustered go to show what is the preferable practice, but the volume of criminal work makes an indiscriminate requirement of reasons impractical, especially in provincial criminal Courts, and the risk of ending up with a ritual formula makes it undesirable to fetter the discretion of trial Judges." This concern was echoed by McLachlin J. in *B.(R.H.)*, *supra* footnote 18 at 121: "To require trial judges charged with heavy caseloads of criminal cases to deal in their reasons with every aspect of every case would slow the system of justice immeasurably."

⁵³ *White v. The King*, [1947] S.C.R. 268 at 234, Estey J. He went on to say at 235: "Eminent judges have from time to time indicated certain guides that have been of the greatest assistance but so far as I have been able to find there has never been an effort made to indicate all the possible factors that might enter into the determination. It is a matter in which so many human characteristics, both the strong and the weak, must be taken into consideration."

⁵⁴ *Ibid.*

Moreover, such reasons would be false in a singularly important way. It is surely never the case that a judge disbelieves a witness because he is leaning 15 degrees to the left and sweating. Rather, based on all the observations at trial, a view of what happened begins to emerge in the mind of the fact finder and it is the emergence of this overall sense of what transpired that in turn generates subsequently conclusions that this or that witness' story is consistent or inconsistent with the truth. A witness testifies and tells a story. The judge has no grounds yet to disbelieve the story and will give it provisional credence. But now another witness testifies to a different story and the differences between these two stories must either be reconciled or one chosen over the other. More evidence is heard. Perhaps it reduces the tension, perhaps it heightens it, but in either case the judge now knows more than he or she previously did. With that greater knowledge may come grounds to believe or disbelieve a witness. Inconsistency in stories may appear, grounds for bias or lack of disinterestedness may become obvious. At the end of the day, one version of what happened (usually but not necessarily some amalgam of the various possibilities offered by the parties) will command the judge's belief and the other will not, but the reasons for this will be as complex and impenetrable as the sum of the judge's background and knowledge that he brought to the trial before it began. Once belief has settled, then the conclusion becomes obvious that those championing another version are wrong and not to be believed. But this is not something that can be known in advance; it emerges as beliefs about the case as a whole emerge as the evidence and arguments unfold.

Now, reconsider the demands that judges explain their credibility beliefs. An honest judge, fully aware of the nature of his or her reasoning processes, would say: "In light of all the knowledge that I possess, party A deserves to win, and the testimony favoring party B is not sufficiently believable to carry the day. Exactly why this is so I don't really know. Perhaps the witnesses favoring party B were misinformed, perhaps they were lying, perhaps their perceptual abilities and memories have let them down. Whatever, verdict for A." This would not, however, satisfy those who ask for reasons from trial judges. That this is so is evident because judges now say precisely what we hypothesize above, and it is this that is seen as inadequate. What the critics want is something more along the lines of formal behavioral rules: If witness A is leaning to the right 15 degrees and sweating, he is lying." But, we now see that a requirement that judges explain their credibility beliefs in such terms would only generate a torrent of largely meaningless explanations. Indeed, they would be worse than meaningless because they would be false, and in addition would hold the judiciary open to ridicule. Rather obviously, maybe a person leaning 15 degrees to the right and sweating is lying, and maybe not.

The practical impossibility of requiring reasons is ironically evident in the arguments of those in favor of the policy. Reconsider the argument of O'Halloran J.A. quoted above:

The credibility of interested witnesses, particularly in cases of conflict of evidence, cannot be gauged solely by the test of whether the personal demeanor of the particular

witness carried conviction of the truth...The trial Judge ought to go further and say that evidence of the witness he believes is in accordance with the preponderance of probabilities in the case and, if his view is to command confidence, also state his reasons for that conviction.⁵⁵

The irony here is that this argument requires that one already know the proper outcome of a trial before one can judge the credibility of the witness. We agree, but we respectfully suggest that, at the end of the trial, the grounds for believing or disbelieving are a sum of the interaction of all the observations at trial with all the knowledge brought to the case by the fact finder.⁵⁶ This cannot be reduced either to rules or to straight forward explanation.

Let us restate our central point differently. When triers of fact believe any witness in whole or in part, that belief will be based on trust in that witness, but trust is as much a cumulative⁵⁷ experience as it is a calculation built upon pieces of evidence. Experiences of belief and trust are examples of what Michael Polyani refers to as tacit knowledge.⁵⁸ Tacit knowledge is contrasted with explicit knowledge, which is formally articulated (such as scientific or mathematical knowledge, or maps).⁵⁹ Perhaps on occasion the reliance on a witness can be reduced to such explicit calculations, as in cases where there is independent and corroborative evidence and a strong motive to lie. But trusting a witness and believing in someone's word is generally not based on that kind of knowledge.

Reconsider once more the beguiling simplicity of the call for reasons. Reasons are integral to rational judgment, and the call for reasons seems tantamount to the call for rationality. Yet the human condition impinges. The factors upon which rational judgment operate can defy the very call for reasons that is designed to guarantee that it is indeed rational judgment that is operating. Thus, conscientious trial judges wishing to respond with something other than a 'ritual formula'⁶⁰ find themselves in a stressful predicament. They will concur in the rationale underlying the call for reasons, yet find themselves unable to identify even to themselves the reasons that satisfactorily explain why they believe one witness or disbelieve another. Nor will the legal system come to their assistance, for nowhere does it provide specific criteria for acceptable reasons around which judges can form their beliefs. They nonetheless must

⁵⁵ *Supra* footnote 31. *Faryna v. Chorny*, [1952] 2 D.L.R. 354 at 356-357 (B.C.C.A.).

⁵⁶ See Allen, "Factual Ambiguity and a Theory of Evidence" (1994) 88 Nw. L. Rev. 604 at 627.

⁵⁷ *R. v. Davis (No.2)* (1977), 35 C.C.C. (2d) 464, applying the following statement by Prowse J.A. for the Alberta Court of Appeal's unanimous judgment in the unreported case of *Western Mack Truck v. Pyramid Management* (1977, Edmonton No. 10682): "In many cases, of which this is one, the reasons for believing some witnesses and not others are based on the cumulative effect of the evidence as a whole and not on any particular statement made by or demeanor of any particular witness."

⁵⁸ M. Polanyi, *The Study of Man* (Chicago: University of Chicago Press, 1959) at 12.

⁵⁹ *Ibid.*

⁶⁰ *MacDonald, supra* footnote 50 at 672: "...the risk of ending up with a ritual formula makes it undesirable to fetter the discretion of trial judges."

decide. And what is stressful for the trial judge becomes frustration for the appellant: how can others check for error if there are no reasons?⁶¹ In those cases where the conclusion is reasonable and supported by the evidence, it is most difficult to over-turn that decision unless there is an error in the trial judge's reasoning.

The quest is not to find ways for appellants to over-turn reasonable and supportable judgments, but rather to protect against unjust decisions based on inappropriate considerations. The puzzle is how to do that given the above complexities. A rule requiring trial judges to give reasons in all cases is not the best way to attack the problem, although the impulse that underlies this perspective is perhaps now more easily seen. Those favoring the providing of reasons do so less to ensure that the decision is for the right reasons than to ensure that it is not for the wrong reason. Right reasons cannot typically be identified for the reasons we have given. Interestingly, wrong reasons can be. If the reason for the decision is bias, prejudice or ignorance, the decision should not stand.

The worst cases imaginable would be those where what on the record appears a reasonable decision supported by the evidence is corrupted by the conscious immoral reasoning of the trier of fact. Thus for example where racism or prejudice are the underlying reasons leading to the decision. It does not matter that the same decision could be reached through proper reasons by another judge. It would not even matter if the decision was the right decision. It would still be necessary to condemn the decision and the corrupt reasoning behind it. But is the call for reasons likely to expose such corruption, and is that the best available method for dealing with such problem decision-makers? The answer is almost certainly no. Corruption normally will be well-hidden; to the extent it is consciously held, a formal call for reasons will not bring it to light. Here more than anywhere, the problem would be hidden behind carefully sanitized judgments or ritual formulae. The best protection against such decisions lies in the quality of the judicial appointments. Judicial candidates come from communities that know them, and they come with a history. It is far more likely that the justice system can be protected against unacceptable values by taking care in the appointment process than by a rule requiring reasons.

Another concern that the call for reasons aims to address is that wrong ideas, assumptions or stereotypical thinking can unconsciously distort the reasoning process. Here again the risk is that what appears to be a reasonable, supportable decision is arrived at by unacceptable paths. The "gender-related stereotypical thinking that led to assumptions about the credibility of complainants in sexual cases which we have at long last discarded as totally inappropriate"⁶² is such an example. In some cases, the discipline of articulating reasons may uncover inappropriately stereotypical reasoning, which can be corrected on appeal to the satisfaction of the appellant and to the education of the legal community

⁶¹ *Supra* footnotes 15 and 23.

⁶² *R. v. K.(V.)* (1991), 68 C.C.C.(3d) 18 at 35 (B.C.C.A.).

generally through the reported judgment. Occasionally a judge who was unaware of developments in our understanding will stumble into error oblivious to the fact that the world has changed. While the giving of reasons may bring such anachronisms to light, it would be more efficient and fair to the parties if such unmindfulness were overcome beforehand and not after the trial. It would spare the parties, society, the judge and the appellate court if judicial training and education,⁶³ rather than a rule requiring reasons, were used to address such problems.

Education and training would also be more effective in bringing to light unconsciously held errors that improperly affect the decision. This is especially obvious where cultural misunderstanding is at play. For example, a judge may come from a culture that values eye contact or certain vocal tonalities as indicators of truthfulness; and the absence of these as signs of deceit. The judge, blind to the influence of these values, may as a result disbelieve a witness who speaks from within a cultural influence that interprets these indicators differently; where the avoidance of eye contact and these same tonalities may indicate respect rather than deceit. In giving the decision, the judge may be unable to offer anything more than 'demeanor' or 'evasiveness' as reasons for the sincerely-held finding that the witness lied. The discipline of requiring the giving of reasons in all cases is not likely to bring to light such deeply embedded beliefs. Educational programs, especially workshops with the opportunity to freely exchange ideas, is by far a better method to help judges discover within themselves these subtle influences.

That is not to say that such educational programs could identify the myriad specific factors that affect decisions and are too dimly held to be brought to light in reasons. But requiring that reasons be given would not bring them to light either. Such programs and workshops would, however, foster a better understanding of the complexity of decisions about credibility and an awareness of sources of error. This in turn would be reflected in the quality of the reasons given by trial judges, and could go a distance in satisfying concerns in that regard. But education and training, not the false promise of a requirement of reasons, can best address the concerns of the understandable impulse underlying the call for reasons. The call for reasons imposes an impossibly high demand on the resources, cognitive and material, of the legal system. The Supreme Court cases are best seen as intuiting just this point. Nonetheless, the call for reasons rests upon profoundly important considerations, but ones best handled through a clear recognition of the limits and potentialities of the human condition. Selecting and training honorable people as judges, and constructing mechanisms to facilitate introspection by those individuals, such as continuing judicial

⁶³ See G.T.G. Seniuk, "Judicial Fact-Finding and Contradictory Witnesses" (1994) 37 C.L.Q. 70 at 73 where the need for such judicial workshops was outlined and a model identified. Also see *Friedland*, *supra* footnote 48 at 171 where it is reported that credible judicial leadership is necessary for such programs to have support and credibility with the judiciary. He also notes the observation that compared to the United States there is concern that Canadian judges do not have adequate resources provided for their judicial education.

education programs, are more likely to have a positive effect on the quality of justice in Canada than is the adoption of a formal requirement of reasons.

II. *The Nature of Juridical Proof*

The first puzzle rested upon the impossible demands of the perfectly understandable desire for reasons as a means of increasing the probability of reasoned judgment. The second puzzle rests upon the impossible demands made upon the system by the conventional view of the nature of juridical proof. The conventional view of juridical proof has long held that liability is determined by proof of the formally necessary elements to the requisite burden of persuasion, typically a preponderance of the evidence in civil cases and proof beyond reasonable doubt in criminal cases. Those burdens of proof in turn have been understood to be probability measures in the conventional probability calculus that ranges from 0.0 to 1.0, with preponderance being more than a .50 probability and proof beyond reasonable doubt being some very high probability (.90 or .95 perhaps). Not only was this view conventional, it was virtually uncontroversial.

The conventional view of the nature of juridical proof has been undermined by two developments, one analytical,⁶⁴ the other empirical.⁶⁵ We put aside the empirical developments, which have made it rather plain that virtually no one thinks as the conventional legal theory requires, and focus here on the analytical points. The conventional view of proof has, it turns out, remarkably curious logical implications and in certain respects striking logical inadequacies. The two most troubling difficulties are, first, how the theory handles uncertainty (risk, in the language of decision theory), in particular the remarkable consequences of the conjunctive effect implicit in the conventional theory, and second the curious manner in which the theory handles ambiguity (ignorance, in decision theoretic terms).

Before proceeding, it is worth noting that the combined effect of the contemporary critiques of the conventional view has generated a shift of focus from the elemental structure of liability to holistic perspectives, from deciding the truth or falsity of particular elements to deciding the relative plausibility of opposing stories, which is the alternative theory proposed by the critics of the conventional view⁶⁶ and is now being adopted even by its defenders.⁶⁷ In an

⁶⁴ See, e.g., R.J. Allen, *The Nature of Juridical Proof* (1991) 13 Cardozo L. Rev. 373.

⁶⁵ N. Pennington and R. Hastie, "A Cognitive Theory of Juror Decision Making: The Story Model" (1991) 13 Cardozo L. Rev. 519; Allen, *supra* footnote 56 at 604.

⁶⁶ Allen, *supra* footnote 56 at 605; R.J. Allen, "A Reconceptualization of Civil Trials" (1986) 66 B.U. L. Rev. 401; P. Bergman & A. Moore, "Mistrial by Likelihood Ratio: Bayesian Analysis Meets the F-Word" (1991) 13 Cardozo L. Rev. 589.

⁶⁷ See, e.g., R.D. Friedman, "Infinite Strands, Infinitesimally Thin: Storytelling, Bayesianism, Hearsay, and Other Evidence" (1992) 14 Cardozo L. Rev. 79 (reconciling Bayesian approaches with the comparative story model). See also B. Robertson and G.A. Vignaux, "Expert Evidence: Law, Practice and Probability" (1992) 12 Oxford J.L. Stud. 392.

interesting way, this shift mirrors an analogous shift in the philosophy of science earlier this century — from the view that science is embarked on an inexorable march toward the truth, to the view that progress is measured by the articulation of better theories, where “better theories” means “better than the available alternatives.”⁶⁸

This section elaborates the two points noted above and contrasts the conventional theory to the relative plausibility theory of juridical proof. Part A addresses uncertainty, and Part B ambiguity. Part C address Canadian jurisprudence on the topic. First, however, a word about the distinction between uncertainty (risk) and ambiguity (ignorance). Compare two cases. In the first, you know that an urn has 60 black balls and 30 red balls in it. Yesterday one ball was drawn at random, and the question is what color that ball is. This is a case of uncertainty (risk). In the second, you know that two days ago three balls were drawn from an urn containing 90 balls, two were black and one was red. Yesterday one ball was drawn at random, and the question again is what color that ball is. This is a case of ambiguity (ignorance).

A. *The Accommodation of Uncertainty (risk): Allocation of Errors and the Conjunction Problem*

The most glaring deficiency of the conventional theory of juridical proof is its inability to explain the structure of proof of liability. Under the conventional view, burdens of persuasion allocate errors over the set of litigated cases, but this allocation cannot occur in the manner desired through proving discrete elements to the requisite burden of persuasion, save only under the most unlikely assumptions.⁶⁹ The theory is that errors should be allocated equally over plaintiffs and defendants in civil cases (or perhaps the total number of errors should be minimized, a nuance that does not affect the following analysis), and weighted against the state in criminal cases. The problem is, using civil cases as the example, that proving individual elements to the requisite burden of persuasion will not allocate errors in either fashion, and the actual results are quite odd. If a civil cause of action has two elements that are statistically (stochastically) independent and each is proven to a .6 probability, the probability of them both being true is .36. That means that the probability that the defendant did not commit at least one of the necessary legal elements is .64 (1-.36), and yet a decision for the plaintiff would nonetheless be returned. This is quite a striking result and demonstrates the incomparability of the present conception

⁶⁸ See generally K.R. Popper, *Objective Knowledge: An Evolutionary Approach* (1972).

⁶⁹ One assumption is that for unknown reasons everything works out all right. For a discussion, see R. Lempert, “The New Evidence Scholarship: Analyzing the Process of Proof” (1986) 66 B.U. L. Rev. 439 at 452-53; R.J. Allen, “Analyzing the Process of Proof: A Brief Rejoinder” (1986) 66 B.U. L. Rev. 479 at 480-81. A more plausible, but still rather dubious, set of assumptions is that elements replicate each other exactly and that giving jurors more than one chance to make an error does not increase errors.

of proof and the desired outcome of civil trials. The desired outcome is to make about the same number of mistakes against plaintiffs and defendants (or possibly to minimize the total number of mistakes), yet in fact verdicts will be returned for plaintiffs in the face of a high probability that the defendant did not commit all the necessary legal elements of liability.

Consider another, still stranger, situation. Consider a case where one element is proven to .5 and another to .9. This would be a defense verdict, since .5 is less than a preponderance. Compare this case to the first hypothetical above where the two elements are each proven to .6, which would be a plaintiff's verdict. The probability in the second hypothetical of defendant's liability is greater ($.5 \times .9 = .45$) than in the first ($.6 \times .6 = .36$), yet a verdict for the defendant is returned in the second and for the plaintiff in the first.

One response to these types of oddities has been to modify the conventional theory to provide that the conjunction of necessary elements must exceed some probability level. This, too, is implausible. Consider two criminal cases, one involving murder and the other theft. Assume that the elements of the murder charge are 1. intent to kill, 2. voluntary act, and 3. causation, and that the elements of theft are 1. the taking, and 2. carrying away, 3. of the personal property, 4. of another, 5. with the intent to deprive. Both involve intentionality, but if the modified conventional theory of proof is true, intent to kill will, on average, have to be proven to a lower probability than will intent to deprive. This is because the theft charge has more elements. For the conjunction of those elements to exceed beyond reasonable doubt, each element on average will have to be proven to a higher probability than will each element of murder. Any theory that generates the result that intent to deprive must be established to a greater certainty to obtain a conviction for theft than intent to kill to obtain a conviction for murder is problematic.

The conjunction problem is more complicated than so far elaborated in the literature, however. The entire genre has assumed the dependency relationships between various elements is known, or at least knowable. The literature discussing the conjunction problem invariably begins by assuming stochastic independence between elements, primarily because that assumption highlights the analytical problem most forcefully, and then asserts, correctly, that relaxing the independence assumption merely reduces the conjunctive effect. In either case, though, the analysis makes sense only if one at least knows that the elements are not duplicates of each other, in other words that they are not completely dependent. Similarly, in order to apply statistical concepts to cases, whether relative frequency or Bayesian, the dependency relationships must be known. What if, plausibly enough, the dependency relationships between the formal elements of liability are not known? In that case, all the counterintuitive consequences of logical confirmation theories become relevant. These consequences are not trivial.

If the dependency relationships among the various elements that are relevant to the confirmation of some hypothesis (like liability) are not known, all kinds of weird results obtain. For example, separate pieces of evidence can

independently confirm an hypothesis while their conjunction disconfirms it. Consider the following example, which is borrowed with modifications from Wesley C. Salmon, who in turn borrowed it from Rudolph Carnap.⁷⁰ Assume that the issue is whether a particular act alleged to be an intentional tort was done intentionally, caused harm, and was not justified. Let $\neg j$ be the hypothesis that the act was not justified. Let i be evidence that it was done intentionally, and h that harm was done. Now, consider the following distribution, where $\neg j$ = an unjustified act, and j = a justified act, so that liability would be established by i , h , and $\neg j$.

	<u>Harm</u>	<u>No Harm</u>
Intent	$j, \neg j$	$\neg j, \neg j$
No Intent	$\neg j, \neg j$	j, j

Assuming no other information bearing on this problem, we can see that:

$$\begin{array}{llll}
 P(\neg j) = .5 & P(\neg j, h)^{71} & = & .6 \\
 & P(\neg j, i)^{72} & = & .6 \\
 & P(\neg j, h, i)^{73} & = & .33
 \end{array}$$

Thus, h and i each separately confirm $\neg j$ (increases its probability), while the conjunction of h and i disconfirms it (decreases its probability). This is not an isolated curiosity. As Salmon points out, a piece of evidence may confirm two hypotheses while disconfirming their conjunction. The example given above could be modified to show that the same piece of evidence may increase the probability of intent and harm but may disconfirm their conjunction. Weirder still, the example could be modified to show that a piece of evidence can confirm each of two hypotheses, but disconfirm their disjunction. In other words, a piece of evidence could increase the probability of intent and increase the probability of harm, but decrease the probability of either intent or harm.⁷⁴

To make this somewhat abstract logical presentation concrete, consider an example. Suppose a murder is committed on the north end of a large island, 20 miles in diameter. Suppose further that the defendant is observed crossing the bridge onto the island 40 minutes before the murder occurred. This would probably appear to most observers as reasonably inculpatory evidence establishing opportunity. But now suppose that evidence is produced that the

⁷⁰ W.C. Salmon, "Confirmation and Relevance" in *The Concept of Evidence* (Peter Achinstein ed., 1983) 95 at 104.

⁷¹ This reads the probability of $\neg j$ given h .

⁷² The probability of $\neg j$ given i .

⁷³ The probability of $\neg j$, given the conjunction of h and i .

⁷⁴ Salmon, *supra* footnote 70 at 104-105.

defendant's mother, who lives on the south end of the island, suffers from kidney dysfunction, must be on dialysis every week, and her standing appointment is one hour after the murder on the mainland. Moreover, the defendant picks her up every week and takes her to the mainland for treatment. Now the apparently inculpatory evidence becomes strongly exculpatory. Crossing the bridge at the time the defendant did goes far in establishing a very strong alibi.

As this example points out, and the logical presentation makes explicit, these results occur because causal relationships can be manipulated. In particular, the occurrence of events can be, or can be made to be, nonrandom. Dealing with random events, if A occurs, the probability of A and B occurring goes up, but it can be the case that the occurrence of A and B are not random, that they are dependent upon one another; indeed it can be the case that every time A occurs B does not, or the opposite, that they always occur together. Those dependency relationships exist in every conceivable way, which is the point the chart and the example above make. Without knowledge of those dependency relationships, one has no idea what the implications of evidence might be.

This analysis led many philosophers of science to conclude that scientific propositions could be confirmed only relative to a theory and that theories in turn had to be accepted or rejected as a whole. The analogue within the law is that parties' theories must, in general, be accepted or rejected whole, and that the acceptance of one theory or another is determined by the applicable burden of persuasion. In civil cases, fact finders are to accept the more plausible of the stories advanced by the parties, and in criminal cases they are to accept the state's case only if no plausible story consistent with innocence has been advanced.⁷⁵ The legal mechanism for reducing the intractable ambiguity of the human condition is the creative activity of the parties through their determination of precisely what is to be litigated. The relative plausibility theory, thus, can fairly easily accommodate the logical implications of confirmation theory.

Given this analysis, what explains the law's curious persistence in maintaining the conventional theory of juridical proof? Two points, we think. First, the analysis contained here is a relatively recent development. Second is the intuition that comparing stories would allow a party to recover whenever the party's story was more plausible than the opponent's, even though the story was not very plausible at all. This is true, and the objection rests on the commendable desire not to make mistakes. Nonetheless, the objection is misplaced. Take an extreme example. Suppose the probability (understood as a relative frequency) of the plaintiff's case is .2, which is quite low and would not be sufficient for a verdict under the conventional conception of proof. Now, assume the probability of defendant's story is .1. Although the probability of the plaintiff's story is low, it is twice as likely as the defendant's. Returning a verdict for a defendant in this circumstance will generate twice as many errors as a verdict for plaintiff. The

⁷⁵ The legal adequacy of the story is tested by the judge in all cases through the decision to send the case to the jury, except guilt of a criminal charge where the judge theoretically lacks the power to direct a verdict.

impulse of error reduction which animates the present rules actually favors the relative plausibility theory. In criminal cases, the explanation is highly analogous. The conventional theory of proof appears to ensure reliability, although for the reasons we've discussed it does not. The relative plausibility theory, by contrast, at least has the virtue of directing attention to the proper issues.

B. *The Allocation of Ambiguity (Ignorance)*

In addition to allocating errors, the structure of proof also allocates ambiguity. Suppose a plaintiff must prove its case to a preponderance of the evidence, which is intended to mean a more than .5 probability, understood as either a relative frequency or a subjective probability.⁷⁶ The conventional theory has proceeded as though these formulations are self-explanatory and the only argument the more arcane one between relative frequentists and Bayesians, but this is erroneous. Under either interpretation, a range of ambiguity over which errors are allocated must be specified, and two obvious candidates are in sight. The first is that an unconditional probability is to be determined, by which we mean a probability conditioned upon all possible evidence. The second is that a probability conditioned solely on the evidence presented at trial is to be determined.

Neither of the allocations of ambiguity work satisfactorily, although for different reasons. Under the unconditional probability candidate, a plaintiff's task virtually always would be impossible, and of course the state's task in a criminal case would be more difficult still. The plaintiff would be required to demonstrate all the possibly true states of the universe as well as their implications, and the failure to do so would count in every instance in the defendant's favor. Perhaps in some unusual case a plaintiff could construct an algorithm demonstrating that the sum of the probabilities of all the cases favoring the defendant, those supported by trial evidence plus those for which no direct evidence has been adduced,⁷⁷ amounts to less than a .5 probability of no liability, but the mere articulation of this logical possibility adequately disposes of it as a general explanation of the trial process.

The second possibility — that the relevant probability is to be conditioned only upon the evidence produced at trial — is also unsatisfactory, although for essentially the opposite reason from that which disposes of the unconditional probability candidate. Whereas under the unconditional probability assumption there are too many possible accounts of reality, under the conditioned on the trial evidence assumption there are too few — none, actually. There are none because this possibility suffers from an infinite regress of a different sort from the unconditional probability assumption. The regress here comes from the fact

⁷⁶ We are unclear what a preponderance of the evidence is under inductive theories such as developed in L.J. Cohen, *The Probable and the Provable* (1977). See R.J. Allen, *The Nature of Juridical Proof*, *supra* footnote 64 at 376, 379.

⁷⁷ Why we use the phrase "direct evidence" here will become evident in the next section.

that evidence does not announce its own implications;⁷⁸ those implications emerge from the effort of human contemplation. For the “trial evidence” assumption to work, the conditions of that effort of human contemplation must themselves be the subject of evidence, but then so too must be this next evidentiary proffer, off into a never ending regress that ultimately will not produce a single candidate for factual truth.

The relative plausibility theory is not embarrassed by this aspect of the ambiguity problem. Under the relative plausibility theory, the parties determine the range of relevant ambiguity. The task of the fact finder is not to make either an unconditional finding or to deny its own capacity for judgment, but rather to determine the relative plausibility of the stories advanced by the parties. Thus, whatever ambiguity there is, and there will often be some, will be allocated equally over the parties, a presumably valuable outcome.⁷⁹

Reconsider our definition of ambiguity above. You know that two days ago three balls were drawn from an urn containing 90 balls, two were black and one was red. Yesterday one ball was drawn at random, and the question again is what color that ball is. We suggest that this is a much better metaphor for the trial of disputes than is uncertainty. Moreover, it makes clear why the conventional conception of juridical proof must be false. Were it true, somebody would be responsible for determining the color of the other 87 balls in the urn, presumably the plaintiff. Yet, the plaintiff will not have access to that information, nor the resources to determine it. If the conventional story of juridical proof were true, plaintiffs in civil cases and the state in criminal cases would almost always lose. At the time in question — the time of the litigated event — the universe could have been an infinite variety of ways. No one will be able to demonstrate that over half of them favor one party or another, or whatever the analogue in a criminal case might be. This imposes impossible demands.

Ironically, rather obviously the system does not implement even though it pays homage to the conventional conception of proof. Civil defendants do not negate elements; they try to show their version of facts is correct. Criminal defendants do not just point to the phone book of the area where the crime occurred and say: “Look at all those people who live in the area. Anyone of them could have done the crime. Unless you disprove that each of them did the crime, you cannot convict me.” O.J. Simpson could have simply asserted that any of the six million people in the Los Angeles area murdered Nicole Brown, but he

⁷⁸ See, e.g., generally, R.J. Allen, “On the Significance of Batting Averages and Strikeout Totals: A Clarification of the “Naked Statistical Evidence” Debate, The Meaning of “Evidence,” and the Requirement of Proof Beyond a Reasonable Doubt” (1991) 65 Tul. L. Rev. 1093; C.R. Callen, “Cognitive Science and the Sufficiency of “Sufficiency of the Evidence” Tests” (1991) 65 Tul. L. Rev. 1113. See also C.R. Callen, “Adjudication and the Appearance of Statistical Evidence” (1991) 65 Tul. L. Rev. 457; D. Shaviro, “A Response to Professor Callen” (1991) 65 Tul. L. Rev. 498; D. Shaviro, “A Response to Professor Allen” (1991) 65 Tul. L. Rev. iiiii. We elaborate this point below in Part III, at____, *infra*.

⁷⁹ For example, the fact finder may conclude that the relevant event happened differently than either party asserts, which is perfectly acceptable. The crucial point is that this may benefit any party at trial; it would not induce any systematic biases.

did not. Why not? Because the conventional theory of proof is false. Juridical proof is largely comparative. The parties identify the range of ambiguity over which they wish to dispute, and then must demonstrate the plausibility of their competing versions. No other system could function given the resources we have available to us.

C. *The Canadian Jurisprudence*

It is well established in Canadian criminal law that a trier of fact must not be compelled to choose between contradictory witnesses,⁸⁰ and the temptation to take an "either-or" approach to such evidence has persisted as an "oft repeated error."⁸¹ The concern has been to avoid "a credibility contest, where the jury must choose which of the two versions it believes."⁸² To protect against this the Supreme Court of Canada in *R. v. W.(D.)* attempted to articulate a correct, three-part jury instruction in those cases where the accused testifies.⁸³ The second branch of this instruction ("if you do not believe the testimony of the accused but you are left in reasonable doubt by it, you must acquit"⁸⁴) has generated academic debate⁸⁵ because it "has been suggested that if one rejects the evidence of the accused, it is logically inconsistent to have a reasonable doubt with respect to it."⁸⁶

⁸⁰ *Supra* footnote 13 at 89. More recently, in *R. v. S. (W.D.)*, *infra* footnote 82 at 10, per Cory J.: "It is erroneous to direct a jury that they must accept the Crown's evidence or that of the defence. To put forward such an either/or approach excludes the very real and legitimate possibility that the jury may not be able to select one version in preference to the other and yet on the whole of the evidence be left with a reasonable doubt. The effect of putting such a position to the jury is to shift a burden to the accused of demonstrating his or her innocence, since a jury might believe that the accused could not be acquitted unless the defence evidence was believed."

⁸¹ *R. v. W.(D.)*, [1991] 1 S.C.R. 742 at 758, Cory J.

⁸² *R. v. S (W.D.)* (1995), 93 C.C.C. (3d) 1 at 11, Cory J.

⁸³ *Supra* footnote 81 at 757, per Cory J: "First, if you believe the evidence of the accused, obviously you must acquit. Secondly, if you do not believe the testimony of the accused but you are left in reasonable doubt, you must acquit. Thirdly, even if you are not left in doubt by the evidence of the accused, you must ask yourself whether, on the basis of the evidence which you do accept, you are convince beyond a reasonable doubt by that evidence of the guilt of the accused." A fourth instruction has been added: "If, after a careful consideration of all the evidence, you are unable to decide whom to believe, you must acquit": *R. v. C.W.H.* (1991), 68 C.C.C. (3d) 146 (B.C.C.A.).

⁸⁴ *Ibid.*

⁸⁵ J. Gibson, "The Liars' Defence" (1993), 20 C.R. (4th) 96; A.D. Gold, "The 'Average, Nervous, Inadequate, Inarticulate, in Short, Typical' Accused's Defence" (1993), 22 C.R. (4th) 253; J.L. Gibson, "Misquote Changes Meaning" (1994), 24 C.R. (4th) 395; A.D. Gold, "Typo Does Not Change Anything" (1994), 24 C.R. (4th) 397.

⁸⁶ *Supra* footnote 82 at 18, McLachlin J (in dissent), who went on to write: "Certainly if the jury rejected (as opposed to merely being undecided about) *all* of the evidence of the accused, it is difficult to see how that very evidence, having been rejected, could raise a reasonable doubt. However, a jury could reject part of the evidence of the accused and still reasonably entertain a doubt as to guilt based on other parts of the accused evidence, which the jury did not reject, but either accepted or was undecided about. It is in the latter sense that I read the second condition of Cory J."

The application or phrasing of the second branch of the *W.(D.)* test has not only spawned scholarly debate but has divided appellate courts as in *S.(W.D.)*.⁸⁷ In that case, the only witnesses were the complainant and the accused. “and there was no other evidence for the jury to consider.”⁸⁸ The case “turned completely on the question of credibility and the correct consideration by the jury of the onus of proof resting upon the Crown of proving the charge beyond a reasonable doubt.”⁸⁹ Although the trial judge several times correctly instructed the jury, the recharge contained phrases⁹⁰ which, in the majority opinion, “would indicate that the jury had the choice to believe either the complainant’s or the accused’s evidence.”⁹¹ The majority decided these phrases suggested an “either/or approach to credibility which...excludes the ‘third alternative’ that although a jury may not believe an accused, it may still have a reasonable doubt on the whole of the evidence. It shifts the burden of proof to the accused by telling the jury it can only acquit if the accused’s story is believed, rather than that of the complainant.”⁹² For the minority, McLachlin J. concluded that in its totality, the instructions correctly stated that “proof beyond reasonable doubt could only be arrived at by weighing all of the evidence...[and that] the jury could not resolve the case simply by deciding whether it believed the complainant or the accused.”⁹³ Although portions of the instruction did not appear to meet the three-part *W.(D.)* test, it was not incorrect on the facts of this case because, as McLachlin J. noted: “Since the only witnesses were the complainant and the accused, total rejection of all the accused’s evidence coupled with acceptance of the complainant’s evidence would leave *no evidence* upon which a reasonable doubt could be based.”

Interestingly, this apparent rejection of the relative plausibility theory in fact embraces it. Although ambiguously expressed, at the heart of the Supreme Court’s concern about credibility contests is an insight that also lies at the heart of the relative plausibility theory. The issue has been presented to the Court, and discussed by the commentators, as though the only choice were to accept completely one version of events or the other. This is seen quite clearly in the

⁸⁷ *Supra* footnote 82.

⁸⁸ *Ibid.* at 5.

⁸⁹ *Ibid.* at 8-9.

⁹⁰ *Ibid.* at 10: “who is to be believed, either complainant in each of the counts or the accused.”; “If you reject his evidence in comparison to the evidence of either of the complainants and that complainant’s evidence is accepted by you as being true, then you convict.”; “You have two stories here. You have to decide whether one is strong enough — one of the complainants’ evidence is strong enough to convince you of the guilt, and you can reject the accused’s evidence. If it isn’t that strong and you can’t reject the accused’s evidence, you must have a reasonable doubt. It is that strong, and you can reject the accused’s evidence, you should be able to say, I am convinced beyond a reasonable doubt.”; “Am i convinced beyond a reasonable doubt that her evidence is correct and his evidence can’t be accepted, and you do that with each count.”

⁹¹ *Ibid.* at 11.

⁹² *Ibid.*

⁹³ *Ibid.* at 19.

phrase quoted earlier that “if one rejects the evidence of the accused, it is logically inconsistent to have a reasonable doubt with respect to it.” This phrase does not capture the domain of inquiry. It assumes that “accepting evidence” means investing it with 1.0 probability — that it is certainly right, in other words, and that “rejecting evidence” means investing it with 0.0 probability — that it is certainly wrong, in other words. But these two probabilities — 1.0 and 0.0 — are not the only possibilities; rather, they are the end points of a infinite range of possibilities. One can hear evidence, not believe it to 1.0 probability and still be influenced by it. This, in essence is what the Supreme Court is saying, and the commentators have missed. It is precisely what is meant by the phrase: “proof beyond reasonable doubt could only be arrived at by weighing all of the evidence... the jury could not resolve the case simply by deciding whether it believed the complainant or the accused.” The commentators are asserting that evidence comes in only two flavors — completely persuasive or not persuasive at all; the Court is saying, correctly, that the persuasive force of evidence ranges from 0.0 to 1.0.

Since the persuasive force of evidence ranges over 0.0 to 1.0, it would be a serious mistake to inform the fact finder that it had to accept or reject evidence.⁹⁴ The correct thing to do would be to inform the fact finder to decide for itself the extent to which it is influenced by the evidence. The Supreme Court’s view, in short, recognizes the enormous complexity of the evidentiary process, the insight at the heart of the relative plausibility theory, and which is the key to their consistency. Under the relative plausibility theory, the task at the end of the day is to determine in civil cases what the most plausible account is, and in criminal cases whether there is a plausible account of guilt and no plausible account of innocence. Just as the Supreme Court is calling for, the relative plausibility theory does not require that unnatural or unrealistic demands be made upon the evidentiary process. Under the relative plausibility theory, as under the Supreme Court’s cases, there is no need to reduce the decision to complete acceptance or complete rejection. Rather, one determines in light of all the evidence, including the knowledge and experience of the fact finder, what most plausibly occurred.

Conclusion

The law rightly desires justified results in fact finding, and like its sister discipline philosophy invests considerable efforts in obtaining them. The law is an important part of the glue that holds society together, and its adhesive power is in large measure a function of public perception that it does justice. Justice, in turn, in large measure means accurate adjudication. Yet like the philosophical

⁹⁴ See *R. v. MacKenzie* (1993), 18 C.R. (4th) 133, per Lamer, C.J. at 162-164 on “The Distinction Between Facts and Evidence” generally, where he states: “It is an error to refer to the jury ‘rejecting’ evidence at any stage of their deliberations. All of the evidence must always be considered.”

search for justified knowledge, the search for justified results within the law will not reduce to a set of simple propositions or rules. This is true not only because of the problem of induction, which besets the law as much as philosophy, but also because the range of inquiry is so vast. The law reaches into every aspect of human behavior, and every aspect of human behavior can become relevant, or generate relevant evidence, at trial. Given the vastness of the canvass, any effort to reduce human decision making to a set of necessary and sufficient conditions is doomed to failure. The most that we can expect is to have disinterested fact finders exercise judgment in light of their knowledge and experience in any unbiased fashion. In doing so the fact finders will of necessity rely on the active involvement of the parties in fashioning the issues to be decided at trial and indicating the range of disagreement over which decision must be made.

It is thus largely futile to insist on statements of reasons to justify inferences of fact, for they will inevitably be banal and uninteresting, save only the case where the honest but misguided fact finder candidly expresses the discriminatory basis of its decision. Similarly, in our view the law should recognize the largely comparative process of proof that occurs at trial in the shadows of the official orthodoxy requiring proving elements of causes of action to discrete probability levels. The orthodoxy cannot be implemented, for reasons we have explained, and maintaining it serves only to distract consideration from the issues that ought to be under examination.