

Assessing witness credibility and reliability: engaging experts and disengaging *Gage*?

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Introduction

Notwithstanding the increasing ‘scientisation’¹ of proof as represented by the rapid growth of new forms of evidence like CCTV and computer records, and the increasing (and now expected)² use of forensic evidence in criminal cases, the evidence of witnesses who observe events and other facts remains crucially important in the criminal justice system. Certainly, witness reports are the most common reason for launching police investigations³ and, along with confessions, the principal determinant of whether crimes are solved.⁴ Furthermore, the fact that errors of identification always head the list – and by some margin – whenever attempts are made to assess the causes of miscarriages of justice,⁵ provides another reason why witness evidence remains of prime importance for evidence lawyers. Ferguson in this volume has demonstrated problems that witnesses have in accurately perceiving, remembering and recalling the identity of criminal suspects.⁶ However, another reason why witness testimony is so problematic for the criminal justice system is the difficulties jurors and other fact-finders face in assessing, not just the accuracy, but also the honesty, of witnesses. Thus, another significant cause of miscarriages of justice is the failure of fact-finders to detect perjury by prosecution witnesses, especially accomplices and others testifying in return for favourable treatment.⁷

This chapter explores the extent of these difficulties and whether expert witnesses on the psychology of witnesses can and should assist fact-finders in improving their evaluation of witnesses of fact. At present, the Scottish courts have set their face against allowing psychologists and psychiatrists to testify about the general credibility and reliability of

¹ MR Damaška, *Evidence Law Adrift* (1997: Yale UP), pp. 143-144.

² R Wheate, ‘The importance of DNA evidence to juries in criminal trials’, (2010) 14 *E & P* 129 on the so-called CSI effect.

³ See e.g. PA Tollestrup, JW Turtle and JC Yuille, ‘Actual victims and witnesses to robbery and fraud: An archival analysis’, in DF Ross, *et al* (eds), *Adult Eyewitness Testimony: Current Trends and Developments* (1994: CUP), 144 at p.152.

⁴ PW Greenwood, JM Chaiken, JR Petersilia, LL Prusoff, RP Castro, K Kellen, S Wildhorn *The Criminal Investigation Process Volume III: Observations and Analysis* (1975), ix, chapter 6; M McConville, A Sanders and R Leng, *The Case for the Prosecution: Police Suspects and the Construction of Criminality* (1993: Routledge), p. 57.

⁵ Estimates range from around 74-90% of US cases involving post-conviction exoneration through DNA evidence: see KA Findley, ‘Learning from our mistakes: A criminal justice commission to study wrongful convictions’, (2002) 38 *California Western Law Review* 333, pp. 339-340; GL Wells, M Small, S Penrod, RS Malpass, SM Fulero and CAE Brimacombe, ‘Eyewitness identification procedures: recommendations for lineups and photospreads’, (1998) 22 *Law and Human Behavior* 603, p. 615. Although Scottish pre-trial identification procedures are somewhat better than those in the US, the problems they cause are swamped by the impact of inherent limits to witnessing ability: cf C Walker, ‘Miscarriages of justice in Scotland’, in C Walker and K Starmer (eds), *Miscarriages of Justice: A Review of Justice in Error* (1999: OUP), 323, pp. 324-325, on Scottish miscarriages of justice.

⁶ See chapter....[Editors to complete]

⁷ Findley, *ibid*, pp. 339-340; G Gudjonsson, *The Psychology of Interrogations and Confessions: A Handbook* (2003: Wiley), chapter 7; S Kassin, ‘Judging eyewitnesses, confessions, informants and alibis: what is wrong with juries and can they do better?’, in A Heaton-Armstrong, E Shepherd, G Gudjonsson and D Wolchover (eds), *Witness Testimony: Psychological Investigations and Evidential Perspectives* (2006: OUP), 345, pp. 357-358.

witnesses. Such experts (henceforth simply called psychological experts)⁸ have long been allowed to testify where issues of psychology and psychiatry are directly raised, for instance, by accused persons denying their fitness to plead or pleading mental disorder or diminished responsibility. More recently, as we shall see,⁹ expert testimony has been admitted on the indirect issue of whether witnesses as to facts in issue can be relied on, but only where such witnesses have ‘a recognised medical condition’ or other ‘special feature’ which affects their ability to provide reliable evidence.

In all other cases of witness reliability and credibility, the High Court has authoritatively declared in *Gage v HMA*¹⁰ that such evidence is inadmissible as it is not ‘necessary for the proper resolution of the dispute’ and for jurors or other fact-finders to reach ‘a sound conclusion’. This is because, as Lord Gill put it, relying on both reasons of alleged fact and legal policy:

‘Questions of credibility and reliability are pre-eminently matters for the tribunal of fact. Our system of jury trial proceeds on the basis that jurors, as people of ordinary intelligence and experience, are capable of assessing the credibility and reliability of a witness without expert assistance. For opinion evidence to be admissible ...[it] must not usurp the function of the jury’.¹¹

In addition, Lord Gill pointed to two other sets of reasons for the categorical exclusion of expert testimony on ‘normal witnesses’. The first, which seems to contradict the assumptions about fact-finders’ evaluation abilities to discern witness unreliability,¹² involves the already existing safeguards against unreliable evidence, namely judicial warnings to juries about potentially unreliable evidence which refer to specific considerations that might affect its reliability as well as defence lawyers highlighting potential problems in cross examination.¹³ The second involves the worry that expert testimony on witness psychology will lead to trials being inordinately prolonged and degenerating into battles of the experts, which might create a ‘climate of disbelief’ about witness testimony and distract jurors from making a ‘proper appraisal’ of witnesses.¹⁴

This chapter has three aims. The first is to question the empirical validity of the High Court’s faith in the ability of fact-finders to reach sound conclusions about witness credibility and reliability and in existing safeguards against them making mistakes, and its assumption about the dangers of psychological experts. Secondly, it questions the High Court’s adoption of an admissibility test for expert evidence. Finally, it argues that the law should instead embrace a test of helpfulness or assistance and, illustrates how such a test incorporates all relevant admissibility enquiries. These include the additional two reasons Lord Gill gives for excluding psychological experts, as well as the very recently introduced requirement that

⁸ Given that psychology is concerned with both healthy minds and those afflicted by various problems, whereas psychiatry is only concerned with the latter: FE Raitt and MS Zeedyk, *The Implicit Relation of Psychology and Law: Women and Syndrome Evidence* (2000: Routledge), pp. 16-17.

⁹ Section A.4.

¹⁰ [2011] HCJAC 40; 2011 SCL 645, discussed by A Roberts, ‘Expert evidence on the reliability of eyewitness identification – some observations on the justifications of exclusion: *Gage v HM Advocate*’, (2012) 16 *E & P* 93.

¹¹ [2011] HCJAC 40, para. 21.

¹² E Stein, ‘The admissibility of expert testimony about cognitive science research on eyewitness identification’, (2003) 2 *Law, Probability and Risk* 295, p. 298.

¹³ [2011] HCJAC 40, paras. 29-30.

¹⁴ *Ibid*, para. 32.

expert testimony is based on ‘a reliable body of knowledge or experience’.¹⁵ Combining both these empirical and legal questions, we argue that the categorical rejection of all expert evidence on the credibility and reliability of witness testimony is not justified, but nor is an approach which admits all such evidence. Instead, admissibility should depend on weighing up a variety of contextual and legal factors relating to the content, function, value and reliability of expert evidence, the relevance of which will emerge in the course of our critique of the *Gage* decision.

A. THE LAW GOVERNING THE ADMISSIBILITY OF EXPERT TESTIMONY

1. The necessity test: built on shaky foundations

Prior to *Gage*, no Scottish case had discussed any distinction between necessity and assistance as tests for the admission of expert evidence. With physical evidence, even of a novel nature, no such test was mooted because it was always assumed that such expert testimony was necessary since fact-finders will not know about DNA, ballistics and the like unless explained by an expert. It seemed equally clear that evidence about a medical condition or illness affecting the mind requires to be explained by someone with relevant professional knowledge. Consequently, psychiatrists and psychologists were allowed to give expert evidence where witnesses were subject to some form of ‘abnormality’. In *Gage*, however, the proffered expert evidence related to the witnessing ability of a ‘normal’ witness, and for the first time the Scottish courts explicitly adopted an admissibility test of necessity rather than the helpfulness test argued for by defence counsel and assumed by one of the few commentators to touch on the issue.¹⁶ According to Lord Gill a helpfulness test was ‘not supported by authority’ and was ‘unworkable in practice’.¹⁷ No justification was given for the latter point, but in support of his adoption of a necessity test, Lord Gill quoted the leading English case of *R v Turner* in which Lawton LJ famously stated that:

‘An expert's opinion is admissible to furnish the court with scientific information which is likely to be outside the experience and knowledge of a judge or jury. If on the proven facts a judge or jury can form their own conclusions without help, then the opinion of an expert is unnecessary. In such a case if it is given dressed up in scientific jargon it may make judgment more difficult. The fact that an expert witness has impressive scientific qualifications does not by that fact alone make his opinion on matters of human nature and behaviour within the limits of normality any more helpful than that of the jurors themselves; but there is a danger that they may think it does.’¹⁸

However, it is not clear that Lawton LJ intended to lay down a necessity test. He refers to the expert being ‘helpful’ and thus could be said to be saying that expert evidence which is not helpful is not necessary, but that which is helpful is necessary. Indeed, in England and Wales the *Turner* test has been interpreted as one of ‘helpfulness’¹⁹ (which incidentally has been taken to apply to all expert evidence rather than just that of psychologists). Consequently, it is

¹⁵ *Kennedy v Cordia (Services) LLP* [2016] UKSC 6; 2016 SLT 209, para. 44. See also *Young v HM Advocate* 2014 SLT 21; 2014 SCL 98 and the discussion below.

¹⁶ ID MacPhail, *Research Paper on the Law of Evidence of Scotland*, (1979) Scottish Law Commission, para. 17.06.

¹⁷ *Gage*, para. 22

¹⁸ [1975] QB 834, p. 841, quoted in *Gage*, para. 25.

¹⁹ See, for example, P Roberts and A Zuckerman, *Criminal Evidence*, (2nd edn, 2010: OUP), pp. 486ff.

arguable that Lord Gill's approach in *Gage* was based on a misreading of *Turner*. Moreover, it is out of line, not just with English, but also US²⁰ and Australian, law.²¹

Indeed, in Scotland there have been recent signs of a more liberal helpfulness or assistance test, albeit not specifically in relation to expert evidence on the credibility or reliability of witnesses. Thus in *Young v HM Advocate*²², a case involving proffered psychological evidence on case analysis linkage, a form of offender profiling, the High Court stated that:

'Evidence about relevant matters which are not within the knowledge of everyday life reasonably to be imputed to a jury or other finder of fact may be admissible if it is *likely to assist* the jury or finder of fact in the proper determination of the issue before it.'²³ (emphasis added).

Admittedly, the possibility of a more stringent necessity test had not been raised and therefore the helpfulness test cannot be said to have been expressly adopted. Moreover, the Scottish courts have always taken a more liberal approach to psychological experts whose testimony relates to 'the proper determination of the issue' before the court, rather than credibility and reliability of specific witnesses. On the other hand, no Scottish court has ever suggested that different types of evidence demand different admissibility tests. Instead, the *dicta* suggest a single test; it is just that it is bypassed where it is clearly met and only discussed in cases of doubt.

Nor should it be thought that the distinction between a necessity and helpfulness test is merely one of semantics. Helpfulness denotes something that the jury can manage without, but which enables them to do a better job. Necessity, on the other hand, involves a categorical distinction – evidence is either necessary or it is not – and a necessity test is far more difficult to satisfy. Courts which are keen to exclude certain types of expertise are thus more likely to adopt a necessity test, as the High Court did in *Gage*, presumably motivated by the desire to uphold the fact-finding authority of the jury, and that of all fact adjudicators, and perhaps also to resist the suggestion that for centuries courts have made unsound decisions about witnesses.

2. Opinion versus social framework evidence

That the distinction between necessity and helpfulness is significant was implicitly recognised by the Supreme Court in *Kennedy v Cordia (Services) LLP*,²⁴ a Scottish personal injury appeal, which has further eroded the reach of the *Gage* necessity test. Here, the correctness of a necessity test was specifically raised and was expressly limited by the Court to experts who give opinion evidence rather than the separate category of 'skilled evidence of factual matters, in which he or she draws on knowledge that is not derived solely from personal observation or its equivalent.'²⁵ Although the Court did not define the difference

²⁰ Federal Rules of Evidence, Rule 702.

²¹ See, for example, *Murphy v R* [1989] HCA 28; *Thirukkumar v Minister for Immigration and Multicultural Affairs* [2002] FCAFC 268 (2002), para. 33. In fact, here legislation has expressly provided that opinion evidence is not inadmissible only on account of the fact that it is about 'a matter of common knowledge': see, the Victorian Evidence Act 2008, s. 80(b). In Canada the Supreme Court moved in *R v Mohan* [1994] 2 S.C.R. 9. from the previous 'helpfulness' test in *R v Abbey* [1982] 2 S.C.R. 24. to one of necessity, despite both cases having been based on *Turner*.

²² [2013] HCJAC 145; 2014 SLT 21; 2014 SCL 98.

²³ *Ibid*, para. 54.

²⁴ [2016] UKSC 6; 2016 SLT 209.

²⁵ *Ibid*, para. 41.

between these expert functions,²⁶ from the examples given of the latter (engineers describing how machines are configured, how motorways are built) and from the application of the law to the facts, it seems to have distinguished an expert who merely provides background knowledge which assists a court in making a decision on proffered facts in issue from an expert who goes further to suggest what inference should be drawn from the proffered facts. In the case of the former the Court held that the admissibility test ‘cannot be strict necessity as, otherwise, the court could be deprived of the benefit of a skilled witness who collates and presents to the court in an efficient manner the knowledge of others in his or her field of expertise.’²⁷

While *Kennedy* did not involve psychological experts, there is nothing to suggest that the Supreme Court only intended its distinction to apply to the health and safety experts involved in that case. The Court did acknowledge that it has no jurisdiction to lay down a test for criminal cases,²⁸ but equally there seems to be no justification for a different approach in criminal cases from that used in civil cases. *Prima facie*, this suggests that the Scottish courts may, in future, be prepared to apply a weaker assistance or helpfulness test where, as often occurs in the US,²⁹ psychological experts merely testify as to relevant research findings on the accuracy of witness accounts without giving an opinion on the likely accuracy of the witnesses at trial. This is sometimes called ‘social framework evidence’³⁰ because it provides evidence as to the social and psychological context relevant to the actions and state of mind of legal actors, thus enabling fact adjudicators ‘to arrive at a more informed interpretation of the facts.’³¹ Social framework evidence thus plays the same role as generalisations about how the world works in providing the necessary basis to draw inferences from facts. In other words, just as fact-finders are enabled to make inferences from facts based on knowledge provided by an expert about how machines are configured, so are they enabled to draw inferences from knowledge provided by an expert on how minds are configured. Social framework evidence is clearly far less problematic as regards Lord Gill’s concern regarding the usurpation of juries and other fact-adjudicators because it leaves them far freer to draw their own inferences from the witnesses’ testimony than the more definitive opinion of an expert.

Moreover, it remains unclear how *Kennedy* can be reconciled with *Gage*. Certainly, if they conflict, *Gage* is the authoritative criminal law case and there are hints of Lord Gill’s resistance to even the provision of skilled evidence of fact relating to the reliability of witnesses. Thus, he stated:

‘In all of the cases in which expert evidence has been admitted in our courts, the evidence was specific to the facts of the case, and usually specific to a particular

²⁶ This distinction is recognised in England where it has statutory status in civil cases: Civil Evidence Act 1972, s. 3, a provision not mentioned in *Kennedy*.

²⁷ [2016] UKSC 6; 2016 SLT 209, para. 46.

²⁸ *Ibid*, para. 37.

²⁹ See for, example, *People v McDonald*, 37 Cal3d 351 208 Cal Rptr 236 (California Supreme Court) 1984, 371; *US v Downing*, 753 F2d 1224 (3d Cir 1985); *US v Smith*, 736 F2d 1103, 1105 (6th Cir 1984); *US v Stevens*, 935 F2d 1380, 1397 (3d Cir 1991); *US v Mathis*, 264 F3d 321, 333; *US v Smithers*, 212 F3d 306, 314 (6th Cir 2000).

³⁰ The concept was introduced by L Walker and J Monahan, ‘Social frameworks: a new use of social science in law’ (1987) 73 *Virginia L Rev* 559 and while usually associated with various means to counter myths about rape, domestic violence, etc it is also regarded as applying to witness testimony: Raitt and Zeedyk, *The Implicit Relation* p. 177. There is some indication that such evidence may be accepted in England too, even on credibility issues – in *R v S* [2006] EWCA Crim 2389, the Court of Appeal declared psychological evidence of the general functioning of autistic children was admissible (although a general rule was not explicitly laid down). Such evidence was also admitted on early memories in *R v JH, TG* [2005] EWCA Crim 1828.

³¹ FE Raitt, ‘Expert evidence as context: historical patterns and contemporary attitudes in the prosecution of sexual offences’, (2004) 12 *Fem LS* 233, p. 236.

witness. Professor Valentine has conducted no case specific tests or research. He can only alert the court to some of the factors that might in general affect the reliability of identification evidence. Much of his report has no bearing on the facts of this case.’³²

However, it is not clear whether he is suggesting a blanket ban on ‘social framework evidence’ relevant to witnesses, reinforcing the need for special features on the part of the witness in question, or upholding the general requirement that all expert evidence must be relevant to issues at stake,³³ or simply supporting his conclusion³⁴ that: ‘[i]t is not for Professor Valentine now to offer a view on whether a particular witness was reliable.’³⁵ Nevertheless, whatever the exact import of Lord Gill’s comments, and their relation to the distinction made in *Kennedy*, the latter does provide some support for a more liberal test of the admissibility of expert evidence on witness psychology.

3. Credibility versus reliability

Additional support may be derived from another distinction overlooked in *Gage* – and indeed all modern Scottish cases – which can also be used to challenge the court’s categorical approach to the exclusion of psychological evidence on witnesses without ‘special features’. Like all other relevant cases, *Gage* conflates the credibility and reliability of witnesses without recognising an important distinction between them pertaining to the admissibility of psychological experts. In ordinary language, which is consistent with the apparent understanding of some writers³⁶ and courts³⁷ on the rare occasions where they discuss the concepts,³⁸ the term ‘credibility’ is used to refer to the question of whether someone is telling the truth and ‘reliability’ to whether their honest testimony is likely to be accurate. No Scottish evidence text since 1825 has discussed these concepts in much detail.³⁹ Sometimes, credibility is said to include reliability questions, and sometimes, even in the same breath, given its own heading.⁴⁰ However, there is another, overlapping but different distinction

³² *Gage*, para. 36. Evidence of a similar kind was offered in *Snowden v HMA* 2014 SCL 736, and was excluded on the application of *Gage* - see para. 67.

³³ Though here he only said that ‘much’ of the evidence has no bearing on the case.

³⁴ *Gage*, para. 35.

³⁵ If Lord Gill meant this, it is not controversial either in Scotland (*Wilson and Murray v HMA* [2009] HCJAC 58; 2009 JC 336) or in England and Wales (*R v H (Stephen)* [2014] EWCA Crim 1555).

³⁶ See ML Ross and J Chalmers, *Walker and Walker: The Law of Evidence in Scotland* (4th ed. 2015: Bloomsbury) para. 12.9.3; FE Raitt, *Evidence: Principles, Policy and Practice*, (2nd ed. 2013: Thomson/W. Green), paras. 12-19; AN Brown, *Criminal Evidence and Procedure: An Introduction*, (3rd ed., 2010: Avizandum), 4; M Stone, *Cross-Examination in Criminal Trials*, (3rd ed., 2009: Tottel), chapter 3 (reliability) and 4 (credibility), and M Stone, *Proof of Fact in Criminal Trials* (1984: W. Green), chapters 2-5 passim. Early evidence writers tended to concentrate on the motivations which might lead to a lack of credibility and on prior inconsistent statements, and rarely discussed concepts such as demeanour or how a witness’s credibility is assessed based on testimony: see, for example, WG Dickson, *A Treatise on the Law of Evidence in Scotland*, (3rd ed., 1887, Vol II, Title II: Bell and Bradfute), paras. 1616-1634, but cf WJ Lewis, *Manual of the Law of Evidence in Scotland* (1925: W Hodge & Co.), p. 253.

³⁷ For example, Dickson J. in the Supreme Court of British Columbia (*Gilbert v Bottle* 2011 BCSC 1389 at para. 9) stated: ‘... truthfulness and reliability are not necessarily synonymous. A witness may sincerely attempt to be truthful, but lack the perceptive, recall or narrative capacity to provide reliable testimony on a given matter.’

³⁸ Cf ID Macphail, *Scottish Criminal Evidence: Procedure and Practice* (2012: Avizandum Publishing Ltd.), para 4.10, noting that credibility and reliability are matters ‘about which law of evidence textbooks have traditionally had little to say’.

³⁹ See Bentham’s discussion of credibility and reliability, the latter in terms of perception, judgement, memory, expression and imagination: J Bentham, *A Treatise on Judicial Evidence* (1825: Baldwin, Cradock and Joy), p. 21.

⁴⁰ See, for example, E Bell, ‘An introduction to judicial fact-finding’, (2013) 39 *Commonwealth Law Bulletin*, 519, p. 525.

which relates more closely to the reason why courts may want to exclude expert evidence on witness psychology: the difference between credibility and reliability. This was recently highlighted by the High Court in *Jenkins v HMA*,⁴¹ albeit in relation to the finality of a jury's decision on appeal. Thus, having stated that questions of credibility and reliability are *normally* to be regarded as quintessentially jury questions (emphasis added), Lord Clarke went on to say that:

‘... it is important to have in mind that while questions of credibility and reliability are said often to shade into each other, they are distinct concepts.⁴² A witness may come across as entirely credible but, on reflection, be held to be unreliable. A person who is credible is one who is believed. A person who is reliable is one upon whom trust and confidence can be placed. Credibility may be judged on the moment, whereas reliability may be only capable of being addressed having regard to the person's “track record”, so to speak.’⁴³

If credibility, unlike reliability, is something which is judged ‘in the moment’, we can see why courts would not want to allow experts to opine on credibility. Credibility is purely about what witnesses say and how they present themselves in the witness box. It is about consistency, confidence, hesitancy, demeanour and reaction under pressure. The common law has always assumed – albeit not entirely correctly, as we shall see⁴⁴ – that these matters can be evaluated by the jury and other fact-finders as well as by anyone.⁴⁵ Consequently, it is no surprise that, in terms of the importance of orality and lay adjudication, credibility has been regarded as a matter entirely for the fact-finders’ common sense and past experiences of those who turned out to be lying or mistaken.

Over time, however, this understandable approach to credibility seems to have been extended to the different and much less discussed question of reliability, without any apparent realisation that reliability is different from credibility and that different considerations might apply. *Jenkins* seems to suggest that reliability is solely about a witness’s propensity and ability to give testimony that can instil ‘trust and confidence’ in the decision-maker. As Ferguson’s chapter makes clear, there are many other reasons why witnesses might not be reliable, flowing from, for instance:

- the conditions under which facts are observed (for instance the duration of observation, distance between witness and events, visibility, whether line of observation impeded, whether the perpetrator was known to the witness),
- the nature of the facts themselves (violent versus non-violent events, rapidly changing or static facts),
- when and how recall is elicited,
- the abilities of the witness (as affected, for instance, by age, vulnerability, illness and intoxicants).

Indeed, if credibility relates to ‘in the moment’ evaluations of witness honesty in terms of factors internal to the testimony, reliability can be said to involve all factors external to the

⁴¹ [2011] H CJAC 86; 2011 SCL 927.

⁴² See also the Scottish Jury Manual: Judicial Studies Committee, *Jury manual: some notes for the guidance of the judiciary*, 2012, para. 2.1.1.

⁴³ [2011] H CJAC 86; 2011 SCL 927, para. 44.

⁴⁴ Section B below.

⁴⁵ Cf Lord Justice-General Cullen in *MacKay v HMA* 2005 1 JC 24, para. 8, who stated that at least one reason why ‘[e]xpert evidence may be given ... as to the existence in a witness of a medical, psychiatric or psychological condition which could account for the witness giving an untrue account ... *is that it relates to matters which a jury do not have the opportunity to investigate* or the expertise to diagnose.’ (emphasis added).

testimony affecting the capacity,⁴⁶ propensity and ability of the witness honestly and accurately to recall relevant facts. To allow expert evidence on reliability would thus not involve experts testifying as to whether witnesses are honest but rather whether their testimony can be trusted, given certain factors external to their testimony.⁴⁷ Jurors will have seen and heard the testimony for themselves, and will have considered any non-expert attacks on reliability. They will have heard the rest of the evidence too, enabling them to assess witness testimony in the context of the whole case. Jurors will have been directed on issues of reliability and credibility. They will then put all of this together (including the expert's contextual reliability evidence) in order to make a decision on reliability. It is simply inaccurate, then, to refer to the psychologist 'substituting' the common sense of the jury,⁴⁸ and it is equally wrong to refer to 'trial by psychiatrist',⁴⁹ because the expert evidence simply gives the jury more information to make their assessment of the reliability of the witness's evidence. This is especially so when one considers the law's acceptance of what can, with more justification, be called 'trial by forensic scientist' which happens whenever full legal proof is constituted, for instance, by DNA or fingerprint evidence alone.⁵⁰ Moreover, the impact of such scientific evidence is more powerful on fact-finders as it points directly to guilt and comes from the more socially authoritative 'hard' sciences,⁵¹ whereas psychological expert testimony on reliability evidence merely offers assistance to the jury on how reliable evidence pointing to guilt is likely to be.

4. 'Special features' versus 'normal' witnesses

That the law does, in fact, take a more permissive approach to expert evidence on reliability (as opposed to credibility) can be seen from greater judicial and legislative willingness to allow psychological experts on reliability of witnesses. Thus, mirroring the English and Welsh courts' approach to the alleged 'abnormality rule' laid down in *Turner*,⁵² the Scottish judiciary has gradually expanded the qualification to the prohibition on psychological evidence on witnessing to the effect that it only applies to 'ordinary and normal'⁵³ witnesses. At first this qualification was confined to testimony on witnesses suffering from a 'mental illness',⁵⁴ 'objective medical condition',⁵⁵ or 'medical, psychiatric or psychological condition'.⁵⁶ Then it was extended, as noted in *Gage*,⁵⁷ to witnesses with 'special features'⁵⁸

⁴⁶ Cf *Gilbert v Bottle* 2011 BCSC 1389, para. 10, which refers to capacity.

⁴⁷ Cf *McBrearty v HMA* 2004 JC 122; 2004 SLT 917, per LJC Gill, para.49.

⁴⁸ *R v Turner* [1975] QB 834, p. 843.

⁴⁹ *Ibid.*

⁵⁰ For example, only recently have the Scottish courts had to consider some of the arguments around the reliability of DNA evidence: *McGarland v HMA* [2015] HCJAC 23; 2015 SCCR 192; 2015 SCL 471; *Dunbar v HMA* [2015] HCJAC 22; 2015 SCCR 186[please check]; 2015 SCL 465; and *Reid v HMA* [2016] HCJAC 41; 2016 SCL 448.

⁵¹ For a critique of the hard/soft science distinction, see, for example, DL Faigman, 'To have and have not: assessing the value of social science to the law as science and policy', (1989) 38 *Emory Law Review*, 1005.

⁵² See for example Roberts and Zuckerman, *Criminal Evidence*, p. 487 describing the 'abnormality rule' as 'nothing more than an eminently defeasible presumption about the type of evidence jurors usually find helpful'.

⁵³ *Grimmond v HMA* 2002 SLT 508, para. 11.

⁵⁴ *Ibid.*, holding that evidence that the complainer was a pathological liar would have been admissible had this been the case.

⁵⁵ *McBrearty*, para. 49. This view has persisted even after the advent of the 'special features' test, which is clearly wider: see the comments in *M v HMA (No.2)* [2013] HCJAC 22; 2013 SLT 380, paras. 38-39.

⁵⁶ *Mackay v HMA* 2004 SCCR 478, para.8.

⁵⁷ [2011] HCJAC 40, para. 17.

⁵⁸ In *HMA v A* 2005 SLT 975 where evidence from a psychiatrist that a complainer suffered from 'false memory syndrome' was admitted because she was in 'a complex mental state that was likely to be outside the experience of the members of a jury', per Lord Macphail, para. 15.

and increasingly over the years, such ‘special features’ have moved further away from an association with abnormal mental conditions.

Thus in *Blagojevic v HMA*⁵⁹ the court made clear that it would have allowed a clinical psychologist to testify that the accused had a tendency, under stress, to be suggestible had the accused laid the necessary foundation in fact by giving evidence. Then, in *Gilmour v HMA*,⁶⁰ another case on confession reliability, a forensic psychologist was allowed to testify that according to tests he had developed, the accused was highly suggestible and highly compliant at the time of his interview.⁶¹ No attempt was made to link this to a diagnosable medical, psychiatric or psychological condition or even some other special feature such as low IQ.⁶² Further support for the ever widening ambit of special features derives from *AJE v HMA*⁶³ in which a social worker who was present at the interview of two children alleging rape had testified that in her opinion they could give reliable evidence of sexual abuse despite denials and inconsistencies in prior statements. All three judges regarded the evidence, which had not been objected to at trial, as problematic, but seemed to be more exercised by the social worker’s lack of relevant expertise than the fact that she was commenting on reliability⁶⁴ and in fact Lord McCluskey stated that the evidence of a child psychologist in this case would have been admissible.⁶⁵ Moreover, the High Court was also critical of the trial counsel’s decision not to adduce evidence of a report from a forensic criminologist on the techniques used to interview children effectively, clearly thinking that such evidence would have been admissible.⁶⁶ It could be argued that children occupy a special group, but the courts in these cases do not indicate that this is the case, and an age-based approach could, at least to some extent, apply to the elderly.

Finally, in *Campbell v HMA*,⁶⁷ the High Court condoned the admission of the evidence of a forensic linguist and a cognitive psychologist called to establish the extreme unlikelihood of the accounts of various police officers (in noting a short incriminating statement) converging on a *verbatim* basis, and hence that they must have colluded in compiling the statements in their notebooks, despite their denials at the original trial. There was no suggestion that the police witnesses were anything other than of ‘ordinary and normal’ mind or particularly susceptible to pressure because of ‘special features’. This latter requirement seems to have simply been ignored in favour of admitting relevant and useful evidence by psychological experts.

Such an approach is also endorsed by Parliament. Thus, s. 275C of the Vulnerable Witnesses (Scotland) Act 1995 makes admissible ‘[e]xpert psychological or psychiatric evidence relating to any subsequent behaviour or statement of the complainer ... for the purpose of rebutting any inference adverse to the complainer’s credibility or reliability as a

⁵⁹ 1995 SLT 1189. See Lord Justice General Hope, p. 1192.

⁶⁰ [2007] HCJAC 48; 2007 SLT 893.

⁶¹ But cf *Wilson v HMA* [2009] HCJAC 68; 2009 JC 336, where the High Court adopted a less charitable view of Professor Gudjonsson’s evidence because it was regarded *inter alia* as addressing the ultimate issue.

⁶² Cf *Hodgson v HMA* [2012] HCJAC 55; 2012 SCL 817, where evidence of psychologists on the very low (borderline) IQ of the complainer was allowed to explain the complainer’s difficulty in discussing sexual matters; *LB v HMA* 2003 JC 94, where no objection was taken to using expert opinion on the impact of low IQ on the ability to understand the caution. For a discussion of some of the English cases on IQ and the artificiality of distinguishing between ‘normal’ and ‘abnormal’ witnesses, see RD Mackay, and AM Colman, ‘Excluding expert evidence: a tale of ordinary folk and common experience’, [1991] *Crim LR* 800.

⁶³ 2002 JC 215.

⁶⁴ *Ibid*, per Lord Justice Clerk Gill, paras. 13 and 14; Lord Hamilton, paras. 12 and 13; Lord McCluskey, para. 18.

⁶⁵ Lord McCluskey *ibid*. para. 18.

⁶⁶ See Lord McCluskey’s comments, *ibid*, para. 18 and *HMA v G* 2010 SLT 239, para. 17 where Lord Brodie appears to have considered expert evidence on child interviewing techniques to be admissible, in principle.

⁶⁷ 2004 SLT 397; 2004 SCCR 220.

witness which might otherwise be drawn from the behaviour or statement.’ While admittedly very narrow in being confined to the evidence of complainers in sexual offence charges, this provision indicates that Parliament does not always regard the admission of testimony of psychological experts as an unjustified usurpation of the role of the jury and other fact adjudicators⁶⁸ in the absence of special features of witnesses.

B. COMMON SENSE AND WITNESS EVALUATION

1. Introduction

There is thus great potential, if not for wholesale replacement of the necessity test with one based on helpfulness, then at least for the necessity test to be confined narrowly only to expert opinion as opposed to social framework evidence and/or to questions of witness credibility (as defined in *Jenkins*), as opposed to reliability (defined as all external factors affecting the ability of a witness to provide credible and reliable testimony). However, another means of challenging *Gage* is to question whether its prohibition on expert testimony on witness credibility and reliability absent ‘special features’ in fact flows from the application of the necessity requirement. Here, it is important to note that Lord Gill specifies that expert evidence must be necessary for a ‘*sound* conclusion’ or ‘*proper* resolution of the dispute’.⁶⁹ A sound decision can be defined as one which is ‘free from error, fallacy, or misapprehension’.⁷⁰ A ‘proper resolution’ of a dispute extends beyond a sound decision to encompass appropriate consideration of the values of the criminal justice system, including not just those of lay adjudication, orality and the day in court idea which underpin the prohibition on experts on witness testimony, but also crucially for our purposes, the notion of ‘principled asymmetry’⁷¹ which leads the law to ‘overprotect’⁷² criminal accused against unjust convictions through measures such as the allocation of the burden of proof, the criminal standard of proof, the right to silence, a right to legal representation, rules protecting suspects against unfair and oppressive police questioning, limits on the prosecution’s adversarial stance, prosecutorial duties of disclosure, the retention of exclusionary rules of evidence (abandoned in civil cases) and, for now at least, the corroboration requirement. Understood in this way, it is possible to argue that expert evidence on credibility and reliability is necessary even in the absence of special features of witnesses.

The High Court held otherwise because of its assumption that assessing the credibility and the reliability of witnesses is merely a matter of ‘life experience’ and ‘common sense’.⁷³ To some extent, this is belied by the number of miscarriages of justice flowing from mistaken misidentifications and lying prosecution witnesses which were not picked up by jurors and other fact-finders.⁷⁴ However, it is notoriously difficult to gain an

⁶⁸ Cf Roberts and Zuckerman, *Criminal Evidence*, p. 489, arguing that only Parliament can authorise trial by expert.

⁶⁹ [2011] HCJAC 40, para. 22 (emphases added).

⁷⁰ Merriam-Webster Online Dictionary, available at <http://www.merriam-webster.com/dictionary/sound> (last accessed 24 August 2016)

⁷¹ P Roberts and A Zuckerman, *Criminal Evidence*, (2nd edn, 2010: OUP), p. 19 .

⁷² D Luban, *Lawyers and Justice: An Ethical Study* (1988: Princeton UP) 60-63; and see D Nicolson and J Blackie, ‘Corroboration in Scots Law: ‘archaic rule’ or ‘invaluable safeguard’?’, (2013) 17 *Edin LR* 152, for the reasons behind this overprotection.

⁷³ [2011] HCJAC 40, paras. 30 and 35, respectively.

⁷⁴ See also more generally on the limits to common sense in this regard: Mackay and Colman, ‘Excluding expert evidence ...’; FE Raitt, ‘A new criterion for the admissibility of scientific evidence?’ in H Reece (ed.), *Law and Science: Current Legal Issues Volume 1* (1998: OUP), ?? especially at p. 157.

accurate idea of the extent of such failures.⁷⁵ A more persuasive source of evidence on the issue lies in the wealth of psychological studies on the accuracy of fact-finders in evaluating witness credibility and reliability, to which we now turn.

2. Credibility

Starting with ‘in the moment’ assessments of witness believability, a major focus for study has been the ability of fact-finders to discern honesty from demeanour. Here, folk wisdom holds that people are betrayed by the three ‘communication channels’ of face, body and voice.⁷⁶ Apparently, ‘from the United States across Europe, we look for a change in voice pitch, hesitations and speech errors, pauses, gaze aversion, fidgeting, smiling, and blinking.’⁷⁷ According to research, however, only some of these ‘common sense’ cues have a basis in reality. Given that facial cues are easily controlled, this is the least revealing communication channel. For instance, there is no evidence that liars are prone to averting their gaze or smiling less. More reliable signs emanate from the less controllable communication channels of body and voice. Thus, some studies reveal that liars frequently shift body posture and make fidgety feet and hand movements, though other studies reveal that liars tend to perform fewer body movements, particularly hand gesticulations. More consistently reliable is the tendency of liars to speak with raised voice pitch, more hesitantly and with greater speech errors.

Unfortunately, however, people pay most attention to faces and, after that, the body. And here, not only are some commonly assumed signs of lying misconceived, but even the more reliable signs may, in fact, be caused by the stress and anxiety involved in testifying in court. Ironically, it may be the worry that one is not being believed that leads to the signs associated with lying. Similarly, averting one’s gaze or other supposed indicia of lying, such as evasive or vague answers to questions may reflect shyness or different cultural norms – an endemic problem in immigration cases.⁷⁸ Moreover, there are problems even with the more reliable cues. One is that they cannot be easily detected with the naked eye or ear, but require special training or equipment. Secondly, not everyone displays the same signs or reacts in the same way when anxious, guilty or lying. Accordingly, unless we know a particular person’s usual behaviour, we cannot assess the significance of the presence or absence of certain behavioural signs. For example, raised voice pitch may reflect anger or excitement rather than untruthfulness, or, as in one Australian case, a voice tremor turned out to be caused by a speech impediment rather than uneasiness as was assumed.⁷⁹ Finally, practised liars can train themselves to avoid showing signs commonly thought to indicate untruthfulness. Even

⁷⁵ See references cited at n. 5 above.

⁷⁶ The following discussion draws on A Kapardis, *Psychology and Law: A Critical Introduction* (4th edn, 2014: CUP), chapter 8; M Stone, ‘Instant lie detection? demeanour and credibility in criminal trials’, [1991] *Crim LR* 821; J McEwan, *The Verdict of the Court: Passing Judgment in Law and Psychology* (2003: Hart Publishing), pp. 94-117; OG Wellborn, ‘Demeanor’, (1991) 76 *Cornell L Rev* 1075; A Vrij, ‘The assessment and detection of deceit’, in D Carson and R Bull (eds), *Handbook of Psychology in Legal Contexts* (2nd edn, 2003: Wiley) 67; A Vrij, ‘Credibility assessments in a legal context’, in D Carson, R Milne, F Pakes, K Shalev, and A Shawyer, A (eds), *Applying Psychology to Criminal Justice* (2007: Wiley), 81; JA Blumenthal, ‘A wipe of the hands, a lick of the lips: the validity of demeanor evidence in assessing witness credibility’, (1993) 72 *Nebraska Law Review* 1157.

⁷⁷ McEwan, *ibid*, p. 107.

⁷⁸ See for example, R Byrne, ‘Assessing testimonial evidence in asylum proceedings: guiding standards from the International Criminal Tribunals,’ (2007) 19 *International Journal of Refugee Law* 609.

⁷⁹ See P McClellan, ‘Who is telling the truth? Psychology, common sense and the law’, Local Courts of New South Wales Annual Conference 2006, available at <<http://www.austlii.edu.au/au/journals/NSWJSchol/2006/14.pdf>> (last accessed 1 November 2016)

children learn at very young ages to lie effectively⁸⁰. In summary, ‘there is nothing like Pinocchio’s nose’⁸¹ which betrays liars. Consequently, it is not surprising that the studies in laboratories (where admittedly lying ‘witnesses’ are less likely to be affected by anxiety and guilt than in real-life situations) suggest that fact-finders have little more than an even chance of assessing witness honesty based only on demeanour.⁸²

As regards other credibility cues which derive from the way witnesses testify,⁸³ here studies suggest that common sense fares better in focusing primarily on the consistency of a witness’s account,⁸⁴ the amount of detail provided, the witness’s speech-style (most notably whether it is in narrative as opposed to fragmented form⁸⁵ and involves what is called ‘powerful’ as opposed to ‘powerless’ speech)⁸⁶ and above all⁸⁷ witness confidence either expressly stated or inferred. Thus, recent research suggests that these factors do have some value as indicators of accuracy. For instance, the recall of events actually experienced, rather than imagined or the result of misleading suggestions, contain more contextual, spatial and sensory detail (time, place, colour and shapes), and are delivered more confidently, and with fewer verbal hedges, admissions of uncertainty and more reference to cognitive processing, such as what witnesses were thinking while observing facts. Unfortunately, however, experiments suggest that people are not particularly good at assessing accuracy from such ‘reality monitoring’ clues.

⁸⁰ See, for example, A Vrij and FW Winkel, ‘Detection of false statements in first and third-graders: the development of a nonverbal detection instrument’, in G Davies, S Lloyd-Bostock, K McMurrin and C Wilson (eds), *Psychology, Law, and Criminal Justice* (1996: de Gruyter), 221

⁸¹ Vrij, ‘The assessment ...’, p. 68.

⁸² Success rates have rarely been above 60%, with most studies reporting levels of between 45-60%: P Ekman and M O’Sullivan, ‘Who can catch a liar?’, (1991) 46 *American Psychologist* 913.

⁸³ See generally, EF Loftus, *Eyewitness Testimony* (1996: Harvard UP), chapter 2; BL Cutler and S Penrod, *Mistaken Identification: The Eyewitness, Psychology and the Law* (1995: CUP), chapters 12-13; see MR Leippe, ‘The appraisal of eyewitness testimony’, in DF Ross, JD Read, and MP Toglia (eds), *Adult Eyewitness Testimony Current Trends and Developments* (1994, CUP), 385.

⁸⁴ See Byrne, ‘Assessing testimonial evidence ...’; J Cohen, ‘Questions of credibility: omissions, discrepancies and errors of recall in the testimony of asylum seekers’, (2002) 13 *International Journal of Refugee Law* 293; J McEwan, ‘Reasoning, relevance and law reform: the influence of empirical research on criminal adjudication’, in P Roberts and M Redmayne (eds), *Innovations in Evidence and Proof: Integrating Theory, Research and Teaching* (2007: Hart Publishing) 187, pp. 196-197; M Boyce, J Beaudry and RCL Lindsay, ‘Belief of eyewitness identification evidence’, in RCL Lindsay, DF Ross, JD Read and MP Toglia (eds), *The Handbook of Eyewitness Psychology: Volume II: Memory for People* (2012: Psychology Press), 501, pp. 510-511;

⁸⁵ Namely, a coherent uninterrupted account as opposed to one derived from questions and answers: see for example WM O’ Barr, *Linguistic Evidence: Language, Power and Strategy in the Courtroom* (1982: Academic Press), especially pp. 76-83. [I can only find a 2014 edition; I can only access 1982 version in our library]

⁸⁶ With powerless speech being characterised by: the use of hedges, such as ‘it seemed’; modifiers like ‘sort of’ and ‘kind of’; hesitation forms like ‘um’; rising intonation as if seeking approval; repetition as an indication of insecurity; intensifiers, such as ‘very close friends’; frequent direct quotations as indicating a deference to others’ authority; polite forms of address; and empty adjectives such as ‘divine’ and ‘charming’: see eg O’ Barr, *ibid*; J M Conley WM O’ Barr, and EA Lind ‘The power of language: presentational style in the courtroom’, (1978) 1978 *Duke Law Journal* 1375.

⁸⁷ Perceived witness confidence accounted for more than 50% of the variance in participants’ assessment of witness accuracy: see for example GL Wells, RC Lindsay, and T. Ferguson, ‘Accuracy, confidence, and juror perceptions in eyewitness identification’, (1979) 64 *Journal of Applied Psychology* 440; and see also Cutler and Penrod, *Mistaken Identification*, pp. 207-209; RCL Lindsay, ‘Expectations of eyewitness performance: Jurors’ verdicts do not follow from their beliefs’, in Ross *et al.*, *Adult Eyewitness Testimony...*, 362, p. 373. Moreover, the impact of confidence is difficult to shake even when fact-finders are faced, as some real-life cases show, with conflicting evidence such as a confession by someone other than the accused or, as experiments show where confidence is debunked as an accurate clue by expert evidence: (MR Leippe, ‘The case for expert testimony about eyewitness memory’, (1995) 1 *Psychology, Public Policy and Law* 909, pp. 926 and 942, respectively),

In any event, these cues are less helpful in the much more common situation of assessing whether the recall of actually observed facts is mistaken and incomplete. Thus, witnesses with accurate memory of central details of events may remember few or no peripheral details.⁸⁸ Peripheral details are also more susceptible to subsequent alteration, especially if witnesses are required to make repeated reports and are questioned closely on these details.⁸⁹ Moreover, skilled questioners can easily induce witnesses into contradicting themselves. Conversely, even important details may be omitted from accounts because of their traumatic impact,⁹⁰ embarrassment or other understandable reasons. Fact-finders thus ought to be very cautious about reading too much into reports which contain inconsistencies or lack detail, not least because witnesses with accurate recall of central details of events may make mistakes on peripheral details⁹¹ and consistent accounts may reflect an ability to organise information rather than a coherent memory. Similar caution also needs to be exercised in making inferences about witnesses who appear to lack confidence, or speak hesitantly, as this may be due to personality traits like shyness or due to gender, race, or class rather than unreliability. Unfortunately, research shows that people are influenced by the social origins of speakers as revealed by accent and the educational sophistication of the language used.⁹²

As regards confidence, years of research reveals that, while it may be a reliable indicator of accuracy in certain circumstances, such as when witnesses are confident about one aspect of the facts but not others,⁹³ and for out-of-court identifications rather than courtroom testimony, more commonly there is at best only a modest link between witness confidence and accuracy, sometimes no link at all, and in rare cases even a negative correlation.⁹⁴ More worryingly, confidence can be artificially boosted by repeated questioning on issues on which witnesses have already provided information, asking witnesses to repeatedly think about their responses to questions, preparing witnesses for trials, and providing positive feedback on witness reports or when they pick out suspects.⁹⁵ Fortunately, the ban on investigating officers conducting VIPERs and traditional live line-ups (but not other forms of formal identification) prevent these line-up abuses, while the Lord Advocate's Guidelines also require officers to take steps to prevent witnesses communicating with each other and thereby boosting confidence levels. On the other hand, confidence (or at least the appearance of it) can be reduced by aggressive cross-examination, as well as the general unfamiliarity of and stress associated with court and other legal proceedings.⁹⁶ Nevertheless, a recent summary of research on witness confidence concludes that it is a

⁸⁸ Loftus, *Eyewitness Testimony*, 63.

⁸⁹ J McEwan, 'Reasoning, relevance and law reform ...', pp. 196-97.

⁹⁰ See Cohen, 'Questions of credibility ...'.

⁹¹ See for example GL Wells and MR Leippe, 'How do triers of fact infer the accuracy of eyewitness identifications? Using memory for peripheral detail can be misleading', (1981) 66 *Journal of Applied Psychology* 682.

⁹² The classic study is H Giles and PF Powesland, *Speech Style and Social Evaluation* (1975:CUP).

⁹³ But even then there is a 15% error rate: HL Roediger, J Wixted, and KA Desoto, 'The curious complexity between confidence and accuracy in reports from memory' in L Nadel and WP Sinnott-Armstrong (eds), *Memory and Law* (2012: OUP), 84, p. 109.

⁹⁴ See for example, Roediger *et al*, *ibid*; JS Shaw, KS McLure and JA Dykstra, 'Eyewitness confidence from the witnessed event through trial', in MP Toglia, JD Read, DF Ross and RCL Lindsay (eds), *The Handbook of Eyewitness Psychology: Volume 1: Memory for Events* (2007: Psychology Press), 371; CAE Luus and GL Wells, 'Eyewitness identification confidence ...', in Ross *et al*, *Adult Eyewitness Testimony*... 223. More specific references are given below.

⁹⁵ See for example RP Fisher and MC Reardon, 'Eyewitness identification', in Carson *et al*, *Applying Psychology*... , 21, pp. 32-33; N Brewer, N Weber and C Semmler, 'A role for theory in eyewitness identification research', in Lindsay *et al*, *The Handbook of Eyewitness Psychology* ... , 201 pp. 213-214.

⁹⁶ McEwan, *The Verdict of the Court* ... , p. 99; Leippe, 'The appraisal of eyewitness testimony ...', p. 396.

relatively reliable but imperfect indicator of accuracy – at least in the absence of any possible sources of post-event memory and confidence manipulation – and pertinently, in relation to recognition and recall shortly after the relevant incidents rather than much later in court.⁹⁷

More generally, we can conclude that reliance on witness confidence and speech-style and the consistency and detail of their accounts is not completely misguided, but will not necessarily lead to sound decisions, given their nuanced and sometimes misleading impact.

3. Reliability

A similarly nuanced picture applies to the extent to which common sense is sufficient to evaluate witness reliability. Admittedly, many studies of the factors that affect witness reliability merely confirm what many already know, for instance, that memory fades with time or children are less reliable witnesses than adults. However, such intuitions are unlikely to extend to the nuances of such phenomena, such as how memory fades or how soon children catch up with adults.⁹⁸ Moreover, many phenomena discussed in Ferguson's chapter (such as the impact of stress or the ineffectiveness of training on perceptual ability) are counterintuitive.

The apparent limits to common sense in assessing witness reliability are supported by numerous studies over more than thirty years, albeit predominantly in the sphere of eyewitness identification. Most commonly, subjects' knowledge of the various factors affecting witnessing has been directly sought by asking them to identify from a choice of statements about witnessing, or simply to agree or disagree with such statements and then comparing answers with those of experts taking the same survey. While early surveys revealed an average agreement rate as low as 24%, lay subjects' agreement with the experts has steadily increased,⁹⁹ with an agreement rate as high as 80% in a recent survey.¹⁰⁰ Gaining an overall picture of accuracy is, however, impossible because the surveys do not always focus on the same factors or use the same wording. However, a meta-analysis of 23 studies involving 4,669 respondents revealed an average agreement rate of 68% on 16 factors most commonly included in studies on which more than 80% of experts agreed.¹⁰¹ On some factors agreement was high – for instance over 80% on the impact of intoxication, pre-existing attitudes and expectations, and question wording, and the malleability of witness confidence, but on others relatively low – for instance less than 60% on weapon focus, the cross race effect on identification, and the link between witness confidence and accuracy.

Admittedly these surveys beg the question as to whether the experts' views are themselves correct – even an 80% agreement rate between experts suggests room for doubt, while today's psychological 'truth' can always become tomorrow's 'fallacy'.¹⁰²

⁹⁷ Roediger *et al*, 'The curious complexity ...', especially pp. 111-112.

⁹⁸ Roberts, 'Expert evidence on the reliability ...', p. 101.

⁹⁹ Possibly due to increased knowledge of the issues caused, *inter alia*, by greater media focus on miscarriages of justice, but also because of the greater use of agree/disagree formats and more comprehensible questionnaires.

¹⁰⁰ See SL Desmarais and JD Read, 'After 30 years, what do we know about what jurors know? A meta-analytical review of lay knowledge regarding eyewitness factors', (2011) 35 *Law and Human Behavior* 200. See also R S Schmechel, TP O'Toole, C Easterly, and EF Loftus, 'Beyond the ken? Testing jurors' understanding of eyewitness reliability evidence', (2005-6) 46 *Jurimetrics* 177, especially p. 211, who found for instance that 89% of respondents accepted that that even a witness who identifies the same person on multiple occasions could be wrong, but also that 46% of respondents wrongly thought memory operates like a video camera in relation to traumatic events

¹⁰¹ *Ibid*.

¹⁰² In addition, results always depend on the questions' wording and subjects are never given what is usually the most accurate answer, namely that the impact of any factors usually depends in interactions with others: EB

Nevertheless, many of the lay misconceptions revealed by the surveys are replicated by studies which indirectly test lay knowledge by ascertaining how it is used in making decisions. One method involves presenting subjects with actual studies on the impact of various factors affecting witnessing accuracy and asking them to predict the outcome.¹⁰³ Other methods involve asking subjects either to identify factors which determine witness reliability in particular situations or to assess witness accuracy either directly or through delivering a verdict in response to situations presented in written descriptions, videotapes or even mock trials in which different witnessing factors are manipulated. All paint a far less optimistic picture of fact-finders' abilities to make accurate assessment of witness testimony than the surveys where subjects can make educated or lucky guesses at the 'correct' response from the answers provided. Thus, even when prompted, participants in these studies tended to be insensitive to the impact of a wide variety of factors when assessing testimony, including those that the surveys suggest are relatively well-understood, such as the effect of lighting, stress, weapon focus, crime duration on perception and of delay¹⁰⁴ between the incident and recall on memory, and most notably that of 'system variables'.¹⁰⁵ Furthermore, when subjects do take into account relevant factors, they sometimes apply them contrary to their actual effect or underestimate their impact.

While there are numerous problems with methodology and consistency of results, overall the studies are said to 'converge' on the broad findings that lay adjudicators have an incomplete and sometimes incorrect understanding of the factors which affect witness accuracy and that even when they correctly understand such factors, they do not necessarily incorporate them into their decision-making. This suggests that they have, at best, only a moderate ability to discern witness accuracy. For instance, in relation to identification evidence, studies repeatedly show that subjects are rarely able to outdo chance in assessing accuracy, with rates never rising above 61%.¹⁰⁶ However, while such poor performance should lead fact-finders to wrongly reject accurate accounts as often as they wrongly accept inaccurate witness accounts, in fact study participants tend to overestimate the accuracy of eyewitness evidence, both as a general proposition in surveys¹⁰⁷ and in indirect studies of witness evaluation.¹⁰⁸ For instance, in one study,¹⁰⁹ 83.7% of subjects asked to assess the accuracy of witnesses overestimated the chances of them accurately identifying a suspect present in a line-up. Moreover, fact-finders' faith in eyewitnesses may be very hard to shake, even in experiments when their evidence is discredited by an opposing lawyer.¹¹⁰ It is also

Ebbesen and VJ Konečni, 'Eyewitness memory research: probative v. prejudicial value', (1996) 5 *Expert Evidence* 2, p. 19.

¹⁰³ Here again the 'prediction studies' are dependent on the validity of the findings the subjects are asked to predict as well as on how accurately studies are described to the subjects.

¹⁰⁴ But cf RCL Lindsay, 'Expectations of eyewitness performance: jurors' verdicts do not follow from their beliefs', in DF Ross *et al* (eds), *Adult Eyewitness Testimony...* 67.

¹⁰⁵ Cf Ferguson's chapter in this volume on the difference between 'system' and 'estimator' variables.

¹⁰⁶ Leippe, 'The appraisal of eyewitness testimony ...', p. 925; Boyce *et al*, 'Belief of eyewitness identification evidence ...', pp. 506-507; DD Caputo and D Dunning, 'Distinguishing accurate identifications from erroneous ones: Post-dictive indicators of eyewitness accuracy', in Lindsay *et al*, *The Handbook of Eyewitness Psychology*, 427 pp. 442-443.

¹⁰⁷ Possibly because of a transference of most people's confidence in their own abilities to others: cf Schmechel *et al*, 'Beyond the ken? ...', p. 196 (77% of jurors surveyed rated their own memories as excellent).

¹⁰⁸ Cutler and Penrod, *Mistaken Identification ...*, pp. 179 and 186.

¹⁰⁹ JC Brigham and RK Bothwell, 'The ability of prospective jurors to estimate the accuracy of eyewitness identifications', (1983) 7 *Law and Human Behavior* 19. See also Boyce *et al*, 'Belief of eyewitness identification evidence ...', 508-509; Leippe, 'The appraisal of eyewitness testimony ...', 388; MR Leippe and D Eisenstadt, 'The influence of eyewitness expert testimony on jurors' beliefs and judgments', in BL Cutler (ed.), *Expert Testimony on the Psychology of Eyewitness Identification* (2009: OUP) 169, p. 171.

¹¹⁰ See Cutler and Penrod, *Mistaken Identification ...*, pp. 191-195; Leippe, 'The appraisal of eyewitness testimony ...', pp. 930-1002.

possible that fact-finders' confidence in witnesses and their lack of ability to accurately assess the factors influencing witness accuracy are linked in a vicious circle: because fact-finders cannot assess testimony accurately they overestimate its accuracy and because they overestimate its accuracy they underestimate the impact of factors detracting from witness reliability.

C. EXPERT TESTIMONY AND SOUND DECISIONS ON CREDIBILITY AND RELIABILITY

1. Is psychological research on witnessing sufficiently reliable?

The above analysis provides little support for Lord Gill's assertion that fact-finders' 'experience of life and human affairs' render them capable of sound decisions on witness credibility and reliability. This opens the way to argue that expert testimony on the psychology of witnessing may be necessary or at least helpful in reaching such sound decisions. However, a necessary, but certainly not sufficient, condition for such testimony itself is that it is based on evidence which is 'sufficiently reliable'; otherwise, as recognised in *Young v HMA*,¹¹¹ it 'will not assist the finder of fact in the proper determination of the issue'. According to *Young*, expert evidence must

'proceed on theories which have been tested (both by academic review and in practice) and found to have a practical and measurable consequence in real life. It must follow a developed methodology which is explicable and open to possible challenge, and it must produce a result which is capable of being assessed and given more or less weight in light of all the evidence before the finder of fact.'¹¹²

As the first Scottish case to lay down a reliability requirement for the admission of expert evidence, it not surprising that it leaves many unanswered questions.¹¹³ Most¹¹⁴ of these are beyond the scope of this article because it can be argued that psychological research on witnessing is at least as reliable as much of that supporting many of the traditional forensic sciences accepted by the courts,¹¹⁵ which been given a 'free pass' in terms of the question of their reliability. Yet as psychological research on witnessing shows, such differential treatment between the 'hard' and 'soft' sciences is difficult to justify¹¹⁶

Thus, most of the research on which psychological experts might rely has been peer-reviewed and is based on falsifiable hypotheses which have been tested through experiments designed to ensure 'internal validity' through isolation of study variables, exclusion of rival hypotheses, random selection of subjects, etc.¹¹⁷ More problematic is the argument¹¹⁸ that the

¹¹¹ [2013] HCJAC 145; 2014 SLT 21; 2014 SCL 98.

¹¹² Ibid, para. 54.

¹¹³ However, the suggestion that all expert evidence must be based on an academic discipline rather experience has now been implicitly overruled in *Kennedy v Cordia (Services) LLP*, [2016] UKSC 6, para. 44 which states as one of the conditions for expert evidence admissibility that it is based on a 'reliable body of knowledge or experience' (emphasis added).

¹¹⁴ But see below.

¹¹⁵ Cf National Research Council, *Strengthening Forensic Science in the United States: A Path Forward*, (2009) available <https://www.ncjrs.gov/pdffiles1/nij/grants/228091.pdf> (last accessed on 1 November 2016); compare *Young v HMA*, at para. 55.

¹¹⁶ See, more generally, Faigman, 'To have and have not ...'; and cf Raitt, 'A new criterion ...', p. 153 on the law's reluctance to engage with the reliability of social science research.

¹¹⁷ The following discussion of the validity of the research draws on McEwan, *The Verdict of the Court ...* chapter 7 and 'Reasoning, Relevance, ...'; Cutler and Penrod, *Mistaken Identification ...*, especially chapter 4; Leippe, 'The appraisal of eyewitness testimony ...', p. 83; R Bagshaw, 'Behavioural science data in evidence

studies lack realism or in scientific jargon ‘external’ or ‘ecological’ validity, and hence their findings are not generalisable to ‘real’ life witnessing and witness evaluation. Due to cost, ethical constraints and the desire for strict control of the variables studied, studies often involve fairly artificial witnessing and witness evaluation experimental conditions. For example, even when witness evaluation studies involve video-taped trials rather than subjects reading witness testimonies or transcripts, such trials are heavily edited and devoid of the tensions and/or tedium of real trials, and the impact of the personalities and demeanour of legal actors and other factors prompting peripheral rather than central route processing.¹¹⁹ Moreover, most studies are of individual decision-making, whereas juries decide collectively, and this may affect individual views. There are fewer problems with creating realistic witnessing conditions, though ethical considerations may limit, for example, the extent to which witnesses can be exposed to stressful and traumatic events, especially as victims. On the other hand, it can be noted that many witnesses are not involved in the incidents they observe, nor are most legal incidents violent, emotionally arousing or otherwise striking. Moreover, as noted by Ferguson, stress and other forms of emotional arousal can have negative as well as positive effects.¹²⁰

More generally, one can ask whether the fact that a theory has not been ‘found to have a practical and measurable consequence in real life’ should, for that reason alone, be refused admission as the High Court suggests. For one thing, the courts have long relied on many disciplines, such as pathology, whose theories are based on inference from first principles and practitioner experience cannot, for obvious reasons, be tested in real life,¹²¹ and others, like psychiatry, which are based on methods other than the paradigmatic scientific method of testing falsifiable hypotheses through controlled laboratory experiments.¹²² In addition, many laboratory experiments are increasingly being confirmed in field experiments which are conducted in real-life situations, and by some archival studies, where researchers look at the record of actual cases. Moreover, the vast majority of the findings cited in this and Ferguson’s chapter are supported by ‘multiple studies conducted in systematic programmes of research carried out by multiple investigators working independently of each other’ and involve ‘methodological variability across paradigms and investigators’.¹²³ It would indeed be startling if, as Leippe and Eisenstadt note, ‘somehow, most experts are wrong about most eyewitness matters.’¹²⁴ Conversely, there is little clear indication that real-life conditions

teaching and scholarship’, in Roberts and Redmayne, *Innovations in Evidence ...*; J Copeland, ‘Helping jurors recognize the frailties of eyewitness identification evidence’, (2002) 46 *Criminal Law Quarterly* 188, and the more partisan discussions from within psychology of BL Cutler, RS Malpass. SJ Ross, CA Meissner, and JL Marcon ‘The need for expert psychological testimony on eyewitness identification’, in Cutler, *Expert Testimony ...* 3,

¹¹⁸ Eg Stone, *Proof of Fact in Criminal Trials ...*, chapter 1; Ebbesen and Konečni, ‘Eyewitness memory research; HD Flowe, *et al.*, ‘Limitations of expert psychology testimony on eyewitness identification’ in Cutler, *Expert Testimony ...*, 201; R Elliott, ‘Expert testimony about eyewitness identification: a critique’ (1993) 17 *Law and Human Behavior* 423.

¹¹⁹ See W Weiten and SS Diamond, ‘A critical review of the jury simulation paradigm: the case of defendant characteristics’, (1979) 3 *Law and Human Behavior* 71.

¹²⁰ Reference ??

¹²¹ See, for example, G Edmond and D Mercer, ‘Trashing “junk science”’, (1998) 3 *Stanford Technology Law Review*, paras 1-86, (available <https://journals.law.stanford.edu/sites/default/files/stanford-technology-law-review-stlr/online/edmund-mercerc-trashing-junk-science.pdf>, last accessed 1 November 2016); EJ Imwinkelried, ‘The meaning of “appropriate validation”’, in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, interpreted in light of the broader rationalist tradition, not the narrow scientific tradition’ (2002-2003) 30 *Fla St U L Rev* 735, pp. 742-743.

¹²² See, for example, Faigman, ‘To have and have not ...’; AE Taslitz, ‘Myself alone: individualizing justice through psychological character evidence’, (1993) 52 *MLR* 1, pp. 30ff.

¹²³ Leippe, ‘The appraisal of eyewitness testimony ...’, p. 915.

¹²⁴ Leippe and Eisenstadt, ‘The influence of eyewitness expert testimony ...’, p. 174.

make a difference to the phenomena observed, let alone what the direction of effect would be. It is one thing to say that laboratory conditions are unrealistic; quite another to say that real-life conditions will cause an observed phenomenon to be reversed, negated or diminished rather than enhanced.

Of course, if such evidence emerges, theories based on laboratory experiments need to be altered, just as when earlier findings are not replicated, or their details complicated, by later studies. But until evidence contradicting otherwise consistent and generally accepted research findings emerges, it seems better to take cognisance of the *prima facie* case for the existence of phenomena established by consistent laboratory findings, rather than ignore them because they might not be replicated in real life¹²⁵ or are later found to require modification. These possibilities counsel for modesty in the claims of experts¹²⁶ and for courts to assess the validity of individual psychological research findings, not for categorically rejecting all psychological expertise on witnessing. To dismiss all psychological findings for a lack of certainty would be to hold psychological research to higher standards than apply to the so called ‘hard sciences’ where scientists acknowledge that they (or at least their colleagues!)¹²⁷ are not capable of providing infallible and unchanging knowledge. More radically, post-Kuhnian sociological studies of science argue that ‘the procedures and conclusions of science are, like all other cultural products, the contingent outcome of interpretive social acts’ and that ‘the factual as well as the theoretical assertions of science depend on speculative and socially derived assumptions’.¹²⁸ In other words, truth claims are the product of negotiation within particular scientific communities, and the best we can expect in terms of reliability is a consensus amongst the scientific community based on consistent findings.¹²⁹ Perhaps more pertinently, legal fact finders constantly rely on generalisations whose applicability and existential validity are far from certain. While it could be argued that this is unavoidable, unlike reliance on unproven psychological findings, it seems bizarre to reject the latter where this would leave fact-finders to rely on ‘fireside inductions’¹³⁰ about human psychology which experts consistently find to be misplaced.¹³¹

¹²⁵ In fact, it is arguable that evidence from actual cases can never trump laboratory experiments because we can only very rarely derive definitive answers from observing actual incidents. This, in turn, is because one cannot sufficiently control for the impact of independent variables outside experiments. More importantly, there is rarely verification of the truth of witness accounts to allow for inferences about the effect of witnessing conditions, or the accuracy of witnesses and evaluations of their reliability

¹²⁶ Faigman, ‘To have and have not ...’ pp. 1030 and 1051.

¹²⁷ BL Campbell, ‘Uncertainty as symbolic action in disputes among experts’, (1985) 15 *Social Studies of Science* 429.

¹²⁸ M Mulkay, ‘Knowledge and utility: implications for the sociology of knowledge’, (1979) 9 *Social Studies of Science* 63, p. 65.

¹²⁹ This is not to argue that the only test of admissibility should be one of consensus or the earlier US test of general acceptance (*Frye v United States* 293 F. 1013 (DC Cir 1923)). There are well-documented problems with this test (see, for example, DL Faigman, ‘Expert evidence: the rules and the rationality the law applies (or should apply) to psychological expertise’, in Carson and Bull, *Handbook of Psychology ...*, not least that it requires deciding on how much consensus is required amongst psychologists (cf HM Hosch, KW Jolly, LA Schmersal, and BA Smith, ‘Expert psychology testimony on eyewitness identification: consensus among experts?’ in Cutler *Expert Testimony ...*, 146-153 regarding the different but increasing levels of consensus amongst witnessing researchers), and the dangers that consensus might be subconsciously encouraged by the fact that psychological researchers, as both academics carving out a relatively new discipline and potential hired experts, have an interest.. On the other hand, one wonders how capable the courts are of evaluating the validity of the methods, never mind the result, of unfamiliar disciplines as required by *Young*. Cf the criticism of the similar new US test (*Daubert v Merrell Dow Pharmaceuticals* 509 US 579 (1993) by, for example, SA Cole, ‘Where the rubber meets the road: thinking about expert evidence as expert testimony’, (2007) 52 *Villanova Law Review* 803 .

¹³⁰ Cf PE Meehl, ‘Law and the fireside inductions: some reflections of a clinical psychologist’, (1971) 27 *Journal of Social Issues* 65.

¹³¹ Cf Roberts, ‘Expert evidence ...’, pp. 104-105; McEwan, *The Verdict of the Court ...*, p. 8.

2. Can psychological experts assist fact-finders?

However, even if it is accepted that fact-finders need help in reaching sound decisions on witness credibility and reliability, and that such help can be based on sufficiently reliable research findings, it still needs to be established that expert testimony will actually help fact-finders, both in the abstract and when weighed against associated harms and other less harmful forms of assistance.

Looking at credibility first, here there seems to be little more experts can do than warn fact adjudicators about the difficulties of inferring credibility from demeanour and other clues relating to the way witnesses testify. Given the simplicity of such a message, this can quite easily be done by lawyers arguing the case and/or judges instructing juries. To provide more than a general ‘lecture’ on this topic (which at any rate, at least in the case of warnings about overvaluing confidence levels, do not seem to work)¹³² by commenting on or even just providing an explanation of the reliability (or lack thereof) of particular cues based on the way witnesses testify would require the expert’s presence in the court throughout the trial. In fact, the trial’s adversarial nature would require both prosecution and defence experts or a significant change in procedure to allow for a court-appointed commentator on witness credibility. In addition, there seems little point in informing jurors of the more reliable signs of lying if they cannot be detected by non-experts. And, even if courts were prepared to allow experts to sit in court and observe all witnesses, allowing experts to provide an opinion on whether they think a witness is credible would fundamentally alter the nature of the Scottish trial and go very far towards usurping the role of those appointed to find the facts, especially if experts have to use special equipment to detect demeanour clues. Thus, while the High Court was wrong to assert that the common sense and life experience of juries and other fact-finders will ensure sound decisions on credibility, it does not seem worthwhile to use experts to help make such assessments.

Some psychological insiders argue for the same conclusion as regards the usability of expert evidence on reliability. Thus, whereas supporters of the use of experts assume that ‘[w]hile a little knowledge can sometimes be a dangerous thing, it is rarely more dangerous than no knowledge at all’,¹³³ critics argue that ‘a little learning is dangerous and ... a little more may be more dangerous still.’¹³⁴ One reason given is that the impact of variables affecting witnessing is too often small or its contours too imprecise to justify being applied. For instance, while studies consistently find a cross-race effect for face identification,¹³⁵ it is very small, and while longer exposure time clearly enhances memory of faces, the exact ratio between exposure time and memory improvement is unclear.¹³⁶ Secondly, it is argued that even if we can be precise about the effect of some witnessing conditions, research can only report an average affect. For actual witnesses, this effect may be magnified, nullified or diminished because of other factors. The effect of some of these factors might be unknown, especially when it comes to variations in witnesses’ personalities. For example, stress clearly affects different people differently, whereas some elderly witnesses may have impeccable memories.¹³⁷ Even where we are dealing with factors whose effect is known in isolation from

¹³² See Leippe, ‘The case for expert witnesses...’, p. 942.

¹³³ Faigman, ‘To have and have not ...’, p. 1046.

¹³⁴ R Elliott, ‘Expert testimony ...’, p. 425. See also, for example, Ebbesen and Konečni, ‘Eyewitness memory research ...’. cf however, Faigman, ‘To have and have not ...’, p. 1047: ‘[w]hile a little knowledge can sometimes be a dangerous thing, it is rarely more dangerous than no knowledge at all.’

¹³⁵ See Ferguson (this volume), chapter ??.

¹³⁶ Cutler and Penrod, *Mistaken Identification ...*, p. 101

¹³⁷ On the capacities of elderly witnesses, see, for example, DJ LaVoie, HK Mertz and TL Richmond, ‘False memory susceptibility in older adults: implications for the elderly eyewitness’ in Toglia *et al*, *The Handbook of*

others or the way in which they combine with some other factors (for instance that longer witness exposure to an event mitigates the speed and extent of memory loss), there are simply too many variables potentially affecting witness accuracy to allow for any ‘scientific’ prediction.

These are valid points, but it can be noted that the courts are content to allow experts to provide opinions on the reliability of those with special features, even though such features might be exacerbated or mitigated by other factors to which fact-finders are not alerted. So, once it is recognised that expert evidence is not validly confined to ‘special features pertaining to a witness or to his evidence’¹³⁸ or that consistently observed factors affecting reliability constitute such special features, the way is open to admitting an opinion on the impact on individual factors, at least if they have more than a minimal impact. This could even be extended to an opinion based on the consistently observed combined effect of factors, though as one moves from two to more factors, such an opinion becomes increasingly speculative. But where a witness’s reliability is likely to have been affected by too many different factors or where there are only a few but their impact on each other is unknown, expert testimony could be confined to merely providing juries with an idea of the observed impact of each relevant factor, the possible size of impact and that other factors might mitigate or enhance these factors. As long as experts make it clear that some effects are smaller than others,¹³⁹ that particular findings have been challenged or may lack ecological validity, and that there may be many different witnessing conditions which affect accuracy, such social framework evidence can be argued to play an important role in educating fact-finders about the factors affecting witnessing and cautioning them about over-estimating witness accuracy without coming close to usurping the court’s fact-finding function.

3. Are the benefits of expert testimony outweighed by the harms?

It is, however, still arguable that even if the information is useful in the abstract, exposure to a plethora of relevant findings, but with no means of weighing them up against each other and applying them to the case before them, might lead to fact-finders becoming confused or paralysed by information overload, especially if exposed to the minutiae of research and, as Lord Gill noted,¹⁴⁰ battles of the experts. This, in turn, may lead them to abandon attempts to evaluate witness accuracy in terms of its content, and focus instead on irrelevant and misleading credibility cues such as witnesses’ status or attractiveness, and whether they look questioners in the eye.¹⁴¹ Leaving aside the question of whether it is better to run the risk of confusing fact-finders than allowing them to labour under misapprehensions about witness testimony,¹⁴² it can be noted that evidence for such ‘peripheral route processing’¹⁴³ is confined to lay rather than professional fact-finders, who presumably will be far more likely to focus on the more valuable content and witness reliability based cues involved in ‘central

Eyewitness Psychology ... 605; and CJA Moulin, RG Thompson, DB Wright, and MA Conway, ‘Eyewitness memory in older adults’, in *ibid*, 627.

¹³⁸ *Gage*, para 22.

¹³⁹ Even though this might negate the impact of their evidence, as has occurred in mock jury studies: see Elliott, ‘Expert testimony ...’, p. 433.

¹⁴⁰ *Gage*, para. 32

¹⁴¹ See Leippe, ‘The appraisal of eyewitness testimony ...’, pp. 391-392; C Fife-Schaw, ‘The influence of witness appearance and demeanour on witness credibility’, in A Heaton-Armstrong, E Shepherd, and D Wolchover, *Analysing Witness Testimony: A Guide for Legal Practitioners and Other Professionals* (1999: Blackstone Press).

¹⁴² Cf Raitt, ‘A new criterion ...’, p. 165.

¹⁴³ RE Petty and JT Cacioppo, ‘The elaboration likelihood model of persuasion’, in L Berkowitz (ed.), *Advances in Experimental Social Psychology: Volume 19* (1986: Academic Press) 123.

route processing'. Moreover, expert warnings about overestimating witness accuracy and relying on common sense signs of witness accuracy and honesty may have the effect of encouraging lay fact-finders to concentrate on the content of testimony.

In any event it is noteworthy that worries about juror confusion – like those of jurors being dazzled by experts' credentials and 'aura of special reliability and trustworthiness'¹⁴⁴ are not regarded as dispositive when it comes to forensic and other so-called 'hard' science experts who carry much greater epistemological authoritativeness than those from the 'soft' sciences.¹⁴⁵ More importantly, decades of US research suggests that fact-finders, including jurors in actual cases, do not simply defer to experts nor are necessarily paralysed by competing experts, but attempt to weigh the merits of their evidence in the context of the case as a whole and do so with reasonable but by no means perfect competence.¹⁴⁶

Studies have also addressed the specific effect of exposing mock fact-finders to research findings by experts.¹⁴⁷ Ideally, such exposure should make fact-finders more likely to accept accurate, and less likely to accept inaccurate, evidence. Initially, such a 'sensitivity effect' only rarely appeared in the relatively large number of experiments involving expert evidence. Instead, some showed no effect at all, whereas most resulted in heightened disbelief in witness testimony, irrespective of its accuracy.¹⁴⁸ However, other studies¹⁴⁹ have shown less of this latter 'scepticism effect' and more of a sensitivity effect, at least when experts tailored their testimony to the case rather than providing an overview of all research findings.

In any event, given fact-finders' tendency to overestimate witness accuracy, one can ask whether general scepticism (as in Lord Gill's climate of disbelief)¹⁵⁰ is so undesirable. According to Leippe and Eisenstadt,¹⁵¹ scepticism occurs usually when it should (for example, when witness testimony is both central to the case and weak) and only sometimes when it should not. Moreover, it is arguable that where such scepticism relates to prosecution as opposed to defence witnesses, it is in fact desirable given both the general over-estimation of witness reliability by fact-finders and the law's adoption of 'principled asymmetry'¹⁵² in favour of 'overprotecting' criminal accused.¹⁵³

If so, it can be argued that while expert evidence might not ensure a sound decision understood solely in terms of accuracy, it may contribute to a proper resolution of the dispute in terms of accepted criminal justice values. For this reason, it is arguable that expert testimony on witness reliability should be confined to situations where the possible impact of common sense assumptions about witnessing is likely to lead to patent injustice to an

¹⁴⁴ *United States v Fosher*, 590 F2d 381 (1st Cir 1979), 383.

¹⁴⁵ See, for example, P Alldridge, 'Forensic science and expert evidence', (1994) 21 *JS* 136, especially p. 138.

¹⁴⁶ N Vidmar and SS Diamond, 'Juries and expert evidence', (2001) 66 *Brooklyn Law Review* 1121; SK Ivkovic and VP Hans, 'Jurors' evaluations of expert testimony: Judging the messenger and the message', (2003) 28 *Law & Social Inquiry* 441.

¹⁴⁷ See Cutler and Penrod, *Mistaken Identification ...*, chapters 14-17; Leippe, 'The case for expert testimony... ', pp. 934-947 passim; L Dufraimont, 'Regulating unreliable evidence: can evidence rules guide juries and prevent wrongful convictions?', (2007-8) 33 *Queen's LJ* 261, pp. 301-306; RA Wise KA Dauphinais and MA Safer, 'A tripartite solution to eyewitness error', (2007) 97 *Journal of Criminal Law and Criminology* 807, pp. 837-841.

¹⁴⁸ See Cutler and Penrod, *Mistaken Identification ...* pp. 218-224; Leippe, 'The case for expert testimony... ', p. 934ff; RA Wise *et al*, 'A tripartite solution...' pp 840-41.

¹⁴⁹ Cutler and Penrod, *Mistaken Identification ...* chapter 15; RA Wise *et al*, 'A tripartite solution...' pp. 837-39.

¹⁵⁰ *Gage*, para 33.

¹⁵¹ 'The influence of eyewitness expert testimony', in Cutler, *Expert Testimony ...*, pp. 188-189; see also Dufraimont, 'Regulating unreliable evidence ... '. pp.300-301; Leippe, 'The case for expert testimony ... '.

¹⁵² Roberts and Zuckerman, *Criminal Evidence*, p. 19

¹⁵³ Luban, *Lawyers and Justice...*, 60-63.

accused.¹⁵⁴ Even if there remain doubts about the effectiveness of expert testimony on witness reliability¹⁵⁵ the cautionary principle suggests that, if there is any potential for experts to safeguard the accused against unsafe convictions based on the failure to make sound decisions about witness reliability, they should be used. A similar response can be directed at the worry expressed by the High Court that expert testimony will substantially extend the length of trials,¹⁵⁶ especially if each side calls its own psychological experts, and courts have to spend time deciding whether their testimony is based on sufficiently reliable research findings.

4. Are there better alternatives to psychological experts?

On the other hand, these costs and the other risks associated with psychological – and indeed all – experts (their propensity to dazzle, confuse or engender undue scepticism) can still be dispositive if they can be shown, as the High Court assumed,¹⁵⁷ to be unnecessary due to safeguards against reliance on unreliable evidence in the form of judicial instruction and cross-examination.

We have already argued that warnings about the unreliability of demeanour and other credibility clues can just as easily – and certainly more efficiently – be provided by lawyers and judges given the simplicity of the message involved. But what about reliability? Here, such a role can only be played by judges and lawyers if their knowledge of the psychology of witnessing is a lot more advanced than that of US judges and lawyers. Thus, while their performance has not been subjected to the more insightful means of indirect testing, neither judges nor lawyers performed better than lay subjects in survey studies of their knowledge of factors affecting witnessing.¹⁵⁸ Indeed, in one survey, law students performed better than judges with years of legal experience.¹⁵⁹

Consequently, the effectiveness of these safeguards requires the proper training of all professional adjudicators and lawyers involved in the criminal justice system. Indeed, this seems desirable whatever role psychological experts might play.¹⁶⁰ In the case of judges, the only problems are ones of cost and possible resistance from judges who might think that they

¹⁵⁴ For instance, in the US, expert evidence on the impact of eyewitness psychology is permitted only where such evidence is a key element in the prosecution case and where it is not substantially corroborated – see the leading case in this area, *People v McDonald* 690 P2d 709 (Cal 1984), p. 727.

¹⁵⁵ See KA Martire and RL Kemp, ‘The impact of eyewitness expert evidence and judicial instructions on juror ability to evaluate eyewitness testimony’, (2009) 33 *Law and Human Behaviour* 225; KA Martire and RL Kemp and ‘Can experts help jurors to evaluate eyewitness evidence? A review of eyewitness expert effects’, (2011) 16 *Legal and Criminological Psychology* 24 reporting a few studies based on evidence given by witnesses who have actually viewed an event rather than fictional eyewitness statements which failed to discern any impact of expert testimony on jury evaluations.

¹⁵⁶ *Gage*, para 32

¹⁵⁷ *Ibid*, paras 29-30.

¹⁵⁸ T R Benton, S McDonnell, DF Ross, N Thomas, and E Bradshaw, ‘Has eyewitness testimony research penetrated the American legal system? A synthesis of case history, juror knowledge, and expert testimony’, in Lindsay *et al*, *The Handbook of Eyewitness Psychology ...*, 453 pp. 485-487; HM Hosch KW Jolly, LA Schmearsal, and BA. Smith, ‘Expert psychology testimony on eyewitness identification: consensus among experts?’, in Cutler, *Expert Testimony ...*, 143, pp. 156-158; JL Devenport, CD Kimbrough, and BL Cutler. ‘Effectiveness of traditional safeguards against erroneous conviction arising from mistaken eyewitness identification’, in *ibid*, 51, pp. 53-59.

¹⁵⁹ RA Wise and MA Safer, ‘A survey of judges’ knowledge and beliefs about eyewitness testimony’, (2003) 40 *Ct Review* 6.

¹⁶⁰ MD MacLeod and DH Sheldon, ‘From normative to positive data: expert psychological evidence re-examined’, 1991 *Crim LR* 811, p. 820; A Heaton-Armstrong. D Wolchover, and E Shepherd, ‘Problematic testimony ...’, in Heaton-Armstrong *Analysing Witness Testimony...*, 335, pp. 336-338; W Young and S Katkhuda, ‘Judicial training’, in Heaton-Armstrong *et al*, *Witness Testimony...*, 425.

have nothing to learn from psychology. Law schools will, however, understandably resist adding to an already crammed compulsory curriculum, and thus this safeguard is dependent on lawyers being sufficiently dedicated to clients to find the time to undertake the necessary research on witness reliability.

But even assuming that judges and lawyers are exposed to relevant knowledge about the reliability of witnesses, their knowledge is likely to be less current than psychological experts. This is not necessarily problematic, as the law is appropriately cautious about using new findings before they become accepted wisdom, lest they prove to be idiosyncratic. Arguably, however, experts are also likely to be seen to be and, given their overriding duty to truth and the court rather than

those calling them, to actually be, more impartial than those of counsel, as well as more authoritative than both lawyers and judges. More importantly, they will be able to provide a far more comprehensive, accurate and nuanced picture of research findings on witness reliability, especially if their views are probed by opposing counsel, judges and other fact adjudicators. Consequently, experts would seem to be the most effective means of contributing to sound decisions on witness reliability, even when appropriately trained judges sit without juries.

These predictions are supported by research which suggests that cross-examination rarely counters the impact of eyewitness testimony¹⁶¹ and is ‘largely useless’ for detecting truthful but mistaken witnesses¹⁶² – no doubt because it is not aimed at helping fact-finders to evaluate testimony accurately, but at undermining unfavourable, and strengthening favourable, testimony, and its impact may well owe more to cross-examination ability than witness accuracy. Particularly in a criminal justice system where many legal aid defence lawyers are underfunded and overworked, judicial instructions are a potentially more effective safeguard. But here also the research does not suggest much cause for optimism about the positive effect of judicial warnings as to potentially unreliable evidence and the factors affecting reliability.¹⁶³ Like jury instructions in general,¹⁶⁴ they may not be sufficiently comprehensible to be effective and are delivered at the end of trials when juror minds may already be made up or where jurors are struggling to cope with information overload. Unsurprisingly, the few studies that have been undertaken reveal that jury instructions have little impact, and certainly less than that of expert witnesses, and that when they do have an impact, they tend to engender scepticism rather than sensitivity.¹⁶⁵ Admittedly, these studies suffer from problems of external validity and use US jury instructions, which lack sufficient relevant information. But, while better-designed studies and improved jury instructions may in the future reveal – and, according to Leverick,¹⁶⁶ are already revealing – a more positive impact, currently there is some justification for thinking

¹⁶¹ Leippe, ‘The Case for Expert Testimony...’, p. 924.

¹⁶² Wells *et al*, ‘Accuracy, confidence, and juror perceptions ...’, p. 609. See also Wise *et al*, ‘A tripartite solution...’ pp. 828-830; Devenport *et al*, ‘Effectiveness of traditional safeguards ...’; Roberts, ‘Expert evidence ...’, pp. 98-99; BL Garrett, *Convicting the Innocent: Where Criminal Prosecutions go Wrong* (2011: Harvard UP), chapter 3, in relation to actual cases involving miscarriages of justice based on misidentification evidence.

¹⁶³ Leippe, ‘The Case for Expert Testimony ...’ p. 949; Roberts, ‘Expert evidence ...’, p. 99; CJ O’Hagan, ‘When seeing is not believing: the case for eyewitness expert testimony’ (1993) 81 *Georgetown LJ* 741, pp.753-754.

¹⁶⁴ See for example McEwan, *The Verdict of the Court ...*, pp.138ff; VG Rose and JRP Ogloff, ‘Evaluating the comprehensibility of jury instructions: a method and an example’, (2001) 25 *Law and Human Behavior* 409.

¹⁶⁵ See Cutler and Penrod, *Mistaken Identification ...*, chapter 17; Devenport *et al*, ‘Effectiveness of traditional safeguards ...’, pp. 61-64.

¹⁶⁶ F Leverick, ‘Jury instructions on eyewitness identification evidence: a re-evaluation’, (2016) 49 *Creighton Law Review* 555. See also L Ellison and V E Munro, ‘“Telling tales”: exploring narratives of life and law within the (mock) jury room’, (2015) 35 *Legal Studies* 201.

that the best means of assisting fact-finders to make sound decisions about witness reliability is through expert evidence.¹⁶⁷ Certainly, it has been shown to produce a sensitivity rather than just a scepticism effect, and experts who may precede and specifically refer to relevant problems of witness testimony, are likely to be able to convey specialist knowledge better than judges and lawyers, and are always open to adversarial challenge.

D. CONCLUSION

In this chapter we have argued that the categorical exclusion of all experts on the psychology of witnessing as unnecessary for the proper resolution of disputes is based on an application of the wrong test for admissibility and, in any event, a misapplication of that test given what is known about the nature of witnessing and the evaluation of witnesses. Instead of a necessity test, we have argued in favour of a test of helpfulness or assistance (supported by *Kennedy*,¹⁶⁸ at least in relation to social framework as opposed to opinion evidence) which justifies the reception of expert evidence if it would improve the soundness of fact-finders' decisions. Then, in looking at the admissibility of psychological experts, we looked at a number of factors, all of which can be brought under a helpfulness test of admissibility. Thus, in order to be admissible it can be argued that all expert evidence must be reliable, usable, more helpful than harmful and, to the extent that any assistance carries associated risks and other costs, not available in a less costly form.¹⁶⁹

Applying this test to the specific case of experts on the psychology of witnessing, we argued that there is little value and overriding system-based problems with calling experts on issues of credibility. On the other hand, absent extensive exposure to the research on psychology of witnessing which is impossible to provide in the case of jurors, there is an argument for admitting opinion evidence of psychological experts on the reliability of witnesses in limited circumstances, and a much greater role for expert testimony as a form of social framework evidence.

At the very least, we hope to have shown that, even if the conclusion in *Gage* on the admissibility of psychological experts is correct, it is not correct for the right reasons. If such evidence is to be excluded it should be on the grounds that, as things currently stand, the research lacks sufficient external validity or precision to be helpful, in which case there is always the possibility that these problems will be overcome as research continues. But we have argued that it is wrong to hold that expert evidence on the psychology of witnessing is never necessary for sound or proper decision-making unless the special features exception applies, that other safeguards are adequate, and that the practical costs of such evidence outweigh its benefits. Such reasoning suggests a judiciary ignorant of the true nature of the psychology of witnesses (thus ironically suggesting that common sense and lived experience, even of lawyers and judges, are not sufficient bases to adequately inform witness evaluation). Alternatively, or in addition, it suggests an excessive judicial zeal to uphold the assumed

¹⁶⁷ As argued for both by psychologists (for example, Copeland, *Helping jurors ...* ; Leippe, *The Case for Expert Witnesses...* ; Cutler, et al, *The need for expert psychological testimony...*), and legal commentators (for example, MacLeod and Sheldon, *From normative to positive data ...* ; Stein, *The admissibility of expert testimony ...* ; O'Hagan, *When seeing is not believing ...* ; Heaton-Armstrong *et al*, *Analysing Witness Testimony ...* ; D Ormerod and A Roberts, *The admissibility of expert evidence ...* , in Heaton-Armstrong *et al*, *Witness Testimony...* 401, p. 408.

¹⁶⁸ *Kennedy v Cordia (Services) LLP* para 41.

¹⁶⁹ For similar approaches, see Roberts and Zuckerman, *Criminal Evidence* , pp. 487-48 (noting that helpfulness has both a positive and negative aspect); T M Massaro, *Experts, psychology, credibility, and rape: the rape trauma syndrome issue and its implications for expert psychological testimony*, [1985] 69 *Minnesota Law Review* 395, p. 432. But see Raitt, *A new criterion ...* , especially p. 154 where she argues that reliability subsumes helpfulness rather than *vice versa*.

value of lay adjudication and with it the authority of all judicial fact-finders and far less concern to ensure that criminal accused are only convicted on as reliable evidence as possible. How these competing issues are to be balanced is, of course, a complex question which is beyond the scope of this chapter. Hopefully, however, our argument that the necessity test and its application to exclude psychological research on witnessing is unpersuasive will clear the ground for a more principled debate about the proper role of all experts in a system which simultaneously values factual truth, the protection of the criminal accused, lay adjudication and the efficient resolution of disputes.