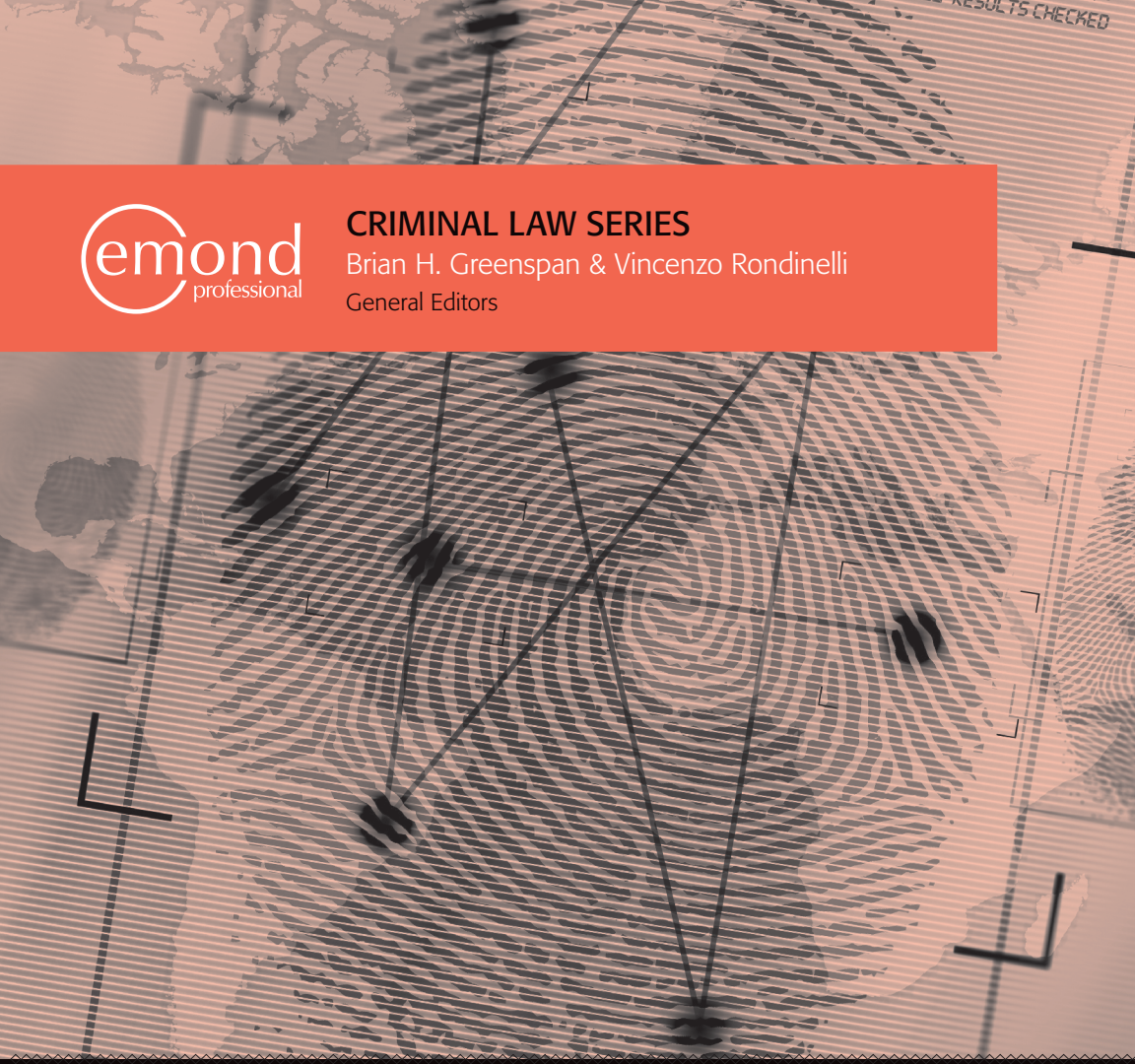

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CRIMINAL LAW SERIES

Brian H. Greenspan & Vincenzo Rondinelli

General Editors

Qualifying and Challenging Expert Evidence

15

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PART I

Principles and Procedure

1 General Principles

I. Overview

Experts play a vital role in our criminal justice system. Their testimony often has a powerful influence over the outcome of a trial. In some cases, their testimony can provide the sole basis for the court to identify the accused to the exclusion of all other suspects; in other situations, an expert's testimony may provide an alternative explanation of events that can exonerate the accused. In a different vein, where mental illness is in issue, expert evidence may be used to raise or rebut the argument that the accused was not criminally responsible on account of mental disorder. There are countless ways that an expert can impact the trajectory of a case.

While expert testimony can be instrumental in promoting the court's truth-seeking functions, it also poses significant dangers. As recognized by the Supreme Court of Canada, expert evidence has the potential to distort the fact-finding process and confuse the jury.[1] The impressive credentials of an expert witness may lead the trier of fact to accept their evidence as authoritative or to give the evidence more weight than it deserves.[2] Expert evidence is far from infallible; it is capable of being tainted, tailored, unsubstantiated, couched in scientific terms, or based on unreliable facts and ultimately debunked science.[3] These shortcomings are not simply a theoretical matter; expert evidence is a leading cause of wrongful convictions in our criminal justice system.[4] Taken together, the prominence and influence of expert evidence has far-reaching implications for the administration of justice in Canada.

The power of expert witnesses stems in part from their unique position in the justice system. Many of the rules that limit the scope of a lay witness's testimony do not apply to an expert witness. For example, unlike ordinary witnesses, who can typically only testify as to facts personally observed, experts are not required to have first-hand knowledge of the facts that form the basis of their opinions.[5] In addition, ordinary witnesses are generally prohibited from providing any opinion evidence; it is the job of the trier of fact to decide what secondary inferences are to be drawn from the evidence.[6] Expert witnesses stand in direct contrast to this general rule. Since the 14th century, common law courts have recognized that certain exceptional matters require the application of special knowledge that lies outside the experience of the

1 *R v Mohan*, 1994 CanLII 80, [1994] SCJ No 36 (QL) at para 19.

2 *Ibid*.

3 Federal, Provincial and Territorial Heads of Prosecutions Committee Working Group on the Prevention of Miscarriages of Justice, *Report on the Prevention of Miscarriages of Justice* (2004), online: *Department of Justice* <https://www.justice.gc.ca/eng/rp-pr/cj-jp/ccr-rc/pmj-pej/index.html> at 115 [*Report*].

4 *Ibid*.

5 Sidney N Lederman, Alan W Bryant & Michelle K Fuerst, *The Law of Evidence in Canada*, 4th ed (Toronto: LexisNexis, 2014) at 784.

6 *Ibid*; see also *R v DD*, 2000 SCC 43 at para 49.

typical trier of fact.[7] Expert witnesses are thus permitted to make inferences and form opinions that relate to their areas of specialized knowledge.[8] While these testimonial features would typically give rise to concerns of admissibility, they are commonplace qualities of expert testimony.

II. Qualification of an Expert

Expert witnesses can take many forms. They range from medical practitioners to pathologists, psychiatrists, psychologists, blood alcohol analysts, traffic accident reconstruction analysts, forensic laboratory technicians, and fingerprint comparison analysts—the list goes on.[9] To be qualified as an expert, the witness must possess special knowledge and experience going beyond that of the trier of fact.[10] This specialized knowledge can be acquired through means of study or practical experience.[11] Where this specialized knowledge prerequisite is fulfilled, the individual in question will be a properly qualified expert.

III. Duty of an Expert

The duty of the expert is "to provide the judge and jury with a ready-made inference which the judge and jury, due to the technical nature of the facts, are unable to formulate."[12] Courts have recognized this as a "special duty" that is animated by the principles of impartiality, independence, and absence of bias.[13] These principles were described by the Supreme Court in *White Burgess Langille Inman v Abbott and Haliburton Co*:

> The expert's opinion must be impartial in the sense that it reflects an objective assessment of the questions at hand. It must be independent in the sense that it is the product of the expert's independent judgment, uninfluenced by who has retained him or her or the outcome of the litigation. It must be unbiased in the sense that it does not unfairly favour one party's position over another. The acid test is whether the expert's opinion would not change regardless of which party retained him or her: P. Michell and R. Mandhane, "The Uncertain Duty of the Expert Witness" (2005), 42 *Alta. L. Rev.* 635, at pp. 638-39. These concepts, of course, must be applied to the realities of adversary litigation. Experts are generally retained, instructed and paid by one of the

7 *DD*, *supra* note 6 at para 50.

8 *R v Abbey*, [1982] 2 SCR 24 at 42, 1982 CanLII 25 [*Abbey* (1982)].

9 *Report*, *supra* note 3 at 130.

10 *R v Marquard*, [1993] 4 SCR 223, [1993] SCJ No 119 (QL) at para 37; *R v Béland*, [1987] 2 SCR 398, 1987 CanLII 27 at para 16.

11 *Mohan*, *supra* note 1 at para 27.

12 *Abbey* (1982), *supra* note 8 at 42.

13 *White Burgess Langille Inman v Abbott and Haliburton Co*, 2015 SCC 23 at paras 2, 32.

adversaries. These facts alone do not undermine the expert's independence, impartiality and freedom from bias.[14]

According to the Supreme Court, "[a] proposed expert witness who is unable or unwilling to comply with this duty is not qualified to give expert opinion evidence and should not be permitted to do so."[15] Simply put, the duty of an expert is not to advocate for a particular party, but to provide fair, objective, and non-partisan assistance to the judge or jury.

IV. The Courts' Shifting Attitude Toward Expert Evidence

While the duty of the expert witness has not changed, the courts' attitude toward expert evidence has evolved over time. In recent decades, courts have exhibited a growing awareness of the powerful influence of expert witnesses.

The 1990s was marked by a relaxed and flexible approach to expert evidence. In *R v Mohan*, the Supreme Court provided a four-part framework to assess the admissibility of expert evidence.[16] While that test and its progeny will be discussed in greater detail later in this chapter, it is fair to say that the test focused on two simple questions: whether the evidence is relevant to the issues to be determined at trial, and whether the evidence is necessary to assist the trier of fact in determining those issues.

According to the Court in *Mohan*, the admissibility of expert evidence was made with reference to common sense and experience.[17] While evidence must be more than merely "helpful" to be viewed as necessary, the Supreme Court stated that it "would not judge necessity by too strict a standard."[18] The Court observed that the "possibility that evidence will overwhelm the jury and distract them from their [fact-finding] task can often be offset by proper instructions."[19] Although the Court in *Mohan* recognized some of the inherent dangers of expert evidence, such as its ability to usurp the role of the fact-finder,[20] the Court ultimately endorsed a flexible standard of admissibility that did not limit expert evidence to exceptional circumstances.

At the turn of the millennium, however, the Supreme Court's attitude toward expert evidence began to shift. In *R v DD* the majority reaffirmed the admissibility test set out in *Mohan* but emphasized that expert evidence should be reserved for "exceptional cases where the jury would be unable to reach their own conclusions

14 *Ibid* at para 32.

15 *Ibid* at para 2.

16 *Supra* note 1 at para 17.

17 *Ibid* at para 45.

18 *Ibid* at para 22.

19 *Ibid* at para 23.

20 *Ibid* at para 24.

in the absence of assistance from experts with special knowledge."[21] In addition to reiterating the risk that expert evidence can usurp the role of the trier of fact, Major J offered a number of additional policy considerations for limiting the role of expert testimony at trial, including the following:

- The emergence of "professional expert witness[es]" raises concerns of independence and impartiality and can contribute to miscarriages of justice.[22]
- Expert opinion is largely insulated from cross-examination.[23]
- Expert evidence is time-consuming and expensive, which places strain on litigants and judicial resources.[24]

For these reasons, the Court suggested that the door to the admission of expert evidence should not be opened too widely.[25]

The dangers outlined by the Supreme Court were not merely theoretical. Shortly following the Court's judgment in *R v DD*, the expert testimony of Dr Charles Smith came under intense public scrutiny. Dr Smith was a pediatric forensic pathologist at Toronto's world-renowned Hospital for Sick Children from 1981 to 2005.[26] Although he had no formal training in forensic pathology, he became involved in a number of pediatric cases that engaged the criminal justice system.[27] Over time, his expert testimony became implicated in a number of cases involving wrongful convictions for such serious offences as murder and sexual assault. One tragic case involved Mr Mullins-Johnson, who was convicted of first-degree murder of his niece based in large part on the evidence of Dr Smith. Dr Smith's opinion was that the child had been strangled and sexually assaulted by Mr Mullins-Johnson while he was babysitting her.[28] Mr Mullins-Johnson was eventually found to be wrongfully convicted after spending 12 years in prison.[29] These wrongful convictions ultimately led the government of Ontario to establish a public inquiry (known as the Goudge Inquiry) into pediatric forensic pathology in Ontario in 2007.[30]

21 *Supra* note 6 at para 51.

22 *Ibid* at para 52.

23 *Ibid* at paras 54-55.

24 *Ibid* at para 56.

25 *Ibid*.

26 Stephen T Goudge, *Inquiry into Pediatric Forensic Pathology in Ontario* (Toronto: Ontario Ministry of the Attorney General, 2008), vol 1: Executive Summary at 6 [Goudge Inquiry].

27 *Ibid*.

28 *Ibid* at 5.

29 *Ibid*.

30 *Ibid* at 7.

Justice Goudge, the commissioner of the inquiry, described how Dr Smith's evidence contributed to several tragic miscarriages of justice:

> In the cases that led to the creation of this Inquiry, Dr. Charles Smith was allowed to give expert evidence in pediatric forensic pathology, often without challenge or with only limited review of his credentials. He was an apparently well-accredited expert from a world-renowned institution. He was a commanding presence who often testified in a dogmatic style. The evidence at this inquiry demonstrated that the legal system is vulnerable to unreliable expert evidence, especially when it is presented by someone with Dr. Smith's demeanor and reputation. An expert like this can too easily overwhelm what should be the gatekeeper's vigilance and healthy skepticism, as we have seen. In fact, as we now know, Dr. Smith had none of the requisite training in forensic pathology and no reliable scientific basis for many of his opinions.[31]

Put simply, the case of Dr Smith exposed the legal system's vulnerability to flawed expert testimony. But more than that, the Goudge Inquiry illustrates the devastating consequences of overreliance on expert witnesses. As Goudge J puts it:

> The consequences of failure [of the criminal justice system] in these circumstances are extraordinarily high. For the parent or caregiver who is wrongly convicted, it almost certainly means time, perhaps years, unnecessarily suffered in jail, a shattered family, and the stigma of being labelled a child killer. … For the community at large, failure in such traumatic circumstances comes at a huge cost to the public's faith in the criminal justice system—a faith that is essential if the justice system is to play the role required of it by society.[32]

In this way, the expert testimony of one witness can have dramatic ripple effects on the criminal justice system.

In the subsequent Ontario Court of Appeal decision *R v Abbey* (2009), the Court cited the case of Dr Smith as an illustration of the dangers associated with expert evidence.[33] Justice Doherty exhibited increased caution toward the use of experts and revised the *Mohan* criteria to raise the threshold for the admissibility of expert evidence. Specifically, the Court divided the "admissibility" test into a two-step process.[34] At the first stage, the party must meet four preconditions of admissibility, which largely encompasses the traditional *Mohan* analysis. At the second stage, courts were granted a novel discretion to weigh the ultimate costs and benefits of admitting the expert evidence.

31 Goudge Inquiry, *supra* note 26, Vol 3: Policy and Recommendations at 470.

32 *Supra* note 26 at 4.

33 2009 ONCA 624 at paras 64, 115 [*Abbey* (2009)].

34 *Ibid* at para 76.

At this second stage, courts are called upon to consider factors such as the expert's impartiality and reliability, the potential of the opinion to confuse or overwhelm the trier of fact, the degree to which the opinion is essential for the trier of fact to properly assess the evidence, and the amount of court time that will be required to adduce the evidence.[35] This second stage limits the admissibility of expert testimony by granting judges a clear discretion to exclude evidence that would have otherwise been admitted under a traditional *Mohan* analysis.

In addition to recalibrating the test for admissibility, the Court in *Abbey* (2009) also emphasized the importance of limiting the scope and content of expert evidence. Citing the Goudge Inquiry, Doherty J noted that a trial judge must carefully circumscribe the scope of an expert's evidence and continue to ensure that the expert does not stray beyond those limits:

> A cautious delineation of the scope of the proposed expert evidence and strict adherence to those boundaries, if the evidence is admitted, are essential. The case law demonstrates that overreaching by expert witnesses is probably the most common fault leading to reversals on appeal. …
>
> The importance of properly defining the limits and nature of proposed expert opinion evidence and the language to be used by the expert is one of the valuable lessons learned from the Inquiry into Pediatric Forensic Pathology in Ontario. That inquiry examined the forensic work of Dr. Charles Smith, who at the time was considered to be a leading pediatric pathologist in Ontario. The inquiry determined that, among other failings, Dr. Smith often went beyond the limits of his expertise when offering opinions in his testimony. His excesses were sometimes not caught by the court or counsel and, along with other shortcomings, led to several miscarriages of justice.[36]

In addition to delineating the scope of expert evidence, Doherty J observed that the evidence should be adduced in a manner that is less likely to usurp the findings of the trier of fact.[37]

Six years later, the *Abbey* framework was adopted, with minor modifications, in *White Burgess*.[38] In brief, the Supreme Court endorsed a two-step test to the admissibility of expert evidence. At the first stage, the tendering party must establish the "threshold requirements of admissibility."[39] At the second stage, the judge exercises a discretionary gatekeeping function to weigh the costs and benefits of admitting the evidence.[40] Relatedly, in a different case, the Supreme Court drew from *Abbey* to

35 *Ibid* at paras 87-95.

36 *Ibid* at paras 62, 64.

37 *Ibid* at paras 67-70.

38 *Supra* note 13.

39 *Ibid* at para 23.

40 *Ibid* at para 24.

emphasize that the scope of an expert's evidence must be strictly circumscribed. As stated in *R v Sekhon*:

> Given the concerns about the impact expert evidence can have on a trial—including the possibility that experts may usurp the role of the trier of fact—trial judges must be vigilant in monitoring and enforcing the proper scope of expert evidence. … The trial judge must do his or her best to ensure that, throughout the expert's testimony, the testimony remains within the proper boundaries of expert evidence.[41]

Taken together, through these decisions the Ontario Court of Appeal's approach in *Abbey* was adopted throughout Canada.

Despite courts' increasing vigilance regarding the dangers of expert witnesses, expert evidence continues to contribute to disturbing miscarriages of justice. Less than a decade after the Goudge Inquiry, the Motherisk Drug Testing Laboratory (MDTL) came under fire for its unreliable hair-testing methods. Since the late 1990s, MDTL had held itself out as a leader in the field of hair testing for drugs.[42] The laboratory conducted hair-strand analysis for compounds that would purportedly reveal whether an individual had consumed drugs. These tests were used in at least six criminal cases and thousands of child protection cases from 1990 to 2015.[43]

A criminal lawyer was the first to raise questions regarding MDTL's faulty lab testing. Tamara Broomfield had been charged with, *inter alia*, two counts of administering cocaine to her two-year-old child. At trial, the Crown relied on expert evidence from MDTL's laboratory director, which ultimately resulted in a conviction. At the Ontario Court of Appeal, Ms Broomfield tendered fresh evidence from an independent toxicologist who criticized MDTL's hair-testing methodology.[44] The Court of Appeal admitted the fresh evidence, observing that there was a "genuine controversy" about the science and methodology used.[45] This decision raised red flags regarding MDTL's hair-testing methodology and ultimately spurred an independent review to assess the adequacy and reliability of MDTL's drug testing.[46]

Justice Susan E Lang, who led the independent review, concluded that MDTL's hair-strand drug and alcohol testing was inadequate and unreliable.[47] She observed that MDTL "never met internationally recognized forensic standards. Indeed, MDTL's leadership failed to appreciate that the Laboratory was doing forensic

41 *R v Sekhon*, 2014 SCC 15 at para 46.

42 Susan E Lang, *Report of the Motherisk Hair Analysis Independent Review* (Toronto: Ministry of the Attorney General, 2015) at 1.

43 *Ibid* at 17, 24.

44 See *R v Broomfield*, 2014 ONCA 725.

45 *Ibid* at para 12.

46 *Motherisk*, *supra* note 42 at 1.

47 *Ibid* at 16.

work."[48] In addition to the issues surrounding the lab itself, however, Lang J noted the culture of complacency surrounding the admissibility and use of this expert evidence:

> Although [MDTL's] results and interpretations were expert opinion evidence, they were infrequently recognized or treated as such by child protection counsel, parents' and children's counsel, or the court. They were often introduced into evidence on consent. As a result, the MDTL evidence was rarely tested against the admissibility requirements for expert opinion evidence that apply in civil proceedings, including child protection proceedings. Accordingly, courts frequently accepted the test results and the concentration ranges as a reliable measure of use—with little, if any, examination of the forensic qualifications of the MDTL representative who communicated those results to the child protection agency, and without any analysis of the adequacy and reliability of the test methodology employed by the Laboratory.[49]

Echoing the sentiments of the Goudge Inquiry, Lang J's comments emphasize the alarming impacts of a laissez-faire approach to admitting and evaluating expert evidence. Through their inaction, both counsel and the judiciary were complicit in removing children from families and incarcerating individuals on the basis of faulty forensic evidence.

V. Admissibility of Expert Opinion Evidence

While alive to the dangers associated with expert opinion evidence, courts have acknowledged that it is a "mainstay" of criminal litigation:

> Despite justifiable misgivings, expert opinion evidence is, of necessity, a mainstay in the litigation process. Put bluntly, many cases, including very serious criminal cases, could not be tried without expert opinion evidence. The judicial challenge is to properly control the admissibility of expert opinion evidence, the manner in which it is presented to the jury and the use that the jury makes of that evidence.[50]

An expert witness need only be qualified as such if giving opinion evidence. Experts can be factual witnesses testifying as to what they observed without being qualified.[51] Things change if an opinion is sought from the expert. For example, physicians who are called as witnesses to describe injuries observed need not be qualified as experts unless they are going to be asked to provide an opinion about the cause of the injuries.

48 *Ibid* at 12.

49 *Ibid* at 16.

50 *Abbey* (2009), *supra* note 33 at para 73.

51 *R v Panghali*, 2012 BCCA 407 at paras 92-93; *R v Hamilton*, 2011 ONCA 399 at paras 277-83; *R v Potter; R v Colpitts*, 2020 NSCA 9 at paras 410-23.

When a party seeks to introduce expert opinion evidence, the trial judge must first determine the nature and scope of the proposed evidence. The boundaries of expert opinion evidence must be carefully defined to prevent overreach.[52] This duty on the trial judge, to ensure that expert opinion evidence does not stray beyond its scope, continues throughout the trial if the evidence is admitted.[53]

The test for the admissibility of expert opinion evidence is derived from *R v Mohan*[54] and *White Burgess*.[55] It consists of two steps: the threshold stage and the gatekeeping stage.

In order to be admitted into evidence, expert opinion must meet the four *Mohan* threshold requirements:

1. relevance,
2. necessity in assisting the trier of fact,
3. absence of an exclusionary rule, and
4. a properly qualified expert.[56]

If the opinion rests on novel or contested science or uses accepted science for a novel purpose, a basic threshold of reliability of the underlying science must be established.[57]

If threshold admissibility is established, the court proceeds to the discretionary gatekeeping step. The trial judge must engage in a balancing exercise to determine whether otherwise admissible expert opinion evidence should be excluded because its probative value is outweighed by its prejudicial effect. If the benefits justify the risks, the evidence will be admitted.[58]

A. The Threshold Stage

1. Relevance

The test for admissibility is relevance, not infallibility.[59] Relevance at the threshold stage refers to logical relevance.[60] Logical relevance means that the evidence has a tendency as a matter of logic and human experience to make the existence of a fact in

52 *R v Bingley*, 2017 SCC 12 at para 17; *Abbey* (2009), *supra* note 33 at paras 62-64.

53 *Sekhon*, *supra* note 41 at para 46.

54 *Supra* note 1.

55 *Supra* note 13.

56 *Mohan*, *supra* note 1 at para 17; *White Burgess*, *ibid* at para 19.

57 *Bingley*, *supra* note 52 at para 15; *White Burgess*, *supra* note 13 at para 23; *Mohan*, *supra* note 1 at para 28.

58 *White Burgess*, *supra* note 13 at paras 19, 24; *Bingley*, *supra* note 52 at para 16.

59 *R v Lyons*, 1987 CanLII 25 at para 97, 1987 CarswellNS 41 (WL Can) at para 123 (SCC).

60 *Abbey* (2009), *supra* note 33 at para 82; *White Burgess*, *supra* note 13 at para 23.

issue more likely than it would be without that evidence.[61] This has been identified as a "low threshold" for admissibility.[62]

2. Necessity

It is not enough that the proposed expert opinion evidence be helpful; it must be necessary:

> The word "helpful" is not quite appropriate and sets too low a standard. However, I would not judge necessity by too strict a standard. What is required is that the opinion be necessary in the sense that it provide information "which is likely to be outside the experience and knowledge of a judge or jury."[63]

If the judge or jury can draw their own inferences and reach their own conclusions on the evidence before them, then a ready-made inference from an expert is not required. If the evidence is sufficiently technical to make that impossible for the trier of fact, then the opinion of an expert is required. The necessity requirement helps ensure that experts do not usurp the function of the trier of fact.[64]

3. The Absence of Any Exclusionary Rule

The admission of expert opinion evidence is an exception to the general exclusionary rule regarding opinion evidence. To be admitted it must not run afoul of any other exclusionary rule of evidence.[65]

4. A Properly Qualified Expert

A witness will be recognized as expert if they have expertise outside the experience and knowledge of the trier of fact.[66] The witness must be "shown to have acquired special or peculiar knowledge through study or experience in respect of the matters on which he or she undertakes to testify."[67]

To be properly qualified, an expert must be impartial, independent, and unbiased. The "acid test" as identified in *White Burgess* is "whether the expert's opinion would not change regardless of which party retained him or her."[68] The fact that an expert has been hired by one side or the other is not sufficient in and of itself to undermine

61 *Mohan*, *supra* note 1 at para 18; *R v J-LJ*, 2000 SCC 51 at para 47.

62 *J-LJ*, *supra* note 61 at para 47.

63 *Mohan*, *supra* note 1 at para 22; see also *DD*, *supra* note 6 at para 46.

64 *DD*, *supra* note 6 at para 50; *Sekhon*, *supra* note 41 at para 45.

65 *Mohan*, *supra* note 1 at para 26; *R v Shafia*, 2016 ONCA 812 at para 252.

66 *Bingley*, *supra* note 52 at paras 19, 22.

67 *Mohan*, *supra* note 1 at para 27.

68 *White Burgess*, *supra* note 13 at para 31.

the expert's independence, impartiality, or lack of bias. The question is not whether there is an appearance of bias but whether there is actual bias.[69]

The exclusion of expert evidence for bias at the threshold stage should only occur in "very clear cases in which the proposed expert is unable or unwilling to provide the Court with fair, objective and non-partisan evidence."[70]

5. Novel Science

While not a separate step in the *Mohan* test, where novel or contested science or science used for a novel purpose is at issue, the reliability of the underlying science for the suggested purpose must be established.[71] The purpose of the special rule for novel scientific evidence is to ensure that the reliability of an underlying technique or procedure used in forming the opinion is established by precedent, evidence, or statute.[72]

6. Burden of Proof

The party seeking to introduce expert opinion evidence must establish its admissibility on a balance of probabilities.

While the burden does not shift, if a party contests the impartiality of an expert witness, "a realistic concern" that the expert is unable or unwilling to comply with their duty to the court to be impartial and unbiased must be shown. If a realistic concern is shown, the party seeking to introduce the evidence must also show, on a balance of probabilities, that the expert is not biased.[73]

B. The Gatekeeping Stage

Even if expert opinion evidence passes the threshold stage of admissibility, the trial judge retains the discretion to exclude the evidence if its probative value is outweighed by its prejudicial effect.[74] At this stage the trial judge engages in a case-specific cost–benefit analysis.

An examination of the benefits of the evidence will involve consideration of its probative potential and the significance of the issue to which it is directed. The reliability (but not the ultimate reliability) of the opinion is relevant. If the expert evidence is essential to the jury's ability to understand the evidence, it will weigh heavily in favour of admissibility.[75]

69 *Ibid* at para 50; *Nova Scotia (Community Services) v JM*, 2018 NSCA 71 at para 27.

70 *White Burgess*, *supra* note 13 at para 49.

71 *Ibid* at para 23.

72 *Bingley*, *supra* note 52 at para 23.

73 *White Burgess*, *supra* note 13 at para 48.

74 *Bingley*, *supra* note 52 at para 16; *ibid* at paras 19, 24.

75 *Abbey* (2009), *supra* note 33 at paras 79, 87-89, 94; *Shafia*, *supra* note 65 at para 232.

The inherent risks associated with expert opinion evidence will be considered in the cost analysis, described in *R v J-LJ* as "consumption of time, prejudice and confusion."[76] In *Abbey* (2009), Doherty J identified the "most important risk" to be the danger that a jury will be unable to make an effective and critical assessment of the evidence.[77]

Concerns about the expert's independence and impartiality are also relevant to the gatekeeping exclusionary discretion of the trial judge:

> Finding that expert evidence meets the basic threshold does not end the inquiry. Consistent with the structure of the analysis developed following *Mohan* which I have discussed earlier, the judge must still take concerns about the expert's independence and impartiality into account in weighing the evidence at the gatekeeping stage. At this point, relevance, necessity, reliability and absence of bias can helpfully be seen as part of a sliding scale where a basic level must first be achieved in order to meet the admissibility threshold and thereafter continue to play a role in weighing the overall competing considerations in admitting the evidence. At the end of the day, the judge must be satisfied that the potential helpfulness of the evidence is not outweighed by the risk of the dangers materializing that are associated with expert evidence.[78]

In *R v JR*, that Court noted that compliance with section 657.3 of the *Criminal Code*,[79] which details notice and disclosure requirements related to expert opinion evidence, may be considered by the judge as part of the gatekeeping function.[80]

1. Factual Basis

For the expert's evidence to be left with the trier of fact, the proponent of the expert evidence must also present the factual basis underlying the expert opinion. There must be some admissible evidence to support the facts on which the expert relies before any weight can be attributed to the opinion. The more the expert relies on facts not proved in evidence, the less weight the opinion will be given.[81]

2. Standard of Appellate Review

Absent an error of law, material misapprehension of the evidence, unreasonable ruling, or abdication of the gatekeeper function altogether, the trial judge's decision to admit or reject expert opinion evidence is entitled to deference from appellate courts.[82]

76 *Supra* note 61 at para 47.

77 *Supra* note 33 at para 90; *Shafia*, *supra* note 65 at para 233.

78 *White Burgess*, *supra* note 13 at para 54.

79 RSC 1985, c C-46 [Code].

80 *R v JR*, 2018 ONCA 615 at paras 83-84.

81 *R v Lavallee*, [1990] 1 SCR 852 at paras 89, 92, 1990 CanLII 95.

82 *Shafia*, *supra* note 65 at paras 229-34; *R v Johnson*, 2019 ONCA 145 at para 50; *R v Pearce (ML)*, 2014 MBCA 70 at para 70; *R v Dominic*, 2016 ABCA 114 at para 17; *R v Natsis*, 2018 ONCA 425 at para 16; *DD*, *supra* note 6 at paras 11-14 (dissent), para 47 (majority); *Potter*, *supra* note 51 at para 438.

C. Statutory Provisions Relevant to Admissibility: Criminal Code

Section 657.3 of the Code states the following in relation to the admissibility of expert evidence:

Expert testimony

657.3(1) In any proceedings, the evidence of a person as an expert may be given by means of a report accompanied by the affidavit or solemn declaration of the person, setting out, in particular, the qualifications of the person as an expert if

(a) the court recognizes that person as an expert; and

(b) the party intending to produce the report in evidence has, before the proceeding, given to the other party a copy of the affidavit or solemn declaration and the report and reasonable notice of the intention to produce it in evidence.

Attendance for examination

(2) Notwithstanding subsection (1), the court may require the person who appears to have signed an affidavit or solemn declaration referred to in that subsection to appear before it for examination or cross-examination in respect of the issue of proof of any of the statements contained in the affidavit or solemn declaration or report.

Notice for expert testimony

(3) For the purpose of promoting the fair, orderly and efficient presentation of the testimony of witnesses,

(a) a party who intends to call a person as an expert witness shall, at least thirty days before the commencement of the trial or within any other period fixed by the justice or judge, give notice to the other party or parties of his or her intention to do so, accompanied by

(i) the name of the proposed witness,

(ii) a description of the area of expertise of the proposed witness that is sufficient to permit the other parties to inform themselves about that area of expertise, and

(iii) a statement of the qualifications of the proposed witness as an expert;

(b) in addition to complying with paragraph (a), a prosecutor who intends to call a person as an expert witness shall, within a reasonable period before trial, provide to the other party or parties

(i) a copy of the report, if any, prepared by the proposed witness for the case, and

(ii) if no report is prepared, a summary of the opinion anticipated to be given by the proposed witness and the grounds on which it is based; and

(c) in addition to complying with paragraph (a), an accused, or his or her counsel, who intends to call a person as an expert witness shall, not later than the close of the case for the prosecution, provide to the other party or parties the material referred to in paragraph (b).

If notices not given

(4) If a party calls a person as an expert witness without complying with subsection (3), the court shall, at the request of any other party,

(a) grant an adjournment of the proceedings to the party who requests it to allow him or her to prepare for cross-examination of the expert witness;

(b) order the party who called the expert witness to provide that other party and any other party with the material referred to in paragraph (3)(b); and

(c) order the calling or recalling of any witness for the purpose of giving testimony on matters related to those raised in the expert witness's testimony, unless the court considers it inappropriate to do so.

Additional court orders

(5) If, in the opinion of the court, a party who has received the notice and material referred to in subsection (3) has not been able to prepare for the evidence of the proposed witness, the court may do one or more of the following:

(a) adjourn the proceedings;

(b) order that further particulars be given of the evidence of the proposed witness; and

(c) order the calling or recalling of any witness for the purpose of giving testimony on matters related to those raised in the expert witness's testimony.

Use of material by prosecution

(6) If the proposed witness does not testify, the prosecutor may not produce material provided to him or her under paragraph (3)(c) in evidence without the consent of the accused.

No further disclosure

(7) Unless otherwise ordered by a court, information disclosed under this section in relation to a proceeding may only be used for the purpose of that proceeding.

Section 657.3(1) allows for an expert's report, accompanied by an affidavit or solemn declaration detailing the expert's qualifications, to be admitted into evidence at any proceeding without the need for *viva voce* testimony. For this to happen, the court must recognize the person as an expert and the party seeking to introduce the report must have provided the other party with a copy of the report, the affidavit or solemn declaration, and reasonable notice of the intention to produce the report in evidence. Under section 657.3(2), the court retains discretion to require the expert to appear in person in any event.

The stated purpose of section 657.3(3) is the "fair, orderly and efficient" presentation of the testimony of witnesses. In keeping with this mandate, any party who intends to call an expert witness must give 30 days' notice (or any other period fixed by the court) to opposing parties detailing the name, area of expertise, and statement

of qualifications of the expert. A copy of the expert's report or a summary of the expert's opinion and the grounds upon which it is based must be provided to the opposing party. The prosecution must do this "within a reasonable period" of time before trial. The defence must do so before the prosecution closes its case.

Section 657.3(4) provides remedies for failure to comply with subsection (3). These include an adjournment to allow sufficient time to prepare for cross-examination of the expert, an order requiring compliance and provision of the report or summary, and an order that any witness be called or recalled to give testimony related to matters raised by the expert testimony (unless the court considers it inappropriate). Similar orders may be made by the court even where subsection (3) has been complied with but the opposing party has not, in the court's opinion, been able to prepare for the expert testimony. Since section 657.3(5) is premised on compliance with subsection (3), the section replaces a compliance order with an order for particulars.

If the defence decides against calling its expert, the prosecution is not allowed to introduce the report previously provided under subsection (3)(c) without the consent of the accused.

Information required to be disclosed under section 657.3 may only be used in regard to the particular proceeding at issue, absent a court order.

In *R v Doonanco*[83] the Crown, in breach of section 657.3, did not disclose the report of its expert witness until after the defence expert finished testifying. The Crown also failed to cross-examine the defence expert on any of the content of the undisclosed report, violating the rule in *Browne v Dunn*.[84] Ms Doonanco's appeal was allowed and a new trial ordered. The Supreme Court found that the only way a fair trial could have been preserved in the circumstances would have been for the trial judge to have precluded the Crown expert from testifying.

Prior to *Doonanco*, exclusion of evidence was not considered an available remedy for failure to comply with section 657.3.[85] Exclusion of expert evidence for failing to disclose or provide notice could still be considered in the context of the constitutional disclosure obligations of the Crown under section 7 of the *Canadian Charter of Rights and Freedoms*.[86] *Doonanco* seems to suggest that when trial fairness has been endangered by a failure to comply with section 657.3, exclusion of evidence will be an available remedy.

Other sections of the Code also deal with the admission of expert opinion evidence relevant to specific offences. For example, section 117.13 deals with the admissibility

83 2020 SCC 2.

84 (1893), 6 R 67 (UKHL).

85 *R v Parada*, 2016 SKCA 102 at para 41; *R v Horan*, 2008 ONCA 589 at para 29; *R v Henneberry*, 2009 NSSC 95 at para 100, aff'd 2009 NSCA 112.

86 Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11 [Charter]; *R v Perjalian*, 2011 BCCA 323 at para 36.

of the certificate of an analyst and provides for attendance for cross-examination of the analyst with leave in the context of firearms and other weapons. Sections 320.31 through 320.4 discuss expert opinion evidence relevant to blood alcohol and drug concentrations and impairment. In Part XX.1—Mental Disorder, various sections deal with assessment reports by a medical practitioner concerning fitness to stand trial and criminal responsibility. Section 752.1 concerns assessment reports for use in dangerous offender and long-term offender applications. When considering calling expert opinion evidence, it is important to review the sections relevant to the charge before the court to see if there are any provisions relevant to admissibility.

VI. Canada Evidence Act

Section 7 of the *Canada Evidence Act*[87] limits the number of expert witnesses either side can present to five, unless leave is obtained from the court:

> 7. Where, in any trial or other proceeding, criminal or civil, it is intended by the prosecution or the defence, or by any party, to examine as witnesses professional or other experts entitled according to the law or practice to give opinion evidence, not more than five of such witnesses may be called on either side without the leave of the court or judge or person presiding.[88]

Section 8 of the *Canada Evidence Act* concerns handwriting comparison by an expert or lay witness. A witness may compare the disputed writing with any sample proven to be genuine to the satisfaction of the court:

> 8. Comparison of a disputed writing with any writing proved to the satisfaction of the court to be genuine shall be permitted to be made by witnesses, and such writings, and the evidence of witnesses respecting those writings, may be submitted to the court and jury as proof of the genuineness or otherwise of the writing in dispute.[89]

VII. Conclusion

In the last few decades, the courts have repeatedly reconsidered their relationship with expert evidence. While expert witnesses have the power to enhance the truth-seeking functions of the court, the corresponding dangers associated with expert evidence are no theoretical matter. The recent cases of Dr Smith and the Motherisk lab illustrate the devastating impacts that expert evidence can have on people's lives. As

87 RSC 1985, c C-5.

88 See *Altana Pharma Inc v Novopharm Ltd*, 2007 FC 1095 at para 63; *Turpin v R*, 2019 NBCA 78, leave to appeal to SCC dismissed.

89 See *R v Abdi*, 1997 CanLII 4448, 34 OR (3d) 499 (CA); *R v LV*, 2016 SKCA 74.

stated by Goudge J, counsel and the judiciary have a large part to play in preventing expert evidence from resulting in wrongful convictions:

> In cases … where the expert's opinion is critical and the charges are so serious, tragic outcomes in the criminal justice system are hardly surprising. While Dr. Smith, as the pathologist giving expert evidence, must bear primary responsibility for these deficiencies, those charged with overseeing his performance cannot escape responsibility. *Indeed, neither can other participants in the criminal justice system—Crown, defence and the court. Each had an important role to play in ensuring, so far as possible, that results in the criminal justice system were not affected by flawed expert testimony*.[90]

Put simply, when it comes to expert evidence, members of the criminal justice system cannot continue to operate in a reactionary manner. Both counsel and the judiciary must be rigorous in ensuring that experts are qualified and that the scope of their evidence is clearly circumscribed. Going forward, such an approach will empower participants in the justice system to prevent miscarriages of justice before they occur.

90 Goudge Inquiry, *supra* note 26 at 19 (emphasis added).