CONTEXT, CULTURE AND THE LAW OF EXPERT EVIDENCE

*David M. Paciocco**

1. Introduction

The admissibility of expert evidence has received significant attention of late because of the proliferation of experts in our courts. It has been observed that "Economic, statistical, technological, and natural and social science data are becoming increasingly important in both routine and complex litigation."[1] This is a product both of the increasing complexity of litigation and the burgeoning number of persons who claim expertise, and it has brought with it the risks posed by "junk science" and the hired gun. Both Canada and the United States have responded with similar rules that assign the role of "gatekeeper" to the trial judge, requiring the judge to prevent the admission of irrelevant, unreliable or misleading opinion evidence. This has raised significant debate about whether judges are able to perform the quality control function that the law assigns. In the leading American case, *Daubert v. Merrel Dow Pharmaceutical, Inc.*,[2] Chief Justice Renquist dissented, doubting that the law of evidence should force judges into the role of amateur scientists. In spite of this, the die have been cast in each country. The law in both Canada and the United States requires judges to undertake what can easily become a complex and intimidating analysis.[3] As I will seek to show

---

* Professor, Common Law Section, University of Ottawa. Of counsel, Michael D. Edelson & Associates.

1. Judicial Conference of the United States, *Report of the Federal Courts Study Committee 97* (April 2, 1990), cited in *General Electric Co. v. Joiner* (1997), 139 L. Ed. 2d 508 (U.S.S.C.) at p. 520. Although the observation was made in the United States, it applies with only moderately less force in Canada.
2. 509 US 579 at p. 601 (1993).
3. In *General Electric Co. v. Joiner*, *supra*, footnote 1, at p. 520, Justice Breyer stressed that "neither the difficulty of the task nor any comparative lack of expertise can excuse judges from exercising the 'gatekeeper' duties". He commented on how judges must find ways to overcome the inherent difficulty, citing increased

in this article, it is an analysis that can become distorted if special care is not paid to context. The supremacy of context reduces the value of precedent in the area. Moreover, it even counsels caution with respect to reliance on trends and on general statements of principle. With respect to expert evidence, context is everything.

2. The Rules of Exclusion.

In *R. v. Mohan*,[4] the Supreme Court of Canada reduced its rules about the admission of expert evidence into a concise four-part test. According to that test, admissibility depends on the application of the following criteria, all of which must be satisfied before the evidence can be admitted:

(a) relevance;
(b) necessity in assisting the trier of fact;
(c) the absence of an exclusionary rule; and
(d) a properly qualified expert.

Although it is not mentioned expressly, the "reliability" or accuracy of the opinion is also "clearly an essential requirement for the admission of expert evidence. In some cases, reliability has been considered an element of the relevancy criteria . . . and in others as part of the need to have a qualified expert."[5]

In *General Electric Co. v. Joiner*,[6] the United States Supreme Court's description of its rule from *Daubert*[7] was even more pithy than the *Mohan* summary. It said: "In general, scientific testimony that is both relevant and reliable, must be admitted and testimony that is irrelevant and unreliable must be excluded."[8] This punchy statement of law omits reference to the fact that the Americans, too, require a necessity requirement and a properly qualified expert, and that relevant and reliable evidence contravening a collateral exclusionary rule would be as unwelcome in the United States as it is in

---

use of pretrial conferences to review the evidence, pretrial hearings, and the appointment of special masters and specially trained law clerks. He also called on increased use of judicially appointed experts and for a cadre of reputable experts recommended by scientific organizations.

4. [1994] 2 S.C.R. 9, 114 D.L.R. (4th) 419.
5. *R. v. F. (D.S.)* (1999), 132 C.C.C. (3d) 97 at p. 110, 169 D.L.R. (4th) 639 (Ont. C.A.).
6. (1997), 139 L Ed 2d 508 (U.S.S.C.).
7. 509 U.S. 579 (1993).
8. *Supra*, footnote 6, at p. 522.

Canada. Despite modest differences in the articulation of the law, the focus of the test in each country is therefore similar.[9]

3. Points of Departure

Of course, legal doctrine develops as lines of authority mature. Before addressing more subtle questions relating to the use of American authority in Canada, two important points of departure should be noted. In Canada, the law has gone in directions that remain less transparent with the American authority. The first has to do with standards of proof relating to admissibility, and the second, with the treatment of novel science.

(1) Burdens of Proof

Where there are preliminary facts that must be established before evidence is admissible, it is necessary to think in terms of standards and burdens of proof. In the criminal context, three recent decisions demonstrate the importance of burdens and standards of proof relating to expert evidence in Canada.

The first is *R. v. Terciera*,[10] a case involving the admissibility of DNA evidence identifying the accused. The Ontario Court of Appeal held that the standard to which a proponent of evidence must establish the components of the *Mohan* test is the balance of probabilities. The party wishing to tender the evidence must therefore demonstrate that the expert is probably qualified and that the evidence is probably necessary and relevant, failing which the evidence will not be admitted. Justice Finlayson stopped short of imposing a similar requirement on the reliability inquiry, however. He held that "the threshold test of reliability is met when the trial judge . . . feels that the novel scientific technique or theory is sufficiently reliable to put to the [trier of fact] for its review".[11]

In the second case, *R. v. J.(I.)*,[12] Justice Rosenberg ordered a new trial on other grounds, but emphasized that the expert evidence

---

9. Although *Daubert* is not cited in *Mohan*, Professor R.J. Delisle has pointed out that "*Mohan* . . . has implicitly adopted the current United States position": "The Admissibility of Expert Evidence: A New Caution Based on General Principles" (1994), 29 C.R. (4th) 267 at p. 269.
10. (1998), 15 C.R. (5th) 359 at p. 378, para. 45, 38 O.R. (3d) 175 (C.A.), affd [1999] 2 S.C.R. 866, 142 C.C.C. (3d) 95, 46 O.R. (3d) 96*n*.
11. [1999] O.J. No. 1192 (Ont. C.A.).
12. *Ibid.*, at p. 359, para. 385 (Ont. C.A.).

should not have been admitted without proper scrutiny at a *voir dire*:[13]

> There is a heavy onus upon counsel leading this type of evidence to elicit the factual foundation for the opinion and relate the opinion to the issues in the case in a manner that is understandable. Otherwise, the evidence may not meet the necessity and reliability requirements . . .

This does not mean that a highly formal *voir dire* is required in all cases. The extent and nature of the hearing will be dictated by the needs of the case, including concessions made by counsel.[14]

Since the law imposes prerequisites on the admission of opinion evidence, a failure to object may not prevent a successful appeal. The trial judge is the gatekeeper, whose responsibilities may not vanish simply because the party against whom the evidence is presented fails to act promptly. In the words of Justice Charron in *R. v. A.K.*, "Expert opinion evidence that does not meet the criteria of admissibility cannot be admitted regardless of the position of counsel."[15]

It is much less clear whether similar burdens and threshold inquiries apply in the United States. In *Daubert*, in a footnote, the court stated that the matters preliminary to admissibility must also be established on the preponderance of proof.[16] Subsequent cases have split, however.[17] It has been held, for example, that admissibility rather than inadmissibility is presumed.[18] If this were accurate it would mean effectively that the onus is on the challenger to convince a court to exclude. And in *Khumo* the court created doubt about whether *proof* of reliability and relevance is a universal requirement to admission. It remarked that "where [the] testimony's factual basis, data, principles, methods or their application are called sufficiently into question, the trial judge must determine whether the

---

13. *Ibid.*, at para. 27.
14. *Supra*, footnote 10, at p. 384, para. 64.
15. [1999] O.J. No. 3280 para 73, note 8.
16. 509 U.S. 579 at p. 592, footnote 10.
17. *Maryland Casualty Co. v. Therm-O-Disc Inc.* (unreported, February 27, 1998, U.S. 4th Circuit Court of Appeals, No. 96-1192) at p. 3: "*Daubert* . . . makes no mention of a burden of "proof" regarding the decision to admit expert scientific testimony." That is "in keeping with the 'liberal thrust' of the Federal Rules of Evidence". But see *Wheat v. Sofamor, S.N.C.*, 46 F.Supp.2d 1351 at p. 1357 (N.D.Ga. 1999), "The proponent of expert testimony must show admissibility by a preponderance of the evidence."
18. *Colombo v. CMI Corp.*, 26 F. Supp. 2d 574 at p. 577 (W.D.N.Y. 1998).

testimony has "a reliable basis in the knowledge and experience of [the relevant] discipline".[19]

Needless to say, the impact of burdens of proof and threshold requirements on admissibility can be substantial. The different burdens and standards being used must be borne in mind when considering the value of the precedents that are being used.

(2) "Novel Science"

Daubert speaks of the law relating to the admission of "novel science".[20] In spite of the occasional holding to the contrary,[21] it is evident from reading *Daubert* that the decision nonetheless applies to both novel science and established science. Still, the post-*Daubert* authority does not appear to have developed formally different standards of scrutiny for novel as opposed to established expertise. In Canada we have developed different standards of scrutiny. In *Mohan* Sopinka J. said of novel science that it must be "essential in the sense that the trier of fact will be unable to come to a satisfactory conclusion without the assistance of the expert". Speaking generally of expert evidence he did not use the term "essential" but spoke instead of "necessity" which he described as imposing "not too high a standard". He also remarked that novel science requires stricter scrutiny than established science and that it must attain a threshold of reliability.[22] Indeed, where novel science evidence addresses an ultimate issue in the case, Justice Rosenberg has subsequently affirmed that "very strict scrutiny" of its reliability is required.[23]

Although "novel science" is not defined, it is clear that the examination is not into whether the general field of study is novel, but whether the particular theory or technique being used is novel. As Justice Charron observed in *R. v. K. (A.)* by way of example, "Although psychology or sociology are certainly recognized fields

---

19. 143 L Ed 2d 238 at p. 251 (1999).
20. *Supra*, footnote 16, at p. 585.
21. See *Colombo v. CMI Corp. supra*, footnote 18, and the cases cited therein.
22. See *Green v. Lawrence* (1997), 119 Man. R. (2d) 3 (Q.B.), where the testimony of an expert in the field of spinal biomechanics was inadmissible when it related to experiments conducted on a model to test load-bearing capacity. There was no data to enable the judge to evaluate the reliability of the device, let alone to conduct the special scrutiny required with this kind of novel evidence.
23. *R. v. Pascoe* (1997), 113 C.C.C. (3d) 126, 5 C.R. (5th) 341 at p. 357, para 48 (Ont. C.A.).

of expertise, some theories advanced in courtrooms in recent years in those fields are entirely novel."[24] Nor is it whether the theories are novel when viewed in general. The question is whether the particular application of the theories is novel. For example, in *Wolfin v. Shaw* the judge found that PET (positron emission tomography) had been around for many years and had been used to diagnose a number of medical conditions, but this did not change the fact that it was novel when used in the clinical diagnosis of mild brain trauma.[25]

In determining whether expert evidence is novel, it appears that the pertinent question is whether those theories or techniques have gained general acceptance in their relevant field. In the words of Justice Dillon in *Wolfin v. Shaw*, "'Novel' science refers to scientific evidence that has not been generally accepted as effective in medicine [or its relevant field] or that deviates from accepted standards."[26] This is in keeping with the observations of Justice Finlayson in *R. v. Terciera* when he was describing the trial judge's obligations:[27]

> The trial judge's function [in assessing reliability] is limited to an overview of the evidence proffered in order to be satisfied that it reflects a scientific theory or technique that has *either* gained acceptance in the scientific field, *or if not accepted* is considered otherwise reliable in accordance with the methodology validating it.

While not an attempt to define novel science *per se*, the passage recognizes the difference in inherent reliability between those techniques or principles that have gained the confidence of the profession that is trained to evaluate them, and those techniques or principles that have yet to receive that kind of endorsement.

Again, to the extent that a different standard has been formalized in Canadian but not American case law for the investigation of "novel science", prudence is required in the use of American precedents. Although it is natural that the Americans too would look more skeptically at that which is "novel", in Canada there is a clear legal requirement that this must occur, a requirement that could well result in a different approach to admission in this country.

---

24. [1999] O.J. No. 3280, para. 86.
25. (1998), 43 B.C.L.R. 190 at p. 197 (B.C.S.C.).
26. *Ibid.*, at p. 196.
27. (1998), 15 C.R. (5th) 359 at p. 384, para. 64 (Ont. C.A.), affd [1999] 3 S.C.R. 866, 142 C.C.C (3d) 95.

4. The Historical and Social Context

Apart from those areas where the case law has developed in different directions in spite of the superficial identity between Canadian and American authority, a review of the leading cases in the two countries reveals more subtle, but nonetheless important distinctions. The first has to do with the genesis of the relevant rules. In Canada the law relating to expert evidence is receiving its attention predominantly in criminal cases, particularly with respect to sexual offences. In the United States it is happening in civil litigation, primarily in product liability suits. The reasons for those different theatres of inquiry relate, of course, to our respective legal and social cultures. In Canada, the preoccupation with sexual assaults, coupled with the acceptance in *R. v. Lavallee*[28] that lay understanding of human behaviour is often impaired by myths and prejudices, has opened the door for the social science expert and the therapist. Initially this encouraged a receptive standard of admission; the law was changed precisely so that it could admit more proof. In the United States, astronomical tort awards, contingency fees and class action lawsuits made it both necessary and feasible to call on scientific or physical experts. While the rules of admissibility were also made looser in the United States to accommodate this, the change in the law raised policy concerns that have clearly influenced the way *Daubert* has been applied. In *General Electric Co. v. Joiner*, Justice Breyer captured those concerns well:[29]

> [I]t may . . . prove particularly important to see that judges fulfill their *Daubert* gate-keeping function, so that they help assure that the powerful engine of tort liability, which can generate strong financial incentives to reduce, or to eliminate, production, points towards the right substances and does not destroy the wrong ones.

In short, while both countries have adopted similar rules, they have done so in vastly different contexts, influenced by very different considerations — considerations that cannot help but influence the development and application of the law. It follows that an understanding of the different genesis and context of the Canadian and American case law is critical to its proper application. Standing alone, the evidentiary tests in *Daubert* and *Mohan* are so general and vague, so bereft of definition, that they take on meaning only in

---

28. [1990] 1 S.C.R. 852, 55 C.C.C. (3d) 97.
29. *Supra*, footnote 1, at p. 520.

context, and this context is influenced by tradition, history and economics, factors that unquestionably influence both the development of principles, and the outcome of cases. Attention has to be paid to this.

5. The Criminal and Civil Context

In one respect, the American case law, focusing as it does on civil cases, should be of particular interest to Canadian civil counsel. After all, the law of expert evidence in Canada is the product of criminal cases. There are few reported civil authorities, yet many criminal ones, and although the Supreme Court of Canada decision in *Mohan* applies to civil cases, its criminal context should not be lost sight of. This point deserves emphasis because we, in Canada, have the unfortunate habit of applying criminal precedents in civil cases without sufficient regard to the impact that the nature of the hearing should have on the way the law applies. This can happen easily with expert evidence, and it must be guarded against.

There are important reasons why the law of evidence must operate differently in civil cases than it does in criminal ones. Although models are invariably oversimplified (child custody and protection cases aside) the civil contest is perceived to be about private disputes relating to money. Criminal prosecutions are perceived to be about the loss of liberty and perhaps even more importantly, about social censure, stigma and public ostracism imposed at the behest of the state against a lone citizen. The liberty regarding principles that define the criminal law colour its rules about proof, sometimes in definition but more often in operation. The presumption of innocence, the right to full answer and defence, and the principle of a specific allegation all play a role in this.

This can have a general impact on the operation of the law. For example, the presumption of innocence and the requirement of proof beyond a reasonable doubt give heightened importance to the truth when it comes to incriminating evidence in criminal cases. This is not to say that truth is unimportant in civil litigation, but the reality is that pragmatics can be allowed to play a larger role in the settlement of private disputes. In *Daubert*, for example, the petitioners fought against a gatekeeping role for the trial judge, arguing that it would be inimical to the search for the truth since it would sanction a "stifling and repressive scientific orthodoxy". The court

responded in a fashion that is fitting for civil cases, but entirely unsuitable, in its emphasis, to criminal litigation:[30]

> Law . . . must resolve disputes finally and quickly. . . . We recognize that in practice, a gatekeeping role for the judge, no matter how flexible, inevitably on occasion will prevent the jury from learning of authentic insights and innovations. That, nevertheless is the balance that is struck by the Rules of Evidence designed not for the exhaustive search for cosmic understanding but for the particularized resolution of legal disputes.

In keeping with this, in the United States the *Daubert* inquiry is sometimes used aggressively in product liability cases during summary judgment applications in order to accomplish the early and final disposition of cases where causation analysis seems weak on the face of competing affidavits. Even though it has been proclaimed that the "trial setting normally will provide the best operating environment for the triage which *Daubert* demands"[31] in *Daubert* itself, when the matter went back down from the Supreme Court, the plaintiff's expert causation analysis did not survive the summary judgment process.[32]

To be sure, we are quite ready, perhaps even too ready, to exclude Crown evidence in a criminal case, thereby compromising the truth. But we do this only rarely in the interests of quick and final settlement of disputes, and we are particularly loathe to do this when accused persons present the evidence. In spite of the fact that we purport to apply the same legal tests, there will occasionally be a higher tolerance for exclusion based on the orderly conduct of litigation in civil cases than we could ever accept in the criminal sphere.

In other cases, there may be a lower tolerance for the admission of expert evidence in criminal cases, at least where it is called by the Crown. In a criminal case, access to justice considerations are extremely important. In a milieu in which many accused persons are

---

30. *Supra*, footnote 16, at p. 597.
31. *Padillas v. Stork Gamco Inc.* (unreported, August 2, 1999, U.S. Circuit Court of Appeals, No. 97-1853), at p. 6.
32. *Daubert v. Merrell Dow Pharm. Inc.*, 43 F.3d 1311 (9th Cir. 1995), cert. denied 516 U.S. 869 (1995), and see *Wilson v. Merrell Dow* (10th Cir 1999), No. 97-5114; *Wheat v. Safomar, S.N.C.*, *supra*, footnote 17; *Valente v. Safomar, S.N.C.* 48 F.Supp.2d 862 (E.D. Wis 1999); *Demaree v. Toyota Motor Corp.*, 37 F.Supp.2d 959 (W.D.Ky), where a successful motion to remove the case from the jury was premised on *Daubert*. And see *Huey v. UPS* (7th Cir. 1999), No. 95-C-0963, regarding summary judgment in the racial discrimination suit where expert evidence about motive of the employer relating to race did not meet the *Daubert* test.

unrepresented, or poor, it is often unrealistic to expect weak expert evidence to be countered with competing experts. It is even unrealistic to expect the kind of high quality cross-examination that is needed to expose the weakness of expert evidence. Although the legal tests do not name this as a factor, this reality can and should affect the way the necessity test is applied. Before a criminal court judge tolerates what is in substance unequal access to justice, that judge should be satisfied that the evidence is truly needed to resolve the case appropriately. By contrast, similar considerations should have less weight in a civil case. A decision to deprive a litigant of relevant information causes a private individual to bear the costs of the loss of that evidence, not the state. Civil cases that make it to litigation are decidedly more adversarial than a criminal trial is meant to be. Within limits, of course,[33] society can afford a stronger *laissez-faire* attitude about the conduct of civil litigation than we can afford in the criminal context.

The differences between civil cases and criminal cases go beyond general levels of tolerance relating to expert proof. There is a general principle in criminal cases that permits Crown evidence to be excluded more readily than defence evidence. Premised on the principle of full answer and defence, it applies in a variety of areas, including character evidence, hearsay and access to privileged information. For example, it was no surprise in *M.(A.) v. Ryan*[34] that Justice McLachlin commented on how access to the psychiatric records of complainants should be granted more readily in criminal cases than civil ones. This same principle has affected the operation of the *Mohan* test because of the centrally important cost/benefit inquiry that must be undertaken as part of the relevance factor. Through its operation, expert defence evidence is not to be excluded on the basis of the relevance inquiry unless the costs of calling that

33. Even in a civil case, where an expert becomes a "hired gun" or an advocate she ceases playing the role of expert and her evidence becomes inadmissible. Indeed, in the United States, some courts give great weight in assessing reliability to whether the opinions expressed arise out of research independent of the litigation, or whether they are generated expressly for the purpose of litigation: *Demaree v. Toyota Motor Corp.*, *ibid.*, at p. 962. It is more common in civil than in criminal cases to find judges rejecting opinion evidence because it is nothing more than advocacy dressed up as expert opinion. See, for example, *Fraser River Pile & Dredge Ltd. v. Empire Tug Boats Ltd.* (1995), 37 C.P.C. (3d) 119 at p. 126 (F.C.T.D.), and the strong comments of Finlayson J. in *M. v. H.* (1996), 142 D.L.R. (4th) 1, 31 O.R. (3d) 417 at p. 437 (Ont. C.A.), affd [1999] 2 S.C.R. 3, 71 D.L.R. (4th) 577.

34. [1997] 1 S.C.R. 157, 143 D.L.R. (4th) 1.

evidence *substantially* outweigh its benefits, whereas Crown evidence should be excluded whenever, on a simple balance, costs outweigh benefits.[35] This immediately makes *Mohan* decisions involving defence evidence of suspect importance in the civil milieu.

The nature of the litigation can also influence the third aspect of *Mohan*, the requirement that evidence be excluded where its admission would contravene collaterally some other exclusionary rule. For example, in *R. v. Bernardo*, then Associate Chief Justice Lesage refused to allow the experts to diagnose Karla Homolka as a "compliant victim" of a sexual sadist because it involved having Crown experts label Bernardo with the extremely prejudicial moniker of a sexual sadist.[36] A similar decision could well occur in a civil case where character evidence is also controlled, but the exclusion of a relevant expert opinion is no doubt less likely where the stakes for the party who is subject to potential prejudice are lower.

In sum, the law of evidence operates differently in criminal and civil cases. This affects both the atmosphere of decisions and the application of the law. For this reason, care must be used by Canadian civil lawyers in using our own leading authorities on expert evidence.

6. The American and Canadian Context

Lest the foregoing discussion induce Canadian civil lawyers to rush to the American case law where civil evidence cases are far more plentiful, a further word of caution is required. The social and legal culture in the United States, which is different from our own, has exerted its own influence. This, too, must be taken into account. For example, I have already referred to the perception in the United States that *Daubert* is a fitting way to control abuse of the tort system in product liability cases. We, in Canada, do not yet have a similar social problem that requires a similar response and again, this can affect the outcome of cases.

The legal culture can influence the operation of precedent in still other ways. For example, the common use of civil juries in the United States exerts its own influence on the application of *Daubert*. For many judges, the bifurcation between the trier of fact and the

35. *R. v. M.(B.)* (1998), 130 C.C.C. (3d) 353 at p. 385, 21 C.R. (5th) 324 (Ont. C.A.).
36. (1995), 42 C.R. (4th) 96 (Ont. Ct. (Gen. Div.)).

trier of law discourages the aggressive application of the gatekeeping role because exclusion by the judge deprives the fact-finder of the ability to make its own appraisal of the evidence. Where a rule of evidence turns on a preliminary assessment of reliability, as the *Daubert* rule does, it poses a significant challenge to the traditional distinction between roles, as judges weigh and evaluate the evidence in place of the trier of fact. Given the faith that many Americans still have in their juries, this has discouraged some courts from the aggressive application of *Daubert*.[37] Indeed, in *Daubert* itself, the court was dismissive of concerns that loosening the rules of admission would create "befuddled juries . . . confronted by absurd and irrational pseudoscientific assertions".[38] It described this as a pessimistic view of the capabilities of juries and of the adversary system, yet in criminal cases in Canada this has proven to be one of the most compelling bases for exclusion. In *R. v. K. (A.)* Justice Charron again made the point:[39]

> [I]t is clear from *Mohan* that "the need for the evidence is assessed in light of its potential to distort the fact-finding process." There is a concern that the trier of fact may give the expert testimony more weight than its true usefulness deserves.

She cited the usual litany of concerns, including the appearance of scientific credibility, the imposing credentials of the expert suggesting heightened importance for the evidence, and potential complexity of the theories presented.

Even in civil cases tried by judge alone in Canada, this can be an important consideration on appellate review. In *Drumonde v. Moniz*, for example, the trial judge enjoined the defendant from building a fence, based largely on the expert evidence of a driving instructor about the difficulty of navigating the plaintiff's driveway with the

---

37. In *McCullock v. H.B. Fuller Co.* 61 F.3d 1038 at 1045 (E.D.N.Y. 1995) (quoted in *Arnold v. Dow Chemical Company*, 32 F. Supp 2d 584 (E.D.N.Y. 1999)), for example, the court interpreted *Daubert* as imposing only the most modest of preliminary assessments on admissibility, saying:

    > Trial judges must exercise sound discretion as gatekeepers of expert testimony . . . however [they are not to imitate] the role of St. Peter at the gates of heaven, performing a searching inquiry into the depths of an expert witness's soul-separating the saved from the damned. Such an inquiry would inexorably lead to evaluating witness credibility and weight of evidence, the ageless role of the jury.

38. *Supra*, footnote 16, at p. 595.
39. [1999] O.J. No. 3280 at para. 97.

fence there. The Court of Appeal held that the expert evidence was not necessary and therefore should not have been admitted, noting:[40]

> There is danger that expert evidence will be misused and will distort the fact-finding process. Dressed up in scientific language which the jury does not easily understand and submitted through a witness of impressive antecedents, this evidence is apt to be accepted by the jury as being virtually infallible and as having more weight than it deserves.

The Court of Appeal noted that this appeared to have happened in *Drumonde*, even with a trial judge sitting alone, and it set the injunction aside.

The respective legal cultures of Canada and the United States have shaped the application of the law of expert evidence in each jurisdiction in far less subtle ways. In both countries the law of evidence has become more "discretionary", with the pretence of having clear rules giving way to standards of admissibility in which judges weigh competing considerations. This movement has been even more pronounced in Canada, for at least two reasons. First, our law of evidence is easier to reform because it is not burdened by the text of codified rules of evidence. Although *Daubert* fashions a principled approach to the admission of expert evidence, it is largely a case about the interpretation of relevant *Federal Rules of Evidence*, and this has undeniably affected the way the law is applied. Second, in Canada much of our recent evidence jurisprudence is dedicated to making the prosecution of sexual offences more effective. This has spawned a movement to reduce the technicality of the rules of proof that were perceived to be sheltering accused persons from proper conviction. This trend has swept across the entire law of evidence. It is shaping the law of expert evidence as well. Indeed, in Canada, the heart of the admissibility inquiry is the "relevance" inquiry, which has two components. The first is the basic requirement of logical relevance. The second involves a cost/benefit assessment. Do the benefits of the evidence outweigh its costs? The "costs" to be considered are not simply or even mainly economic but include such factors as the undue consumption of time, the degree to which the evidence will distract the trier of fact, and the risk that it will overwhelm the trier of fact.[41] By contrast, in the United States the relevance inquiry is generally perceived to be a simple examination of

---

40. (1997), 105 O.A.C. 295 at p. 298.
41. In *R. v. K. (A.), supra,* footnote 39, at para. 75, the court describes how this balancing inquiry occurs under each of the relevance and necessity heads.

logical relevance, in part because that is how relevance is defined in Rule 401 of the *Federal Rules of Evidence*. In *Daubert* the court said:[42]

> "Relevant evidence" is defined as that which has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Rule 401. The Rules' basic standard of relevance thus is a liberal one.

While there is a separate federal rule in the United States which is of general application that invites judges to weigh probative value and prejudice, it has not been as central to the admissibility inquiry in American cases as the cost/benefit inquiry has been in Canada. By far it is the reliability inquiry that has gained the greatest attention south of the border. It is all but assumed that if the evidence is relevant and reliable enough, it comes in.

Again, the point of all of this is a simple but important one. In interpreting and relying on American authority, exercise caution. Be sensitive to the impact that the social and legal culture has on both the articulation and application of the law.

7. The Kind of Expertise at Issue

Even when we get beyond differences in culture and the nature of the litigation, further discernment is required in relying on precedent or even trends. In particular, the legacy of *Daubert* demonstrates how the nature of the expert evidence is critical to how it must be examined.

Daubert involved a suit against a manufacturer of an anti-nausea drug called Bendectin. The suit was brought by two families who claimed it caused birth defects in their children. They wanted to call eight expert witnesses who claimed that the drug can cause birth defects. The trial judge, applying in substance the *Frye* test, rejected their evidence because the experts' *conclusion* had not gained general acceptance in the relevant scientific community.[43] Relying on

---

42. *Supra,* footnote 16, at p. 587.
43. *Frye v. United States,* 239 F. 1013 (D.C.Cir. 1923). The *Frye* test still applies in some state courts. In California, for example, it is used for scientific but not "medical" evidence. *Daubert,* in turn, applies to neither kind of evidence, and medical evidence has been defined broadly to include proof relating to human behaviour. For this reason, Californian courts have openly received the evidence of "behavioural scientists", the reliability and utility of which is a matter of great debate in

the text of the *Federal Rules of Evidence* applicable in District Courts, the United States Supreme Court held that the trial judge had erred in two ways. First, he erred by focusing on the experts' conclusion. What should be examined is not the conclusion, *per se*, but rather the method by which it was derived.[44] Second, and of more general importance, the court held that the *Frye* test had been superceded by Rule 702. That rule provides:

> If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise.

Daubert, of course, dealt with the first species of expert evidence listed in the rule. The evidence was not so much technical as it was scientific. This influenced the entire focus of the decision. It inspired the court to interpret Rule 702 by parsing it and removing the terms in the first clause that did not relate to "science". This caused the words "scientific" and "knowledge" to abut, which the court then interpreted as constituting a unified term. Over the objection of Chief Justice Renquist, the majority interpreted the phrase "scientific knowledge" to mean information that satisfies, in some measure, the scientific method:[45]

> The adjective "scientific" implies a grounding in the methods and procedures of science. Similarly, the word "knowledge" connotes more than subjective belief or unsupported speculation. The term applies to any body of ideas inferred from such facts or accepted as truths on good grounds. . . . In order to qualify as "scientific knowledge", an inference must be derived by the scientific method.

This, of course, caused the court to focus, in determining reliability, on a narrow range of criteria. Although disclaiming that they were developing an exhaustive checklist or test, the court listed four factors, with "a key question" being whether the hypothesis grounding the evidence could be replicated through testing, and could successfully resist efforts to disprove it:[46]

> Scientific methodology today is based on generating hypotheses and testing

---

this country. See, for example, *People v. Ward*, 83 Cal.Rptr. 2d 828 (Cal. App. 4 Dist. 1999) and *Wilson v. Phillips*, 86 Cal.Rptr. 2d 204 (Cal. App. 4 Dist. 1999).

44. It is noteworthy that Canadian law has not developed the distinction between assessing conclusions and methods that is often the focus of American decisions.
45. *Supra*, footnote 16, at p. 590.
46. *Ibid.*, at p. 593.

> them to see if they can be falsified; indeed, this methodology is what distinguishes science from other fields of human inquiry.

The other three factors included, "whether the theory or technique has been subjected to publication and peer review . . . the theory's or technique's rate of error, and whether the theory or technique is generally accepted among the expert's peers".[47]

Clearly it is inappropriate to consider all expertise as science, or to require all expertise to attain the scientific method. Some expert witnesses rely on science only in a loose sense. Actuaries apply probability theory and mathematics to produce decidedly unscientific results. Appraisers make subjective assessments of objective data, as do family assessment experts. Professionals testifying to standards of care within their profession are doing nothing scientific. Yet *Daubert* spawned a jurisprudence that was fixated for a time with science. This led lower courts to commit two kinds of error. First, it caused some lower courts to hold that the *Daubert* test and the gatekeeping role is confined to scientific expertise. Experts who were not scientists would not be subjected to the reliability inquiry proscribed by *Daubert*. Second, it caused other courts to apply the criteria listed in *Daubert* in a wooden fashion, even to non-scientific forms of expertise. Each of these two kinds of error was caused by the failure to take context into account. In *Kumho Tire Company, Ltd. v. Patrick Carmichael*[48] the court was presented with the opportunity to correct these problems.

Like *Daubert* itself, *Kumho Tire* involved a product liability suit. A tire blowout had caused an accident that claimed one life and injured several others. A "tire failure analyst" was called. He had developed a theory, shared by no-one else in his field, that in the absence of at least two of four specific physical symptoms of tire abuse, a blowout must be attributed to a defect in manufacture or design. Based on this theory and a visual inspection of the remnants of the tire, he supported the plaintiff's contention. The trial judge rejected the evidence, using the four factors keyed in on by the *Daubert* court, even though the engineer was not a scientist. The United States Supreme Court held that he erred in his reasoning, but upheld his decision to reject the evidence on a more flexible analysis. Based on this, the court also upheld the judge's decision to grant

---

47. *Valente v. Sofamor S.N.C.*, 48 F.Supp. 2d 862 (E.D. Wis. 1999), summarizing the approach in *Daubert*.
48. (1999), 143 L Ed 2d 238.

summary judgment, but not before clarifying the application of *Daubert*.

First, the court settled that *Daubert* applies to all expert evidence, whether scientific or not. The rationale for judicial scrutiny of reliability is tied to the latitude that is given to experts to express opinions, and it is not only scientific opinions that can lack reliability.[49] Moreover, it would be impossible to distinguish systematically between science and non-science.[50] Second, the court stated that the inquiry into reliability is a flexible one and that the call for scientific method and peer review are not universal requirements. Since not all expertise is scientific in nature, flexibility is required. Indeed, the court downplayed its list of four factors from *Daubert*, even in cases where the evidence was clearly scientific:[51]

> [T]hose factors do not all necessarily apply even in every instance in which the reliability of scientific testimony is challenged. It might not be surprising in a particular case, for example, that a claim made by a scientific witness has never been the subject of peer review, for the particular application may never previously have interested any scientist.

The court made it clear that what is required is for a court to determine whether the testimony has "a reliable basis in the knowledge and experience of [the relevant] discipline":[52]

> It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.

Having said this, where the field itself is unreliable, the evidence will not make the grade. As the court noted:[53]

> Nor, on the other hand, does the presence of *Daubert's* general acceptance factor help show that an expert's testimony is reliable where the discipline itself lacks reliability, as, for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy.

Canadian authority was spared the confusion of *Daubert* to a large degree because our founding case, *R. v. Mohan*, did not involve a scientific opinion. It dealt with the conclusions of a medical doctor about human behaviour, in particular the categorization

---

49. *Kumho Tire Company, Ltd. v. Patrick Carmichael* (1999), 143 L Ed 2d 238 at p. 250.
50. *Ibid.*, at p. 250.
51. *Ibid.*, at p. 252.
52. *Ibid.*, at p. 251.
53. *Ibid.*, at p. 252.

of sexual deviance. It was therefore clear from the outset that *Mohan*'s principles were not confined to pure and applied science. There are, however, signs that can be misinterpreted, suggesting that at least in Ontario science is the *sine quo non* of admissible expertise. In *R. v. McIntosh*[54] the Ontario Court of Appeal has imposed the requirement that expertise must be grounded in "science" before it is admissible. But note the definition of science used.[55]

> Paraphrasing freely from the definition of science in The Shorter Oxford English Dictionary on Historical Principles, it seems to me that before a witness can be permitted to testify as an expert, the court must be satisfied that the subject-matter of his or her expertise is a branch of study in psychology concerned with a connected body of demonstrated truths or with observed facts systematically classified and more or less connected together by a common hypothesis operating under general laws. The branch should include trustworthy methods of discovery of new truths within its own domain.

This is not a narrow, technical conception of what science is. It describes science in the broadest sense, distinguishing it from mere personal musings or speculation. In truth, *McIntosh* is not antithetical to *Khumo* but rather on all fours with it. *McIntosh* simply requires that an opinion must emerge from a branch of study that has a collective experience of demonstrated truths, principles and methods, and that the opinion offered to the court satisfy the standards relevant to that branch. The cry for this degree of science in *McIntosh* is a fitting response to the sobering experience that criminal law has had with some theories of behavioural science, particularly with child abuse accommodation syndrome,[56] and battered women's syndrome.[57] In these areas generalizations about human

---

54. (1997), 117 C.C.C. (3d) 385, 35 O.R. (3d) 97 (C.A.), leave to appeal to S.C.C. refused 121 C.C.C. (3d) vi, 111 O.A.C. 395 *sub nom. R. v. McCarthy*.
55. *Ibid.*, at p. 103 O.R. (C.A.). *McIntosh* was relied on in *R. v. J.(I.)*, [1999] O.J. No. 1192 (QL) (Ont. C.A.).
56. See *R. v. K. (A.)*, *supra*, footnote 39, where Justice Charron rejects entirely the use of child abuse accommodation syndrome as diagnostic of sexual abuse because it is simply incapable of identifying those who have been abused. She also rules that the use of the term "syndrome" is unduly prejudicial, suggesting more system than is actually there. The decision follows on *R. v. Olscamp* (1994), 95 C.C.C. (3d) 466, 35 C.R. (4th) 37 (Ont. Ct. (Gen. Div.)), where Justice Charron, as a trial judge, engaged in a more direct analysis of the weaknesses of this brand of evidence. Yet many courts in Canada have relied on this evidence, and no doubt accused persons have been convicted because of it.
57. *R. v. Lavallee*, *supra*, footnote 28, relied entirely on the theory of battered women's syndrome. The court has since had to back away from the learned helplessness leg of the theory. It has been discredited in other research, and more

behaviour were being presented by therapists and social scientists in the same way that pure and applied science is, as near universal truths, when all that the evidence could show was trends that might be of modest assistance in explaining human behaviour. To the extent that *McIntosh* imposes an obligation on parties presenting evidence to show that it is scientific in the broad sense described, it is a sage development.

8. Context and the Precise Use of the Evidence

In *Khumo Tire*, the respondent sought to support the admissibility of the engineer's evidence about the cause of the tire failure by defending the legitimacy of experts using visual and tactile inspection to gauge whether "overdeflection" had caused the tire's tread to separate from its steel-belted carcass. The court responded that this was not the issue:[58]

> Rather, it was the reasonableness of using such an approach, along with [the expert's] particular method of analyzing the data thereby obtained, to draw a conclusion regarding *the particular matter to which the expert testimony was directly relevant.*

In other words, the admissibility of expert evidence does not turn solely on the validity of the general hypotheses and techniques being used. It turns as well on the specific use to which those general hypotheses and techniques are being put. No case demonstrates this more clearly than the recent decision of the Ontario Court of Appeal in *R. v. K. (A.).*[59]

K. (A.) was charged with sexual offences. The Crown sought to call a therapist with extensive experience in dealing with sexually abused victims. The expert purported to testify about child abuse accommodation syndrome, a constellation of behavioural symptoms that have been identified as being present in many sexual abuse vic-

---

importantly to the court, it caused a stereotype of the battered woman to develop. See *R. v. Mallot*, [1998] 1 S.C.R. 123, 121 C.C.C. (3d) 456.

Another area of concern relates to recovered and repressed memories secured by psychiatric and therapeutic technique. Once readily relied on by some experts, the use of such techniques for this purpose has been discredited. Psychiatric associations in Canada, the United States, Great Britain and Australia have all issued cautions. Even the Attorney-General's office in British Columbia, after a horrendous experience, issued a directive to Crowns in that province to exercise extreme care with cases of therapeutically recovered memories.

58. (1999), 143 L Ed 2d 238 at p. 253.

59. *Supra*, footnote 39.

tims. The Crown sought to use this evidence to assist in diagnosing the complainant as a victim of sexual abuse, thereby supporting her claim to having been victimized. In fact, child abuse accommodation syndrome evidence cannot diagnose sexual abuse for the simple reason that it does not have discriminate validity. Many of the constellation of symptoms can be present in those who have not been sexually abused. So the evidence was not admissible *for this purpose*. The court held, however, that aspects of the expert testimony could be used for a different purpose, namely to contextualize defence counsel's suggestions that the complainant was less credible because of her conduct in delaying reporting or in continuing to associate with the accused after the alleged assaults. The court said that expert evidence on these matters would be relevant to explain that these factors are not necessarily inconsistent with sexual abuse having occurred. The expert evidence could therefore be used to enable the trier of fact to understand that there are other possible explanations for such conduct, apart from a lack of credibility on the part of the complainant. In short, admissibility depends on the specific purpose for which the evidence is being called.

This same point can be made not only with respect to relevance, reliability and prejudice, but even with respect to the more basic requirement of necessity. In *Fraser River Pile v. Empire Tug Boats*,[60] Justice Reid observed that it:

> is not the subject matter of the opinion per se, nor the knowledge of the trier of fact apart from the evidence adduced in a given case which makes expert opinion necessary or unnecessary. One has to assess whether it is necessary in light of all the evidence which is being given in a case, for an expert to be called to assist the trier of fact in drawing inferences.

9. The Diminished Utility of Precedent

This all goes to show, of course, that when it comes to expert evidence, context is everything, and precedent is worth little. Indeed, the Ontario Court of Appeal has stated unequivocally that "the admissibility of expert evidence is not a question of precedent".[61] In Canada, admissibility turns on a careful, complex balance of competing considerations. Indeed, there is often no right answer and no wrong answer in a particular case. In *Zellgate Holdings Inc. v. Beechlawn Holdings Ltd.*, for example, the trial judge refused the

60. (1995), 37 C.P.C. (3d) 119 at p. 124, 95 F.T.R. 43 (F.C.T.D.).
61. *Supra*, footnote 39, at para. 76 (C.A.).

evidence of an appraiser. In considering the appeal, the Court of Appeal recognized the discretionary nature of the decision when it observed that while perhaps other judges might have "permitted the witness to testify and express his opinion", the trial judge had not erred.[62] The fact that there may be no right answer or wrong answer for a particular judge in a given case is in keeping with the American rule that on appeal, the propriety of the admission of expert evidence will be determined on an abuse of discretion basis.[63] Unless the exercise of the discretion is manifestly wrong or contrary to principle, an appeal will not succeed. Cases cannot be used therefore, to show that admission of a particular kind of expert evidence is right. The most they can be used to say is that *in the particular circumstances of that case*, the admission of the evidence was not wrong.

Given this, the words of Justice Hill in *R. v. C.(G.)*, words cited with approval by the Ontario Court of Appeal, are apt:[64]

> To the extent that the [case law] provides opinion evidence upon matters identical, or nearly identical, to expert evidence generically recognized by appellate authorities to be the proper subject of expert evidence, this recommends itself as a factor worthy of consideration in the legal determination of admissibility.
>
> Nevertheless . . . the state of scientific knowledge is fluid. Differing challenges may be mounted case-to-case and the evidentiary record of each prosecution constitutes a case-specific context for the relevant inquiries and balancing of factors which the court is obliged to undertake.

10. Conclusion

The first instinct of any lawyer is to find authority, and it is often easy to do so. There is a great deal of material in Canadian criminal cases on expert evidence. There is a morass of it in the United States dealing with civil cases. The burden of this article has been to emphasize that while these cases can be used, they must be used properly. Attention must be paid to context. Regard must be had to whether the case is criminal or civil, American or Canadian, or whether it relates to an area of expertise that is clearly scientific, or technical or even non-technical. Even once this has been done and a case matches the general area of inquiry that is needed, it must be

---

62. (1996), 89 O.A.C. 313 at p. 316.
63. *General Electric Company v. Joiner*, *supra*, footnote 1.
64. (1997), 8 C.R. (5th) 21 at p. 35 (Ont. Ct. (Gen. Div.)), adopted in *R. v. K. (A.)*, *supra*, foonote 39.

appreciated that each case turns on its own facts and its own peculiar needs and concerns. The case law, both American and Canadian alike, can do no more than to identify zones of attention or concern, and provide general guidance by listing criteria for consideration. It is up to the practitioner and the judge to take these generic principles, and to apply them in a discerning, relevant fashion by identifying the material concerns that their particular litigation gives rise to. When it comes to expert evidence, context and culture are everything.