

USING THE “HOT TUB” – HOW CONCURRENT EXPERT EVIDENCE AIDS UNDERSTANDING ISSUES

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INTRODUCTION

1. Australian courts and agencies have been acknowledged as having the most experience with the “hot tub” method in which experts give their evidence concurrently. This is not a parochial boast, but appeared in the American Journal *Anti-Trust*¹. An article in the *Oregon Law Review* stated in 2009 that the innovation itself is attributable to Australia². Ian Freckelton SC recently echoed this tribute in the Fifth edition of *Expert Evidence: Law, Practice, Procedure and Advocacy*³, commenting that international interest is developing, for example in the United States of America, Canada and the United Kingdom. The purpose of this paper is to explain, *first*, a little bit of history about expert evidence, *secondly*, the purposes and technique of concurrent evidence, and *thirdly*, the technique’s virtues.
2. Expert evidence is not a new phenomenon. In 1554, Saunders J said in *Buckley v Rice Thomas*⁴:

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¹ Lisa C Wood, “Experts In The Hot Tub” (2007) 21 *Anti-Trust* 95

² Megan A Yarnall, “Dueling Scientific Experts: Is Australia’s Hot Tub Method a Viable Solution for the American Judiciary?” (2009) 88 *Or. L. Rev* 311 at p 312

³ Ian Freckelton and Hugh Selby (2013) Lawbook Co at [6.15.01]

⁴ (1554) 1 Plowd 118 at 124; 75 ER 182 at 191

“... if matters arise in our laws which concern other sciences and faculties we commonly call for the aid of that science or faculty which it concerns, which is an honourable and commendable thing for thereby it appears that we do not despise all other sciences but our own, but we approve of them and encourage them.”

However, some experienced commentators have observed that in contemporary times, the use of expert evidence “has increased dramatically ... both in its frequency and its complexity”⁵. When expert evidence is tendered in contested proceedings, traditionally each party will call one or more expert witnesses whose evidence in chief supports that party’s case. Cross-examination is the traditional common law method for testing that evidence. Experience of the forensic use and testing of expert evidence in this way has often produced a number of concerns:

- each expert is taken tediously through all his or her contested assumptions and then is asked to make his or her counterpart’s assumptions;
- considerable court time is absorbed as each expert is cross-examined in turn;
- the expert issues can become submerged or blurred in a maze of detail;
- juries, judges and tribunals frequently become concerned that an expert is partisan or biased;
- often the evidence is technical and difficult to understand properly;
- the experts feel artificially constrained by having to answer questions that may misconceive or misunderstand their evidence;
- the experts feel that their skill, knowledge and, often considerable, professional accomplishments are not accorded appropriate respect or weight;

⁵ The Hon Geoffrey L Davies, “The Changing Face of Litigation”, (1997) 6 *J Jud Admin* 179, 188

- the Court does not have the opportunity to assess the competing opinions given in circumstances where the experts consider that they are there to assist it⁶ – rather experts are concerned, with justification, that the process is being used to twist or discredit their views, or by subtle shifts in questions, to force them to a position that they do not regard as realistic or accurate.
3. In 1999, an empirical study of Australian judges found that 35% considered bias as the most serious problem with expert evidence⁷. And another 35% considered that the presentation or testing of the expert was the most serious problem. This was manifested in their differing concerns about poor examination in chief (14%), poor cross-examination (11%) and the experts' difficult use of language (10%).
 4. The “hot tub” offers the potential, in many situations calling for evidence, of a much more satisfactory experience of expert evidence for all those involved. It enables each expert to concentrate on the real issues between them. The judge or listener can hear all the experts discussing the same issue at the same time to explain his or her point in a discussion with a professional colleague. The technique reduces the chances of the experts, lawyers and judge, jury or tribunal misunderstanding what the experts are saying.
 5. In this paper, I will review the use of concurrent expert evidence generically. As will appear, the technique is of general application. I have seen it used to deal with topics as diverse as accounting, quantity surveying, fire protection requirements, pharmaceutical patents, wildlife paths, metallurgy, naval architecture, expert navigation of Panamax size (230m) container ships in a gale, mechanical engineering, the appropriate flooring for elephant enclosures in zoos and the mating of those mammals. Even in copyright, it is not difficult to imagine

⁶ see too the Hon Sir Laurence Street AC KCMG, “Expert Evidence in Arbitrations and References” (1992) 66 *ALJ* 861

⁷ Ian Freckelton, Prasuna Reddy & Hugh Selby, *Australian Judicial Perspectives on Expert Evidence: An Empirical Study* (1999) Australian Institute of Judicial Administration Incorporated at p 37

the utility of concurrent evidence where expert questions of similarity, economics or copying arise. And like all forensic tools, things can go wrong, such as asking one question too many.

A short historical excursion

6. Courts have struggled for a long time with the consequences of the use by each party, in the adversarial system, of an expert whose evidence, at least in chief, favours that party. Prof Wigmore suggested that the remedy lay in “... *removing this partisan feature*: i.e. by bringing the expert witness into court free from any committal to either party”⁸. There was a fear in judges that this object is not easy to achieve. Sir George Jessel MR observed in 1876 that sometimes the Court had appointed its own expert under an inherent power to do so⁹. He lamented:

“It is very difficult to do so in cases of this kind. First of all the Court has to find out an unbiased expert. That is very difficult.”

7. He accepted that there was no reason for experts necessarily to agree in their opinions. However, his Lordship declaimed the way parties searched for experts to find one or more who would give evidence in support of that party’s case, leaving the rest as discards, about whom the Court would know nothing. He said that he had been counsel in a case where his solicitor had consulted 68 experts before finding one who supported their client’s case; hence his mistrust of the system of “opposing” experts.
8. Expert evidence has been a provocative topic, both among lawyers and experts. In the twelfth edition of *Best on Evidence* published in 1922 the learned authors, who included Sidney L Phipson, said¹⁰:

⁸ *Wigmore on Evidence* (1940: 3rd ed, Chadbourn Revision) Vol II §563 at 762

⁹ *Thorn v Worthing Skating Rink Company* (1876) 6 Ch D 415n at 416

¹⁰ S.L. Phipson, *Best on Evidence* (1922, 12th ed), Sweet & Maxwell Ltd at 438-439: see also Sir Louis Blom-Cooper QC, “Historical Background” in Sir Louis Blom-Cooper (ed) *Experts in the Civil Courts* (2006) at 1-8 [1.01]-[1.22]; Carol Jones, *Expert Witnesses: Science, Medicine and the Practice of Law* (1994) Oxford University Press at 97–102

“... there can be no doubt that testimony is daily received in our courts as ‘scientific evidence’ to which it is almost profanation to apply the term; as being revolting to common-sense, and inconsistent with the commonest honesty on the part of those by whom it is given.”

9. On the other hand, Prof Wigmore¹¹ evoked a vision that giving expert evidence was akin to coming to a graveyard or indeed the Calvary, saying:

“Professional men of honorable instincts and high scientific standards began to look upon the witness box as a golgotha, and to disclaim all respect for the law’s method of investigation. By any standard of efficiency, the orthodox method registers itself as a failure, in cases where the slightest pressure is put upon it.”

10. No doubt many have had the experience of seeing an eminent and reputable expert in their field subjected to a cross-examination calculated to evoke the very response which Prof Wigmore noted. Such persons come away from the forensic experience justifiably scarred and disdainful of it as a process for eliciting intelligent and appropriate examination of expert opinion. They can be so discouraged by their forensic experiences that they no longer wish to be involved in assisting courts.
11. According to one text writer, the earliest reference to court appointed experts was in 1345 when surgeons were called to say whether a wound was fresh¹². In admiralty matters, judges in England have sat since the sixteenth century with (usually two) elder brethren of Trinity House to assist and advise them in assessing who was at fault in cases concerning marine casualties. The elder brethren were usually skilled, experienced master mariners¹³. One set of whom advised the trial judge, another set advised the Court of Appeal, and yet another set, the House of Lords. Although Sir Winston Churchill also was made an elder brother, as a result of his having been First Lord of the Admiralty, I doubt he

¹¹ *Wigmore* above n 8, §563 at p 760; see too Blom-Cooper, above n 10, at 6–7 [1.15]-[1.17]; Tal Golan, *Laws of Men and Laws of Nature* (2004) Harvard University Press at 110–118

¹² Jones, above n 10, at 35

¹³ see the discussion of the role of the elder brethren in English Admiralty trials and appeals in Jones, above n 10, at 38-45; *Owners of the SS Australia v Owners of Cargo of the SS Nautilus* (“*The Australia*”) [1927] AC 145 at 150 per Viscount Dunedin, at 150-153 per Lord Sumner, with whom Lords Carson and Blanesburgh agreed on this issue at 157

assisted in any proceedings in the Probate, Admiralty and Divorce Division. More recently, Heerey J, appointed an expert as a court assessor to sit with him in a patent case under the provisions of s 217 of the *Patents Act 1990* (Cth)¹⁴. The parties paid for the cost.

12. Lord Sumner once cautioned about courts deferring to assessors' opinions. They, like experts, have a place that he appositely described¹⁵:

“Authority for the proposition that assessors only give advice and that judges need not take it, but must in any case settle the decision and bear the responsibility, is both copious and old. It is for them to believe or to disbelieve the witnesses, and to find the facts, which they give to their assessors and which must be accepted by them. If they entertain an opinion contrary to the advice given, they are entitled and even bound, though at the risk of seeming presumptuous, to give effect to their own view¹⁶.”

¹⁴ *Genetic Institute Inc v Kirin-Amgen Inc (No 2)* (1997) 78 FCR 368; affirmed *Genetic Institute Inc v Kirin-Amgen Inc* (1999) 92 FCR 106 at 117–118 [36]–[37] per Black CJ, Merkel and Goldberg JJ at 117-118 [35]-[37]. Sir Louis Blom-Cooper QC suggested that a movement for reform of expert evidence grew in the mid-19th century, spurred on by two scientists who were deeply scarred by the experience of giving evidence in an adversarial forum. One of the key proponents, Mr Robert Angus Smith, a sanitary chemistry, wrote in 1859 that when giving expert evidence in court:

“the scientific man in that case simple becomes a barrister who knows science. But this is far removed from the idea of a man of science. He ought to be a student of the exact sciences, who loves whatever nature says, in a most disinterested manner. If we allows him or encourage him to become an advocate, we remove him from his sphere; we destroy the very idea of his character; we give him duties which he never was intended to perform.”

His proposed solution was, among others, to give the judge an assessor who examined the expert and made an independent report to the judge: S Blom-Cooper QC, above n 10, at 7. This solution drew on the practice of the Courts of Admiralty.

¹⁵ *The Australia* [1927] AC 145 at 152

¹⁶ *The Alfred* (1850) 7 Notes of Cases, 352, 354; *The Swanland* (1855) 2 Spinks, 107; *The Magna Charta* (Privy Council) (1871) 1 Asp MLC 153; *The Aid* (1881) 6 PD 84; *The Beryl* (1884) 9 P.D 137,141, per Brett MR; *The Koning Willem II* [1908] P 125, 137, per Kennedy LJ; *The Gannet* [1900] AC 234, 236, per Halsbury

Lord Sumner continued:

“Such being the position of the judges, what is that of the assessors? In Admiralty practice they are not only technical advisers; they are sources of evidence as to facts. In questions of nautical science and skill, relating to the management and movement of ships, a Court, assisted by nautical assessors, obtains its information from them, not from sworn witnesses called by the parties (*The Sir Robert Peel* (1880) 4 Asp MLC 321; *The Assyrian* (1890) 6 Asp MLC 525), and can direct them to inform themselves by a view or by experiments and to report thereon (24 Vict c 10, s 18, sub-s 1).”

13. By leaving the questioning entirely in the control of counsel, who may or may not fully understand the subject matter, an expert can be made to look as bad as the engineer and fire assessor cross-examined by Norman Birkett KC on the cause of a fire in a motor vehicle. Birkett's first question to the expert was the memorable line: "What is the coefficient of the expansion of brass?". The "expert" was destroyed by his inability to even understand the question let alone respond to Birkett in an appropriate way. Some criticisms have been advanced subsequently of the line of questioning, including Birkett's failure to identify the inherent assumption in the question as to the proportions of copper and zinc making up the particular specimen of brass to which the question was supposed to relate. Perhaps a true expert may have been able to respond immediately that he needed that information before being able to answer the question, in which case Birkett may have been thrown back on his resources or been shown up himself¹⁷.
14. Concurrent evidence is a means of eliciting expert evidence with more input and assistance from the experts themselves in lieu of their, perhaps unfairly, perceived role as being inherently, even if not consciously, biased to the case of the party calling them. This is not my perception, but has developed as Jessel MR once described through a distrust of expert evidence¹⁸:
- "... not only because it is universally contradictory, and the mode of its selection makes it necessarily contradictory, but because I know of the way in which it is obtained. I am sorry to say the result is that the Court does not get that assistance from the experts which, if they were unbiassed and fairly chosen, it would have a right to expect."
15. It is not inherently bad that experts might not reach the same conclusion. As Downes J has stated extra-judicially "the fallacy underlying the one-expert argument lies in the unstated premis[e] that in fields of expert knowledge there is

¹⁷ The Hon Justice Vickery, "The Technology, Engineering and Construction" (2009) Spring *Victorian Bar News* 11 at 11-12; see the account of *R v Rouse* (21 February 1931) *The Times*, given by JW Burnside QC in (2003) 124 *Victorian Bar News* 55-56

¹⁸ *Thorn* 6 Ch D at 416n

only one answer”¹⁹. Contradictory evidence can assist the tribunal of fact, simply because it elaborates the alternatives.

16. The task for a judge, or a jury, in assimilating the differing views of persons eminent in their fields and then arriving at their assessment of the evidence is no easy one. As LW Street J noted, similarly to Lord Sumner, in some forensic disputes, the Court does not choose between the experts, preferring one opinion over another, but uses their differing views to assist in reaching its own conclusion²⁰. Valuation and issues of similarity in copyright cases are examples that readily spring to mind, as well as expert economic evidence²¹.
17. Often in my experience at the Bar, the real dispute between experts did not lie in their conclusions at all. Rather, it was that they had proceeded on different assumptions. Because they were briefed by the particular litigant paying them, they were not asked to opine as to whether, if they accepted the other experts’ assumptions, they would come to the same conclusion as the other expert. Instead, the experts debated the assumptions. This was largely a sterile exercise for them, since they did not have knowledge of the primary facts.
18. One feature of the process of conventional expert evidence is that the cross-examiner often will spend a great deal of time asking about the assumptions on which the opposing expert has based his or her conclusions. Then there will be a lengthy time interval until the defendant’s or respondent’s expert gets into the witness box and the context in which the second expert’s evidence is given will be different and, perhaps, significantly so, to that earlier.
19. In the Federal Court of Australia, and in other tribunals presided over by Federal Court judges, concurrent evidence is also used. Indeed, Lockhart J, when

¹⁹ The Hon Garry Downes AM, “Problems with Expert Evidence: Are Single or Court-Appointed Experts the Answer?” (2006) 15 *J Jud Admin* 185

²⁰ *Archer, Mortlock Murray & Woolley Pty Ltd v Hooker Homes Pty Ltd* [1971] 2 NSWLR 278 at 286E-F

²¹ *Visa International Service Association v Reserve Bank of Australia* (2003) 131 FCR 300 at 438-439 [663]-[666] per Tamberlin J

- President of the Trade Practices Tribunal, was instrumental in introducing the technique to Australian jurisprudence²². One of the first uses of the “hot tub” in court proceedings in Australia was by Rogers J in an insurance case in 1985²³. By 1992, Sir Laurence Street AC KCMG was using the technique in arbitrations and court references, and had published his standard directions²⁴.
20. Concurrent expert evidence is used extensively in the Land and Environment Court of New South Wales, principally as a result of the enthusiasm of McClellan JA, when Chief Judge of that Court. His Honour’s enthusiasm spilled over into the Common Law Division of the Supreme Court of New South Wales during this time as Chief Judge at Common Law²⁵. In addition the Administrative Appeals Tribunal uses the technique robustly and its former President, Downes J, has written extensively on the topic²⁶.
21. While the use of concurrent evidence has been generally confined to civil proceedings, it has been introduced recently, by consent of the parties, in criminal trials before a judge sitting alone, in *voir dire* examinations and before magistrates in summary criminal proceedings in New South Wales. For example, Judge Berman SC of the New South Wales District Court heard expert evidence concurrently in judge alone trial on charges of dangerous driving occasioning bodily harm²⁷. The issue in dispute there was the manner in which the accused was driving – whether it was dangerous to other persons at the time of the impact. Each of the Crown and the accused called an expert on how fast the vehicle was travelling and whether it had become airborne as it travelled over the crest of a

²² In the DVD “*Concurrent Evidence – New Methods with Experts*” produced by the Judicial Commission of New South Wales and the Australian Institute of Judicial Administration, the Hon John Lockhart AO QC outlined his involvement with the history.

²³ *Spika Trading Pty Ltd v Royal Insurance Australia Ltd* (1985) 3 ANZ Insurance Cases 60-663 (in the Commercial List of the Supreme Court of New South Wales)

²⁴ “Expert Evidence in Arbitrations and References” (1992) 66 *ALJ* 861

²⁵ see also his keynote address to the Medicine and Law Conference, Law Institute of Victoria: *Concurrent Expert Evidence* (29 November 2007)

²⁶ see also Administrative Appeals Tribunal, *An Evaluation of the Use of Concurrent Evidence in the Administrative Appeals Tribunal* (November 2005); The Hon Garry Downes AM, *Concurrent Expert Evidence in the Administrative Appeals: The New South Wales Experience* (29 February 2004)

²⁷ *R v Stanyard* [2012] NSWDC 78

dune immediately the victims suffered their injuries. His Honour described the process adopted for the trial in his reasons. He noted that the experts had prepared a joint report that identified where one expert's opinion had changed, where they had reached agreement and where they continued to disagree.

Concurrent evidence in practice

22. Initially, and my own experience is to this effect, uninitiated counsel are highly suspicious of concurrent evidence. That suspicion evaporates once they participate. Why is this so? It is because of the efficiency and discipline which the process brings to bear.

23. *Pre-trial directions:* The way concurrent evidence generally works, though individual judges or tribunals may have their own variants²⁸, is that after each expert has prepared his or her evidence, there is a pre-trial order that they confer together, without lawyers, to prepare a joint report on the matters about which they agree and those on which they disagree, giving short reasons as to why they disagree. Sometimes this process will identify that the experts agree on everything that each has said in his or her reports, on the basis that the opposing expert accepts the assumptions which the other has used. Thus, the role of the expert evidence is finished, and the question resolves into one of dry fact proved by lay witnesses or other evidence. That was my experience in *Australasian Performing Right Association Ltd v Monster Communications Pty Ltd*²⁹. On most other occasions, the range of difference between the experts, apparently vast if one put their two reports side by side, reduces to a narrow point or points of principle in their expertise. On other occasions the experts have recognised that some of the questions posed to them of the parties involved the legal issues of statutory construction raised in the proceedings³⁰.

²⁸ see a number of examples of orders made by the Administrative Appeals Tribunal and Australian Competition Tribunal in Freckelton and Selby, *Expert Evidence* (2013) Lawbook Co at [6.15.240]

²⁹ (2006) 71 IPR 212; [2006] FCA 1806

³⁰ *Spirit Pharmaceuticals Pty Ltd v Mundipharma Pty Ltd* (2013) 102 IPR 55 at 65 [29]

24. Another forensic benefit from the preparation of joint expert reports before the trial is that counsel can be made aware of any relevant factual issues that are contentious between the experts. This can focus and narrow the need for cross-examination of lay witnesses because the joint reports may show that some factual differences do not matter.
25. *In the courtroom:* Generally, at the conclusion of both parties' lay evidence or at a convenient time in the proceedings, the experts are called to give evidence together in their respective fields of expertise. It is important to set up the court room so that the experts (there can be many on occasion) can all sit together with convenient access to their materials for their ease of reference. I have recently had seven experts give evidence concurrently on one issue. They sat in the jury box. One microphone is then made available for all of the experts so that only one can speak at a time.
26. The judge explains to the experts the procedure that will be followed and that the nature of the process is different to their traditional perception or experience of giving expert evidence. First, each expert will be asked to identify and explain the principal issues, as they see them, in their own words. After that, each can comment on the other's exposition. Each may ask then, or afterwards, questions of the other about what has been said or left unsaid. Next, counsel is invited to identify the topics upon which they will cross-examine. Each of the topics is then addressed in turn. Again, if need be, the experts comment on the issue and then counsel, in the order they choose, begin questioning the experts. If counsel's question receives an unfavourable answer, or one counsel does not fully understand it, he or she can turn to their expert and ask what that expert says about the other's answer.
27. This has at least two benefits. *First*, it reduces the chance of the first expert obfuscating in an answer. *Secondly*, it stops counsel going after red herrings because of a suspicion that his or her own lack of understanding is due to the expert fudging. In other words, because each expert knows his or her colleague

can expose any inappropriate answer immediately, and also can reinforce an appropriate one, the evidence generally proceeds directly to the critical, and genuinely held, points of difference. Sometimes these differences will be profound and, at other times, the experts will agree that they are disagreeing about their emphasis but the point is not relevant to resolving their real dispute.

28. The experts are free to ask each other questions or to supplement the other's answers after they are given. The only rule is that the expert who has the microphone has the floor. Generally the experts co-operate with one another and freely and respectfully exchange their views. Often one will see them arriving at a consensus which becomes clear through the process.
29. A great advantage of concurrent evidence is that all the experts on the topic are together in the witness box at the one time, answering the one question on the same basis. Everyone is together on the same page. This is a world away from a traditional cross-examination of each expert in the various parties' cases, sometimes heard days, if not weeks, apart with a raft of other evidence having interposed. Instead, by hearing the evidence concurrently, the judge is able to understand the issues clearly, and sometimes so are the lawyers. The experts feel capable of explaining the matters to the judge and putting their points of view in a way in which they feel free to use their knowledge and experience. McClellan JA described the process as³¹:

“... essentially a discussion chaired by the judge in which the various experts, the parties, advocates and the judge engage in an endeavour to identify the issues and arrive where possible at a common resolution of them. In relation to the issues where agreement is not possible a structured discussion, with the judge as chairperson, allows the experts to give their opinions without constraint by the advocates in a forum which enables them to respond directly to each other. The judge is not confined to the opinion of one advisor but has the benefit of multiple advisors who are rigorously examined in a public forum.”

³¹ The Hon Justice P McClellan AM: *Concurrent Expert Evidence* (29 November 2007) at 19; see also *Strong Wise* (2010) 185 FCR 149

30. In a pharmaceuticals matter I heard recently, the experts used a white board as additional tool to assist in explaining the differences in their opinions regarding molecular structures. Each expert used a different coloured marker and made comparative drawings or added to the structures drawn by the colleagues. The board was then printed and formed part of the evidence in the trial.

Some examples of concurrent evidence

31. In *Strong Wise Ltd v Esso Australia Resources Ltd*³², there were eight expert witnesses who gave oral evidence over five separate areas of specialised knowledge. I will briefly describe the process and my experience of it. Each had prepared at least one principal report, some prepared a responsive report. In the pre-trial phase, I directed that the experts in each relevant discipline should confer together, without the parties or their lawyers, and prepare a joint report that set out the issues on which they agreed and those on which they disagreed, giving brief reasons for their differences. I also directed that the experts, in each discipline would give evidence concurrently. Here, the experts and their fields were 3 master mariners; 2 naval architects; 2 structural engineers; 2 metallurgical engineers; and 2 mechanical engineers. A number of other experts gave written reports that were accepted without the need for cross-examination.
32. The joint reports were extremely useful in crystallising the real questions on which the experts needed to give oral evidence. *First*, the experts usually readily accepted the other's opinion on the latter's assumptions in many instances. This position is frequently lost in long reports that debate, not that opinion, but the assumptions which, in turn, usually depend on the facts that need to be found. *Secondly*, the process then helpfully identified the critical areas in which the experts disagreed.

³² (2010) 185 FCR 149 at 175-176 [93]-[97]; [2010] FCA 240

33. When each concurrent evidence session began, I explained that the purpose of the process was to engage in a structural discussion. Each expert was asked to summarise what he (all were male) thought were the principal issues between him and his colleague(s). Each was free to comment on or question his colleague on what he had said both during the introductory part and throughout the process. After each expert had outlined the principal issues (usually one did this and the other agreed that it was a fair summary or added some brief further remarks), counsel identified the issues or topics on which they wished to cross-examine. I then invited whichever counsel wished to begin questioning to do so. The experts sat at a table where they had ample room to place their reports and materials. They had a single microphone for whomever was speaking, so that the transcript would record the relevant evidence and they would exercise self-discipline in responding. Often when one had given an answer, the other would comment, or agree, thus narrowing the issues and focussing discussion. From time to time counsel could and would pursue a traditional cross-examination on a particular issue exclusively with one expert. But, sometimes when one expert gave an answer, counsel, or I, would ask the other about his opinion on that same question.
34. As I have explained, the great advantage of this process is that all experts are giving evidence on the same assumptions, on the same point and can clarify or diffuse immediately any lack of understanding the judge or counsel may have about an issue. The taking of evidence in this way usually greatly reduced the court time spent on cross-examination because the experts quickly got to the critical points of disagreement. At the end of his second session of concurrent evidence, one witness from London said that he had been in court before but that this had been a very different and positive experience for him.
35. Another significant benefit of the process is generally a substantial saving of court time and costs. My first experience of the technique was a valuation case in the Land and Environment Court before the then Chief Judge, McClellan JA,

involving which there were many experts in various fields³³. The evidence in their reports amounted to over one metre in height. Yet most of the expert evidence, apart from that of the four valuation experts was, ultimately, the subject of joint reports on which all points were agreed. In the remaining few reports where there was disagreement, the area of dispute was narrowed to one, two or three small points of principle that were dealt with in concurrent evidence in blocks of between 10 and 30 minutes. The two valuers for the applicant asserted that the value of the easement was between \$20 million and \$30 million. The two for the resuming authority argued that it was worth in the order of \$1 million or a little more. Their concurrent evidence concluded in a day and a quarter.

36. In such a dispute, in a conventional trial, an individual valuer would have been cross-examined probably for over a day, and four would have been likely to take well over six days. There would have been extensive attacks on the selections of comparable properties, the varying assumptions of the land's development potential and the like. And, in that case the only reason the valuation evidence went longer than a day, was that one of the experts changed his evidence because of newly agreed expert evidence from another field that affected the costs of development. That change required further cross-examination.
37. The Judicial Commission of New South Wales and the Australian Institute of Judicial Administration jointly produced a DVD of that experience entitled "*Concurrent Evidence – New Methods with Experts*". It is the largest selling publication of the Judicial Commission. It provides a good example of how the technique works. Modesty prevents me from identifying the other counsel whose participation with Bernie Coles QC in the re-enactment, directly from the transcript, is partly featured on the DVD. The DVD recording is now also viewable online on the Judicial Commission website³⁴.

³³ *Ironhill Pty Ltd v Transgrid* (2004) 139 LGERA 398; [2004] NSWLEC 700
³⁴ see www.judcom.nsw.gov.au/publications/education-dvds/copy_of_education-dvd

38. McClellan JA has observed, as have I, that the process removes the ordinary tension that exists in a conventional trial where expert evidence is led. The experts feel that they are able to explain their views, and if need be, defend them, in an intellectual discussion with their fellow expert or experts. Each of the experts presence with the other or others induces them to be precise and accurate. Generally, they are less argumentative than in a normal confrontational cross-examination process. Each knows that the other expert is able to understand exactly what he or she is saying and, so cannot rely on the technique so criticised in the passage I quoted earlier from *Best on Evidence*.

Criticisms of concurrent evidence

39. Concurrent evidence, like the curate's egg, is only good in parts. The decision whether to proceed or continue with taking evidence concurrently may be influenced by the need to ensure fairness in the trial process. Some critics, including the prominent economist, Henry Ergas, and Davies J formerly of the Court of Appeal of the Supreme Court of Queensland, have expressed concern that "hot tubs" may result in the more persuasive, confident or assertive expert winning the judge's mind, by, in effect, overshadowing or overwhelming the other's.
40. Mr Ergas suggested that the "hot tub" was a response to a perceived problem that experts, in giving complex economic evidence, would "dumb down" their analysis into accounts that were little more than analogies to their underlying reasoning so as to enable the lawyers, or decision-makers, to understand the concepts. He feared that this would result in economists, not trained in or familiar with the forensic analysis involved in cross-examination, rarely approaching the "hot tub" in a structured and systematic way. He thought that "hot tubs" were especially at risk of being dominated by participants who were more confident or assertive, traits which were unrelated to the merits of the analyses being presented. He also considered that time constraints could often mean that the

- discussion remained at a relatively superficial level, thus further limiting its value³⁵.
41. Davies J echoed similar criticism. His Honour expressed a concern that the judge could be left with two opposed, but comparatively convincing, opinions by equally well qualified experts neither of whom had been shaken in the process. He suggested that the “hot tub” protracted, rather than shortened proceedings and that it was too cumbersome, expensive and “too adversarial”³⁶. He was obviously suspicious of the likely integrity of the whole process³⁷. He speculated like, Sir George Jessel MR more than a century before, that the parties’ solicitors or counsel would audition the best expert to give evidence in court (as if that would be a new consideration). Davies J also argued that the parties’ lawyers would see the experts in conference before giving evidence and suggest how best to answer questions in a way consistent with the respective expert’s stated opinion and the party’s case.
42. Those criticisms have not been validated in practice. Contrary to those spectres, experts generally take the various courts’ expert codes of conduct very seriously³⁸. After all, in general they value their reputations and integrity. But more fundamentally, the joint report process often reveals that one party’s case on a critical point will succeed or fail. This is because the experts are able to understand, through professional exchanges, what each has said and on what assumptions. The frequency of experts in joint reports agreeing on critical issues shows that the experts retain their independence and cut through the parties’ different instructions to each, to reach the core question which they then answer.
43. Additionally, Davies J’s fear of the experts being coached does not appear to be related only to the possibility of an expert giving concurrent evidence. Coaching

³⁵ Henry Ergas, “Reflections on Expert Evidence” (2006–2007) Summer *Bar News* 39 at 42-43

³⁶ The Hon Justice Geoffrey L Davies, “Recent Australian Development: A Response to Peter Heerey” (2004) 23 *Civil Justice Quarterly* 388 at 398-399

³⁷ *ibid* at 377-398

³⁸ The Federal Court’s Code is in *Practice Note CM7: Expert Witnesses in the Federal Court of Australia*, issued by the Chief Justice on 4 June 2013

is equally possible where traditional forms of expert evidence are to be used. Giving evidence can be daunting. Provided that the discussion remains at the level of assisting or familiarising the expert with the task of giving his or her own actual opinion in evidence, there can be no criticism. However, a lawyer or other person must not interfere with the integrity of the expert's evidence or seek to manipulate it. The rules of professional conduct for lawyers still apply.

44. The New South Wales Law Reform Commission³⁹ reported “overwhelming support from experts and their professional organisations” who are involved in giving concurrent evidence before the Land and Environment Court. “They find that, not being confined to answering questions put by the advocates, they are better able to communicate their opinions to the Court. They believe there is less risk that their opinions will be distorted by the advocates’ skills.”⁴⁰
45. Another legitimate concern is that “hot tubs” are controlled idiosyncratically by the individual judge or tribunal⁴¹. Indeed, the structure of the concurrent evidence process may vary from case to case with the same judge or tribunal member, as it can from topic to topic during the one “hot tub” session.
46. However, the same may be said of a conventional cross-examination. Horses need to suit courses. Not every set of expert witnesses on every issue will proceed with a topic in the same way. That may be because the issue in dispute between the parties, or one set of experts, or on one topic between experts, may be of a character that requires a particular approach, while other issues require different approaches. My experience has been that where it is necessary to engage in a rigorous, structured cross-examination of an aspect of the expert opinions, it is possible to do so in a conventional way. Conventional and effective cross-examination as to credit is also, equally, possible. One example is shown on the DVD to which I referred earlier.

³⁹ *Expert Evidence* (2005) LRC 109

⁴⁰ *ibid* (2005) at [6.51]

⁴¹ Gary Edmond, “Secrets of the ‘Hot Tub’: Expert Witnesses, Concurrent Evidence and Judge-led Law Reform in Australia” (2008) 27 *Civil Justice Quarterly* 51 at 68

Overall experience of concurrent evidence

47. Concurrent evidence, in general, greatly reduces the hearing time⁴². It efficiently and effectively identifies the issues. By the judge allowing each of the experts to explain himself or herself, both at the beginning and at the end of the whole process, it is possible to allow them to feel they have done justice to themselves. This can be so even where a conventional individual cross-examination has occurred during the “hot tub”. In contrast, as sometimes happens, an expert does not feel he or she had been treated fairly in such convention cross-examinations, whereas in a “hot tub” environment, at some stage they will have had the opportunity to explain what they think their point was. Whether the judge or tribunal accepts the explanation is a different question. Even at this final stage the basis of what the expert is then saying may be revealed to be self-serving as opposed to giving a true explanation. And if the parties’ lawyers consider that something arises which, in fairness, they wish to pursue out of any final explanation, they can then have a further opportunity to test it by cross-examination.
48. No system is perfect. There are many flaws in each of our systems for obtaining evidence in court, but like Sir Winston Churchill’s analysis of democracy, it may be the worst possible system, but it is the best that anyone has yet invented. At the end of the process one or more of the experts on occasion has volunteered that he or she have found this to be a much more satisfactory way of giving evidence than in a conventional cross-examination. Gary Edmond criticised such responses by suggesting that they should be viewed with caution given the power relationship between the judge or tribunal member and the witnesses appearing before them⁴³. I agree that caution is appropriate but not determinative.

⁴² Australian Law Reform Commission, *Managing Justice: a Review of the Federal Justice System: Report No 89* (2000) at 6.117; New South Wales Law Reform Commission, *Expert Evidence* (2005) LRC 109 at [6.51]; Freckelton and Selby (2013) at [6.15.200]

⁴³ Edmond, above n 41 at 74

49. Experts participating in the two cases I had at the Bar using concurrent evidence, expressed satisfaction to me, in my then role, that they had found this to be a better experience than that in conventional trials. There does not appear to be much written adverse criticism by experts who have participated in the process of concurrent evidence suggesting that any felt they were not able to get their points across, were overawed, overborne or outperformed by another “hot tubber”. Again, one cannot draw too much from this since people rarely wish to explain publicly why they felt inadequate in a previous performance. Nor am I aware of anecdotal discussion of actual instances of these suggested problems occurring.

Conclusion

50. Litigation is an expensive, lengthy, stressful, and not always exact, means of undertaking a decision-making process. At the end of the day the judge or jury must select whether they are satisfied or persuaded that one of the competing versions is to be preferred or accepted. Like other witnesses, experts will leave impressions on judges based on demeanour, including their apparent persuasiveness, whether giving evidence alone or in a “hot tub”.
51. Nonetheless, at least where judges are the tribunals of fact, the modern approach of courts was summarised by Gleeson CJ, Gummow and Kirby JJ in *Fox v Percy*⁴⁴. It is that courts are cautious about the danger of drawing conclusions too readily concerning truthfulness and reliability solely or mainly from the appearance of witnesses. They pointed out that in recent years scientific research has cast doubt on the ability of judges or anyone else to tell truth from falsehood accurately on the basis of such appearances. They said that considerations of this kind have encouraged judges both at a trial and on appeal to limit their reliance on the appearance of witnesses and to reason to their conclusions, as far as possible, on the basis of contemporary materials, objectively established facts and the

⁴⁴ (2003) 214 CLR 118 at 128-129 [30]-[31]

apparent logic of events. Their Honours cited⁴⁵ an incisive observation of Atkin LJ⁴⁶:

“... I think that an ounce of intrinsic merit or demerit in the evidence, that is to say, the value of the comparison of evidence with known facts, is worth pounds of demeanour.”

52. Because the experts have conferred and produced joint reports before going into the “hot tub”, the field of dispute is generally narrowed. Not all cases will suit the process. It may be that in patent cases, where the whole case revolves around conflicts within fields of expertise, concurrent evidence is not likely to assist a judge. Heerey J’s expedient of an assessor may prove a better alternative. But concurrent evidence allows advocates to focus on the critical differences, with the assistance of their respective experts in the box, and, at the same time to hammer home the strengths of their own, and the inadequacies in the other, expert’s reasoning processes. In the end, concurrent evidence is generally likely to produce more ounces of merit which will be worth more to a judge than pounds of charisma or demeanour.

⁴⁵ *Fox* 214 CLR at 129 [30]

⁴⁶ *Société d’Avances Commerciales (Société Anonyme Egyptienne) v Merchants’ Marine Insurance Co (The “Palitana”)* (1924) 20 Ll L Rep 140 at 152; see also *Coghlan v Cumberland* [1898] 1 Ch 704 at 705