

HIGH COURT OF AUSTRALIA

FRENCH CJ,
GUMMOW, HAYNE, HEYDON, CRENNAN, KIEFEL AND BELL JJ

DASREEF PTY LIMITED

APPELLANT

AND

NAWAF HAWCHAR

RESPONDENT

Dasreef Pty Limited v Hawchar [2011] HCA 21
22 June 2011
S313/2010

ORDER

Appeal dismissed with costs.

On appeal from the Supreme Court of New South Wales

Representation

D F Jackson QC with T G R Parker SC and D T Miller for the appellant
(instructed by Moray & Agnew Solicitors)

B M Toomey QC with F Tuscano and M A Kumar for the respondent (instructed
by Slater & Gordon Lawyers)

Notice: This copy of the Court's Reasons for Judgment is subject to
formal revision prior to publication in the Commonwealth Law Reports.

CATCHWORDS

Dasreef Pty Limited v Hawchar

Evidence – Admissibility – Opinion evidence – Section 79(1) of *Evidence Act* 1995 (NSW) provided that rule excluding evidence of opinion did not apply where "a person has specialised knowledge based on the person's training, study or experience" and person's opinion "wholly or substantially based on that knowledge" – Respondent sued appellant in Dust Diseases Tribunal of New South Wales – Respondent claimed he was negligently exposed to unsafe levels of silica while working for appellant – Witness gave evidence about approximate level of respirable silica to which respondent may have been exposed – Opinion treated as admissible to found calculation of numerical or quantitative level of exposure to respirable silica – Whether opinion admissible for that purpose – Requirements for admissibility.

Procedure – Specialist tribunal – Dust Diseases Tribunal of New South Wales – Ability of judge constituting Tribunal to draw on experience as member of specialist tribunal when making findings of fact – Section 25 of *Dust Diseases Tribunal Act* 1989 (NSW) required Tribunal to apply rules of evidence – Section 25B provided exception subject to various requirements – Trial judge drew on "experience" that silicosis usually caused by very high levels of silica exposure in concluding that respondent's silicosis caused by exposure to silica – Section 25B neither invoked nor complied with – Whether trial judge entitled to draw on "experience" in making finding of fact.

Procedure – Objection to admissibility of evidence – Evidence taken on voir dire – Trial judge did not rule on objection at conclusion of voir dire – Desirability of ruling on objection to admissibility as soon as possible.

Words and phrases – "based on the person's training, study or experience", "basis rule", "opinion rule", "specialised knowledge", "specialist tribunal", "voir dire", "wholly or substantially based on that knowledge".

Dust Diseases Tribunal Act 1989 (NSW), ss 25, 25B, 32.

Evidence Act 1995 (NSW), ss 55(1), 76(1), 79(1).

Dust Diseases Tribunal Rules (NSW), r 9.

1 FRENCH CJ, GUMMOW, HAYNE, CRENNAN, KIEFEL AND BELL JJ. Nawaf Hawchar, the respondent in this appeal, suffers from silicosis. He worked for the appellant ("Dasreef") as a labourer and then as a stonemason for a little over five and a half years between 1999 and 2005. Before he immigrated to Australia in 1996, Mr Hawchar had worked for about a year in a family stonemasonry business in Lebanon. From time to time between 2002 and 2005 he did some private stonemasonry work. In all those undertakings he was exposed to silica dust.

2 In 2004, Mr Hawchar was diagnosed with scleroderma. In May 2006, he was diagnosed with early stage silicosis. In October 2007, he began proceedings against Dasreef in the Dust Diseases Tribunal of New South Wales claiming damages for personal injury: his contracting scleroderma and silicosis. His central allegation was that, while working for Dasreef, he had been exposed to unsafe levels of silica dust. He alleged breach of statutory duty, negligence and breach of contract. The evidence he called at the trial of the proceeding included opinion evidence from several witnesses, among them Dr Kenneth Basden, a chartered chemist, chartered professional engineer, and retired senior lecturer in the School of Chemical Engineering and Industrial Chemistry at the University of New South Wales.

3 At the trial of the proceeding, the Tribunal (Judge Curtis) found¹ that scleroderma is not a dust disease but that, by s 11(4) of the *Dust Diseases Tribunal Act* 1989 (NSW) ("the Dust Diseases Tribunal Act"), the Tribunal had jurisdiction to determine Mr Hawchar's claim for provisional damages and further damages on account of his contracting scleroderma as claims ancillary or related to the claims he brought in respect of silicosis. Nevertheless, Mr Hawchar sought and obtained an order, at trial, dismissing his claim for damages for scleroderma. Evidently he took this course in order to preserve entitlements he had under the *Workers Compensation Act* 1987 (NSW) in respect of his disease of scleroderma. It is not necessary, however, to explore this aspect of the matter any further.

4 In respect of his claim for damages for contracting silicosis the Tribunal found Dasreef 20 in 23 parts responsible for Mr Hawchar's silicosis, the balance of responsibility resting with his work in Lebanon and the work he had done in Australia on his own account. The accuracy of this apportionment of

1 *Nawaf Hawchar v Dasreef Pty Ltd* [2009] NSWDDT 12.

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responsibility was not in issue in the appeal to this Court. The Tribunal entered judgment for Mr Hawchar against Dasreef for damages in an amount of \$131,130.43, together with an order pursuant to s 11A of the Dust Diseases Tribunal Act that an award of further damages may be made with respect to certain silica-related diseases.

5 Dasreef appealed to the Court of Appeal of New South Wales against the whole of the orders made by the Dust Diseases Tribunal. The Court of Appeal (Allsop P, Basten and Campbell JJA) allowed² Dasreef's appeal in relation to certain questions of costs, remitting those questions to the Tribunal for reconsideration, but otherwise dismissed Dasreef's appeal.

6 When Mr Hawchar was working for Dasreef there was an applicable standard³ prescribing the maximum permitted exposure to respirable silica. The standard was expressed as a time weighted average (or "TWA") concentration of 0.2 mg/m³ of air to which a person was exposed over a 40 hour working week.

7 The central question that Dasreef agitated in the Court of Appeal was whether the primary judge had "erred in admitting evidence of Dr Basden as to the numerical level of respirable silica dust in [Mr Hawchar's] breathing zone". Dasreef further alleged that the primary judge had "erred in relying on his 'experience' as a 'specialist tribunal'". The primary judge had said, in his reasons for judgment, that he could rely on that experience to conclude that Mr Hawchar's silicosis had been caused by exposure to silica dust. Dasreef advanced some other grounds of appeal but they need not be noticed.

8 The Court of Appeal rejected⁴ Dasreef's complaints about the admissibility of Dr Basden's evidence and also rejected⁵ Dasreef's challenge to the primary judge's ability to rely on his experience as a judge in a specialist court.

2 *Dasreef Pty Ltd v Hawchar* [2010] NSWCA 154.

3 Occupational Health and Safety Regulation (NSW), cl 51(1), (2)(a).

4 [2010] NSWCA 154 at [44] per Allsop P, Basten and Campbell JJA agreeing.

5 [2010] NSWCA 154 at [52]-[54].

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9 These reasons will demonstrate that Dr Basden's evidence was not admissible to establish that Mr Hawchar's exposure to silica dust in the course of working for Dasreef was greater than the level prescribed as the maximum permissible level of exposure. To the extent to which Dr Basden expressed an opinion about the numerical or quantitative level (in the sense explained later in these reasons) of respirable silica dust to which Mr Hawchar was exposed in the course of working for Dasreef, his evidence was not "wholly or substantially based on" "specialised knowledge based on [his] training, study or experience"⁶. These reasons will further demonstrate that the Court of Appeal was wrong to conclude that the primary judge was "permitted", as he put it⁷, "to take into account my experience that this disease [silicosis] is usually caused by very high levels of silica exposure".

10 But despite the wrongful reception of evidence and the primary judge's impermissible reliance on experience as a judge in a specialist court, the Court of Appeal should have dismissed Dasreef's appeal against the primary judge's findings that Dasreef was liable to Mr Hawchar for damages for negligently exposing him to dangerous levels of silica dust. The Court of Appeal should have reached that conclusion because there was no dispute, whether at trial, on appeal to the Court of Appeal, or in this Court, that Mr Hawchar suffers from silicosis or that silicosis is a disease caused only by exposure to silica dust. And there was uncontested evidence at trial from an expert pathologist (Professor Henderson) that, based on the period of latency of Mr Hawchar's disease, Mr Hawchar's exposure to silica had been intense and was attributable to a history of exposure to silica dust over a period of about six years beginning in 1999.

11 To explain the bases for these conclusions, it is necessary to say something first about the course of proceedings in the Dust Diseases Tribunal, next the decision of the primary judge, and then the decision of the Court of Appeal. Against that background it will be necessary to examine s 79(1) of the *Evidence Act* 1995 (NSW) ("the Evidence Act"). Finally, it will be necessary to say something about the use by the Dust Diseases Tribunal of evidence given, and opinions formed, in cases other than the case under particular consideration.

6 *Evidence Act* 1995 (NSW) ("the Evidence Act"), s 79(1).

7 [2009] NSWDDT 12 at [87].

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The trial – Dr Basden's report

12 The solicitors for Mr Hawchar retained Dr Basden to provide a report addressing three questions:

- "i) During the period of Mr Hawchar's employment by [Dasreef], was it reasonably foreseeable that an employee exposed to silica dust could suffer a silica-related injury?
- ii) What procedures could an employer have taken to materially reduce the risk of injury?
- iii) If the employer had carried out these steps as outlined in (ii) above to materially reduce the risk of injury, would [Mr Hawchar's] risk of injury have been minimized?"

To assist Dr Basden in preparing his report, Mr Hawchar's solicitors gave Dr Basden a copy of the statement of claim and statement of particulars that had been filed in the matter, a photograph of a mask of the type worn by Mr Hawchar when at work, a photograph of Mr Hawchar wearing that mask, a photograph of Mr Hawchar demonstrating the use of a hand-held powered masonry cutting disc and a photograph of the Dasreef working premises.

13 In the introduction to his written report, Dr Basden described the circumstances which he understood to lie behind the questions he had been asked. Although lengthy, it is desirable to set out the relevant section of the introduction in full.

"Mr Hawchar is suffering from silicosis allegedly contracted through the inhalation of silica bearing dust, while in the employment of the defendant [Dasreef] between 21 October 1999 and May, 2005. During this period Mr Hawchar was employed as a stone worker who was involved in cutting and laying stone, usually sandstone. Depending on the nature of the job, Mr Hawchar on a daily basis spent from one hour to all day cutting stone, usually sandstone, and generally by power tools. This operation generated large quantities of airborne dust. While performing this work, Mr Hawchar at all times wore a mask provided by his employer, but he alleges that dust penetrated these masks because of gaps between them and his face.

Mr Hawchar also alleges that about 20 to 30 times each year during the period of his employment he worked within a plastic enclosure or 'tent',

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erected to minimize the spread of fugitive dust to neighbouring properties. One side of this enclosure or tent was fitted with an exhaust fan to remove the dust therefrom, but nevertheless Mr Hawchar claims that in spite of this the enclosure only served to concentrate the dust in his working / breathing zone. He further alleges that due to the increased concentration of dust he would have to take a break approximately every hour because of troubled breathing."

The evidence given at trial did not accord in every respect with this description of the circumstances. In particular, the number of occasions on which Mr Hawchar worked within a plastic enclosure or "tent" was said to be fewer than the 20 to 30 times each year recorded by Dr Basden. For present purposes, however, nothing turns on these differences.

14 In his report, Dr Basden identified two commonly adopted procedures which could have been employed, but were not, as means of reducing Mr Hawchar's exposure to dust: the "employment of wet cutting, in which a jet of water is directed to the junction between the cutting wheel and the stone being cut", and the "provision of an exhaust hood close to the source of the dust ... connected to an industrial sized 'vacuum cleaner' at its outlet end to capture the collected dust".

15 Dr Basden also expressed the opinion with respect to the masks provided by Dasreef "that the types of respirator supplied to Mr Hawchar were totally inadequate by the criteria officially in force at the time concerned". He concluded that "if wet cutting associated with a quite portable suction ventilation system adjacent to the cutting site had been employed, along with the provision of an appropriate PAPR [powered air-purifying respirator] type of respirator, it is almost certain that Mr Hawchar would have suffered no injuries at all". This aspect of Dr Basden's evidence was not contradicted and showed what steps could have been taken to avoid the consequences of intense exposure to silica dust.

16 In a section of his report entitled "selection of respiratory protection devices", Dr Basden wrote about the level of dust concentration generated in Mr Hawchar's breathing zone when he was using a cutting wheel. Again, although the relevant part of the section is lengthy, it is desirable to set it out. It read:

"The actual dust concentrations generated in Mr Hawchar's breathing zone, which would be no more than 50 or 60 cm from the cutting wheel

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(as indicated by the photograph supplied ...), presumably were never measured with the appropriate instruments while work was in progress. However, it most certainly would not be from half to two *ten-thousandths* of a gram per cubic metre of air, but more realistically would be of the order of a thousand or more times these values or even approaching *one* gram, or thereabouts, per cubic metre. (Only once can I recall actually observing sandstone being dry-cut in the open air by portable powered angle grinders, at a monument being erected at the entrance to a country town in NSW. Each of the two operators was enveloped by dense clouds of highly visible fugitive dust, and neither was wearing a respirator of any type! In the case of Mr Hawchar, the defendant [Dasreef] found it necessary to erect a 'tent' fitted with an exhaust fan 'to attempt to minimize the dust pollution caused to neighbouring properties when the stone was being cut', which indicates the production of considerable quantities of visible dust). It should be noted that not all of the dust in the visible clouds being generated by the cutting wheels would be in the 'respirable' size range, which means an equivalent aerodynamic diameter (EAD) of below 4 μm . The actual clouds would consist of particles from about 20 or perhaps 30 μm downwards, as larger ones will settle rapidly by gravity and not remain in the airborne state. However, a considerable proportion of the size distribution of the suspension would be 4 μm and below, and hence would constitute the 'respirable' fraction of the dust cloud." (emphasis in original)

17 Considerable attention was given, both at trial and on appeal to the Court of Appeal, to this passage from Dr Basden's report. Several observations may be made about it. First, Dr Basden did not, in this section of his report or elsewhere, attempt to offer any calculation of the levels of respirable silica dust to which Mr Hawchar had been exposed at work. He did offer the opinion that the dust concentrations generated in Mr Hawchar's breathing zone, when operating a cutting wheel as indicated in a particular photograph, "most certainly would not be from half to two *ten-thousandths* of a gram per cubic metre of air, but more realistically would be of the order of a thousand or more times these values or even approaching *one* gram, or thereabouts, per cubic metre". He related that to the respirable dust (that is, dust particles having an equivalent aerodynamic diameter of below 4 μm) by saying that "a *considerable proportion* of the size distribution of the suspension would be 4 μm and below, and hence would constitute the 'respirable' fraction of the dust cloud" (emphasis added). He did not, in his written report or elsewhere, identify what he meant by "a considerable proportion".

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The trial – a voir dire but no ruling

18 Counsel for Dasreef objected to the reception of any part of Dr Basden's report. The primary judge took evidence from Dr Basden as on a voir dire. Counsel for Dasreef cross-examined Dr Basden, at some length, with a view to demonstrating that Dr Basden did not profess to have expressed any opinion based on his specialised knowledge, experience, training or study about the amount of dust Mr Hawchar would have inhaled during his time with Dasreef. And Dr Basden agreed with a number of questions put to him by counsel for Dasreef to the general effect described.

19 At the end of the voir dire the primary judge did not rule on the admissibility of Dr Basden's evidence. As a result, Mr Hawchar, as plaintiff, did not know what evidence led in support of his claim had been found by the primary judge to be admissible. And Dasreef, as defendant, did not know, before it decided what if any evidence it should call, what was the evidence that it had to meet. That result is unsatisfactory. As a general rule, trial judges confronted with an objection to admissibility of evidence should rule upon that objection as soon as possible. Often the ruling can and should be given immediately after the objection has been made and argued. If, for some pressing reason, that cannot be done, the ruling should ordinarily be given before the party who tenders the disputed evidence closes its case. That party will then know whether it must try to mend its hand, and opposite parties will know the evidence they must answer.

20 It is only for very good reason that a trial judge should defer ruling on the admissibility of evidence until judgment. This was not such a case. Yet the primary judge did defer ruling on the disputed evidence in this matter until judgment. And because that is what the primary judge did, the evidence of Dr Basden was used for purposes for which it was not admissible and for which it may be doubted that Mr Hawchar had sought to tender it.

The primary judge's use of the evidence

21 In his reasons for judgment, the primary judge recorded that counsel for Dasreef had raised more than 70 objections to the expert evidence called on Mr Hawchar's behalf at trial. The primary judge said⁸ that "[r]ather than address the merit of each objection" he would recite the qualifications of each expert and attempt to summarise in each case the reasoning process of the expert.

8 [2009] NSWDDT 12 at [59].

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22 The primary judge recorded⁹ that Dr Basden had admitted that "he could not express a numerical opinion about Mr Hawchar's exposure to respirable silica, that he could not express an opinion about the amount of dust that Mr Hawchar would have inhaled during his time with Dasreef and could not express a numerical opinion about the time-weighted average of Mr Hawchar's exposure to silica". The primary judge set out several questions and answers given by Dr Basden in the course of the voir dire. Read as a whole, however, the answers given by Dr Basden in the course of the voir dire show that the statements he had made in his written report and in the course of the voir dire, to the effect that the amount of respirable silica in Mr Hawchar's breathing zone would have been 500 or 1000 times greater than the permissible levels of exposure, provided, as Dr Basden put it, "only a ballpark to justify the reason I was recommending the protection factor of about a thousand for the use of a VAPR [sic PAPR] respirator. That was the purpose of it."

23 Yet despite Dr Basden's estimates being proffered with this limited purpose, the primary judge sought to calculate the levels of silica dust to which Mr Hawchar had been exposed in the course of working for Dasreef. The primary judge said¹⁰ in his reasons for judgment:

"A simple calculation may be made upon the basis of Mr Hayek's [a proprietor of Dasreef] evidence that a man engaged in cutting stone through the course of one day would use the angle grinder for approximately 30 to 40 minutes, and Dr Basden's opinion that during this time he would be exposed to dust concentrations at least 1000 times greater than the permissible limit of 0.2 mg/m^3 ... Accepting for the moment that the P2 mask provided to Mr Hawchar fitted perfectly and provided a protection factor of 50, the concentration of respirable particles within the respirator when cutting was $1000 \div 50 \times 0.2 \text{ mg/m}^3 = 4 \text{ mg/m}^3$.

The standard TWA of 0.2 mg/m^3 permits the accumulation of 40 hours $\times 0.2 \text{ mg/m}^3 = 8 \text{ mg/m}^3$. If a man is exposed for 30 minutes on each of five days to a concentration of 4 mg/m^3 his cumulative weekly exposure is 2.5 hours $\times 4 \text{ mg/m}^3 = 10 \text{ mg/m}^3$. The TWA of this exposure over 40 hours is

9 [2009] NSWDDT 12 at [75].

10 [2009] NSWDDT 12 at [82]-[83].

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then $10 \text{ mg/m}^3 \div 40 = 0.25 \text{ mg/m}^3$. This exceeds the permissible limit. If he were exposed for 40 minutes each day his TWA rises to 0.33 mg/m^3 ."

24 It is to be observed that the calculation made by the primary judge took *estimates* given by a witness of the length of time "a man engaged in cutting stone" would use the angle grinder and coupled that with the proposition that it was "Dr Basden's opinion that during this time he would be exposed to dust concentrations *at least* 1000 times greater than the permissible limit" (emphasis added). The dangers of building estimate upon estimate to yield some apparently precise calculation of the time weighted average exposure to respirable silica are evident. Several premises necessarily underpin the use of those estimates in this way. Unless each of those premises has been exposed in the course of argument for consideration by the parties there are serious risks not only that the calculation pretends to an accuracy it does not have but also that the parties are not afforded procedural fairness.

25 In the present case, however, there was a more deep-seated problem. Was there admissible evidence before the primary judge that during the whole of the time Mr Hawchar was using an angle grinder to cut stone in the course of working for Dasreef he was exposed to dust concentrations at least 1000 times greater than the permissible limit? In the passage from his reasons for judgment that has been set out, the primary judge implicitly answered that question in the affirmative. It was that question which was central to the first way in which Dasreef put its appeal to the Court of Appeal.

Dasreef's appeal to the Court of Appeal

26 Dasreef appealed to the Court of Appeal as of right. Section 32 of the Dust Diseases Tribunal Act provided, so far as now relevant, that:

- "(1) A party who is dissatisfied with a decision of the Tribunal in point of law or on a question as to the admission or rejection of evidence may appeal to the Supreme Court.
- (2) The Supreme Court may, on the hearing of any appeal under this section, remit the matter to the Tribunal for determination by the Tribunal in accordance with any decision of the Supreme Court and may make such other order in relation to the appeal as the Supreme Court sees fit."

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Having regard to what the primary judge had said in his reasons, argument in the Court of Appeal naturally proceeded¹¹ on the footing that the critical question concerning the admissibility of Dr Basden's evidence was whether "he had the relevant expertise to proffer an opinion concerning the measurement of silica dust in the way he did". Having set out¹² the passage from Dr Basden's written report that is set out earlier in these reasons, the Court of Appeal recorded¹³ that the cross-examination of Dr Basden had "revealed that his opinion was not based on a precise measurement or a view expressed with precision, but rather an estimate drawn from his experience". The Court of Appeal concluded¹⁴ that:

"From the debate reflected in the evidence of Dr Basden, his reasons for coming to the opinion are clear: his experience and specialised knowledge allowed him to say that given that dusts have a consistent fraction of respirable content and that given Mr Hawchar was working in clouds of silica as the evidence revealed, an inexact estimate of the concentration of respirable silica dust was what he said it was – a thousand times the acceptable level of the standard."

The Court of Appeal described¹⁵ the opinion as "contestable and inexact" but went on to say¹⁶ that "it was then for someone qualified as an expert to say that his estimate was worthless, or of little weight, or for some other reason unreliable" and that¹⁷ "[a] lack of reasoning did not make his opinion inadmissible".

11 [2010] NSWCA 154 at [36].

12 [2010] NSWCA 154 at [40].

13 [2010] NSWCA 154 at [41].

14 [2010] NSWCA 154 at [42].

15 [2010] NSWCA 154 at [43].

16 [2010] NSWCA 154 at [43].

17 [2010] NSWCA 154 at [44].

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28 On the second issue pressed by Dasreef – whether the primary judge was right to rely on experience he had gained in hearing evidence and deciding other cases in the Dust Diseases Tribunal – the Court of Appeal concluded¹⁸ that the primary judge had not acted illegitimately. The Court of Appeal treated¹⁹ the point as concluded by its earlier decisions in *ICI Australia Operations Pty Ltd v Workcover Authority of New South Wales*²⁰ and *JLT Scaffolding International Pty Ltd (in liq) v Silva*²¹.

29 As indicated at the outset of these reasons, consideration of the admissibility of Dr Basden's evidence directs attention to s 79(1) of the Evidence Act.

The Evidence Act and opinion evidence

30 Section 79(1) of the Evidence Act must be understood in its statutory context. Section 76(1) of the Evidence Act provides that "[e]vidence of an opinion is not admissible to prove the existence of a fact about the existence of which the opinion was expressed". That exclusionary rule is referred to in the Evidence Act as "the opinion rule". Subsequent provisions of the Evidence Act provide a number of exceptions to the opinion rule. Section 79(1) provides that:

"If a person has specialised knowledge based on the person's training, study or experience, the opinion rule does not apply to evidence of an opinion of that person that is wholly or substantially based on that knowledge."

31 Section 76(1) expresses the opinion rule in a way which assumes that evidence of an opinion is tendered "to prove the existence of a fact". That manner of casting the rule does not, as might be supposed, elide whatever distinction can be drawn between "opinion" and "fact" or invoke the very difficult distinction which sometimes is drawn between questions of law and questions of fact. It does not confine an expert witness to expressing opinions

18 [2010] NSWCA 154 at [51]-[53].

19 [2010] NSWCA 154 at [51]-[52].

20 (2004) 60 NSWLR 18 at 62-65 [216]-[234] per McColl JA.

21 Unreported, 30 March 1994 at 12 per Kirby P.

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about matters of "fact". Rather, the opinion rule is expressed as it is in order to direct attention to why the party tendering the evidence says it is relevant. More particularly, it directs attention to the finding which the tendering party will ask the tribunal of fact to make. In considering the operation of s 79(1) it is thus necessary to identify why the evidence is relevant: why it is "evidence that, if it were accepted, could rationally affect (directly or indirectly) the assessment of the probability of the existence of a fact in issue in the proceeding"²². That requires identification of the fact in issue that the party tendering the evidence asserts the opinion proves or assists in proving.

32 To be admissible under s 79(1) the evidence that is tendered must satisfy two criteria. The first is that the witness who gives the evidence "has specialised knowledge based on the person's training, study or experience"; the second is that the opinion expressed in evidence by the witness "is wholly or substantially based on that knowledge". The complaint which Dasreef made at trial, on appeal to the Court of Appeal and on appeal to this Court was that Dr Basden did not express an opinion about the numerical or quantitative level of exposure to respirable silica encountered by Mr Hawchar in working for Dasreef that was an opinion based on any specialised knowledge Dr Basden had that was based on his training, study or experience.

33 The expression "numerical or quantitative level" requires explanation. It is used in these reasons in the sense of assigning a value capable of use in a calculation of the kind the primary judge made. In his written report Dr Basden spoke of the operator of an angle grinder being exposed to dust "of the order of a thousand or more times" the permissible levels. In one sense that was a numerical or quantitative assessment of the level of exposure to silica dust during the particular operation. But it was not, and was evidently not intended to be, an assessment which could form the foundation for a calculation of the time weighted average level of exposure of a particular worker. So much is evident from Dr Basden's use of the phrase "of the order of" as an expression of approximation.

34 As explained earlier in these reasons, it may greatly be doubted that Dr Basden sought to express an opinion about the numerical or quantitative level of respirable silica to which Mr Hawchar had been exposed. On the *voir dire* he denied that this was what he was trying to do. Read as a whole, Dr Basden's

²² Evidence Act, s 55(1).

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written report is better understood as offering an opinion about what measures could have been taken to prevent Mr Hawchar contracting silicosis *if* he was exposed to respirable silica at levels as much as 1000 times greater than permissible levels. And in Dr Basden's evidence on the voir dire, that was what he said he was doing. But as also explained earlier in these reasons, that was not how the primary judge or the Court of Appeal used Dr Basden's evidence. Both the primary judge and the Court of Appeal took his evidence as expressing an opinion about the numerical or quantitative level of exposure encountered by Mr Hawchar. That is, his evidence was taken as expressing an opinion that could found the calculations made by the primary judge of the time weighted average level of respirable silica to which Mr Hawchar had been exposed. If that opinion was expressed, was it an opinion based on specialised knowledge Dr Basden had that was based on his training, study or experience?

35 In order for Dr Basden to proffer an admissible opinion about the numerical or quantitative level of Mr Hawchar's exposure to silica dust it would have been necessary for the party tendering his evidence to demonstrate first that Dr Basden had specialised knowledge based on his training, study or experience that permitted him to measure or estimate the amount of respirable silica to which a worker undertaking the relevant work would be exposed in the conditions in which the worker was undertaking the work. Secondly, it would have been necessary for the party tendering the evidence to demonstrate that the opinion which Dr Basden expressed about Mr Hawchar's exposure was wholly or substantially based on that knowledge.

36 In this case, demonstration of those matters could come only from evidence given by Dr Basden. That is why, in *HG v The Queen*, Gleeson CJ pointed out that, "[b]y directing attention to whether an opinion is wholly or substantially based on specialised knowledge based on training, study or experience, [s 79] requires that the opinion is presented in a form which makes it possible to answer that question"²³.

37 It should be unnecessary, but it is nonetheless important, to emphasise that what was said by Gleeson CJ in *HG* (and later by Heydon JA in the Court of Appeal in *Makita (Australia) Pty Ltd v Sprowles*²⁴) is to be read with one basic

23 (1999) 197 CLR 414 at 427 [39]; [1999] HCA 2.

24 (2001) 52 NSWLR 705 at 743-744 [85].

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proposition at the forefront of consideration. The admissibility of opinion evidence is to be determined by application of the requirements of the Evidence Act rather than by any attempt to parse and analyse particular statements in decided cases divorced from the context in which those statements were made. Accepting that to be so, it remains useful to record that it is ordinarily the case, as Heydon JA said in *Makita*²⁵, that "the expert's evidence must explain how the field of 'specialised knowledge' in which the witness is expert by reason of 'training, study or experience', and on which the opinion is 'wholly or substantially based', applies to the facts assumed or observed so as to produce the opinion propounded". The way in which s 79(1) is drafted necessarily makes the description of these requirements very long. But that is not to say that the requirements cannot be met in many, perhaps most, cases very quickly and easily. That a specialist medical practitioner expressing a diagnostic opinion in his or her relevant field of specialisation is applying "specialised knowledge" based on his or her "training, study or experience", being an opinion "wholly or substantially based" on that "specialised knowledge", will require little explicit articulation or amplification once the witness has described his or her qualifications and experience, and has identified the subject matter about which the opinion is proffered.

38 But that was not this case.

39 Dr Basden gave evidence of his training, study and experience. He did not give evidence asserting that his training, his study or his experience permitted him to provide anything more than what he called a "ballpark" figure estimating the amount of respirable silica dust to which a worker using an angle grinder would be exposed if that worker was using it in the manner depicted in the photograph of Mr Hawchar or a video recording Dr Basden was shown. Indeed, in his written report, Dr Basden had pointed out that he had seen the use of an angle grinder in this way only once before. And he gave no evidence that he had then, or on any other occasion, measured directly, or sought to calculate inferentially, the amount of respirable dust to which such an operator was or would be exposed.

40 There was, in these circumstances, no footing on which the primary judge could conclude that a numerical or quantitative opinion expressed by Dr Basden

25 (2001) 52 NSWLR 705 at 744 [85].

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was wholly or substantially based on specialised knowledge based on training, study or experience.

41 Contrary to submissions on behalf of Mr Hawchar, this analysis does not seek to introduce what has been called "the basis rule": a rule by which opinion evidence is to be excluded unless the factual bases upon which the opinion is proffered are established by other evidence. Whether that rule formed part of the common law of evidence need not be examined. It may be accepted that the Law Reform Commission's interim report on evidence²⁶ denied the existence of such a common law rule and expressed the intention to refrain from including a basis rule in the legislation the Commission proposed and which was later enacted as the *Evidence Act* 1995 (Cth) and the *Evidence Act* 1995 (NSW). What has been called the basis rule is a rule directed to the facts of the particular case about which an expert is asked to proffer an opinion and the facts upon which the expert relies to form the opinion expressed. The point which is now made is a point about connecting the opinion expressed by a witness with the witness's specialised knowledge based on training, study or experience.

42 A failure to demonstrate that an opinion expressed by a witness is based on the witness's specialised knowledge based on training, study or experience is a matter that goes to the admissibility of the evidence, not its weight. To observe, as the Court of Appeal did, that what Dr Basden said about the volume of respirable dust to which Mr Hawchar was exposed over time was "an estimate" that was "contestable and inexact" no doubt did direct attention to its worth and its weight. But more importantly, it directed attention to what exactly Dr Basden was saying in his evidence and to whether any numerical or quantitative assessment he proffered was admissible. And if, as the Court of Appeal observed²⁷, his opinion on that matter lacked reasoning, the absence of reasoning pointed (in this case, inexorably) to the lack of any sufficient connection between a numerical or quantitative assessment or estimate and relevant specialised knowledge.

26 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 417 [750].

27 [2010] NSWCA 154 at [44].

French CJ
Gummow J
Hayne J
Crennan J
Kiefel J
Bell J

16.

43 Dr Basden's evidence was not admissible to found the calculation made by the primary judge of the level of respirable dust to which Mr Hawchar was exposed.

The "specialist" court

44 Consideration of whether the primary judge could draw on evidence led in other cases "to take into account [his] experience that this disease [silicosis] is usually caused by very high levels of silica exposure"²⁸ must begin with the relevant provisions of the Dust Diseases Tribunal Act. Section 25 of that Act provided that:

- "(1) Any evidence that would be admissible in proceedings in the Supreme Court is admissible in proceedings before the Tribunal.
- (2) Except as otherwise provided by this Part or the rules, evidence is not admissible in proceedings before the Tribunal if it would not be admissible in those proceedings by virtue of subsection (1).
- (3) Historical evidence and general medical evidence concerning dust exposure and dust diseases which has been admitted in any proceedings before the Tribunal may, with the leave of the Tribunal, be received as evidence in any other proceedings before the Tribunal, whether or not the proceedings are between the same parties."

It follows that, subject to whatever is specifically provided by other provisions of Pt 3 of the Act, or by the rules²⁹, proceedings in the Tribunal are governed by the rules of evidence. Those rules do not permit the Tribunal to take into account, in deciding one case, evidence given in other cases between different parties or findings of fact made in other cases between different parties.

45 Section 25B of the Dust Diseases Tribunal Act provides an important qualification to that general rule. That section provides:

²⁸ [2009] NSWDDT 12 at [87].

²⁹ See *Dust Diseases Tribunal Act* 1989 (NSW), s 3(1).

17.

- "(1) Issues of a general nature determined in proceedings before the Tribunal (including proceedings on an appeal from the Tribunal) may not be relitigated or reargued in other proceedings before the Tribunal without the leave of the Tribunal, whether or not the proceedings are between the same parties.
- (1A) If an issue of a general nature already determined in proceedings before the Tribunal (the *earlier proceedings*) is the subject of other proceedings before the Tribunal (the *later proceedings*) and that issue is determined in the later proceedings on the basis of the determination of the issue in the earlier proceedings, the judgment of the Tribunal in the later proceedings must identify the issue and must identify that it is an issue of a general nature determined as referred to in this section.
- (2) In deciding whether to grant leave for the purposes of subsection (1), the Tribunal is to have regard to:
 - (a) the availability of new evidence (whether or not previously available), and
 - (b) the manner in which the other proceedings referred to in that subsection were conducted, and
 - (c) such other matters as the Tribunal considers to be relevant.
- (3) The rules may provide that subsection (1) does not apply in specified kinds of proceedings or in specified circumstances or (without limitation) in relation to specified kinds of issues.
- (4) This section does not affect any other law relating to matters of which judicial notice can be taken or about which proof is not required."

Rule 9(1) of the Dust Diseases Tribunal Rules (NSW) provides that "[a] party who intends to rely in any proceedings on the determination in other proceedings of an issue of a general nature ... must ... file and serve on all other parties notice of that intention". Rule 9(2) makes plain that, even if no party gave notice of intention to rely on the earlier determination of a general issue, the Tribunal may do so on its own motion. But, in such a case, s 25B(1A) obliges the Tribunal to identify the issue in its judgment and identify that the issue was an issue of a general nature determined as referred to in s 25B.

French CJ
Gummow J
Hayne J
Crennan J
Kiefel J
Bell J

18.

46 No party relied on s 25B as justifying the course taken by the primary judge in the present matter. The primary judge did not identify the issue of whether very high levels of silica exposure were the usual cause of silicosis as a general issue that had been determined in earlier proceedings.

47 Whatever may be the position with respect to other tribunals, the statutory requirement that, subject to certain limited exceptions, none of which was engaged here, the Dust Diseases Tribunal apply the rules of evidence compels the conclusion that the primary judge erred when he said that he was permitted to take his experience into account in determining what caused Mr Hawchar's silicosis. To the extent to which earlier decisions of the Court of Appeal concerning the Dust Diseases Tribunal³⁰ hold to the contrary, they should be overruled. Under the rules of evidence the primary judge was permitted to take account of matters not proved in evidence in this case only if they were matters of which judicial notice could be taken. It was not suggested that the causes of silicosis were matters for judicial notice.

Conclusion and orders

48 For these reasons, the Court of Appeal was wrong to conclude that the evidence of Dr Basden was admissible for the purposes for which that Court and the primary judge used it. Further, the Court of Appeal was wrong to conclude that the primary judge was entitled to take account of his experience as a member of a "specialist" court in determining what caused Mr Hawchar's silicosis. Those errors having been established, it by no means follows, however, that the Court of Appeal was bound to set aside the orders of the primary judge and remit the matter for rehearing.

49 It will be recalled that s 32(2) of the Dust Diseases Tribunal Act provided that on the hearing of an appeal the Court of Appeal was empowered to "remit the matter to the Tribunal for determination by the Tribunal in accordance with any decision" of the Court but that the Court of Appeal was further empowered to "make such other order in relation to the appeal" as it saw fit. In the present case, where there was undisputed expert evidence that Mr Hawchar was suffering

30 For example, *ICI Australia Operations Pty Ltd v Workcover Authority of New South Wales* (2004) 60 NSWLR 18 at 64 [232]; *GIO General Ltd v ABB Installation & Service Pty Ltd* (2000) 19 NSWCCR 720 at 730 [34].

French CJ
Gummow J
Hayne J
Crennan J
Kiefel J
Bell J

19.

silicosis, that the short latency of the disease suggested that Mr Hawchar's silica exposure had been intense and that the silicosis was to be attributed to a history of exposure to silica dust over a period of about six years beginning in 1999, coupled with the evidence of readily available means of avoiding injury, the Court of Appeal should have concluded that Dasreef's appeal against the finding that it was liable to Mr Hawchar be dismissed. This Court should now make the orders which the Court of Appeal should have made. That is to be achieved in this case by dismissing Dasreef's appeal to this Court, with costs.

50 HEYDON J. This appeal primarily concerns reception of expert opinion evidence under the *Evidence Act* 1995 (NSW) ("the Act"). The Act has near-equivalents in some other jurisdictions³¹.

The relevant statutory provisions

51 The relevant provisions are as follows. Section 55(1) provides:

"The evidence that is relevant in a proceeding is evidence that, if it were accepted, could rationally affect (directly or indirectly) the assessment of the probability of the existence of a fact in issue in the proceeding."

Section 56 provides:

"(1) Except as otherwise provided by this Act, evidence that is relevant in a proceeding is admissible in the proceeding.

(2) Evidence that is not relevant in the proceeding is not admissible."

Section 57(1) provides:

"If the determination of the question whether evidence adduced by a party is relevant depends on the court making another finding (including a finding that the evidence is what the party claims it to be), the court may find that the evidence is relevant:

(a) if it is reasonably open to make that finding, or

(b) subject to further evidence being admitted at a later stage of the proceeding that will make it reasonably open to make that finding."

52 Parts 3.2-3.11 then set out various exclusionary rules – exceptions to the s 56(1) rule that relevant evidence is admissible.

53 Part 3.3 sets out exclusionary rules relating to opinion. Section 76(1) provides:

"Evidence of an opinion is not admissible to prove the existence of a fact about the existence of which the opinion was expressed."

31 The *Evidence Act* 1995 (Cth) operates in federal courts. The legislation also has equivalents in Tasmania (*Evidence Act* 2001), Norfolk Island (*Evidence Act* 2004) and Victoria (*Evidence Act* 2008). In the Australian Capital Territory the *Evidence Act* 1995 (Cth) will continue to apply until the *Evidence Act* 2011 (ACT) comes into force.

Section 79(1) provides:

"If a person has specialised knowledge based on the person's training, study or experience, the opinion rule does not apply to evidence of an opinion of that person that is wholly or substantially based on that knowledge."

Section 80 provides:

"Evidence of an opinion is not inadmissible only because it is about:

- (a) a fact in issue or an ultimate issue, or
- (b) a matter of common knowledge."

Part 1 of the Dictionary to the Act defines "opinion rule" as meaning s 76. But the expression "opinion" is not defined. A meaning commonly given to it is "an inference drawn or to be drawn from observed and communicable data."³² This meaning will suffice for present purposes, although it must not be taken to suggest that the observation of data does not itself involve inference³³, and sometimes expertise³⁴.

54 Section 135 provides:

"The court may refuse to admit evidence if its probative value is substantially outweighed by the danger that the evidence might:

- (a) be unfairly prejudicial to a party, or
- (b) be misleading or confusing, or
- (c) cause or result in undue waste of time."

Section 136 provides:

"The court may limit the use to be made of evidence if there is a danger that a particular use of the evidence might:

32 *Allstate Life Insurance Co v Australia and New Zealand Banking Group Ltd (No 5)* (1996) 64 FCR 73 at 75 per Lindgren J.

33 *Agfa-Gevaert AG v AB Dick Co* 879 F 2d 1518 at 1523 (7th Cir 1989); *Milam v State Farm Mutual Automobile Insurance Co* 972 F 2d 166 at 170 (7th Cir 1992).

34 *Hannes v Director of Public Prosecutions (Cth) (No 2)* (2006) 205 FLR 217 at 288 [286].

- (a) be unfairly prejudicial to a party, or
- (b) be misleading or confusing."

Difficulties with expert opinion evidence

55 The construction of s 79 is important for several reasons.

56 First, for generations judges have complained about the partiality of expert opinion witnesses. In 1843 Lord Campbell³⁵, in 1873 Sir George Jessel MR³⁶, and in 1963 Walsh J³⁷ lamented their "bias". Indeed many litigation lawyers can doubtless recall instances of experts who say one thing in one case and a contradictory thing in another, each time to the supposed advantage of the party paying them. In 1849 Lord Cottenham LC³⁸ and in 1876 Sir George Jessel MR³⁹ drew attention to the skewed manner in which experts are selected, as each side rummages through a group of experts until the most favourable one is found. In 1935 Lord Tomlin complained of the propensity of experts to offer opinions on matters which are questions for the court⁴⁰ – or, as Lord Justice Auld said more recently, to give opinion evidence "masquerading as expert evidence on or very close to the factual decision that it is for the court to make."⁴¹ In 1986 Judge Posner complained of expert opinion which⁴²:

"was the testimony either of a crank or, what is more likely, of a man who is making a career out of testifying for plaintiffs in automobile accident cases in which a door may have opened; at the time of trial he was

35 *The Tracy Peerage* (1843) 10 Cl & F 154 at 191 [8 ER 700 at 715].

36 *Lord Abinger v Ashton* (1873) LR 17 Eq 358 at 374.

37 *Miller Steamship Co Pty Ltd v Overseas Tankship (UK) Ltd* [1963] SR (NSW) 948 at 963.

38 *Re Dyce Sombre* (1849) 1 Mac & G 116 at 128 [41 ER 1207 at 1212].

39 *Thorn v Worthing Skating Rink Co* (1876) reported as a note to *Plimpton v Spiller* (1877) 6 Ch D 412 at 416.

40 *British Celanese Ltd v Courtaulds Ltd* (1935) 152 LT 537 at 543.

41 *Review of the Criminal Courts of England and Wales: Report*, (2001) at 574 [133].

42 *Chaulk v Volkswagen of America Inc* 808 F 2d 639 at 644 (7th Cir 1986). The quotation is from *Keegan v Minneapolis & St Louis RR* 78 NW 965 at 966 (Minn 1899).

involved in 10 such cases. His testimony illustrates the age-old problem of expert witnesses who are 'often the mere paid advocates or partisans of those who employ and pay them, as much so as the attorneys who conduct the suit. There is hardly anything, not palpably absurd on its face, that cannot now be proved by some so-called "experts."'

In 1994 he said⁴³:

"Many experts are willing for a generous (and sometimes for a modest) fee to bend their science in the direction from which their fee is coming. The constraints that the market in consultant services for lawyers places on this sort of behaviour are weak ... The judicial constraints on tendentious expert testimony are inherently weak because judges (and even more so juries ...) lack training or experience in the relevant fields of expert knowledge."

57 Then there is the delay and expense caused by the disproportionate volume of expert evidence. Lord Woolf MR identified a troubling modern trend⁴⁴.

"A large litigation support industry, generating a multi-million pound fee income, has grown up among professions such as accountants, architects and others, and new professions have developed such as accident reconstruction and care experts. This goes against all principles of proportionality and access to justice. In my view, its most damaging effect is that it has created an ethos of what is acceptable which has in turn filtered down to smaller cases. Many potential litigants do not even start litigation because of the advice they are given about cost, and in my view this is as great a social ill as the actual cost of pursuing litigation."

58 The tendency of experts to dominate proceedings creates numerous other perils for the integrity of the trial process. One is that experts, who ex hypothesi know much more about their fields of expertise than judges and juries do, and who know of that vast disparity, will take over the conduct of cases and exert excessive influence over their outcomes. Another is that experts, no doubt contemptuous, often justifiably, of the ignorance of the lawyers, will appoint themselves as advocates for the party calling them. Another is that experts render their evidence less than useful by giving it in a form conventional in their

43 *Indianapolis Colts Inc v Metropolitan Baltimore Football Club Limited Partnership* 34 F 3d 410 at 415 (7th Cir 1994).

44 *Access to Justice: Final Report to the Lord Chancellor on the civil justice system in England and Wales*, (1996) at 137 [2].

discipline but not conforming to the rules of evidence⁴⁵. Another is the tendency of experts to drift into giving the courts reasons why they should accept or reject the evidence of lay witnesses on matters of primary fact⁴⁶.

59 Finally, and very importantly, there is increasing concern about the risk of injustice that may flow from unsatisfactory expert evidence⁴⁷. The stricter the admissibility requirements for s 79 tenders, the greater the chance that evidence carrying that danger will be excluded.

The admissibility issue

60 The evidence was that the "actual dust concentrations generated in [the respondent's] breathing zone ... most certainly would not be from half to two *ten-thousandths* of a gram [0.05 to 0.2mg] per cubic metre of air, but more realistically would be of the order of a thousand or more times these values or even approaching *one* gram, or thereabouts, per cubic metre" (emphasis in original). The trial judge used it as an integer in calculations leading to the conclusion that the time weighted average of the respondent's exposure to dust while working for the appellant, assuming he was exposed for 30 minutes on each of five days per week, was 0.25mg/m³, which exceeded the limit of 0.2mg/m³ in the relevant Australian standard. That was a pleaded particular of a breach of statutory duty going to breach of the appellant's duty of care to the respondent. But was that evidence admissible?

The respondent's position

61 The respondent submitted that the evidence was admissible, because there was no "basis rule" in s 79. The expression "basis rule" can be used in a variety of senses. By it the respondent referred to, but denied the existence of, three requirements. He summed them up as the need to prove "the facts, the

45 In *The Commonwealth v Yarmirr* (2001) 208 CLR 1 at 62 [84]; [2001] HCA 56 Gleeson CJ, Gaudron, Gummow and Hayne JJ said the practice of "mixing ... disparate elements" such as "evidence of historical and other facts, ... expert opinions ... and ... advocating the claimants' case" was "a practice which has obvious difficulties and dangers."

46 For American criticisms see Kaye, Bernstein and Mnookin, *The New Wigmore: A Treatise on Evidence – Expert Evidence*, 2nd ed (2011) at 8-34 [1.3]-[1.4.2].

47 See, for example, Ligertwood and Edmond, *Australian Evidence: A Principled Approach to the Common Law and the Uniform Acts*, 5th ed (2010) at 615-617 [7.46]; Redmayne et al, "Forensic Science Evidence in Question", [2011] *Criminal Law Review* 347.

assumptions and the reasoning which are the basis of the opinion." First, the respondent denied any requirement that the expert disclose the "facts" and "assumptions" on which the expert's opinion was founded. It is convenient to call that requirement the "assumption identification" rule. Secondly, the respondent denied any requirement that the "facts" and "assumptions" stated be proved before the evidence was admissible. This requirement is often called the "basis" rule, following the usage of the Australian Law Reform Commission ("the Commission")⁴⁸. But it is convenient to refer to it below as the "proof of assumption" rule. Thirdly, the respondent denied any requirement that there be a statement of reasoning showing how the "facts" and "assumptions" related to the opinion stated so as to reveal that that opinion was based on the expert's expertise⁴⁹. It is convenient to call this requirement the "statement of reasoning" rule.

62 In short, the respondent submitted that the admissibility of expert opinion evidence tendered under s 79 required the establishment of a relevant field of expertise, required that the witness be expert in that field, and required the statement of opinion – but no more⁵⁰. If evidence tendered met those requirements but had the dangers to which ss 135 and 136 applied, the position could be remedied by orders under those sections.

63 The common law position is relevant to the construction of s 79.

Common law in relation to assumption identification rule

64 *The authorities.* There is no doubt that the assumption identification rule exists at common law. Expert evidence is inadmissible unless the facts on which the opinion is based are stated by the expert – by way of proof if the expert can admissibly prove them, otherwise as assumptions to be proved in other ways. Thus Dixon J said that the assumptions of fact on which an expert opinion rested had to be "adverted to by the witness."⁵¹ There is much authority for that

48 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 417 [750] ("ALRC 26").

49 It is possible to state this requirement more elaborately. But the formulation set out in the text will suffice for the purposes of deciding this appeal.

50 He cited *HG v The Queen* (1999) 197 CLR 414 at 433 [63]; [1999] HCA 2.

51 *Bugg v Day* (1949) 79 CLR 442 at 462; [1949] HCA 59. See also at 456 per Latham CJ.

proposition in England⁵²; New South Wales⁵³; Queensland⁵⁴; South Australia⁵⁵; Western Australia⁵⁶; the Australian Capital Territory⁵⁷; the Northern Territory⁵⁸; and the Federal Court of Australia⁵⁹. It has the extrajudicial support of G J Samuels⁶⁰.

65 *Function of the assumption identification rule.* The rule facilitates the operation of the proof of assumption rule and other rules of admissibility. It helps to distinguish between what the expert has observed and what the expert has been told⁶¹; to ensure that the expert is basing the opinion only on relevant facts⁶²; to ensure that experts do not pick and choose for themselves what aspects of the primary evidence they reject, what they accept, how they interpret it and what the court should find⁶³; and to ascertain whether there is substantial

52 *R v Turner* [1975] QB 834 at 840; *National Justice Compania Naviera SA v Prudential Assurance Co Ltd ("The Ikarian Reefer")* [1993] 2 Lloyd's Rep 68 at 81.

53 *Steffen v Ruban* (1966) 84 WN (Pt 1) (NSW) 264 at 268-269.

54 *R v Ping* [2006] 2 Qd R 69 at 79 [43].

55 *R v Fowler* (1985) 39 SASR 440 at 442; *Hillier and Carney v Lucas* (2000) 81 SASR 451 at 491-492 [311], [314], [317] and [321]; *Flavel v South Australia* (2008) 102 SASR 404 at 421 [67].

56 *Pollock v Wellington* (1996) 15 WAR 1 at 4.

57 *Forrester v Harris Farm Pty Ltd* (1996) 129 FLR 431 at 438.

58 *Milirrump v Nabalco Pty Ltd* (1971) 17 FLR 141 at 162.

59 *Trade Practices Commission v Arnotts Ltd (No 5)* (1990) 21 FCR 324 at 327-330; *Arnotts Ltd v Trade Practices Commission* (1990) 24 FCR 313 at 349-353; *Quick v Stoland Pty Ltd* (1998) 87 FCR 371 at 373-374; *Daniel v Western Australia* (2000) 178 ALR 542 at 546 [16]; *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd* (2002) 55 IPR 354 at 357 [10].

60 "Problems Relating to the Expert Witness in Personal Injury Cases", in Glass (ed), *Seminars on Evidence*, (1970) 139 at 145.

61 *Steffen v Ruban* (1966) 84 WN (Pt 1) (NSW) 264 at 268-269.

62 *R v Turner* [1975] QB 834 at 840.

63 *R v Fowler* (1985) 39 SASR 440 at 443; *Arnotts Ltd v Trade Practices Commission* (1990) 24 FCR 313 at 352; *Hillier and Carney v Lucas* (2000) 81 SASR 451 at 492 [318].

correspondence between the facts assumed and the evidence admitted to establish them⁶⁴.

Common law in relation to the proof of assumption rule

66 *The authorities.* There is also no doubt that the proof of assumption rule exists at common law. An expert opinion is not admissible unless evidence has been, or will be, admitted, whether from the expert or from some other source, which is capable of supporting findings of fact which are sufficiently similar to the factual assumptions on which the opinion was stated to be based to render the opinion of value. There is authority for the rule in this Court⁶⁵; in the Federal Court of Australia⁶⁶; in New South Wales⁶⁷; in Victoria⁶⁸; in Queensland⁶⁹; in

64 *Hillier and Carney v Lucas* (2000) 81 SASR 451 at 492 [321].

65 *Commissioner for Government Transport v Adamcik* (1961) 106 CLR 292 at 298; [1961] HCA 43; *Paric v John Holland (Constructions) Pty Ltd* (1985) 59 ALJR 844 at 846; 62 ALR 85 at 87-88; [1985] HCA 58; *Palmer Bruyn & Parker Pty Ltd v Parsons* (2001) 208 CLR 388 at 433 [138]; [2001] HCA 69 (citing *Ramsay v Watson* (1961) 108 CLR 642 at 648-649; [1961] HCA 65).

66 *Arnotts Ltd v Trade Practices Commission* (1990) 24 FCR 313 at 350-351; *Quick v Stoland Pty Ltd* (1998) 87 FCR 371 at 373; *Daniel v Western Australia* (2000) 178 ALR 542 at 546 [16].

67 *King v Great Lakes Shire Council* (1986) 58 LGRA 366 at 371; *R v Perry* (1990) 49 A Crim R 243 at 249; *R v Hilder* (1997) 97 A Crim R 70 at 79, n 15.

68 *R v Haidley* [1984] VR 229 at 234 and 250-251; *R v Lee* (1989) 42 A Crim R 393 at 400; *R v Anderson* (2000) 1 VR 1 at 25-26 [59]-[60]; *R v Berry* (2007) 17 VR 153 at 173-174 [69]; *R v Marijancevic* (2009) 22 VR 576 at 594 [74].

69 *R v Tonkin* [1975] Qd R 1 at 17; *R v Gardner* [1980] Qd R 531 at 535; *Bromley Investments Pty Ltd v Elkington* (2002) 43 ACSR 584 at 593 [50]; *R v Ping* [2006] 2 Qd R 69 at 79 [43].

South Australia⁷⁰; in Western Australia⁷¹; in the Australian Capital Territory⁷²; in England⁷³; in Scotland⁷⁴; in New Zealand⁷⁵; and in Canada⁷⁶. The Victorian Court of Appeal (Ormiston, Vincent and Eames JJA), speaking of a proposition that an expert opinion without any evidentiary basis is inadmissible, said: "The situation requires no elaborate exposition of the legal principles nor is the extensive citation of authority required with respect to such a basic proposition."⁷⁷

70 *Sych and Sych v Hunter* (1974) 8 SASR 118 at 119; *R v Reiner* (1974) 8 SASR 102 at 109-110; *R v Bjordal* (2005) 93 SASR 237 at 245 [27] and 247 [31]; *Flavel v South Australia* (2008) 102 SASR 404 at 421 [67].

71 *Pownall v Conlan Management Pty Ltd* (1995) 12 WAR 370 at 377 and 390; *Pollock v Wellington* (1996) 15 WAR 1 at 3; *Koushappis v Western Australia* (2007) 168 A Crim R 51 at 61-62 [47]-[50]; *Director of Public Prosecutions (WA) v Mangolamara* (2007) 169 A Crim R 379 at 403-404 [148] and 406 [162]; *Woods v Director of Public Prosecutions (WA)* (2008) 38 WAR 217 at 268 [230]-[231].

72 *Forrester v Harris Farm Pty Ltd* (1996) 129 FLR 431 at 438.

73 *R v Ahmed Din* [1962] 1 WLR 680 at 686; [1962] 2 All ER 123 at 127; *English Exporters (London) Ltd v Eldonwall Ltd* [1973] Ch 415 at 421; *R v Turner* [1975] QB 834 at 840; *R v MacKenney* (1980) 72 Cr App R 78 at 81; *R v Abadom* [1983] 1 WLR 126 at 131; [1983] 1 All ER 364 at 368; *R v Theodosi* [1993] RTR 179 at 184; *R v Jackson* [1996] 2 Cr App R 420 at 422-423.

74 *Russell v HM Advocate* 1946 JC 37 at 44; *Forrester v HM Advocate* 1952 JC 28 at 35 and 36; *Blagojevic v HM Advocate* 1995 SLT 1189 at 1192.

75 *Bevan Investments Ltd v Blackhall & Struthers (No 2)* [1978] 2 NZLR 97 at 123.

76 *R v Discon* (1968) 67 DLR (2d) 619 at 624-625; *R v Howard* [1989] 1 SCR 1337 at 1346-1347.

77 *R v Ryan* [2002] VSCA 176 at [9]. See also Samuels, "Problems Relating to the Expert Witness in Personal Injury Cases", in Glass (ed), *Seminars on Evidence*, (1970) 139 at 147.

67 ALRC 26. However, in ALRC 26, the Commission disagreed⁷⁸:

"It has been implied in some cases and asserted in some academic writing that there is a rule of evidence that for expert opinion testimony to be admissible it must have as its basis admitted evidence. The better view is that there is no such rule. Were it to exist, it would not be possible to have opinion evidence which had as a significant component the opinions or the statements of others. This would preclude the tendering of evidence whose value is dependent upon material not before the court and, therefore, difficult for it to assess. While this would have its advantages, it would fail in its inflexibility to take account of the normal means by which experts generally form their opinions – by means of reports of technicians and assistants, consultation with colleagues and reliance upon a host of extrinsic material and information that it would be an endless and unfruitful task with which to burden the courts."⁷⁹

68 There is no common law rule that expert opinion evidence cannot be received unless there exists already "admitted" evidence. It suffices if it can be seen that the appropriate evidence will be admitted later. Statements suggesting the contrary⁸⁰ stem from a time when it was commoner than it is now for a party not to call expert evidence until all the other evidence in that party's case had been called.

69 Further, the Commission's criticism is undercut by one qualification to the proof of assumption rule. Under a common law exception to the hearsay rule, experts may give evidence of hearsay matters which go to demonstrate their expertise – what is said in the published or unpublished works they have read, what has been said to them in discussions they have had with colleagues, what

78 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 417 [750]. A cross-reference given to vol 2, App C at 179 [107] reveals that among the "academic writing" was Pattenden, "Expert Opinion Evidence Based on Hearsay", [1982] *Criminal Law Review* 85 at 88. ALRC 26 recommended the enactment of a Bill containing cll 66(1) and 68. Clause 66(1) corresponded with s 76, and cl 68 had similarities to s 79. The Final Report contained a clause closer to s 79, but it did not add to what ALRC 26 said about the common law rule: Australia, The Law Reform Commission, *Evidence*, Report No 38, (1987) at 82-84 [148]-[151].

79 In other places ALRC 26 was less definitive: Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 78-79 [161] and 198 [362]-[363].

80 For example, *R v Haidley* [1984] VR 229 at 234.

impressions they have gained from their general experience⁸¹. In any event, the criticism goes more to the question whether the rule is satisfactory, not to the present question of whether it exists at common law.

70 The respondent rightly accepted that the Commission was wrong to deny or doubt the existence of the proof of assumption rule.

71 It is necessary to deal with the Commission's six reasons for denying the existence of the proof of assumption rule. Five can be dealt with briefly; the sixth calls for fuller discussion.

72 *Phipson's authorities*. First, the Commission criticised a statement of the proof of assumption rule in the 12th edition of *Phipson on Evidence* by twice saying that it was "most dubious" whether the four cases cited supported it⁸². In fact they do⁸³. The passage had appeared in the first 11 editions as well⁸⁴. It has also appeared in the last five editions⁸⁵. The appearance of the passage in so

81 *Borowski v Quayle* [1966] VR 382 at 386-387; *English Exporters (London) Ltd v Eldonwall Ltd* [1973] Ch 415 at 420; *R v Abadom* [1983] 1 WLR 126 at 129; [1983] 1 All ER 364 at 367.

82 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 78 [161], n 362; vol 2, App C at 179 [108], n 112, referring to *Phipson on Evidence*, 12th ed (1976) at [1209].

83 The four cases are the *Gardner Peerage* case (see le Marchant, *Report of the Proceedings of the House of Lords on the Claims to the Barony of Gardner* at 77); *Wright v Tatham* (1838) 5 Cl & F 670 [7 ER 559]; *Re Dyce Sombre* (1849) 1 Mac & G 116 [41 ER 1207]; and *R v Staunton*, *The Times*, 26 September 1877. Two other cases referred to by Phipson, *Thornton v The Royal Exchange Assurance Co* (1790) Peake 37 [170 ER 70] and *Beatty v Cullingworth*, *The Times*, 17 November 1896, are also not against the rule.

84 1st ed (1892) at 261 (see also at 264); 2nd ed (1898) at 364 (see also at 367-368); 3rd ed (1902) at 345 (see also at 349); 4th ed (1907) at 361 (see also at 365); 5th ed (1911) at 369 (see also at 373-374); 6th ed (1921) at 391 (see also at 396-397); 7th ed (1930) at 379 (see also at 384-385); 8th ed (1942) at 385 (see also at 390); 9th ed (1952) at 408 (see also at 413); 10th ed (1963) at [1297] (see also at [1310]); 11th ed (1970) at [1297] (see also at [1308]-[1310]).

85 13th ed (1982) at [27-14] (see also at [27-56]); 14th ed (1990) at [32-14]; 15th ed (2000) at [37-16]; 16th ed (2005) at [33-16]; 17th ed (2010) at [33-18]. (In the later editions the passage has been adjusted to reflect statutory changes in English law in civil cases.) The first and fourth of the authorities were referred to in all editions, the second in all editions since the third, and the third in all editions since the sixth.

many editions of *Phipson*, which has been in constant use among the profession for over a century in numerous common law jurisdictions, and has passed through the hands of many highly experienced editors and assistant editors, without recorded criticism from judges, barristers or other authors, is a significant pointer to the existence of the rule.

73 *Blackburn J.* The second reason given by the Commission⁸⁶ was that *Milirrpum v Nabalco Pty Ltd*⁸⁷ was inconsistent with the rule. Yet in fact Blackburn J's reasoning was devoted to establishing that there was no need to prove the expertise of expert witnesses by evidence complying with conventional rules of admissibility.

74 *Obscure English cases?* Thirdly, the Commission said that two English cases⁸⁸ were unclear as to whether the rule existed⁸⁹. This is an exaggeration. The cases do in truth support the rule.

75 *The United States position at common law.* Fourthly, the Commission conceded that the basis rule "may well have been the common law position in the United States."⁹⁰ There is actually no doubt about it⁹¹. Wigmore stated that in a hypothetical question put to an expert containing the factual assumptions on which the expert opinion is to be based, "the data to be assumed are those which it is expected or claimed by the party the jury will subsequently adopt as true"; and hence the question "*must not include data which there is not a fair possibility of the jury accepting.*"⁹² A question which offends that prohibition is open to objection, and an opinion offered in answer to that question is inadmissible.

86 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 2, App C at 180 [108].

87 (1971) 17 FLR 141 at 161-163.

88 *R v Turner* [1975] QB 834 at 840; *R v MacKenney* (1980) 72 Cr App R 78 at 81.

89 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 2, App C at 180-181 [108].

90 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 2, App C at 179 [107].

91 Cleary (ed), *McCormick's Handbook of the Law of Evidence*, 2nd ed (1972) at 33; Judge Learned Hand, "Historical and Practical Considerations Regarding Expert Testimony", (1901) 15 *Harvard Law Review* 40 at 53-54, n 2.

92 Wigmore, *Evidence in Trials at Common Law*, Chadbourn rev (1979), vol 2 at 947 [682] (emphasis in original). See also Kaye, Bernstein and Mnookin (eds), *The* (Footnote continues on next page)

76 *The Canadian position.* Fifthly, the Commission relied on a Canadian case, *Wilband v The Queen*⁹³. But on the present point that case was later substantially qualified⁹⁴.

77 *Ramsay v Watson: the facts and the judgment.* Sixthly, the Commission said that in *Ramsay v Watson*⁹⁵:

"the High Court took the view that the consequence of not proving the factual basis is that the opinion may be of 'little or no value' not that it would be inadmissible. No basis rule of admissibility [ie proof of assumption rule] was laid down by the High Court. It did state, however, that a trial judge can properly refuse to admit evidence of statements made to [the expert witness] on which he bases his opinion where it is apparent that other evidence to prove the truth of those statements will not be adduced."⁹⁶

78 In *Ramsay v Watson*, Watson claimed that he had been made ill by reason of his employer's failure to protect him against injury from inhaling lead particles and lead oxide fumes. He succeeded before a jury at trial and before the Full Court of the Supreme Court of New South Wales. One ground advanced in the employer's appeal to the High Court concerned a government medical officer. He gave evidence that he had examined 21 other employees who had worked at that workplace and "observed" that they did not have symptoms of lead poisoning. The High Court (Dixon CJ, McTiernan, Kitto, Taylor and Windeyer JJ) said⁹⁷:

New Wigmore: A Treatise on Evidence – Expert Evidence, 2nd ed (2011) at 153-154 [4.5].

93 [1967] SCR 14 at 21. See Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 198 [363].

94 *R v Abbey* [1982] 2 SCR 24 at 46; *R v Lavallee* [1990] 1 SCR 852 at 895-896 and 899-900. See generally Bryant, Lederman and Fuerst (eds), *The Law of Evidence in Canada*, 3rd ed (2009) at 834-849 [12.159]-[12.192]. See below at [112]-[115].

95 (1961) 108 CLR 642 at 649.

96 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 2, App C at 180 [108] (footnote omitted).

97 *Ramsay v Watson* (1961) 108 CLR 642 at 646-647 (emphasis added).

"Counsel for the defendant wanted him to go further. He sought to get from the witness not only what he *had observed*, but also what each of the men examined *had told him* about his state of health in the past. He apparently hoped to strengthen or complete the evidence of the witness that in his opinion those other men had not been affected by lead, or not affected to a serious degree, by proving that each when questioned had said that his health in the past had been good, and perhaps to elicit also other statements they had made. Counsel for the plaintiff objected on the ground that, if these matters were admissible, they could not be proved by hearsay and that the men themselves should be called."

In particular, an objection was put to any question about what history each employee gave the medical officer. The High Court said that the history was not admissible as part of the *res gestae*, but continued⁹⁸:

"A sounder argument for admitting evidence of what the men had told the examining doctor might have been that it was part of the material on which he formed the opinion that he gave in evidence. When a physician's diagnosis or opinion concerning his patient's health or illness is receivable, he is ordinarily allowed to state the 'history' he got from the patient. ... This, of course, is quite a different matter from the rule last discussed [ie the *res gestae* rule]. That, in cases where it applies, makes statements made to anyone concerning present symptoms and sensations admissible as evidence that those symptoms and sensations, in fact, existed. This makes all statements made to an expert witness admissible if they are the foundation, or part of the foundation, of the expert opinion to which he testifies; but, except they be admissible under the first rule [ie the *res gestae* rule], such statements are not evidence of the existence in fact of past sensations, experiences and symptoms of the patient. Hearsay evidence does not become admissible to prove facts because the person who proposes to give it is a physician."

79 The High Court then made the statement on which the Commission relied⁹⁹:

"[I]f the man whom the physician examined refuses to confirm in the witness box what he said in the consulting room, then the physician's opinion *may have little or no value*, for part of the basis of it has gone."

98 *Ramsay v Watson* (1961) 108 CLR 642 at 648-649.

99 *Ramsay v Watson* (1961) 108 CLR 642 at 649 (emphasis added).

The High Court continued¹⁰⁰:

"Each case depends on its own facts. In this case counsel for the defendant sought to get the examining doctor to recount things he had been told by those he examined. Yet he did not undertake to call them as witnesses. Indeed he made it clear that he did not intend to do so. His Honour in his summing-up told the jury that the medical evidence was that none of the twenty-one men had, when examined, exhibited any symptoms of lead poisoning. The appellant nevertheless complains, because it seems that the respondent's counsel had suggested to the jury that they might discount this evidence, as they did not know the past medical history of the men. This comment, the appellant suggests, could not have been made had the doctor been allowed to tell the jury what they had told him. His Honour, however, could properly refuse to admit evidence of this, it having been made apparent that the men would not be called."

80 In *Ramsay v Watson*, the factual basis of the expert opinion was established by the witness's personal observation of the 21 employees. The rejected evidence was evidence of the histories given by way of supposed reinforcement, the need for which was later confirmed by the failure of the expert opinion to sway the jury. The High Court was thus not dealing with a case where the expert witness's opinion depended wholly on a factual basis which was not established. Its analysis is, with respect, instructive nonetheless.

81 *As yet uncalled evidence suffices.* First, the High Court did not see it as a barrier to the admissibility of the evidence about the employees' histories that the employees had not given evidence of them before the expert witness entered the witness box. Subsequent evidence from the 21 employees of those histories would have sufficed. Ideally, expert evidence will always be called after the primary evidence tendered to prove the assumptions on which the expert evidence rests. That is because at that point it will be clearer what is truly in dispute factually, it will be easier to estimate what evidence may be accepted by the jury, and it will be easier to put hypothetical questions of a realistic kind to witnesses in answer to which they can state opinions based on the factual case proffered by the party calling them, and say how, if at all, their opinions would be modified if that case were not fully accepted or were rejected. But in practice it is frequently not possible or convenient to call the expert evidence at the end of the tendering party's case. *Ramsay v Watson* makes plain that expert opinion evidence is unaffected by the fact that the primary evidence has not yet been given to support the assumptions on which the opinion rests. The admissibility of the expert evidence can be secured by counsel undertaking to call the primary

100 *Ramsay v Watson* (1961) 108 CLR 642 at 649.

evidence later. Hence the proof of assumption rule does not cramp the party calling the expert witness by imposing an impracticably rigid order of witnesses.

82 A procedure conforming with *Ramsay v Watson* was explained thus by the Queensland Court of Appeal in *R v Ping*¹⁰¹:

"Mr Jones was a properly qualified clinical psychologist. He was, relevantly, an expert whose opinion might be admitted into evidence. Before it could be accepted, however, the factual basis for the opinion had to be explained to the court. Mr Jones had to recount the facts on which he based his opinion. To do that he had to give in evidence the history he took from the complainant about his symptoms and what led up to them. Mr Jones's rehearsal of those facts would not prove them but once he had said what he understood the facts to be on which he formed his opinion that opinion could be *provisionally* admitted into evidence. If the facts were proved by someone who had knowledge of them, in this case the complainant, the opinion would be admitted *unconditionally*. [If] the facts were not proved the *condition* on which the admission depended would be unsatisfied and the opinion could not be acted on by the tribunal of fact."

83 *Procedural possibilities.* A second important aspect of *Ramsay v Watson* is the High Court's refusal to enunciate any absolute rule about the precise impact of an absence of primary evidence on the admissibility of expert evidence based on it. "Each case depends on its own facts." There are innumerable ways in which there may be a disconformity between the facts assumed by the expert as the basis for the opinion, and the facts eventually accepted by the trier of fact. If the party tendering the expert opinion has called primary evidence which, if accepted, would correspond substantially with the factual basis assumed, but the trier of fact rejects the primary evidence, in whole or in part, the question is not one of admissibility, but only of weight. That is because questions of admissibility generally¹⁰² ought not to arise once the evidence is closed: by the time it is closed, all evidence that is to be considered by the trier of fact will have been admitted, and any other evidence tendered will have been rejected. "Parties should know, before addresses are taken, the final state of the evidence, whether the trial be by judge and jury or judge alone."¹⁰³ Rulings on admissibility must

101 [2006] 2 Qd R 69 at 79 [43] per Chesterman J (Williams and Jerrard JJA concurring) (emphasis added).

102 There are exceptional and often unsatisfactory instances where evidence is admitted "subject to relevance", or subject to some specific objection, giving the judge power to reject evidence even after the close of both parties' cases.

103 *Aktiebolaget Hässle v Alphapharm Pty Ltd* (2002) 212 CLR 411 at 443 [77] per Gleeson CJ, Gaudron, Gummow and Hayne JJ; [2002] HCA 59.

thus generally be made before the evidence closes. But that is only a minimum position. The superior practice requires rulings about the admissibility of the evidence tendered by one party to be made before that party's case is closed, so as to allow the opposing party, if the defendant, the opportunity to consider whether to make a no case submission, and to allow all opposing parties to consider whether evidence should be called and, if so, what. The traditional position is even more desirable: subject to the judge's entitlement to take a little time to consider difficult objections, "a party is entitled to have questions of admissibility determined as they arise"¹⁰⁴. Only in that way can the opposing party know whether and how to cross-examine the tendering party's witnesses, and what documents to tender through them.

84 Sometimes the tendering party will fail to ensure sufficient conformity between the assumed and the primary facts because the tendering party never intends to call evidence of the primary facts. Sometimes it will fail because while its tenders, if accepted, would go some distance towards establishing the primary facts, they do not go far enough, even if accepted, to establish their existence.

85 When a party tendering the opinion of an expert contends that all the evidence of the primary facts that could be tendered has already been admitted, the court's task in deciding the admissibility of the opinion is relatively simple. It is to assess whether, assuming the evidence of the primary facts is accepted, it will lead to findings sufficiently similar to the factual assumptions on which the expert opinion was stated to be based to render it of value. That task is easier when carried out in the light of actual evidence as distinct from a perhaps imperfect prediction of what the evidence may turn out to be. If, on the other hand, the evidence of the primary facts already admitted, even if accepted, would not lead to the necessary findings, the admissibility of the expert evidence may depend on the giving of an undertaking by the tendering party to call another witness. It is good practice for counsel opposing tender of the opinion evidence to draw attention, at the time of tender, to any significant gap between the primary facts assumed by the expert and the evidence so far received in an attempt to establish those facts, and to seek rejection of the expert evidence unless an appropriate undertaking to fill the gap is offered.

86 "*Little or no value*". What, then, is the meaning of the High Court's words: "[I]f the man whom the physician examined refuses to confirm in the witness box what he said in the consulting room, then the physician's opinion may have little or no value, for part of the basis of it has gone"?

104 *International Harvester Co of Australia Pty Ltd v McCorkell* [1962] Qd R 356 at 358-359 per Philp J.

87 Where a tendering party refuses in advance to give an undertaking to attempt to comply with a condition of admissibility, the court should reject the tender. When their Honours in *Ramsay v Watson* said that the trial judge "could properly refuse to admit evidence of [what the 21 employees told the doctor], it having been made apparent that the men would not be called", they were not referring to a discretion: the trial judge "could properly" refuse to admit the evidence because it is proper to reject inadmissible evidence.

88 On the other hand, where an undertaking is given in advance that an attempt will be made to comply with a condition of admissibility, the court may choose to admit the evidence conditionally, ie provisionally, in the manner described in *R v Ping*¹⁰⁵. What if that attempt is frustrated by the refusal or failure of the witness called in fulfilment of that undertaking to come up to proof? It may not be right to exclude it if there has been only a partial failure to fulfil the undertaking. But if, at the close of the tendering party's case, the party opposing the tender draws attention to the continuing gap between the primary facts assumed by the expert and the evidence called to prove them, and to the failure of the tendering party to fulfil the undertaking to close that gap, it may be the duty of the court to reject the evidence even if it has been conditionally admitted. That duty will exist if, to use the High Court's language, the missing "basis" which has left the gap is so great that the expert's opinion has "no value" – that is, no probative value – because in that event it cannot have any relevance and it is therefore inadmissible. If it has very "little" value, the same may be true. If it has some value, it may be relevant. But it may be at risk of exclusion in exercise of a discretion in criminal cases, and, if one exists in civil cases at common law, in civil cases too, to exclude evidence the probative value of which is outweighed by its prejudicial effect. It would be strange if opinion evidence which is inadmissible because the tendering party failed to offer an undertaking would become admissible where the tendering party did offer an undertaking to call the supporting evidence but did not fulfil it. In those circumstances a trial judge would be entitled to reverse an earlier ruling admitting the evidence in reliance on the undertaking.

89 *Conclusion about Ramsay v Watson.* It is not true to say that *Ramsay v Watson* held that a failure to prove the assumed factual basis of an expert opinion goes only to weight, not admissibility. It is not true to say that no "basis rule of admissibility" was laid down. The Full Court of the Federal Court of Australia correctly cited *Ramsay v Watson* as holding¹⁰⁶: "The proposition that an expert's

105 [2006] 2 Qd R 69 at 79 [43]: see above at [82].

106 *Eric Preston Pty Ltd v Euroz Securities Ltd* (2011) 274 ALR 705 at 724 [171] per Jacobson, Foster and Barker JJ – a proposition true both at common law and in relation to s 79.

opinion based upon certain assumptions which are not ultimately proved in evidence is irrelevant is a fundamental principle of the law". Irrelevant evidence is inadmissible.

90 *Function of the proof of assumption rule.* The function of the proof of assumption rule is to highlight the irrelevance of expert opinion evidence resting on assumptions not backed by primary evidence. It is irrelevant because it stands in a void, unconnected with the issues thrown up by the evidence and the reasoning processes which the trier of fact may employ to resolve them¹⁰⁷. If the expert's conclusion does not have some rational relationship with the facts proved, it is irrelevant. That is because in not tending to establish the conclusion asserted, it lacks probative capacity. Opinion evidence is a bridge between data in the form of primary evidence and a conclusion which cannot be reached without the application of expertise. The bridge cannot stand if the primary evidence end of it does not exist. The expert opinion is then only a misleading jumble, uselessly cluttering up the evidentiary scene.

The statement of reasoning rule at common law

91 *The authorities.* At common law there is no doubt that an expert opinion is inadmissible unless the expert states in chief the reasoning by which the expert conclusion arrived at flows from the facts proved or assumed by the expert so as to reveal that the opinion is based on the expert's expertise. The court does not have to be satisfied that the reasoning is correct: "the giving of correct expert evidence cannot be treated as a qualification necessary for giving expert evidence."¹⁰⁸ But the reasoning must be stated. The opposing party is not to be left to find out about the expert's thinking for the first time in cross-examination¹⁰⁹.

92 Sir Owen Dixon, speaking extrajudicially, said: "courts cannot be expected to act upon opinions the basis of which is unexplained."¹¹⁰ In *R v*

107 *Arnotts Ltd v Trade Practices Commission* (1990) 24 FCR 313 at 351.

108 *Commissioner for Government Transport v Adamcik* (1961) 106 CLR 292 at 303 per Menzies J.

109 *Lewis v The Queen* (1987) 88 FLR 104 at 124.

110 "Science and Judicial Proceedings", in *Jesting Pilate*, (1965) 11 at 18, approved in *Samuels v Flavel* [1970] SASR 256 at 260. Just before that statement, Sir Owen said that one duty of the expert witness was "to give his own inferences and opinions *and the grounds upon which they proceed*" (emphasis added). Immediately after the statement quoted in the text, Sir Owen said:

*Jenkins; Ex parte Morrison*¹¹¹ Fullagar J quoted that statement with approval, and added that expert scientific witnesses should be asked to "explain the basis of theory or experience" on which their conclusions rest¹¹². On appeal Rich and Dixon JJ approved what Fullagar J had said¹¹³. The witness must explain the basis of theory or experience because the court is not limited to examining the conclusion or the expertise of the expert witness: it must look to the "substance of the opinion expressed."¹¹⁴ Since choosing between conflicting experts depends in part on "impressiveness and cogency of reasoning"¹¹⁵ their "processes of reasoning" must be identified¹¹⁶. In short, as the Victorian Court of Appeal (Winneke P, Charles and Chernov JJA) said in *R v Juric*¹¹⁷:

"[T]he jury must be able to evaluate the strength of [expert opinion] evidence by reference to its factual or scientific basis. Whether it can properly do so is a matter initially for the judge in determining whether that evidence is admissible. ... [T]he admissibility of [expert opinion] evidence must depend upon the judge's satisfaction that the jury can, on the basis of material put before them, properly and reasonably evaluate the

"However valuable intuitive judgment founded upon experience may be in diagnosis and treatment, it requires the justification of *reasoned explanation* when its conclusions are controverted. *Reasoned explanation* requires care and forethought – qualities the presence of which is not always transparently visible in expert evidence." (emphasis added)

It was certainly not visible in the challenged evidence in this case, whether given on the voir dire or as part of the trial – full as it was of obscurities, contradictions, and denials of matters necessary to its admissibility.

111 [1949] VLR 277 at 303.

112 Applied in *Samuels v Flavel* [1970] SASR 256 at 259-260; *R v Haidley* [1984] VR 229 at 234-235; *R v J* (1994) 75 A Crim R 522 at 531; *R v Juric* (2002) 4 VR 411 at 426 [19]; *Police v Barber* (2010) 108 SASR 520 at 539 [81].

113 *Morrison v Jenkins* (1949) 80 CLR 626 at 637 and 641 respectively; [1949] HCA 69.

114 *Holtman v Sampson* [1985] 2 Qd R 472 at 474.

115 *Monroe Australia Pty Ltd v Campbell* (1995) 65 SASR 16 at 27, quoting *Sotiroulis v Kosac* (1978) 80 LSJS 112 at 115.

116 *Arnotts Ltd v Trade Practices Commission* (1990) 24 FCR 313 at 349.

117 (2002) 4 VR 411 at 426 [18].

differing opinions expressed and make a responsible determination as to which of them is to be preferred."

93 *Function of the statement of reasoning rule.* The rule protects cross-examiners by enabling them to go straight to the heart of any difference between the parties without the delay of preliminary reconnoitring. It also aids the court in a non-jury trial, because at the end of the trial it is the duty of the court to give reasons for its conclusions. And it aids jurors, because at the end of the trial they have the duty of assessing the rational force of expert evidence. If there is not some exposition of the expert's reasoning it will be impossible for the court to compose a judgment stating, and for the jurors to assemble, reasons for accepting or rejecting or qualifying the expert's conclusion.

"The process of inference that leads to the [expert's] conclusions must be stated or revealed in a way that enables the conclusions to be tested and a judgment made about the reliability of them."¹¹⁸

As Lord Cooper, the Lord President, said in *Davie v Magistrates of Edinburgh*¹¹⁹:

"The value of [expert opinion] evidence depends ... above all upon the extent to which [the expert's] evidence carries conviction ...

[T]he defenders went so far as to maintain that we were bound to accept the conclusions of [an expert witness]. This view I must firmly reject as contrary to the principles in accordance with which expert opinion evidence is *admitted*. ... [The] duty [of expert witnesses] is to furnish the Judge or jury with the necessary scientific criteria for testing the accuracy of their conclusions, so as to enable the Judge or jury to form their own independent judgment by the application of these criteria to the facts proved in evidence. ... [T]he bare ipse dixit of a scientist, however eminent, upon the issue in controversy, will normally carry little weight, for it cannot be tested by cross-examination nor independently appraised, and the parties have invoked the decision of a judicial tribunal and not an oracular pronouncement by an expert."

118 *Pownall v Conlan Management Pty Ltd* (1995) 12 WAR 370 at 390 per Anderson J.

119 1953 SC 34 at 39-40 (emphasis added). These passages have been much cited: for example *Lysaght v Police* [1965] NZLR 405 at 409; *R v Robb* (1991) 93 Cr App R 161 at 166; *O'Kelly Holdings Pty Ltd v Dalrymple Holdings Pty Ltd* (1993) 45 FCR 145 at 155; *R v Gilfoyle* [2001] 2 Cr App R 57 at 67 [24]; *R v Luttrell* [2004] 2 Cr App R 520 at 539 [36].

94 It is sometimes said that these words deal with weight only, not admissibility. But this is contradicted by the Lord President's use of the word "admitted".

Section 79 and the assumption identification rule

95 The respondent contended that the three common law rules just discussed were not taken up in s 79.

96 The respondent relied on denials by Branson J that the first rule existed in relation to s 79 tenders. In *Quick v Stoland Pty Ltd* her Honour said that the Act did not contain a provision reflecting the common law rule that the admissibility of expert opinion depends upon "proper *disclosure* and *proof* of the factual basis of the opinion."¹²⁰ The word "disclosure" is a reference to the first rule. The word "proof" is a reference to the second rule. In *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd*¹²¹ she repeated her denial that the common law rule requiring "proper disclosure" had been adopted in the Act. In support she referred to the Commission's proposal to "refrain from including" the second rule in its draft Bill¹²². However, as Austin J correctly pointed out in *Australian Securities and Investments Commission v Rich*¹²³, in that passage the Commission was not speaking of "disclosure" of the factual basis, only "proof" of it.

97 *The respondent's riposte to Gleeson CJ.* The respondent asserted that there was no reference in terms to the first rule in s 79. Gleeson CJ, however, rested the continued existence of the first rule on an implication from the terms of s 79. Gleeson CJ said¹²⁴:

"An expert whose opinion is sought to be tendered should differentiate between the assumed facts upon which the opinion is based, and the opinion in question. ... [T]he provisions of s 79 will often have the practical effect of emphasising the need for attention to requirements of form. By directing attention to whether an opinion is wholly or substantially based on specialised knowledge based on training, study or

120 (1998) 87 FCR 371 at 373-374 (emphasis added).

121 (2002) 55 IPR 354 at 357 [10].

122 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 417 [750].

123 (2005) 190 FLR 242 at 312 [295].

124 *HG v The Queen* (1999) 197 CLR 414 at 427 [39] (footnote omitted).

experience, the section requires that the opinion is presented in a form which makes it possible to answer that question."

The respondent riposted by going so far as to submit that, even if it did not appear on the face of the opinion that it was based on specialised knowledge, the opinion was admissible. He also submitted, less ambitiously, that the requirement that the opinion be "wholly or substantially based" on the expert's "specialised knowledge based on the person's training, study or experience" was "susceptible of proof by a simple evidentiary statement." The respondent went on: "Proof that the requirement has been met can be given in the document required by rules in all the Australian Courts, or it can be given in evidence in chief or it can be given in cross examination or it can be decided ... by a *voire dire*." Whether the opinion actually was wholly or substantially based on the witness's knowledge was a matter to be investigated in the light of cross-examination. It was a matter that went only to whether the expert's opinion had sufficient weight to be accepted. Hence there was no need to state the assumed facts.

98 The respondent's riposte is not correct. The requirement that the opinion be based wholly or substantially on specialised knowledge is an explicit precondition of admissibility. Like other preconditions under s 79, it is to be established by the party tendering the evidence. It is to be established in examination in chief (during the trial or on the *voir dire*), not in cross-examination or in non-evidentiary documents required by rules of court for other purposes.

99 The Full Court of the Federal Court of Australia has rightly rejected the respondent's riposte¹²⁵. So has the Court of Appeal of the Supreme Court of New South Wales: it held that the links between the expert's training, study and experience and the opinion should be spelt out unless they are apparent from the nature of the specialised knowledge¹²⁶. And in this Court, Gleeson CJ, in dealing with an expert whose opinion was not based on specialised knowledge but on "a combination of speculation, inference, personal and second-hand views as to the credibility of the complainant"¹²⁷, said¹²⁸:

125 *Ocean Marine Mutual Insurance Association (Europe) OV v Jetopay Pty Ltd* (2000) 120 FCR 146 at 151 [22]-[23]; *Cadbury Schweppes Pty Ltd v Darrell Lea Chocolate Shops Pty Ltd* (2007) 159 FCR 397 at 420 [107].

126 *Adler v Australian Securities and Investments Commission* (2003) 179 FLR 1 at 138 [631]-[632].

127 *HG v The Queen* (1999) 197 CLR 414 at 428 [41].

128 *HG v The Queen* (1999) 197 CLR 414 at 429 [44].

"[I]t is important that the opinions of expert witnesses be confined, in accordance with s 79, to opinions which are wholly or substantially based on their specialised knowledge. Experts who venture 'opinions' (sometimes merely their own inference of fact), outside their field of specialised knowledge may invest those opinions with a spurious appearance of authority, and legitimate processes of fact-finding may be subverted."

100 *The authorities.* Branson J's view that s 79 tenders need not comply with an assumption identification rule is not, apart from one passage in this Court¹²⁹, specifically supported by the authorities in any jurisdiction¹³⁰. Almost all courts in which the question has been considered have revealed disagreement with her

129 *HG v The Queen* (1999) 197 CLR 414 at 433 [63] per Gaudron J.

130 There is a suggestion by Weinberg and Dowsett JJ in *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd* (2002) 55 IPR 354 at 379 [87] that a failure to identify the relevant assumptions will not necessarily prevent the initial reception of the evidence, but it is vague and innominate. The suggestion was concurred in in *Noetel and Quealey* (2005) FLC ¶93-230 at 79,800 [106] by Bryant CJ and Boland J, who said that what Branson J and Weinberg and Dowsett JJ meant was:

"[G]enerally questions of admissibility of expert evidence ... should not be the prime determinant of the admissibility of that evidence, but rather the relevance of the evidence to the issue in dispute, the specialized skill and knowledge of the expert and whether the report is based on such skill and knowledge."

The proposition that questions of admissibility should not be the prime determinant of admissibility is novel. In *Daniel v Western Australia* (2000) 178 ALR 542 at 546 [16] R D Nicholson J recorded Branson J's view, but the challenge to the evidence in that case did not depend on its validity, and the references to "factual basis" at 550 [30] suggest that his Honour thought it invalid. At 546 [16] it was said that Emmett J "relevantly agreed" with Branson J in *Quick v Stoland Pty Ltd* (1998) 87 FCR 371. It is true that at 379 he said he agreed with her Honour's analysis of the "scheme" of the legislation, but the extent to which he agreed with the detail of what she said is doubtful, not least because in *Cadbury Schweppes Pty Ltd v Darrell Lea Chocolate Shops Pty Ltd* (2007) 159 FCR 397 the Full Court (Black CJ, Emmett and Middleton JJ) said that its failure to deal with a question about the possible need for evidence of assumed facts, which the primary judge had denied, on the ground that it had not been argued on appeal "should not necessarily be taken as endorsement of the correctness of the view adopted by the primary judge" (at 411 [58]). This does not suggest complete agreement with Branson J's views in *Quick's* case.

Honour's view¹³¹. That does not mean that the omission of any assumption, however obvious or insignificant, results in exclusion of the opinion. In *Harrington-Smith v Western Australia (No 2)*¹³² Lindgren J stated: "perhaps it cannot be said that in all cases evidence of expert opinion will be inadmissible if an expert does not separately list all the factual assumptions underlying his or her report". For example, it has been said that the requirement that expert witnesses reveal all the assumptions on which they proceeded does not extend to basic assumptions about human nature, human anatomy, atmospheric conditions on earth, the working of a market economy, and obvious reasoning about the dating of information and the provenance of documents¹³³. But these qualifications do not undercut the proposition that the articulation of all significant factual assumptions is a precondition to admissibility when expert evidence is tendered under s 79.

101 *Principle.* That proposition is sound in principle. For the reasons given by Gleeson CJ, the proposition has textual support. A construction of s 79 as abolishing the common law rule should be rejected because silence about the factual assumptions being made would have very unsatisfactory consequences. First, the court may not be able to understand the opinion so as to decide what weight to accord it¹³⁴. Secondly, the court will not be able to assess whether it

131 In this Court, see *HG v The Queen* (1999) 197 CLR 414 at 427 [39], 428 [41] and 453 [137]; *Palmer Bruyn & Parker Pty Ltd v Parsons* (2001) 208 CLR 388 at 433 [138]. In other courts, see, for example, *Idoport Pty Ltd v National Australia Bank Ltd* [2001] NSWSC 123 at [13]; *Rhoden v Wingate* (2002) 36 MVR 499 at 500 [2] and 517-518 [61]-[62]; *Neowarra v Western Australia (No 1)* (2003) 134 FCR 208 at 217-218 [23]-[24]; *Australian Securities and Investments Commission v Vines* (2003) 48 ACSR 291 at 301 [39]; *James v Launceston City Council* (2004) 13 Tas R 89 at 93 [10]; *Australian Retailers Association v Reserve Bank of Australia* (2005) 148 FCR 446 at 563 [448]; *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 313 [302]; *Hevi Lift (PNG) Ltd v Etherington* (2005) 2 DDCR 271 at 293 [80]; *BHP Billiton Iron Ore Pty Ltd v National Competition Council* (2007) 162 FCR 234 at 273 [185]; *Paino v Paino* (2008) 40 Fam LR 96 at 112 [66].

132 (2003) 130 FCR 424 at 429 [25].

133 *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 288 [186]-[187]. Further, the "facts" which are part of the material on which the witness's specialised knowledge is based lie outside the assumption identification rule: *NutraSweet Australia Pty Ltd v Ajinomoto Co Inc* (2005) 224 ALR 200 at 207 [33].

134 *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 312 [297].

corresponds with the facts which the court finds at the end of the trial¹³⁵. Thirdly, the court will not be able to assess whether the opinion is one wholly or substantially based on the expert's knowledge¹³⁶. Fourthly, there would be unacceptable difficulties for the cross-examiner, who should not have to perform, in the dark, particularly in relation to lengthy and complex expert opinion evidence, the "task of teasing out in cross-examination all the circumstances that the witness had in mind."¹³⁷ Fifthly, the cross-examining party should not be left at a disadvantage in deciding whether and how to meet the evidence. Sixthly, the respondent's construction reduces the chance of the parties getting to grips, or at least getting to grips quickly. It would thus cause trials to become slower, more complicated and more costly. The respondent's submissions failed to refute these points.

Section 79 and the proof of assumption rule

102 *The respondent's submissions.* Is an opinion tendered under s 79 inadmissible unless there was evidence, admitted or to be admitted before the end of the tendering party's case¹³⁸, capable of proving matters sufficiently similar to the assumptions to render the opinion of value? The correct answer is in the affirmative. The respondent answered in the negative. He relied on some remarks of Gaudron J in *HG v The Queen*¹³⁹ and on various Federal Court authorities¹⁴⁰. He accepted that if the expert's assumptions were wrong the

135 *HG v The Queen* (1999) 197 CLR 414 at 428 [41]; *Harrington-Smith v Western Australia (No 2)* (2003) 130 FCR 424 at 428-429 [25]; *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 312 [297].

136 *HG v The Queen* (1999) 197 CLR 414 at 427 [39]; *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 313-314 [303].

137 *Australian Securities and Investments Commission v Vines* (2003) 48 ACSR 291 at 301 [39] per Austin J; *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 314 [304].

138 *Rhoden v Wingate* (2002) 36 MVR 499 at 499-500 [1]-[2] and 517-519 [60]-[63]; *Australian Securities and Investments Commission v Rich* (2005) 218 ALR 764 at 794 [136].

139 (1999) 197 CLR 414 at 433 [63].

140 *Quick v Stoland Pty Ltd* (1998) 87 FCR 371 at 373-374; *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd* (2002) 55 IPR 354 at 357 [10]; *Neowarra v Western Australia (No 1)* (2003) 134 FCR 208 at 215-218 [16]-[25] (citing *Guide Dog Owners' & Friends' Association Inc v Guide Dog Association of New South Wales & ACT* (1998) 154 ALR 527 at 531); *Sampi v Western Australia* [2005] FCA 777 at [798]-[799].

opinion based on them would have no relevance. He accepted that sometimes expert evidence might be provisionally admitted subject to relevance (ie depending on whether the assumptions were established). But he submitted that even when cross-examination and other forensic testing rendered evidence either worthless or much reduced in significance, it did not become inadmissible. The respondent relied on the absence of any words in s 79 retaining the common law rule and on the Commission's stated intention to "refrain from including a [proof of assumption] rule in the legislation"¹⁴¹.

103 *The authorities.* Support for the respondent can be found not only in the Federal Court cases on which he relied, but in others¹⁴², and also in judgments of Dowd J¹⁴³ and Walker CCJ¹⁴⁴. On the other hand, other Federal Court cases

141 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 417 [750].

142 *Jango v Northern Territory (No 4)* (2004) 214 ALR 608 at 612 [19]; *Cadbury Schweppes Pty Ltd v Darrell Lea Chocolate Shops Pty Ltd* (2006) 228 ALR 719 at 722 [7]; *Gambro Pty Ltd v Fresenius Medical Care Australia Pty Ltd* (2007) 245 ALR 15 at 27 [43]; *Bodney v Bennell* (2008) 167 FCR 84 at 107 [90]-[91].

143 *Director of Public Prosecutions (NSW) v Tong* (2004) 151 A Crim R 296 at 303-304 [35]-[37].

144 *Brown v Iontask Pty Ltd* (2002) 24 NSWCCR 231 at 241 [62]; *Hevi Lift (PNG) Ltd v Etherington* (2005) 2 DDCR 271 at 280-281 [30]. The Court of Appeal did not accept Walker CCJ's views: see at 294 [84].

leave the question open¹⁴⁵, or raise a doubt¹⁴⁶. And, as noted above¹⁴⁷, the Full Federal Court recently asserted roundly and rightly: "The proposition that an expert's opinion based upon certain assumptions which are not ultimately proved in evidence is irrelevant is a fundamental principle of the law"¹⁴⁸. There are other cases which hold, say or assume that the respondent's contention is erroneous¹⁴⁹.

145 In *Cadbury Schweppes Pty Ltd v Darrell Lea Chocolate Shops Pty Ltd* (2007) 159 FCR 397 at 411 [58] Black CJ, Emmett and Middleton JJ said their failure to address the question, which was not put in issue on the appeal, "should not necessarily be taken as endorsement of the correctness of the view adopted by the primary judge." At 420 [108] their Honours said: "If the opinion is based on ... facts that are clearly not going to be proved, the opinion is likely to be valueless." Expert opinion evidence which can be seen at the moment of tender to be valueless is irrelevant: that is so despite the words "if it were accepted" in s 55(1) and despite s 57(1). It is therefore inadmissible.

146 *BHP Billiton Iron Ore Pty Ltd v National Competition Council* (2007) 162 FCR 234 at 273 [185]. Greenwood J, with whom Sundberg J concurred "generally", said that it "seems" that the "absence of proven foundation facts" does not affect admissibility, but "little or no weight will be given to such an opinion", and "the central point may simply be the question of admissibility, not weight". An opinion which can be seen at the time of tender to be of no weight is irrelevant and inadmissible.

147 See [89].

148 *Eric Preston Pty Ltd v Euroz Securities Ltd* (2011) 274 ALR 705 at 724 [171] per Jacobson, Foster and Barker JJ.

149 In *Velevski v The Queen* (2002) 76 ALJR 402 at 411 [47]; 187 ALR 233 at 246; [2002] HCA 4, Gleeson CJ and Hayne J said that apart from facts of which an expert can give admissible evidence, the expert "witness can give evidence only by reference to facts which will have to be established otherwise." Among the others are *Idoport Pty Ltd v National Australia Bank Ltd* [2001] NSWSC 123 at [13]; *R v P* (2001) 53 NSWLR 664 at 681-682 [55]; *Australian Securities and Investments Commission v Adler (No 1)* (2001) 20 ACLC 222 at 225-226 [19]; *TCN Channel Nine Pty Ltd v Anning* (2002) 54 NSWLR 333 at 359-360 [145]-[147]; *Adler v Australian Securities and Investments Commission* (2003) 179 FLR 1 at 136-138 [624]-[632]; *Australian Securities and Investments Commission v Vines* (2003) 48 ACSR 291 at 300-301 [35]-[36]; *James v Launceston City Council* (2004) 13 Tas R 89 at 93 [10]; *Australian Securities and Investments Commission v Rich* (2005) 218 ALR 764 at 786-794 [85]-[137].

104 The respondent relied on *Guide Dog Owners' & Friends' Association Inc v Guide Dog Association of New South Wales & ACT*¹⁵⁰. But it is immaterial. It contains dicta about lay opinion evidence tendered under s 78. It does not deal with expert opinion evidence tendered under s 79. There is conceptually a radical distinction between s 78 and s 79. When witnesses speak, for example, of age, speed, weather or emotional state, while it may be desirable from the point of view of weight for them to indicate whatever identifiable and communicable perceptions of primary fact cause them to reach a conclusion, it is often hard for them to do so. Hence it can be "necessary", within the meaning of s 78 of the Act, that their rolled-up opinions, based on unidentifiable or incommunicable perceptions of primary fact, be received "to obtain an adequate account or understanding of [their] perception of the matter or event." A s 78 opinion often has utility despite not being supported by evidence of the "primary facts". To insist on proof of primary facts would in many instances nullify that utility. Instances where a s 79 opinion unsupported by evidence of the "primary facts" has utility are difficult to imagine and rare.

105 *Principle.* The respondent, like the Federal Court cases on which he relied, placed determinative significance on what was said by the Commission in ALRC 26¹⁵¹.

106 Section 34 of the *Interpretation Act* 1987 (NSW) and s 3(3) of the Act¹⁵² permit ALRC 26 to be taken into account in interpreting s 79 for the purposes listed in s 34(1). They are:

"(a) to confirm that the meaning of the provision is the ordinary meaning conveyed by the text of the provision (taking into account

150 (1998) 154 ALR 527 at 531.

151 There are detailed references to or quotations from the passage quoted at [67] above in *Quick v Stoland Pty Ltd* (1998) 87 FCR 371 at 373-374, *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd* (2002) 55 IPR 354 at 357 [10] and *Neowarra v Western Australia (No 1)* (2003) 134 FCR 208 at 215-216 [16]-[19].

152 Section 3(3) provides:

"Without limiting the effect of, and subject to, section 34 of the *Interpretation Act* 1987, material that may be used in the interpretation of a provision of this Act includes any relevant report of a Law Reform Commission laid before either House of the Parliament of the Commonwealth before the provision was enacted."

ALRC 26 was tabled in the Parliament of the Commonwealth on 21 August 1985.

its context in the Act or statutory rule and the purpose or object underlying the Act or statutory rule ...), or

- (b) to determine the meaning of the provision:
 - (i) if the provision is ambiguous or obscure, or
 - (ii) if the ordinary meaning conveyed by the text of the provision (taking into account its context in the Act or statutory rule and the purpose or object underlying the Act or statutory rule ...) leads to a result that is manifestly absurd or is unreasonable."

107 For what purpose did the courts and the respondent refer to ALRC 26 – to confirm the ordinary meaning of s 79, or to determine the meaning of s 79 in view of its ambiguity or obscurity, or to determine its true meaning in view of the manifest absurdity or unreasonableness of the ordinary meaning? The cases relied on by the respondent do not say. Nor did the respondent.

108 The ordinary meaning of s 79, taking into account its language, its context in the Act (including ss 55-57), the function of the Act (which is the efficient and rational regulation of trials from an evidentiary point of view), and the unreasonable results which a contrary construction would produce, is that it does not abolish the common law proof of assumption rule. Failure by the tendering party to comply with the proof of assumption rule makes the opinion evidence irrelevant. The court may find the opinion relevant, however, if the evidence already tendered of the primary facts, taken with further evidence to be admitted at a later stage, makes it reasonably open to make a finding that they exist: s 57(1).

109 While the respondent submitted that the Commission was wrong to conclude that there is no proof of assumption rule at common law, he also submitted that it followed from the Commission's decision "to refrain from including a [proof of assumption] rule" in its draft Bill that the legislature had abolished that rule. The conclusion does not follow. The Commission's reasoning has misled both itself and some of its readers. A decision to refrain from including what was thought to be a rule which does not exist at common law does not demonstrate abolition of a rule which does in fact exist at common law. The Commission wrongly thought that there is no proof of assumption rule at common law. On that hypothesis, as the Commission correctly saw, the question was whether it should recommend that the legislature should enact one, and it decided not to make that recommendation. In fact there is a proof of assumption rule at common law, and the question for the Commission thus should have been whether to recommend that it be abolished by legislation. To abolish it by legislation would have called for specific language. The Commission's misapprehension of the common law, and hence of its task, has

resulted in a failure to have enacted specific language ensuring that s 79 tenders need not comply with a proof of assumption rule.

110 The respondent asked: "Does s 79 provide for the common law proof of assumption rule?" That was not the correct question. The correct question was: "Does s 79 abolish that rule?" The Act is far from being a complete code. It often deals with complex and important subjects, like expert evidence, in very general words. Sometimes the Act changes the previous law. Sometimes it repeats it. At many points it assumes the continuance of the common law. An example is the common law exception to the hearsay rule permitting experts to rely on the writings of others in the relevant area of expertise as a basis for their opinion¹⁵³. Although s 79 says nothing about that rule, the Full Federal Court, correctly, did not approach the issue by asking whether s 79 provided for the permissible reliance of experts on other expert works, but simply held that nothing in s 79 has abolished it¹⁵⁴. Similarly, s 79 does not in express terms state that experts must articulate the factual assumptions on which their opinions are based. But the vast bulk of authority holds that that principle applies in relation to tenders under s 79.

111 Section 79 presents a significant contrast with s 80. Section 80 reflects the desire of the Commission to abolish what it saw as two unsatisfactory common law rules¹⁵⁵. Acting on that desire, it recommended specific language eventually used by Parliament to abolish those rules. The Commission's misconception about the common law led it not to adopt that technique in relation to the proof of assumption rule.

112 *Inconvenience of proof of assumption construction?* The authorities on which the respondent relied¹⁵⁶ adopted the familiar technique which sees it as legitimate to favour one construction of legislation because of the disadvantages of others. Those authorities adopted an argument advanced by the Commission about the unsatisfactoriness of a proof of assumption rule. The argument was that the rule would eliminate much material from sources normally open to

153 See above at [69].

154 *Bodney v Bennell* (2008) 167 FCR 84 at 108 [92]-[93].

155 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 194 [354], 196-197 [359] and 412 [743]. See also Australia, The Law Reform Commission, *Evidence*, Report No 38, (1987) at 84 [151].

156 See notes 139 and 140.

experts in their professional lives. The Commission relied on a passage in Fauteux J's judgment in the Canadian case of *Wilband v The Queen*¹⁵⁷. He said:

"to form an opinion according to recognized normal psychiatric procedures, the psychiatrist must consider all possible sources of information, including second-hand source information, the reliability, accuracy and significance of which are within the recognized scope of his professional activities, skill and training to evaluate. Hence, while ultimately his conclusion may rest, in part, on second-hand source material, it is nonetheless an opinion formed according to recognized normal psychiatric procedures. ... The value of a psychiatrist's opinion may be affected to the extent to which it may rest on second-hand source material; but that goes to the weight and not to the receivability in evidence of the opinion, which opinion is no evidence of the truth of the information but evidence of the opinion formed on the basis of that information."

The Commission criticised any proof of assumption rule as requiring proof of the "reports of technicians and assistants, consultation with colleagues and reliance upon a host of extrinsic material and information". This "would be an endless and unfruitful task with which to burden the courts."¹⁵⁸

113 Do the Commission's words refer to the sources of the witness's expertise in training and experience, in works of authority and research, in conversations with colleagues, and in all the witness's past dealings with problems similar to that involved in the litigation? If so, the proof of assumption rule does not render that material inadmissible.

114 Do the Commission's words refer to dealings the expert has had with others, or contributions by others to the expert's report, in relation to his or her evidence about the problem involved in the litigation? If so, the proof of assumption rule does not prevent evidence being given, for example, of the calculations performed by the assistants to expert accountant witnesses, even though the assistants did not give evidence.

157 [1967] SCR 14 at 21. This was quoted in Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 198 [363], summarised by it at 417 [750], and quoted by Sundberg J in *Neowarra v Western Australia (No 1)* (2003) 134 FCR 208 at 216 [18].

158 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 417 [750].

115 Do the Commission's words refer to the opinions of fellow experts about the case in issue, or the observations by fellow experts, professional persons who are not experts and other lay witnesses of primary facts to do with the case in issue? If so, it is clear that at common law the evidence is inadmissible¹⁵⁹. G J Samuels put the following justification for rejecting:

"subsidiary expert opinions [consisting] of reports of other experts, amounting to their unsworn findings or observations, those others not being called in the proceeding. In such cases, there will be no evidence of the truth of the material, nor of the competence of the authors to make the findings. This is a situation which often arises in the Courts where a doctor is asked to express an opinion based in part upon the reports of radiologists, or asked to express a conclusion based upon pathological reports or upon myelograms, ECG's and the like. It would seem that in no case could such material be used as a basis for a further opinion. That is on the assumption of course, that proof of it is not ultimately to be introduced. This would be so although the expert was to give his opinion not solely upon the reports of others but upon that material coupled with his own direct knowledge by examination."¹⁶⁰

The Commission did not demonstrate why that was wrong. Its prediction that the proof of assumption rule would burden the courts with an "endless and unfruitful task" came strangely from a body which denied or doubted the existence at common law of the proof of assumption rule, and was therefore disabled from pointing to adverse experience. The rule has not in fact proved excessively burdensome. And it is easier for counsel and for triers of fact to deal with evidence in the open than with shadowy untendered material.

116 *Unnecessariness of proof of assumption rule?* The other reasons given by the Commission for its proposal to refrain from including a proof of assumption rule in the draft legislation do not cast doubt on the reasonableness of a construction acknowledging its survival. One was put thus¹⁶¹:

159 *R v Abadom* [1983] 1 WLR 126; [1983] 1 All ER 364. Hence where scientific tests are run by assistants of an expert witness and the expert relies on those tests, the assistants must be called: *R v Jackson* [1996] 2 Cr App R 420 at 424.

160 "Problems Relating to the Expert Witness in Personal Injury Cases", in Glass (ed), *Seminars on Evidence*, (1970) 139 at 147.

161 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 198 [363].

"[I]n most cases the important facts on which the opinion is based will be established by other evidence. Parties are under strong tactical pressure to do so."

On this reasoning, virtually no rules of evidence would be needed at all. It is reasoning at odds with the slackness and arrogance revealed in modern times in a great many expert reports.

117 *Capacity of proof of assumption rule to be insisted on oppressively?*
Another reason given by the Commission was¹⁶²:

"To place parties in a position where they can insist on proof of all the bases of the opinion, including that which is not contested, would introduce costly, time consuming and cumbersome procedures."

What are the "costly, time consuming and cumbersome procedures" that the proof of assumption rule "would introduce"¹⁶³? It has existed for centuries without any difficulties the Commission was able to point to. The Commission spoke of parties insisting on proof of "all the bases of the opinion, including that which is not contested"¹⁶⁴. If part of the basis is not contested, ex hypothesi there is no need for proof of it, at least in civil cases, and a party cannot insist on proof of it. If it is contested in good faith, subject to the court's power to compel admissions, a party can insist on proof of it, and it is not unreasonable that a party should be able to do so.

118 In the Federal Court of Australia it has been said that, if s 79 tenders depended on compliance with a proof of assumption rule, "the smooth running of trials involving expert evidence could be expected to be interrupted by the need to explore in detail, in the context of admissibility, matters more properly considered at the end of the trial in the context of the weight to be attributed to the evidence."¹⁶⁵ These have been described as "practical difficulties" which

162 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 198 [363]. See also at 417 [750].

163 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 198 [363] (emphasis added).

164 Australia, The Law Reform Commission, *Evidence*, Report No 26, (1985) vol 1 at 198 [363].

165 *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd* (2002) 55 IPR 354 at 359 [16] per Branson J.

"should not be underestimated."¹⁶⁶ Those complaints overlook a key distinction. It is a distinction between the need for the party tendering an expert opinion to establish that the other evidence (tendered or yet to be tendered) taken at its highest *is capable of supporting* the expert's factual assumptions, on the one hand, and, on the other hand, the need for the tendering party to persuade the trier of fact to accept that the evidence tendered to support the factual assumptions *actually does support them*. And it is necessary to set against any practical difficulties caused by the proof of assumption rule a competing consideration. That is whether the reception of evidence which turns out to be useless because the assumptions on which it rests are unproven does not create countervailing difficulties – costs burdens, unduly long trials, the risk of misleading the trier of fact, and unnecessary appeals.

119 *Sufficiency of discretionary power of exclusion?* The Commission argued that, while a proof of assumption rule would have advantages, any corresponding disadvantages which might flow from its absence could be overcome by a discretionary power of exclusion (now to be found in s 135). This technique eschews the primary technique of a rule of strict inadmissibility, and instead falls back on a weaker device. Expert evidence is expensive. For defendants in particular, it is necessary to know with reasonable certainty before the trial begins whether the expert evidence tendered by the moving party is admissible. If it is, it may be necessary to incur the expense of meeting it. If it is not, that expense can be avoided. To make the criterion of admissibility turn not on the satisfaction of a rule but on the invocation of a discretion is to abandon the search for reasonable predictability. Reliance on discretionary powers of exclusion to seek to secure the "advantages" of a proof of assumption rule which s 79 putatively did not introduce is inefficient.

120 *Abolition of proof of assumption rule removes a safeguard against useless expert evidence.* To admit evidence of the primary facts that is of weak probative value is one thing. To admit expert evidence that is of weak probative value because the expert's assumptions about the primary facts are not supported by evidence capable of establishing those primary facts is another. Whether evidence of primary facts will in fact be accepted is often not a question that can be answered at the moment of tender. Usually it can only be answered after it has been considered in relation to all the other material evidence of primary facts. On the other hand, whether evidence of primary facts, taken at its highest, is capable of corresponding with the expert's assumptions is a question which can be answered at the moment of tender. An expert witness's high qualifications and impeccable intellectual processes will produce only useless evidence unless there is a link between the opinion and a version of the primary facts made

¹⁶⁶ *Australian Retailers Association v Reserve Bank of Australia* (2005) 148 FCR 446 at 564 [451] per Weinberg J.

possible by the evidence. A proof of assumption rule is a significant safeguard against the dangerous consequences of experts giving opinions which fail to mesh with the concrete factual controversies before the court.

121 *Procedural advantages of a proof of assumption rule.* A construction of s 79 which does not require establishment at the time of tender that there either has been, or will be, evidence admitted capable of proving the assumed facts permits more expert opinion evidence to be received. It permits postponement of the difficulties by seeking to solve them as questions of weight at a later time – even as late as the end of the trial¹⁶⁷. But increasing the amount of this type of evidence is not necessarily valuable. It may be unfair to the opposing party. It is indecisive. Its indecisiveness inflicts uncertainties on the parties. The additional evidence received may have a cloud over it for the rest of the trial.

122 In contrast, a proof of assumption rule diminishes the risk of clouds. It encourages early and decisive rulings. Early and decisive rulings are important, both for the party opposing tender and for the tendering party.

123 From the point of view of the party opposing tender, it is vitally important to know what evidence is or is not in, and how much utility expert opinion evidence is likely to have. That knowledge affects decisions about cross-examining the witnesses called by the tendering party; decisions by defendants whether or not to submit that there is no case to answer; decisions whether or not to call particular categories of evidence; and, if rulings are delayed until after the close of the trial, decisions about what is to be said in address. A practice of deciding whether a proof of assumption rule has been complied with at the time when expert opinion evidence is tendered avoids a dilemma for cross-examiners. One horn of the dilemma is that to cross-examine a witness about expert evidence which may later be rejected or treated as useless carries the risk of giving it a foothold in the record which it lacked at the time of the tender. The other horn of the dilemma is that, if the opposing party avoids that danger by not cross-examining on the expert evidence, there is a risk that it will be accepted despite its feebleness. It is a dilemma which cross-examiners should not have to face.

124 From the point of view of the tendering party, it is desirable that the admissibility of expert opinion evidence tendered by that party be clear by the moment when the case for that party closes. It is undesirable that expert opinion evidence admitted in that party's case should later be held – perhaps as late as the time of judgment – to be subject to such doubts about its weight that it lacks utility. It is undesirable that its admissibility be in suspense until a time after the

¹⁶⁷ *Sydneywide Distributors Pty Ltd v Red Bull Australia Pty Ltd* (2002) 55 IPR 354 at 358 [14]. See also at 357 [9], 358-359 [15]-[16] and 379 [87].

tendering party's case has closed. If the admissibility of expert opinion evidence which is tendered and conditionally admitted is not finally ruled on until after the case for the tendering party is closed, and the evidence is then rejected, or its weight has become so questionable that it is useless, the tendering party may have lost an opportunity to repair the position before its case closed, either by calling further witnesses or tendering further documents, or by recalling witnesses who had already been in the box. The capacity of tendering parties who are the prosecution or the plaintiff to reopen their cases rests on a discretion in the court which may not be favourably exercised; their capacity to tender evidence in reply is constricted by fairly strict rules, particularly in criminal cases.

125 *Jury trials.* There are yet further difficulties in relation to jury trials. If evidence is rejected when tendered, the jurors are not confused by it, for they will ordinarily be absent during the debate about the tender: s 189(4) of the Act. If circumstances change and evidence once rejected becomes admissible, it can be re-tendered successfully. Again there is no risk of jury confusion. However, considerable confusion can flow where, although opinion evidence is admitted conditionally, later it becomes apparent that the condition is not satisfied. The evidence must be removed from the record, otherwise there would be no difference between conditional and unconditional admission. The same problems arise where opinion evidence is admitted, not on any formal condition, but simply in the expectation that at some time after the tender of the opinion evidence, witnesses will be called to establish the factual assumptions on which the opinion was pronounced, but that expectation is disappointed. In either event the jury will have heard evidence which is inadmissible. Should it be struck out? Should it be withdrawn from the jury? Should the jury be directed that the issue to which the expert's evidence was directed no longer arises? Should the jury be told not to consider the expert's evidence? Should the jury be told to disregard the expert's evidence on the ground that the factual basis has not been proved¹⁶⁸? All these courses are possible. Each course is less attractive than a regime having a proof of assumption rule and a practice of rejecting the tender until it has been satisfied.

126 And what is to be done with any evidence that was called in relation to that conditionally admitted but inadmissible evidence, whether it was elicited by the cross-examination of the party opposing tender or tendered by that party in its own case? That problem is reduced if decisive rulings about compliance with a proof of assumption rule are made.

168 See Wigmore, *Evidence in Trials at Common Law*, Tillers rev (1983), vol 1 at 702-731 [14]-[14.1] and 847-855 [19].

127 *Conclusion.* A construction of s 79 which holds that there is no proof of assumption rule in relation to s 79 tenders is difficult to reconcile with the practical exigencies pursuant to which parties conduct their cases. It is necessary for trials to be conducted in a businesslike and efficient way. That is a matter of context pointing to the view that there is a proof of assumption rule with which those tendering expert opinion evidence must comply by reason of ss 55, 56 and 79 read against the background of the common law.

Section 79 and the statement of reasoning rule

128 In relation to s 79 tenders, need the expert's reasoning be disclosed? The appellant submitted that it does, and stressed it as the crucial thing adverse to admissibility in this case. In contrast, the respondent directed rather less attention to this rule than to the first two.

129 *Authority.* There is ample authority supporting the view that it is not enough for evidence tendered under s 79 merely to state the expert's qualifications in a field of expertise and the conclusion. It is necessary to avoid the insidious risk that the trier of fact will simply accept the opinion without careful evaluation of the steps by which it was reached, and hence the evidence must state the criteria necessary to enable the trier of fact to evaluate that the expert's conclusions are valid¹⁶⁹. The evidence must reveal the expert's reasoning – how the expert used expertise to reach the opinion stated¹⁷⁰. It is not enough for evidence tendered under s 79 merely to state the expert's qualifications in a field of expertise and the conclusion. Admissibility does not depend on the reasoning being accepted as correct; that is a matter for consideration at the end of the trial. But admissibility does depend on the reasoning being stated.

169 *Hannes v Director of Public Prosecutions (Cth) (No 2)* (2006) 205 FLR 217 at 289 [289]-[290].

170 *Ocean Marine Mutual Insurance Association (Europe) OV v Jetopay Pty Ltd* (2000) 120 FCR 146 at 151 [23]; *Idoport Pty Ltd v National Australia Bank Ltd* [2001] NSWSC 123 at [13]; *Harrington-Smith v Western Australia (No 2)* (2003) 130 FCR 424 at 428 [21]; *James v Launceston City Council* (2004) 13 Tas R 89 at 93 [10]; *Australian Securities and Investments Commission v Rich* (2005) 190 FLR 242 at 314-316 [306]-[312]; *Hevi Lift (PNG) Ltd v Etherington* (2005) 2 DDCR 271 at 294 [84]; *R v Tang* (2006) 65 NSWLR 681 at 715 [153]-[154]; *Rylands v The Queen* (2008) 184 A Crim R 534 at 547-548 [84]; *Nicola v Ideal Image Development Corporation Inc* (2009) 261 ALR 1 at 8-9 [17]-[18]; *Noza Holdings Pty Ltd v Commissioner of Taxation* (2010) 273 ALR 621 at 625 [10] and 628 [23]. The Court of Appeal in this case did not deny the requirement: *Dasreef Pty Ltd v Hawchar* [2010] NSWCA 154 at [39]-[44].

130 *Principle.* In principle, that line of authority is correct. There is nothing in s 79 which suggests that the corresponding common law rule has been abolished. And the language of s 79 positively supports its continuance: without a statement of the expert's reasoning it is not possible to say whether the opinion is wholly or substantially based on the specialist knowledge claimed.

The interdependence of the controverted requirements

131 Although the respondent denied that the three requirements existed in relation to s 79 tenders, his submission was put as a single submission accepting that, if they existed, they comprised an interdependent and integrated regime. That was a negative perception, but a powerful one.

132 Sir Owen Dixon, speaking extrajudicially, drew a distinction between an "intuitive judgment", which might be valuable in diagnosis and treatment, and "reasoned explanation" for it when its conclusions were controverted, as they usually will be in adversarial litigation¹⁷¹. The distinction is important. A reasoned explanation is vital for both a trial judge who has to write a judgment turning on the clash between competing opinions and a jury which has to employ reason in dealing with that clash. The contents of a reasoned explanation will depend on applying the specialised knowledge of a witness to the circumstances of the case. It will not be possible to appreciate the application of the specialised knowledge to the circumstances of the case without knowing what assumptions are being made by the witness about the circumstances of the case, most or all of which the witness will often not personally be able to prove. A reasoned explanation of the application of the specialised knowledge to the circumstances of the case will be useless unless the assumed facts involved in that reasoning are facts which, if the evidence is accepted, are capable of being proved by it.

133 In short, the utility of receiving expert opinions rests in what the trier of fact can make of them. If the assumed facts are not stated, no reasoning process can be stated and the opinion will lack utility; if there is no evidence, called or to be called, capable of supporting the assumed facts, no reasoning process, even if stated, will have utility; and even if there are facts both assumed and capable of being supported by the evidence, they will lack utility if no reasoning process is stated. In each instance, a lack of utility results in irrelevance and inadmissibility.

134 In view of the close interrelationships between the three common law requirements it would be strange if the first and third continued in relation to s 79 tenders, as is almost universally agreed, but not the second.

171 "Science and Judicial Proceedings", in *Jesting Pilate*, (1965) 11 at 18.

The evidence was inadmissible

135 The trial judge did not rule on the appellant's objection to admissibility before the end of the respondent's case. Indeed he never explicitly ruled on it at any stage, though his detailed discussion of and reliance on the particular witness's evidence indicated an implicit overruling of the objection. The trial judge erred in not ruling on the objection at the end of the voir dire, or, at the latest, at the end of the respondent's case.

136 Putting that procedural error on one side, was the trial judge correct to overrule the objection?

137 The witness had some training, study or experience which led him to have some specialised knowledge. He did not, however, explain what elements of his training, study or experience led him to possess specialised knowledge of a kind which enabled him to reach the conclusion that a cloud of silica dust liberated when cutting or grinding stone contained 200mg/m³ of respirable silica, or even as much as 1g/m³. He gave evidence of only one casual observation of an angle grinder in operation. He gave no evidence of ever having measured respirable silica dust. He gave no evidence of having measured dust concentrations, or the respirable fractions of those concentrations, arising from the type of work the respondent was doing. He did not explain how he had reasoned from his specialised knowledge, on the basis of lay descriptions of how the respondent worked and photographic records of how that type of work was done, to his estimate of the dust concentrations inhaled by the respondent. Accordingly the evidence was inadmissible.

The "specialist" court

138 The trial judge erred in relying on his experience as a "specialist tribunal" in other cases in order to conclude that silicosis is usually caused by very high levels of silica exposure.

139 For one thing, the trial judge did not notify the parties in advance of his intention to rely on that experience even if it were otherwise open for him to do so¹⁷². This failure was a course which the respondent conceded in this Court was questionable.

140 Further, it was not open to the trial judge to rely on that experience because the *Dust Diseases Tribunal Act* 1989 (NSW) did not permit him to take it into account. His experience was not "[h]istorical evidence and general

¹⁷² See, in another but related context, *Woods v Multi-Sport Holdings Pty Ltd* (2002) 208 CLR 460 at 511 [165]; [2002] HCA 9.

medical *evidence*" (emphasis added) within the meaning of s 25(3) of that legislation. No "issue of a general nature" which had been the subject of an earlier "determination" was identified within the meaning of s 25B(1A). No consideration took place of the factors listed in s 25B(2) which are relevant to leave being granted to re-litigate or re-argue issues of a general nature determined in proceedings by the Tribunal pursuant to s 25B(1). Rule 9(1) of the Dust Diseases Tribunal Rules (NSW) requires a party intending to rely on a s 25B determination to give notice of that intention. No party gave notice. Rule 9(2) permits the Tribunal to rely on a s 25B determination on its own motion, but this did not permit the trial judge to sidestep the limits in, and safeguards surrounding, s 25B by relying on his own experience. The factual conclusion to which the trial judge's experience led him was not sufficiently notorious to permit the trial judge to take judicial notice of it pursuant to s 25B(4).

141 The trial judge relied on *JLT Scaffolding International Pty Ltd (in liq) v Silva*¹⁷³ to justify the course he took. The case does not permit that course. Kirby P said that a generalist appellate court like the Court of Appeal of the Supreme Court of New South Wales ought to exercise "a degree of care" in substituting its opinion on questions of medical causation and the aetiology of incapacity for that of a specialist tribunal like the Compensation Court of New South Wales¹⁷⁴. That caveat is entirely distinct from what the trial judge did and does not justify it.

142 In upholding the validity of the trial judge's approach, the Court of Appeal in this case relied, apart from the *JLT* case and *Strinic v Singh*¹⁷⁵, which did no more than quote from the *JLT* case, on *ICI Australia Operations Pty Ltd v WorkCover Authority of New South Wales*¹⁷⁶. That case does not support the trial judge's approach. The trial judge inferred from his experience that silicosis is usually caused by very high levels of silica exposure, and inferred from the fact that the respondent has silicosis, that the levels of silica exposure in his case were very high. That is, the trial judge relied on his experience to find that there had been a specific breach of duty, and that it had caused the respondent's condition. That is not the process which the Court of Appeal approved in the *ICI* case. The Court of Appeal in that case was looking to the use of experience in assessing what the ordinary risks of particular employment were – "the potential incidents

¹⁷³ Unreported, New South Wales Court of Appeal, 30 March 1994 (Kirby P, Mahoney and Priestley JJA).

¹⁷⁴ At 12-13.

¹⁷⁵ (2009) 74 NSWLR 419 at 430 [58].

¹⁷⁶ (2004) 60 NSWLR 18 at 62-65 [216]-[234].

of the worker's employment, not to its actual effect."¹⁷⁷ The Court of Appeal was not approving the use of experience to decide whether there had been a specific breach of duty and what its causative effect in the particular case was. The Court of Appeal in the *ICI* case started with what Jordan CJ said in *Tame v Commonwealth Collieries Pty Ltd*¹⁷⁸ in relation to the capacity of the Workers' Compensation Commission to take into account its general knowledge of silicosis to conclude "that the conditions of employment did not expose the worker to the ordinary risks of such employment but that the general evidence showed that they left him exposed to some risk of inhaling silica dust." The Court of Appeal then extended Jordan CJ's statement from the Workers' Compensation Commission to the Dust Diseases Tribunal. Similarly, in *GIO General Ltd v ABB Installation & Service Pty Ltd*¹⁷⁹, a decision of the Court of Appeal relied on in the *ICI* case, the question was not one of causation in fact, but a statutory question about whether a worker had been exposed to the risk of contracting mesothelioma by working in an atmosphere in which asbestos fibres were actually present¹⁸⁰.

143

The appellant submitted:

"it is not necessary in the present case to decide whether [the *Tame* case] was correct in deciding that the former Workers' Compensation Commission could rely upon its earlier experience in determining a question of the capacity of certain working conditions to give rise to the condition of silicosis. Nor is it necessary to decide whether [the *ICI* case] was correct in extending this line of authority to the Dust Diseases Tribunal in spite of the statutory differences between the Tribunal and the former Commission. It is sufficient to say that neither decision provides any support to the idea that a specific issue of breach of duty could be decided in such a way in the present case."

That submission is correct. It follows that the authorities relied on by the Court of Appeal did not justify what the trial judge did. Whether they, and the authorities referred to in them, are correct need not be decided in this appeal, since neither party argued that they were not.

¹⁷⁷ *ICI Australia Operations Pty Ltd v WorkCover Authority of New South Wales* (2004) 60 NSWLR 18 at 58 [190]; see also at 63 [221] and 64 [232].

¹⁷⁸ (1947) 47 SR (NSW) 269 at 272.

¹⁷⁹ (2000) 19 NSWCCR 720.

¹⁸⁰ (2000) 19 NSWCCR 720 at 724 [11], 730-731 [34] and 732 [38].

144 The Court of Appeal supported the trial judge by contending that he was saying no more than that his experience helped him to understand the evidence¹⁸¹. That contention was not defended by the respondent in this Court and is not sustainable as a matter of construction.

Orders

145 The appellant contended that if its arguments had the measure of success they have enjoyed to the extent set out above, the matter should be remitted to the Court of Appeal.

146 The respondent contended that the appeal should be dismissed because the errors of the trial judge were harmless in the sense that the trial judge's conclusion could be supported for other reasons given by him.

147 The reasons alone, however, are not clear enough to show the correctness of that course. That course might be correct in the light of the evidence that underlay some of the trial judge's reasons. However, this Court was not taken to the underlying evidence in sufficient detail to make it easy confidently to decide the issue: indeed it was taken to virtually none of that evidence. Accordingly the matter should be remitted to the Court of Appeal.

181 *Dasreef Pty Ltd v Hawchar* [2010] NSWCA 154 at [53].

