**Assessing Concurrent Expert Evidence**

**Gary Edmond, Ann Plenderleith Ferguson and Tony Ward[[1]](#footnote-1)†**

**Introduction**

At its meeting in June 2017, the Civil Procedure Rules Committee (CPRC) approved amendments to PD 35 concerning hot-tubbing – the term used in the CPRC minutes for what is more formally referred to as concurrent expert evidence. While they stop short of mandating the use of hot tubbing in any particular type of case, the amendments aim to “give court users a useful steer” in the direction of a particular form of hot-tubbing procedure.[[2]](#footnote-2) The direction in which courts are “steered” by these changes is that of a significantly more inquisitorial procedure, with the judge leading the questioning of what in many civil cases will be the most important witnesses.

 This article takes a critical look at the evidence available in support of such a change: in particular, the report by a Civil Justice Council (CJC) working party, and the 31 published judgments we could locate on Westlaw (up to 31 October 2017) in which judges in any of the UK jurisdictions discuss their experiences with concurrent evidence. We do not dispute that, when skilfully implemented, concurrent evidence can be effective; but we question whether there is sufficient evidence to justify steering the courts towards treating a particular form of concurrent evidence as the presumptive standard procedure across the range of civil litigation.

 When we ask whether concurrent evidence is effective, we are not concerned primarily with whether it is *efficient –* whether it saves time and/or money (this is not insignificant, and we shall see that the evidence as to whether it does so is both limited and equivocal). Rather, we are concerned with whether the procedure enhances the epistemic quality and usefulness of expert evidence. Does it, in other words, make it more likely (compared to conventional adversarial procedure) that experts will express conclusions backed up by cogent reasoning and communicate that reasoning to the judges in a way that helps them resolve the issues before them? In particular, does it achieve these benefits in cases where (unlike the specialist courts and tribunals where hot-tubbing has been most extensively used) the judge has no prior expertise in the witnesses’ fields?

 Our review is presented in three parts. The first examines the range of procedures collectively referred to as “concurrent evidence” and reviews previous studies, focusing on a recent CJC Report. The second discusses the reported cases in which concurrent evidence was used. The third considers some of the implications of concurrent evidence with reference to the cases.

**Part 1: A Procedural smorgasbord**

Concurrent evidence is not one thing. Judges, across a variety of institutions, have operationalized concurrent evidence in different ways. These applications vary from an almost traditional adversarial questioning of expert witnesses appearing seriatim to judge-led questioning that leaves limited scope for the lawyers (or the experts) to speak. One of the positive features of a recent review by the CJC is its recognition of the diverse range of practices that fall under the banner of concurrent evidence. The CJC Report explains that concurrent evidence has assumed a variety of forms, and endeavours to provide some basic nomenclature.[[3]](#footnote-3) To its credit the report also recognises that it “will not be for every case”. Which cases concurrent evidence is suited to, and how to identify them, is an issue to which we will return.

 The CJC report lists four basic types of procedure. First is sequential, or back to back, expert evidence. Each expert is called individually, cross-examined and re-examined in the usual manner. The twist comes from calling all of the experts on a specific topic or set of topics to appear sequentially.[[4]](#footnote-4) This has been common practice in some English civil courts for years. It is not strictly a form of concurrent evidence and the CPRC Committee decided in the interests of clarity not to refer to it as such.[[5]](#footnote-5)

 The second type of concurrent evidence involves a process where the experts appear together and the trial judge leads the oral examination. This is characterised as “Hot-tubbing (or ‘judge-led joint examination of experts (JJEE)’)”.[[6]](#footnote-6) In JJEE the trial judge may assume the role of “chief examiner” or adopt a more passive approach. The judge will often ask questions, may invite the experts to comment on the answers of other experts, and may also provide an opportunity for the lawyers to examine on issues that have not previously been canvassed. This active style of judging, more akin to inquisitorial procedures, requires the trial judge to dedicate considerable time to preparation and management.

 Thirdly, there is a hybrid version of concurrent evidence. In reality, the third form may subsume JJEE, as it accommodates the “great many variations” in the way concurrent evidence has manifested in English courtrooms since 2013. Some of the resulting “hybrid” forms include: variations in the roles played by counsel; variations in the extent of direct discussion between expert witnesses; and variations in the level of participation by the trial judge.[[7]](#footnote-7)

 The amended Practice Direction treats JJEE as the standard procedure: “the judge *will* initiate the discussion” of each point on an agenda set or approved by the court, and *may* ask further questions of each witness before any questioning by counsel.[[8]](#footnote-8) The judge, however, retains a discretion to adopt any of the “hybrid” versions of concurrent evidence, or a sequential, issue-by-issue approach, or some combination of these procedures.

 Finally, the CJC Report includes reference to a “teach in” session.[[9]](#footnote-9) This is an opportunity for the parties’ experts (or a neutral scientific advisor) to offer explanation on technical issues arising in the case. It is characterised as a “tutorial” offered at an early stage to assist the judge with the technical detail, terminology and complexity. The “basic seminar” focuses on the subject matter and any technicalities rather than the “expert evidence on the dispute itself”. There is no sense in which such a procedure would reduce costs “but”, according to the Report, “it may improve the trial process very considerably.”[[10]](#footnote-10) The CPRC Hot-tubbing Subcommittee, at a meeting which considered the CJC Report, expressed “a marked lack of enthusiasm” for the teach in, considering it a threat to the principle of open justice.[[11]](#footnote-11)

 The CJC Report indicates that it is important for lawyers and judges, though especially judges, to consider the suitability of concurrent evidence to the specific litigation. Unfortunately, the Report, with its limited evidence base, offers limited assistance with the identification of cases and issues best suited to concurrent evidence and how to tailor concurrent evidence-related procedures to specific types of litigation. It leaves the question of whether to deploy concurrent evidence, and if so which variant to use, largely to the discretion of trial judges.[[12]](#footnote-12) Beyond the research into professional and judicial opinions conducted by the Review team,[[13]](#footnote-13) little appears to be known about the actual impact of concurrent evidence on the length and cost of litigation, the quality of expert evidence, comprehension by judges – particularly non-specialist judges – or, indeed, outcomes – whether through settlement or judicial determination. This is not to dismiss the experience of judges who have used concurrent evidence and found it valuable, but only to urge caution in generalising from such impressions.

***Evidence for the hot tub***

Concurrent evidence is often credited with a number of advantages over conventional civil procedures. Sir Rupert Jackson summarised these benefits as follows:

1. The procedure was quicker, and more focused, than the traditional sequential format;
2. Experts find this procedure easier; they give evidence better and sometimes more impartially than under the traditional sequential format;
3. Judges find it easier to understand complex technical evidence when it is given in this way; and
4. The procedure achieves a significant saving of both trial time and costs.[[14]](#footnote-14)

Jackson based these claims on what he was told by Australian judges and practitioners. In Australia, as in the UK, “hot-tubbing” was embraced enthusiastically by certain influential judges, with little empirical research or systematic analysis.[[15]](#footnote-15)

 The one empirical study of concurrent evidence in England prior to the CJC Report was Dame Hazel Genn’s evaluation of the pilot of the procedure at the Manchester Technology and Construction Court.[[16]](#footnote-16) The majority of cases in which concurrent evidence was expected to be given were settled and only four came to trial; Genn acknowledged that this was an inadequate basis from which to draw to robust conclusions.[[17]](#footnote-17) In all four cases the judges thought that the procedure had saved substantial amounts of court time, but doubted whether it saved significant costs for the parties, as most costs were incurred before trial. They also thought it had helped them to understand the issues and compare different views.[[18]](#footnote-18) Genn tentatively suggested (while recognising the sociological complexity of the issues) that concurrent evidence might assist the search for truth by creating an environment in which it was easier than in conventional adversarial proceedings for experts to find common ground or admit mistakes.[[19]](#footnote-19) She also sounded two important notes of caution. First, concurrent evidence placed a considerable burden of preparation on the trial judge and involved:

a substantial shift from the passive judge who sits waiting for the case to unfold before her, to an active inquisitor who has the responsibility for ensuring that the discussion agenda is comprehensive and that the evidence is properly heard and tested. This requires the involvement of judges who are enthusiastic about the procedure, who are conscientious about their role and diligent in undertaking the additional work.[[20]](#footnote-20)

Secondly, some of those interviewed expressed concerns that the influence of presentational factors might be magnified where the experts engaged in face-to-face debate.

 Although the CJC Review merely involved surveying a small sample of users and inviting a select group of judges to describe their experiences, the review claims to have “tested whether [Jackson’s] rationales were being achieved”.[[21]](#footnote-21) A more rigorous approach might have involved, for example, a review by independent experts of the quality of evidence in various concurrent evidence sessions. As it is, the review is reliant on the opinion of non-experts about the value and quality of expert evidence and their own assessment of their ability to comprehend the evidence.

 The CJC reported some anecdotal support for time savings, but several respondents questioned whether time was reduced overall, even if less of the court’s time was occupied with experts. One point not identified in the CJC Report is that sometimes the individual experts spend longer in court as a group than each might have spent as a single expert, even where the overall court time dedicated to experts is reduced. The report does recognise the “issue of judicial preparation time”, especially where concurrent evidence involves judge-led questioning, which may require considerable preparation: “Indeed, to a large degree, the success or otherwise of hot-tubbing largely depends upon this preparedness.”[[22]](#footnote-22) Where judges are required to undertake additional trial preparation this “increase[s] the cost to the ‘public purse’” and may not reduce the actual costs to the parties – as counsel are simultaneously obliged to prepare.[[23]](#footnote-23)

 On the quality of the evidence, “83%” (or, more modestly, 5 of 6) “of the judicial respondents considered that the quality of the expert evidence was improved, where it was given via hot-tubbing.”[[24]](#footnote-24) Lawyers were equally positive, but only a slight majority of the experts (60%) thought so. Roughly a third (30%) of the respondent experts did not believe that hot-tubbing improved the quality of expert evidence.[[25]](#footnote-25) The real issue here is the basis on which non-experts can make credible assessments of the quality of expert opinion. This extends beyond the issue of the potential for improved comprehension (from hearing the expert evidence simultaneously or in close contemporaneity) to some explanation for why the procedure would enhance the quality of evidence. A procedure may generate more cordiality, more moderation, and even more consensus without any improvement in the underlying quality or representativeness of the opinions and agreement produced.

 This leads us to the third point: the judges were unanimous in regarding the procedures as “[a]ssisting the court to determine disputed issues of expert evidence.”[[26]](#footnote-26) This may be a result of both the contemporaneous interactions and enhanced comprehension (in part from better preparation), but it may also reflect the potentially radical increase in judicial control over proceedings, including the evidence adduced, admitted and addressed. Significantly, the expert witnesses surveyed expressed mixed views; while 62% considered that hot-tubbing made expert evidence “more intelligible” 30% responded that it did not.[[27]](#footnote-27)

 Finally, on cost savings, the CJC Report found, as we have seen, that costs were not necessarily reduced. This “counter-intuitive result” was said to warrant “further exploration”.[[28]](#footnote-28) This might be considered curious given the central role of costs in terms of proportionality and access to justice. Uncertainties around costs and efficiency are revealing, because these are probably easier to assess than any improvement in comprehension or the quality of expert evidence.

 The CJC Report is favourably disposed toward concurrent evidence, in part because it privileges the perspectives of a small group of judges. A range of benefits is advanced, but the actual basis for success is expressed in terms of reduced time in court and improved comprehension from judicial officers. In reality, identifying and measuring these particular benefits is more complex than the extracts from interviews with judges and other respondents would suggest. Moreover, the focus on Jackson’s objectives elides other issues such as the changing role of the trial judge and the loss of judicial independence. Overall, there is little empirical evidence, but rather personal impressions of how much time might have been spent using conventional procedures as opposed to the time spent using concurrent evidence.

 Most of the support for the benefits of concurrent evidence are not only anecdotal, but vague impressions and synthesis. Consider the following claims, for example:

* Sequential evidence is described by one judge as “highly efficient in terms of use of court time, and thus cost to the parties”.[[29]](#footnote-29)
* On the hot-tub: “It is an excellent aid for both experts and the judge. It works well in construction cases, where I find that almost all building experts are prepared to engage in constructive discussion” (Roth J).[[30]](#footnote-30)
* On the hot-tub: “the great benefit of the process is that, where the parties are aware of it beforehand, there is more likely to be an agreement of expert evidence, or a much greater narrowing of issues than might be expected in a conventional process” (Judge Waksman).[[31]](#footnote-31)
* Allowing experts to ask and respond to questions was described by one judge as “helpful” and “constructive” (though another single judge expressed a preference for only allowing experts to comment on the evidence of another expert witness).[[32]](#footnote-32)

 “Perhaps the most interesting, and positive outcome” of the CJC Report was that five out of six judicial respondents “considered that the quality of the expert evidence was improved, where it was given via hot-tubbing.”[[33]](#footnote-33) Quality is an ambiguous concept. It could refer to the *performative* quality of the evidence – whether the witness is clear, confident,[[34]](#footnote-34) answers questions without evasion and so on – or to its *epistemic* quality: whether it accurately communicates good reasons for and against believing a (disputed) proposition.[[35]](#footnote-35) Performative quality is like the quality of a sharp knife – it enhances the effectiveness of the evidence for good or ill. The ideal witness is one who communicates justified beliefs convincingly, but the witness with the greatest capacity to do harm is a skilled performer who effectively communicates unjustified beliefs and fails to acknowledge limitations.[[36]](#footnote-36) One reason why good performers are convincing is that performative quality is often substituted as a proxy for epistemic quality – a witness’s confidence may be attributed to her having strongly warranted beliefs, or a likeable manner[[37]](#footnote-37) may be interpreted as a sign of sincerity.[[38]](#footnote-38) One of the problems that bedevils expert evidence, however, is that the parties may select witnesses because of their performative abilities, including sensitivity to apparent interests and how they might be represented, and this may distort any link between performance and epistemic merit.[[39]](#footnote-39) If hot-tubbing creates a market for witnesses who can appear conciliatory, collegial and open-minded, it may simply lead to more covert forms of presentational competition. Impressions of appropriate norms and manners, like apparent interests, might be conflated with the quality or value of evidence. Like other lay decision-makers, including juries,[[40]](#footnote-40) judges might be prone to rely on performative quality as a proxy for epistemic quality in cases where they find it difficult to grapple with the substantive issues.[[41]](#footnote-41) As in the criminal courts, judges might benefit from giving more attention to the question of whether an expert’s techniques have been shown to be valid, i.e. to yield consistent and accurate results.[[42]](#footnote-42)

 We shall return to these issues in our discussion. At this point we move to consider the treatment of concurrent evidence in reported judgments.

**Part 2: Reported judgments in the UK**

In this Part we review all of the 31 cases we could locate on Westlaw reporting the use of concurrent expert evidence or hot tubbing in the UK. In endeavouring to understand the value of concurrent evidence we advance two distinctions: (i) between improvements in the *performance* of experts as witnesses and improvements in the *epistemic* quality of their evidence; and (ii) between courts or tribunals where decision-makers share to some degree in the expertise of witnesses and those where they do not.

***Expert tribunals versus generalist judges***

A prominent feature of the available case law on concurrent evidence is that a large proportion involves courts and tribunals where decision-makers appear to share to some degree in the relevant expertise. As the CJC notes, this is also true of arbitration, where concurrent evidence has been used more extensively than in the civil courts.[[43]](#footnote-43) This technocratic style of adjudication is not without its dangers.[[44]](#footnote-44) An expert may be predisposed towards a school of thought more favourable to one party than another, may be more likely to pre-judge issues or have pre-formed opinions, or to go “off” the evidentiary record. It is, however, distinct from the classic “battle of the experts” which the judge is expected to approach almost as a *tabula rasa,* bringing no specialised knowledge to bear apart from what the witnesses say in open court.

 *BT v Office of Communications v Sky UK Ltd*[[45]](#footnote-45)affords an example of this more technocratic style of adjudication. In *BT* the expert member appears to have led the questioning of the experts in the hot-tub. Accordingly, the Tribunal’s “ability to lead the examination with the expertise of Professor Colin Mayer enabled it to evaluate the issues effectively in a single morning instead of the one or two full days that might otherwise have been required.”[[46]](#footnote-46) BT’s subsequent attempt to appeal, on the basis that evidence was omitted from the concurrent evidence session, was unsuccessful.[[47]](#footnote-47) One of the most prolific users of the “hot tub”, so far as reported decisions indicate, is the Northern Ireland Lands Tribunal, a mixed body made up of lawyers and “persons who have experience in the valuation of land”.[[48]](#footnote-48) Many of these decisions are made by the one full-time member, who is a valuer and can apply his or her own expertise to resolve any differences between the experts. For example in *Debenhams plc v Commissioner of Valuation for Northern Ireland,*[[49]](#footnote-49)wherethe valuation evidence was heard concurrently, Michael Curry FRICS concluded that whether to adopt an “overall pricing” or a “zoning” approach to the value of a store was a matter of “expert judgment”, but expressed “no hesitation” in making an expert judgment of his own and deciding that the former method was appropriate.[[50]](#footnote-50)

 In another recent case, experts were admonished not to leave too much to the Tribunal’s own judgment: “it is for the experts to decide what factors they think are appropriate and communicate their criteria and reasons for that … it is not sufficient simply to drop a bundle of comparisons or otherobservations on the table; the expert witness must disclose their analysis to demonstrate the inferences they say can be drawn.”[[51]](#footnote-51) The Tribunal’s role, in other words, is a judicial one concerned with evaluating the relative merits of the cases advanced by the parties; but in doing so, Tribunal members can draw on their own expertise. Henry Spence, the current valuer member of the Tribunal, while commenting positively on the use of concurrent evidence in a series of cases involving the Northern Ireland Electricity Board, has questioned whether it would be as effective if the “decider” was not an expert.[[52]](#footnote-52)

 The valuers on the Tribunal have what Collins and Evans call “contributory expertise.”[[53]](#footnote-53) They not only understand how land is valued but could, when not playing a judicial role, undertake the work of the expert, here a land valuer, themselves. Other specialist courts and tribunals (and advocates) may possess what Collins and Evans call “interactional expertise”: that is, “the ability to master the language of a specialist domain in the absence of practical competence”.[[54]](#footnote-54) Generalist judges are more likely to rely on “transmuted expertise”, which involves “judging the experts’ demeanour, the internal consistency of their remarks, the appropriateness of their social location, etc.”[[55]](#footnote-55) The extent to which judges possess interactional expertise is not easy to assess and it is likely that lawyers and judges overestimate their own ability to acquire insight in fields such as medicine, engineering, economics and statistics.[[56]](#footnote-56) The use of concurrent evidence, or variants of it, in the Court of Protection illustrates a sort of semi-expert participation by judges. Further, in these settings the stance is often more inquisitorial than adversarial, and in these types of cases the decision-maker, arguably, plays a different role to judges in general civil and commercial proceedings.

 For example, in *M v N*[[57]](#footnote-57)the Court had to decide whether to discontinue life-sustaining treatment for a patient with grave physical and cognitive impairment arising from multiple sclerosis. Expert evidence was offered by three consultants who were questioned by counsel but also discussed the evidence with one another. The main difference between them was over whether Mrs N was in a vegetative state (VS) or a minimally conscious state (MCS) – a significant issue because the case law established that different approaches to decision-making were appropriate depending on which diagnosis applied.[[58]](#footnote-58) As Hayden J indicated in correspondence with the CJC, he found the variant of hot-tubbing he applied “extremely helpful.”[[59]](#footnote-59) In particular, he noted in the judgment that he “was impressed by [the consultants’] respect for each others’ [sic] views and their willingness continually to re-evaluate the available evidence.”[[60]](#footnote-60) The judgment refers not only to the experts’ evidence but to the medical literature they cited.[[61]](#footnote-61) The articles in question are not discussed in any depth but their inclusion implies that the trial judge was laying claim to some degree of interactional expertise.

 Focusing on the merits of the argument rather than its presentation, the judge concluded:

I find both approaches here to be so coherently reasoned that I am unable to prefer one to the other. Fortunately, I do not consider that I need to make a choice because the reality of the disagreement is far narrower clinically than is the theoretical divide.[[62]](#footnote-62)

Having said that, however, he found that there were clear normative reasons to classify Mrs N’s condition as MCS rather than VS and adopt the legal approach and medical guidelines that followed from that conservative characterisation.[[63]](#footnote-63)

 Hayden J clearly saw a modified “hot tub” as leading not only to performative improvement – it “discouraged posturing”[[64]](#footnote-64) – but also to epistemic improvement. By encouraging the experts to “continually re-evaluate”[[65]](#footnote-65) the evidence, taking into account one another’s arguments, it “helped foster true and objective consensus”.[[66]](#footnote-66) This is an interesting comment because it implicitly recognises that a process such as hot-tubbing *could* foster a consensus that was not “true” or “objective” – where “objective” can be construed, roughly, as being based on reasons that any competent and impartial expert would accept. It is possible that the fact that the judge did not lead the questioning in this case gave him more time to focus on assessing the process of reasoning and discussion by which a partial consensus was reached. As mentioned in the CJC Report the judge considered that the “usual forensic process would hamper … candid professional exchanges”.[[67]](#footnote-67) There is no attempt to explain the reasoning behind this assessment. Even if the judge’s “instincts were correct” as is claimed,[[68]](#footnote-68) it would be rash to assume that we could dispense with this “usual forensic process” in other cases.

 Another feature of *M v N* is the way in which what at first looks like a complex factual dispute resolves itself into a *normative* dispute about how the agreed facts about Mrs N’s condition should be classified and the legal and medical consequences that would flow from that. In other cases where a form of “hot tubbing” was used in the Court of Protection[[69]](#footnote-69) or Family Division,[[70]](#footnote-70) the discussion was explicitly concerned with the “best interests” of the adult or child whose future the court had to decide. This kind of discussion of a normative question which only the judge has the authority to decide is quite different to the usual use of expert evidence in factual disputes in relation to which the judge is a layperson.

***Narrowing and clarifying differences***

One of the main benefits attributed to concurrent evidence in the judgments is that it either produced agreement between the experts on some points, thereby narrowing the issues on which the judge had to resolve the issues, or helped to produce a clear statement of the differences between the experts. For example in *Swain v Swains plc* the three accountancy experts were “hot-tubbed” on an application by the defendants, despite opposition from the claimants.[[71]](#footnote-71) The judge directed that the experts meet as often as necessary throughout the trial to see if further narrowing of the issues, or agreement could be reached. The judgment indicates that although the meetings achieved no narrowing of issues, this did occur in the concurrent evidence session, reducing the issues to a few key points.

 In cases like this, reasoning and the quality of expert opinion seem to be less important to achieving closure than the appearance of consensus between the experts selected by the parties. In *Armstrong v Richardson,* for example, the judge expressed “mild surprise” that what he considered “a very successful ‘hot-tubbing’ of the experts” led to the defendant’s accident reconstruction expert substantially agreeing with the claimant’s expert’s calculation that the defendant must have braked a fraction of a section later than he could have done, from which it followed, given the judge’s findings of fact, that he was negligent in running down a child who was crossing the road.[[72]](#footnote-72) The judge made no comment as to whether the witness was right to concede as much as he did, and it seems to be the sheer fact of the emergent consensus that was decisive.

Even where it produces no consensus, concurrent evidence can serve to “crystallise” the different positions of the experts.[[73]](#footnote-73) In *Stratton v Patel,[[74]](#footnote-74)* a case about defective premises, building and mechanical experts were hot-tubbed, largely, as the judgment indicates, to save time and costs. The reason the judge offers for why he found the exercise “extremely useful” is that two of the experts gave clear statements of the relatively narrow issue on which they disagreed.[[75]](#footnote-75) The judge resolved the issue by ruling that an independent electrical contractor should be brought in to conduct further tests.[[76]](#footnote-76)

 Similarly, in *Bluewater Energy v Mercon,*[[77]](#footnote-77)experts on the quantum of damages, who had previously narrowed many areas of dispute in a series of joint statements, gave concurrent evidence in a session where they explained the essence of their differing views on eight issues.[[78]](#footnote-78) Interestingly, in the same case the experts on welding and delay analysis appear to have given evidence in the “usual” way. In *Aurora Leasing v Colliers*[[79]](#footnote-79)the judge considered that a concurrent evidence session, where he led the questioning, expedited the process and served to focus on the differences between the experts and to facilitate comprehension. The case related to valuation evidence, concerning comparables, and so might not be considered particularly complex. By suggesting, though “without implying any criticism of the expert witness in this case”, that expert witnesses would benefit from training in the giving of evidence concurrently, the judgment implies that the process did not go altogether smoothly.[[80]](#footnote-80)

 In *Harrison v Shepherd Homes,*[[81]](#footnote-81)where engineering experts were initially cross-examined and then “hot-tubbed,”in relation to defects in a number of properties, the process was said to highlight the extent of the agreement between the experts and the limited differences in approach on which the judge had to make a decision. The “narrowing of differences” was also mentioned in *Streetmap v Google,* discussed in detail below

 These cases have to be understood in the context of civil procedures that already encourage experts to identify areas of agreement and disagreement through pre-trial meetings.[[82]](#footnote-82) It would be surprising if hot-tubbing dramatically increased the amount of consensus that emerges from (occasionally protracted) pre-trial discussions and it seems to have been used for relatively simple issues or where the gulf is not vast in any event. In *SSE v Hochtief*, an example of large-scale litigation and a very positive judicial hot-tubbing experience, “[t]he exercise was less successful in respect of quantum … where there was little common ground and the level of detail was too great”. [[83]](#footnote-83) In *BA Kitchen Components Ltd v Jowat (UK) Ltd,*[[84]](#footnote-84) a dispute about the cause of delamination, the experts could not bridge their fundamental disagreement in the “hot tub”. The solution was to call in a court-appointed expert, with whom the court largely agreed.

 The fact that differences between the experts were narrowed in some cases does not necessarily mean that they converged on the truth – an issue indexed to the quality of the evidence. Judges will usually (as in *Armstrong*) defer to what the experts agree upon, without inquiring closely into whether it was what Hayden J in *M v N* (above) called a “true and objective consensus”.[[85]](#footnote-85)

***Adversarial experts in the tub***

We now turn to what is perhaps the most interesting group of cases: those in which the experts in the “tub” disagreed with each other on some factual question as to which the court had no particular claim to expertise. Whether concurrent evidence is effective in such situations depends on whether it allows differences between the quality of one expert’s evidence and another to be detected and sensibly evaluated. This could be either because it exposes differences between the epistemic qualities of the two experts’ evidence, or because it reveals performative differences that can reasonably be taken as indicators of reliable epistemic differences.

 One case in which a clear “winner” emerged from the tub is *Patel v Vigh*, which concerned a claim for a beneficial interest in a house and a claim against a deceased’s estate.[[86]](#footnote-86) Handwriting experts were “hot-tubbed”, with the consent of both counsel, over allegations that a signature on a business statement was forged. The claimant’s expert used three reference documents, i.e. putatively genuine examples of the alleged signatory’s writing in her analysis of whether or not the signature in question was genuine, and the authenticity of one of those three was questionable. Moreover, “[e]ach of her 2 reports was only 4 pages long and contained very little reasoning”.[[87]](#footnote-87) The defendant’s expert used 59 documents, the authenticity of which was accepted by the claimant’s expert. The judge also contrasted the performance of the two witnesses, describing the defendant’s expert as a reliable witness who did his best to assist the court and the claimant’s expert as *“*considerably less impressive.” She was “unable to engage with the detailed points” made by the defendant’s expert and “appeared to regard her role as being to advance her client’s case, rather than to assist the court.”

 All in all, the defendant’s expert appears to have displayed what Alvin Goldman calls “dialectical superiority”.[[88]](#footnote-88) Goldman’s point is that even if one is not in a position to assess the truth of specific claims made by an expert, the fact that one expert can accommodate the other’s points within his argument, while also making points to which the other appears to have no answer, affords an *indicator* that the first expert’s points are better founded. In *Patel*, however, this indicator supplements and confirms what the judge is able to perceive about the intrinsic weaknesses of one expert’s reasoning. It also supports an explanation of those weaknesses as stemming from experts assuming an advocacy role. The same results could very likely have been achieved by traditional cross-examination. In focussing on issues of bias and the care displayed by the experts, the court did not engage with the arguably more important issue of whether handwriting comparison, however thorough, has any valid scientific basis.[[89]](#footnote-89)

 *Streetmap v Google*[[90]](#footnote-90)is one of two cases (along with *Stratton v Patel,* above) where the judgment quotes substantial extracts from the exchanges between experts in the concurrent evidence session. It borders on being an “expert tribunal” case as the judge involved (Roth J) was a highly experienced competition lawyer and judge, and the experts were economists giving evidence on “not particularly complex” competition issues. However, Roth J was not sitting, as he often does, in the Competition Appeals Tribunal,[[91]](#footnote-91) where one of the other members would be an economist, but hearing the evidence alone as a Chancery Division judge. He gave permission for the two economists to ask questions of one another directly: a process he found “helpful” and “constructive”, and which appears to have rendered cross-examination largely redundant. The exchange referenced in the judgment concerned a particular graph of internet searches and their results. Addressing the defendant’s expert, the claimant’s expert told him that the graph in question

… is my graph shifted six months to the left … All you have done in effect is to shift the line back and paint a picture that suggests that effects that occurred in June should be viewed as having occurred in January.[[92]](#footnote-92)

While the judge accepted this criticism of the graph, he also accepted the opposing expert’s view of the limitations of the data on which the both versions of the graph were based. The claimant’s expert’s display of dialectical superiority at this point was regarded by the judge as “the high water mark” of his evidence, and did not prevent a decision in favour of the defendants.[[93]](#footnote-93)

 While Roth J thought that the concurrent evidence process probably saved a day in the presentation of evidence, he also noted that “this process involves considerable preparation by the court” and that “the process ... effectively requires (as in the present case) a transcript, since the judge is unable to keep a proper note while leading the questioning”. Despite the “constructive” nature of the exchanges, Roth J also found that each expert remained something of an advocate for the party instructing them.[[94]](#footnote-94)

 In *Hi-Lite Electrical v Wolsey*[[95]](#footnote-95) concurrent evidence was used in a limited way by hearing together the experts instructed by the defendant and the third party, who at this stage in the proceedings were no longer in dispute with one another. There was only a relatively minor difference of view between the two experts. The way in which the judge resolved the differences between these two experts and the claimant’s experts, by placing their conclusions about the cause of a fire in the context of the testimony of employees at the business where the fire occurred, is interesting but appears to owe little to the use of concurrent evidence.

 In *Hunt v Optima,*[[96]](#footnote-96) a case concerning defects in a newly-built block of flats, we find Akenhead J observing that the “hot tubbing” of architecture and engineering experts “worked extremely well”[[97]](#footnote-97) and then resolving differences between them in a very traditional way, by commenting on their character, experience and performance in the witness box. For example, the claimant’s architect “came over as wholly decent, open and straightforward. He spoke with an authority which was compelling” – although just what made his performance so compelling is not explained. By contrast, the judge felt that the engineer called by the second defendant “was not particularly emphatic or very convincing.”[[98]](#footnote-98) Following the hot-tubbing session, the experts were “cross-examined separately on more overall matters”, and it was the contrasting responses of two of the architects – one “opportunistic”, the other “wholly open” – that gave the judge a reason for preferring the latter’s evidence to the former.[[99]](#footnote-99) There are very limited references to the way any of the expert witnesses responded to questions in the “hot tub”.

**Part 3: Discussion**

Having reviewed both the CJC Report and the recent reported cases, at this juncture we endeavour to offer some additional constructive engagement with the analysis, recommendations and the ability of concurrent evidence to address expert disagreement and partisanship. We are also interested in wider system implications relating to participation, procedural fairness and the changing role of the common law judge.

***The value and suitability of particular procedures to particular disputes***

Reading the reported cases we are struck repeatedly by the idiosyncratic use of concurrent evidence procedures. Different procedures are used, not just for different cases, but for different experts in the same case, usually without clear explanation of why the specific procedures were selected. [[100]](#footnote-100) For example, why “hot tub” the architects and engineers in *Hunt v Optima,*[[101]](#footnote-101)but not the quantity surveyors? In *Melhuish and Saunders v Hurden*[[102]](#footnote-102) (another TCC case about defective premises), why was concurrent evidence seemingly used for just one issue about the cost of cleaning? Are such choices a matter of unfettered judicial discretion, or is it possible to identify some principles or empirical evidence that ought to guide or constrain them? Civil procedures should be predictable and not based on the idiosyncratic beliefs and experiences of individual judges.

 One of the issues here is that specific forms of procedure *may* advantage particular witnesses or parties; particularly those with sufficient resources or experience to enable them to instruct the most effective “hot-tubbers”. This brings us back to the concerns identified by Genn about the potential influence of presentational factors and about whether experts will be as effectively challenged in judge-led sessions as in traditional adversarial proceedings, particularly where judges may not be as motivated or as skilled as those who pioneered the procedure.[[103]](#footnote-103) We are not in a position to assess these matters systematically, but neither are the judges or the CJC.[[104]](#footnote-104) Indeed HHJ Waksman, as experienced a judge as any in this field, told the CJC there was “not enough judicial experience yet to take a view*”* on when hot-tubbing might work best and with which kinds of evidence.[[105]](#footnote-105)

 In a section entitled “When hot-tubbing is appropriate” the CJC Report endeavours to address the question of when to use hot-tubbing.[[106]](#footnote-106) Here the foundations are, again, impressionistic. One judicial respondent suggested that it “would be very dangerous” to use hot-tubbing with “cutting edge scientific engineering or medical issues”.[[107]](#footnote-107) This view was counterposed to HHJ Grant’s view, as the judicial member of the working group (and a TCC judge), that hot-tubbing was suitable for cases of “serious technical complexity”. The reasoning behind the former comment is not explained, but it seems likely that the judge had in mind the extent to which courts rely on advocates to assimilate “cutting edge” evidence and “translate” it for the benefit of the judge. HHJ Grant, on the other hand, explained that hot-tubbed experts could educate the judge on certain matters before moving on to contentious issues. This again highlights the issues of preparation and different levels of judicial expertise.

 The CJC Report offers, in a draft Guidance Note, “Criteria which may indicate whether judge-led joint expert examination is appropriate”. These place “no restrictions on the type of case, or the nature of expert evidence”. The criteria are really general considerations, which afford only limited guidance. They include: whether “the court considers that the judge’s understanding … will be assisted”, “whether or not the experts’ disagreement will likely be narrowed”, whether the complexity “warrants that the court should lead the examination”.[[108]](#footnote-108) Another set of factors relates to what the CJC calls the “logistics” of concurrent evidence: whether the experts are from similar disciplines, the relative seniority of the experts, any animosity between the experts, the numbers of experts called by respective parties, and whether a party is a litigant-in-person.[[109]](#footnote-109) These do not seem to be matters merely of logistics, but are at least partly questions of fairness (for example, one expert may be better able than another to handle a situation involving personal animosity, but this may bear no relation to the merits of their respective views). Again, simply advising judges to “have regard” to these factors affords limited guidance.

 Where a “serious” challenge to competence, independence or credibility is indicated, the report suggests that “it will generally not be appropriate for the court to give a direction for concurrent evidence”.[[110]](#footnote-110) Although it is not spelt out, the thinking behind this recommendation is presumably that lawyers are better equipped to carry out confrontational questioning than either a fellow expert or the judge, who might be perceived as inappropriately entering the fray. The CJC does not consider the benefits that might ensue from having the expert’s peers available to comment on censure, criticism, professional sanctions and so forth. If, for example, the questions about a particular expert’s credibility were based on earlier criticism by a trial or appellate court, it would surely be worth knowing whether the other experts in the hot-tub disagreed with that criticism. Discussion of the issue among peers, though perhaps uncomfortable, might shed light on professional norms and expectations and yield a more nuanced view than a simple repetition of judicial animadversions.

 In its discussion of litigants-in-person the CJC Report again has to rely on the very limited evidence of a few brief comments by judges and experts.[[111]](#footnote-111) A couple of these comments suggest that judge-led questioning of the experts may help to redress the inequality of arms that obtains where only one side is legally represented.[[112]](#footnote-112) The idea that the legal system can cope with the growing lack of legal representation by expecting judges to play the role of both counsel as well as deciding impartially between them has been forcefully criticised by Zuckerman.[[113]](#footnote-113) Here again the CJC’s Guidance Note – understandably, given the lack of evidence – does no more than advise judges to take into consideration that one party is a litigant in person.[[114]](#footnote-114)

 The Guidance Note lists a range of subject areas where JJEE “has been successfully employed”. The Working Group’s researches, however, yielded no consensus on what were suitable cases, leading the CPRC Subcommittee to conclude that this “must be left to case by case judicial determination”.[[115]](#footnote-115) More important than the subject area, we suggest, is the type of the tribunal – to what extent the judge is a participatory expert or the setting is more traditionally inquisitorial – and the interests, abilities and inclinations of the parties.

***Procedural fairness***

Noting that some of the respondents expressed concerns about concurrent evidence restricting or inhibiting questioning witnesses, the CJC indicated that this might be “one of the most important aspects of procedural fairness”.[[116]](#footnote-116) This is a serious issue which concerns the predictability of procedure and has clear links to the fairness and efficacy (however measured) of concurrent evidence. The parties involved need to be confident that there is consistency in how cases are handled, and sufficient predictability to enable them both to plan the litigation and negotiate a settlement.

 Procedural fairness requires some consideration of the perspectives of the parties so that they are not “shut out of the process”.[[117]](#footnote-117) The CPRC appears to attempt to cater for this by way of amendments to two questionnaires completed, normally by the parties’ solicitors, in the course of pre-trial proceedings. These questionnaires, which are discussed further below, ask whether the parties consider the expert evidence, or any part of it, suitable for giving concurrently and the Listing Questionnaire (the more detailed of the two) invites proposals for how the evidence should be given and for the agenda, which may be agreed with the other party.[[118]](#footnote-118) As responses to the CJC survey indicate, details such as whether all experts are asked the same questions and whether the order of questioning is varied may be important from the perspectives of the witnesses and those calling them.[[119]](#footnote-119) These matters rest with the discretion of the trial judge.

 The importance of the order of questioning was recognised by the CAT in *Agents’ Mutual Ltd v Gascoigne Halman Ltd*.[[120]](#footnote-120) The defendant in a breach of contract case alleged that the contract was void on competition law grounds, and the trial of this issue was transferred to the CAT. The defendant’s expert was said to have given “much fuller answers during the “hot tub” process, which reflects the fact that he… tended to be asked questions first.”[[121]](#footnote-121) He was also cross-examined, while the defendant elected not to cross-examine the claimant’s expert.[[122]](#footnote-122) Though “enormously impressed by the diligence and helpfulness of both experts”, the Tribunal ultimately preferred the answers given “clearly and briefly” by the claimant’s expert.[[123]](#footnote-123)

 Finally, the parties should be allowed to question expert witnesses. There seem to have been some tensions between a party’s interest in questioning an expert and judicial impressions of repetition and redundancy. This is not insuperable, but is an issue that requires some careful consideration by the trial judge.[[124]](#footnote-124) Concurrent evidence appears to depend to a large extent on the expertise and preparedness of the judge. We question the wisdom of wresting this responsibility from the parties when it is arguable that the “usual forensic process” is necessary to allow the parties to properly test the evidence in a way that leaves them satisfied with the fairness of the proceedings.[[125]](#footnote-125)

***Judicial independence***

One issue that is implicit in the CJC Report and the amended PD35.11 is the impact on the traditional role of the trial judge in adversarial proceedings. Rather than act as a relatively passive “umpire” and fact-finder, in the form of concurrent evidence favoured by the CPRC the trial judge becomes an active inquisitor. Indeed, the CJC accepted that concurrent evidence is an “inquisitorial-type” of procedure.[[126]](#footnote-126) In the case of the Court of Protection, and to some extent the Family Court, this is a general feature of the way the court functions, but in ordinary civil cases the introduction of concurrent evidence may constitute a significant departure from the traditional role of the judge in an adversarial proceeding. The trial judge might not be in a position to call witnesses, but otherwise might dictate (through procedural discretion) the pre-trial preparations and reports, the main issues to be canvassed at trial, how they will be addressed, who will be heard (and for how long), and even the scope of party-questioning.[[127]](#footnote-127) The trial judge may dominate the questioning and even restrain the scope for cross-examination. While strong forms of activism may be exceptional, they are certainly now available. To varying degrees these threaten some models of party control and perhaps even conventional ideas of procedural fairness under adversarialism.

 The crucial point here, as Fuller[[128]](#footnote-128) and more recently Zuckerman[[129]](#footnote-129) have argued, is the effect on the judge’s impartiality of increased involvement in the preparation of evidence and questioning of witnesses. Such a role may make judges more prone to forming a provisional view before the hearing, which as a result of confirmation bias then hardens into a final judgment. According to Jolowicz, “the idea inherent in the adversary process that the best judge is the judge who, like a jury, knows nothing of the case he is to try until the trial itself begins has been finally killed off”, by, *inter alia,* the pre-reading of written experts reports that is required by the judge’s case management role.[[130]](#footnote-130) Nevertheless, there is a big difference between expecting judges to familiarize themselves with the issues in a case and expecting them to define the issues to be discussed and lead the questioning of witnesses, while still remaining strictly impartial.[[131]](#footnote-131) The level of judicial preparation required if concurrent evidence is to be done properly is akin to that of a barrister preparing a cross-examination schedule. One judge quoted in the CJC Report stated that concurrent evidence “does put a huge burden on the judge who, in effect, has to prepare something rather equivalent to notes for a cross examination in respect of the experts of each discipline.”[[132]](#footnote-132) The time and resources required for such an exercise, as well as the risk of prejudgment, are serious concerns.

***How does concurrent evidence work?***

In addition to the concerns set out above, in summary, if concurrent evidence is to be hailed as a real improvement in the way expert evidence is given, it must be on the ground that it produces not merely more attractive or persuasive *performances* by expert witnesses, but that it improves the *epistemic* quality of their evidence and decision-making. By this we mean that it must make it more likely that experts (a) arrive at conclusions based on sound reasons and (b) effectively communicate those reasons to the judge. The very limited evidence afforded by the publicly available judgments suggests that concurrent evidence may have these beneficial effects in cases (and particularly in specialised courts: the TCC, Court of Protection, Northern Ireland Lands Tribunal) where the factfinder shares or at least has a degree of familiarity with the witnesses’ expertise. There is, however, nothing in these cases to suggest that concurrent evidence helps significantly with the problem of how a non-expert judge is to decide between experts who disagree, let alone address quality where the available experts agree in ways that are misguided or not representative of mainstream perspectives and practices.

 Rather, we find judges deploying the traditional repertoire of tie-breaking techniques – placing the evidence in the context of lay evidence, impressionistic judgments of the witnesses’ characters, confidence, and the detection of signs of adversarial bias – with very little evidence that concurrent evidence improved decision making.[[133]](#footnote-133) The cases concerning hot-tubbing also make several mentions of concessions being made in cross-examination. What hot-tubbing may do, as pre-trial meetings of experts also do, is to increase the likelihood of experts reaching agreement. But this raises a difficult question about whether it produces “a true and objective consensus”,[[134]](#footnote-134) or a consensus resulting from procedural pressures, the personal dynamics between the experts, and their interest in avoiding protracted cross-examination.

 Concurrent evidence is often celebrated as a means of reducing partisanship and advocacy, although in reality the procedures may (seek to) achieve these ends by making it more difficult to observe. Consider the following, attributed to judicial respondents, in relation to the form of the evidence: “there may be a danger of experts coming across as ‘advocates’ for the party which they are representing, if they are given an opportunity for an opening statement.”[[135]](#footnote-135) Here, preventing the appearance of partisanship appears to trump concerns about its existence. We should be aiming to implement procedures that generate substantial advantages rather than formal or apparent improvements. Without wanting to insist that impressions of bias or partisanship will always be particularly significant, judges should be sensitive to, and consider, such issues. Indeed, complaints about apparent bias can be found in cases where experts were “hot-tubbed”.[[136]](#footnote-136) Judges should be cautious about procedural reforms that might obscure or conceal actual biases and alignments, and judges should not overlook the fact that our party-led system may encourage (some of) them through the selection and orientation of expert witnesses.

**Conclusion: Table d’hôte** **or the smorgasbord?**

At first sight, concurrent expert evidence looks like a small and relatively innocuous modification to civil procedure. Who could object to a procedure that reduces expert disagreement, improves the quality of expert opinion, the comprehension of judges and the efficiency of civil proceedings? Unfortunately, we are not in a position to confirm that concurrent evidence has these benign effects. So far concurrent evidence has been used on a modest scale and what little is known about it suggests that it has been modestly successful, particularly in specialised courts like the TCC, NILT and Court of Protection. If, however, we consider the possibility of concurrent evidence becoming the normal way for experts to participate in civil trials, then we would – given the centrality of expert evidence to modern civil litigation – be contemplating a fundamental shift towards a more inquisitorial civil justice system. This is not a step to be taken lightly.

 Recently, the CPRC concluded that “dictating the use of [hot-tubbing] would be a step too far”.[[137]](#footnote-137) Nonetheless, “it was agreed that in general Hot-Tubbing (HT) had not caught on, it is not the default position, and not widely taken up voluntarily. The subcommittee recognised the danger that implementing the CJC proposals would not deliver HT unless it is imposed through the rules/standard directions and onus is on a party to opt out.”[[138]](#footnote-138) Although hot-tubbing has not been made mandatory the amended directions and listing questionnaires, which require the parties to give detailed consideration of the possibility of hot-tubbing and provide reasons as to why they do not consider hot-tubbing to be suitable, evidence a clear steer towards increased use of hot-tubbing. Such changes appear to have been approved without substantive discussion by the CPRC.[[139]](#footnote-139)

 In the end there may be more at stake than procedural reform. At its core, concurrent evidence represents a break with conventional adversarial procedure and reliance on the parties to collect and present their evidence. While revising procedures, especially in the free-form proposed by the CJC might be defensible, citizens might expect to see more persuasive data about advantages in terms of evidentiary products and institutional efficiencies. We might expect to see reform, guidance and advice based on serious assessment using recognisable analytical tools rather than the bare impressions of a few participants.[[140]](#footnote-140) If judges are going to become more active participants in civil proceedings, and in the process compromise more of their traditional impartiality and independence, then such shifts should be grounded in procedures that are demonstrably valuable, have clearly understood mechanisms of operation, and can be guided by evidence as to the conditions in which they are most likely to produce desirable and undesirable results. Moreover, reformers should directly address these non-trivial role changes.

 We wonder why so much emphasis has been placed on hot-tubbing, given its disruptive potential, as opposed to experimentation and evaluation of more modest procedural refinements, more consistent with adversarialism and some of the benefits associated with hot-tubbing, such as the sequential presentation of expert evidence. In the absence of compelling evidence of remediable problems with expert evidence or the effectiveness of concurrent evidence in achieving Jackson’s objectives, why opt for such procedural flexibility, disruptive to adversarial principles, as opposed to the presentation of expert evidence in ways that maintain party-presentation, and testing of evidence along with greater judicial independence? We should be confident that abandoning traditional roles and procedures, and embracing more explicitly inquisitorial approaches to expertise, will actually improve the quality of the evidence, comprehension, fairness, rectitude, access to justice and party satisfaction before moving to adopt them.

1. † Professor, School of Law, The University of New South Wales, Sydney, Australia and Research Professor (fractional), Northumbria Law School, Newcastle-upon-Tyne; Lecturer, Northumbria Law School, Newcastle-upon-Tyne; Professor, Northumbria Law School, Newcastle-upon-Tyne. The authors would like to thank the CJC and members of a workshop convened at Northumbria Law School in June 2017 to discuss concurrent evidence. [↑](#footnote-ref-1)
2. *Minutes of the CPR Committee for 9 June 2017,* available on Lexis PSL under Dispute Resolution/key DR developments; CPR minutes, para. 9. See also the Minutes for 7 April 2017, item 4, para. 14, agreeing that “hot tubbing could not be imposed top down”. [↑](#footnote-ref-2)
3. Civil Justice Council, *Concurrent Expert Evidence and “Hot-Tubbing” in English Litigation Since the “Jackson Reforms”: A Legal and Empirical Study* 24 (2016) (hereafter CJC Report or Review) available at <https://www.judiciary.gov.uk/wp-content/uploads/2011/03/cjc-civil-litigation-review-hot-tubbing-report-20160801.pdf>. [↑](#footnote-ref-3)
4. CJC Report, 15-16. [↑](#footnote-ref-4)
5. CPRC, n 1 above and “Hot-tubbing Subcommittee note for CPRC meeting on 5.5.17” available through LexisPSL. [↑](#footnote-ref-5)
6. CJC Report, 16. [↑](#footnote-ref-6)
7. CJC Report, 17. [↑](#footnote-ref-7)
8. CPRC, n. 1 above, item 6, Annex B, para. 11.4; “will” replaces the current Direction’s “may”. [↑](#footnote-ref-8)
9. See *Electromagnetic Geoservices v Petroleum Geoservices* [2016] EWHC 881 (Pat). [↑](#footnote-ref-9)
10. CJC Report, 25. [↑](#footnote-ref-10)
11. Civil Procedure Rules Committee, “Hot-tubbing Subcommittee Report”, available via LexisPSL, Minutes of the CPR Committee meeting of 7 April 2017, item 4, para. 11. [↑](#footnote-ref-11)
12. CJC Report, Appendix 1, “A Suggested Re-draft of CPR 35.11”, draft rules 11.1 (“at [the Court’s] absolute discretion”) and 11.8 (“depending upon what the court considers the most appropriate way of adducing the oral expert opinion testimony in the case”). [↑](#footnote-ref-12)
13. The empirical work undertaken for the purpose of the CJC Report is set out at pages 4-6 of the Report and took the form of “interviews, surveys and personal insights”. The CJC Report itself sets out the limitations of the project at pages 6-9 including (at page 7) the “small budget by which to conduct its survey, although the interest was such that, via approximately 100 responses, it did gather more data than might have been expected.” . [↑](#footnote-ref-13)
14. Sir Rupert Jackson, “Focussing Expert Evidence and Controlling Costs” (Lecture delivered at University College London, 2011) available at <https://www.judiciary.gov.uk/wp-content/uploads/JCO/Documents/Speeches/lj-jackson-lecture-focusing-expert-evidence-controlling-costs.pdf>, para. 4.1, quoted in CJC Report, 57. [↑](#footnote-ref-14)
15. Gary Edmond, “Secrets of the ‘Hot Tub’: Expert Witnesses, Concurrent Evidence and Judge-led Law Reform in Australia” (2008) 57 CJQ 51; Gary Edmond, “[Merton and the hot tub: Scientific conventions and expert evidence in Australian civil procedure](http://www.law.unsw.edu.au/staff/edmondg/docs/Merton-and-the-hot-tub.pdf)” (2009) 72 *Law & Contemporary Problems* 159. Cf Administrative Appeals Tribunal, *An evaluation of the use of concurrent evidence in the Administrative Appeals Tribunal* (2005). [↑](#footnote-ref-15)
16. Hazel Genn, “Getting to the Truth: Experts and Judges in the ‘Hot Tub’” (2013) 32 CJQ 275. [↑](#footnote-ref-16)
17. Ibid., 285. [↑](#footnote-ref-17)
18. Ibid., 288. [↑](#footnote-ref-18)
19. Ibid., 298. [↑](#footnote-ref-19)
20. Ibid., 297. [↑](#footnote-ref-20)
21. CJC Report, 57. [↑](#footnote-ref-21)
22. CJC Report, 40. [↑](#footnote-ref-22)
23. CJC Report, 57. [↑](#footnote-ref-23)
24. CJC Report, 58. [↑](#footnote-ref-24)
25. CJC Report, 59. [↑](#footnote-ref-25)
26. CJC Report, Appendix D, 83. [↑](#footnote-ref-26)
27. CJC Report, Appendix D, 99. [↑](#footnote-ref-27)
28. CJC Report, 61. [↑](#footnote-ref-28)
29. CJC Report, 16. [↑](#footnote-ref-29)
30. CJC Report, 58 [↑](#footnote-ref-30)
31. CJC Report, 58. [↑](#footnote-ref-31)
32. CJC Report, 18. [↑](#footnote-ref-32)
33. CJC Report, 58 [↑](#footnote-ref-33)
34. A Champagne, D Shuman and E Whitaker “An Empirical Examination of the Use of Expert Witnesses in American Courts” (1992) 31 Jurimetrics J 375; HJ Wechsler, A Kehn and RJ Cramer “Attorney Beliefs Concerning Scientific Evidence and Expert Witness Credibility” (2015) 41 Int J Law & Psychiatry 58 [↑](#footnote-ref-34)
35. An expert witness has an ethical and legal obligation to communicate reasons that undermine her own conclusions, even if those conclusions are true. See Tony Ward, “Ethics and the Role of the Expert Witness” in Lucina Hackman, Fiona Raitt and Sue Black (eds) *The Expert Witness, Forensic Science and the Criminal Justice Systems of the UK* (CRC Press, 2018). [↑](#footnote-ref-35)
36. This concern was strongly expressed by the House of Commons Science and Technology Committee, *Forensic Science on Trial* (HC 96-1, 2005), para. 142. [↑](#footnote-ref-36)
37. SL Brodsky, TMS Neal, RJ Cramer, MA, and MH Ziemke, “Credibility in the Courtroom: How Likeable Should an Expert Witness Be?” (2009) 37 J Am Acad Psychiatry Law 525. [↑](#footnote-ref-37)
38. Kristy A Martire and Gary Edmond, “Rethinking Expert Opinion Evidence” (2017) 40 Melb. L. Rrv. 467 [↑](#footnote-ref-38)
39. Samuel R Gross “Expert Evidence” [1991] Wis. R. Rev. 1113, 1133-5. [↑](#footnote-ref-39)
40. J Cooper, EA Bennett and HL Sukel, “Complex Scientific Testimony: How do Jurors Make Decisions?” (1996) 20 Law & Hum Behav 379. [↑](#footnote-ref-40)
41. For example, McKay J’s judgement in *XYZ v Schering Health Care* [2002] EWHC 1420 (QB) was criticised by epidemiologists for relying on “vivid pen-portraits that would grace a novel” to resolve a complex statistical dispute: DCG Skegg, Editorial, “Oral Contraceptives, Venous Thromboemblism and the Courts” (2002) 325 BMJ 524, see also Klim McPherson, “One Expert’s Experience” in Louis Blom-Cooper (ed.) *Experts in the Civil Courts* (Oxford: Oxford University Press, 2006). [↑](#footnote-ref-41)
42. For detailed discussion of the concept of validity see President’s Council of Advisors on Science and Technology, *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (2016), [https://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcastforensicsciencereportfinal.pdf](https://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf). [↑](#footnote-ref-42)
43. FP Kao, JL. Heather, RA Horning and MV Sinclair, Jr “Into the Hot Tub … A Practical Guide to Alternative Expert Witness Procedures in International Arbitration” (2010) 44 Int Lawyer 1035; CJC Report, 6. [↑](#footnote-ref-43)
44. These can be seen in their sharpest form in expert determination, a form of dispute resolution where an expert in effect combines the role of witness and arbitrator; the Court of Appeal has held that those who agree to this “quick and relatively inexpensive” procedure “must be taken to have recognised that mistakes may be made, both of fact and law, but they are prepared to take that risk” (*Premier Telecom v Webb* [2014] EWCA Civ 994, [12]). [↑](#footnote-ref-44)
45. CAT [2016] CAT 25 [↑](#footnote-ref-45)
46. Ibid at [18], see also [244]. [↑](#footnote-ref-46)
47. *BT v Ofcom v Sky* [2017] CAT 4 at [36-42]. [↑](#footnote-ref-47)
48. Lands Tribunal and Compensation (Northern Ireland) Act 1964, s. 1(3). [↑](#footnote-ref-48)
49. [2016] RA 217. [↑](#footnote-ref-49)
50. Ibid. at [35], [47], [55]. [↑](#footnote-ref-50)
51. *Greer v Northern Ireland Housing Executive* R/19/1996, quoted in *Brickkiln Waste Ltd v Northern Ireland Electricity* [2015] R.V.R. 197at [25] . [↑](#footnote-ref-51)
52. Note from Henry Spence dated 8 June 2017 and prepared for a workshop on concurrent evidence held at Northumbria University on 20 June 2017. [↑](#footnote-ref-52)
53. Harry Collins and Malcom Evans, *Rethinking Expertise* (Chicago: University of Chicago Press, 2007), 14, 24-7. [↑](#footnote-ref-53)
54. Ibid., 14 [↑](#footnote-ref-54)
55. Ibid., 15. [↑](#footnote-ref-55)
56. Jeremy Green “Industrial Ill Health, Expertise and the Law” in Roger Smith and Brian Wynne (eds.) *Expert Evidence: Interpreting Science in the Law* (London: Routledge, 1989), 112-7. [↑](#footnote-ref-56)
57. [2015] EWCOP 76. [↑](#footnote-ref-57)
58. Ibid, [44]-[7]. See, more generally, Geoffrey Bowker and Susan Star, *Sorting Things Out: Classification and Its Consequences* (1999). [↑](#footnote-ref-58)
59. CJC Report, 18. [↑](#footnote-ref-59)
60. [2015] EWCOP 76, [36]. [↑](#footnote-ref-60)
61. Ibid., [40]-[41] [↑](#footnote-ref-61)
62. Ibid., [43]. [↑](#footnote-ref-62)
63. Ibid., [48]. [↑](#footnote-ref-63)
64. Email quoted in CJC Report, 18. [↑](#footnote-ref-64)
65. [2015] EWCOP 76, [36]. [↑](#footnote-ref-65)
66. Email quoted in CJC Report, 18. [↑](#footnote-ref-66)
67. Ibid, [18]. CJC Report, 22. [↑](#footnote-ref-67)
68. CJC Report, 22. [↑](#footnote-ref-68)
69. *C v A Local Authority* 2011] EWHC 1539, *PB v RB* [2016] EWCOP 12. [↑](#footnote-ref-69)
70. *A Local Authority v A* [2011] EWHC 590 (Fam). [↑](#footnote-ref-70)
71. [2015] EWHC 650 (Ch), [3, 105]. [↑](#footnote-ref-71)
72. [2014] EWHC 3306 (QB), [2], [35]. [↑](#footnote-ref-72)
73. *SSE Generation v Hochtief Solutions* [2016] CSOH 177, [258]. [↑](#footnote-ref-73)
74. [2014] EWHC 2677 (TCC). [↑](#footnote-ref-74)
75. Ibid., [400]. [↑](#footnote-ref-75)
76. Ibid., [402]. [↑](#footnote-ref-76)
77. [2014] EWHC 2132 (TCC) [↑](#footnote-ref-77)
78. See also *Markey v McMahon* [2012] NIQB 35 [↑](#footnote-ref-78)
79. [2013] NIQB 116. [↑](#footnote-ref-79)
80. Ibid., [14]-[15] [↑](#footnote-ref-80)
81. (2011) 27 Const LJ 709 (QBD (TCC)), 716. [↑](#footnote-ref-81)
82. CJC, Report, 7-9. The CJC inquiry does not seem to have engaged with relevant procedural rules and practice in Australia, notwithstanding some reading and communications, where pre-trial meetings between experts and joint reports are routine. (Thanks to Justice Brian Preston, Chief Judge of the NSW Land and Environment Court for discussion on this issue.) See also Steven Rares, “Using the ‘Hot Tub’: How Concurrent Expert Evidence Aids Understanding Issues” (A paper presented to the Continuing Legal Education seminar presented by the University of New South Wales on 23 February 2017 and updated from the previous versions presented in 2009 and 2013). [↑](#footnote-ref-82)
83. *SSE Generation v Hochtief Solutions* [2016] CSOH 177, [258]. There is a need for caution in extrapolating from large-scale litigation where the parties are all very well-resourced and represented to ordinary cases that might be less symmetrical, and even involve litigants in person. [↑](#footnote-ref-83)
84. [2017] NIQB 76 [↑](#footnote-ref-84)
85. See *M v N* [2015] EWCOP 76. There is nothing in-principle wrong with such an approach, which structures most settlements. [↑](#footnote-ref-85)
86. [2013] EWHC 3403 (Ch). [↑](#footnote-ref-86)
87. Ibid., [50]. [↑](#footnote-ref-87)
88. Alvin W. Goldman, “Experts: Which Ones should you Trust?” (2001) 63 *Philosophy and Phenomenological Research* 85*,* 95. [↑](#footnote-ref-88)
89. D. Michael Risinger, Mark P Denbeaux and Michael J Saks, “Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Forensic Handwriting Expertise” (1989) 137 U Ps L Rev 731; D Michael Risinger, “Goodbye to all That, or a Fool’s Errand, by one of the Fools: How I Stopped Worrying about Court Responses to Handwriting Identification (and Forensic Science in General) and Learned to Love Misrepresentations of *Kumho Tire v Carmichael”* (2007) 43 Tulsa L Rev 447. There is, however, research indicating that document examiners are reasonably accurate in identifying signatures as genuine, which was the issue in this case. Bryan Found and Doug Rogers, “The Probative Character of Forensic Handwriting Examiners’ Identification and Elimination Opinions on Questioned Signatures” (2008) 178 Forensic Sci Int 54. [↑](#footnote-ref-89)
90. [2016] EWHC 253 (Ch). [↑](#footnote-ref-90)
91. In *Socrates Training v Law Society* [2017] CAT 10, the CAT with Roth J presiding heard “constructive and very sensible” concurrent evidence from two economists [13]. [↑](#footnote-ref-91)
92. Ibid., [134]. [↑](#footnote-ref-92)
93. Ibid., [134]-[5]. [↑](#footnote-ref-93)
94. Ibid., [47]. [↑](#footnote-ref-94)
95. [2011] EWHC 2153 (TCC). [↑](#footnote-ref-95)
96. [2013] EWHC 681 (TCC) (reversed on an unrelated point of law, [2015] 1 WLR 1376 (CA)). [↑](#footnote-ref-96)
97. Ibid,, [7] [↑](#footnote-ref-97)
98. Ibid., [7] [↑](#footnote-ref-98)
99. Ibid., [7]. [↑](#footnote-ref-99)
100. An exception is *Unwired Planet International Ltd v Huawei Technologies Co Ltd* [2017] EWHC 711 (Pat) where Birss J explained (at [58]) that the concurrent evidence session was confined to certain general questions which were not addressed to either expert in particular. [↑](#footnote-ref-100)
101. [2013] EWHC 681 (TCC) [↑](#footnote-ref-101)
102. [2012] EWHC 3119 (TCC) [↑](#footnote-ref-102)
103. See Genn, “Getting to the truth”, 15. [↑](#footnote-ref-103)
104. There may be utility in comparing a range of matched cases to see not only whether the costs and times are similar, but also whether outcomes, comprehension and findings bear similarities. [↑](#footnote-ref-104)
105. Quoted by CJC Report, 37. [↑](#footnote-ref-105)
106. CJC Report, 37. [↑](#footnote-ref-106)
107. CJC Report, 37, 84. [↑](#footnote-ref-107)
108. CJC Report, 38. [↑](#footnote-ref-108)
109. See also CJC Report, 41-43. [↑](#footnote-ref-109)
110. CJC Report, 39. [↑](#footnote-ref-110)
111. CJC Report, 44-5. [↑](#footnote-ref-111)
112. See the remarks of Roth J and Nicola Cohen, quoted in CJC Report, 44. [↑](#footnote-ref-112)
113. Adrian Zuckerman, “No Justice Without Lawyers – The Myth of an Inquisitorial Solution” (2014) 33 CJQ 355. [↑](#footnote-ref-113)
114. Guidance Note, para. 7(3), CJC Report, 29ff. [↑](#footnote-ref-114)
115. Hot-tubbing Subcommittee report, n. 10 above, para. 7. [↑](#footnote-ref-115)
116. CJC Report, 21. See also 24. [↑](#footnote-ref-116)
117. CJC Report, 34. [↑](#footnote-ref-117)
118. CPRC, n. 1 above, Item 6 – Hot-tubbing (Amendments to Annex C). [↑](#footnote-ref-118)
119. CJC Report, 49. [↑](#footnote-ref-119)
120. [2017] CAT 15 [↑](#footnote-ref-120)
121. Ibid at [40]. [↑](#footnote-ref-121)
122. Ibid at [36]. [↑](#footnote-ref-122)
123. Ibid at [40] [↑](#footnote-ref-123)
124. CJC Report, 50. [↑](#footnote-ref-124)
125. See Tom Tyler, *Why People Obey the Law* (2006). [↑](#footnote-ref-125)
126. CJC Report, 60. [↑](#footnote-ref-126)
127. Compare the Canadian criminal case of *Bornyk*, 2014 BCCA 450where the trial judge was censured for “entering the fray” on the basis of asking the parties to make submissions about a series of mainstream scientific reports that were directly pertinent to the only issue in the proceedings. [↑](#footnote-ref-127)
128. Lon L. Fuller, “The Forms and Limits of Adjudication” (1978) 92 Harv LR 353, 383. [↑](#footnote-ref-128)
129. Zuckerman, “No Justice Without Lawyers” – n115 above [↑](#footnote-ref-129)
130. JA Jolowicz, “Adversarial and Inquisitorial Models of Civil Procedure” (2003) 52 ICLQ 281, 286-7. [↑](#footnote-ref-130)
131. Cf. Zuckerman, “No Justice Without Lawyers” –n115 above, 359. [↑](#footnote-ref-131)
132. CJC Report, 40 [↑](#footnote-ref-132)
133. See Gary Edmond, “The conditions for rational (jury) evaluation of forensic science evidence” (2015) 39 *Melbourne University Law Review* 1. [↑](#footnote-ref-133)
134. *Stratton v Patel* [2014] EWHC 2677 (TCC). [↑](#footnote-ref-134)
135. CJC Report, 52. [↑](#footnote-ref-135)
136. See *Aurora Leasing v Colliers* [2013] NIQB 116; *Patel v Vigh* [2013] EWHC 3403 (Ch); *Streetmap v Google* [2016] EWHC 253 (Ch); *Hunt v Optima* [2013] EWHC 681 (TCC). [↑](#footnote-ref-136)
137. Minutes of the CPRC meeting on 3 February 2017 accessible at https://www.lexisnexis.com/uk/lexispsl/disputeresolution/document/393750/5N7V-WYP1-F18B-81CF-00000-00/Minutes\_of\_the\_CPR\_Committee\_meeting\_of\_3\_February\_2017 [↑](#footnote-ref-137)
138. Ibid [↑](#footnote-ref-138)
139. Minutes of the CPRC meeting on 9 June 2017 accessible at https://www.lexisnexis.com/uk/lexispsl/disputeresolution/document/393750/5NY1-X8H1-F18B-80DN-00000-00/Minutes\_of\_the\_CPR\_Committee\_meeting\_of\_9\_June\_2017 [↑](#footnote-ref-139)
140. Throughout this article we have placed emphasis on the need for procedural reforms to be informed by rigorous empirical research. It is beyond the scope of this article to design such research, but we acknowledge that assessing the quality of expert evidence (and of judicial decisions) is a difficult task for researchers as well as for judges. The controversy about Jane Ireland’s research on the family courts illustrates such difficulties: *Evaluating Expert Witness Psychological Reports: Exploring Quality* (2012) available at <http://netk.net.au/Psychology/ExpertReports.pdf>; for an overview of the controversy see <http://www.transparencyproject.org.uk/the-ireland-report-and-the-fitness-to-practice-panel-in-respect-of-professor-ireland/> (accessed 12 July 2017). (Prof. Ireland was eventually cleared of disciplinary charges: *LSG* 8 June 2017.) [↑](#footnote-ref-140)