



Recent Developments in the use of experts and the admissibility of expert evidence – an international perspective

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Expert evidence & miscarriages of justice: the English experience

If you thought that I was going to eulogise life across 'the pond' then you would be mistaken. The House of Commons Seventh Report [March 2005] outlines the very troubled state of English Criminal Justice with regard to Forensic Science and its presentation in the Courts¹.

No less than Professor Sir Alec Jeffreys, the father of DNA 'finger-printing' told the Committee: 'I lost my faith in the adversarial system the first time I stood up in court', due to the realisation that 'it all depends on the chemistry between the witness and the jury.'

Another eminent forensic expert, Professor Black, told the Committee that 'when the defence ask who is the prosecution witness on this then frequently there are a number of people who will back down and will not go up in court against them'.

She attributed this to the fact that 'they believe that the person the prosecution has aimed for is going to have greater credibility, greater presence and greater ability in court' and described the 'great scrambling in a lot of police forces to make sure that they get the person they want in the prosecution'.

She herself said she had 'first-hand experience of that, of being brought into a number of police forces to ensure that I was not brought in with the defence' and said that there was 'unquestionably a league table among expert witnesses'.

The Association of Chief Police Officers subsequently stated that they agreed with Professor Black's observation, conceding that 'some experts are perceived to have more credibility and are more persuasive than others', although noting that the police preference for certain witnesses may also reflect their greater skill or experience.'

¹ <http://www.publications.parliament.uk/pa/cm200405/cmselect/cmsctech/96/9602.htm>

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With a certain amount of understatement, the Committee commented 'Either way, this does not seem to be likely to advance the prospects of a fair trial'. In this paper I outline some thoughts on the nature of this problem.

The funding gap in England

There is little doubt that in the provision of expert evidence the Prosecution 'war chest' is far bigger than the publicly funded defence allowance. It has now become a routine matter for the defence in England and Wales to find that the amount of cash available to confront an apparently vast prosecution budget is meagre and trials are frequently delayed owing to problems with funding.

This inequality of fire-power is very much against the ethos of 'Equality of Arms', which (according to Article 6 ECHR) must remain the foundation of a fair adversarial process. The Court cannot rectify this, as the Government expressly removed a Judge's right to order funding for expert evidence some years ago. The spectacle of frustrated, albeit sympathetic, Judges making firm but legally moribund requests to the Legal Services Commission does not advance the prospects of a fair trial. But before moving on to the next problem, we need to get one thing straight: the majority of experts in the UK are not exorbitantly paid and nor are they holding the system to ransom².

Novel scientific techniques and the English courts' refusal to apply a validity or verifiability test

The 'league table' (which hints at egotism and a cult of personality) together with limitless funding can provide a fertile environment for unreliability, particularly as the English Courts have tended to concentrate on the qualities of the expert as opposed to an analysis of that expert's methodology and verifiability. This is particularly the case where novel scientific ideas and techniques come into play, such as 'Sudden Infant Death Syndrome'.

Relatively recent (but less notorious) miscarriages of justice in England have also involved ear-prints (*R-v-Dallagher* [2002] EWCA Crim 1903, (2003) 1 Cr.App.R.12; discredited facial mapping (*R-v-Gray* [2003] EWCA 1001, involving an expert who made dogmatic pronouncements in a number of cases as to various defendants' guilt, subsequently contradicted by the real culprits' who had - embarrassingly enough for him - confessed to crimes he claimed others had committed)³;

2 As the HC report observed: 'It is also interesting to note that a recent survey by the legal publisher Sweet and Maxwell found that 85% of expert witnesses are paid under £200 per hour, with 32% of all expert witnesses, and 68% of forensic experts, receiving less than £99 per hour. These figures need to be interpreted with regard to the fact that 81% of those expert witnesses had more than 10 years' experience of providing expert opinions to the courts, and roughly 25% had more than 20 years' experience.[362] This suggests that there is little foundation for the accusation occasionally levelled by some that expert witnesses routinely receive extortionate fees.

3 We do not however wish to pass from this appeal without making general observations about the use of facial imaging and mapping expert evidence of a reliable kind. Mr Harrow, like some other facial imaging and mapping experts, said that comparison of the facial characteristics provided 'strong support for the identification of the robber as the appellant'. No evidence was led of the number of occasions on which any of the six facial characteristics identified by him as 'the more unusual and thus individual' were present in the

and *R-v-Robb* (1991) 93 Cr.App.R.161 (subsequently discredited voice recognition – albeit the conviction still stands).

English Courts do not have a precedent or definition for what is reliable and choose not to. It is galling to reflect that many of the precedents that justify this 'loose' open-ended approach arose in cases that were miscarriages of justice.

A classic instance of this is to be found in the only case considered by the Court of Appeal in the field of forensic lip reading, *Luttrell* [2004] EWCA Crim 1344.

The issue in these conjoined appeals was whether lip reading should have been deemed admissible as expert evidence at trial. The appellants contended that lip reading was so inherently unreliable as to make it inadmissible in evidence (*Luttrell*, paragraph 28). Professor Moore, at paragraph 30, outlined the pitfalls associated with lip reading, stating that 'even the best speech readers achieve only up to 80% correctness when the words are presented in clearly spoken sentences'. Other evidence, from Professor Ruth Campbell, further emphasised the dangers of relying upon such evidence.

The Court of Appeal held that admissibility of expert evidence was dependant upon two conditions, outlined in *Bonython* (1984) 38 SASR 45, being met. The first is whether the study or experience of an expert will give his opinion an authority that the opinion of one not so qualified would lack; the second is whether the witness is so qualified to express the opinion. Lip-reading evidence was said to meet both conditions. The Court disagreed with the appellant's proposition that lip reading can never be entirely accurate and stated that here was ample material to demonstrate that the exercise can produce results free from error (*Luttrell*, paragraph 31).

The appellants, however, argued that such evidence should not have been admitted unless it passed a further test. Namely, that the evidence could be seen to be reliable because the methods used are sufficiently explained to be tested in cross-examination and so to be verifiable or falsifiable (*Luttrell*, paragraph 34).

general population, nor as to the frequency of the occurrence in the general population, of combinations of these or any other facial characteristics. Mr Harrow did not suggest that there was any national database of facial characteristics or any accepted mathematical formula, as in the case of fingerprint comparison, from which conclusions as to the probability of occurrence of particular facial characteristics or combinations of facial characteristics could safely be drawn. This court is not aware of the existence of any such database or agreed formula. In their absence any estimate of probabilities and any expression of the degree of support provided by particular facial characteristics or combinations of facial characteristics must be only the subjective opinion of the facial imaging or mapping witness. There is no means of determining objectively whether or not such an opinion is justified. Consequently, unless and until a national database or agreed formula or some other such objective measure is established, this court doubts whether such opinions should ever be expressed by facial imaging or mapping witnesses. The evidence of such witnesses, including opinion evidence, is of course both admissible and frequently of value to demonstrate to a jury with, if necessary, enhancement techniques afforded by specialist equipment, particular facial characteristics or combinations of such characteristics so as to permit the jury to reach its own conclusion - see Attorney General's Reference No 2 of 2002 [2002] EWCA Crim 2373; but on the state of the evidence in this case, and if this court's understanding of the current position is correct in other cases too, such evidence should stop there.

The Court of Appeal roundly dismissed that as a condition of admissibility:

'the appellants argued that evidence should not be admitted unless it passes a further test, that the evidence can be seen to be reliable because the methods used are sufficiently explained to be tested in cross-examination and so to be verifiable or falsifiable. Where, as here, the Crown is seeking to adduce the evidence in a criminal trial, this could properly be considered by the court when deciding whether to refuse to allow the evidence, under s.78 of the Police and Criminal Evidence Act 1984 or otherwise, in order to ensure a fair trial. We cannot accept that this is a requirement of admissibility. In established fields of science, the court may take the view that expert evidence would fall beyond the recognised limits of the field or that methods are too unconventional to be regarded as subject to the scientific discipline. But a skill or expertise can be recognised and respected, and thus satisfy the conditions for admissible expert evidence, although the discipline is not susceptible to this sort of scientific discipline. Thus, in *In re Pinion* decd, [1965] Ch 85 the court was willing, indeed felt obliged, to hear expert evidence on the question whether a collection of paintings and other objects had aesthetic worth so that their display would be of educational value and for the public benefit, notwithstanding, as Harman LJ observed, "de gustibus non est disputandum" (Luttrell, paragraph 34).

The Court had been taken to both *Dallagher* and *Robb* in the course of argument. In the former case, an extract from *Cross and Tapper on Evidence* (9th Edition) had been cited with approval at [2002] EWCA 1903, [29]:

'The better, and now more widely accepted, view is that so long as the field is sufficiently well established to pass the ordinary tests of relevance and reliability, then no enhanced test of admissibility should be applied, but the weight of the evidence should be established by the same adversarial forensic techniques applicable elsewhere.'

The Court, however, did not preclude reliability from being an issue as to the admissibility of expert evidence. Thus in *Gilfoyle* [2001] 2 Cr.App.R. 5 at paragraph 25, it was observed that English law will not consider expert evidence properly admissible if it is 'based on a developing new brand of science or medicine... until it is accepted by the scientific community as being able to provide accurate and reliable opinion' (Luttrell, paragraph 53). It follows that lip reading was deemed to have past that particular hurdle in *Luttrell*, notwithstanding the sustained assault made upon its reliability.

Once admissible, the reliability of the evidence goes to its weight. This gives rise to serious problems with an overconfident, however accomplished, witness in the witness box. As distinguished authors in this field have pointed out, 'by then the damage has been done'⁴.

The Court was also asked to decide if a special warning was necessary whenever lip reading evidence was introduced. The Court held, per paragraph 42, that a special warning is necessary if

4 Expert Evidence Law and Practice – 2nd Edition (Hodgkinson & James) ISBN 10 0-421-88930-6

experience, research or common sense has indicated that there is a difficulty with a certain type of evidence that requires giving the jury a warning of its dangers and the need for caution, tailored to meet the needs of the case. The strength of the warning and its terms will depend on the nature of the evidence, its reliability or lack of it, and the potential problems it poses.

Although the Court held that 'the bare ipse dixit of a scientist, however eminent, upon the issue in controversy, will normally carry little weight, for it cannot be tested by cross-examination nor independently appraised, and the parties have invoked the decision of a judicial tribunal and not an oracular pronouncement by an expert', regrettably that is precisely what occurred in the case of lip reading as the methodology cannot be satisfactorily explained – how can one test, measure or explain why an individual expert can 'see' another word, even a 'paragraph' of speech, which has not been 'seen', 'read' or detected by another, equally competent, lip reader?

As Hodgkinson and James have stated in their important text, *Expert Evidence, Law & Practice*:

'In England there has been a stark lack of judicial debate about how to deal with novel expert evidence and the lessons (if any) that can be learned from other parts of the common law world.'

The solution may present itself with the adoption of a Frye or Daubert- type test, which the English Courts have specifically rejected. As the Select Committee reported:

'Most states in the US follow well defined procedures to establish whether evidence from a particular scientific technique should be admitted. According to the Frye test (named after the defendant in a murder case in 1923), courts can only admit evidence derived from novel scientific techniques once the technique has gained general acceptance in the scientific community to which it belongs. The test entails first identifying the field in which the theory underlying the new technique falls, and then determining whether the principle of the technique is widely accepted by most members in this field. Most states now also apply the Daubert test to scientific or technical expert evidence. The Daubert principles require expert testimony to be tested against four criteria:

- Whether the theory or technique can be (and has) been tested;
- Whether the theory or technique has been subjected to peer review and publications;
- In the case of a particular technique, what the known or potential rate of error is or has been; and
- Whether the evidence has gained widespread acceptance within the scientific community.

Dr Chris Pamplin, editor of the UK Register of Expert Witnesses, has argued that 'As a result of Daubert, expert evidence in the US is likely to come under close scrutiny at an earlier stage that

in UK proceedings', averring that 'it is time for our courts to formulate similar rules. They might do better than the American model, but they could, at least, do no worse'.

The Select Committee also expressed the trenchant opinion that,

'The absence of an agreed protocol for the validation of scientific techniques prior to their being admitted in court is entirely unsatisfactory. Judges are not well-placed to determine scientific validity without input from scientists. We recommend that one of the first tasks of the Forensic Science Advisory Council be to develop a 'gate-keeping' test for expert evidence. This should be done in partnership with judges, scientists and other key players in the criminal justice system, and should build on the US Daubert test. The development of such a test would complement the increasing emphasis on pre-trial hearings in England and Wales discussed [earlier]'.

Material non-disclosure

The most damaging wrongful convictions in the last 30 years have without question been those concerning Irish Terrorism on the UK mainland. Innocent men and women served crushing sentences having committed no crime. None asked for parole, thus prolonging their ordeal, as all maintained their innocence. Those politicians who seek to 'rebalance' the Criminal Justice System would do well to remember Cicero's prescient dictum 'to remain ignorant of the past is always to remain a child'.

Tragically, the other category of cases involved parents and children. In the last 20 years there has been a sorrowful repetition of error and prejudice. The Cleveland Sexual Abuse Inquiry, the Orkney and Shetlands Satanic Abuse Scandal all involved innocent families being broken in pieces as a result of controversial diagnostic techniques and unsupported theories. More recently the 'Sudden Infant Death' or 'Cot Death' cases have led to numerous miscarriages of justice. One in particular, that of Sally Clark, has particular resonance. It will forever remain a public tragedy for what should always have been a private, albeit inconsolable, grief.

Sally was convicted in 1999 of murdering two of her babies. She had already lost one appeal by the time her case was restored to the Court. It is perhaps instructive to reflect on the 'Moses like' conclusions of the original Court that rejected her first appeal in 2000.

271. Taken separately there was a very strong case on each count. Take together we conclude that the evidence was overwhelming having regard to the identified similarities:
 - a. the babies died at the same age;
 - b. they were both found by the appellant and both, according to one version of the appellant, in a bouncy chair;
 - c. they were found dead at almost exactly the same time of evening, having been well, having taken a feed successfully, and at a time when the appellant admitted tiredness in coping;
 - d. on each occasion the appellant was alone with the baby when it was found

- lifeless;
- e. on each occasion the appellant's husband was away from home, or about to go away from home;
 - f. in each case there was evidence of previous abuse: for Christopher an attempted smothering; for Harry an old rib fracture;
 - g. in each case there was evidence of deliberate injury recently inflicted: for Christopher bruising and a torn frenulum; for Harry hypoxic damage, petechial haemorrhages in the eyelid and fresh bleedings of the spine and swelling of the spinal cord;
 - h. the rarity of two natural deaths in one family with the first five features above present, and the extraordinary coincidence, if both deaths were natural, of finding evidence of old and recent abuse.
272. For all those reasons, we consider that there was an overwhelming case against the appellant at trial. If there had been no error in relation to statistics at the trial, we are satisfied that the jury would still have convicted on each count. In the context of the trial as a whole, the point on statistics was of minimal significance and there is no possibility of the jury having been misled so as to reach verdicts that they might not otherwise have reached. Had the trial been free from legal error, the only reasonable and proper verdict would have been one of guilty.
273. It follows that in our judgment the error of approach towards the statistical evidence at trial identified at paragraph 181 (Ground 3(c)) did not render the convictions unsafe.
274. The appeal against conviction on each count is therefore dismissed.

What nobody knew then was the status of the microbiology results obtained by the Home Office pathologist, Alan Williams, who carried out the post mortem examination on her second son, Harry. The findings had not been disclosed to the police, prosecutors, defence lawyers or to the other doctors in the case.

Sally was charged with murder after Harry died aged 8 weeks in January 1998, in circumstances which were strikingly similar to those surrounding the death of her first son, Christopher, at 11 weeks in December 1996.

Christopher's death was originally diagnosed as sudden infant death syndrome. Harry's death brought Sally within the firing line of suspicion. What no one knew throughout the first trial and the original appeal was that Harry was riddled with *Staphylococcus Aureus*, from tests taken from 8 samples from various sites of his body, including the cerebro-spinal fluid. Dr Williams had been sitting on these results since February 1998. He had discounted the results and without alerting any one to their existence had stated that he did not believe Harry had died as a result of any pre-existing disease. This was a major ground of appeal.

As Clare Montgomery QC submitted in her forceful skeleton argument:

The whole trial proceeded on the basis that there was no natural explanation for non-artefactual bleeding in Harry, no evidence of natural disease and no natural explanation for his death. Defence experts were repeatedly forced to concede that there was no evidence of infection or other natural causes. Sally Clark was driven to accept that she could not explain how Harry died or why he might have bled. Dr Williams never volunteered the information that there was evidence of infection (even if he personally did not believe it).

When the jury asked 'Are there blood tests results for Harry?' Dr Williams gave a deliberately misleading answer. The degree of deliberation involved is confirmed by the fact that it is now clear from the police investigation, carried out in 2002, that Dr Williams must have consulted the files that contained toxicology, virology and microbiology results for Harry before answering the question.

Another paradigm of expert error, straying off one's expertise or 'hubris' (call it what you will) arose in this case. I refer to the infamous 'Meadow's Law'.

PROFESSOR SIR ROY MEADOW – a very public fall from grace : MEADOW V GENERAL MEDICAL COUNCIL [2007] 2 W.L.R. 286

Professor Sir Roy Meadow was an establishment figure of undoubted eminence. He coined the term Munchausen's Syndrome by proxy (MSbP) and was a renowned paediatrician hugely respected in the Criminal and Family Courts. His evidence at Sally's trial turned out to be seriously flawed, and her father made a complaint against him to the General Medical Council [GMC]. He told the Jury that the chance of two cot deaths in a family like the Clarks (affluent and educated) was 1 in 73 million. This was criticised as seriously misleading but he justified his remarks after Sally's conviction by stating that none of the experts called by the Crown had considered sudden infant death syndrome to be a viable theory and thus his example, however flawed, simply could not have misled the Jury.

The Judges in the first appeal had likewise played down its prejudicial effect on the Jury – even though an almost DNA like 'Prosecutors' fallacy' had been introduced into the Crown's closing speech⁵. In contrast, the second Court of Appeal expressed a diametrically opposed view to the effect that it was dramatic evidence which could only have had a dramatic and prejudicial impact on the Jury.

It was against this background that Professor Meadow appeared before the GMC's fitness to practise panel. The panel found that although Sir Roy had acted in good faith his error constituted serious professional misconduct and ordered that his name be erased from the register.

At first instance, Collins J allowed the Sir Roy's appeal, holding that immunity from suit enjoyed

⁵ As with DNA results there is a danger of the Jury being misled into thinking that the odds of innocence are/were 73 million to 1

by an expert witness in respect of evidence he gave in court extended to disciplinary proceedings, unless the witness's shortcomings were sufficiently serious for the Judge hearing the case to refer the expert's conduct to the relevant disciplinary body. His reasons included that if immunity was not extended experts would be more reluctant to give evidence in proceedings for risk of disciplinary action. Collins J further found that the doctor had not been guilty of serious professional misconduct and quashed the order for erasure.

On appeal, the Court of Appeal allowed the GMC's appeal. It was held that the common law immunity from civil suit was capable of extension to professional disciplinary proceedings, but there was no principled basis for an extension to all fitness to practise proceedings since their purpose was to protect the public and if the conduct of an expert witness raised the question whether that expert was fit to practise in his particular field, the regulatory authorities should be entitled and might be bound to investigate. It was a matter for Parliament where regulation was statutory or otherwise for the relevant authorities to decide what changes, if any, were required to limit the powers of a fitness to practise panel by extending immunity from civil suit. It was inappropriate for the trial judge or the Court of Appeal to be the sole arbiter of who should be immune from fitness to practise proceedings. The Court of Appeal went on to find that Sir Roy Meadow's misconduct was not, in all the circumstances, sufficiently serious to justify a finding of serious professional misconduct and affirmed Collins J on this point.

It is worth pointing out that the Select Committee of the House of Commons did not absolve the lawyers from blame when they picked over the entrails of this case:

169. Most informed observers seem to accept that Professor Sir Roy Meadow gave his evidence in good faith, no matter how erroneous it turned out to be. Yet he has been publicly vilified through the extensive media reports that focussed on his role in the miscarriages of justice in the Clark and Cannings cases. By contrast, little attention was given, at least in public, to the lawyers and judges involved, who may have been able to prevent the miscarriage of justice from being carried out, but failed to do so. In oral evidence to this inquiry, Professor Sir Alec Jeffreys expressed his amazement that the flaws in Professor Sir Roy Meadow's statistical evidence were 'not tracked right at the beginning', describing it as 'a failure not only of the experts but also of the courts'.

CONFIRMATION BIAS

This is another insidious danger which lawyers must recognise and combat but almost always overlook. It is naïve but too easy to imagine that experts are free from bias or subliminal influences. The work of Dr Itiel Dror⁶ (and his colleagues) is of immense assistance and instruction in this field. As Dr Dror has written in a forensic report which I have been permitted to quote from:

⁶ Dr Itiel Dror (born 1961) is the Principal Consultant at Cognitive Consultants International Ltd., and a Senior Lecturer at the School of Psychology, Faculty of Medicine, Health and Life Sciences, at the University of Southampton, Hampshire, UK. He received his PhD from Harvard in 1994 and his research focuses on understanding the information processing underlying human cognition and performance. Further details are available at his webpage, at: www.users.ecs.soton.ac.uk/id.

'Are experts immune from influences and biases? The short answer is 'no', experts across domains are susceptible to such biases. Indeed erroneous identifications because of bias have led in the medical and military domains to incorrect medical diagnosis and military friendly fire.

In the forensic domain there is clear evidence how context, such as knowledge of a target identification has led to erroneous identification. These have occurred in the most reliable and well established forensic domains: DNA (e.g., Thompson, 1995) and fingerprint identification (e.g., Stacey, 2004).

How can competent, well trained, and qualified dedicated experts, in the most established forensic domains, make errors? The answer is top-down influences, such as targets, that interfere and bias the objective perception and evaluation of visual patterns. This is not only supported by research (described below), but has been documented in real criminal cases.

Take for example the US Federal Bureau of Investigation's (FBI) erroneous identification of Brendan Mayfield as the Madrid bomber. Senior fingerprint experts matched the latent print to a Muslim convert who had a military background. The identification was further verified by two additional senior FBI fingerprint experts. Even an independent expert appointed by the court on behalf of the defence matched the print to Mayfield. All experts concluded 100% that it was Mayfield's print (see Stacey, 2004).

After the incorrect identification was exposed by coincidence, the FBI's report on this error, as well as a report by the U.S. Justice Department's Office of the Inspector General (OIG), concluded that confirmation bias played a role in the erroneous identification. The existence of the target caused experts to incorrectly match the prints. The low quality of the latent print made the introduction of a target a powerful influence that can easily bias the identification'.

Perhaps Dr Dror's most disturbing empirical research in this area concerns finger print identification and the 're-packaging' of old cases where the experts under review had expressed unambiguous opinions as to identity. He describes it as follows:

'In two empirical field studies data was collected covertly from fingerprint experts during their routine everyday work in the fingerprint bureau. In these two separate studies the experts were presented with fingerprints within a context that a target print was (or was not) a match. Unknowingly to the experts, they were actually presented with a pair of prints that they themselves had previously examined in real criminal cases years ago and then judged them as matches (or as non-matches – in the cases they previously judged them as a match they were now re-introduced within a context that they were not a match, and those who were judged in the past as non-match were now re-presented in a context that they were a match). The prints themselves (the bottom-up information) were exactly the same as those they judged in the past, except that their context (the top-down information) was repackaged so as to suggest that the prints did (or did not) match

(Dror, Charlton, and Peron, 2006; Dror and Charlton, 2006).

The findings were that many of the experts in the new context made totally different and conflicting judgements to those they made in the past: 80% in one study and 38% in the other study (for full details see Dror, Peron, and Charlton, 2006; Dror and Charlton, 2006). Again, consistent with the huge body of scientific literature, the biasing effects were most pronounced in the cases where the data was of low resolution and quality.

Thus, there is clear scientific evidence, as well as documented real criminal cases, that demonstrate how highly skilled experts are affected by context, such as a target identification. These effects limit objective data-driven identification, and can (and have) lead to errors in identification.'

THE FUTURE

- The Council for the Registration of Forensic Practitioners (CRFP) was established in 1999 to give the courts a single point of reference on the competence of forensic practitioners. The overriding aim of the CRFP is 'to promote public confidence in forensic practice in the UK'. Together with the other Expert Witness academies or institutes there must be a concerted drive for quality and best practice.
- Lawyers and Judges must become articulate and must understand the nature of the subject they are engaged in. Training and funding for training and assistance is vitally important.
- As the House of Commons Select Committee on Science and Technology suggested, a Forensic Science Advisory Council should be established and then develop a 'gate-keeping' test for expert evidence. 'This should be done in partnership with judges, scientists and other key players in the criminal justice system, and should build on the US Daubert test'.
- Procedural Safeguards are another factor that ought to be carefully considered – see this extract from Bowman [2006] EWCA Crim 4:

Experts

174. In *R v Harris and Others* [2006] 1 Cr App. R.5 this court gave guidance in respect of expert evidence given in criminal trials (see page 55). The way that the expert reports have been prepared and presented for this appeal leads us to believe that it would be helpful to give some further guidance in order to underline the necessity for expert reports to be prepared with the greatest care.

175. On 14 February 2006 the Attorney General, announcing the outcome of his review of Shaken Baby Syndrome cases published three papers including a booklet entitled 'Disclosure: Expert's Evidence and Unused Material- Guidance Booklet for Experts'. The instructions contained in this booklet were 'designed to provide a practical guide to disclosure for expert witnesses instructed by the Prosecution Team'. The booklet sets out

three key obligations arising for an expert as an investigation progresses. The relevant steps are described as to retain, to record and to reveal. No doubt any expert instructed by the prosecution will, of course, comply with these guidelines. What follows applies equally to experts instructed by the prosecution and defence.

176. We desire to emphasise the duties of an expert witness in a criminal trial, whether instructed by the prosecution or defence, are those set out in Harris. We emphasise that these duties are owed to the court and override any obligation to the person from whom the expert has received instructions or by whom the expert is paid. It is hardly necessary to say that experts should maintain professional objectivity and impartiality at all times.

177. In addition to the specific factors referred to by Cresswell J in the *Ikarian Reefer* [1993] 2 Lloyd's Rep 68 set out in Harris we add the following as necessary inclusions in an expert report:

1. Details of the expert's academic and professional qualifications, experience and accreditation relevant to the opinions expressed in the report and the range and extent of the expertise and any limitations upon the expertise.
2. A statement setting out the substance of all the instructions received (with written or oral), questions upon which an opinion is sought, the materials provided and considered, and the documents, statements, evidence, information or assumptions which are material to the opinions expressed or upon which those opinions are based.
3. Information relating to who has carried out measurements, examinations, tests etc and the methodology used, and whether or not such measurements etc were carried out under the expert's supervision.
4. Where there is a range of opinion in the matters dealt with in the report a summary of the range of opinion and the reasons for the opinion given. In this connection any material facts or matters which detract from the expert's opinions and any points which should fairly be made against any opinions expressed should be set out.
5. Relevant extracts of literature or any other material which might assist the court.
6. A statement to the effect that the expert has complied with his/her duty to the court to provide independent assistance by way of objective unbiased opinion in relation to matters within his or her expertise and an acknowledgment that the expert will inform all parties and where appropriate the court in the event that his/her opinion changes on any material issues.
7. Where on an exchange of experts' reports matters arise which require a further or supplemental report the above guidelines should, of course, be complied with.

178. In this case, at times, some of the experts expressed to the court for the first time

opinions which had not featured in their reports. A number of additional reports were also supplied at a late stage. Mr Martin-Sperry explained forcefully the funding constraints and difficulties faced by those representing the appellant in approaching and obtaining experts' reports. We are mindful of these difficulties and aware of the constraints placed on the appellant's advisers in this appeal but they do not wholly explain why some of the material placed before the court was not included in the relevant expert's initial report. They also do not explain or excuse the failure to refer to the instructions given and material provided before the reports were written. Failure to adhere to the guidelines can cause considerable difficulties and some delay in the conduct of the proceedings. These remarks are designed to help build up a culture of good practice rather than to be seen as critical of the experts in this case. We should add that it may be that some of the difficulties experienced by the experts were caused by late supply to them of information, from whatever source.

CONCLUSION

We are dealing with an imperfect system, prone to human error, conscious and unconscious bias, and subject to subliminal influences - but more often than not the participants are (in their own way) simply doing their best. Faced with the odd one out, that belligerent and dogmatic expert of legend, perhaps the last resort of the lawyer is to echo the words of Oliver Cromwell: 'I beseech you in the bowels of Christ, think not that you might be mistaken?'

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This paper was first delivered at the Second National Forum on Expert Evidence in Criminal Proceedings: Strategies for Avoiding Wrongful Convictions and Acquittals, at the Osgoode Hall Law School, York University, Toronto, Canada on Saturday, November 3, 2007.

7 For a mesmerising soliloquy, where this quotation was deployed in a different context, see Dr Jacob Bronowski's speech to camera at Auschwitz, in the BBC science programme 'The Ascent of Man' - <http://www.youtube.com/watch?v=8mIfatdNqBA>